DRAFT PARTIALLY REVISED ENVIRONMENTAL IMPACT REPORT

Guenoc Valley Mixed Use Planned Development Project



MARCH 2025

LEAD AGENCY:

Lake County Community Development Department
255 N. Forbes St. #330
Lakeport, CA 95453

Draft Partially Revised Environmental Impact Report

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Executive Summary

INTRODUCTION

This section provides a summary of the Guenoc Valley Mixed-Use Planned Development Project (Proposed Project) Partially Revised Environmental Impact Report (PREIR). This Draft PREIR responds to both the Superior Court Ruling requiring additional community evacuation analysis and the subsequent First Appellate District Court of Appeal (First Appellate Court) decision requiring expanded wildfire risk analysis. This chapter includes a table summarizing the impacts of the Modified Project that have been assessed within this PREIR and mitigation measures that have been identified to reduce potentially significant impacts.

PROJECT UNDER REVIEW

The Proposed Project includes the development of a master planned mixed-use resort and residential community within a portion of the Guenoc Valley Ranch property (Guenoc Valley Site). The Project as evaluated in the 2020 EIR includes a General Plan amendment to designate the 16,000-acre Guenoc Valley Site (Project Site) as Resort Commercial and rezone it to Guenoc Valley District (GVD). These amendments would allow for the development of up to 400 hotel rooms, 450 resort residential units, 1,400 residential estates, and 500 workforce co-housing units (the "Original Project") within the zoning district. Phase 1 of the Original Project included the phased subdivision and related entitlements to allow up to 401 residential estates, 141 resort residential units, 177 hotel units, and accessory resort and commercial uses. In addition, Phase 1 includes a subdivision and rezoning of an off-site parcel (Middletown Housing Site) to accommodate 21 single family residences with optional accessory dwelling units, 29 duplex units in 15 structures, and a community clubhouse and associated infrastructure. Other off-site infrastructure improvements under Phase 1 analyzed in the 2020 EIR included a proposed water supply well on an off-site parcel (Off-Site Well Site) and pipeline located adjacent to and within Butts Canyon Road, along with intersection and electrical improvements (collectively referred to as 'Off-Site Improvements').

The Project Modifications revise the Original Project analyzed in the 2020 EIR such that 25 building sites within the Equestrian Center area and 39 building sites within the northeastern portion of the Project Site would be relocated further from the wildland/urban interface, and various connector roads and road buffers would be added. The Project Modifications include voluntary measures and some contained within a settlement agreement with the State of California, and which are intended to further reduce the wildfire risks and greenhouse gas emissions associated with the Proposed Project. The Project Modifications include the following:

- A new proposed emergency route called the Grange Road Connector will connect the Guenoc Valley Site with the County-maintained Grange Road to the north. The Grange Road Connector will be approximately 3.9 miles, with 2.2 miles occurring on the Guenoc Valley Site and 1.7 miles sited on the off-site property to the north;
- Relocating 25 residential building sites that the 2020 Project would have located on a hilltop near the proposed Equestrian Center and 39 residential building sites that the 2020 Project would have

located within the northeastern portion of the Project site such that they would be located further from the wildland/urban interface;
- Reconfiguring the roadway plan so that there are no dead-end, non-looped road segments that exceed 1-mile in length;
- Improving an area of approximately 10 feet on each side of roadways with hardscape, to the extent topography permits;
- Removal of the camping area in the northern portion of the property;
- Funding and staffing commitments for the onsite Emergency Response Center; and
- Various renewable energy commitments and greenhouse gas reduction measures that will not change the development footprint.

PROJECT LOCATION

The Guenoc Valley Site (Project Site) consists of approximately 16,000 acres located in the southeast portion of incorporated Lake County (County). The site is generally bounded by Long Valley and Coyote Valley to the west, a U.S. Coast Guard LORAN station military reservation to the northwest, the Cedar Mountains to the north, and the Lake County / Napa County border to the east. The project site is located in the "Middletown," "Jericho Valley," "Detert Reservoir," and "Aetna Springs" U.S. Geological Survey (USGS) 7.5 Minute Topographic Quadrangles. The site is located north and south of an approximately five mile segment of Butts Canyon Road, approximately four miles east of the intersection of State Route (SR) 29 / Butts Canyon Road, and 1.5 miles west of the intersection of Snell Valley Road / Butts Canyon Road. The project site is approximately 3.5 miles east of the unincorporated community of Middletown, and is directly adjacent to the Napa County line.

SUMMARY TABLE

Table ES-1 presents a summary of project impacts and proposed mitigation measures that would further avoid or minimize potential impacts. These mitigation measures were either introduced in the 2020 EIR or introduced or modified within this PREIR; the full mitigation measures are included in **Section 5** of this PREIR. In the table, the level of significance of each environmental impact is indicated both before and after the application of the recommended mitigation measure(s). For detailed discussions of all project impacts and mitigation measures, refer to environmental analysis sections in **Section 3** and **Section 4** of this PREIR.

Acronyms used within **Table ES-1** to describe levels of significance are explained below:

- BI – Beneficial impact
- NI – No impact
- LTS – Less than significant
- PS – Potentially significant
- S – Significant
- SU – Significant and unavoidable

Table ES-1: Summary of Impacts and Mitigation Measures

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
	Aesthetics			
3.1-1 – 3.1-3	No changes to Aesthetics Impacts are anticipated as a result of the Project Modifications and therefore this area was not assessed further within this PREIR.		Mitigation measures listed in the 2020 EIR remain applicable to the Modified Project. See **Appendix D**.	
	Land Use and Agriculture			
3.2-1	Conflict with land use Plans, Policies, or Regulation adopted for the purpose of avoiding or mitigating an environmental effect.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.2-2	Create land use conflicts or be incompatible with existing or proposed adjacent land uses.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** LTS \ N/A	*No modifications to the following from the 2020 EIR:* MM 3.2-1: Right-to-Farm Disclosure.	PS \ LTS
3.2-3	Convert prime farmland, unique farmland, or farmland of statewide importance (important farmland), as shown on maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use.	**Guenoc Valley Site:** S \ SU **Off-Site Areas:** LTS \ N/A	*No modifications to the following from the 2020 EIR:* MM 3.2-2: Agricultural Conservation.	S \ SU
3.2-4	Conflict with existing zoning for agricultural use.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** NI \ N/A	None Required	LTS \ N/A

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
3.2-5	Result in the loss of forest land or conversion of forest land to non-forest use.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.2-6	Cumulative land use and agricultural impacts.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
	Air Quality			
3.3-1	Conflict with or obstruct implementation of the applicable air quality plan	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.3-2	Generate construction related emissions resulting in a cumulatively considerable net increase of any criteria air pollutant for which the project region is nonattainment under an applicable Federal or state ambient air quality standard.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.3-1: Measures to Reduce Short-term Construction Related Emission.	PS \ LTS
3.3-3	Generate operational related emissions in a cumulatively considerable net increase of any criteria air pollutant for which the project region is nonattainment under an applicable Federal or state ambient air quality standards.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.3-2: Project Measures to Reduce Operational Emissions.	PS \ LTS

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
3.3-4	Carbon monoxide emissions at local intersections could violate an air quality standard or contribute substantially to an existing or projected air quality violation.	**Guenoc Valley Site:** LTS \ LTS **Off-Site Areas:** LTS \ LTS	None Required	LTS \ LTS
3.3-5	Expose sensitive receptors to substantial pollutant concentrations.	**Guenoc Valley Site:** LTS \ LTS **Off-Site Areas:** LTS \ LTS	None Required	LTS \ LTS
3.3-6	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	**Guenoc Valley Site:** LTS \ LTS **Off-Site Areas:** LTS \ LTS	None Required	LTS \ LTS
	Biological Resources			
3.4-1	Substantial adverse effect, either directly through habitat modifications or indirectly, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Guenoc Valley Site:** S \ LTS **Off-Site Areas:** S \ LTS	*Modifications to the following:* MM 3.4-2: Work Environmental Awareness Training (added Grange Road Connector); MM 3.4-8: Special-Status Birds – Nesting (added Grange Road Connector); MM 3.4-10: Northwestern Pond Turtle Impacts – Construction (updated per Federal listing status). *No modifications to the following from the 2020 EIR:* MM 3.4-1: Construction Best Management Practices; MM3.4-2: Work Environmental Awareness Training; MM 3.4-3: General Special-Status Plant Mitigation; MM 3.4-4: American Badger Impacts; MM 3.4-5: Ringtail Impacts; MM 3.4-6: Bat Maternity Roosts and Special-Status Bat Impacts; MM 3.4-7: Artificial Lighting Impacts;	S \ LTS

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
			MM 3.4-8: Special-Status Birds – Nesting; MM 3.4-9: Special-Status Birds – Burrowing Owl; MM 3.4-10: Northwestern Pond Turtle Impacts – Construction; MM 3.4-11: Foothill Yellow-Legged Frog Impacts – Construction; MM 3.4-12: Invasive Species Management – Operation; MM 3.4-13: Aquatic Habitat Public Signage; MM 3.9-1: Storm Water Pollution Prevention Plan; MM 3.9-2: Aggregate/Concrete Monitoring and Reporting Program; MM 3.4-21: Domestic Cat Predation; and MM 3.10-2: Construction Noise Reduction.	
3.4-2	Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.	**Guenoc Valley Site:** S \ LTS **Off-Site Areas:** S \ LTS	*Modifications to the following:* MM 3.4-15: Impact to Sensitive Habitats (added newly designated serpentine rock outcrop); MM 3.4-18: Sensitive Habitat Impacts from Wildfire Clearing (added newly designated serpentine rock outcrop). *No modifications to the following from the 2020 EIR:* MM 3.4-1 Construction Best Management Practices; MM 3.9-1 Storm Water Pollution Prevention Plan; MM 3.9-2 Aggregate/Concrete Monitoring and Reporting; MM 3.4-14: Future Phases Biological Review; MM 3.4-16: Oak Mitigation Plan; and MM 3.4-17: Aquatic Resources Protection and Management.	S \ LTS

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
3.4-3	Substantial adverse effect on state or Federally protected wetlands through direct removal, filling, hydrological modification, or other means.	**Guenoc Valley Site:** S \ LTS **Off-Site Areas:** LTS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.4-1 Construction Best Management Practices; MM 3.9-1 Storm Water Pollution Prevention Plan; MM 3.9-2 Aggregate/Concrete Monitoring and Reporting; MM 3.4-17: Aquatic Resources Protection and Management.	S \ LTS
3.4-4	Interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	**Guenoc Valley Site:** S \ LTS **Off-Site Areas:** LTS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.4-7: Artificial Lighting Impacts; MM 3.4-19: Wildlife Movement – Fencing; MM 3.4-20: Wildlife Movement – Future Phases; and MM 3.4-14: Future Phases Biological Review.	S \ LTS
3.4-5	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Guenoc Valley Site:** S \ LTS **Off-Site Areas:** S \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.4-14: Future Phases Biological Review; and M 3.4-16: Oak Mitigation Plan.	S \ LTS
3.4-6	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.	**Guenoc Valley Site:** S \ LTS **Off-Site Areas:** NI \ NI	*No modifications to the following from the 2020 EIR:* MM 3.4-14: Future Phases Biological Review; and M 3.4-16: Oak Mitigation Plan.	S \ LTS
3.4-7	Cumulative impacts to biological resources.	**Guenoc Valley Site:** S \ LTS **Off-Site Areas:** LTS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.4-1: Construction Best Management Practices; MM3.4-2: Work Environmental Awareness Training; MM 3.4-3: General Special-Status Plant Mitigation; MM 3.4-4: American Badger Impacts; MM 3.4-5: Ringtail Impacts; MM 3.4-6: Bat Maternity Roosts and Special-Status Bat Impacts;	S \ LTS

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
			MM 3.4-7: Artificial Lighting Impacts; MM 3.4-8: Special-Status Birds – Nesting; MM 3.4-9: Special-Status Birds – Burrowing Owl; MM 3.4-10: Northwestern Pond Turtle Impacts – Construction; MM 3.4-11: Foothill Yellow-Legged Frog Impacts – Construction; MM 3.4-12: Invasive Species Management – Operation; MM 3.4-13: Aquatic Habitat Public Signage; MM 3.4-15: Impact to Sensitive Habitats; MM 3.4-16: Oak Mitigation Plan; MM 3.4-17: Aquatic Resources Protection and Management; MM 3.4-18: Sensitive Habitat Impacts from Wildfire Clearing; MM 3.4-19: Wildlife Movement – Fencing; MM 3.4-20: Wildlife Movement – Future Phases; and MM 3.4-21: Domestic Cat Predation.	
	Cultural Resources			
3.5-1	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** NI \ N/A	*Modifications to the following:* MM 3.5-1: Avoid Historical and Archaeological Resources, Apply Appropriate Mitigation (updated to specifically call out two additional resources).	PS \ LTS
3.5-2	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*Modifications to the following:* MM 3.5-1: Avoid Historical and Archaeological Resources, Apply Appropriate Mitigation (updated to specifically call out two additional resources). MM 3.5-2: Worker Awareness Training, Construction Monitoring, and Walt Work (Unanticipated Discoveries Plan moved to new Tribal Cultural Resources mitigation). *No modifications to the following from the 2020 EIR:*	PS \ LTS

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
			MM 3.5-3: Future Phase Investigations.	
3.5-3	Disturb any human remains, including those interred outside of formal cemeteries.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*Modifications to the following:* MM 3.5-1: Avoid Historical and Archaeological Resources, Apply Appropriate Mitigation (updated to specifically call out two additional resources). *No modifications to the following from the 2020 EIR:* MM 3.5-4: Cease Work, Contact County Coroner.	PS \ LTS
3.5-5	Cumulative impacts to cultural resources and tribal cultural resources.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*Modifications to the following:* MM 3.5-1: Avoid Historical and Archaeological Resources, Apply Appropriate Mitigation (updated to specifically call out two additional resources); and MM 3.5-2: Worker Awareness Training, Construction Monitoring, and Walt Work (Unanticipated Discoveries Plan moved to new Tribal Cultural Resources mitigation). *No modifications to the following:* MM 3.5-3: Future Phase Investigations; and MM 3.5-4: Cease Work, Contact County Coroner.	PS \ LTS
	Geology and Soils			
3.6-1	Directly or indirectly cause potential substantial risk of loss, injury, or death due to seismic related hazards.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.6-1: Final Design-Level Geotechnical Report(s).	PS \ LTS
3.6-2	Substantial soil erosion or loss of topsoil.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
3.6-3	Development on expansive soils or on unstable soils.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.6-1: Final Design-Level Geotechnical Report(s).	PS \ LTS
3.6-4	Have soils inadequate to support septic or alternative wastewater systems.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** NI \ N/A	None Required	LTS \ N/A
3.6-5	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.6-2: Worker Training, Cease Work, and Consul with Qualified Paleontologist.	PS \ LTS
3.6-6	Cumulative geology and soils impact.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.6-1: Final Design-Level Geotechnical Report(s); and MM 3.6-2: Worker Training, Cease Work, and Consul with Qualified Paleontologist.	PS \ LTS
	Greenhouse Gas Emissions			
3.7-1	Generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment.	**Guenoc Valley Site:** PS \ SU **Off-Site Areas:** PS \ SU	*Modifications to the following:* MM 3.7-1: Operational GHG Emissions (additional requirements to achieve compliance with CALGreen Tier 2 and limit use of natural gas or propane at restaurants consistent with Settlement Agreement). *No modifications to the following from the 2020 EIR:* MM 3.7-2: Construction GHG Emissions; and MM 3.4-16: Oak Mitigation Plan.	PS \SU
3.7-2	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	**Guenoc Valley Site:** PS \ SU **Off-Site Areas:** PS \ SU	*Modifications to the following:* MM 3.7-1: Operational GHG Emissions (additional requirements to achieve compliance with CALGreen Tier 2 and limit use of natural gas or propane at restaurants	PS \SU

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
			consistent with Settlement Agreement).	
	Hazards and Hazardous Materials			
3.8-1	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** LTS \ N/A	*No modifications to the following from the 2020 EIR:* MM 3.8-1: Hazardous Materials Best Management Practices.	PS \ LTS
3.8-2	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment or from being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*Modifications to the following:* MM 3.8-5: Asbestos Dust Mitigation Plan (minor language update for consistency with current LCAQMD practices). *No modifications to the following from the 2020 EIR:* MM 3.8-2: Prepare a Hazardous Materials Contingency Plan; MM 3.8-3: Minimize Potential for Accidental Release During Construction; MM 3.8-4: Reporting Geothermal Wells	
3.8-3	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	**Guenoc Valley Site:** N/A \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.8-4	Potential for cumulative effects associated with hazards and hazardous materials.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
	Hydrology and Water Quality			
3.9-1	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.9-1: Storm Water Pollution Prevention Plan; and MM 3.9-2: Aggregate/Concrete Monitoring and Reporting Program.	PS \ LTS
3.9-2	Substantially decrease groundwater supplies or interfere substantially with	**Guenoc Valley Site:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.9-3: Off-Site Groundwater Well Safe Yield Analysis	PS \ LTS

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
	groundwater recharge such that the project may impede sustainable groundwater management of the basin.	**Off-Site Areas:** PS \ LTS	and Monitoring.	
3.9-3	Substantially alter the existing drainage pattern which would: result in erosion, siltation or flooding; exceed the capacity of stormwater drainage systems; or provide substantial additional sources of polluted runoff.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.9-4	Result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.9-4: Flood Plan Analysis; MM 3.9-5: Inundation Mapping; and MM 3.9-6 Incorporation of Floodplains and Dam Inundation Zones in Site Plans.	PS \ LTS
3.9-5	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.9-6	Cumulative hydrology and water quality impacts.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
	Noise			
3.10-1 – 3.10-5	No changes to Noise Impacts are anticipated as a result of the Project Modifications and therefore this area was not assessed further within this PREIR.		Mitigation measures listed in the 2020 EIR remain applicable to the Modified Project. See **Appendix D**.	
	Population and Housing			
3.11-1 – 3.11-2	No changes to Population and Housing Impacts are anticipated as a result of the Project Modifications and therefore this area was not assessed further within this		Mitigation measures listed in the 2020 EIR remain applicable to the Modified Project. See **Appendix D**.	

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
	PREIR.			
	Public Services			
3.12-1 – 3.12-8	No changes to Public Services Impacts are anticipated as a result of the Project Modifications and therefore this area was not assessed further within this PREIR.		Mitigation measures listed in the 2020 EIR remain applicable to the Modified Project. See **Appendix D**.	
	Transportation and Traffic			
3.13-1	Conflict with program, plan, ordinance, or policy addressing roadways during construction.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.13-2	Conflict with program, plan, ordinance or policy addressing roadways during operation assuming future baseline plus project conditions.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.13-1: Implement Improvements at SR-29 and Butts Canyon Road.	PS \ LTS
3.13-3	Conflict with program, plan, ordinance or policy addressing transit during operation.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.13-4	Conflict with program, plan, ordinance or policy addressing bicycle, or pedestrian facilities during operation.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.13-5	Conflict or be inconsistent with CEQA guidelines § 15064.3, subdivision (b).	**Guenoc Valley Site:** PS \ SU **Off-Site Areas:** PS \ SU	*No modifications to the following from the 2020 EIR:* MM 3.13-4: Implement a Transportation Demand Management Program; and MM 3.13-5: Pay a Fair Share towards Pedestrian and Bicycle Improvements.	PS \ SU
3.13-6	Substantially increase hazards due to a geometric design feature (e.g., sharp curves	**Guenoc Valley Site:** LTS \ N/A	None Required	LTS \ N/A

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
	or dangerous intersections) or incompatible uses (e.g., farm equipment).	**Off-Site Areas:** LTS \ N/A		
3.13-7	Result in inadequate emergency access.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	None Required	LTS \ N/A
3.13-8	Conflict with program, plan, ordinance or policy addressing roadways during under cumulative conditions	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.13-1: Implement Improvements at SR-29 and Butts Canyon Road; MM3.13-2: Pay Fair Share towards Lake County Intersection Improvements; and MM 3.13-3: Conduct Traffic Study and Implement Mitigation for Future Phases.	PS \ SU
	Tribal Cultural Resources			
3.5-4	Cause a substantial adverse change in the significance of a tribal cultural resource pursuant to §21080.3.1 and §21080.3.2.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*New mitigation measures:* MM TCR-1: Phase 1 Avoidance Strategies; and MM TCR-2: Unanticipated Discoveries Plan and Construction Monitoring.	PS \ LTS
3.5-5	Cumulative impacts to cultural resources and tribal cultural resources.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*New mitigation measures:* MM TCR-1: Phase 1 Avoidance Strategies; and MM TCR-2: Unanticipated Discoveries Plan and Construction Monitoring. *No modifications to the following from the 2020 EIR:* MM 3.5-3: Future Phase Investigations; and MM 3.5-4: Cease Work, Contact County Coroner.	PS \ LTS
	Utilities			
3.14-1 – 3.14-9	No changes to Utilities Impacts are anticipated as a result of the Project Modifications and therefore this area was not assessed further within this PREIR.		Mitigation measures listed in the 2020 EIR remain applicable to the Modified Project. See **Appendix D**.	
	Energy			

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
3.15-1 – 3.15-4	No changes to Energy Impacts are anticipated as a result of the Project Modifications and therefore this area was not assessed further within this PREIR.		Mitigation measures listed in the 2020 EIR remain applicable to the Modified Project. See **Appendix D**.	
	Wildfire			
3.16-1	Substantially impair An Adopted Emergency Response Plan Or Emergency Evacuation Plan, or result in an inconsistency with A safety element that has been updated to integrate wildfire and Evacuation concerns, or recommendations developed by the California Board of Forestry regarding the safety of subdivisions.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	*New mitigation measures for Phase 1 (including Guenoc Valley Site and Off-Site Housing):* MM 3.16-3: Prepare South Lake County Evacuation Traffic Management Plan to Reduce Near-Term Evacuation Times, Incorporate in Updated Lake County Emergency Operations Plan (EOP), and Implement Evacuation Traffic Management Measures; MM 3.16-4: Reduce Evacuation Time Impacts on SR 29 by Minimizing Project-Related Evacuation Traffic on SR-29; MM 3.16-5: Implement SR 29 Traffic Signal Evacuation Operational Enhancement Measures; and MM 3.16-6: Provide Dedicated Project Evacuation Shuttles for Phase 1 Hotel Uses. *New mitigation measures for Future Phases:* MM 3.16-7: Updated South Lake County Evacuation Traffic Management Plan; and MM 3.16-8: Provide Dedicated Project Evacuation Shuttles for Full Build-out Hotel Uses.	**Guenoc Valley Site:** S \ LTS **Off-Site Housing:** S \ LTS **Off-Site Well:** NI \ N/A
3.16-2	Exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire.	**Guenoc Valley Site:** LTS \ N/A **Off-Site Areas:** LTS \ N/A	*No modifications to the following from the 2020 EIR:* MM 3.16-1: Fire Prevention during Construction. Applicable to Guenoc Valley Site and Off-Site Areas. *New mitigation measures for Phase 1 and Future Phases (applicable to Guenoc Valley Site only, not to Off-Site Areas):* MM 3.16-9: Implement Operational Wildfire Risk	**Guenoc Valley Site:** PS \ LTS **Off-Site Housing:** LTS \ N/A **Off-Site Well:** NI \ N/A

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
			Reduction Activities.	
3.16-3	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.16-1: Fire Prevention during Construction. Applicable to Guenoc Valley Site and Off-Site Areas. *New mitigation measures for Phase 1 and Future Phases (applicable to Guenoc Valley Site only, not to Off-Site Areas):* MM 3.16-9: Implement Operational Wildfire Risk Reduction Activities.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS
3.16-4	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.16-2: Post-Wildfire Emergency Response. Applicable to Guenoc Valley Site and Off-Site Areas.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS
3.16-5	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fire.	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS	*No modifications to the following from the 2020 EIR:* MM 3.16-2: Post-Wildfire Emergency Response. Applicable to Guenoc Valley Site and Off-Site Areas. *New mitigation measures for Phase 1 and Future Phases:* MM 3.16-3: Prepare South Lake County Evacuation Traffic Management Plan to Reduce Near-Term Evacuation Times, Incorporate in Updated Lake County Emergency Operations Plan (EOP), and Implement Evacuation Traffic Management Measures; MM 3.16-4: Reduce Evacuation Time Impacts on SR 29 by Minimizing Project-Related Evacuation Traffic on SR-29; MM 3.16-5 Implement SR 29 Traffic Signal Evacuation Operational Enhancement Measures; and MM 3.16-6: Provide Dedicated Project Evacuation Shuttles for Phase 1 Hotel Uses. MM 3.16-7: Updated South Lake County Evacuation Traffic Management Plan;	**Guenoc Valley Site:** PS \ LTS **Off-Site Areas:** PS \ LTS

Impact Number	Environmental Impact	2020 EIR Conclusion (Original Project: Level of Significance Before Mitigation \ After Mitigation)	Mitigation Measures	PREIR Conclusion (Modified Project: Level of Significance Before Mitigation \ After Mitigation)*
			MM 3.16-8: Provide Dedicated Project Evacuation Shuttles for Full Build-out Hotel Uses; and MM 3.16-9: Implement Operational Wildfire Risk Reduction Activities.	
3.16-6	Cumulative impacts.	**Guenoc Valley Site and Off-Site Areas:** LTS \ N/A	*No modifications to the following from the 2020 EIR:* MM 3.16-1: Fire Prevention during Construction; MM 3.16-2: Post-Wildfire Emergency Response; MM 3.16-3: Prepare South Lake County Evacuation Traffic Management Plan to Reduce Near-Term Evacuation Times, Incorporate in Updated Lake County Emergency Operations Plan (EOP), and Implement Evacuation Traffic Management Measures; MM 3.16-4: Reduce Evacuation Time Impacts on SR 29 by Minimizing Project-Related Evacuation Traffic on SR-29; MM 3.16-5 Implement SR 29 Traffic Signal Evacuation Operational Enhancement Measures; MM 3.16-6: Provide Dedicated Project Evacuation Shuttles for Phase 1 Hotel Uses; MM 3.16-7: Updated South Lake County Evacuation Traffic Management Plan; MM 3.16-8: Provide Dedicated Project Evacuation Shuttles for Full Build-out Hotel Uses; and MM 3.16-9: Implement Operational Wildfire Risk Reduction Activities.	**Guenoc Valley Site and Off-Site Areas:** PS \ LTS

*The Project Modifications do not affect the Off-Site Areas and therefore the PREIR Conclusion column only addresses impacts related to the Guenoc Valley Site for all issue areas except Wildfire, where the Courts required recirculation of the entire impact analysis.

Section 1 | Introduction

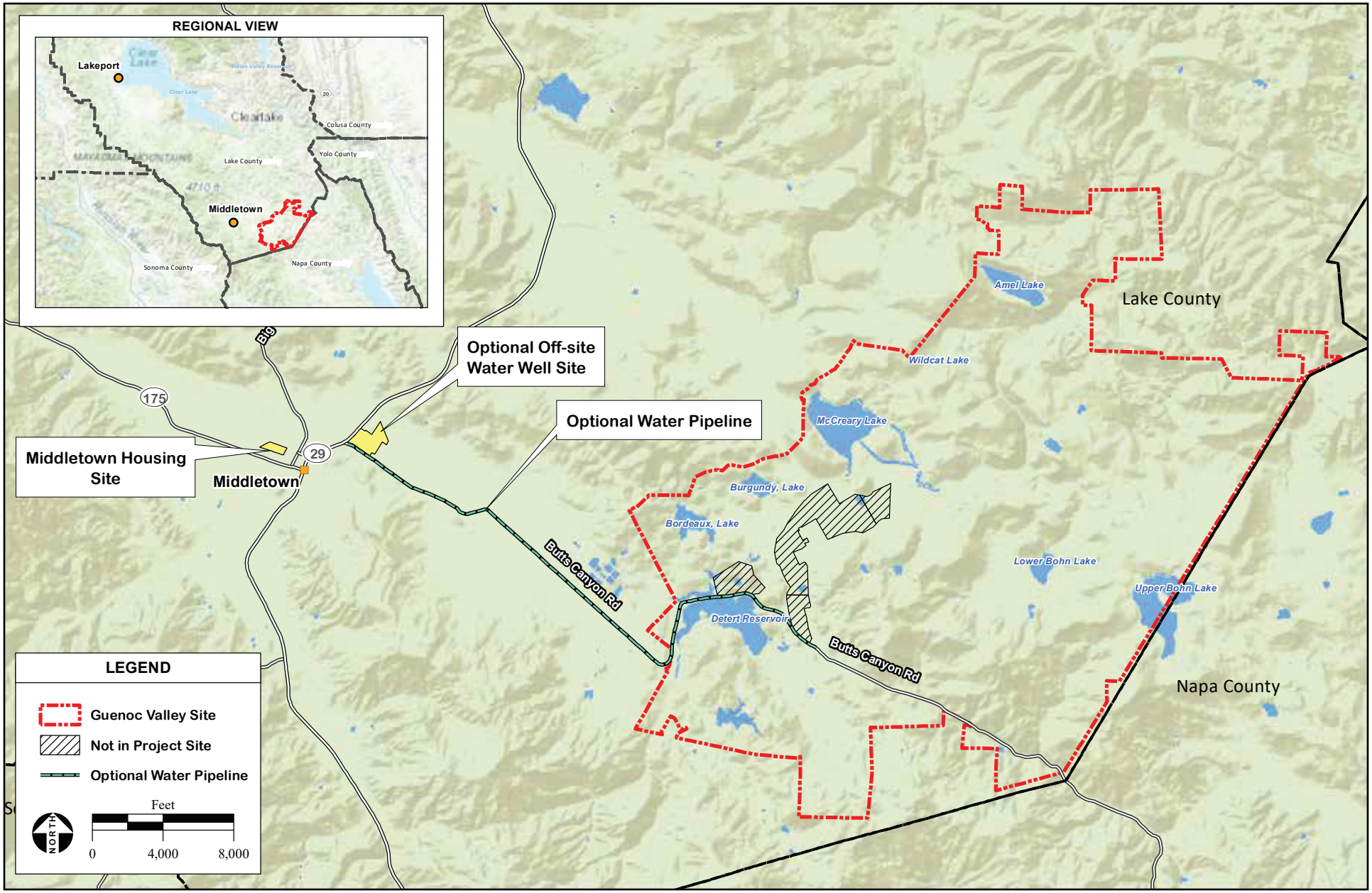
1.1 BACKGROUND AND PURPOSE OF THE DRAFT PARTIALLY REVISED ENVIRONMENTAL IMPACT REPORT (PREIR)

1.1.1 Summary of 2020 EIR

In July 2020, Lake County (County) certified the Environmental Impact Report (2020 EIR) for the Guenoc Valley Mixed-Use Planned Development Project (Project), which assessed the potential environmental impacts of implementing the Project as required by the California Environmental Quality Act (CEQA). The Project as evaluated in the 2020 EIR includes a General Plan amendment to designate the 16,000-acre Guenoc Valley Site (Project Site) as Resort Commercial and rezone it to Guenoc Valley District (GVD). These amendments would allow for the development at full buildout of up to 400 hotel rooms, 450 resort residential units, 1,400 residential estates, and 500 workforce co-housing units (the "Original Project") within the zoning district.

The 2020 EIR analyzed the potential environmental effects of the proposed General Plan amendment and rezoning of the Guenoc Valley Site to GVD on a programmatic level, and conducted a project-level analysis of Phase 1 of the Original Project. Phase 1 of the Original Project included the phased subdivision and related entitlements to allow up to 401 residential estates, 141 resort residential units, 177 hotel units, and accessory resort and commercial uses that included 100 onsite workforce housing units. In addition, Phase 1 includes a subdivision and rezoning of an off-site parcel (Middletown Housing Site) to accommodate 21 single-family residences with optional accessory dwelling units, 29 duplex units in 15 structures, and a community clubhouse and associated infrastructure. Other off-site infrastructure improvements under Phase 1 analyzed in the 2020 EIR included a proposed back-up water supply well on an off-site parcel (Off-Site Well Site) and pipeline located adjacent to and within Butts Canyon Road, along with intersection and electrical improvements (collectively referred to as 'Off-Site Improvements'). The Guenoc Valley Site, Middletown Housing Site, and Off-Site Improvements are located entirely within unincorporated Lake County (**Figure 1-1**).

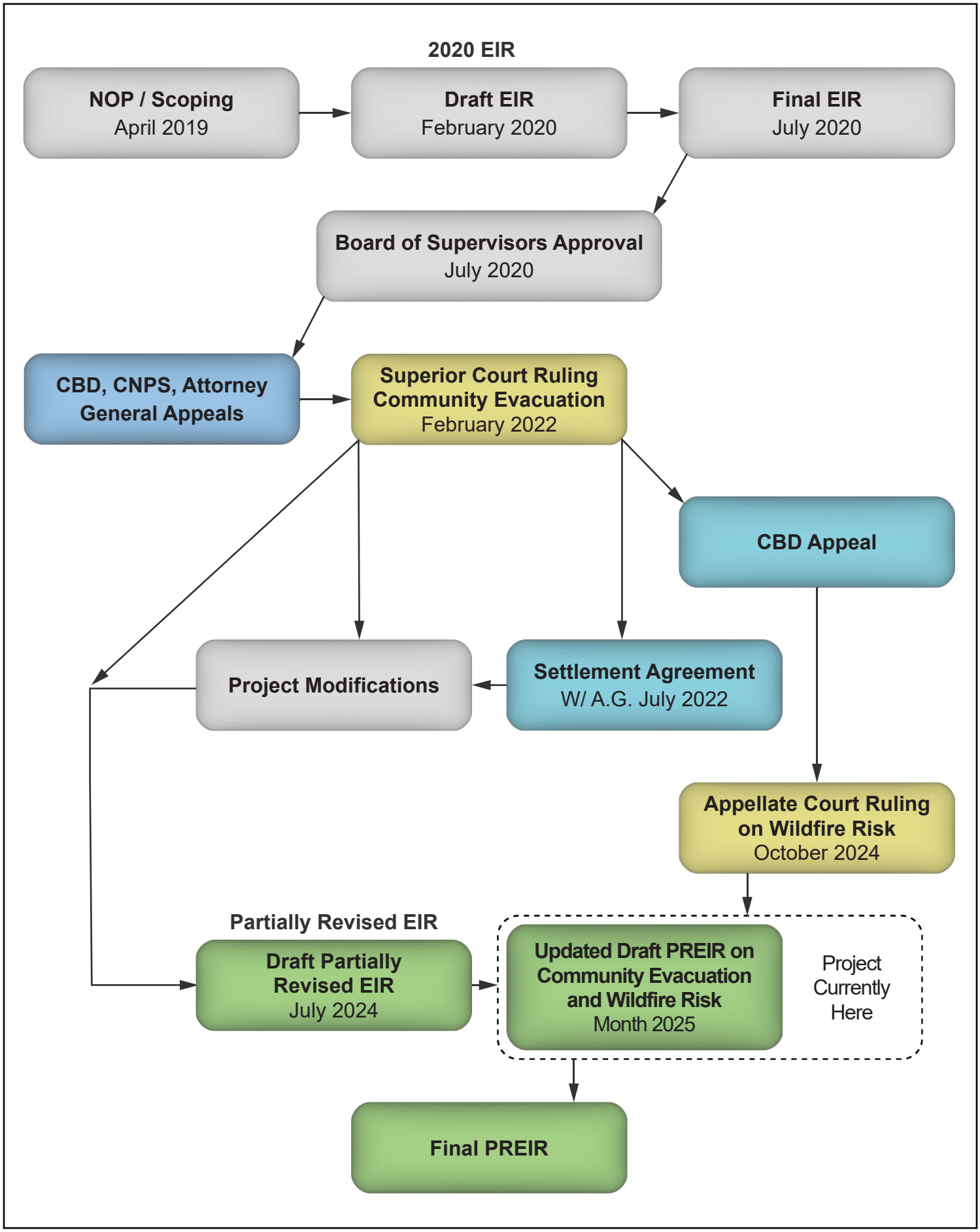
The Draft 2020 EIR (State Clearinghouse No. 2019049134) was circulated for public review and comment for a period of 45 days that began on February 21, 2020 and ended on April 6, 2020. Additionally, the County Planning Commission held a public meeting on March 12, 2020 to receive comments from government agencies and the public on the Draft EIR. During the public review period, written and oral comments were received on the Draft EIR. The County reviewed and responded to those comments, and made appropriate changes to the Final EIR dated June 2020 as part of that process. On July 15, 2020, the County published an Errata to the Final EIR to address late-filed comments received from the public and government agencies, which resulted in minor revisions and clarifications to the Final EIR. The 2020 EIR was certified and the Project was approved by the Board of Supervisors on July 21, 2020, as shown in **Figure 1-2** depicting a flow chart of the 2020 EIR and subsequent environmental processes (described below).



Source: WRA Environmental, 8/2019; Lotusland Investment Holdings, Inc. 7/2019; USGS, 2019; AES, 2/12/2020

FIGURE 1-1

REGIONAL LOCATION



SOURCE: Acorn Environmental, 2/28/2025

FIGURE 1-2

ENVIRONMENTAL IMPACT REPORT PROCESS FLOW CHART

1.1.2 Superior Court Ruling

After the Original Project was approved in 2020, the Center for Biological Diversity (CBD) and California Native Plant Society (CNPS) filed petitions for writs of mandate in the Superior Court for the County of Lake challenging the County's approval, including the County's certification of the EIR, asserting that the EIR was inadequate under CEQA on various grounds. The petitions were consolidated for purposes of briefing and hearing under Lake County Superior Court Case Number CV 421152. The State Attorney General intervened in the pending CBD action and filed its own petition for writ of mandate (Case Number CV 421193).

On January 4, 2022, the Lake County Superior Court issued a Ruling and Order on Petitions for Writ of Mandate (Trial Court Ruling and Order [**Appendix A-1**]). The Superior Court found that the EIR adequately complied with CEQA in all areas except for its analysis of impacts relating to community evacuations, where the Court identified two errors with the 2020 EIR analysis. The first is that the "evidence primarily addresses the issue of whether the Project's residents could safely leave the Project Site in the event of a wildfire. This evidence does not focus on the issue that is required to be addressed by CEQA; whether evacuation of the residents in the nearby area would be affected by the evacuation of the Project's residents during a wildfire. Second, this evidence cannot be considered substantial evidence. Substantial evidence includes 'expert opinion supported by facts.' (14 CCR §15384(b).) Unsubstantiated opinion does not constitute substantial evidence. (14 California Code of Regulations [CCR] §15384(a).) The conclusion reached by the County as it relates to emergency evacuation plans is based on unsubstantiated expert opinions" (**Appendix A-1**).

On February 25, 2022, the Lake County Superior Court entered two separate judgments and issued a writ of mandate requiring the County to set aside its certification of the EIR; vacate its findings relating to impacts to community evacuation or an adopted emergency evacuation plan; set aside and vacate all approvals in connection with the County's approval of the Project and certification of the EIR, including amendments to the Lake County General Plan, zoning ordinance text, and zoning maps; and take specific actions necessary to bring its EIR and findings as they relate to the issue of community emergency evacuation routes into compliance with the Court's Ruling and Order and CEQA (Judgement and Writ of Mandate [**Appendix A-2**]).

1.1.3 Settlement Agreement

On July 5, 2022, the State filed a notice of appeal of the Superior Court's decision. Subsequently, the Applicant voluntarily entered into a Settlement Agreement with the State to resolve the State's petition and appeal which was thereafter dismissed (Attorney General Settlement Agreement [**Appendix C**]). The Settlement Agreement included several project modifications that the Applicant has agreed to incorporate into the Project design pertaining to wildfire prevention and protection, greenhouse gas (GHG) emissions, and land use, as discussed in more detail in **Section 2.2** below.

1.1.4 July 2024 Draft PREIR Circulation

The County prepared an initial Draft PREIR to address the topic of community wildfire evacuation in order to comply with the Superior Court's decision, as well as an analysis of the then proposed modifications to the project. The initial Draft PREIR was circulated for public review and comment for a period of 55 days that began on July 19, 2024, and ended on September 11, 2024. Additionally, the County Planning Division held a public meeting on September 9, 2024, to receive comments from government agencies and the public on the Draft PREIR. Written and oral comments were received but a Final PREIR responding to those

comments was not released before the October 2024 appellate court ruling that the EIR's wildfire risk analysis needed to be brought into compliance with CEQA pursuant to the appellate court's ruling and therefore also required recirculation. The County is choosing to fully recirculate the Draft PREIR with the original community evacuation analysis and additional analysis of wildfire risk to provide a holistic assessment of these two related wildfire topics. Comments previously received on the July 2024 Draft PREIR will be retained and included in the administrative record and responded to, along with any comments received on this second Draft PREIR, in a Final PREIR.

1.1.5 Court of Appeal Decision

The CBD and CNPS appealed the trial court's judgments upholding portions of the 2020 EIR other than the analysis of wildfire community evacuation impacts. On October 23, 2024, the First Appellate Court issued its decision. The First Appellate Court held that the 2020 EIR complied with CEQA in all areas remaining at issue on appeal (the Superior Court's conclusion regarding inadequacy of the community evacuation analysis was not appealed and therefore was not before the First Appellate Court) except for its analysis of impacts relating to wildfire risk resulting from the Proposed Project. With respect to the wildfire risk analysis, the First Appellate Court found two issues. First, the Court found that the additional wildfire risk analysis presented in the Errata to the 2020 FEIR and the letter submitted by the Applicant's attorney was presented too late and effectively precluded public review. Second, the Court found that the wildfire risk analysis failed to meaningfully assess the wildfire risk created by the Project's potential to increase human-caused wildfire ignitions. The First Appellate Court remanded the case to the Superior Court and directed it to issue an order and writ of mandate consistent with the First Appellate Court's decision.

1.1.6 Statutory Background

CEQA is a legislatively created statute set forth in Public Resources Code (PRC) Sections 21000-21189.91. The CEQA Guidelines, which have been prepared by the State Office of Planning and Research (OPR) and the California Natural Resources Agency as a means to interpret and provide guidance on implementation of CEQA, are included in CCR, Title 14, Division 6, Chapter 3, Sections 15000-15387 (CEQA Guidelines).

Where a court finds that CEQA violations have occurred, judicial remedies must only include the mandates needed to comply with CEQA. (PRC Section 21168.9(b); *see also* CEQA Guidelines Section 15234.) To that end, CEQA Guidelines Section 15234 provides that an agency revising its environmental document per a court's order "need not expand the scope of analysis on remand beyond that specified by the court." (CEQA Guidelines Section 15234(d).)

The CEQA Guidelines further acknowledge that "additional environmental review shall only be required by the court consistent with principles of res judicata." (CEQA Guidelines Section 15234(d).) Res judicata is the legal concept that "prevents relitigation of the same cause of action in a second suit between the same parties or parties in privity with them" (California Supreme Court in *Mycogen v. Monsanto Company* (2002) 28 Cal.4th 888, 896; see also *Ione Valley Land, Air, & Water Defense Alliance, LLC v. County of Amador* (2019) 33 Cal.App.5th 165, 170-173). Once an agency has taken steps to correct the deficiencies in an EIR identified in a writ of mandate, further challenges to the EIR based on issues that were raised or could have been raised in the prior litigation are barred by res judicata. *Ione Valley* (2019) 33 Cal.App.5th 165, 172. As the First Appellate Court explained in *Sierra Club v. County of Fresno* (2020) 57 Cal.App.5th 979 (*Friant Ranch II*), "[b]ased on the principle set forth in *Ione Valley*, new challenges to the parts of the EIR that have been upheld are not allowed in proceedings on remand." (57 Cal.App.5th at p. 990.)

Currently, under the CEQA Guidelines provision and case law described above regarding the principle of res judicata, new challenges to the 2020 EIR that could have been but were not previously raised are not allowed to be brought in the trial court in a second suit or upon remand. On October 23, 2024, the First Appellate Court held that the 2020 FEIR's analysis of the Proposed Project's potential to exacerbate existing wildfire risks was inadequate and affirmed the ruling of the trial court with respect to all other claims. The deadline for the California Supreme Court to review that ruling has passed. Therefore, no new challenges to the 2020 FEIR will be permissible.

Pursuant to *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, "the trial court's retained jurisdiction under PRC section 21168.9, subdivision (b) is limited to ensuring compliance with the peremptory writ of mandate. After considering the petitioner's challenges to an EIR or other agency action and rendering a final judgment and peremptory writ of mandate, a trial court evaluating a return to the writ may not consider any newly asserted challenges arising from the same material facts in existence at the time of the judgment."

1.2 DOCUMENT ORGANIZATION

1.2.1 PREIR Structure

The County has prepared this PREIR to address the CEQA adequacy issues identified by the Superior Court with regard to the 2020 EIR's analysis of community evacuation in the event of wildfire and by the First Appellate Court with regard to its analysis of impacts relating to potential wildfire risk resulting from the Project. In addition, some changes to the Project have occurred since the County's certification of the 2020 EIR, namely those changes voluntarily agreed to by the Applicant as set forth in the Settlement Agreement, updates to address revised State codes, and the provision of an additional, third emergency evacuation route. These changes are referred to throughout this PREIR as the "Project Modifications" and are described in detail in **Section 2.0** of this PREIR. The Project Modifications do not increase the overall amount of development that would be allowed. The Project Modifications include:

- Increasing the density of lots within some neighborhoods and decreasing the average lot size (described more fully in **Section 2.2.1**, subsection Wildfire-Related Project Modifications of this PREIR);
- Decreasing the total length of internal Project roadways proposed while increasing roadway connectivity for better circulation in emergencies (as described in **Section 2.2.1**, subsection Wildfire-Related Project Modifications);
- New energy efficiency and renewable energy commitments (as described in **Section 2.2.1**, subsection Greenhouse Gas Emissions Reduction Measures);
- Updates to the Wildfire Prevention Plan (described in **Section 2.2.3**); and
- Addition of a third emergency evacuation route called the 'Grange Road Connector' (described in **Section 2.2.2**).

In addition to addressing the issues identified in the Superior Court's Ruling and the First Appellate Court decision, this PREIR assesses whether or not the Project Modifications would result in new or more substantially significant environmental effects, consistent with criteria outlined in CEQA Guidelines Section 15162. Impacts that were found by the First Appellate Court to be adequately addressed, and/or that would not change as a result of the Project Modifications, are not re-assessed. For example, Section 4.2, "Air Quality", only assesses the potential incremental increase in air pollutant emissions resulting from the Project Modifications to determine if a new or substantially more severe impact would occur

beyond those effects described in the 2020 EIR, because the First Appellate Court upheld analyses of air quality impacts in the 2020 EIR. Consistent with the 2020 EIR, this PREIR provides a project-level analysis for Phase 1; the program-level analysis of future phases has not changed from the 2020 EIR with the exception of the community wildfire evacuation and wildfire risk analyses, as required by the Superior Court's Ruling and the First Appellate Court decision. The analysis provides sufficient detail and clarity such that the revised analysis is disclosed to the public, and decision makers can make an informed decision regarding the adequacy of the PREIR analysis.

As discussed further below, the County will consider comments received on the contents of this PREIR within the public comment period and will prepare written responses as required by CEQA. Pursuant to Section 15088.5(f)(2) of the CEQA Guidelines, reviewers are directed to limit their comments to the information contained in this updated PREIR that was revised and recirculated. Specifically, comments should be limited to the revised discussion of the Project's potential impacts related to wildfire risk and the assessment of whether or not the Project Modifications would result in new or more substantially significant environmental effects. Comments that were submitted during the public comment period from July 19, 2024, to September 11, 2024, on the previously circulated Draft PREIR that analyzed community wildfire evacuation impacts and the Project Modifications will be addressed in the written responses required by CEQA, and do not need to be submitted again. This updated Draft PREIR does not make any substantial changes to the previous Draft PREIR's analyses of community wildfire evacuation impacts or the Project Modifications, aside from minor technical clarifications in several areas. Based on CEQA and legal requirements, including *res judicata*, the County need not address comments on issues that were covered in the 2020 EIR (included as **Appendix D**) and that were not overturned by the Superior Court or the First Appellate Court

This document is organized into the following sections. Note that section numbering differs from the 2020 EIR organization.

Section 1, Introduction. This chapter describes the purpose and organization of the PREIR, as well as the background of the various agreements, Superior Court's Ruling, and First Appellate Court decision that have occurred since certification of the 2020 EIR.

Section 2, Project Modifications. This chapter summarizes the Original Project components that have not changed since the 2020 EIR and describes the Project Modifications that have occurred.

Section 3, Wildfire. This chapter analyzes the potential wildfire impacts, including community evacuation impacts as required by the Superior Court Rulings and wildfire risk as required by the First Appellate Court decision.

Section 4, Assessment of Environmental Impacts from Project Modifications. This chapter analyzes the potential impacts of the Project Modifications on the relevant resource areas and discusses the incremental change as compared to the 2020 EIR.

Section 5, Updated Mitigation Monitoring and Reporting Program. An updated Mitigation Monitoring and Reporting Program (MMRP) is included as Section 5. The revised MMRP includes all Project Modifications from the Settlement Agreement, new mitigation measures that arise from the analysis contained within this PREIR, and reiterates previously-adopted mitigation measures from the 2020 EIR.

Section 6, Report Preparation. This section lists the preparers of this PREIR and those individuals, organizations, or agencies consulted in its preparation.

Section 7, References. This section lists all references utilized during the preparation of this PREIR.

Section 8, Acronyms. This section lists and defines all acronyms contained within this PREIR.

1.2.2 PREIR Updates Since July 2024 Public Draft PREIR

As discussed in **Section 1.1.4** above, this Draft PREIR is being recirculated in its entirety and contains the original community evacuation analysis, new analysis of wildfire risk, and the same assessment of Project Modifications first circulated for public review in July 2024 with minor technical modifications. This section summarizes the main changes to this Draft PREIR since the July 2024 public review:

- A new **Section 1.1.4** has been added addressing the July 2024 Draft PREIR circulation;
- A description of the First Appellate Court decision has been added to **Section 1.1.5**;
- References to Court Rulings throughout the PREIR have been updated to reference both the Superior Court and First Appellate Court rulings, and the First Appellate Court decision has been added as **Appendix B**;
- As a result of the First Appellate Court decision, wildfire prevention measures requiring ongoing maintenance that were previously considered project design features within the Wildfire Prevention Plan (WPP) have been recategorized as mitigation measures. This is introduced first in **Section 2.2.3** and analyzed accordingly throughout **Section 3**; however the analysis of the Project Modifications in **Section 4** continues to holistically assess the impacts of the entire WPP, including components identified as design features and mitigation measures;
- **Section 3** was renamed from 'Wildfire Evacuation' to 'Wildfire' and the additional wildfire risk analysis required by the First Appellate Court has been added throughout **Section 3**. This includes updated introductory text in **Section 3.1**, expanded environmental setting in **Section 3.2**, regulatory setting updates where applicable in **Section 3.3**, and additional impact analysis and mitigation measures in **Section 3.4** and **Section 3.5,** respectively. Note that Impacts 3.16-2, 3.16-3, and 3.16-4 were previously assessed for only the Project Modifications in **Section 4**, and now the entire discussion of wildfire risk has been moved into **Section 3**;
- A supporting Wildfire Risk Analysis technical report has been prepared and included as **Appendix M** to this recirculated Draft PREIR;
- The authors of the January 2024 Wildfire Evacuation Analysis peer-reviewed the Wildfire Risk Assessment and provided a brief memorandum discussing the relationship between the two supporting memos, which has been added as **Appendix H-3** (Wildfire Risk Analysis [January 2025] and Relationship to Wildfire Evacuation Assessment); and
- Additional botanical surveys were completed during 2024 and a memorandum documenting the survey results is now included as **Appendix I-2** (WRA Special-Status Plant Survey), and the survey results have been added to **Section 4.4** wherever applicable.

1.3 LIMITED CIRCULATION OF THE PREIR

Consistent with the requirements of Sections 15087 and 15088.5(d) of the CEQA Guidelines, this Draft PREIR is being circulated for public review and comment for a period of 45 days. During this period, the public, organizations, and agencies can submit comments to the Lead Agency on the PREIR. Release of the Draft PREIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The public can review the Draft PREIR at the County's website at:

https://lakecountyca.gov/1762

Or at the following addresses during normal business hours:

County of Lake, Community Development Department
255 N. Forbes Street
Lakeport, CA 95453

Middletown Library
21256 Washington Street
Middletown, CA 95461

All comments regarding the PREIR should be mailed or emailed to:

Name: Laura Hall
Title: Senior Planner
255 N. Forbes Street
Lakeport, CA 95453
guenocvalleycomments@lakecountyca.gov

Pursuant to Section 15088.5(f)(2) of the CEQA Guidelines, reviewers are directed to limit their comments to the information contained in the PREIR that was revised and recirculated. Specifically, comments should be limited to the revised discussion of the Project's potential impacts related to community wildfire evacuation, wildfire risk, and the assessment of whether or not the Project Modifications would result in new or substantially more severe significant environmental effects. Comments that were submitted during the public comment period from July 19, 2024 to September 11, 2024 on the previously circulated PREIR that analyzed community wildfire evacuation impacts and the Project Modifications, will be addressed in the written responses within the Final PREIR as required by CEQA, and do not need to be submitted again. This updated Draft PREIR does not make any substantial changes to the previous Draft PREIR's analyses of community wildfire evacuation impacts or the Project Modifications, only minor technical clarifications in several areas.

After the close of the comment period, the County will consider all comments received on this Draft PREIR within the comment period and prepare written responses to comments raising significant environmental issues, as required by CEQA (CEQA Guidelines Section 15088). The Final EIR will consist of the 2020 EIR (including the Draft EIR, Final EIR, and Final EIR Errata), the July 2024 Draft PREIR, this updated Draft PREIR, comments and written responses to comments on the Draft PREIRs, and any resulting text changes to the PREIR. The County will then consider whether to certify the EIR, as revised by the PREIR, and whether to reapprove the Project.

1.4 TERMINOLOGY

Throughout this PREIR, the following terminology is utilized:

- **2020 EIR:** refers to the Draft EIR, Final EIR, and Final EIR Errata, as certified by the County Board of Supervisors in July 2020 and included as **Appendix D**
- **Guenoc Valley Site:** the entire 16,000-acre Guenoc Valley Ranch property or the 'Project Site'
- **Project Site:** this term also refers to the entire 16,000-acre Guenoc Valley Ranch property or the 'Guenoc Valley Site'
- **Middletown Housing Site:** the 12.75-acre off-site workforce housing property

- **Project Modifications:** this refers specifically to those portions of the Project that have been altered since the 2020 EIR, as summarized above and described fully in **Section 2.0**
- **Proposed Project:** the Project as analyzed in the 2020 EIR along with the Project Modifications described in **Section 2.0** of this PREIR. Also referred to as 'Modified Project'
- **Modified Project:** the Proposed Project with Modifications described in **Section 2.0**
- **Original Project:** the Project as analyzed in the 2020 EIR
- **Area of Potential Effects (APE)[1]:** this refers to the maximum surface area that may be directly impacted by Phase 1 of the Proposed Project. This includes the road network, development footprint of the proposed resorts, as well as the entire parcel acreage of each residential parcel. The entire APE will not be disturbed, rather it represents the outer perimeter within which impacts may occur. Note in the 2020 EIR the Phase 1 APE was 2,958 acres, but with the Project Modifications, it will be reduced by 505 acres to 2,453 acres because some of the lot sizes have been reduced and consolidated, fewer linear miles of roadways are proposed, and the camping area was eliminated. While the APE has decreased in size, approximately 333 acres of the current APE is proposed within areas that are located outside of the Phase 1 APE as previously defined in the 2020 Final EIR. The terms 2020 APE and Modified APE are used throughout this PREIR.

  Development Area: this is the maximum area of disturbance that will result from implementation of the Proposed Project. Under the new proposed zoning, the maximum development footprint on each residential parcel is 1.5 acres (inclusive of the house, landscaping, driveways, etc.), but each house has not been designed on each parcel and therefore the 1.5 acre of disturbance on each residential lot has not been defined. Note in the 2020 EIR the Phase 1 Development Area was 1,415 acres, but with the Project Modifications, it will be reduced by 213 acres to 1,202 acres because fewer linear miles of roadways are proposed and the camping area has been eliminated.

[1] While the term APE is used to describe the physical footprint of the proposed development, it should be noted that the EIR assessment of impacts to certain resources, such as air quality and water resources, does not strictly limit review to the spatial extent of the APE. For example, evaluation of impacts to air quality considers the overall impacts to the air basin, and evaluation of impacts to groundwater considers impacts to the larger groundwater basin and associated users.

Section 2 | Project Modifications

Throughout this PREIR, the term 'Modified Project' refers to the Original Project proposed and analyzed in the 2020 EIR (**Appendix D**), summarized in **Section 2.1** below, as amended by the Project Modifications described in **Section 2.2**.

2.1 ORIGINAL PROJECT SUMMARY

As described in detail in Section 2.0 of the 2020 EIR, the Original Project consists of the development of a master planned mixed-use resort and residential community within a portion of the 16,000-acre Guenoc Valley Ranch property (Guenoc Valley Site) in southeast Lake County, off-site workforce housing (Workforce Housing) located on an 12.75-acre site in central Middletown (Middletown Housing Site), and off-site water supply well and pipeline located adjacent to and within Butts Canyon Road. Minimal changes to the project description have occurred which are further described in **Section 2.2** below. The full project description is provided in the 2020 EIR, which is included as **Appendix D** of this document. The Original Project includes:

- General Plan & Zoning Ordinance Amendment that would introduce a new zoning district and rezone the entire Guenoc Valley Site to Guenoc Valley District (GVD), which would permit the development of up to a total of 850 hotel and resort residential units, 1,400 residential estates, workforce housing, resort amenities, and accessory uses within the Guenoc Valley Site. The zoning ordinance amendment would also include an Agricultural Preserve Combining District and an Open Space Combining District.
- Approval of entitlements for the first phase of development (Phase 1), including a Use Permit for the General Plan of Development and Specific Plan of Development (SPD; UP 18-01) and Phased Tentative Subdivision Maps that would allow for the development of four separate subdivisions with approximately 401 residential estate villas, 141 resort residential units, 177 hotel rooms, 20 camp sites, and 100 on-site co-housing workforce bedroom units (equivalent to 35 housing units), and associated infrastructure.
- Approval of entitlements for the proposed Workforce Housing in Middletown, including a rezone of 3.5 acres from Single Family Residential to Two-Family Residential, a tentative subdivision map for 38 lots, and a use permit (UP 24-08) for a community center. This would result in 21 Single Family Homes on 21 lots, 29 Duplex units on 15 lots, one lot for the community center, and one green space lot for a total of 50 housing units within the site.
- Conceptual Grading Permit to allow for development of off-site water supply well and pipeline along Butts Canyon Road to the Detert Reservoir within the Guenoc Valley Site.

As described in the 2020 EIR, the Original Project components would be developed over multiple phases. The first phase (Phase 1) will be constructed in the near-term (approximately the next ten years) and future phases will be built out based on market demands.

2.2 PROJECT MODIFICATIONS

Table 2-1 from the 2020 EIR (**Appendix D**) details all previously proposed land uses and densities; the Project Modifications would result in the same or reduced number of residential units and hotel rooms

and would consolidate certain previously proposed remote lots into a smaller area, resulting in a greater density of units within certain neighborhoods. As a result of these consolidations of lot configuration and size, the Project Modifications will reduce the overall Phase 1 APE and Development Area from that previously studied in the 2020 EIR, and result in four tentative subdivision maps instead of the original five. While the proposed land uses and site plans for Phase 1 are defined in detail within the proposed updated SPD, Tentative Subdivision Maps (**Appendix E**), and associated studies, land use plans have not been developed for the future uses that would be allowable under the proposed GVD zoning designation for the Guenoc Valley Site. Consistent with the 2020 EIR, this PREIR provides a project-level analysis for Phase 1; the program-level analysis of future phases has not changed from the 2020 EIR. **Figure 2-1** illustrates the Proposed Project Site Plan with Project Modifications, **Figure 2-2** illustrates the parcel configuration analyzed in the 2020 EIR and the areas removed from the proposed parcel configuration, and **Tables 2.2-1** and **2.2-2** summarize the proposed land uses and how they have changed from the 2020 EIR as a result of the Project Modifications. The existing combining districts under current County zoning have not changed since the 2020 EIR and are not proposed to change, and therefore do not constitute a Project component. The Floodway Fringe (113 acre), Scenic (584 acre), Waterway (981 acre), and Wetlands (107 acre) combining districts are existing zoning overlays on the property and would remain under the Proposed Project. These combining districts overlap with each other and overlap with the proposed zoning and proposed new combining districts.

Table 2.2-1: Phase 1 Land Use Area Summary, Modified Project Compared to Original Project

Proposed Land Use	Acreage (Total Area of Lot)			Acreage (Total Potential Development Area)		
	2020 EIR	Modified Project	Change (acres/miles)	2020 EIR [1]	Modified Project	Change (acres)
Commercial Resort Parcels	604	373	-231 (-38%)	244	190	-54 (-22%)
Resort Residential Parcels	98	203	+105 (107%)	48	66	+18 (38%)
Residential Estate Parcels	2,048	1,361	-687 (-33%)	602	560	-42 (-7%)
Golf Course Parcels	441	474	33 (7%)	90 [2]	90	0 (0%)
Accessory Uses Parcels	371	324	-47 (-13%)	172	131	-41 (-24)
Road Parcels (area)	259	134	-125 (-48%)	259	165	-94 (-36%)
Sub-Total	**3,821**	**2,869**	**-952 (-25%)**	**1,415**	**1,202**	**-213 (-15%)**
Proposed Designated Open Space Combining District	2,765	2,765	0	-	-	N/A
Proposed Agricultural Preserve Combining District	1,743 [3]	1,653	-90 (-5%)	-	-	N/A
Other Undeveloped Land	7,626	8,668	952 (12%)	-	-	N/A
Sub-Total	12,134	13,086	-	-	-	-
Total	15,955	15,955				

Notes: [1]Based on limits of grading for commercial and infrastructure areas, and the maximum 1.5 acres of development allowable within the residential parcels.[2]Includes grading for fairways, greens, and golf cart paths.
[3]Does not include areas that overlap with parcels and roads, which resulted in decreases due to Modifications.
[4]This table presents the total area of future lots (not Area of Potential Effects [APE]). The total lot size in the 2020 EIR was 3,821 acres and within this the 2020 APE was 2,958 acres. The total lot size under the Modified Project is 2,869 acres and within this the Modified APE is 2,453 acres.
Source: SWA Group, 2024 and 2020 EIR (**Appendix D**)

GUENOC VALLEY PROJECT | 2024 UPDATED PLAN

PARCELS & AREAS

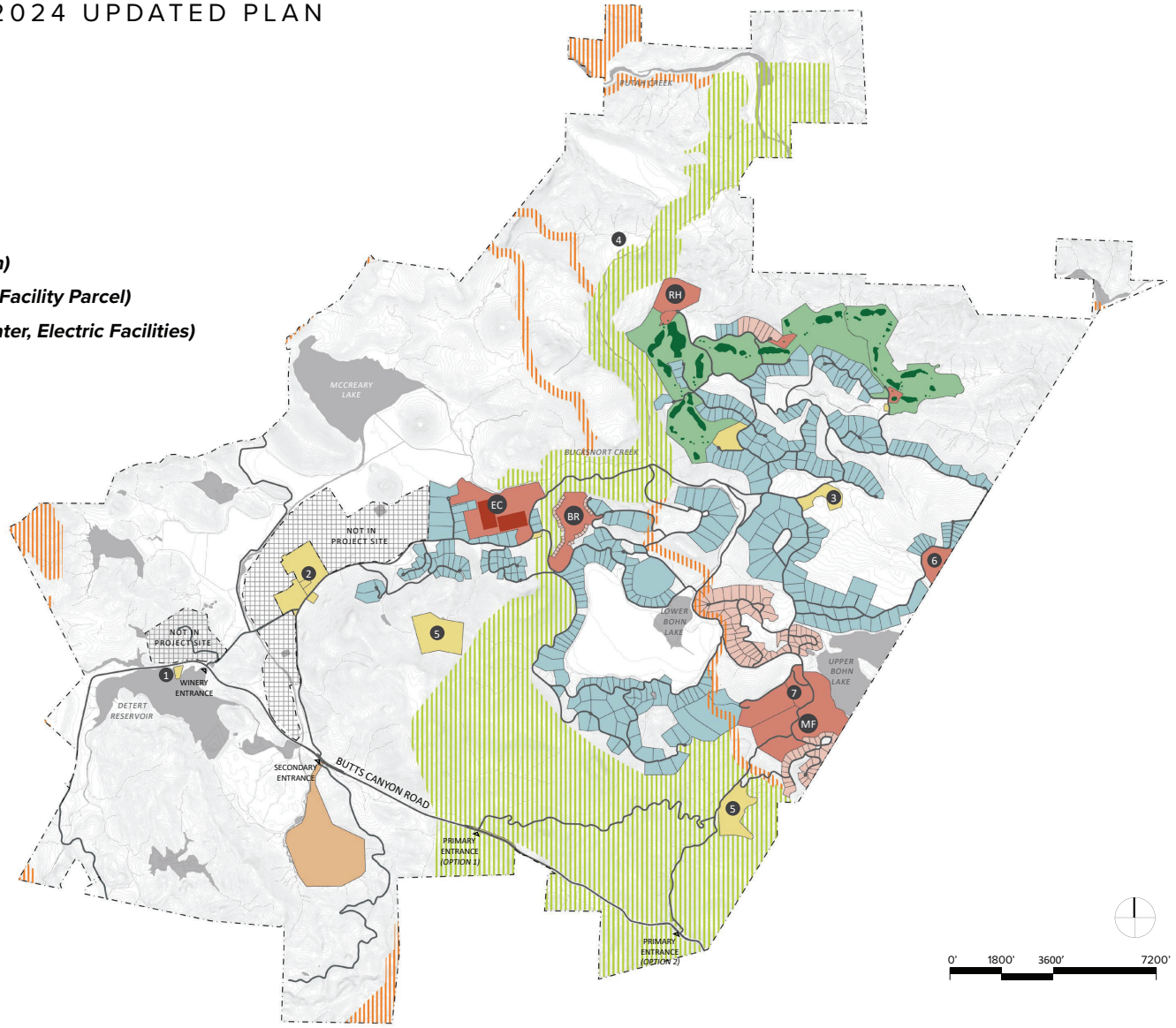
- **Resort Parcels**
  - ***Equestrian Fields (approximate location)***
- **Resort Residential Parcels**
- **Residential Estate Parcels**
- **Golf Course Parcel**
  - ***Golf Course Greens (approximate location)***
- **On-Site Workforce Housing Parcel *(Supporting Facility Parcel)***
- **Supporting Facilities *(Including Water, Wastewater, Electric Facilities)***
- **Designated Open Space**
- **Habitat Connectivity Easements**

MAIN RESORTS

- BR Bohn Ridge Resort
- EC Equestrian Center & Lodge
- MF Maha Farm
- RH Red Hill Resort

FEATURES

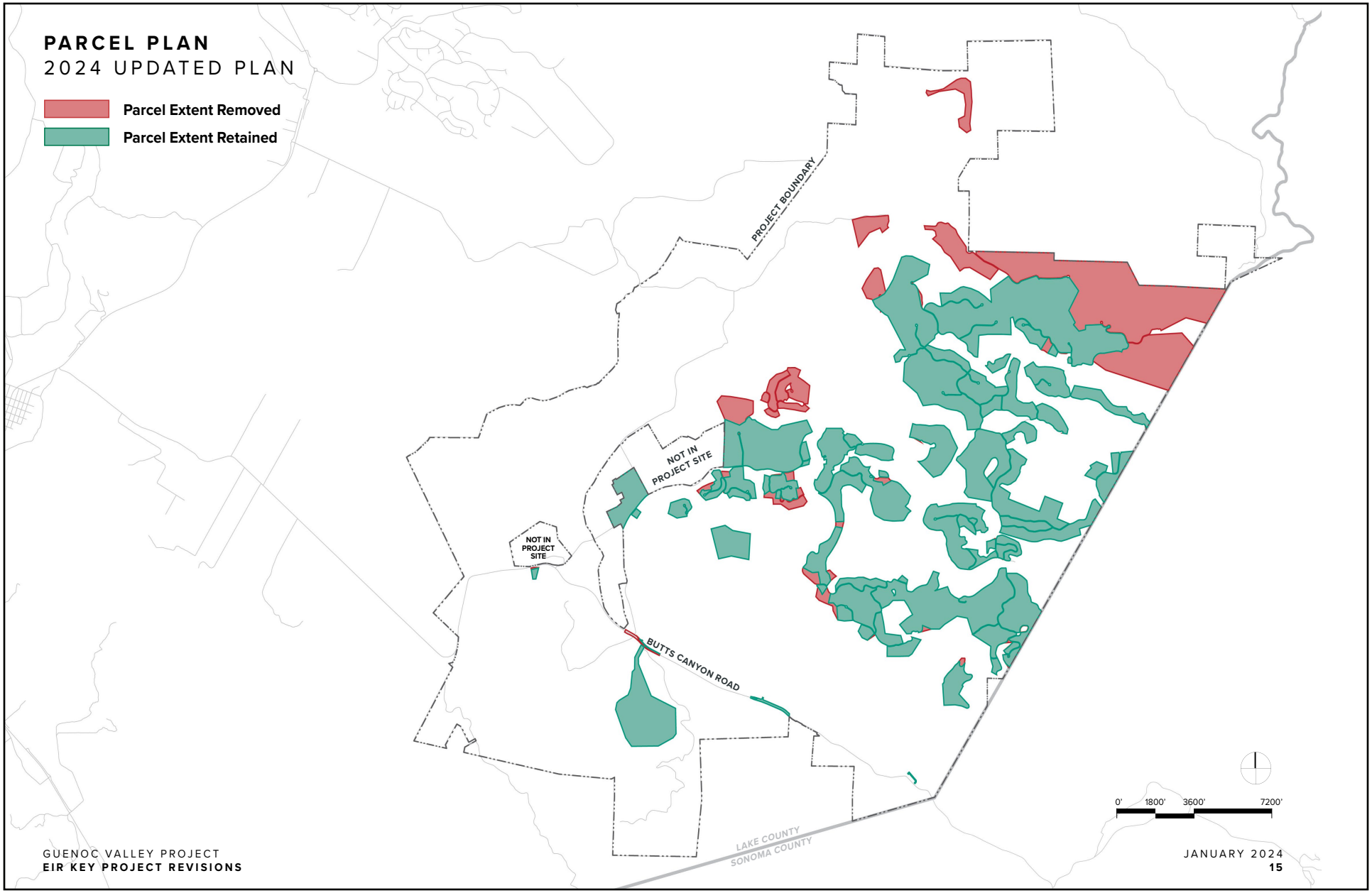
- 1 Aerial Site Access
- 2 Central Back-of-House Operatons
- 3 Emergency Response Center
- 4 Hennesy Barn Public Ranch
- 5 Potental Solar Fields
- 6 Wineries



Source: SWA Group, 2024

FIGURE 2-1

PROPOSED PROJECT SITE PLAN WITH MODIFICATIONS



Source: SWA Group, 2024

FIGURE 2-2

PROPOSED PROJECT MODIFIED PARCEL CONFIGURATION

Table 2.2-2: Phase 1 Unit Counts, Modified Project Compared to Original Project

	Hotel and Camping Units*		Resort Residential Units*		Residential Estate Units*		Workforce Co-Housing*	
	Original	Modified	Original	Modified	Original	Modified	Original	Modified
Maha Farms & Sales Center	48	48	45	104	145	73	0	0
Bohn Ridge Resort	31	49	30	30	39	112	0	0
Resort at Trout Flat	12	0	13	0	29	0	0	0
Spa and Wellness	0	0	0	0	11	0	0	0
Denniston Golf Estates	30	0	40	7	89	133	0	0
Equestrian Center and Lodge	6	50	13	0	88	67	0	0
Camping Area	20	0	0	0	0	0	0	0
Entourage Hotel	50	0	0	0	0	0	0	0
Workforce Co-Housing[1]	0	0	0	0	0	0	100	100
Total[2]	**197**	**147**	**141**	**141**	**401**	**385**	**100**	**100**

Notes: *For purposes of this table, "Original" refers to the number of units analyzed in the 2020 EIR and Modified refers to the current Modified Project unit numbers. [1]The 100 Workforce Co-Housing Units are a 400 square foot bedroom and bathroom unit with a common cooking and resting area, the same as the 2020 EIR. [2]Although there has been a slight reduction of 50 hotel units and 16 residential estates, analyses of certain issue areas in this PREIR assumes the same number of hotel and residential units to present a more conservative analysis.
Source: SWA Group, 2024

As shown in **Table 2.2-1**, the total area of all lots proposed under the Original Project was 3,821 acres, of which the Phase 1 APE was 2,958 acres. The Project Modifications result in a Phase 1 Modified APE that is 2,453 acres, approximately 505 acres less than the APE of the Original Project as depicted in Figure 2-6 of the 2020 EIR, and a Development Area that is 1,202 acres, approximately 213 acres less than the Development Area of the Original Project. As described in **Section 1.4** of this PREIR, the Phase 1 Development Area includes the proposed limits of grading for the commercial/resort lots, roadways, and infrastructure, and a 1.5-acre area for each residential lot based on the lot development restrictions in the proposed Design Guidelines (reference Appendix DG of the 2020 EIR). The Development Area also includes a minimum of 50 feet of width on either side of roadways to encompass the potential fuel reduction zone as described in the Updated Wildfire Prevention Plan (**Appendix F**). Similar to the analysis within the 2020 EIR, the APE encompasses this potential development footprint area, but has been expanded to include the entirety of the residential parcels since the 1.5-acre development areas have not been defined.

With the exception of Grange Road and the connector roadways (discussed further in **Sections 2.2.1** and **2.2.2** below), all modified components of the Proposed Project have been intentionally sited within the same parcel alignment as the 2020 EIR to the maximum extent feasible. However, while the APE has decreased in size, approximately 333 acres of the Modified APE is proposed within areas that are located outside of the Phase 1 APE as previously depicted in the 2020 Final EIR. These new APE areas encompass the Grange Road Connector APE, new connector roadway segments, a higher concentration of resort residential parcels in the Maha Farms community, and higher concentrations of residential estates in the Bohn Ridge and Denniston Golf Estates (formerly Red Hill Resort) communities. **Figure 2-3a** illustrates the boundaries of the 2020 APE as compared to the Modified APE, and **Figure 2-3b** provides a side by side comparison of the Development Area of the Original Project compared to the Development Area with the Project Modifications. The following APE additions are addressed throughout this PREIR:

- Grange Road: The Grange Road Connector APE is approximately 3.9 miles, of which 1.7 miles are located on the off-site Comstock Ranch property and the remaining 2.2 miles are located on the Guenoc Valley Site. Approximately 75 percent of the off-site portion is located on existing dirt roads, some of which were at least partially covered with sand or gravel. The portion of the Grange Road Connector on the Guenoc Valley Site is located almost entirely along existing vineyard and ranch roads.
- Connector Roads: the Project Modifications include 4.8 miles of 'Connector Roadways' within the Guenoc Valley Site to ensure there are no dead-end or non-looped roads greater than one mile. The APE for the new Connector Roadways is approximately 30 feet wide to reflect average topographic conditions and the feasibility of the 10-foot hardscape shoulder near steep slopes. The Connector Roads were sited within the APE previously analyzed in the 2020 EIR to the maximum extent feasible, although some stretches of roadway are outside of the APE analyzed in the 2020 EIR.
- Parcel Reconfiguration: While the 2020 APE encompassed the entire boundary of most residential parcels, design level details were utilized where available for certain resort residential parcels. Because the density of resort residential parcels has increased in certain areas to offset the elimination of more remote parcels, these design level plans will need to be revised. To provide a conservative review, the entire extent of the resort residential parcels has been included in the Modified APE, resulting in a shift in the APE boundaries, but mostly within previously studied or surveyed areas.

The majority of the Original Project components remain the same; e.g. construction equipment and construction duration, water and energy demand, landscaping and lighting. If a project component is not directly addressed in **Section 2.0** of this PREIR, it is the same as the Original Project and a complete description is available in the 2020 EIR (**Appendix D**).

2.2.1 Settlement Agreement Project Commitments

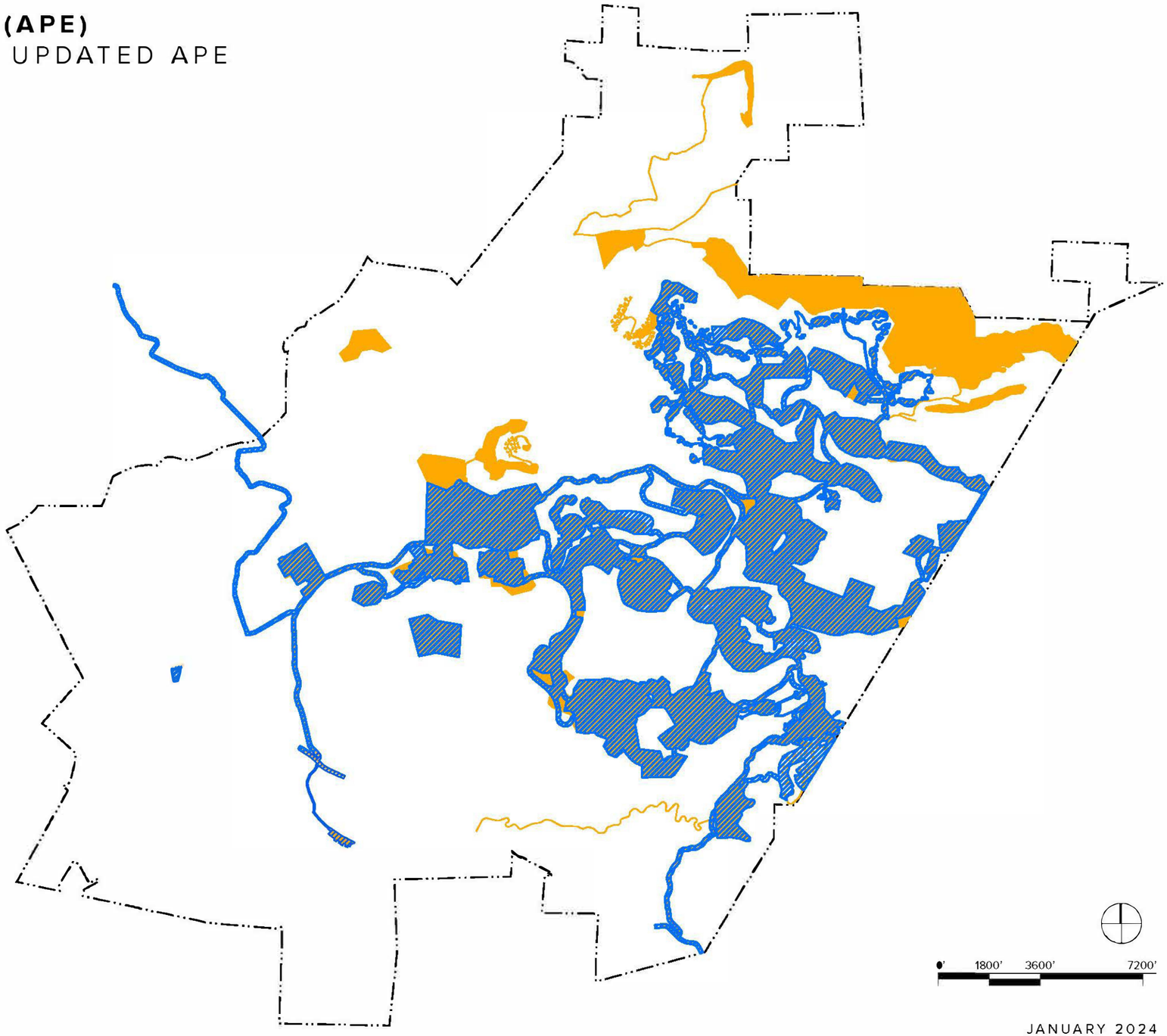
Pursuant to the Settlement Agreement (**Appendix C**), the Applicant agreed to incorporate several Project Modifications and mitigation measures to lessen the degree of potential impacts of the Project. Pursuant to subsection (4) of the Settlement Agreement, all Project Modifications and requirements have been included in the project design or mitigation identified in this PREIR, and are incorporated into the Modified Project's Revised Mitigation Monitoring and Reporting Plan (MMRP) found in **Section 5** of this PREIR. The Project Modifications arising from the Settlement Agreement are grouped into two categories, 1) wildfire-related modifications and 2) greenhouse gas (GHG) emission reduction measures.

AREA OF POTENTIAL EFFECT (APE)

2020 ORIGINAL APE VS. 2024 UPDATED APE

2024 Updated APE

2020 Original APE



GUENOC VALLEY PROJECT

EIR KEY PROJECT REVISIONS

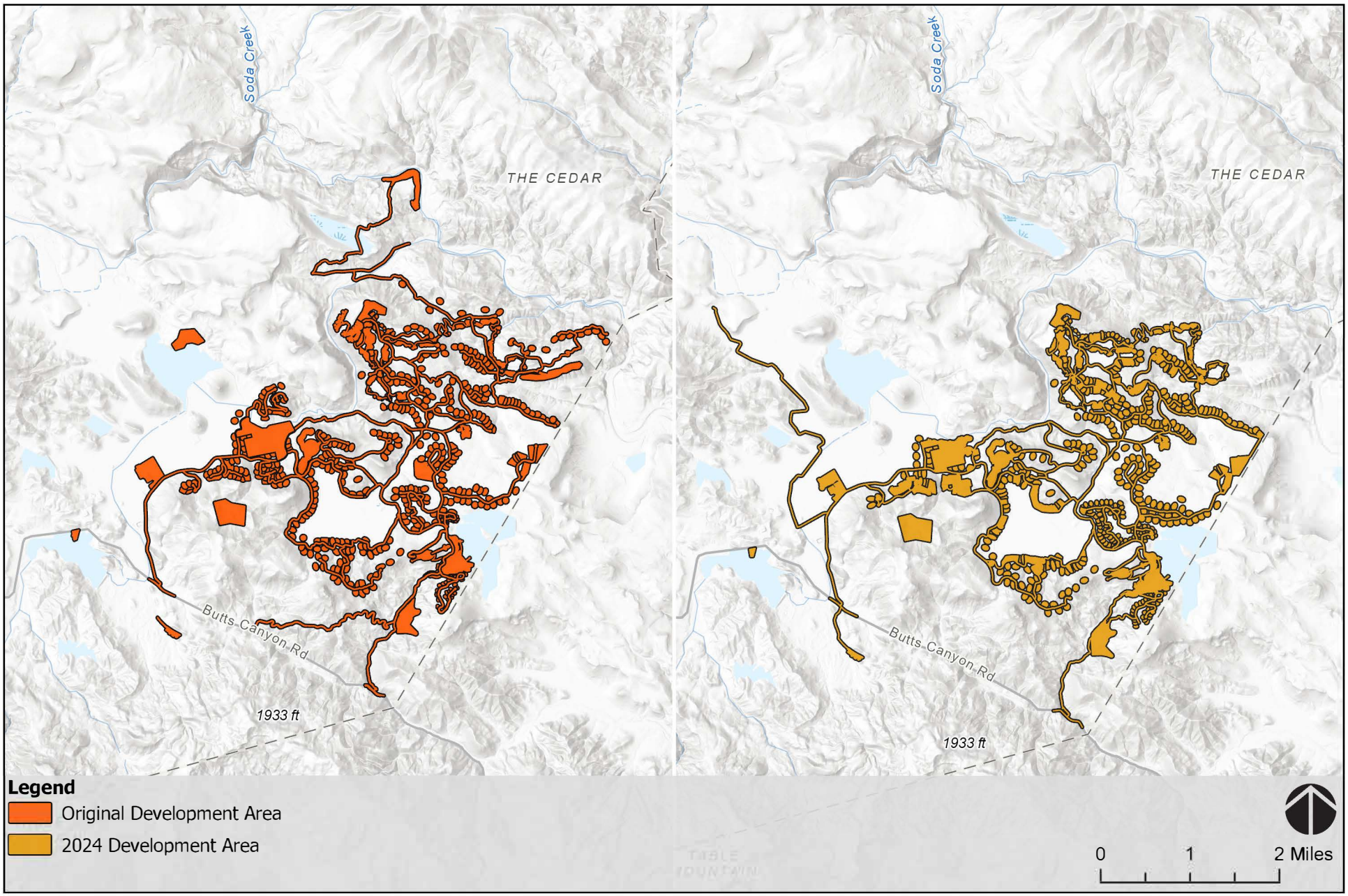
JANUARY 2024

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Source: SWA Group, 2024

FIGURE 2-3A

AREA OF POTENTIAL EFFECTS: ORIGINAL VS. MODIFIED PROJECT



Source: Lake County Community Development and General Plan; County of Napa, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS,

FIGURE 2-3B

DEVELOPMENT AREA: ORIGINAL VS MODIFIED PROJECT

Wildfire-Related Project Modifications

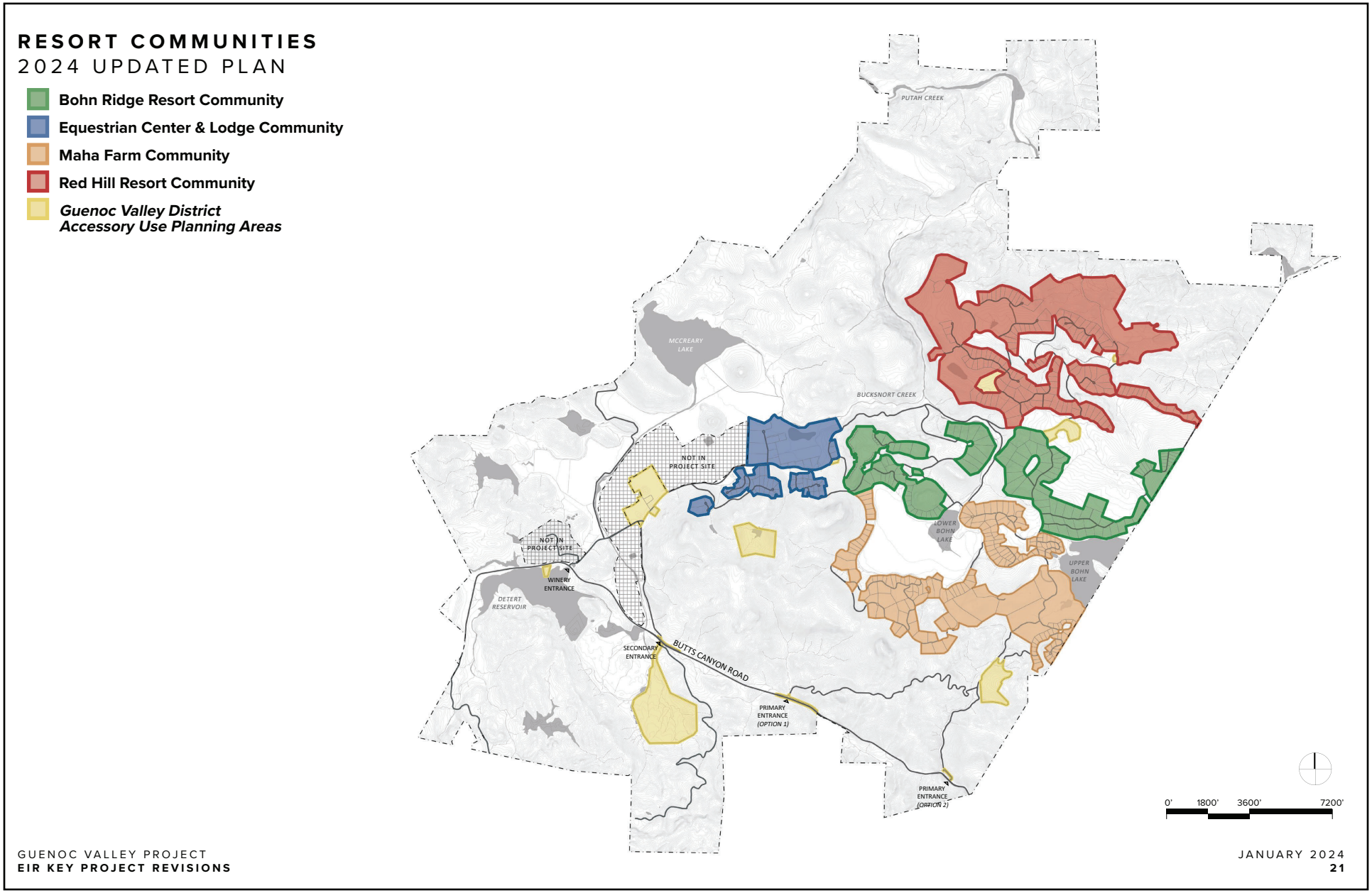
Camping Area. Due to the remote location, the Project Modifications include the removal of the camping area previously located in the northern portion of the property from Phase 1 (**Figure 2-2**). The 20 units from this area have been redistributed to the Equestrian Center and Lodge and are now accounted for in the revised hotel unit counts (see **Table 2.2-2**). While tent camping is allowable under the proposed zoning, no camping district is proposed under Phase 1 of the Modified Project. Camping is still allowed under the Settlement Agreement with open fires to be strictly prohibited. If a camping area is proposed under future phases, it would be subject to environmental review in compliance with CEQA.

Equestrian Center Community. In the Equestrian Center & Lodge area, Project Modifications include the removal of 25 of the lots that were previously located on a knoll overlooking the Equestrian Center Community (**Figure 2-2**). This subdivision will include hotel units (38), resort residential units (7), and residential estates (67), but the remaining residential lot sizes will be smaller. With the removal of the lots previously planned at the top of the knoll, all of the lots at the Equestrian Center Community will be entirely located in the lower areas, allowing for more defensible space and lesser evacuation times in the event of an emergency.

Denniston Golf Estates Community (formerly the Resort at Trout Flat and Red Hill Resort Communities). The Project Modifications include the removal of the Resort at Trout Flat Community previously located in the northeastern portion of the Guenoc Valley Site, and the reallocation of 12 hotel units, 13 resort residential units, and 29 residential estates from this community into other communities. Additionally, the overall size of the Denniston Golf Estates Community is reduced under the Project Modifications to relocate the more remote parcels near the urban-wildland interface towards the central portion of the Denniston Golf Estates Community. As a result, there are more residential estates located within this community but the average lot size has decreased (**Figure 2-4**).

Across the entire Guenoc Valley Site, the Project Modifications will shift the proposed hotel and residential units between communities and increase the density, and would reduce the average lot size across the Project by approximately 1.0 acre (**Figure 2-4**). As shown in **Table 2.2-2**, there is a decrease of 50 hotel units, no change to the total number of resort residential units, and a decrease of 16 residential estates compared to what was analyzed in the 2020 EIR. Although there may be a slight reduction in proposed water demand, wastewater generation, and electricity demand, the same demand for these utilities is assumed in this PREIR to provide a more conservative assessment. However, as a result of the updates to the parcel configuration to remove some of the more remote parcels and land uses, some proposed infrastructure is no longer required. As an example, the same total electrical demand is assumed to be required but the proposed residences will be located closer together and therefore fewer miles of electrical distribution line will be required. This will similarly occur with potable water and wastewater treatment, where the total demand or production is assumed to remain the same under the Modified Project, but less linear feet or miles of pipeline will be required.

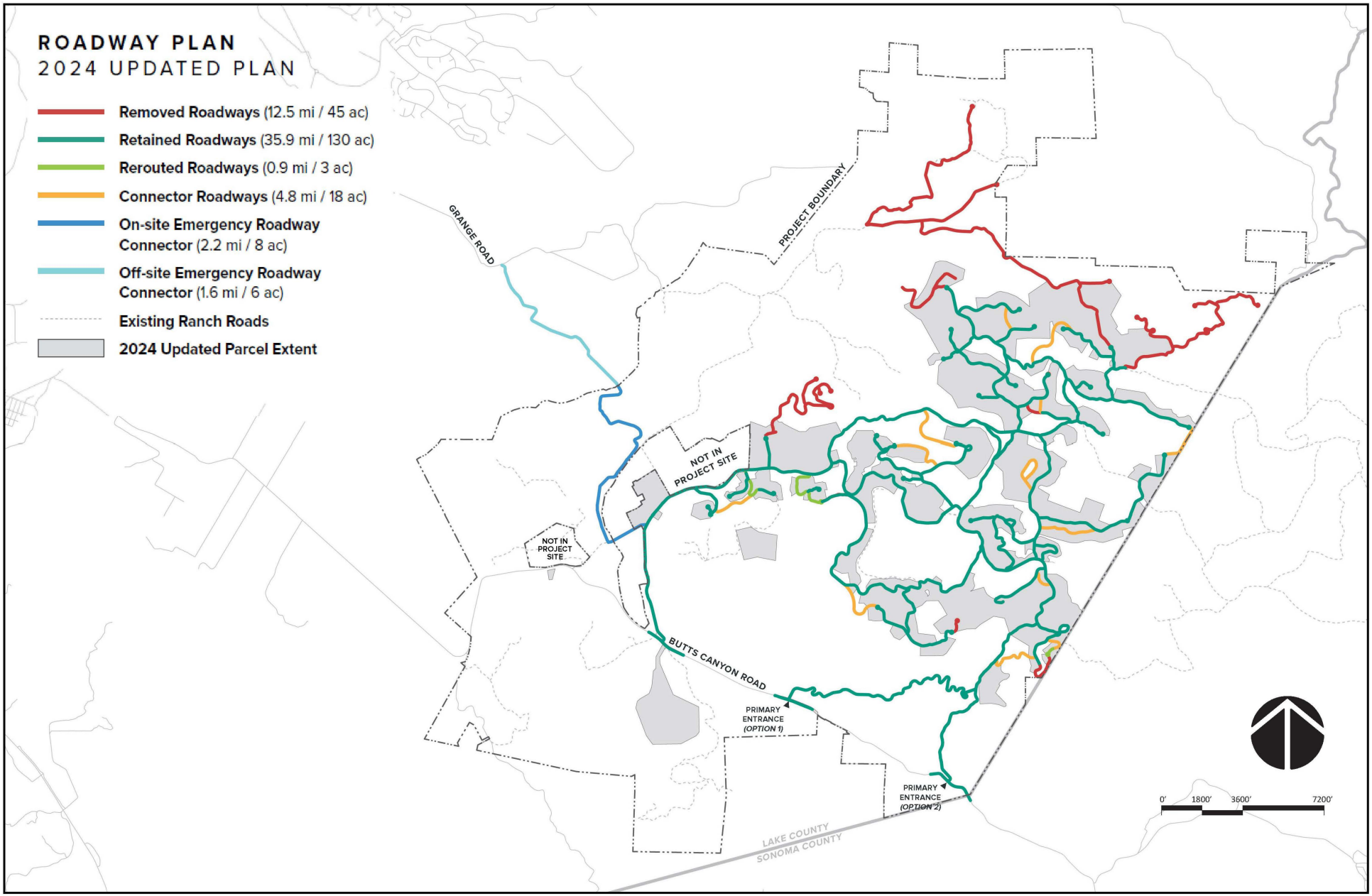
Roads. Under the Modified Project, all project components including roads have been designed to meet the 2023 State Minimum Fire Safe Regulations and the most updated Road and Street Standards. No dead-end roads or non-looped road segments greater than one mile in length are proposed. The Original Project included 48.5 miles of road which has decreased to 45.4 miles with the Project Modifications (approximately 3 miles less). As shown in **Figure 2-5**, the Project Modifications include several new lengths of 'Connector Roadways' (4.8 miles) to ensure there are no dead-end or non-looped roads greater than one mile.



Source: SWA Group, 2024

FIGURE 2-4

MODIFIED RESORT COMMUNITIES



Source: SWA Group, 2024

FIGURE 2-5

UPDATED ROADWAY PLAN

As a result of the consolidation of some of the more remote parcels and removal of the camping area, numerous roadways are no longer required and therefore the Project Modifications include the removal of 12.5 miles of previously proposed roadways. To the maximum extent feasible, the new Connector Roadways were sited within the APE studied in the 2020 EIR, however several short stretches are located outside of the previously studied APE. The On-Site/Off-Site Emergency Roadway Connector (Grange Road Connector) is discussed in **Section 2.2.2** of this PREIR.

In addition to removing unnecessary roads and connecting stretches of roadway that were previously dead-ends, in accordance with the Settlement Agreement, Project Modifications also include adding approximately 10 feet of hardscape on each side of the roadway for further wildfire protection, which is discussed further in **Section 2.2.3** of this PREIR along with additional Settlement Agreement terms relating to wildfire prevention.

Greenhouse Gas Emissions Reduction Measures

The Applicant will implement numerous GHG emission reduction measures as summarized herein, the full text of which can be found in the Settlement Agreement (**Appendix C**). The Settlement Agreement reiterated certain energy efficiency measures that were already included in the Project as described in the 2020 EIR (refer to Section 2.5.2.7 of the 2020 EIR, **Appendix D**); while all Settlement Agreement terms pertaining to GHG reduction measures are described below, only those that constitute Project Modifications are analyzed in **Section 4** of this PREIR.

Residential Land Uses. The Settlement Agreement specified that photovoltaic (PV) systems and batteries will be installed on all residential land use structures and ground-mounted community solar systems as on-site conditions allow; these systems were included in the Original Project. The 2020 EIR did not specify the capacity of the proposed PV systems; per the Settlement Agreement, the minimum capacity of the PV systems shall be equal to or greater than the minimum projected energy needs of all residential land uses on the Guenoc Valley Site. The Settlement Agreement also specified that the Applicant shall be responsible for the repair and maintenance of these systems via requirements in the residential Homeowners Association (HOA) bylaws that covers the Resort Community. Additionally, each residential structure will have at least one Level 2 or higher capacity Electric Vehicle Supply Equipment (EVSE), which is a Project Modification. As an additional Project Modification, no natural gas or propane will be installed in any of the on-site residential structures and any preexisting natural gas infrastructure on the property will be capped and removed; previously, natural gas/propane was proposed in the 2020 EIR.

In summary, the GHG related Project Modifications for residential land uses include:

- The capacity of residential PV systems shall be equal to or greater than the minimum projected needs of the residential land uses;
- Repair and maintenance of PV systems will be the responsibility of the Applicant enforced through the HOA bylaws;
- Each residence will have Level 2 or higher EVSE; and
- No natural gas infrastructure, including propane tanks or propane distribution pipelines will be allowed for residential structures.

Non-Residential Land Uses. Similar to residential land uses, the Settlement Agreement requires on-site generation of renewable energy to power all non-residential land uses. In the 2020 EIR, all commercial properties were proposed to be constructed “Solar Ready” pursuant to California Energy Code and would

be connected to the same grid options that included the production of on-site renewable solar energy. Through Mitigation Measure 3.7-1, the energy demands of the commercial structures were required to be entirely renewable, via either on-site production or purchase of renewable energy, and therefore the full production of solar energy on-site is considered a Project Modification. Similar to residential land uses, this can be accomplished through rooftop, ground-mounted community solar systems, or carport panels as appropriate. The Settlement Agreement stipulates that the solar farms must be sited in areas served by existing roads to the maximum extent feasible, have been intentionally sited to minimize harm to biological resources and wildfire risk, and will produce no less than 5,500,000 kilowatt-hours (kWh) per year. Approximately 47 acres of solar farms with a capacity to generate 28 megawatts (MW) per year were proposed and analyzed in the 2020 EIR (shown in Figure 2-15 of the 2020 EIR), and therefore this is not considered a Project Modification. The Settlement Agreement requires that at least 300 publicly accessible Level 2 or higher capacity Electric Vehicle Charging Stations (EVCS) with two ports per charger and 20 publicly accessible Level 3 EVCS/Fast Chargers will be installed in preferential parking locations; note that 384 public-area EV chargers (unspecified Level) were included in the Original Project and therefore this is not considered a Project Modification. The Applicant shall be responsible for the repair and maintenance of these systems via the Covenants, Conditions, and Restrictions (CC&Rs) of the resort. No natural gas will be allowed in the non-residential structures with the exception of natural gas or propane in restaurants that is allowed only for cooktops or for fire pits in the outdoor patio areas; previously propane was proposed in the 2020 EIR. Furthermore, the Applicant will purchase annually for 30 years voluntary market GHG Offset Credits with a registry approved by the California Air Resources Board (CARB) in an amount currently estimated to be 14,865 credits. Similar to the use of PV systems, the purchase of GHG Offset Credits was included in Mitigation Measure 3.7-1 of the Final EIR Errata but this was a one-time GHG Offset Credit purchase, and therefore the annual purchase of credits (currently estimated at 14,865) is considered a Project Modification.[2] Furthermore, the Project Modifications include a new set of performance standards associated with the purchase of these offset credits, including that the location prioritizes (1) offsets within the County; (2) offsets within the State of California, only if in-county offsets are unavailable; (3) offsets within the United States, only if in-state offsets are unavailable; and (4) international offsets only if in-nation offsets are unavailable. As an additional Project Modification, specific "Monitoring, Reporting, and Recordkeeping" commitments mandate that the Applicant retain an independent, third-party expert on GHG mitigation and offsets. This third-party expert cannot be a former or current employee or agent of the Applicant and is subject to approval by the Office of Administrative Hearings (OAH). The third-party expert will compile and analyze the requisite data, and prepare and provide annual reports to the County and State regarding whether the Applicant has complied with the GHG emissions reduction measures within the Settlement Agreement.

[2] Future events or developments may affect the availability and utility of the GHG Offset Credits, and the Project's actual GHG emissions. These factors may support an adjustment to the amount of GHG Offset Credits that the Applicant is required to purchase under the Settlement Agreement. The Applicant may seek the State's consent in the future to an adjustment of this requirement, and the State will consider such request in good faith. Any adjustment to the amount of GHG Offset Credits to be purchased by the Applicant is required to be consistent with CEQA.

In summary, the GHG-related Project Modifications for commercial land uses include:

- Repair and maintenance of PV systems will be the responsibility of the Applicant enforced through the CC&Rs of each resort;
- No natural gas tanks or distribution pipelines will be allowed for residential or non-residential structures, with the exception of natural gas-fueled or propane cooktops in restaurants and natural gas-fueled or propane fire pits in outdoor patio areas of restaurants;
- Annual purchase of offset credits in an amount to offset each year's actual GHG emissions, currently estimated at 14,865 credits;
- Performance standards associated with the purchase of GHG Offset Credits prioritizing local credits; and
- An independent, third-party expert on GHG mitigation and offsets will be retained to ensure the Applicant has complied with the GHG emission reduction measures.

2.2.2 Grange Road Connector

Grange Road is a looped, two-lane public road that begins at State Route 29 (SR-29) and travels south-southeast for approximately 2 miles before turning north-northeast and looping back on itself. In order to provide an additional emergency ingress/egress to the Guenoc Valley Site, Project Modifications include a new road to connect the property to SR-29 via Grange Road through an off-site property. As shown in **Figure 2-5**, under the Project Modifications, Grange Road is proposed to be extended to connect to the existing on-site road network, and would only be used for emergency ingress and egress. Access to this new roadway would be controlled via a locked gate; only the Applicant, the Comstock property owner, and local fire district and emergency first responders would be able to unlock the gate, ensuring that non-emergency access would be restricted. This proposed roadway improvement is referred to as the "Grange Road Connector" and has been designed in compliance with Public Resources Code (PRC) 4290, the State's Minimum Fire Safe Regulations. Approximately 1.6 miles (6 acres of disturbance) is located off the Guenoc Valley Site on a property known as 'Comstock Ranch' [Assessor's Parcel Number (APN) 014-300-04] and easements will be obtained as necessary. The remainder, approximately 2.2 miles (8 acres of disturbance), is located on the Guenoc Valley Site. The new 14-acre development area assumes a 30-foot-wide road base, including the additional 10 feet of firebreak edge (i.e., hardscape) as agreed to under the Settlement Agreement. This area was not previously proposed to be disturbed and was not included in the Original APE analyzed in the 2020 EIR. However, several stretches of the proposed Grange Road Connector are along existing farm or ranch roads that have been previously disturbed (either dirt or gravel roads) and will be improved to meet current Road and Street Standards. The Grange Road Connector will join with the existing on-site road network near the central back of house operations facility.

Construction of the Grange Road Connector shall be completed prior to the first initial occupancy of the Project. Approximately 25,000 cubic yards of cut and 23,250 cubic yards of fill are estimated to be generated. If any excess cut is generated by construction of the Grange Road Connector it will be temporarily stockpiled within the Development Area and utilized on-site as structural fill.

2.2.3 Updated Wildfire Prevention Plan

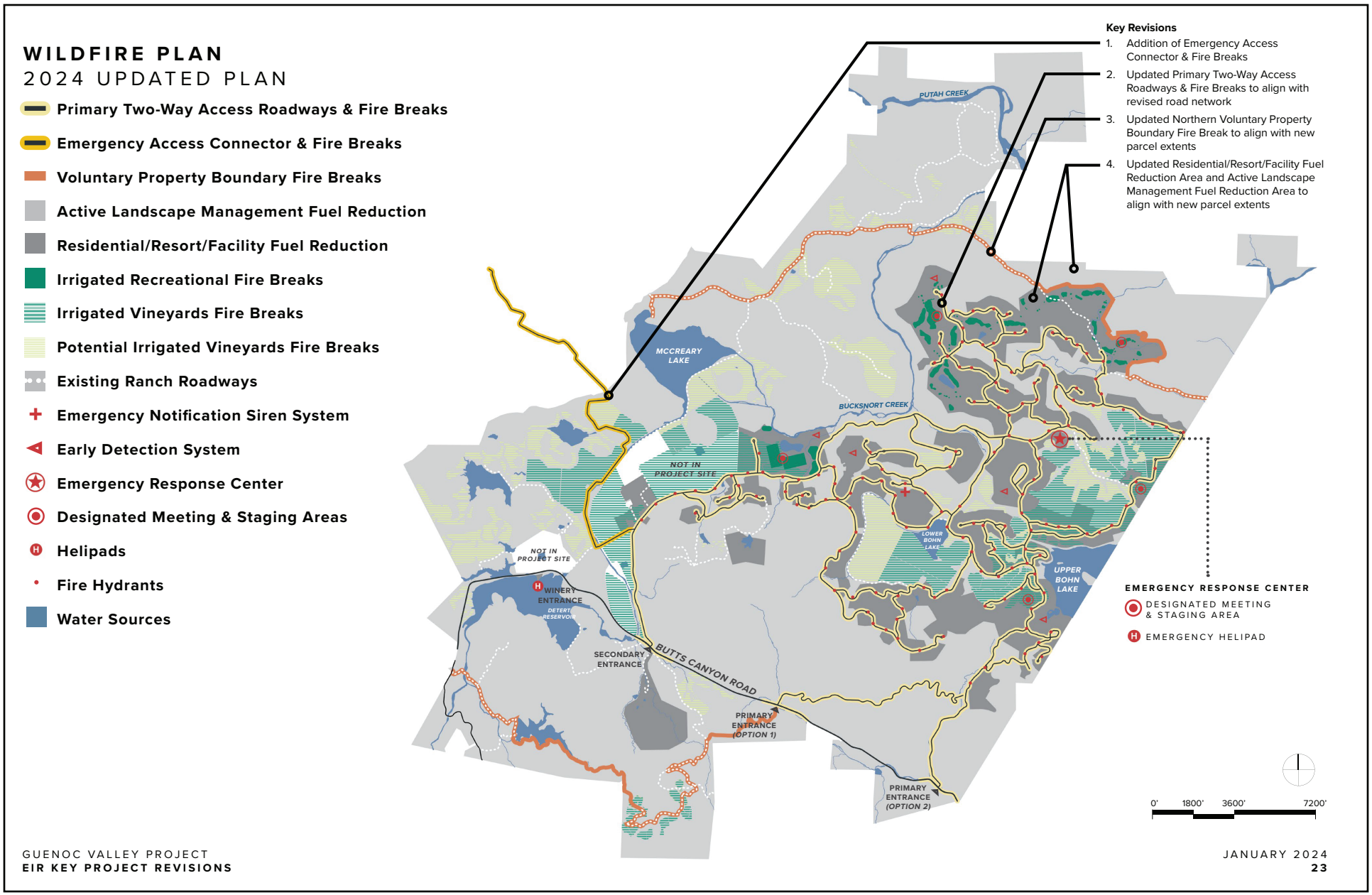
The Mahá Guenoc Valley Wildfire Prevention Plan (WPP) for Phase 1 has undergone several updates to reflect the Superior Court Ruling, Settlement Agreement, Project Modifications, and First Appellate Court decision as shown in **Figure 2-6** (**Appendix F**). The WPP is intended to present an integrated approach to wildfire management through approaches that can be grouped into the following categories: general wildfire prevention, construction wildfire prevention, utility wildfire prevention, landscape wildfire

prevention, building wildfire prevention, wildfire prevention preparedness, and wildfire emergency response. The vast majority of the WPP and the wildfire prevention techniques remain consistent with those described in the 2020 EIR; modifications to WPP since the 2020 EIR are presented in redline/~~strikeout~~ in the Updated WPP (**Appendix F**).

The WPP has been updated to include the modified site plan and the removal of the more remote parcels and land uses, the modified roadway network that now complies with the State's Minimum Fire Safe Regulations, the Grange Road Connector, and voluntary property boundary fire breaks that match the updated parcel extents. In addition, as shown in **Figure 2-7** the Updated WPP now includes a 10-foot wide aggregate or hardscape surface on each shoulder of all roads where feasible, as required by the Settlement Agreement. The total firebreak along the road network will remain 125 feet consistent with the 2020 EIR, which includes a 25-foot wide roadway, plus 50-foot wide fuel reduction zones on either side; however under the Project Modifications, the 50-foot-wide fuel reduction zone will include 10 feet of hardscape. This hardscape area can be used as shoulder, pedestrian walkways, or bicycle lanes as the topography and site constraints allow.

The Original Project included an on-site Fire Station and Emergency Response Center with a proposed helipad immediately adjacent, with the fire station intended to ultimately become the South Lake County Fire Protection District (SLCFPD) Fire Station #61. There are no proposed physical changes to the Fire Station and Emergency Response Center compared to what was analyzed in the 2020 EIR and it remains in the same location on the property. As described in the 2020 EIR (Section 3.12, Public Services):

> "The fire center will include a structure to house firefighting equipment, as well as a headquarters space and storage for minor medical supplies. SLCFPD would provide fire protection and fire suppression services to the Guenoc Valley Site and the Middletown Housing Site and would staff the on-site emergency response and fire center at the Guenoc Valley Site which would ultimately become SLCFPD Station #61. Multiple on-site water sources are available for fire suppression and will be supplemented with fire hydrants for first responders. The addition of on-site emergency response resources and fire management facilities would ensure that, in the event of an emergency, adequate response times would be met. Additionally, response personnel would be sourced from onsite, lessening the burden of emergency response teams from surrounding areas, including Napa County. Specifically, two or three years post-development, the Developer will begin to budget approximately 200,000 dollars per year, which will roll over annually to build funds to purchase and replace emergency response equipment as needed. Prior to staffing Station #61, emergency fire response to the project site will be generated from nearby SLCFPD facilities. Approximately four years post-development, Station #61 will be staffed at all times. Approximately five years post-development, Station #61 will be staffed by SLCFPD and reported to ISO for documentation (SLCFPD, 2019c). In the event that demand for fire protection services in the district is greater than SLCFPD can provide, fire protection services would be supplemented through mutual aid from other local agencies, pursuant to the CFAA.



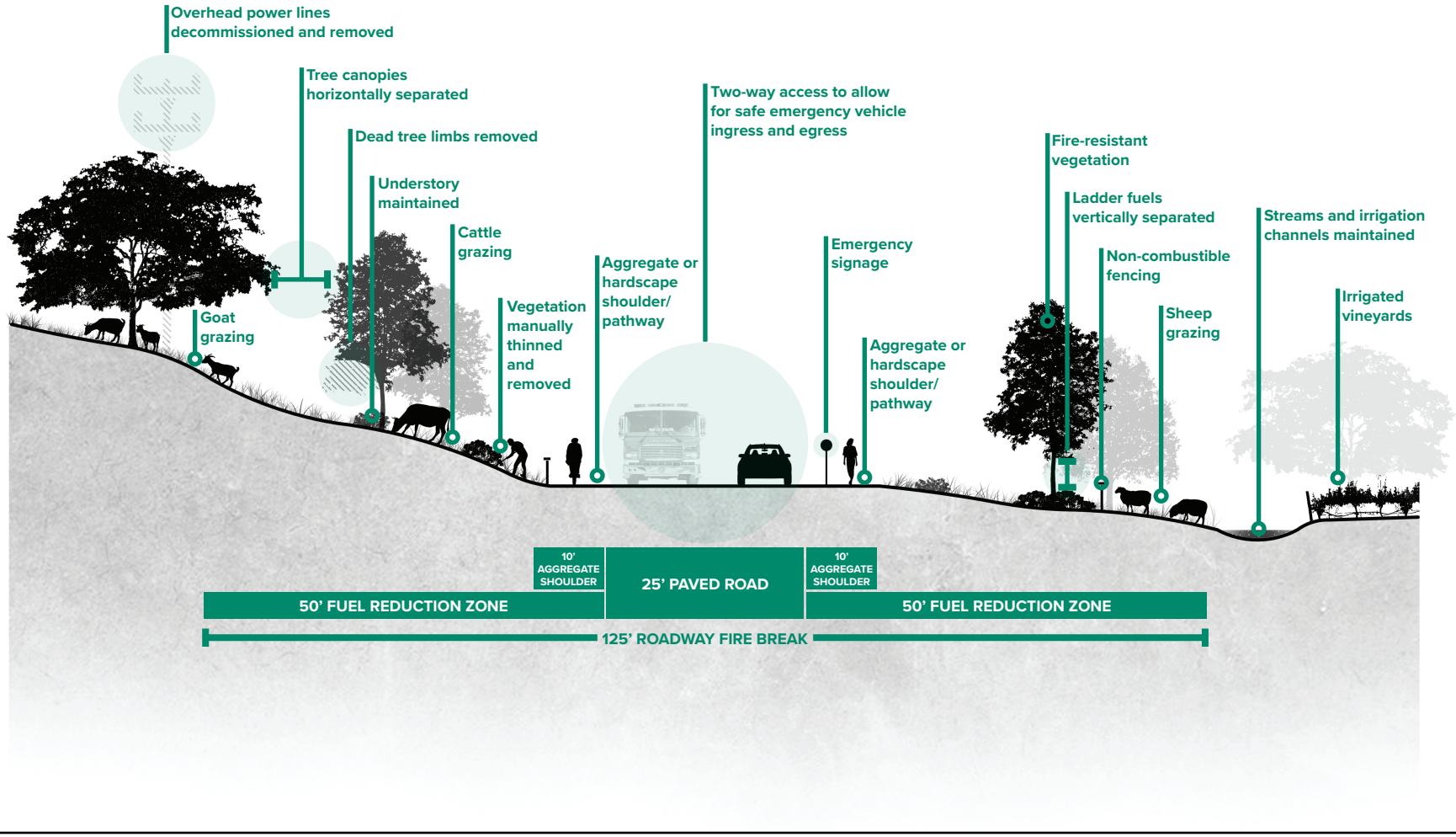
Source: SWA Group, 2024

FIGURE 2-6

UPDATED WILDFIRE PREVENTION PLAN

WILDFIRE MANAGEMENT PLAN
2023 UPDATED STRATEGY
TYPICAL ROADWAY FIRE BREAKS

Key Revision: Addition of a 10 foot wide aggregate or hardscape surface on shoulder where feasible



Source: SWA Group, 2024

FIGURE 2-7

MODIFIED ROADWAY FIRE BREAK STRATEGY

The Project Modifications associated with the Fire Station and Emergency Response Center in the Updated WPP are primarily funding and staffing commitments. The Applicant shall pay the SLCFPD annually the amount determined by SLCFPD to be necessary in order to staff and equip the Emergency Response Center for fire services, including wildfire response. Through its CC&Rs, the HOA will be required to contract with a wildfire expert for the duration of the Project, with costs paid by the HOA. The HOA shall consult with the wildfire expert in its implementation of wildfire prevention measures, including those identified in the WPP. Furthermore, the Project's Emergency Response Center will have on-site at least one individual with wildfire expertise related to evacuation and emergency access, the cost of which will be paid by the Guenoc Valley Project HOA.

The following fire management activities are excerpted from Section 2.5.2.3 of the 2020 EIR; although these project components remain unchanged from the analysis presented in the 2020 EIR, they are important to the understanding and analysis of the currently Proposed Project:

> Proposed fire management facilities are shown in **[Figure 2-6]**, and include extensive fuel breaks along roadways and drainages, five designated temporary refuge areas (emergency gathering and protection sites), vegetation management areas, and the construction of an on-site emergency response and fire center and helipad for emergency access/transportation. The fire center will include a structure to house firefighting equipment, as well as a headquarters space and will also house minor medical supplies. Approximately 500 square feet of the emergency response and fire center would be dedicated to the Lake County Sheriff's Office (LCSO) for law enforcement services. The South Lake County Fire Protection District (SLCFPD) would provide fire protection and fire suppression services to the Guenoc Valley Site and would staff the on-site emergency fire center. Cal Fire would provide fire protection and suppression services in the event of a wildland fire since the Guenoc Valley Site is within Cal Fire's state responsibility area (Wink, 2019). Multiple on-site water sources are available for fire suppression and will be supplemented with fire hydrants for first responders. Additionally, a communication system such as Nixle and early fire detection system high-definition cameras and an emergency notification siren system would be installed throughout the site.
>
> Fire wise landscaping techniques such as reducing fire prone vegetation within fifty feet from both edges of each proposed roadway will be managed by the HOA. This will include cutting down dead trees and removing all flammable shrubs. The understory below trees will be maintained by mowing, grazing, and manual vegetation removal; in addition, shrubs will be removed below trees. Within this zone, individual trees or tree clusters will be adequately spaced to prevent fires from quickly spreading. In addition, landscape within 300 feet of proposed commercial buildings and within 50 feet of residential buildings will be primarily native and low fuel vegetation to reduce vegetated fire risk, and exterior fire sprinkler systems will be installed on residential buildings on dead-end drives over 0.25 miles. It is anticipated that each resort community would have at least 180,000 gallons of stored fire water.

In summary, the only Project Modifications that have resulted from the Updated WPP are:

- Figures within the Updated WPP now depict the following:
  - The new site plan that includes the removal of the more remote parcels and land uses,
  - The modified roadway network that now complies with the State's Minimum Fire Safe Regulations,
  - The Grange Road Connector, and

    - Voluntary property boundary fire breaks that match the updated parcel extents;
- A 10-foot wide aggregate or hardscape surface will be included on each shoulder of all roads where feasible;
- The Applicant shall pay the SLCFPD annually to staff and equip the Emergency Response Center;
- The HOA will be required to contract with and pay for a wildfire expert that will implement a wildfire preparedness program;
- The Emergency Response Center will have on-site at least one individual with wildfire expertise related to evacuation and emergency access, the cost of which will be paid by the Guenoc Valley Project HOA; and
- Other WPP technical clarifications, expanded detail related to code compliance and recommendations that do not result in physical changes to the environment that would affect the analysis of non-wildfire impacts.

As described in **Section 1.1.2** and **Section 3.1.1** of this PREIR, the First Appellate Court decision agreed that "aspects of the Wildfire Plan - such as undergrounding power lines - reflect design choices," but opined that some measures previously considered to be design features within the WPP are better understood and should be categorized instead as mitigation measures. Specifically, measures that require ongoing maintenance "such as animal grazing, '[p]running tree limbs,' and 'remov[ing] vegetation debris that accumulates on [rooves],' are more naturally understood as 'maintenance operations'" (First Appellate Court Decision [**Appendix B**]). These maintenance practices were previously treated as part of the Proposed Project and analyzed as such. While the analysis of wildfire impacts in **Section 3** has been revised to consider certain on-going maintenance components of the WPP as mitigation, rather than an inherent component of the project, the analysis of other issues areas that may be impacted by the Project Modifications within **Section 4**, such as biological resources and cultural resources, continues to apply to the WPP as a whole, including those components now characterized as mitigation.

2.2.4 Water Supply and Drought Preparation

Lake County Ordinance 3106 was passed by the Board of Supervisors on July 27, 2021 and requires that all projects that require a CEQA analysis of water use include a Drought Management Plan (DMP) describing how the project will reduce water use during a declared drought emergency. Because Ordinance 3106 was enacted after the 2020 EIR, a DMP was not required or included within the 2020 EIR. Ordinance 3106 also requires a Hydrology Report addressing water usage, water supply, and cumulative impacts to surrounding areas. Water usage was studied extensively in the 2020 EIR and a Water Demand Analysis was prepared by Sherwood Design Engineers (Appendix WATER to the 2020 EIR) and a Water Supply Assessment (WSA) was prepared by Luhdorff & Scalmanini Consulting Engineers (Appendix WSA to the 2020 EIR). Therefore, although no additional WSA is required to comply with Ordinance 3106, additional clarifying information has been prepared to address additional information related to water supply that has been made available since the 2020 EIR (Water Supply Assessment Addendum Memorandum [**Appendix G-1**]) and a DMP has been prepared for the Modified Project (Drought Management Plan [**Appendix G-2**]).

Water Supply System

The Proposed Project will require both potable water and non-potable water which is proposed to be met by various water sources. Note that the 2020 EIR, WSA, and other supporting technical documents prepared at the time of the Original Project review used the term 'domestic' and 'potable' water well interchangeably. Consistent with the 2020 EIR, potable water will be supplied by groundwater wells, while

non-potable water will be supplied by groundwater wells, recycled water produced onsite by the proposed treatment plants, and surface water for areas within the Place of Use (POU) of existing water rights. As fully described in Appendix WATER to the 2020 EIR, Phase 1 of the Proposed Project would require 249 acre-feet per year (afy) and future phases would require 685 afy of potable water. Non-potable water demands for areas outside the POU (e.g., areas that would not be able to utilize surface water) are 482 afy for Phase 1 and 760 afy for future phases. As shown in **Table 2.2-2**, with the Project Modifications there is a decrease of 50 hotel units, no change to the total number of resort residential units, and a decrease of 16 residential estates compared to what was analyzed in the 2020 EIR. Although this will lead to a slight decrease in water demand, this PREIR assumes the full potable and non-potable water demand for Phase 1 remains the same as what was analyzed in the 2020 EIR to present a more conservative analysis.

A WSA was prepared to analyze the available water supplies for both Phase 1 and future phases and demonstrate adequate sources of supply for normal and dry years, consistent with the requirements of California Senate Bill (SB) 610 (Appendix WSA to the 2020 EIR). At the time of preparation of the WSA and 2020 EIR, two groundwater wells had been constructed to serve the project and three were pending construction or testing (see Table 2-3 of the WSA). Therefore, the WSA recommended that new supply wells for the planned water system continue to be constructed and tested, consistent with State and County regulations, to demonstrate the available capacity of the proposed potable system (see Section 7.2 of the WSA). This construction and testing program has been underway since the 2020 EIR, and supplemental well construction and testing information for the project wells has been provided in the Water Supply Assessment Addendum Memorandum (**Appendix G-1**) of this PREIR.

There are currently five potable wells on the Guenoc Valley Site that will serve the Proposed Project:

- Bohn Ridge 3
- Camping Area (CA PW-1), now renamed Wilderness Area
- Farmstead 1 (FS PW-1)
- Red Hills 1 (RH PW-1)
- Tephra 4

The total potable water supply capacity for these five wells is 645.5 gallons per minute (gpm), which is equal to 1,042 afy. This total capacity was determined in accordance with CCR Title 22, Section 64554, "New and Existing Source Capacity", where the capacity of each well is equal to 50 percent of the flow maintained during a 10-day pump test to allow for the wells to "rest" consistent with the 2020 EIR. There is also one non-potable well called the Crossroads Well, which had been drilled at the time of the 2020 EIR and WSA. This Crossroads well is capable of producing 264 gpm, which is equal to 426 afy. Please refer to **Appendix G-1** for additional discussion of the existing potable and non-potable wells and testing results.

No changes are currently proposed to the Off-Site Well under the Modified Project. As discussed in Section 2.5.2.5 of the 2020 EIR, this proposed Off-Site Well may be developed during Phase 1 to provide supplemental non-potable water for agricultural irrigation, fire protection, and to cover evapotranspiration losses from recreational water features and ponds. The proposed well is expected to yield flows over 1,000 gpm. The Off-Site Well is located on a parcel near the intersection of SR 29 and Butts Canyon Road within the Collayomi Valley Groundwater Basin. It remains proposed as a backup supply only, consistent with the analysis contained within the 2020 EIR. The Applicant may enter into an agreement with the Callayomi County Water District in the future such that the District would own and operate the Off-Site Well for the benefit of its customers and the Project. Thus, the operation of the Off-

Site Well as a backup water supply source for the Proposed Project may be conducted directly by the Applicant, or by the Callayomi County Water District pursuant to a future agreement with the Applicant. However, any use of the Off-Site Well by the Callayomi County Water District to expand its water supply capacity and/or service area would be a separate and distinct project beyond the scope of this EIR, and may be subject to additional environmental review in accordance with CEQA.

Drought Management Plan (DMP)

The DMP will allow water system users and managers to act promptly in the event of a drought to better protect the water supply, as further described in the DMP (**Appendix G-2**). The DMP contains three drought management sub-plans, one for each of the three different water user types associated with the Proposed Project: potable water, golf course water, and equestrian center water. The potable water users include residential and commercial customers, while the golf course and equestrian center users are specific to those areas within the Guenoc Valley Site. Under the potable water DMP, when there is a potential threat to the water supply system Stage 1 of the DMP will be enacted to alert the community and begin voluntary conservation measures, as well as compliance with any and all State regulations that may be issued regarding conservation. The system capacity and consumption will be monitored carefully during Stage 1, and if the drought conditions are not alleviated or worsen, Stage 2 will be implemented which will introduce 'phased' mandatory conservation measures and fee surcharges for violators. Robust monitoring will be occurring throughout the operation of the water system which will allow the water system operators to develop triggers for when Stage 3 or Stage 4 need to be implemented. Stage 3 of the DMP includes additional mandatory conservation measures, revised rate structures to increase fees, as well as the ability to install mandatory flow restrictors on users that violate the urgency ordinance more than twice. At Stage 4, a maximum water allocation is set for each user to ensure minimum essential health and safety are met, as well as prohibiting new connections. Throughout each of the DMP stages, public information and outreach is a large component to ensure that all users are fully informed of the ongoing water shortages and status of the DMP stages.

The golf course DMP is similar to the potable water DMP in that each stage becomes progressively more restrictive as to water use. As drought conditions worsen and the site progresses into the next DMP stage, timing of irrigation is limited until ultimately grass may be removed and drought-tolerant vegetation may be required in its place. The equestrian center DMP similarly will start by limiting the number of times per week horses may be washed, then limiting timing of watering, before finally limiting or eliminating pasture watering and requiring supplemental feed. As a last resort, horses may be shipped to non-drought areas, but at no such time will drinking water for horses be curtailed.

Section 3 | Wildfire

3.1 INTRODUCTION

3.1.1 Legal Background

This section of the PREIR provides the additional, revised community wildfire evacuation analysis for the Proposed Project as required by the Trial Court's Ruling in Lake County Superior Court Case Number CV 421193 (**Appendix A-1**) and the additional wildfire risk analysis required by the First Appellate Court decision (**Appendix B**). See **Section 1** of this PREIR for further information on these court Rulings and their relationship to this PREIR.

Project evacuation routes are those routes that residents or visitors to the Project Site would utilize in an emergency to leave the site and first responders would use to access the area in an emergency. Community evacuation routes are area-wide routes that provide emergency ingress and egress to non-Project residents in the surrounding vicinity. The Ruling found that "analysis of the Project's evacuation routes are a "reverse CEQA" issue and need not be addressed in the EIR. The Project's impacts to community evacuation routes, however, must be analyzed in the EIR." As further stated on pages 7 through 8 of the Ruling:

> Real Party is correct that analysis of community evacuation is not required unless the project might exacerbate existing environmental hazards. (Real Party in Interest Lotusland Investment Holding, lnc.'s Supplemental Brief Re: Evacuation filed November 19, 2021, (Real Party's Supplemental Brief), p. 7:7-9.). Here, unlike the case in *Newton, supra,* [sic; Newtown] there is evidence that the Project might exacerbate existing environmental hazards. As pointed out by Petitioners Center for Biological Diversity (CBD) and California Native Plant Society (CNPS), a significant number of wildfire related deaths in California occur during attempts to evacuate. (Petitioners' Opening Brief filed June 15, 2021, pp, 19:26-20:4.) The hazards of a wildfire are certainly exacerbated if community residents are unable to evacuate safely due to congested evacuation routes. It is estimated that the Project will bring 4,070 residents to the area. (AR 6612.) This is a significant population increase when considering the Project is located in Lake County Census Tracts 12 and 13 which had an estimated combined population of 10,163 in 2017. (AR 6608.) If a wildfire occurs, the Project's residents will need to evacuate. These people will likely compete with residents in the surrounding area for safe evacuation routes. The additional people competing for the same limited routes can cause congestion and delay in evacuation, resulting in increased wildfire related deaths. This is undoubtedly a situation where the Project, by bringing a significant number of people into the area, may significantly exacerbate existing environmental hazards; specifically, wildfires and their associated risks. Therefore, this is an issue that is required to be addressed under CEQA.
>
> The County concluded the impacts to existing emergency evacuation plans would be less than significant. (AR 6746.) The evidence supporting this conclusion are comprised primarily of opinions from traffic engineers and fire and law enforcement personnel. (Real Party's Supplemental Brief, p. 8:2-8; AR 42594-42595; 53739-53740.) Those opinions were not based on any identifiable facts.

> There are two problems with this evidence. First, this evidence primarily addresses the issue of whether the Project's residents could safely leave the Project in the event of a wildfire. This evidence does not focus on the issue that is required to be addressed by CEQA; whether evacuation of the residents in the nearby area would be affected by the evacuation of the Project's residents during a wildfire.
>
> Second, this evidence cannot be considered substantial evidence. Substantial evidence includes "expert opinion supported by facts." (14 CCR §15384(b).) Unsubstantiated opinion does not constitute substantial evidence. (14 CCR §15384(a).) The conclusion reached by the County as it relates to emergency evacuation plans is based on unsubstantiated expert opinions. This evidence is legally insufficient to qualify as substantial evidence under CEQA.
>
> Because the County's findings regarding community emergency evacuation routes are not supported by substantial evidence, the EIR does not comply with CEQA.

As indicated in the above excerpt, the Ruling called for additional analysis of the Project's impacts to community evacuation during a wildfire and that the analysis must be based on substantial evidence.[3]

Upon appeal, the First Appellate Court "reverse[d] the trial court's decision that the FEIR adequately disclosed the project's impact on increasing the area's existing wildfire risks… In all other respects, the judgment is affirmed" (**Appendix B**). More specifically, as it relates to wildfire risks, the First Appellate Court determined that the information in the Final EIR Errata was disclosed too late in the process (at pages 11 through 14). Additionally, the First Appellate Court determined that "even if its discussion of the project's potentially significant impacts on wildfire risks did not come too late, the errata's passing disclosure is insufficient to comply with CEQA" (page 14 of **Appendix B**).

> Specifically, the FEIR fails to reasonably describe the "additional wildfire risk factors as compared to existing conditions" that the project would "introduce" to the area. Instead, the errata points to several sources of "human-caused ignitions" - i.e., arson, debris-burning, vehicle sparks, and discarding of cigarettes - and then cites a general study finding that "increased fire education, a decline in smoking, and modern vehicles ... have reduced the impacts of anthropogenic causes of wildfire ignitions [other than by powerlines] in recent times." It concerns us that the County did not appear to "use its best efforts to find out and disclose all that it reasonably can" about the project's impact on these risk factors. (Guidelines, § 15144.)…
>
> As the FEIR currently stands, there is no way to connect the dots between the "additional wildfire risk factors," which the errata concedes exist, and the Wildfire Plan's prevention strategies, which the errata does not update.

[3] "(a) 'Substantial evidence' as used in these guidelines means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence. (b) Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." (CEQA Guidelines Section 15384)

Finally, the First Appellate Court questioned whether some of the measures contained within the Wildfire Prevention Plan (WPP) were design features and not mitigation. Footnote 9 on page 16 states:

> Certainly, aspects of the Wildfire Plan - such as undergrounding power lines - reflect design choices. (E.g., *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656, fn. 8 *(Lotus)* ["composition of paving" plausibly part of design].) But we observe that other components of the Wildfire Plan, such as animal grazing, "[p]running tree limbs," and "remov[ing] vegetation debris that accumulates on [rooves]," are more naturally understood as "maintenance operations" aimed at "[r]educing ... impacts" of a project introducing people to undeveloped, fire-prone areas. (See Guidelines, § 15370, subd. (d).) We are not persuaded that making it a project objective to be a"' "model project" of wildfire mitigation'" converts such measures into project design features.

3.1.2 Wildfire Analysis Organization

This PREIR section retains the same organization as the 2020 EIR and the same impact numbering to simplify comparisons across the two documents. Where the 2020 EIR included environmental setting information related to the fire risk, fire severity, and vegetation and climate characteristics relevant to fire conditions, that information is not repeated in its entirety in **Section 3.2** here. Similarly, **Section 3.3** "Regulatory Setting" in this PREIR generally only provides information that has changed since the 2020 EIR. As an example, the Lake County General Plan (2008) was in effect at the time of the publication of the 2020 EIR and a description of such is provided in Section 3.16.3 "Regulatory Context" of the 2020 EIR; while this plan is still relevant to the analysis of the Modified Project included herein, the regulatory background is not repeated in **Section 3.3.3** of this PREIR. The full discussion of the environmental setting and regulatory setting are available in the 2020 EIR (**Appendix D**).

Information and analysis in this chapter has been largely summarized from the updated "Mahá Guenoc Valley Wildfire Prevention Plan" (Updated WPP) (**Appendix F**) and "Guenoc Valley Mixed Use Planned Development Project: Wildfire Risk and Evacuation Assessment, January 2024" prepared by the Community Wildfire Planning Center and Fehr & Peers (Community Wildfire Evacuation Analysis) (**Appendix H**), and the "Wildfire Risk Analysis" prepared by the UC Berkeley Disaster Lab, Willow Labs, and Wildland Resilience Management, and Digital Mapping Solutions (Wildfire Risk Analysis) (**Appendix M**). The Evacuation Assessment was prepared to address the Superior Court Ruling (**Appendix A-1**), subsequent CEQA guidance released by the Attorney General, and compliance with California Department of Forestry and Fire Protection (CAL FIRE) regulations related to wildfire evacuation and emergency access. In accordance with the Settlement Agreement, the California State Attorney General's Office was provided an opportunity to review and provide input on the Evacuation Assessment. The Wildfire Risk Analysis was prepared to provide the additional analysis required by the First Appellate Court Decision (**Appendix B**).

3.2 ENVIRONMENTAL SETTING

3.2.1 Wildfire Terminology

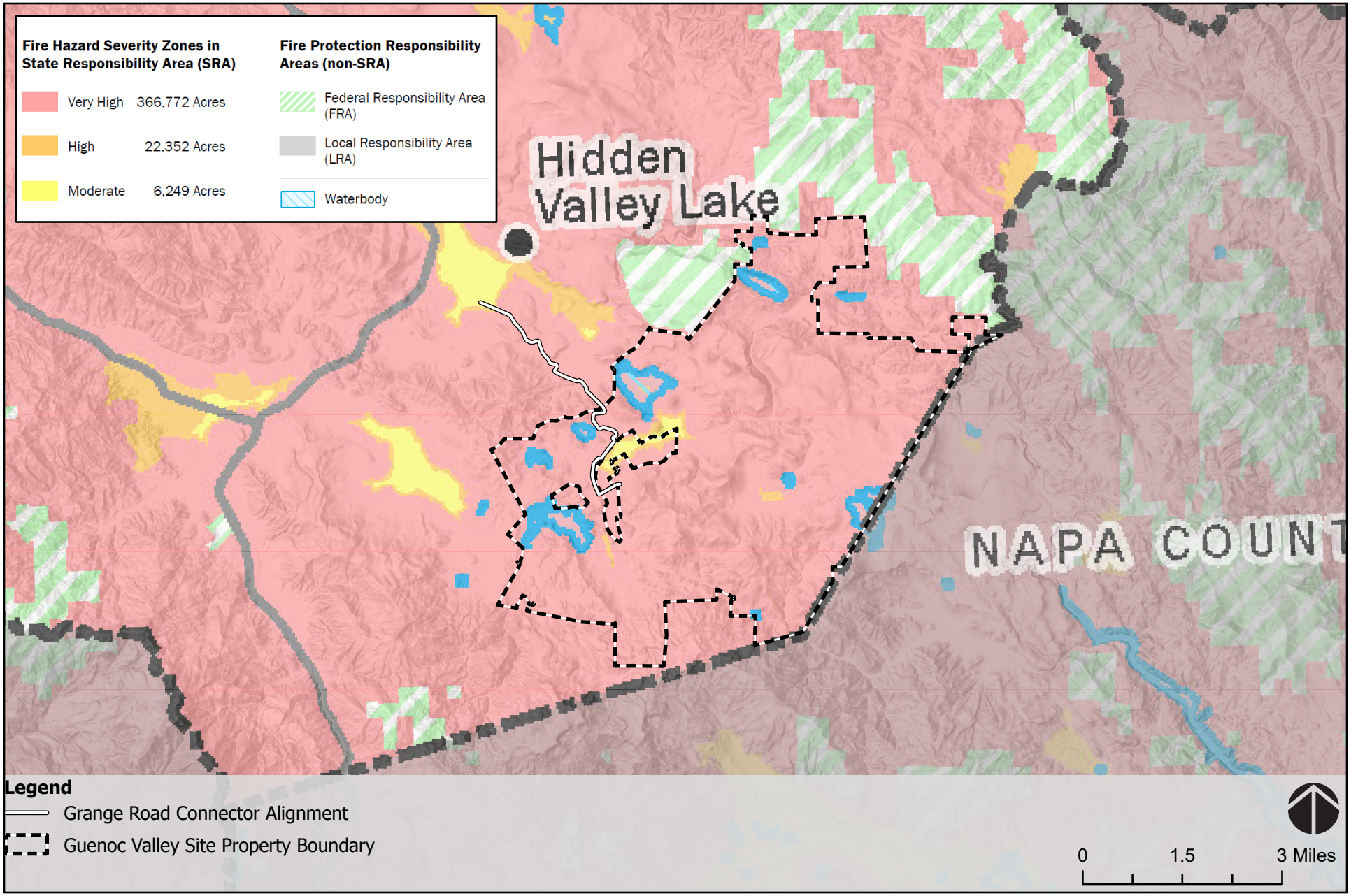
The terms wildfire hazard and wildfire risk are often used incorrectly and interchangeably, or even combined to create the term "wildfire hazard risk." Throughout this analysis, the terms "wildfire hazard" and "wildfire risk" will be used deliberately and it is important to understand the differences.

State Responsibility Areas (SRAs) are recognized by the California State Board of Forestry as areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention. Public Resources Code (PRC) Section 4202 requires the State Fire Marshal to classify lands within SRAs into fire hazard severity zones (FHSZs). The FHSZs that are published by CAL FIRE describe the ***wildfire hazard***, which is the likelihood of a wildland fire occurring at a location and the potential intensity at which it will occur (see **Figure 3-1** for the FHSZ of the Project Site).

The term ***wildfire risk*** describes the wildfire hazard along with the factors that contribute to the susceptibility of an area to wildfire damage, or the impact wildfire may have on what are considered highly valued resources and assets. The wildfire risk combines the following components: 1) likelihood of ignitions, 2) intensity of a fire (the components that make up the hazard), and 3) factors in the susceptibility of the built environment, as shown in the graphic below from both the Evacuation Assessment and Wildfire Risk Analysis (**Appendix H** and **M**, respectively). As an example, an extremely remote forest with many dead trees but no roads or homes may have a high wildfire hazard, but in the absence of structures the overall wildfire risk in the area may be lower than a similar forest with numerous scattered homes.

Graphic 1: Excerpted Figure 4-1 from Wildfire Risk Analysis





Source: The State of California and the Department of Forestry and Fire Protection CAL FIRE State Responsibility Areas (SRA22_2) CAL FIRE Fire Hazard Severity Zones (FHSZSRA_23_2)

FIGURE 3-1

FIRE HAZARD SEVERITY ZONES

As described further in **Appendix M**, multiple variables can affect these three wildfire risk factors:

- **Likelihood (Ignition):** How likely are wildfires to occur? What land uses (e.g., camping and recreation, construction), human activities (e.g., debris burning, smoking, fireworks), and natural events (e.g., lightning, volcanoes) are likely to cause fires? Can policies, practices, and programs be implemented to reduce the likelihood of ignitions?
- **Intensity (Fire Behavior):** What are the potential characteristics of a fire, given an ignition source? How quickly will the fire grow and how much intensity will be produced? How feasible will it be for firefighters to quickly, safely, and effectively engage in fire suppression?
- **Susceptibility (Community):** How resilient are structures and neighborhoods to a potential fire exposure? How close together are the structures located and what is the potential for structure-to-structure spread (i.e., urban conflagration)? How do building materials, design practices, and landscaping features increase or decrease the likelihood of structure ignition? What educational programs or local ordinances are present to develop and maintain fire-smart design practices?

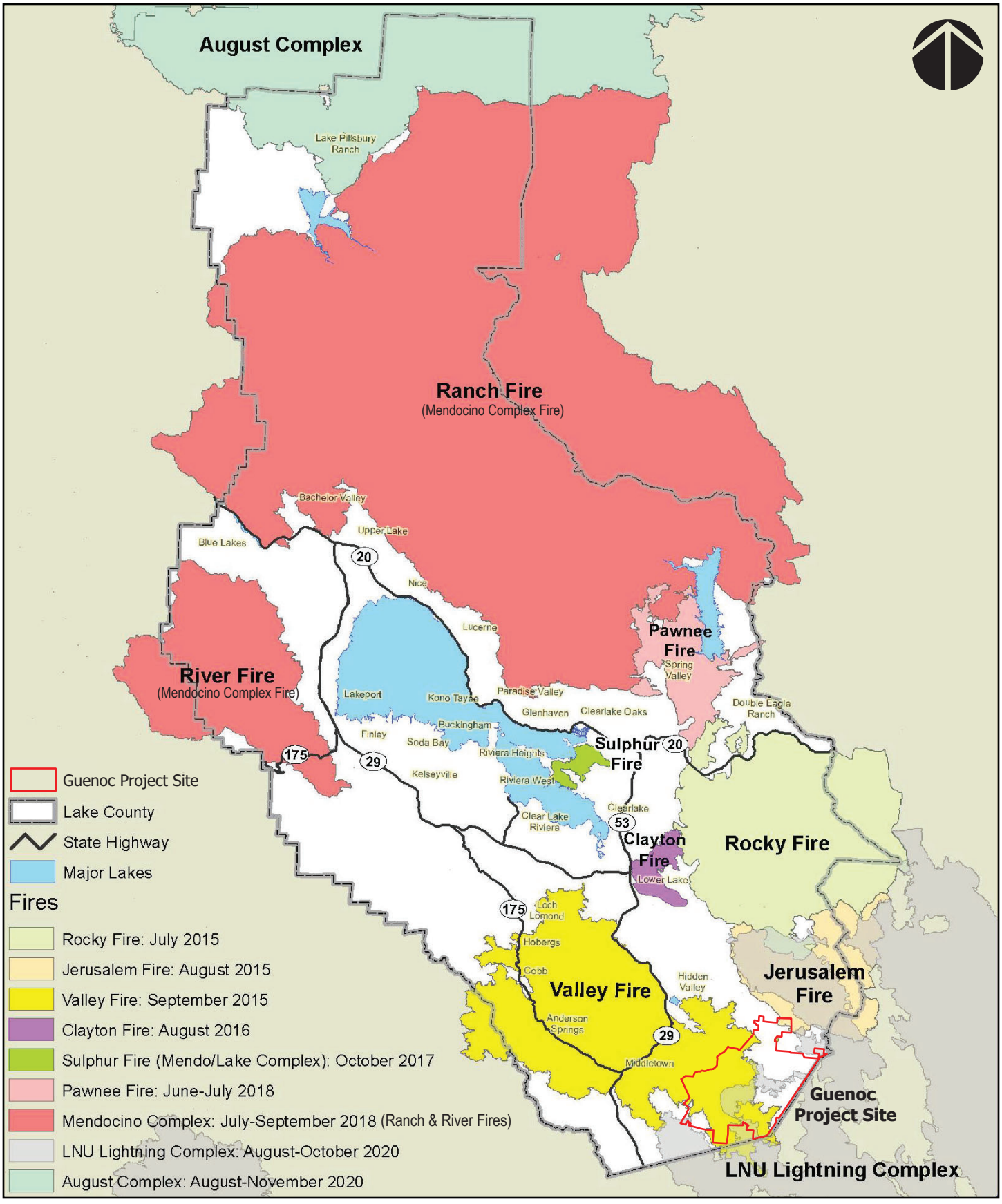
3.2.2 Fire Characteristics and History in the Region

The Guenoc Valley is within a fire prone region of California; the wildfire hazard is highest during late summer and throughout fall, which is known as the fire season. During the fire season, hot and dry weather dries out vegetation and increases potential for wildfire ignition, particularly during windy days. The fall months (September and October) also support Konocti and Diablo wind events, when strong foehn winds move warm, dry air masses from the north and east into the region, exacerbating fire risk.

The topography of the Project Site and surrounding area is characterized by rolling terrain resulting in valley drainages and subtle ridgelines. The natural vegetation cover is dominated by oak savannah fuel types consisting of oak trees, grass, and dispersed shrubs, which are interrupted by vineyards, reservoirs, creeks, and other scattered rural development. The oak savannah fuel complex typically supports low intensity, fast moving fires, although the long grazing history across the Guenoc Valley Site has significantly lowered the fire intensity and spread potential within the Project Site (**Appendix F**).

The entire Guenoc Valley Site is located within a SRA and, as such, the Proposed Project must comply with State requirements for wildfire protection and safety, as reviewed and approved by CAL FIRE. As further described in the 2020 EIR, many factors such as vegetation, slope aspect, climate, and wind patterns influence wildfire risk and are included in CAL FIRE's FHSZ rating system. Subsequent to the 2020 EIR, CAL FIRE released updated draft FHSZ maps in November 2022 which were adopted in June 2023 (**Figure 3-1**). As shown in **Figure 3-1**, the majority of the Guenoc Valley Site is now mapped as Very High FHSZ. Previously as shown in the 2020 EIR, approximately half of the Guenoc Valley Site in the central and southeast was mapped as Very High FHSZ, while the northeastern area was High FHSZ and the western portion was mapped as Moderate FHSZ.

Several significant fires have occurred in the vicinity of the Guenoc Valley Site since 2013, as depicted in **Figure 3-2** and described in **Table 3.2-1**. During two recent fires, the 2020 LNU Lightning Complex and the 2015 Valley Fire, there were no known ignitions within the Project Site and once the fire entered the property it exhibited very low growth, which has been attributed by local fire authorities to the active grazing program and presence of vineyards (**Appendix H-1**). Historically, at least 14 wildfires have burned on the property (**Appendix M**); however, ongoing grazing and regular prescribed fire use by the ranch employees through the 1950s, 60s and 70s reduced fire behavior and growth.



Source: Lake County CWPP

FIGURE 3-2

SOUTH LAKE COUNTY FIRE HISTORY

Table 3.2-1: South Lake County Fires

Fire Name	Fire Characteristics	Evacuation Area
Butts Fire (2014)	▪ Ignited 7/1/13 off Butts Canyon Road ▪ Two residences and seven outbuildings destroyed ▪ 4,300 acres burned ▪ 590 acres (3.6%) of Project Site burned	▪ Evacuation orders along Butts Canyon Road from James Creek to Snell Valley Road, Berryessa Estates in both Lake and Napa Counties ▪ Evacuation advisories included areas in Lake County on Butts Canyon Road from county line to Langtry Estates
Valley Fire (2015)	▪ Ignited 9/12/15 near Cobb Mountain ▪ Contained on 10/15/15 ▪ 1,955 structures destroyed, 1,280 home ▪ 4 homeowner deaths and 4 firefighter mortalities ▪ 76,067 acres burned ▪ 14,450 acres (87.5%) of Project Site burned	▪ Communities of Cobb, Loch Lomond, Anderson Springs, Middletown, and Hidden Valley were affected ▪ Mandatory evacuations for Cobb Mountain
Jerusalem Fire (2015)	▪ Ignited 8/9/15 in Lake County within Jerusalem Valley ▪ Fire moved northeast and merged with Rocky Fire ▪ 25,120 acres burned ▪ 220 acres (1.3%) of Project Site burned	▪ Mandatory evacuations for Jerusalem Valley areas and Hidden Valley Lake ▪ Evacuation center opened at Middletown High School
Rocky Fire (2015)	▪ Ignited 7/29/15 near Morgan Valley Road and Rocky Creek Road east of Clear Lake ▪ Contained 8/14/15 ▪ 96 structures destroyed, 8 structures damaged ▪ 69,438 acres burned	▪ Mandatory evacuations for Jerusalem Valley Area ▪ Numerous evacuation centers opened in region, including for animals
Clayton Fire (2016)	▪ Ignited 8/13/16 off Highway 29 and Clayton Creek Road south of Lower Lake ▪ Contained 8/26/16 ▪ 300 structures destroyed, 189 homes, 28 structures damaged ▪ 3,929 acres burned	▪ 5,000 – 6,000 people evacuated from Lower Lake and Clearlake, including St. Helena Hospital ▪ Evacuation center opened at Highlands Senior Services Center in Clearlake
LNU Lightning Complex (includes numerous individual fires that merged) (2020)	▪ Ignited on 8/17/20 by lightning ▪ Active for 47 days ▪ Affected Napa, Sonoma, Lake, Yolo, and Solano Counties ▪ 1,490 structures destroyed, 232 structures damaged ▪ 5 injuries and 6 deaths ▪ 305,350 acres burned ▪ 5,120 acres (31%) of Project Site burned	▪ Mandatory evacuations in vicinity of Project Site included Hidden Valley Lake, Jerusalem Valley areas, Lower Lake ▪ Evacuation warnings for areas north of Lower Lake to Highway 20 (excluding Clearlake) and Middletown area ▪ Southbound Highway 29 was closed to allow both lanes of the highway to be used for northbound evacuation traffic

Source: Wildfire Risk and Evacuation Assessment Report (**Appendix H-1)** and Wildfire Risk Analysis **(Appendix M)**

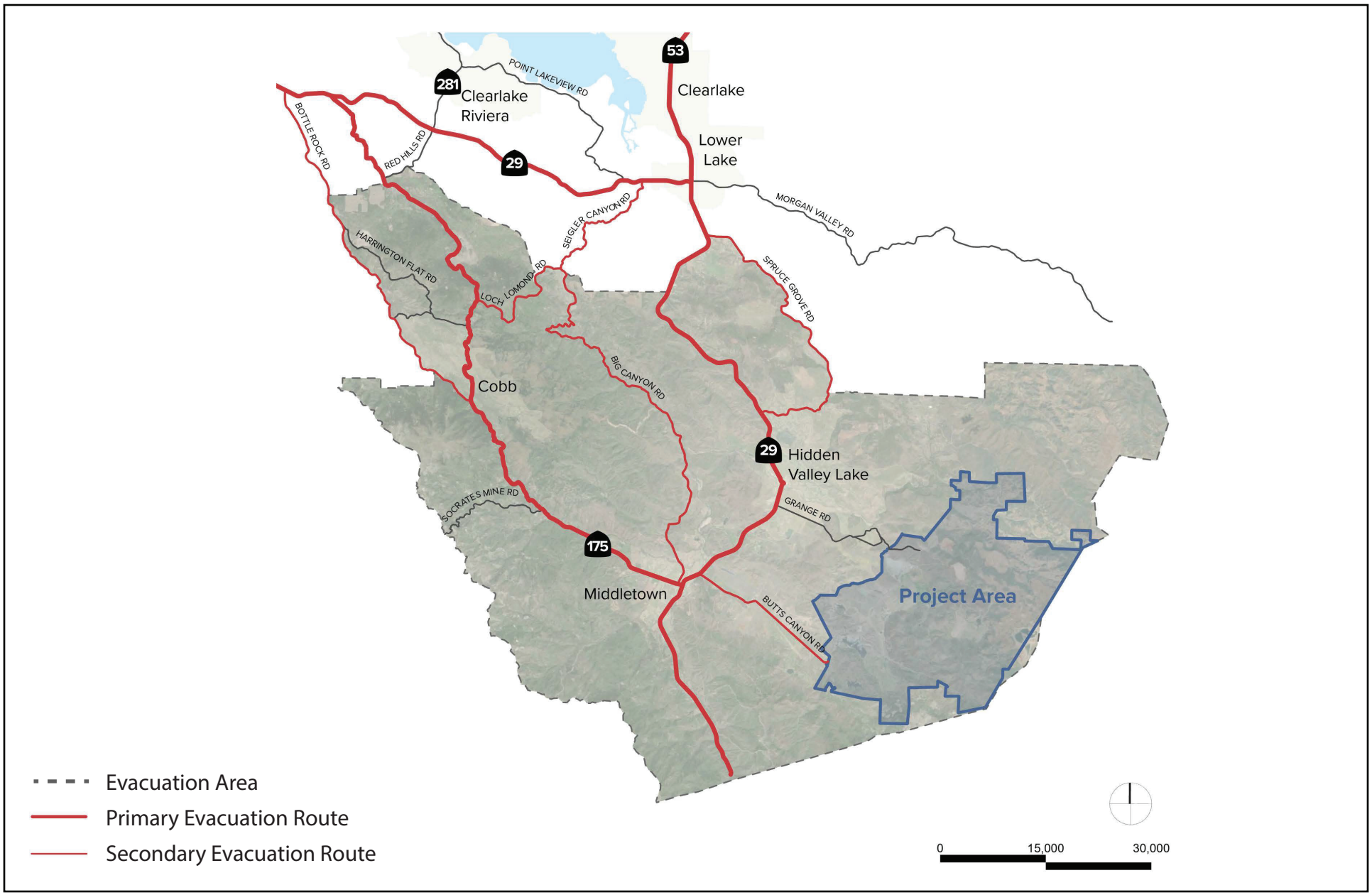
3.2.3 Fire Protection and Emergency Response

The SLCFPD, one of six county fire protection districts, is responsible for serving communities in South Lake County. Four fire stations are located throughout the district in Middletown, Hidden Valley Lake, Cobb, and Loch Lomond. SLCFPD Station 60 in Middletown is the nearest SLCFPD fire station, located approximately 4 miles west of the Project Site. CAL FIRE has four stations within Lake County including Middletown Station 31 located in Middletown, also approximately 4 miles west of the Project Site. CAL FIRE and SLCFPD provide emergency wildfire response to the region, including the Project Site.

The Lake County Sheriff's Office of Emergency Services (OES) is the lead agency for local emergency management efforts for the County of Lake. Emergency notifications are provided via the Everbridge/Nixle platform, Genasys Protect (previously known as the Zonehaven platform), Wireless Emergency Alerts, LakeCoAlerts, and door-to-door notifications during evacuation orders.

In Lake County, SR-29 provides north-south access through the central portion of the County from the southernmost boundary with Napa County, through Middletown and then northeast through Hidden Valley Lake to Lower Lake, where it turns west south of Clear Lake. At Middletown, SR 175 begins at the intersection with SR 29 and travels west-northwest past the communities of Cobb and Loch Lomond, eventually merging with SR 29 approximately 20 miles northwest. As shown in **Figure 3-3**, SRs 29 and 175 are the primary community evacuation routes in South Lake County. Secondary community evacuation routes are generally County roads that provide regional or through access. In the vicinity of the Guenoc Valley Site, these include: Butts Canyon Road that connects from the Napa County line to SR 29 in Middletown; Big Canyon Road that connects Middletown to Loch Lomond Road and Seigler Canyon Road in the north; Spruce Grove Road that provides an alternate route around SR 29 north of Hidden Valley Lake in the eastern portion of the County; and Bottle Rock Road that connects SR 175 to SR 29 in the western portion of the County.

The regional roadway network is managed predominantly by Lake County and Caltrans, with CAL FIRE and other partner wildfire agencies (e.g. fire districts or local Firewise councils) providing vegetation and fuel management along roadways. The Clear Lake Environmental Research Center (CLERC) is a local non-profit organization that is currently partnering with CAL FIRE to reduce forest fuels around Lake County, which includes roadways. The Lake County Wildfire Risk Reduction Project – Phase 1 will implement priority actions in the Updated Lake County Community Wildfire Protection Plan (CWPP) (2023) including about 45 miles of additional roadside clearance (Lake County, 2023a). Significant collaboration efforts have been underway between these agencies to improve the state highway system and local roadways in the area, which will ultimately improve regional access for all residents and visitors to South Lake County, including those associated with the Proposed Project. As described further on page 79 of the Wildfire Risk and Evacuation Assessment in **Appendix H-1**, "for the state highway system, efforts include the State Route 29 South Corridor Engineered Feasibility Study (2014 joint study by Caltrans District 1 and Lake County/City Area Planning Council) and implementation of the SR 29 Konocti Corridor project." The SR 29 Konocti Corridor Project is a cooperative effort of Caltrans, the Lake County Local Area Planning Council (LAPC), and the Federal Highway Administration (FHWA). In total, the project will widen an 8-mile section of SR 29 from a two-lane divided highway to a four-lane expressway. "Segment 2C of the SR 29 Konocti Corridor Project (widening of the westernmost 3.1 mile segment of the project) was completed in June 2023. The Caltrans Milestone Report for Lake County (August 10, 2023) indicates that construction of the remaining Segments 2A and 2B is scheduled for completion in December 2030" (**Appendix H-1**).



Source: Fehr & Peers, 2024

FIGURE 3-3

COMMUNITY EVACUATION ROUTES

3.3 REGULATORY SETTING

3.3.1 Federal

National Fire Protection Association

The National Fire Protection Association (NFPA) is an international nonprofit organization that has established the NFPA 1710 industry standards as well as codes, training, and education for eliminating death, injury, and other damages related to fire, electric, and associated hazards. The NFPA recommends that 90 percent of incident calls receive responses within 6 minutes of the requested assistance in order to intervene and prevent the fire from spreading past the room of origin. Fire departments are advised to allow 1 minute for receiving and dispatching the call, 1 minute for response preparation, and 4 minutes for arriving to the scene. The Firewise USA program was created by NFPA for communities to apply to be Firewise USA Sites. The communities must obtain a wildfire risk assessment from their state forestry agency or fire department and develop a plan of action. These sites must invest the equivalent of minimum one volunteer hour per housing unit annually.

3.3.2 State

New State Minimum Firesafe Regulations

On January 31, 2023, after certification of the 2020 EIR, the Board of Forestry adopted new State Minimum Fire Safe Regulations (14 CCR, Division 1.5, Chapter 7 Subchapter 2, Articles 1-5). These regulations establish minimum wildfire protection standards applicable to building within the SRA and the Very High FHSZ. The regulations mandate that future design and construction of structures, subdivisions and other developments within the SRA and the Very High FHSZ shall provide for basic emergency access and perimeter protection measures. The regulations also provide standards for access, signage and building numbering, private water supplies for emergency use, and vegetation management (including vegetation modification, fuel breaks, and greenbelts). The Minimum Fire Safe Regulations provide for minimum turning radii, road or driveway widths, and dead-end or non-looped road lengths, and other standards that will allow safe ingress and egress for first responders and evacuees in an emergency. The proposed amendments promote compliance with the revisions to PRC 4290 within SB 901 (Chapter 626, 2018), and improve clarity of certain administrative processes within Article 1 of the existing regulations, specifically to:

- Establish standards for fuel breaks and greenbelts near communities;
- Establish measures for the preservation of undeveloped ridgelines;
- Improve clarity regarding the inspection and enforcement agencies;
- Promote local jurisdiction compliance with the Fire Safe Regulations and to clarify the process by which that occurs;
- Increase the flexibility offered to local jurisdictions in implementing the minimum standards provided in these regulations.

PRC Section 4291 requires the maintenance of defensible space around a structure located within or adjacent to a mountainous, forested, or shrub-covered area, and specifies an ember-resistant (e.g., hardscape) zone 5 feet from the building, more intense fuel reductions between 5 and 30 feet from the

structure, and more moderate fuel vegetation management in the zone between 30 and 100 feet from the structure.

Fire Hazard Severity Zone and Hazardous Fire Area Regulations

Chapter 6.8 of the California Government Code (Sections 51175 – 51189), effective January 1, 2022, defines FHSZs and requirements for defensible space around occupied structures built within FHSZs. PRC Sections 4251 – 4290.5 establish restricted activities within "hazardous fire areas." These code requirements include fire-wise practices such as home hardening measures, vegetation management, water supply, among others. Table 2.1 within the Wildfire Risk Analysis (**Appendix M**) includes a full list of these regulatory requirements.

Senate Bill (SB) 99

SB 99 (2020) requires review and updating of each local city and county general plan's safety element to include information to identify residential developments in hazard areas that do not have at least two emergency evacuation routes.

Assembly Bill (AB) 747

AB 747 (2019) added Government Code Section 65302.15, which requires that, upon the next revision of a Local Hazard Mitigation Plan (LHMP) on or after January 1, 2022, or beginning on or before January 1, 2022, if a local jurisdiction has not adopted a LHMP, the safety element must be reviewed and updated as necessary to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. If a LHMP, emergency operations plan, or other document fulfills commensurate goals and objectives, a local agency may use that information in the safety element to comply with this requirement by summarizing and incorporating by reference such a plan or other document into the safety element. These new requirements apply to all types of hazards in the safety element and are not unique to fire.

AB 1409

AB 1409 (2021) amended Government Code Section 65302.15, which requires general plan safety elements to be reviewed and updated as necessary to identify evacuation locations under various emergency scenarios, and the capacity, safety, and viability of evacuation routes. The safety element must be reviewed and revised no less than once every eight years with new information regarding flood and fire hazards, as well as climate adaptation and resiliency strategies applicable to the county.

AB 3074 and Executive Order N-18-25

AB 3074 (September 2020) mandated that CAL FIRE adopt rules requiring an ember-resistant "zone zero" be maintained between 0 and 5 feet from structures in High and Very High FHSZs. On February 6, 2025, California's Governor issued Executive Order N-18-25 in response to the declared State of Emergency in Ventura and Los Angeles counties as a result of the recent fires in the greater Los Angeles Area. EO N-18-25 directs the Board of Forestry and Fire Protection to create rules that would fully implement the "zone zero" defensible space requirement.

3.3.3 Local or Regional Regulations

Lake County Community Wildfire Protection Plan

Lake County had an adopted 2009 CWPP that was in place at the time of the 2020 EIR. In 2023, an updated CWPP ('2023 CWPP') was released and adopted following public workshopping of the 2022 Draft CWPP. The 2023 CWPP updates and streamlines the 2009 version, provides fire safety information to residents and homeowners, and identifies fuel reduction projects and fire safety resources throughout the County. As noted in the 2023 CWPP, communities at a higher level of wildfire risk include Cobb, Hidden Valley Lake, Loch Lomond, and Middletown in South Lake County near the Project Site.

South Lake County Wildland Fire Preparation and Emergency Plan (2016)

The South Lake County Wildland Fire Preparation and Emergency Plan (2016) compiles information for the public on how to best prepare for emergencies and what to do during an evacuation. The plan was written by the South Lake County Fire Protection District and South Lake Fire Safe Council and identifies primary evacuation routes for the South Lake County communities, which include SR 29 and SR 175, and secondary evacuation routes, Butts Canyon Road, Big Canyon Road, Spruce Grove Road, Loch Lomond Road, Bottle Rock Road, and Seigler Canyon Road. The plan establishes temporary assembly zones on the emergency evacuation map (South Lake Fire Safe Council, 2016). Middletown High School (20932 Big Canyon Road) and Coyote Valley Elementary School (18950 Coyote Valley Road) are the two assembly zones closest to the Project site.

Lake County Emergency Operations Plan (2020)

The Lake County Emergency Operations Plan (EOP) was updated in 2020 after publication of the 2020 EIR. The 2020 EOP provides a structure for coordinating interagency support for a local response to an incident through hazard-specific annexes, such as the Wildland Urban Interface (WUI) Annex, which was updated in 2021. The WUI Annex establishes priorities, responsibilities, and assigns tasks to the various response agencies who respond during wildfires. Wildland fire suppression, structure protection, and incident management are provided by CAL FIRE on State Responsibility Areas, Lake County Fire Districts within Local Responsibility Areas, and the U.S. Forest Service and Bureau of Land Management within federal lands. Because wildfires do not follow jurisdictional boundaries, the WUI Annex provides a clear framework for how the agencies will interact and establish coordinators for firefighting efforts, in addition to strategies and guiding principles for fire fighters on the ground. The EOP is currently undergoing revisions relating to preparedness, response, recovery, and mitigation framework, as well as the incorporation of the Federal Emergency Management Agency's (FEMA) updated lifeline concepts. Logistic and hazard-specific annexes are also being updated. The 2025 EOP will supersede the current EOP once adopted in mid-2025. Until then, the 2020 EOP remains the governing plan for the area.

Other Relevant Lake County Plans and Studies

The following plans and studies are not specific emergency plans or wildfire-related studies, but contain information and policies relevant to emergency response and evacuation. As such, these studies were considered as appropriate in the Evacuation Assessment (**Appendix H-1**):

- Lake County Regional Transportation Plan / Active Transportation Plan (2022) – refer to **Section 4.10.3** of this PREIR for a discussion;

- Lake County Local Hazard Mitigation Plan (2018)[4]
- Lake Transit Development Plan & Marketing Plan (2015);
- Valley Fire Post Fire Watershed Emergency Response Team Report (2015);
- Middletown Community Action Plan (2014);
- SR 29 South Corridor Engineered Feasibility Study (2014); and
- Lake County General Plan (2008).

3.3.4 Established Best Practices

The following section discusses best practices that have been established by experts in the field of wildfire resiliency, evacuation, and related topics that are not mandatory regulations. Brief descriptions are provided below, and Table 2.2 within the Wildfire Risk Analysis (**Appendix M**) includes additional information regarding how wildfire best practices from each of the groups below have been incorporated into the Proposed Project.

Attorney General's Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects

On October 10, 2022, after certification of the 2020 EIR, the Office of the Attorney General (OAG) published *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act* (AG Guidance; OAG, 2022). The AG Guidance is designed to help lead agencies comply with CEQA when considering whether to approve projects in wildfire-prone areas. The AG Guidance provides "suggestions for how best to comply with CEQA when analyzing and mitigating a proposed project's impacts on wildfire ignition risk, emergency access, and evacuation."

The AG Guidance describes CEQA's requirements in the following two analysis categories.

- Analyzing Impact on Wildfire Risk
- Analyzing Impact on Evacuation & Emergency Access

The addition of new development into high wildfire risk or adjacent areas may impact the evacuation of project residents, as well as the existing population (e.g., residents, workers, students, visitors, and possibly livestock) in the area and the ability of emergency responders to simultaneously access the area to fight wildfire. This can, in turn, impact the risk and extent of large-scale fire spread and community safety within and around the new development. Section IV.B of the AG Guidance outlines variables that should be considered in the analysis of impact on wildfire risk related to the following project characteristics: Project Density, Project Location in the Landscape, and Water Supply and Infrastructure. Section IV.C of the AG Guidance contains further recommendations regarding evacuation and emergency access.

[4] An update to the Multi-Jurisdictional Hazard Mitigation Plan is underway and will be available February 2025.

Insurance Institute for Business & Home Safety

The Insurance Institute for Business & Home Safety has developed the voluntary Wildfire Prepared Home Recommendations program. This voluntary certification includes additional wildfire resiliency measures that exceed the minimum California Building Code requirements.

National Fire Protection Association

The NFPA is an international nonprofit organization that has established NFPA 1140 Standard for Wildland Fire Protection, as well as codes, trainings, and education with an established goal of eliminating death, injury, and other damages related to fire hazard.

3.4 IMPACTS

3.4.1 Methods of Analysis

The analyses of wildfire evacuation and risk impacts is based upon a review of the Updated WPP (**Appendix F**), project plans, maps, CAL FIRE data, and other available documents, consideration of federal, State, and local regulations and guidelines, input from the Attorney General's Office, consultation with the Lake County Sheriff's Office, and the use of various statistical and computer models. The Community Wildfire Planning Center and Fehr & Peers prepared a Wildfire Risk and Evacuation Assessment (**Appendix H-1**) to specifically address the Superior Court's Ruling and the AG Guidance (2022), and a group of wildfire specialists collaborated to prepare a separate Wildfire Risk Analysis (**Appendix M**) to address the First Appellate Court decision. The methodology for each is described below.

Evacuation Analysis Methodology

Per the AG Guidance, for "projects located in high wildfire risk areas that present an increased risk of ignition and/or evacuation impacts, evacuation modeling and planning should be considered and developed at the time of project review and approval." Specifically, evacuation modeling and analysis should include the following per the AG Guidance:

- Evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access.
- Assessment of the timing for evacuation.
- Identification of alternative plans for evacuation depending upon the location and dynamics of the emergency.
- Evaluation of the project's impacts on existing evacuation plans.
- Consideration of the adequacy of emergency access, including the project's proximity to existing fire services and the capacity of existing services.
- Traffic modeling to quantify evacuation time estimates (ETEs) under various likely scenarios.

Wildfire Evacuation Research

Significant research has been conducted on California wildfires, evacuations that have occurred, and wildfire risk reduction measures. A *Review of California Wildfire Evacuations from 2017 to 2019* (Wong et al., 2020) reviewed evacuations conducted across 11 major wildfires where approximately 1.1 million people were ordered to evacuate. This study included local data from fires in Sonoma County (the Kincade

Fire with 200,000 evacuees), Butte County (the Camp Fire with 52,000 evacuees), and Lake, Mendocino, Glenna, and Colusa counties (the Mendocino Fire Complex with 17,000 evacuees). This study yielded information on number of evacuants per household, rate of non-compliance with a mandatory evacuation order, and other key factors as summarized in **Table 3.4-1**.

Additionally, surveys were conducted of Santa Rosa residents who evacuated from the 2017 Tubbs Fire in Sonoma County, which was one of the only studies in the last five years to quantify the number of vehicles evacuated per residential household. Based on this data from a nearby jurisdiction, 1.75 vehicles were evacuated per household (**Appendix H-1**).

Table 3.4-1: Evacuation Statistics

Evacuation Factor	Statistics
Vehicles per household during evacuation	1.89 (weighted average)
Non-compliance rate [1]	Between 3% and 11%
Shadow evacuation rate [2]	Between 29% and 75%
Percentage evacuating in one vehicle	Between 34% to 45%
Percentage evacuating in two or more vehicles	Between 49% to 62%

Notes: [1] Non-compliance rate is the number of individuals who received a mandatory evacuation order but did not evacuate.
[2] Shadow evacuation rate refers to the individuals who did not receive a mandatory evacuation order but chose to evacuate.
Source: Wong et al., 2020 and Community Wildfire Evacuation Analysis (**Appendix H**)

Traffic Simulation Model

A region's evacuation system can be assessed in different ways, from identifying a theoretical hourly capacity of the available roadways and comparing it to an expected traffic volume to a full simulation of the roadway network to assesses how traffic will redistribute to alternative routes during an evacuation and identification of congested locations in the event of an evacuation. As described in the Wildfire Risk and Evacuation Assessment Report (**Appendix H-1**), ETEs were prepared using the Lake County Area-Wide Microsimulation Model (LAMM) that spans most of Lake County and was originally prepared for the Lake County/City Area Planning Council. LAMM is a 450-square-mile microscopic traffic simulation model spanning most of Lake County. The model study area includes 720 road miles, 120 of which are on SRs 20, 29, and 53, as well as road network detail in local communities.

The LAMM was designed to interface with the Wine Country Interregional Partnership (WCIRP) travel demand model. The LAMM and WCIRP travel demand models are built on shared geographic information system platform. The LAMM includes nearly every street in Lake County and was calibrated and validated based on criteria published by the FHWA and Caltrans. LAMM was used for the traffic operations assessment for the SR 29 South Corridor Engineered Feasibility Study. The LAMM relies on a series of zones consistent with the WCIRP travel demand model, trip tables that identify trips between land uses in the origin zones and destination gateways, and the existing road network. The LAMM estimates traffic and levels of congestion on 15-minute intervals and, as link congestion builds (i.e., roads fill with cars), it dynamically reassigns traffic to less congested routes if available.

The road network within the LAMM model was updated to include the roundabout at SR 29 and Hartmann Road that was installed in 2019 based on the SR 29 South Corridor Engineered Feasibility Study (2014), and traffic signal phasing/timing data was updated as necessary (**Appendix H-1**). Total population in Lake County grew between 2011, when the LAMM model was originally developed, and 2022 from 64,300 to 68,200 for a total growth of 6.1 percent. This indicates there was not a substantial change in population

in Lake County over the period of time since the LAMM model was originally developed and that it may be applied based on the original model development. To support this conclusion, turn movement counts collected at 14 intersections on Friday, August 19, 2022 were compared to the updated LAMM model predictions; these counts confirmed that the new model is accurately representing observed field conditions (**Appendix H-1**). One modification to the regional transportation network was made in the LAMM for the cumulative (2040) analysis to include Segment 2C of the Konocti Corridor (formerly Lake 29 Improvement) project, discussed further in **Section 3.2.3** (**Appendix H-1**).

Evacuation Assessment

The Evacuation Assessment identifies scenarios of evacuation events, defines the potential evacuation area, defines evacuation routes, estimates trip demand for various evacuation scenarios, assigns trips along evacuation routes during those scenarios, and estimates total evacuation times (**Appendix H-1**). The Evacuation Area encompasses the communities of Middletown, Hidden Valley, Cobb, Loch Lomond, and surrounding areas within southern Lake County. Primary and secondary community evacuation routes are those that provide the most direct path to exit the Evacuation Area with the least exposure to risk, and were identified in the South Lake County Wildland Fire Preparation and Emergency Plan (2016) and are depicted in **Figure 3-3**:

- Primary Community Evacuation Routes:
  - SR 29
  - SR 175
- Secondary Community Evacuation Routes:
  - Butts Canyon Road
  - Big Canyon Road
  - Spruce Grove Road
  - Loch Lomond Road
  - Bottle Rock Road
  - Seigler Canyon Road

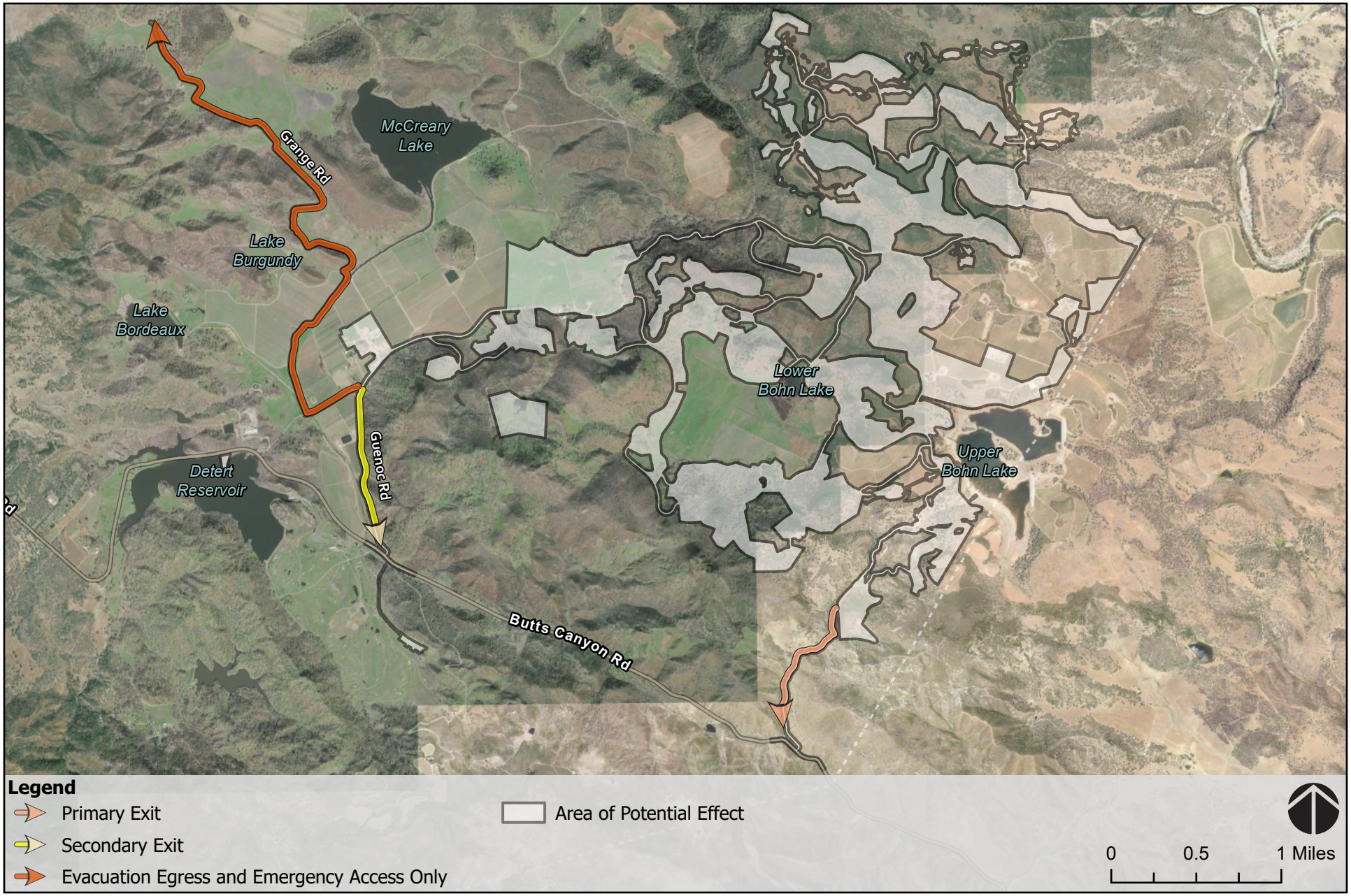
Within the Guenoc Valley Site, the Modified Project now includes three evacuation routes for vehicles leaving the Project Site (**Figure 3-4**). The 2020 EIR included the proposed Primary Access Road at McCain Canyon that would connect directly to Butts Canyon Road and a Secondary Access Road that would connect to Butts Canyon Road via an existing intersection approximately halfway between the existing Langtry Winery Entrance and the new Primary Access Road. The third emergency access road is the proposed Grange Road Connector that would provide emergency access and evacuation egress only, from the interior of the Project Site to SR 29 via Grange Road.

- Project Evacuation Routes:
  - Primary Access Road to Butts Canyon Road
  - Secondary Access Road to Butts Canyon Road
  - Grange Road Connector (evacuation egress and emergency access only) to SR 29

In order to analyze potential impacts to community evacuation routes, evacuation scenarios were defined. The Wildfire Risk and Evacuation Assessment (**Appendix H-1**) defines two Wildfire Scenarios which were selected based on wildfire history of the region. As discussed under the subheader '**Wildfire Risk Analysis Methodology**' below, the two scenarios defined for the wildfire risk analysis were based on wind direction on the most extreme fire-risk weather days, rather than historical fire scenarios. The two wildfire scenarios assessed in the evacuation analysis are as follows:

- "**Wildfire Scenario A** (wildfire from north to south) is based on a wildfire that starts in Boggs Mountain Demonstration State Forest in the northwest portion of the Evacuation Area and moves to the southeast, similar to the 2015 Valley Fire that was a significant wind-driven weather event that traveled from northwest to southeast from Cobb Mountain into the valleys and communities of Middletown and Hidden Valley Lake." (**Appendix H-1**). The evacuation traffic directional distribution pattern for Wildfire Scenario A corresponds to the west wind scenario from the Wildfire Risk Analysis (**Appendix H-3**).
- **"Wildfire Scenario B** (wildfire from south to north) is based on a wildfire that starts on Mt. St. Helena in the southernmost portion of the Evacuation Area and moves to the north. This is somewhat similar to the LNU Lightning Complex fire that affected the southern portion of the Evacuation Area"(**Appendix H-1**). The evacuation traffic directional distribution pattern for Wildfire Scenario B corresponds to the east wind scenario from the Wildfire Risk Analysis (**Appendix H-3**).

Each of these Wildfire Scenarios was analyzed in the following years: Baseline (2022), Baseline (2022) plus Guenoc Valley Project Phase 1, Cumulative (2040), and Cumulative (2040) plus Guenoc Valley Project Full Build-Out. As a result, eight scenarios were modeled encompassing two wildfire scenarios under baseline and future conditions, both with and without the Project. Various adjustments were made to the LAMM model as fully described in **Appendix H-1**. For the Cumulative (2040) transportation network, improvements to SR 29 were assumed to have been fully implemented as part of the Konocti Corridor project (Segment 2C). To be conservative, improvement measures to local roadways or intersections were not included in the 2040 model if the funding or design efforts are not finalized. For the Baseline (2022) plus Project Phase 1 Scenario and the Cumulative (2040) plus Project Full Build-Out scenario, a roundabout was added to the LAMM model at SR 29 and Butts Canyon Road to indicate that **Mitigation Measure 3.13-1** was implemented. Furthermore, to account for the unknown nature of future emergencies that may trigger evacuation, a reduced capacity of approximately 40 percent below the standard roadway operating capacity was included to account for potential changes in driver behavior during the emergency, presence of wildfire smoke that may affect visibility, debris on the roadway, or other hazards that could occur throughout the evacuation period. Little research on changes in driver behavior during wildfire and the resulting effect on vehicle throughput on evacuation routes is available locally, but research conducted in China supports a 40 percent reduction in driver speeds in low-visibility conditions analogous to wildfire smoke (**Appendix H-1**).



Source: Lake County Community Development and General Plan; County of Napa, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS,

FIGURE 3-4

PROJECT EVACUATION ROUTES

The Evacuation Analysis included the following key parameters:

- Evacuation order issued at 4:00 pm on a Friday afternoon in August, which was chosen because this is the timeframe with the highest traffic volume.
- All homes are occupied for both community population groups and Proposed Project population groups.
- The analysis assumed that 100 percent of residents for both community population groups and Project population groups in the Evacuation Area evacuate (recall that a 3 to 13 percent non-compliance rate was identified by Wong et al., 2020, so this is an extremely conservative assumption).
- 80 percent of employees for community population groups and 100 percent of employees for Project population groups are at their place of employment, which is likely high at 4:00 p.m. on a Friday.
- 85 percent hotel occupancy for community population groups and 100 percent hotel occupancy for Project population groups, which is likely a high occupancy rate as the 2020 EIR Traffic Impact Analysis assumed a 71% occupancy rate based on recent local trends.
- For employees who work and live inside the Evacuation Area, the analysis assumed that they would make a trip from their workplace to their home, and then be part of subsequent evacuation numbers out of the area. Employees who live outside the Evacuation Area were assumed to evacuate immediately and not travel inside the Evacuation Area. For employees who work outside of the Evacuation Area but live inside the Evacuation Area, the analysis conservatively assumed that they would enter the Evacuation Area to access their home, then join the subsequent evacuation numbers out of the area.
- For the cumulative analysis (2040), a forecasted growth rate of 1.6 percent was applied, which is conservative as it is more than double the 0.6 percent growth rate experienced in Lake County between 2011 and 2022.

The number of potential trips estimated to originate from the community population, Project Phase 1, and Project at Full Build-Out are summarized in **Table 3.4-2**. In addition, there will be background traffic on the local roadways, which are trips on the designated evacuation routes that do not have an origin or destination in the Evacuation Area.

Table 3.4-2: Evacuation Trips for Community and Project Phases

Group	Unit Type	Quantity	Trips Generated
Community Population			
Primary Households	Dwelling Units	4,455	7,735
Secondary Homes	Dwelling Units	1,214	1,457
Hotels	Hotel Rooms	123	105
Employees at Work (live and work inside Evacuation Area)	Persons	1,591	1,591
Employees at Work (work inside but live outside Evacuation Area)	Persons	1,240	1,240
Employees at Work (live inside but work outside Evacuation Area)	Persons	1,414	1,414
	Sub-Total	**10,037**	**13,542**

Group	Unit Type	Quantity	Trips Generated
Project Phase 1			
Residential Estate Units	Dwelling Units	385*	659*
Resort Residential Units	Dwelling Units	141	141
Hotels	Hotel Rooms	147*	103*
Employees**	Persons	610	610
Visitors	Persons	100	83
	Sub-Total	**1,383***	**1,569***
Project Full Build-Out (including Phase 1)			
Residential Estate Units	Dwelling Units	1,400	2,394
Resort Residential Units	Dwelling Units	450	450
Hotels	Hotel Rooms	400	280
Employees	Persons	1,220	1,220
Visitors	Persons	200	167
	Sub-Total	**3,670**	**4,511**

Notes: *The Wildfire Evacuation Assessment analyzed 401 residential estate units (16 more than the 385 estates that are proposed) and 127 hotel rooms (20 less than what is proposed). The Supplemental Memorandum (Wildfire Evacuation Vehicle Trip Demand Phase 1 Updated Memorandum) (February 9, 2024, **Appendix H-2**) corrected the residential estate and hotel rooms.
**Workforce Co-Housing is included with Employees.
Source: Fehr & Peers (**Appendix H-1** and **Appendix H-2**)

The background traffic was estimated by daily and peak hour traffic counts collected on SR 29 in 2022 (**Appendix H-1**). Not all community- and Project-generated evacuation trips will begin at the same time. As explained further in The Wildfire Risk and Evacuation Assessment Report (**Appendix H-1**), "evacuation departure time for trips leaving the Evacuation Area varies by many factors including, but not limited to, the time of day, type of hazardous event, perceptions of risk, and relative preparedness of evacuees. For situations where ample notice is given or the family unit is already together, less time is needed to prepare for the evacuation. On the other hand, where there is minimal notice given or when the family unit is not together, the time required to prepare for an evacuation is typically longer as residents need to pack belongings, collect their animals, and conduct other coordination activities before beginning their evacuation trip." Using research conducted in 2021, the Evacuation Assessment quantified when different groups would be more likely to begin their evacuation during the two wildfire scenarios and modeled the trips in 15-minute intervals starting at 4:00 PM. Some of the key parameters for the model included assumptions such as employees and tourists in the community population group would have the quickest departure curve as they do not need to pack items or coordinate evacuations with others. Full-time residents that do not have a worker employed outside the household would be able to evacuate quicker than residents with a worker employed outside the household, as many of those households would wait for the person to return home from work before evacuating. Finally, Guenoc Valley Project employees would have a delayed departure curve compared to other employees in the Evacuation Area because most of the Project-employees would be trained to assist in the evacuation of Project residents and guests and would be required to delay their own evacuation. Finally, the model accounts for four primary directions that evacuation trips will follow to get outside of the Evacuation Area in the event of an emergency.

After determining the evacuation trip demands and associated transportation network, a dynamic traffic assignment was performed to reflect congestion, departure times, and model the ETE. The ETE represents the time required for the last evacuee to safely leave the Evacuation Area.

Wildfire Risk Analysis Methodology

Wildfire risk is a function of the likelihood of ignitions, the intensity of fire behavior, and the susceptibility of a community to wildfire, and each of those factors is influenced by a myriad of conditions, as discussed further in **Section 3.2.1** of this PREIR and in the Wildfire Risk Analysis (**Appendix M)**. There is no single scientific tool that can quantitatively assess every facet of wildfire risk, and therefore the Wildfire Risk Analysis utilized various tools to assess the potential for the Proposed Project to exacerbate wildfire risk.

Likelihood: Ignition Frequency Analysis

A statistical analysis was conducted of wildfire ignition frequency using wildfire incident data from Lake County provided by CAL FIRE Redbooks and Hidden Valley Lake Subdivision security reports. Basic descriptive and inferential statistics were then run on the compiled data to determine the most common causes and trends in ignition causes over time. Statistics included deriving annual averages for each fire cause, outlier analysis and evaluation, and assessment of linear temporal trends using linear regression. The statistical model evaluated the number of wildfire ignitions as a function of road miles, buildings, and population in the County and used this to assess how ignition frequency could change due to the Proposed Project.

Intensity: Fire Behavior and Growth Modeling

Two wildfire modeling tools were utilized to assess potential fire intensity. The first is FlamMap, a fire modeling software produced by the United States Forest Service that simulates potential fire behavior under user-defined conditions. FlamMap provides outputs of key fire behavior metrics such as flame length, rate of spread, and crown fire activity, but it does not model temporal patterns; instead, it provides detailed estimates of the characteristics of the fire at each pixel on the landscape, such as intensity and speed. The second tool utilized, Fire Pathways, is a computational model of fire spread that identifies where topography, fuel, and wind align to produce the fastest routes fire could take to spread across a landscape. Fire Pathways is useful for understanding how fire is likely to advance across a landscape, locating hazardous combinations of fuel and topography where fire is expected to make runs, and identifying the portions of a community at greatest risk from rapidly spreading fire. Each of these models relies upon datasets described in **Table 3.4-3** to determine the baseline fire intensity on the site.

Table 3.4-3: Fire Model Data Inputs

Dataset Input	Description	Source
Surface Fuel Data	Type, load, and arrangement of fuels on the surface	California Forest Observatory's Surface Fuels dataset at 10m resolution[1]
Canopy Fuel Data	Canopy height, density, and thickness of tree cover	California Forest Observatory's 10m LIDAR-derived data
Topography	Elevation, slope, and aspect	USGS 10m digital elevation model
Weather	Wind direction, speed, and relative humidity	Konocti Remote Automated Weather Station (RAWS)[2]

Notes: [1]Site-specific fine-scale vegetation mapping conducted for the biological resources analysis is not applicable for fire behavior modeling, which requires specialized geospatial datasets that describe fuel size, loading, arrangement, and continuity. These "fuel models" are not generally correlated with vegetation type or species.
[2]A statistical approach was used on the Konocti RAWS data to determine the two fire weather scenarios that represented the highest severity fire-weather conditions.
Source: Wildfire Risk Analysis (**Appendix M**)

As a result of these model inputs, two modeling scenarios were identified to represent the most extreme fire risk weather scenarios:

- **East Wind Scenario.** Wind speeds of 14 miles per hour (mph) from 100 degrees (east), with 9 percent relative humidity.
- **West Wind Scenario.** Wind speeds of 17 mph from 270 degrees (west), with 8 percent relative humidity.

As further explained in the Wildfire Risk Analysis (**Appendix M**), Fire Pathways modeling focuses on the most likely pathways under the probable high-severity fire weather conditions, and therefore these pathways may not reflect the fire pathways observed on historical fires. "Not all historical fires occurred during worst-case scenario weather conditions, and thus may follow other routes. However, the intent of this modeling is not the accurate representation of historical fire behavior, but, rather, to understand and evaluate potential fire growth trajectories representative of the highest risk weather events" (Section 4.2.3 of **Appendix M**).

Delineation of Design Features versus Measures Requiring Maintenance

The factors outlined in **Table 3.4-3** were input into the fire models to determine baseline or pre-project fire conditions. In order to assess the potential impacts of the Proposed Project, the location of the proposed buildings, roadways, and other project infrastructure was input into the models to compare changes in wildfire intensity. The WPP includes a suite of wildfire risk minimization techniques that would be implemented across the life of the Proposed Project from early structure design, through construction, and for the lifetime of project operations. As further explained in **Section 3.1.1** of this PREIR, the First Appellate Court concurred that measures that could be incorporated as part of project design choices (e.g., undergrounding power lines) were design features and part of the Proposed Project, but implied that measures that involved maintenance operations (e.g., active landscape management via grazing) should be considered mitigation measures under CEQA. Table 1.1 within **Appendix M** categorizes the various WPP components as either design features or mitigation measures. Those components of the WPP considered "design features", such as the roadways and hardened homes, were included in the "Case 1 model" to compare the Proposed Project against baseline conditions. A second scenario was modeled referred to as the "Case 2 model", which assumed both the design features and mitigation measure components of the WPP were implemented. While Table 1.1 of the Wildfire Risk Assessment lists 33 measures (21 design features and 12 mitigation measures) within the WPP that would be implemented for the Proposed Project, not all are possible to model in the computer software.[5] Therefore, as shown in

[5] Design features and mitigation measures that could not be accounted for in the modeling include: Wildfire safety design standards and suppression systems for all buildings, fire suppression surface water sources and dedicated nighttime water source for aerial firefighting, existing interconnected water pumping system and fire hydrants, generators for water system, underground power lines and electric system, microgrid system for commercial buildings, additional emergency access route along Grange Road to SR 29, on-site Emergency Response Center located in the Project core, two emergency helipads, parking restricted on primary access roads, safety zones for firefighters, temporary refuge areas, added firefighter staff during construction, fire safety oversight and procedures during construction, Emergency Response Center with staffed wildfire mitigation expertise in access and evacuation, HOA funding for annual vegetation and defensible space management, HOA contract with wildfire expert for the project duration to support homeowner education and response planning, early detection system and emergency notification siren system, and an opt-out communication system. Excluded design features and mitigation measures are largely related to suppression, evacuation, and communication. These activities do not change the structure of the fuels on the Project Site and, therefore, generally do not influence the fire behavior.

Table 3.4-4 below, the modeling software incorporated the following measures into the Case 1 (Design Features) and Case 2 (Design Features and Mitigation Measures) modeling scenarios.

Table 3.4-4: WPP Components Feasible to Model and Case Assumptions

WPP Feature or Measure to Reduce Wildfire Risk	Modeled Case 1: Design Features	Modeled Case 2: Design Features & Mitigation Measures
Additional paved roads (DF)	Yes	Yes
10 ft hardscaping on each side of roadways (DF)	Yes	Yes
40 ft vegetation clearance beyond hardscaping on each side of roadways (MM)	No	Yes
Grazing around structures (MM)	No	Yes
Active landscape vegetation management (MM)	No	Yes
Vineyards (DF)	Yes	Yes
Irrigated areas around non-residential buildings (40 ft) (DF)	Yes	Yes
Irrigated areas around residential buildings (30 ft) (DF)	Yes	Yes
Golf and polo fields (DF)	Yes	Yes
Irrigated areas near roadways (DF)	Yes	Yes
Defensible space adjacent to buildings (100 ft residential; 300 ft non-residential structures) (MM)	No	Yes
Perimeter shaded fuel breaks (MM)	No	Yes
Water features (DF)	Yes	Yes

Notes: DF – Design Feature, MM – Mitigation Measure
Source: Table 4.1 of the Wildfire Risk Analysis (**Appendix M**)

To the extent necessary and practicable, the Wildfire Risk Analysis (**Appendix M**) used a quantitative approach to those items that could be quantified and provided a qualitative assessment for those wildfire risk reduction strategies that are impossible to model.

Susceptibility: Fire Response Times

Susceptibility of a community to wildfire is influenced by both the resilience of structures and the capacity of firefighters to detect and respond to new fires. The resilience of proposed structures on the Guenoc Valley Site and existing structures in the community was assessed qualitatively against the various applicable building codes, standards, and scientific information about radiant heating.

Emergency response time, or the time it would take for a fire engine or ambulance to reach various locations within the Project Site and surrounding community, was analyzed quantitatively using the ArcGIS Pro Network Analyst program[6] under two scenarios:

1. Arrival time for all three existing stations, including two fully staffed stations, Hidden Valley Lake Station #63 and Middletown Station #31, and one volunteer Napa County Fire Department Station #220, which is not always staffed, and only using existing roads and road cover data;

[6] ArcGIS Pro Network Analyst is an industry standard geographic information system tool to analyze simple roadway network and travel time changes that can integrate publicly available roadway data with site-specific roadway configuration.

2. Arrival time for all three existing stations and new planned Emergency Response Center to be located on the Project Site, and using existing and planned roads under the Proposed Project.

3.4.2 Thresholds of Significance

The following thresholds of significance from Appendix G of the State CEQA Guidelines are applied in the context of the wildfire analysis. For purposes of this PREIR, a significant impact would occur if implementation of the Proposed Project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan
- Exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

The analysis and mitigation of impacts is also based on guidance provided by the California Attorney General in *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects under the California Environmental Quality Act* released on October 10, 2022. This document provides guidance on factors that should be considered in analyzing a project's impacts related to wildfire risk, analyzing a project's impacts related to evacuation and emergency access, and identifying mitigation measures for wildfire risk and evacuation, and emergency access impacts. This includes considering whether the Proposed Project creates an inconsistency with:

- An adopted emergency operations or evacuation plan;
- A safety element that has been updated per the requirements in Government Code sections 65302(g)(5) and 65302.15 to integrate wildfire and evacuation concerns; or
- Recommendations developed by the California Board of Forestry and Fire Protection regarding the safety of subdivisions pursuant to Public Resources Code section 4290.5.

3.4.3 Impacts

The impact discussions below retain the same numbering (3.16-1 through 3.16-6) consistent with the 2020 EIR analysis.

IMPACT 3.16-1:	**SUBSTANTIALLY IMPAIR AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN, OR RESULT IN AN INCONSISTENCY WITH A SAFETY ELEMENT THAT HAS BEEN UPDATED TO INTEGRATE WILDFIRE AND EVACUATION CONCERNS, OR RECOMMENDATIONS DEVELOPED BY THE CALIFORNIA BOARD OF FORESTRY REGARDING THE SAFETY OF SUBDIVISIONS**			
	Guenoc Valley Site		**Other Phase 1 Areas**	
	Phase 1	**Future Phases**	**Off-Site Workforce Housing**	**Off-Site Infrastructure**
Significance Before Mitigation	Significant	Significant	Significant	No Impact
Mitigation Measures	MM 3.16-3, 3.16-4, 3.16-5, 3.16-6	MM 3.16-7 and 3.16-8	MM 3.16-3, 3.16-4, 3.16-5, 3.16-6	None Required
Significance After Mitigation	Less Than Significant	Less Than Significant	Less Than Significant	N/A

Notes: In the 2020 EIR, separate analysis columns were provided for the Guenoc Valley Site, the Off-Site Workforce Housing, and the Off-Site Infrastructure. The Evacuation Assessment (**Appendix H-1**) analyzed the Off-Site Workforce Housing inclusive with the employees on the Guenoc Valley Site.

The adopted emergency response plans and emergency evacuation plans that are in effect and applicable to the Guenoc Valley Site are the Lake County Community Wildfire Protection Plan (2023), the Lake County Emergency Operations Plan (2020), and the South Lake County Wildland Fire Preparation and Emergency Plan (2016) (collectively referred to as 'Adopted Emergency Plans'). In addition, Section 7.7 of the Lake County General Plan Health & Safety Element addresses Urban and Wildland Fire Hazards. A significant impact would occur if the Proposed Project would substantially impact or interfere with these adopted plans or the recommendations developed by the California Board of Forestry and Fire Protection regarding the safety of subdivisions pursuant to Public Resources Code section 4290.5. To assess this impact, the following analysis has been divided into three areas, the first focusing on whether the Proposed Project is consistent with the overarching goals of those Adopted Emergency Plans that contain policies that can be applied on a project-level basis. The second section analyzes the proposed emergency access to the Guenoc Valley Site, while the third section most directly addresses the Court Ruling regarding potential community-wide evacuation impacts.

Consistency with Adopted Emergency Response Plans, Emergency Evacuation Plans, and Safety Element

General Plan Health and Safety Element Consistency

Section 7.7 of the Lake County General Plan Health & Safety Element addresses Urban and Wildland Fire Hazards, and Policy HS-7.4 (Wildland Fire Management Plans) requires development of wildland fire management plans for projects adjoining significant areas of open space that may have high fuel loads, such as the Guenoc Valley Site. The Project as analyzed in the 2020 EIR included an assessment of the WPP (Appendix FIRE to 2020 EIR) which has been updated as described in **Section 2.2.3** of this PREIR to reflect the Ruling, Settlement Agreement, and Project Modifications and is included as the Updated WPP, **Appendix F** to this PREIR. The General Plan Health & Safety Element includes policies related to new development that call for consultation with fire service districts, encouraging cluster development,

requiring development of wildland fire management plans, establishing fuel breaks around structures, implementing wildfire risk reduction measures (i.e., cluster development, providing ongoing fire prevention maintenance activities, and providing an adequate private water supply), and using fire resistant building materials. The preparation, adoption, and adherence to the Updated WPP ensures consistency with the Health & Safety Element and related General Plan policies.

The Updated WPP presents numerous targeted wildfire abatement practices specific to the Guenoc Valley Site that can be grouped into the following general categories: general wildfire prevention, construction wildfire prevention, utility wildfire prevention, landscape wildfire prevention, building wildfire prevention, wildfire prevention preparedness, and wildfire emergency response. In addition to the Updated WPP, the Modified Project includes components designed to facilitate future emergency response by SLCFPD and CAL FIRE, should a wildfire occur. The proposed Fire Station and Emergency Response Center, which would be located in the central portion of the site between the Bohn Ridge Resort Community and the Denniston Golf Estates Community, would ultimately become SLCFPD Fire Station #61. There are numerous designated meeting spaces throughout the Guenoc Valley Site, with the proposed Fire Station and Emergency Response Center providing the centralized area for first responders to gather and coordinate efforts. It will include essential fire-fighting equipment, minor medical supplies, and a helipad. The Project Modifications associated with the Fire Station and Emergency Response Center in the Updated WPP are primarily funding and staffing commitments. The Applicant shall pay the SLCFPD annually the amount determined by SLCFPD to be necessary in order to staff and equip the Emergency Response Center for fire services, including wildfire response. Through its Covenants, Conditions, and Restrictions (CC&Rs), the homeowner's association (HOA) will be required to contract with a wildfire expert for the duration of the Project, with costs paid by the HOA. The HOA shall consult with the wildfire expert in its implementation of wildfire prevention measures, including those identified in the WPP. Furthermore, the Project's Emergency Response Center will have on-site at least one individual with wildfire expertise related to evacuation and emergency access, the cost of which will be paid by the Guenoc Valley Project HOA.

2023 CWPP Consistency

The 2023 CWPP is a community-wide plan that provides fire safety information to residents and homeowners, identifies fuel reduction projects throughout the County, and promotes "comprehensive and community-based adaptation to living in a fire adapted ecosystem." As such, the 2023 CWPP contains overarching goals and policies for the entire County and does not necessarily provide project-specific checklists or individual project metrics for consistency, and many of the larger County-wide coordination or funding items may not be applicable to a single project. However, Appendix A of the 2023 CWPP includes 145 individual fuel-reduction and prevention priorities specific to the needs and conditions in various communities across the County, which include best practices such as controlled burns, ongoing fuel break maintenance, animal grazing, fire prevention and education, seeking funding for wildfire hazard and risk mapping and abatement, and vegetation management along roadways. The site-specific measures within the Updated WPP are consistent with the best practice priorities listed in Appendix A of the 2023 CWPP. Appendix B of the 2023 CWPP includes a detailed Action Plan with 70 unique actions listed under seven main categories:

- Advancing Defensible Space
- Reducing Fuels
- Reducing Structural Ignitability
- Enhancing Fire Protection
- Evacuation Planning and Emergency Preparedness
- Promoting Fire Safe Education

- Facilitating Long-Term Fire Safety

The Modified Project and the Updated WPP are consistent with the 2023 CWPP Action Plan, in that they include numerous risk reduction measures that are consistent with the community-wide actions in each of these seven identified Action Plan categories. Specifically, the Modified Project and Updated WPP include:

- Increased Project density: removal of 64 remote lots at the Urban-Wildland Interface and the remote camping area will consolidate people and structures in valley/commercial core areas where firefighting access and evacuations are easier (consistent with CWPP Action Plan #2).
- Creation and maintenance of firebreaks along property boundaries and roadways, which now include a 10-foot hardscape shoulder where topographically feasible, in addition to irrigated green belts (consistent with CWPP Action Plan #7, 16).
- Active vegetation management through grazing, manual thinning and chipping of vegetation, and mastication of vegetation (consistent with CWPP Action Plan #16, 17, 18).
- Creation of a third emergency evacuation route and ingress route for first responders, to be used only in the event of an emergency (consistent with CWPP Action Plan #17, 39).
- Fire-safe building design and material decisions guided by the California Building Code (CBC) and Wildland-Urban Interface standards, as well as defensible space for all structures (consistent with CWPP Action Plan #5, 23, 25, 32).
- Firewise infrastructure planning, such as high-volume water supply, municipal-type fire hydrant systems, and underground electric utilities (consistent with CWPP Action Plan #38).
- Construction and ongoing staffing of the Fire Station and Emergency Response Center (consistent with CWPP Action Plan #68).
- Safety zones and temporary refuge areas have been designated throughout the Guenoc Valley Site for evacuation staging, meeting places, and sheltering in place when recommended (consistent with CWPP Action Plan #56).
- Construction safety practices that include limiting the timing of certain activities more likely to cause sparks (consistent with CWPP Action Plan #64).
- Creation and maintenance of an on-site early detection system for fires, emergency notification systems, and specific funding mechanisms through the various HOAs to guarantee the effectiveness of the Updated WPP in perpetuity (consistent with CWPP Action Plan #2, 44, 45, 66).

County EOP and South Lake County Wildland Fire Preparation and Emergency Plan Consistency

The County's EOP (OES, 2020) outlines the response procedures of the OES and coordination with other relevant agencies in the event of an emergency. A separate WUI Annex is provided to more specifically address the OES response to wildfire (OES, 2021). The WUI Annex establishes priorities, responsibilities, and assigns tasks to coordinate response operations during wildfires, written by the Lake County Fire Chief's Association to facilitate future coordination with CAL FIRE and other local firefighting organizations. The South Lake County Wildland Fire Preparation and Emergency Plan (2016) is a resource document for homeowners that discusses defensible space, where to locate emergency evacuation routes, and what to pack in the event of an evacuation.

The Modified Project would enhance firefighting capabilities in South Lake County by constructing an Emergency Response Center that will ultimately become Fire Station #61, and the Project Modifications guarantee funding for additional firefighting staff on an annual basis. The Project would be constructed in accordance with federal, State, regional, and local requirements, which are intended to ensure the safety of County residents and structures to the extent feasible. Compliance with these standard regulations

would be consistent with the County's EOP (2020) and WUI Annex (2021). The Updated WPP contains measures consistent with the guidance for homeowners contained within the South Lake County Wildland Fire Preparation and Emergency Plan (2016).

Summary

The new funding commitments ensure that the operation of the Modified Project will occur consistent with the Adopted Emergency Plans while guaranteeing that financial resources are not diverted away from other County and State programs or offices for emergency and first response that could impair the ability of these groups to provide wildfire or other emergency response. The Modified Project is consistent with the Adopted Emergency Plans and policies contained therein; an assessment of the potential for the Modified Project to impair implementation of these plans is provided below.

Assessment of Emergency Access to the Guenoc Valley Site

The Proposed Project includes an Emergency Response Center that will ultimately become Fire Station #61, and the Project Modifications ensure that the facility will be staffed at all times with at least one individual with expertise related to wildfire and evacuation. The Emergency Response Center constructed on the Project Site is located within three miles of all new buildings and would be able to respond to an on-site fire within about six minutes or less, consistent with NFPA 1710 industry standards. The California BOF, pursuant to PRCS Section 4290.5, recommends for the safety of subdivisions that a secondary access to the neighborhood be created, improvements to existing access roads, and other fire safety measures. The Modified Project meets and exceeds state minimum requirements for wildfire safety by incorporating a comprehensive set of measures promulgated in the Updated WPP, including but not limited to, providing three access and egress routes, maintaining a 50-foot-wide fuel treatment buffer on each side of Project roadways that exceeds minimum Fire Safe Regulations, building a 25-foot-wide all-weather surface on all roadways, and providing two emergency helipads that will provide aerial support site access points. Project Modifications also include new internal connector roadways to ensure there are no dead-end, non-looped road segments that exceed one mile in length.

Although a staffed Fire Station will exist on the Guenoc Valley Site and the internal circulation network exceeds the minimum Fire Safe Regulations to ensure that first responders can safely navigate within the Project Site, it is imperative that additional wildfire first responders can access the property from off-site in the event of an emergency. For emergency access purposes, the Guenoc Valley Site would have a total of three evacuation and emergency access routes that connect to Butts Canyon Road and SR 29 (via Grange Road). Two evacuation routes would provide access to Butts Canyon Road: a new Primary Access Road that would be located at McCain Canyon, approximately 2.6 miles south of the existing Langtry Winery Entrance, and a second access at the existing intersection located approximately halfway between the Langtry Winery entrance and the Primary Access Road entrance. The third evacuation route would be via a newly improved road, for evacuation and emergency ingress and egress only, that would connect from the interior of the Project Site through an adjacent property to SR 29 via Grange Road.

County-wide ongoing roadside fuel reduction activities along SR 29, Highway 175 and Butts Canyon Road in the vicinity of the Project Site as guided by the 2023 CWPP will reduce flame intensity along primary emergency vehicle access routes and facilitate access to wildfires or emergency locations. Once emergency vehicles enter the Guenoc Valley Site, the Updated WPP roadside clearing meets or exceeds the minimum California Fire Safe Regulations with a 50-foot-wide fuel reduction zone on each side, and a 10-foot hardscape on each side of the roadway. In addition to fuel reduction or vegetation maintenance projects, the County and Caltrans are undertaking large-scale projects to expand SR 29, a primary

evacuation route in the region. As discussed further in **Section 3.2.4** of this PREIR, the SR 29 Konocti Corridor Project will widen an 8-mile section of SR 29 from a two-lane divided highway to a four-lane expressway that will further ease traffic and improve the ability of emergency vehicles to access wildfires or other incidents in the area. First responders and evacuees usually travel in opposite directions and thus use opposing travel lanes, and first responders will typically arrive at the scene of an emergency or wildfire before evacuation orders are issued and congestion levels build on local roadways.

For all of these reasons, impacts related to emergency vehicles accessing the Guenoc Valley Site are less than significant.

Assessment of Community Evacuation Impacts

The South Lake County Wildland Fire Preparation and Emergency Plan has designated primary and secondary evacuation routes for the communities in South Lake County, which align with those primary and secondary routes analyzed in the Wildfire Risk and Evacuation Assessment Report (**Appendix H-1**). The Modified Project has two evacuation routes that would connect directly with Butts Canyon Road (a secondary community evacuation route) and would provide access to SR 29 (a primary community evacuation route) via the proposed Grange Road Connector.

As discussed further in **Section 3.4.1** of this PREIR, the Evacuation Assessment identifies scenarios of evacuation events, defines the potential evacuation area, defines evacuation routes, estimates trip demand for various evacuation scenarios, assigns trips along evacuation routes during those scenarios, and estimates total evacuation times (**Appendix H-1**). The Evacuation Area encompasses the communities of Middletown, Hidden Valley, Cobb, Loch Lomond, and surrounding areas within southern Lake County. Primary and secondary community evacuation routes are those that provide the most direct path to exit the Evacuation Area with the least exposure to risk, and were identified in the South Lake County Wildland Fire Preparation and Emergency Plan (2016), while Project Evacuation Routes are those that would be utilized by residents, visitors, and employees at the Guenoc Valley Site (see **Figure 3.3-3**). Two Wildfire Scenarios (Scenario A – Fire North to South and Scenario B – Fire South to North) were defined and analyzed under baseline (2022) and future (2040) conditions, both with and without the Project.

After determining the evacuation trip demands and associated transportation network, a dynamic traffic assignment was performed to reflect congestion, departure times, and model the ETE. The ETE represents the time required for the last evacuee to safely leave the Evacuation Area. The results of the eight modeled scenarios are summarized in **Table 3.4-5**. The ETE analysis is conservative in that it was conducted for 4:00 PM on a summer Friday afternoon when background traffic is highest, it assumes that all of the Project residences and hotel rooms are fully occupied, it assumes that 100 percent of people evacuate and nobody voluntarily remains behind, roadway functions at 40% capacity, and that no police resources are available to manage evacuation traffic.

Table 3.4-5: Evacuation Time Estimates by Wildfire Scenario

Criteria	Scenario							
	1	2	3	4	5	6	7	8
Hazard Type	**Wildfire Scenario A (Wildfire from North to South)**				**Wildfire Scenario B (Wildfire from South To North)**			
Study Year	**Baseline (2022)**		**Cumulative (2040)**		**Baseline (2022)**		**Cumulative (2040)**	
Project Conditions	**No Project**	**Project Phase 1**	**No Project**	**Project Full Build-Out**	**No Project**	**Project Phase 1**	**No Project**	**Project Full Build-Out**
Evacuation Time Estimate (hours) – 90% Evacuated	3.5 hours	4 hours	4 hours	5.5 hours	3.5 hours	4 hours	4 hours	5 hours
Evacuation Time Estimate (hours) – 100% Evacuated	4.5 hours	5 hours (+0.5 hours)	5 hours	7.5 hours (+2.5 hours)	4.5 hours	5 hours (+0.5 hours)	5 hours	7 hours (+2 hours)

Notes: * Project Phase 1 includes the Middletown Off-Site Employee Housing for 221 employees within the onsite 'employee' category, along with the visitors and residents of the Guenoc Valley Site detailed in Table 3.4-3 above.
** Project Full Build-Out includes all of the Phase 1 development components (including the 221 persons who may reside on the Middletown Off-Site Employee Housing site), along with maximum full buildout assumptions for other employees, residents, and visitors detailed in Table 3.4-3 above.
Source: Fehr & Peers (**Appendix H-1**)

The following observations were noted from the ETE analysis:

Wildfire Scenario A (wildfire from north to south):

- All scenarios result in traffic congestion forming along primary and secondary evacuation routes.
- The segment of SR 29 from Middletown southward is the most used evacuation route and therefore has the most traffic congestion. The intersection of SR 29 with the Hidden Valley Lake community is the most significant bottleneck in both the with-Project and no-Project scenarios.
- The new roundabout at SR 29/Butts Canyon Road (**Mitigation Measure 3.13-1**) is heavily congested with evacuation-related vehicle trips generated by full buildout of the Project in the cumulative condition.
- The Phase 1 Project evacuation vehicle trips, when added to the existing community evacuation trips, increases the total evacuation time by approximately 30 minutes.
- The Project Full Buildout evacuation vehicle trips, when added to the community evacuation trips modeled in the cumulative buildout year (2040), increases the total evacuation time by approximately 2 hours and 30 minutes.

Wildfire Scenario B (wildfire from south to north):

- All scenarios result in traffic congestion forming along primary and secondary evacuation routes.
- The segment of SR 29 south of Lower Lake is the most used evacuation route and therefore has the most traffic congestion. The same bottleneck at the access of the Hidden Valley Lake community with SR 29 described in Scenario A is the most significant bottleneck in Scenario B.
- Similar to Scenario A, the new roundabout at SR 29/Butts Canyon Road is significantly congested.
- The Phase 1 Project evacuation vehicle trips, when added to the existing community evacuation trips, increases the total evacuation time by approximately 30 minutes.

- The Project Full Buildout evacuation vehicle trips, when added to the community evacuation trips modeled in the cumulative buildout year (2040), increases the total evacuation time by approximately 2 hours.

Wildland fire suppression, structure protection, and incident management are the responsibility of CAL FIRE in SRAs, Lake County Fire Districts in Local Responsibility Areas, and the U.S. Forest Service and the Bureau of Land Management in designated Federal Lands. The Adopted Emergency Plans include actions such as notifying emergency response departments of anticipated emergencies, testing the County's emergency alert systems, pre-establishing human and animal evacuation shelters, and pre-fire preparedness, however they do not provide evacuation traffic management strategies to address the new population that would be added by the Proposed Project. As such, the Proposed Project may substantially impair an adopted emergency response plan by requiring development and documentation of new evacuation strategies.

Phase 1 Analysis

The Evacuation Assessment conservatively assumed that approximately 2,300 persons would be on the Guenoc Valley Site on a summer Friday afternoon, which assumes 100 percent occupancy of all hotels, residences, and employees, while the existing population of the surrounding South Lake County communities is estimated at approximately 14,800 persons (**Appendix H-1**). Under baseline conditions without the added Project evacuation trips, estimated total evacuation times for 100 percent evacuation of the South Lake County communities total about 4.5 hours for Wildfire Scenarios A and B. In both Wildfire Scenarios A and B, the Phase 1 Project evacuation trips are estimated to add approximately 30 minutes in evacuation time for 100 percent evacuation of South Lake County when combined with evacuation trips from the surrounding communities (from about 4.5 hours to about 5 hours). SR 29 would be the most heavily congested evacuation route during a full evacuation of South Lake County with bottlenecks occurring at the Hidden Valley Lake community egress roads, at the signalized intersection with SR 52 in Lower Lake, and at the signalized intersection with SR 175 in Middletown. The added evacuation trips generated by the Proposed Project would increase the amount of time required for community members surrounding the Project Site to evacuate, and would require updates to the current evacuation plans and additional management of evacuation routes by community and Project-related evacuation trips. Thus, implementation of Phase 1 of the Proposed Project would impair an emergency response or emergency evacuation plan by requiring development and implementation of new evacuation strategies. This is a significant impact.

In order to reduce the Project-related increase in time it would take for the community to evacuate, **Mitigation Measures 3.16-3** through **3.16-6**[7] include a series of strategies that would reduce traffic on the evacuation routes in the event of an emergency. These measures are presented in full in **Section 3.4.4** of this PREIR and summarized as follows:

- **Mitigation Measure 3.16-3** requires that the Project applicant shall fund the costs to prepare a South Lake County Evacuation Traffic Management Plan, which shall be adopted by Lake County Office of Emergency Services (OES) prior to occupancy of Phase 1, and will reduce the major bottlenecks in the evacuation network to ultimately achieve a 15-minute reduction in the community plus Project evacuation time. The South Lake County Evacuation Traffic Management Plan shall include measures employed during the 2015 Valley Fire by Lake County Sheriff and

[7] The mitigation numbering follows the 2020 EIR.

California Highway Patrol (CHP) officers, including stopping northbound and southbound SR 29 traffic at the edges of the evacuation area (to be determined by the Incident Commander and County Sheriff, CHP, or other police enforcement personnel, as appropriate) to minimize new traffic entering the area and open the roadways for evacuees leaving, as well as managing traffic at key intersection bottlenecks on SR-29 at Hidden Valley Lake, which is the most populous area of South Lake County. These measures were implemented approximately five hours after the 2015 Valley Fire was originally reported, and proved effective at managing evacuating traffic; however they were not assumed to be in place in the evacuation time estimate forecasts in the Evacuation Assessment. The Traffic Management Plan shall be subject to the approval of the Lake County OES, the Lake County Sheriff, the South Lake County Fire Protection District, Caltrans, and CHP.

- **Mitigation Measure 3.16-4** requires that the applicant install variable message signs at the outbound lanes of the three Project egress routes that are connected to the on-site Emergency Response Center so that the fire personnel managing a future evacuation can provide real-time messaging to evacuees in an emergency. Unless precluded by wildfire, all evacuating Project traffic shall be directed to the planned Project egress intersections on Butts Canyon Road and then to the south on Butts Canyon Road. Traveling to the south on Butts Canyon Road would be the most direct route for evacuating trips from the proposed Project residential units and hotel uses whose primary destination would be to the south where residents or guests would return to homes in the Bay Area or to access airports or hotels. This mitigation measure would minimize the addition of Project evacuation trips on SR 29, which is the major evacuation route for existing South Lake County communities. Additionally, a southbound bypass lane will be installed in the roundabout that will be constructed by the Project applicant at the SR 29/Butts Canyon Road intersection to increase intersection capacity.
- **Mitigation Measure 3.16-5** requires that the applicant shall design, obtain permits for, and install improvements to the signalized intersection of SR 29/SR 53 intersection in Lower Lake and the two signalized intersections on SR 29 in Middletown (SR 175 and Wardlaw Street). These improvements shall include variable message signs and traffic signal controllers that are connected to Caltrans and Lake County traffic operations staff so they can be managed remotely during an evacuation to redistribute signal green time to the evacuating direction of traffic, as well as extending pocket lanes for turning to further minimize known bottlenecks. A benefit is that the evacuation signal timing plans could be activated by Public Works staff as a quick response measure at the beginning of evacuations when police resources are not available to manage traffic at the signalized intersections.
- **Mitigation Measure 3.16-6** shall ensure that shuttle buses are stored on-site, available at all times, and that drivers (hotel staff) are fully trained to evacuate those hotel guests who may not be able to evacuate in their own vehicles, estimated at 132 guests based on number of hotel rooms and the estimation of number of guests arriving via shuttle or means other than a personal vehicle.

The implementation of **Mitigation Measures 3.16-3 through 3.16-6** will result in the preparation of the South Lake County Evacuation Traffic Management Plan, reduce the number of vehicles entering the evacuation zone during a future emergency, enhance the ability of first responders to communicate with evacuees, direct Project-related evacuees to alternate routes other than SR 29, improve the physical conditions at intersections along evacuation routes with known bottleneck issues, and provide sufficient shared shuttle evacuation capacity for Project guests. After mitigation, Phase 1 and the Off-Site Workforce Housing would have a less than significant impact on emergency response and emergency evacuation plans.

Future Phases Analysis – Full Buildout in Cumulative Year 2040

Using the same conservative assumptions, the Evacuation Assessment assumed that approximately 6,500 persons would be on the Guenoc Valley Site under full buildout of future phases of the Project, while the existing population of the surrounding South Lake County communities is estimated at approximately 18,900 persons (**Appendix H-1**). Under future 2040 cumulative conditions without the added Project evacuation trips, estimated total evacuation times for 100 percent evacuation of the South Lake County communities total about 5 hours for Wildfire Scenarios A and B. Under future cumulative conditions in 2040 with full buildout of the Proposed Project, the Project evacuation trips are estimated to add approximately 2.5 hours (Scenario A) and 2 hours (Scenario B) for 100 percent evacuation of South Lake County when combined with evacuation trips from the surrounding communities. The added evacuation time due to Project evacuation trips for a 90 percent evacuation level, which is more representative of the number of residents who have chosen to evacuate in past wildfires, is 1.5 hours for Scenario A and 1 hour for Scenario B (**Appendix H-1**).

Similar to the modeled Phase 1 evacuation conditions, SR 29 would be the most heavily congested evacuation route, with bottlenecks occurring at the Hidden Valley Lake community egress roads, at the signalized intersection with SR 52 in Lower Lake, and at the signalized intersection with SR 175 in Middletown. In addition, the total number of evacuation trips generated by future phases of the Project would exceed the capacity of Butts Canyon Road as a two-lane facility under Scenario A. Thus, implementation of future phases of the Proposed Project would impair an emergency response or emergency evacuation plan by requiring development and implementation of new evacuation strategies, and impacts would be significant.

A subsequent project-level CEQA assessment of full build-out evacuation impacts will be required prior to implementation of development beyond the Phase 1 land use program. **Mitigation Measures 3.16-7** and **3.16-8** are identified in this program-level analysis; the measures are programmatic in nature and may be refined following additional project-level CEQA analysis based on more specific details regarding future Project phases that will be included in application submittals for such phases, evolving evacuation analysis methods, any future changes to roadway infrastructure and/or capacity, and/or new or enhanced evacuation mitigation strategies. Because these mitigation measures are program-level they require performance standards of reducing forecasted evacuation levels such that: 1) full buildout of future phases of the Project shall not result in evacuation times that exceed one hour beyond the total cumulative no project ETEs for a full evacuation of the Evacuation Area, and 2) the estimated number of added future phases evacuation trips on Butts Canyon Road shall not exceed its evacuation capacity. If the future project-level CEQA document cannot identify demand, supply, and communication strategies to achieve this performance measure, a reduction in the number of housing units shall be implemented. Reducing the number of housing units that can be added beyond Phase 1 would reduce the number of Project-related evacuation trips and the associated total evacuation time with the Project.

The future phases programmatic mitigation measures would reduce impacts associated with impairing the current Lake County EOP by developing additional evacuation time reduction strategies to reduce forecast evacuation levels in the Evacuation Area, which the Project will be required to develop as part of future CEQA analyses for buildout of future phases. **Mitigation Measures 3.16-7** and **3.16-8** will reduce total evacuation times and accommodate evacuees from the Proposed Project, thereby reducing this impact to less-than-significant.

IMPACT 3.16-2:	**EXACERBATE WILDFIRE RISKS AND THEREBY EXPOSE PROJECT OCCUPANTS TO POLLUTANT CONCENTRATIONS FROM WILDFIRE OR THE UNCONTROLLED SPREAD OF WILDFIRE**			
	Guenoc Valley Site		**Other Phase 1 Areas**	
	Phase 1	**Future Phases**	**Off-Site Workforce Housing**	**Off-Site Infrastructure**
Significance Before Mitigation	Potentially Significant	Potentially Significant	Less than Significant	No Impact
Mitigation Measures	MM 3.16-1 and 3.16-9	MM 3.16-1 and 3.16-9	None Required	None Required
Significance After Mitigation	Less than Significant	Less than Significant	N/A	N/A

Guenoc Valley Site Phase 1 and Future Phases

As discussed in **Section 3.2.2** and displayed in **Figure 3-1** of this PREIR, the majority of the Guenoc Valley Site is in a Very High FHSZ which is an increase in the wildfire hazard severity for the Project Site compared to the severity identified in the mapping that was current at the time the 2020 EIR was prepared. While the Proposed Project would introduce new residents, visitors, and employees to a site with a high wildfire potential, one of the objectives of the Proposed Project is to "become a 'model project' of wildfire mitigation through innovative landscape management, dual purpose fire access roads, emergency action management, and animal husbandry practices with the intention to reduce the risk of fire" (see Final EIR, Volume II, Section 2.4). As such, the Updated WPP includes numerous design features intended to minimize wildfire risk from the outset of the project and additional measures requiring ongoing maintenance to continue providing wildfire risk reduction benefits. However, there remains the potential that the introduction of new people to the Project Site could increase wildfire risk via a corresponding increase in ignition likelihood if the other wildfire risk factors (e.g., community susceptibility and fire intensity) were not reduced accordingly. To avoid duplicative and redundant text, the comprehensive discussion of wildfire risk is presented in **Impact 3.16-5** below, including the potential for project occupants to be exposed to wildfire related pollutants and the uncontrolled spread of wildfire. As described further therein, a slight reduction in wildfire risk is expected based on the design features alone, but due to the uncertainties and stochastic nature of wildfire events and the location of the project within a Very High FHSZ, increased wildfire risk is considered a potentially significant impact without the inclusion of mitigation measures (e.g., those components of the WPP involving long-term operational maintenance activities). With inclusion of construction fire prevention strategies in **Mitigation Measure 3.16-1**, and those measures within the Updated WPP that involve long-term operational maintenance activities, now required as **Mitigation Measure 3.16-9**, the Wildfire Risk Analysis concludes that the Proposed Project with design features and mitigation "greatly reduces projected increases in wildfire ignition *likelihood* due to the project, greatly decreases modeled wildfire *intensity,* and greatly decreases community susceptibility due to improved fire response times and increased resilience of the built environment on site." The Wildfire Risk Assessment further concludes that "with the implementation of the design features and mitigation measures, no exacerbation of wildfire risk is projected and no additional exposure of occupants to pollutants from wildfire or the uncontrolled spread of wildfire is expected" (Wildfire Risk Analysis [**Appendix M**]) reducing this impact to **less than significant**. Refer to additional discussion under **Impact 3.16-5** below.

As Future Phases of the Proposed Project are developed, the Updated WPP will continue to evolve as best practices, scientific understanding of wildfire behavior, and regulatory requirements and building codes are updated. The measures requiring long-term operational maintenance activities would occur across the entire Guenoc Valley Site and are not limited to the Phase 1 APE. For example, the active grazing and landscape management required in **Mitigation Measure 3.16-9** will reduce Phase 1 impacts to less-than-significant levels, and is expected to have ongoing wildfire risk reduction benefits for future phases of the project. As future phases progress and specific development plans are proposed, additional approvals would be required, and project-level environmental review would be performed based on specific development proposals. For this reason, the environmental impact of wildfire risk from future phases would also be considered less than significant with implementation of **Mitigation Measures 3.16-1 and 3.16-9**.

Off-Site Workforce Housing

The Middletown Housing Site is within a Moderate and High FHSZ, and it is a Wildland-Urban Interface Fire Area according to the CBC. The majority of the site is currently nonnative annual grassland, which is highly flammable, and is bordered to the north by open space grasslands. The off-site workforce housing would involve removal of this grassland and construction of structures built to the most current California Fire Code and CBC standards. Additionally, because the site is in an area adjacent to open space with a high fuel source, a Wildland Fire Management Plan must be prepared according to the General Plan and Community Wildfire Protection Plan. The SLCFPD and CAL FIRE would provide fire protection and fire suppression services to this site. Under the future building permit application, the off-site workforce housing will provide adequate water for fire suppression in accordance with International Fire Code. Fire hydrants served via a water main in the public right-of-way may be preferred by the Fire Marshal and would be utilized if the flow rates and pressures from the existing hydrants are adequate to support the potential firefighting needs of the proposed housing. However, if it is determined that flow rates or pressures are inadequate from existing distribution infrastructure, onsite water storage will be provided that meets the necessary water pressure to accommodate firefighting equipment. This onsite water storage would be calculated per the NFPA 1142 “Standard on Water Supplies for Suburban and Rural Firefighting”. The final determination for fire suppression methods will be made prior to building permit submittal, and will comply with all relevant code requirements. Therefore, the off-site workforce housing would not exacerbate wildfire risk and this impact is less than significant.

Off-Site Infrastructure

The off-site well and pipeline would not have project occupants or contribute to the spread of wildfire. There is no impact related to the exacerbation of wildfire risk and exposing occupants to pollutants or uncontrolled wildfire. Potential construction-related wildfire risks are analyzed in Impact 3.16-3, below.

IMPACT 3.16-3:	**REQUIRE THE INSTALLATION OR MAINTENANCE OF ASSOCIATED INFRASTRUCTURE (SUCH AS ROADS, FUEL BREAKS, EMERGENCY WATER SOURCES, POWER LINES OR OTHER UTILITIES) THAT MAY EXACERBATE FIRE RISK OR THAT MAY RESULT IN TEMPORARY OR ONGOING IMPACTS TO THE ENVIRONMENT**			
	Guenoc Valley Site		**Other Phase 1 Areas**	
	Phase 1	**Future Phases**	**Off-Site Workforce Housing**	**Off-Site Infrastructure**
Significance Before Mitigation	Potentially Significant	Potentially Significant	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.16-1 and MM 3.16-9	MM 3.16-1, MM 3.16-9	MM 3.16-1	MM 3.16-1
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant	Less than Significant

Guenoc Valley Site Phase 1 and Future Phases

The Proposed Project includes installation of infrastructure such as roads, fuel breaks, underground powerlines, and wastewater collection systems. Propane tanks and/or use of natural gas are no longer proposed for any residential or non-residential structures as part of the Project Modifications, with the exception of natural gas-fueled or propane-cooktops in restaurant kitchens and natural gas-fueled or propane-fire pits in the outdoor patio areas of restaurants. During infrastructure installation and building construction, construction equipment could spark and temporarily increase fire risk, resulting in a potentially significant impact. Implementation of **Mitigation Measure 3.16-1** would reduce the probability of equipment accidentally igniting a fire during construction by requiring fully functioning spark arresters on appropriate equipment and requiring that vegetation be cleared prior to using spark-inducing equipment. If a spark or other emergency were to occur during construction, **Mitigation Measure 3.16-1** also includes measures to minimize response times, including initiating a Fire Watch before and after hot work, having a certified firefighter present on-site, and keeping pressurized air horn devices at each construction site to alert others to emergencies.

Operation and maintenance of infrastructure would have low impacts to the environment in terms of fire risk because these activities would not be combustible or induce sparks. As discussed in the Updated WPP (**Appendix F**), powerlines would be located underground, avoiding the potential for starting a fire. All infrastructure would be built according to applicable Federal and State regulations, such as, but not limited to, the Code of Federal Regulations and California Public Utility Codes for underground electrical facilities. Furthermore, new and existing infrastructure would be properly maintained to reduce fire risk and vegetation would be managed according to the Updated WPP (**Appendix F**) and **Mitigation Measure 3.16-9**, which would ensure that fuel levels remain low to the reduce the probability of igniting a fire and reduce the intensity and rate of spread of fires. As discussed further in **Impact 3.16-5** below, the addition of new roads throughout the Guenoc Valley Site could increase fire risk by adding cars that could spark or cigarette litter. However, the Project Modifications include 10 feet of hardscape on each side of the proposed roads and at least 50 feet of fuel reduction zones on each side of the road, which would offset this risk (see **Appendix F** and **Appendix M**). Implementation of **Mitigation Measures 3.16-1** and **3.16-9**, conformance to regulatory requirements, and implementation of the Wildfire Prevention Plan would

reduce the impact of fire risk from infrastructure to a less-than-significant level. Furthermore, the fuel breaks proposed in the Updated WPP are included in the Modified APE for the Proposed Project and therefore potential impacts due to ongoing maintenance of the fuel breaks has been accounted for in the Phase 1 Impact Analysis throughout this PREIR. All potential impacts to biological, cultural, geological, and other resources were reduced to less-than-significant levels with the implementation of mitigation measures.

Off-Site Workforce Housing

Off-Site workforce housing would include the installation of infrastructure such as roads, underground powerlines, sewer lines, and water lines. Construction activities associated with the installation of this infrastructure may also cause a temporary increase in fire risk. This is a potentially significant impact. Implementation of **Mitigation Measure 3.16-1** would reduce the risk of igniting a fire during construction to less-than-significant levels. Additionally, the powerlines and gas lines would be underground to lower fire risks. This infrastructure would be built according to applicable Federal and State regulations for underground electrical facilities and gas lines. Implementation of **Mitigation Measure 3.16-1** and conformance to regulatory requirements would reduce the impact of fire risk from infrastructure to a less-than-significant level.

Off-Site Infrastructure

The off-site well and water pipeline installation may also cause a temporary increase in fire risk due to the use of construction equipment that can cause sparks. This is a potentially significant impact. Implementation of **Mitigation Measure 3.16-1** would reduce the risk of igniting a fire during construction to less-than-significant levels. Operation of the well and water pipeline would not exacerbate wildfire risk.

IMPACT 3.16-4:	**EXPOSE PEOPLE OR STRUCTURES TO SIGNIFICANT RISKS, INCLUDING DOWNSLOPE OR DOWNSTREAM FLOODING OR LANDSLIDES, AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES**	
	Guenoc Valley Site	**Other Phase 1 Areas**
	Phase 1 and Future Phases	**Off-Site Workforce Housing**
Significance Before Mitigation	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.16-2	MM 3.16-2
Significance After Mitigation	Less than Significant	Less than Significant

Guenoc Valley Site Phase 1 and Future Phases

After the event of a wildfire, the environment would be altered, especially vegetation cover. Vegetation typically absorbs rainfall and holds soil in place. Furthermore, wildfires that reach high temperatures can create water insoluble soils where the organic matter within the soil becomes hydrophobic. The elimination of vegetation after a fire and chemical changes due to extreme temperatures can reduce the

ability of the soil to absorb water and cause sediments to flow down slopes. During rain events, these landscapes are very susceptible to flash flooding and sediment can collect in channels and cause mud or debris flows, a type of landslide (National Oceanic and Atmospheric Administration [NOAA], 2015). Structures are most at risk from post-fire flooding and slope instability if they are adjacent to steep slopes. The Guenoc Valley Site contains many steep slopes (see page 11 of **Appendix F**). The majority of the steep slopes are included in the dedicated open space area. However, some of the Phase 1 resort communities are located downslope from the steep slopes. Additionally, future phases may include the development of housing or structures downslope from steep slopes. This is a potentially significant impact.

Mitigation Measure 3.16-2 will require that after a wildfire, soil stabilization measures are implemented and included in a post wildfire emergency response plan (PWERP) approved by the SLCFPD. Furthermore, the PWERP will specifically include an action to develop a long-term recovery and restoration plan to remediate the burned areas, and thus reduce potential hazards in the future to the public and property. The PWERP would include site-specific measures based on the various flood or landslide risk factors specific to portions of the Project Site, as needed; additional discussion of landslides and floodplains are discussed in **Section 4.6** and **Section 4.9** of this PREIR, respectively. Implementation of **Mitigation Measure 3.16-2** will reduce the impact to a less-than-significant level.

Off-Site Workforce Housing

Although there are no steep slopes on the Middletown Housing Site, the property is adjacent to Dry Creek and is already subject to flood hazards. Thus, after a wildfire, there may be potentially significant impacts related to flooding or debris flows. Implementation of **Mitigation Measure 3.16-2** will ensure that a PWERP is in place to stabilize the soil and prevent risks from post-fire drainage changes. With this mitigation, the impact is less than significant.

IMPACT 3.16-5	**EXPOSE PEOPLE OR STRUCTURES, EITHER DIRECTLY OR INDIRECTLY, TO A SIGNIFICANT RISK OF LOSS, INJURY OR DEATH INVOLVING WILDLAND FIRE**	
	Guenoc Valley Site **Phase 1 and Future Phases**	**Off-Site Non-Project (Community) Areas**
Significance Before Mitigation	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.16-2, 3.16-3, 3.16-4, 3.16-5, 3.16-6, 3.16-7, 3.16-8, and 3.16-9	MM 3.16-2, 3.16-3, 3.16-4, 3.16-5, and 3.16-6
Significance After Mitigation	Less than Significant	Less than Significant

As described above, the majority of the Guenoc Valley Site is in a Very High FHSZ, and the Proposed Project would introduce new residential uses and commercial resort uses within this area, thereby potentially exposing onsite people and structures to a significant risk of loss involving wildland fires and potentially increasing wildfire risk that could impact the surrounding community and cause a significant risk of loss due to wildland fires. The 2020 EIR identified that this impact was potentially significant, and that implementation of the WPP; Project Commitments listed in Table 4-2 of the Mitigation Monitoring and Reporting Plan (MMRP) within the 2020 Final EIR, Volume II; Mitigation Measure 3.16-1, Mitigation

Measure 3.16-2; and the California Fire Code would reduce the risks from wildfires to less-than-significant levels. However, the First Appellate Court determined that additional wildfire risk analysis was required to comply with CEQA, which is provided below. As described in **Section 3.1.1** of this PREIR, this Draft PREIR is intended to remedy the three general deficiencies identified by the First Appellate Court:

1. Information was not included timely in the CEQA process and the public did not have adequate opportunity to review. This Draft PREIR will be circulated for a minimum 45-day public review period pursuant to CEQA Guidelines Section 15105.
2. Additional analysis is required to support the findings relating to wildfire risk. A detailed wildfire risk analysis has been prepared and is included in **Appendix M**. This effort included the use of wildfire modeling techniques and statistical analysis to quantify potential wildfire risks.
3. Portions of the WPP should not be treated as project design features but rather analyzed as mitigation measures, and these which are now included as **Mitigation Measure 3.16-9**.

Appendix M provides additional technical information about the Wildfire Risk Analysis conducted for the Proposed Project. The results of the various analyses that were undertaken to assess the three wildfire risk components (likelihood, intensity, and susceptibility) are summarized below, followed by a holistic determination of the various risk factors in one overall impact determination.

Likelihood: Ignition Frequency Analysis

The Hidden Valley Lake subdivision, approximately 2 miles north of the Guenoc Valley Site, experiences similar weather conditions and has similar terrain and surrounding vegetation as the Guenoc Valley Site. Therefore, fire ignition data available from this subdivision was assessed as an analogue for the Guenoc Valley Site. Approximately 5,852 residents live within the Hidden Valley Lake subdivision, and data shows there have been 217 fire calls since 2015 from Hidden Valley Lake. However, of these, 71 were false alarms/no merit calls, 124 were other types of ignitions that never reached the wildland, and 22 were wildland fire events that never exceeded 4.9 acres. The data from Hidden Valley Lake suggests that while increased residential density may increase ignitions due to increased human activity and development, most of the fires started in and around the built environment and did not progress into large wildland fires that pose a threat to the surrounding ecology or populations. Furthermore, the proposed number of buildings and associated persons on the Guenoc Valley Site is lower than the Hidden Valley Lake site for both Phase 1 (526 residential buildings, 159 non-residential buildings, and estimated maximum occupancy of 1,625 people, which is about 20 percent of the size of Hidden Valley Lake) and Future Phases (which could bring the total population up to 4,915 people, or about 84 percent of the size of the neighboring subdivision) (Wildfire Risk Analysis [**Appendix M**]). Additionally, the majority of the structures in Hidden Valley Lake were built before modern building codes, the application of which can decrease building susceptibility to both wildland and structure fire ignition. In contrast, all of the Proposed Project structures will be built to the California Building Code Chapter 7A or better, meet or exceed all contemporary fire codes, including robust defensible space, and incorporate automatic interior and exterior sprinkler systems. Furthermore, the building separation in the Hidden Valley Lake area is sometimes less than 30 feet apart, which is conducive to structure-to-structure fire spread. The Proposed Project residential structures will be a minimum of 30 feet apart to reduce the role of radiant heating and direct flame contact in sustaining urban fire spread.

Countywide fire ignition data was also reviewed and a simple linear relationship was developed between the number of ignitions by road miles, structures, and persons. In Lake County, the data suggests an average of approximately 0.014 fires per road mile, 0.0019 fires per structure, and 1.03 fires per 1,000

people. Phase 1 of the Proposed Project includes approximately 46 miles of proposed road (note that this figure includes existing ranch roads, but all roads were considered new roads to account for the higher usage due to the Proposed Project), up to 686 proposed new buildings (including residential and non-residential structures), and approximately 1,625 people on the site (residents, hotel guests, employees). Leveraging the simple linear relationships for Lake County as a whole, Phase 1 of the Proposed Project could result in between 0.6 and 1.7 additional ignitions per year (see Table 5.3 of the Wildfire Risk Analysis [**Appendix M**]). The potential for up to 1.7 additional ignitions under Phase 1 represents less than 3 percent of the average annual fires across the County. The same simple linear relationship results in an estimation of up to 5 new ignitions per year for Future Phases of the Proposed Project. There is substantial natural variability in the number of fires that occur in the County from year to year. The potential increase in fire activity of about 1.7 fires per year for Phase 1 of the Proposed Project is small compared to the natural year-to-year variation, which fluctuates by about 15 fires annually, or about 21 percent. Due to the high natural variability in number of ignitions in the County per year, 1.7 and 5 new ignitions falls within the natural fluctuation and is not considered a statistically significant increase. Nevertheless, the Proposed Project could increase the number of ignitions on the Project Site compared to baseline conditions resulting in a potentially significant impact. Refer to the Wildfire Risk Analysis (**Appendix M**) for a detailed summary of the potential for ignitions by cause, and how the proposed design features and mitigation measures may impact the probability of each type of ignition from occurring. As discussed therein, ignitions can occur due to numerous natural or anthropogenic causes, and **Table 3.4-6** below (adapted from Table 5.7 of **Appendix M**) details those human-caused ignition sources and how the Proposed Project includes design features or mitigation measures to offset the potential project-related increases in ignition potential.

Table 3.4-6: Project Design Features and Mitigation Measures Intended to Reduce Human Caused Ignitions

Human Cause of Ignition	Project Design Feature	Mitigation Measure	Effect on Predicted Increases in Ignition Likelihood
Power Lines	Transmission lines underground		Large Decrease
Equipment Use		On-site construction and maintenance equipment equipped with spark arrestors	Moderate Decrease
		Required crew education	Small Decrease
		Bans on certain equipment during periods of high wildfire danger	Moderate Decrease
Smoking	10 ft of Roadside hardscaping where feasible		Large Decrease
		Managed vegetation buffers from 10 ft to 50 ft on both sides of roads	Moderate Decrease
Campfires and	No open fires on the property		Large Decrease
	Early detection system		Small Decrease

Human Cause of Ignition	Project Design Feature	Mitigation Measure	Effect on Predicted Increases in Ignition Likelihood
Recreational Fires			
		24/7 on-site security	Small Decrease
Other Causes (incl. playing with fire, railroad-caused fires, and other miscellaneous causes)	Early Detection system		Small Decrease
		24/7 on-site security	Small Decrease
		Educational programs facilitated by dedicated wildfire mitigation specialists	Moderate Decrease
Debris Burning		Debris burning restricted	Large Decrease
Arson	Early detection system		Moderate Decrease
		24/7 on-site security	Moderate Decrease
Vehicles	Roadside hardscaping where feasible		Large Decrease
		Managed vegetation buffers on 50' on both sides of roads	Moderate Decrease

Source: Table 5.7 of the Wildfire Risk Analysis (**Appendix M**)

Intensity: Fire Behavior and Growth Modeling

Computer modeling software was utilized to estimate fire behavior and intensity in the baseline (pre-project) condition, which is displayed in Figure 5.5 of **Appendix M**. As described in Section 3.2.1, two additional modeling scenarios were run. Case 1 represented the Proposed Project with only design features from the Updated WPP and Case 2 included the design features and those components of the WPP involving on-going maintenance activities that are now considered to be mitigation measures (**Table 3.4-4**).

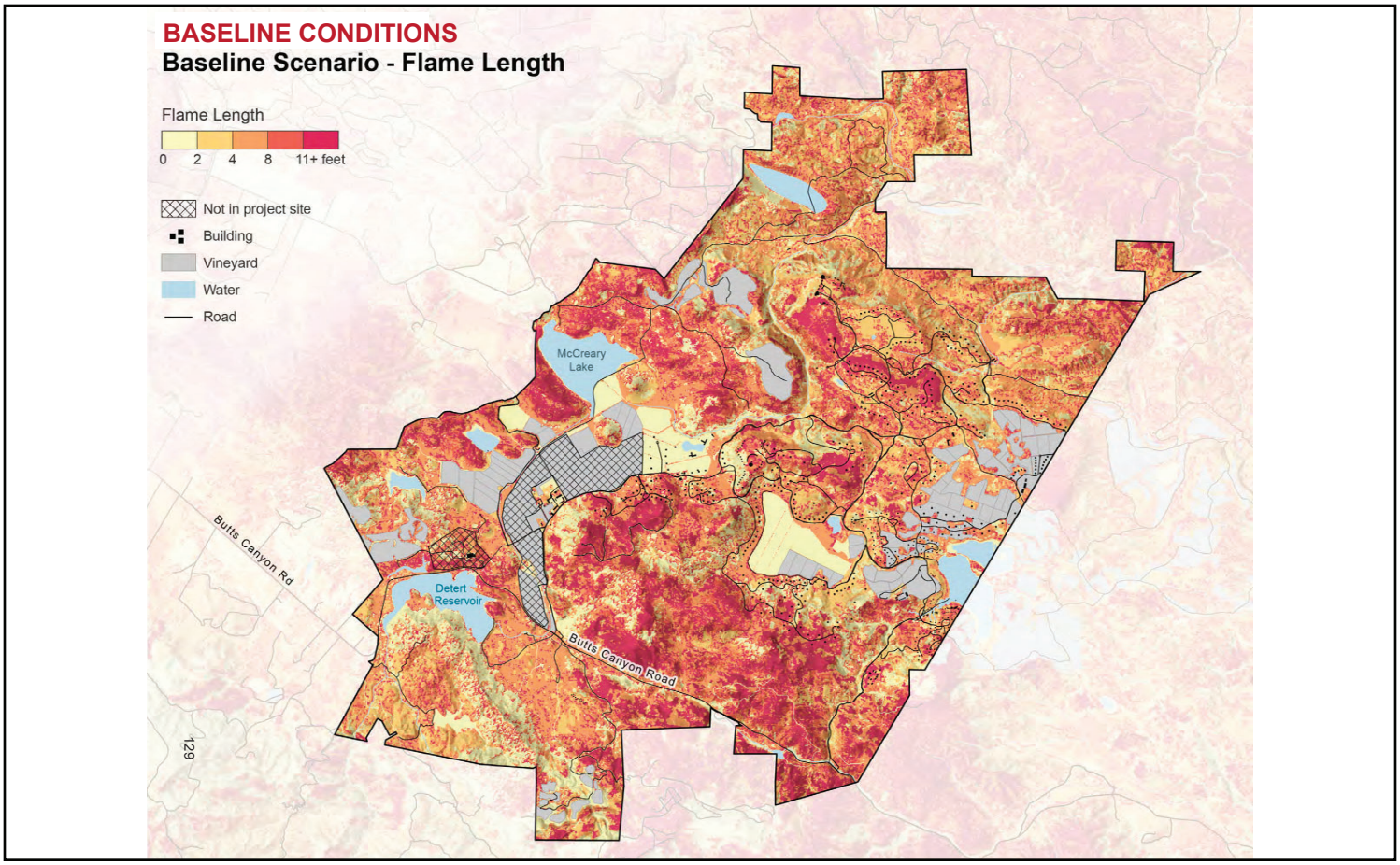
Case 1 (Design Features alone) is projected to have a modest impact on the fire behavior and spread trajectories. The Design Features introduce non-burnable surfaces (e.g., golf and sports fields, roads) and irrigated landscaping into the Project Site, producing localized impacts on flame length at key locations adjacent to the built environment. In Case 1, the site-wide average flame length is projected to decrease in comparison to existing baseline conditions by approximately 2.8 percent, the average rate of spread is projected to decrease by 3 percent, and the fraction of the site capable of supporting canopy fire activity is projected to be reduced by 2.8 percent. The most significant decrease in fire behavior attributed to Case 1 is a result of the irrigated areas around residential, commercial, and facility buildings, which are projected to result in a 20 to 22 percent decrease in flame length within 100 feet of buildings. While the models do show some reductions in fire intensity, they are very modest (refer to Section 5.2.1.2 of **Appendix M**). Case 2 (Design Features with Mitigation Measures) showed substantial reductions in wildfire intensity across the entire Guenoc Valley Site, not limited to around the built environment, due to the landscape-level maintenance activities. Case 2 is projected to reduce the average fire intensity by approximately 50 percent compared to the baseline, the average rate of spread by 28 percent, and the proportion of the site capable of supporting canopy fire activity by 25 percent. The widespread application

of active management, including grazing, lop and scatter, and mastication, are projected to have widespread benefits across the site and beyond, and more localized benefits are projected to result from intensive defensible space around buildings. Fire behavior is projected to decrease the most around roads and buildings, with nearly 70 percent reductions in flame length and 60 percent reductions in rate of spread projected within 100 feet of existing and proposed buildings. **Figure 3-5** depicts the baseline flame length (top) compared to the modeled flame lengths of Case 1 (bottom) under the east wind scenario; as shown therein, a visual comparison shows minimal changes on a landscape level but some reduction in flame length near the built environment. **Figure 3-6** compares flame lengths under Case 2 against the modeled baseline condition in the east wind scenario and shows more robust reductions across the entire Guenoc Valley Site. Additional results under both wind scenarios are further delineated in **Table 3.4-7** below. As shown, both Case 1 and Case 2 result in less risk and a more resilient state than the current baseline.

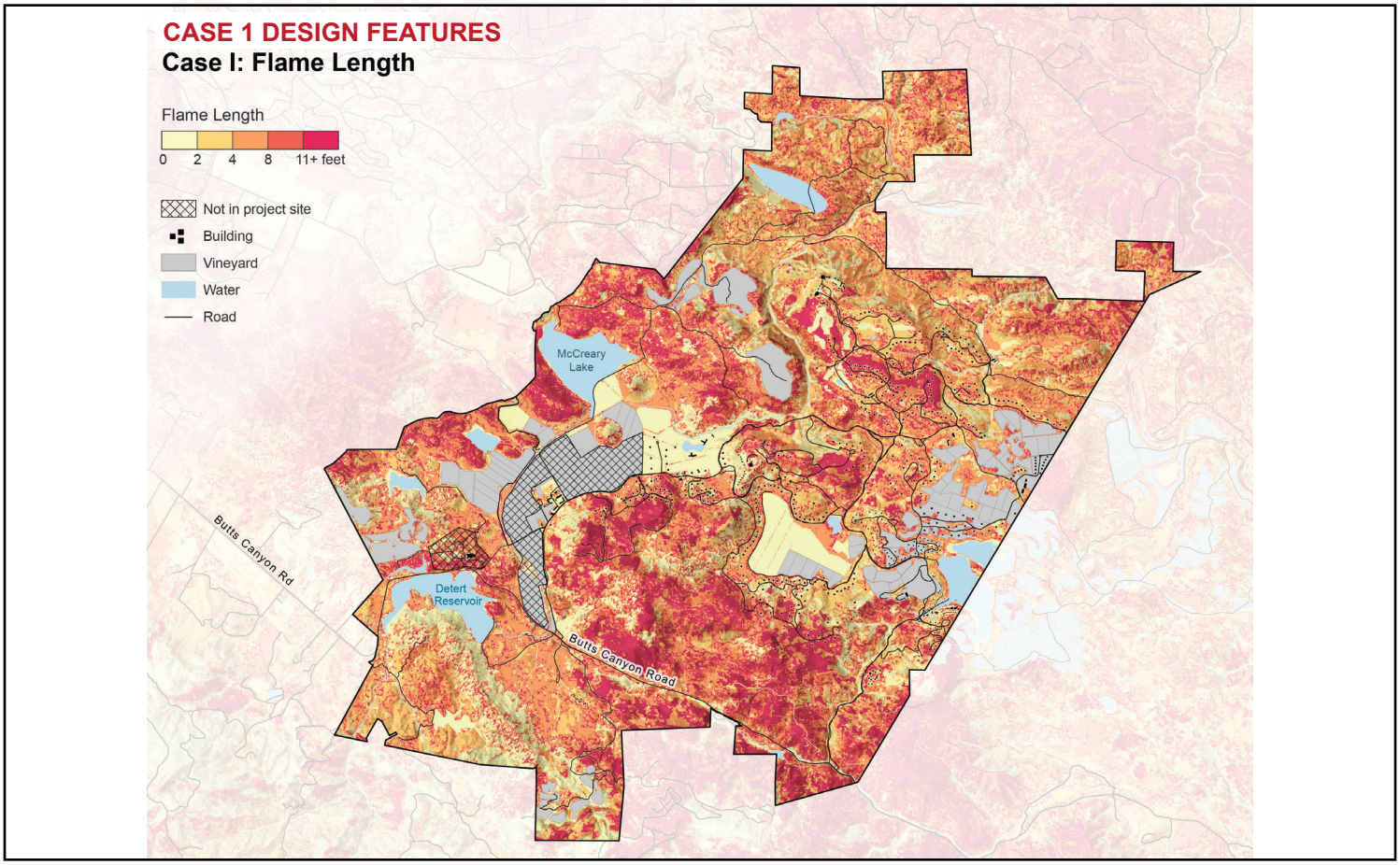
Table 3.4-7: Modeled Changes in Key Fire Behavior Indicators

	Key Indicator	Case 1 Projected Change: Baseline vs. DF	Case 2 Projected Change: Baseline vs. DF + MM
East Wind Scenario	Site-Wide Average Flame Length	-3%	-50%
	Site-Wide Average Rate of Spread	-3%	-29%
	Fraction of Site Supporting Direct Attack	+2%	+32%
	Torching Fraction of Site	-1%	-26%
West Wind Scenario	Site-Wide Average Flame Length	-3%	-50%
	Site-Wide Average Rate of Spread	-3%	-28%
	Fraction of Site Supporting Direct Attack	+2%	+31%
	Torching Fraction of Site	-1%	-26%

Source: Table 5.8 of the Wildfire Risk Analysis (**Appendix M**)



Source: Willow Labs, LLC. January 2025; Acorn Environmental, 2/28/2025



Source: Willow Labs, LLC. January 2025; Acorn Environmental, 2/28/2025

FIGURE 3-5

FLAME LENGTH MODELING (BASELINE CONDITIONS AND CASE 1)

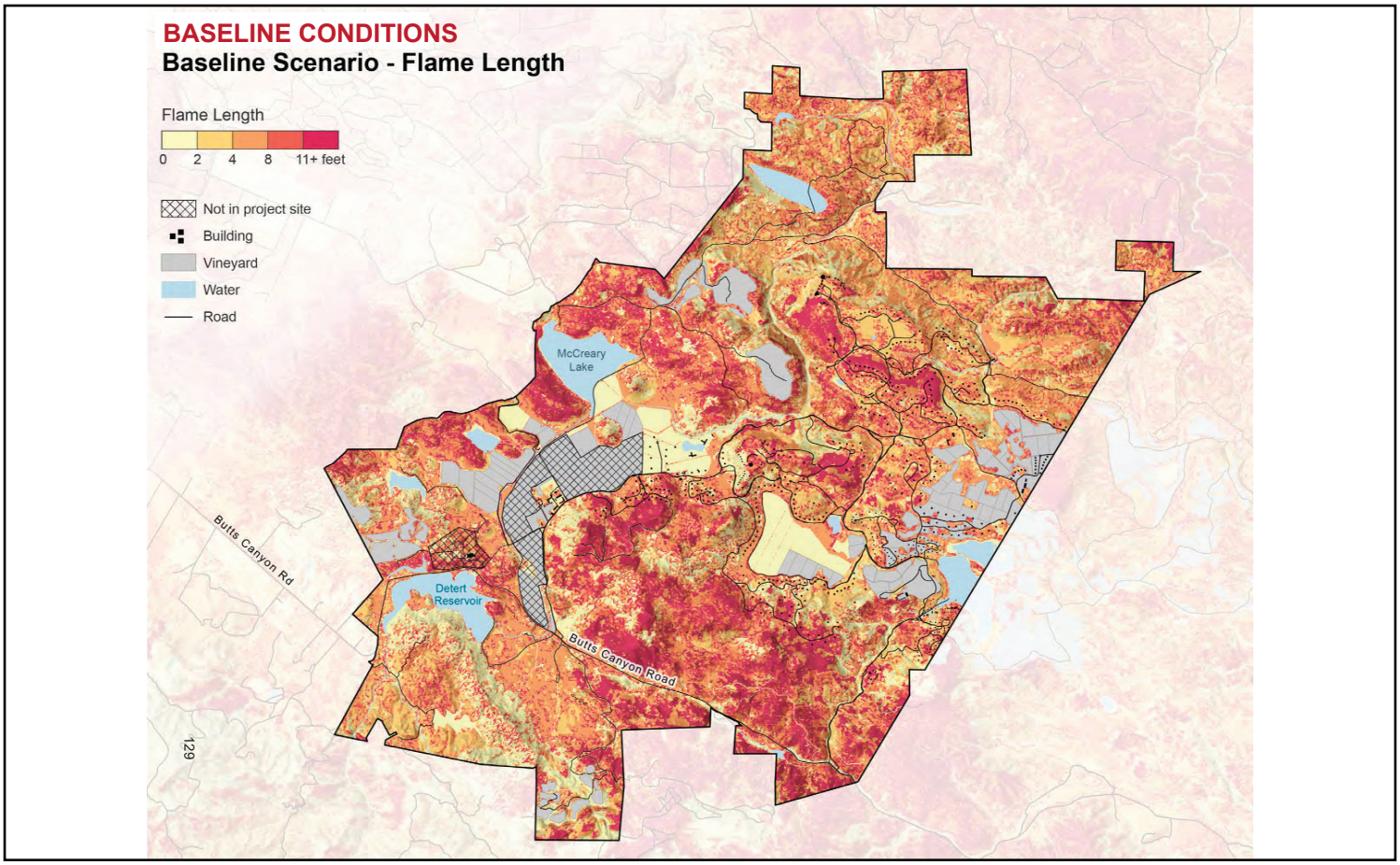
Fire pathways and arrival times were also modeled for Phase 1 to determine if the Proposed Project (with either design features or adding mitigation measures) would interrupt fire pathways and delay fire arrival times. The modeling results indicate that design features are marginally beneficial in interrupting fire spread: together, these features are projected to increase fire arrival time to the existing and proposed buildings on the eastern portion of the Project Site by approximately 20 to 30 minutes, providing additional time for Project evacuation and firefighter ingress. While the increase in fire arrival time is not insignificant, it is unlikely to be sufficient to facilitate a complete evacuation or the sufficient ingress of local and regional firefighting resources. In many cases, the design features alone are too small or too isolated to be broadly effective in interrupting the corridors of most rapid fire spread. However, the modeling results indicate substantial benefits to the Proposed Project and to the surrounding off-site community when mitigation measures are included (refer to Table 5.9 of **Appendix M** and **Mitigation Measure 3.6-9**). Fires spreading across the Guenoc Valley Site when accounting for ongoing vegetation management and other risk reduction activities are likely to spread much more slowly and encounter more fragmented fuels than under the baseline case. Decreased fire spread rates are projected to provide firefighters an average of approximately two hours, and in many cases upwards of four to five hours, to reach the existing and proposed structures on the Guenoc Valley Site. As shown in **Figure 3-7**, these benefits of slower fire spread are also likely to extend to the nearby communities of Middletown and Hidden Valley Lake (for the east wind scenario) and Napa County (for the west wind scenario).

Future Phases cannot be modeled at this time as plans do not yet exist for where future buildings and roads may be sited. However, **Appendix M** determined that the addition of approximately 1,500 additional structures in the buildout of future phases of the project is not projected to substantially increase the fire behavior or pathways on the Project Site. The precise changes in fire behavior due to landscaping and the addition of buildings and other elements is dependent on the location of those features; however, continued adherence to the principles laid out in the WPP, including irrigation, defensible space around buildings, roadside clearance, and active landscape management throughout the site, are likely to keep fire behavior and growth probabilities low around roads and buildings. As Future Phases of the Proposed Project are developed, the Updated WPP will continue to evolve as best practices, scientific understanding of wildfire behavior, and regulatory requirements and building codes are updated. As future phases progress and specific development plans are proposed, additional approvals would be required, and project-level environmental review would be performed based on specific development proposals.

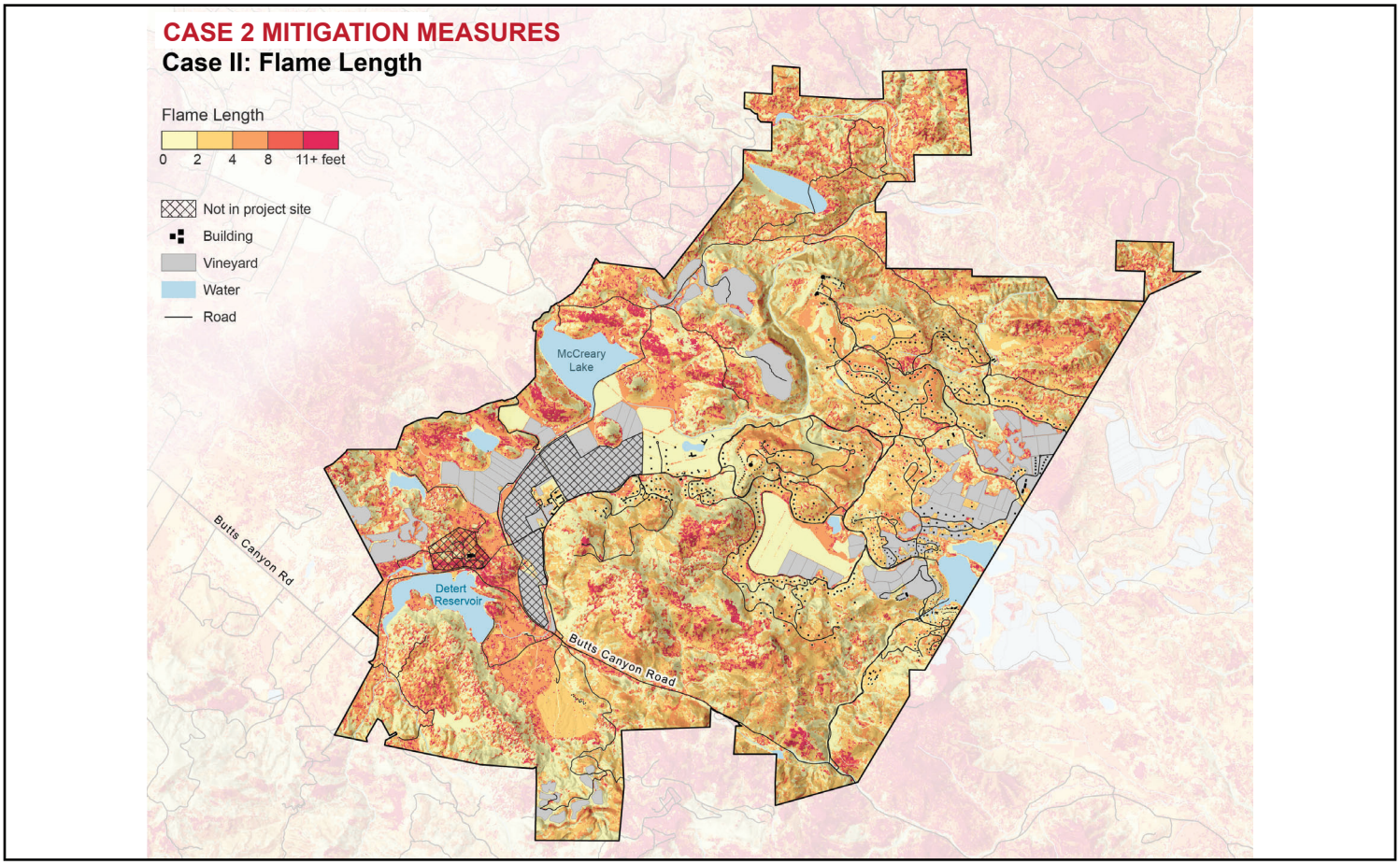
Community Susceptibility: Home Hardening and Fire Response Times

In the context of a wildfire risk assessment that is determining risk to people, property, and environment both on-site and off-site, the concept of community susceptibility takes on two roles:

1. The susceptibility of anyone living, working, or recreating on-site; and
2. The susceptibility of surrounding communities off-site



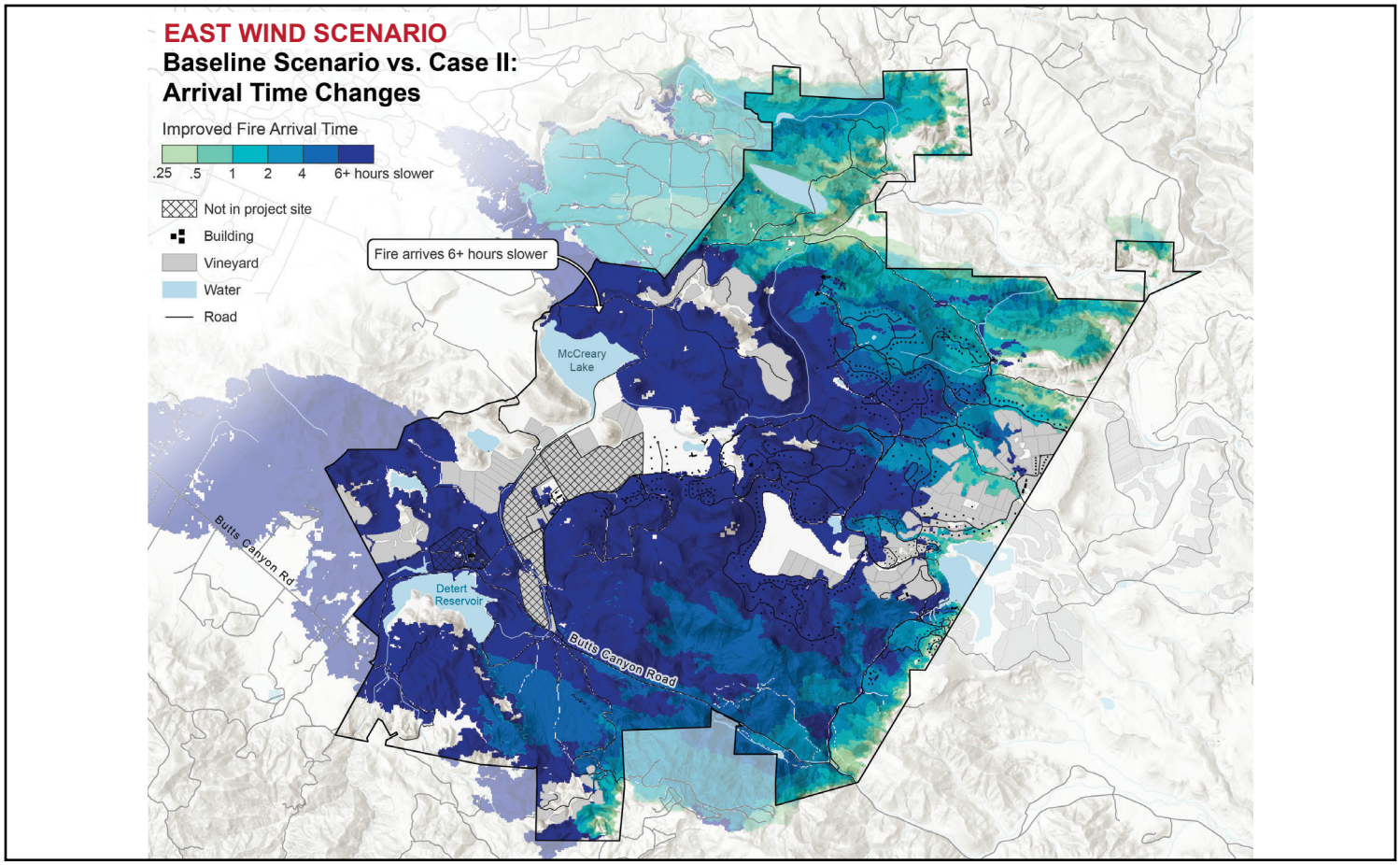
Source: Willow Labs, LLC. January 2025; Acorn Environmental, 1/27/2025



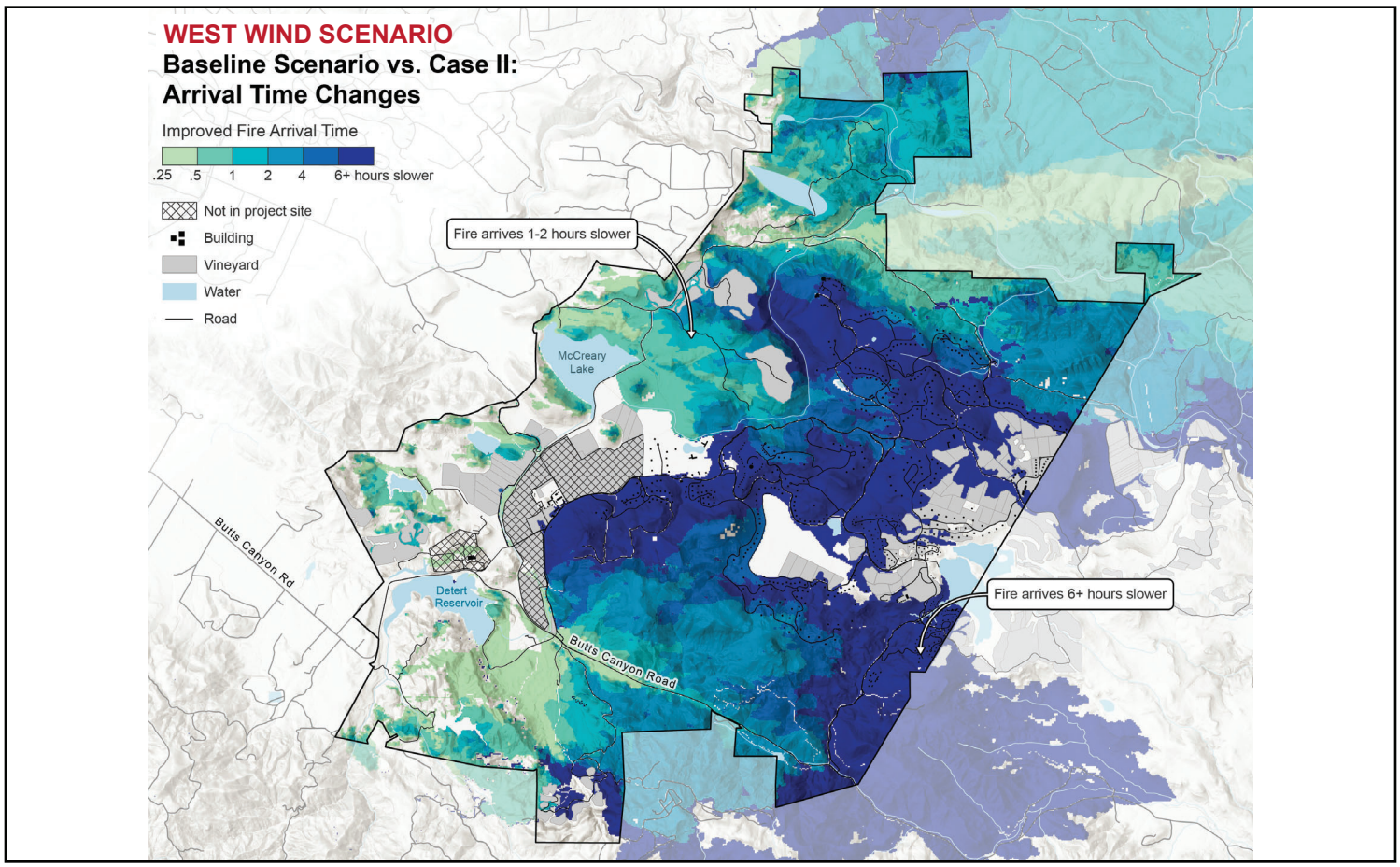
Source: Willow Labs, LLC. January 2025; Acorn Environmental, 1/27/2025

FIGURE 3-6

FLAME LENGTH MODELING (CASE 2)



Source: Willow Labs, LLC. January 2025; Acorn Environmental, 1/27/2025



Source: Willow Labs, LLC. January 2025; Acorn Environmental, 1/27/2025

FIGURE 3-7

FIRE ARRIVAL TIME MODELING (CASE 2)

Design features associated with the Proposed Project would occur on the Project Site and result in hardened structures on the Guenoc Valley Site, and therefore the benefits would accrue mostly to the Project rather than the surrounding community. The Updated WPP includes design features to construct hardened homes (fire resistant exterior materials, wildfire safety design standards, rooftop suppression systems, ember resistant vents), establish a non-combustible zone immediately surrounding structures, and plant fire-resistant landscaping, all of which will minimize the susceptibility of onsite structures to ignition from embers, a leading cause of home ignitions (**Appendix M**). These proposed measures will minimize risk to onsite persons, but have fewer benefits off of the Project Site. However, with the implementation of **Mitigation Measure 3.16-9**, the reduction in canopy fire activity due to ongoing vegetation management across the Guenoc Valley Site is projected to reduce the number of medium- and long-range embers produced by burning vegetation, resulting in lower rates of ember deposition across the site and adjacent to buildings.

Table 5.16 of **Appendix M** indicates that, with the addition of a new Emergency Response Center and improved road network and surfacing, emergency response times drop to less than 5 minutes for the center of the Project Site and are within 5 to 10 minutes for a majority of the site, in the Phase 1. The fringes of the site are first reached within 10 to 15 minutes. The response times for areas west of Butts Canyon Road remain unchanged. Adjacent to the Project Site, first response is improved from 15 to 30 minutes to within 15 minutes. Therefore, the proposed Emergency Response Center is expected to decrease community susceptibility to wildfire risk as it relates to emergency response times.

Overall Wildfire Risk Determination

When considered holistically, the analysis presented in **Appendix M** of *ignition likelihood*, *wildfire intensity*, and *community susceptibility to wildfire*, Phase 1 of the Proposed Project with design features alone (Case I) may lead to a small decrease in wildfire risk. However, due to the highly unpredictable nature of severe wildfire events and the location of the project within a predominantly Very High FHSZ, the potential for the Proposed Project to expose people or structures to a significant risk of loss due to the uncontrolled spread of wildfire was still determined to be potentially significant with design features only. With the implementation of **Mitigation Measure 3.16-9**, which includes the implementation of the long-term and ongoing measures contained within the Wildfire Prevention Plan, Case 2 modeling results depict a large decrease in wildfire risk for the Project Site and a small decrease in risk to the surrounding community compared to existing baseline conditions. **Table 3.4-8** summarizes the anticipated change in wildfire risk factors due to the various design features and mitigation measures to the on-site Project occupants and structures, while **Table 3.4-9** depicts the anticipated change in wildfire risk factors to the off-site community due to those same Project design features and mitigation measures in comparison to baseline (no project) conditions.

Table 3.4-8: Impact of Design Features and Mitigation Measures on Wildfire Risk for Project Occupants

Features to Reduce Wildfire Risk	DF or MM	Ignition Likelihood	Wildfire Intensity	Community Susceptibility
Wildfire safety structure design standards and suppression systems for all buildings	DF	Small Decrease		Moderate Decrease
Irrigated landscape defensible space around buildings (30 ft or greater)	DF		Moderate Decrease	
No open fires	DF			Small Decrease

Features to Reduce Wildfire Risk	DF or MM	Ignition Likelihood	Wildfire Intensity	Community Susceptibility
Golf course - irrigated landscape	DF		Moderate Decrease	
Vineyards – irrigated landscape	DF		Moderate Decrease	
Polo Field	DF		Moderate Decrease	
Fire suppression surface water sources and dedicated nighttime water source for aerial firefighting	DF			Moderate Decrease
Existing interconnected water pumping system and fire hydrants	DF			Moderate Decrease
Power – existing generators for water system	DF			Moderate Decrease
Underground powerlines	DF	Large Decrease		
Additional emergency access route along Grange Road to SR 29	DF			Moderate Decrease
On-Site Emergency Response Center staffed by South Lake County Fire Protection District	DF			Large Decrease
Two emergency helipads	DF			Small Decrease
Roadside hardscape shoulder (10 ft on either side of road)	DF	Large Decrease		
Revised road network and surfacing – paved two-way roads, added connector roads, no dead-end roads greater than 1 mile in length	DF			Moderate Decrease
Safety zones for firefighters	DF			Moderate Decrease
Temporary refuge areas	DF			Moderate Decrease
Early detection system and emergency notification siren system	DF	Moderate Decrease		
Fire-resistant landscaping, including planting design and species selection	DF		Moderate Decrease	
Home Hardening: Building exterior wildfire prevention strategies following CBC and WUI standards	DF			Large Decrease
Defensible space for all buildings (minimum 100 ft for residential, and 300 ft for non-residential)	MM		Moderate Decrease	
Vegetation management for fire risk reduction	MM		Large Decrease	
Property-wide fire breaks and resort edge defensible space	MM		Large Decrease	
Roadside reduced fuel zone (40 ft on either side of road beyond 10 ft hardscape shoulder)	MM	Moderate Decrease	Moderate Decrease	
Parking restricted on primary access roads	MM	Moderate Decrease		

Features to Reduce Wildfire Risk	DF or MM	Ignition Likelihood	Wildfire Intensity	Community Susceptibility
Added firefighter staff during construction	MM			Small Decrease
Fire safety oversight and procedures during construction	MM	Small Decrease		
On-site construction and maintenance equipment equipped with spark arrestors	MM	Moderate Decrease		
HOA funding for annual vegetation and defensible space management	MM		Large Decrease	
HOA contract with a wildfire expert for Project duration to support homeowner education and response planning	MM			Moderate Decrease
Opt-out alert and communication system	MM			Moderate Decrease

Source: Table 5.10 of the Wildfire Risk Analysis (**Appendix M**)

Table 3.4-9: Impact of Design Features and Mitigation Measures on Wildfire Risk to Off-Site Community

Features to Reduce Wildfire Risk	DF or MM	Ignition Likelihood	Wildfire Intensity	Community Susceptibility
Wildfire safety structure design standards and suppression systems for all buildings	DF		Small Decrease	
Irrigated landscape defensible space around buildings (30 ft or greater)	DF		Small Decrease	
No open fires	DF			
Golf course - irrigated landscape	DF		Small Decrease	
Vineyards – irrigated landscape	DF		Small Decrease	
Polo Field	DF		Small Decrease	
Fire suppression surface water sources and dedicated nighttime water source for aerial firefighting	DF			
Existing interconnected water pumping system and fire hydrants	DF			
Power – existing generators for water system	DF			
Underground powerlines	DF			
Additional emergency access route along Grange Road to SR 29	DF			
On-Site Emergency Response Center staffed by South Lake County Fire Protection District	DF			Moderate Decrease
Two emergency helipads	DF			Small Decrease
Roadside hardscape shoulder (10 ft on either side of road)	DF			
Revised road network and surfacing – paved two-way roads, added connector roads, no dead-end roads	DF			

Features to Reduce Wildfire Risk	DF or MM	Ignition Likelihood	Wildfire Intensity	Community Susceptibility
greater than 1 mile in length				
Safety zones for firefighters	DF			
Temporary refuge areas	DF			
Early detection system and emergency notification siren system	DF			
Fire-resistant landscaping, including planting design and species selection	DF		Small Decrease	
Home Hardening: Building exterior wildfire prevention strategies following CBC and WUI standards	DF		Small Decrease	
Defensible space for all buildings (minimum 100 ft for residential, and 300 ft for non-residential)	MM		Small Decrease	
Vegetation management for fire risk reduction	MM		Large Decrease	
Restrictions on debris burning	MM			
Property-wide fire breaks and resort edge defensible space	MM		Moderate Decrease	
Roadside reduced fuel zone (40 ft on either side of road beyond 10 ft hardscape shoulder)	MM		Moderate Decrease	
Parking restricted on primary access roads	MM			
Added firefighter staff during construction	MM			
Fire safety oversight and procedures during construction	MM			
On-site construction and maintenance equipment equipped with spark arrestors	MM			
HOA funding for annual vegetation and defensible space management	MM		Moderate Decrease	
HOA contract with a wildfire expert for Project duration to support homeowner education and response planning	MM			
Opt-out alert and communication system	MM			

Note: blank fields correspond to no anticipated change from baseline conditions
Source: Table 5.11 of the Wildfire Risk Analysis (**Appendix M**)

Integrating the ignition likelihood analysis, the fire behavior and growth modeling, the response-time modeling, and the expert assessment of the impact of design features and mitigation measures on ignition prevention, **Appendix M** determined that the project with design features alone:

1. Does not result in a statistically significant increased likelihood of predicted annual fires due to Phase 1 or full buildout of the project. The statistically insignificant predicted likelihood of 1.7 additional annual fires from Phase 1 and 5 fires from full buildout are determined to be moderately reduced due to design features alone;
2. Slightly decreases potential wildfire *intensity*; and
3. Greatly reduces community *susceptibility* to wildfire.

While there is a "slight reduction in holistic wildfire risk due to design features alone, considering the highly stochastic nature of the most catastrophic wildfires," **Appendix M** concludes that wildfire risk remains potentially significant. Implementation of **Mitigation Measure 3.16-9** in combination with the design features greatly reduce projected increases in wildfire ignition *likelihood* due to the Proposed Project, greatly decreases modeled wildfire *intensity,* and greatly decreases community susceptibility due to improved fire response times and increased resilience of the built environment, effectively reducing the residual wildfire risk to less-than-significant levels for Phase 1 of the Proposed Project. Furthermore, as the design features and mitigation measures applied to Phase 1 will also be implemented for buildout of future phases of the project, and reduce impact fire intensity and improve response times for the entire site and surrounding communities, future phases of the Proposed Project are also considered less than significant with mitigation.

Off-Site Workforce Housing and Off-Site Infrastructure

The off-site well and proposed underground pipeline do not have any components that would contribute to the spread of wildfire or otherwise increase wildfire risk. The Off-Site Workforce Housing site is located partially within a Moderate FHSZ and High FHSZ, and as further discussed in the 2020 EIR the site is predominantly native and non-native grassland, which is highly flammable, with a few trees on the site edges and along the Dry Creek stream corridor. The terrain is relatively flat. The Proposed Workforce Housing would introduce new residents to the Middletown Housing Site which may slightly increase the risk of ignition consistent with the discussion of the Guenoc Valley Site above, but it is a much smaller development that does not include extensive roads into wildland areas or above-ground power lines, which would minimize the potential increase in ignition risk. The Proposed Project would remove the current grassland vegetation within the site, which is a wildfire fuel source, and replace it with proposed housing that would meet all applicable building codes and fire-safe building regulations. The project would also extend emergency vehicle access roadways and firefighting water infrastructure to the site which would ensure that community susceptibility to wildfires would not be significant. Wildfire intensity is not expected to increase significantly as the proposed housing would be constructed with fire-resistant building materials in accordance with all applicable building codes. Therefore, the potential to increase wildfire risks due to the off-site areas is less than significant.

Indirect Risk During Community Evacuation

The potential for the Modified Project to indirectly impact the safety of evacuating community residents would be significant if the Modified Project were to prevent or significantly delay community evacuation. The Wildfire Risk and Evacuation Assessment Report (**Appendix H-1**) provides a complete analysis of ETE in two Wildfire Scenarios (Scenario A – Fire North to South and Scenario B – Fire South to North) across four years: Baseline (2022), Baseline (2022) plus Guenoc Valley Project Phase 1, Cumulative (2040), and Cumulative (2040) plus Guenoc Valley Project Full Build-Out.

Phase 1

As discussed further in Impact 3.16-1 above, development of Phase 1 would increase community evacuation times by up to 30 minutes, which could indirectly expose people to a significant risk of loss, injury or death. This is a significant impact. **Mitigation Measures 3.16-3** through **3.16-6** include a series of strategies that shall reduce the impacts by reducing traffic on the evacuation routes in the event of an emergency and would reduce the potential increase in community evacuation time by a minimum of 15 minutes. This is a conservative assessment of potential impacts, as the Community Evacuation Analysis

determined that up to a 30 minute increase in evacuation time could occur did not include the potential delay in fire arrival time as predicted in the Wildfire Risk Assessment modeling by up to several hours.

Recent and ongoing roadside fuel reduction activities along SR 29, Highway 175 and Butts Canyon Road, in combination with the fact that all on-site roadways within the Guenoc Valley Site will exceed the minimum California Fire Safe Regulations with a 50-foot-wide fuel treatment on each side, will significantly reduce flame intensity along primary community and Project evacuation routes. Wildfire evacuations occurred in South Lake County communities surrounding the Guenoc Valley Site during the 2020 LNU Lightning Complex Fire, the 2015 Valley Fire, and the 2015 Jerusalem Fire. Interviews with first responders, combined with reviews of fire and media reports, indicate that no one died in a vehicle attempting to evacuate in Lake County during these fires (**Appendix H-1**).

The implementation of **Mitigation Measures 3.16-3** through **3.16-6** will result in the preparation of the South Lake County Evacuation Traffic Management Plan, reduce the number of vehicles entering the evacuation zone during a future emergency, enhance the ability of first responders to communicate with evacuees, direct Project-related evacuees to alternate routes other than SR 29, improve the physical conditions at intersections along evacuation routes with known bottleneck issues, and provide sufficient shared shuttle evacuation capacity for Project guests. After mitigation, Phase 1 would not expose the community to a significant risk of loss, injury or death involving wildland fires as a result of inadequate community evacuation conditions. Refer to further discussion above under Impact 3.16-1. This impact is less than significant with mitigation.

Future Phases

Full buildout of future phases of the Project in the cumulative year 2040 could result in increases in community evacuation times by up to 2 hours or 2.5 hours without mitigation, which is a potentially significant impact. **Mitigation Measure 3.16-7** requires performance standards of reducing forecasted evacuation levels such that: 1) full buildout of future phases of the Project shall not result in evacuation times that exceed one hour beyond the total cumulative no project ETEs for a full evacuation of the Evacuation Area, and 2) the estimated number of added future phases evacuation trips on Butts Canyon Road shall not exceed its evacuation capacity. **Mitigation Measure 3.16-8** requires the Applicant obtain additional shuttle buses to meet the additional Project buildout capacity for shared evacuation of Project guests. If the future project-level CEQA document prepared for the future phases of the Project cannot identify mitigation to achieve the above performance standards, a reduction in the number of housing units shall be implemented. **Mitigation Measures 3.16-7** and **3.16-8** will reduce total evacuation times for the community members, thereby reducing the potential impact to less-than-significant levels.

IMPACT 3.16-6	CUMULATIVE IMPACTS
Significance Before Mitigation	Potentially Significant
Mitigation Measures	MM 3.16-1, 3.16-2, 3.16-3, 3.16-4, 3.16-5, 3.16-6, 3.16-7, 3.16-8, and 3.16-9
Significance After Mitigation	Less than Significant

For wildfire impact analysis, the immediate vicinity of the Guenoc Valley Site and Middletown Housing Site is considered the cumulative context because wildfires could spread from the borders of the sites. This entire region contains areas within Moderate, High and Very High Fire Hazard Severity Zones. Planned cumulative projects in the region are described in **Table 4.12-1**. Currently, the buildout of the Hidden Valley Community, the Valley Oaks Community, and the Guenoc Valley Water Rights Modification Project are the only large-scale planned projects in this region. Development of these projects would introduce new people and infrastructure to the area. Increased development could potentially add more opportunities for igniting fires, more fuel, and make emergency response operations more complex. Any project implemented in this area will have to adhere to applicable State and local regulations with respect to fire zone designation. Furthermore, potential future projects will have to individually assess and mitigate potentially significant impacts related to building in the present and future environmental conditions that are conducive to starting and exacerbating wildfires (e.g. steep terrain). The Proposed Project will implement the Wildfire Prevention Plan and **Mitigation Measures 3.16-1** through **3.16-9** in order to reduce its potential for starting and exacerbating wildfires. Furthermore, these measures will ensure a thorough emergency response, safe evacuation routes, and the competent management of direct (e.g. smoke inhalation) and indirect effects associated with a wildfire (e.g. erosion). Because of the discussed factors, the Proposed Project in combination with future projects in the region will not create a significant impact. This cumulative impact is less than significant.

3.4.4 Mitigation Measures

Mitigation Measures 3.16-1 and **3.16-2** were originally presented in the 2020 EIR (**Appendix D**), and are repeated below. One minor change occurred to Mitigation Measure 3.16-1 to ensure a certified firefighter is present onsite during construction activities; no other changes occurred to **Mitigation Measures 3.16-1** and **3.16-2**. **Mitigation Measures 3.16-3** through **3.16-9** below are new since circulation of the 2020 EIR.

MM 3.16-1 Fire Prevention during Construction

Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. During construction, staging areas and areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak.

Additionally, the following measures shall be required on the Guenoc Valley Site:

- Every work area shall have one round tip shovel, and one water type fire extinguisher accessible within 10 feet.

- Portable Fire Extinguisher rated at a minimum of 4/ABC or larger shall be in every vehicle, or piece of equipment except for privately owned vehicles.
- In general, during fire season, mowing of vegetation should be completed prion to noon.
- Hot Work shall have Fire Watch in place during and 30 minutes after.
- Persons activating 911 shall know where they are on property to give directions.
- All persons shall have access to a cell phone or radio system to activate 911.
- Persons activating 911 shall arrange an escort from the entrance at 22000 Butts Canyon Road to the location of the emergency for the first arriving emergency apparatus.
- Each construction site shall be provided with a hand held pressurized air horn such as a marine device (or similar) to alert others of an emergency.
- A certified firefighter shall be available on-site during construction.

Explanation of Purpose/Effectiveness

Construction activities may produce sparks that could lead to a fire event, and would necessarily occur prior to the operational phase where a fully staffed Emergency Response Center would be operating onsite. These measures will minimize the potential for ignitions to occur, while ensuring response times are minimized if an emergency were to occur. This measure applies to construction on the Guenoc Valley Site and for any off-site construction activities occurring at the Middletown Housing Site or Off-Site Infrastructure.

MM 3.16-2 Post-Wildfire Emergency Response

After a wildfire, response measures shall include actions to minimize slope instability and installation of warning signs. Immediate actions may include identifying impending threats to safety and property, checking all culverts to ensure proper drainage and installing erosion control mats and fiber rolls around steep areas. There shall also be long-term recovery and restoration actions to rehabilitate burned areas that have the potential to impact safety and property.

The post wildfire emergency response plan (PWERP) will also include standards for a five-year long-term recovery and restoration plan to rehabilitate any burned areas that have the potential to impact safety and property. These measures could include restoring burned habitat, reforestation, mulching, and treating noxious weed infestations. This would be prepared by a qualified personnel with burned area restoration expertise and in coordination with and to the approval of the Lake County Department of Environmental Health.

Explanation of Purpose/Effectiveness

The PWERP will ensure immediate attention is paid to areas of critical risk following a wildfire to stabilize slopes and protect downhill property and environmental resources. The inspection and maintenance activities will ensure that wildfire damage is not compounded by future weather conditions (e.g., flooding or erosion) or other environmental factors (e.g., invasive species spread). The PWERP will also allow the HOA to respond to post-wildfire maintenance needs on the Guenoc Valley Site to minimize the

potential for additional emergencies that could further strain County resources following a wildfire.

MM 3.16-3 Prepare South Lake County Evacuation Traffic Management Plan to Reduce Near-Term Evacuation Times, Incorporate in Updated Lake County Emergency Operations Plan (EOP), and Implement Evacuation Traffic Management Measures

The applicant shall fund the administrative costs for preparation and adoption of a South Lake County Evacuation Traffic Management Plan, which shall be adopted prior to the issuance of the first certificate of occupancy for Phase 1. Lake County Office of Emergency Services (OES) shall be the Lead Agency for adoption of the plan and implementation of the traffic management measures, working in collaboration with other responsible agencies as noted below. The Evacuation Traffic Management Plan strategies, in combination with other mitigation measures described below, shall achieve a 15-minute reduction in total evacuation times for a full evacuation of South Lake County, thereby reducing the 30 minutes in added overall evacuation time due to Phase 1 Project evacuation trips. The Evacuation Traffic Management Plan shall be subject to the approval of the Lake County OES, the Lake County Sheriff, the South Lake County Fire Protection District, Caltrans, and the California Highway Patrol (CHP). The approved version of the South Lake County Evacuation Traffic Management Plan shall be incorporated into an updated version of the Lake County Emergency Operations Plan (Lake County Office of Emergency Services) and the Lake County Community Wildfire Protection Plan (CWPP), with evacuation management strategies and improvement measures to address major bottlenecks in the South Lake County evacuation network. These measures shall include but will not be limited to the following:

- SR 29 Evacuation Traffic Reduction Measure – at the time of an evacuation order for a full South Lake County evacuation and as determined by the Incident Commander and County Sheriff, CHP and/or other police enforcement personnel shall implement measures to stop through traffic on SR 29 through the evacuation area such as stopping northbound SR 29 traffic at Tubbs Lane in Napa County and southbound SR 29 traffic at SR 53 in Lower Lake, thus reducing traffic levels on SR 29 during an evacuation. This measure would prevent inbound traffic on SR 29 from accessing the South Lake County evacuation network but would allow outbound evacuating vehicles to exit via SR 29.
- Hidden Valley Lake Evacuation Traffic Management Measure – at the time of an evacuation order for a full South Lake County evacuation and as determined by the Incident Commander and County Sheriff, Lake County Sheriff and/or other police enforcement personnel shall implement traffic management for the Hidden Valley Lake community that addresses bottlenecks at the intersections of SR 29 and Hidden Valley Lake community egress roads. The officers would direct Hidden Valley Lake evacuating traffic away from the direction of the wildfire and in a coordinated direction to reduce or avoid conflicting movements at the intersections.
- Guenoc Valley Project SR 29 Evacuation Traffic Reduction Measure – at the time of an evacuation order for a full South Lake County evacuation, evacuating Project traffic shall be directed to alternate routes to SR 29. Unless precluded by wildfire, evacuating project traffic shall be directed to the planned Project egress

intersections on Butts Canyon Road and to the south on Butts Canyon Road. This measure would not apply if Butts Canyon Road were closed due to wildfire. In that event (such as under Scenario B), evacuating Project trips would be directed to travel north on Butts Canyon Road (or via Grange Road as needed), south on SR 29 to Middletown, and then north on SR 175 (presuming that SR 29 to the south over Mt. St. Helena was also closed). Additional details are described for this measure in **Mitigation Measure 3.16-4**.

SR 29 Traffic Signal Evacuation Operational Enhancement Measures – a description of the traffic signal evacuation operational enhancement measures described in **Mitigation Measure 3.16-5** shall be included in the Updated Lake County EOP.

MM 3.16-4 Reduce Evacuation Time Impacts on SR 29 by Minimizing Project-Related Evacuation Traffic on SR-29

- Prior to occupancy of any Project uses, the applicant shall install variable message signs at the outbound lanes of the three Project egress roads that connect to Butts Canyon Road and Grange Road. Lake County shall be the Lead Agency to oversee installation of the variable message signs within the Project Site. The variable message signs shall be connected to the on-site Emergency Response Center so that evacuation-related messages can be controlled by fire personnel managing the evacuation. At the time of an evacuation order for a full South Lake County evacuation, evacuating Project traffic shall be directed to alternate routes to SR 29. Unless precluded by wildfire, evacuating Project traffic shall be directed to the planned egress intersections on Butts Canyon Road and to the south on Butts Canyon Road.
- The roundabout that will be constructed by the Project applicant at the SR 29/Butts Canyon Road intersection shall include a southbound bypass lane to increase intersection capacity.

Explanation of Purpose/Effectiveness

Butts Canyon is a lightly traveled and populated rural road that would provide access to Napa and Solano counties. Traveling to the south on Butts Canyon Road would be the most direct route for evacuating trips from the proposed Project residential units and hotel uses whose primary destination would be to the south. This measure would be implemented by staff in the on-site Emergency Response Center.

A large share of the evacuating trips from the proposed Project residential units and hotel uses would be destined to the south where residents or guests would return to homes in the Bay Area or access airports or hotels. The evacuation time estimates presented earlier in this assessment are based on an equal distribution between SR 29 and Butts Canyon Road of project evacuation trips destined to the south.

Under this measure, all traffic evacuating from the proposed Project via Butts Canyon Road would turn left and travel to the south unless precluded by wildfire. Directing all Project evacuation trips exiting onto Butts Canyon Road to turn left, which is the most immediate evacuation route to the south, would reduce congestion levels on SR 29 south of Butts Canyon Road through Middletown that otherwise would be exacerbated by

Project-generated evacuation trips. With implementation of this mitigation measure, the only Project evacuation trips that would use SR 29 would be those with destinations to the north (e.g., Lower Lake, Clear Lake, Kelseyville, etc.), which would be directed to use the Grange Road evacuation route to access SR 29. The total number of Phase 1 Project evacuation trips that would be assigned to Butts Canyon Road with this mitigation measure, under Scenario A (which has the higher share of evacuation trips assigned to the south), would be approximately 1,330 vehicle trips over a four-hour window as shown in Figure 4-3 of ***Appendix H****. This measure would not apply if Butts Canyon Road were closed due to wildfire. For this condition that could occur under Scenario B, evacuating Project trips would be directed to travel north on Butts Canyon Road (or via Grange Road as needed), south on SR 29 to Middletown, and then north on SR 175 (presuming that SR 29 to the south over Mt. St. Helena was also closed). To facilitate an evacuation under a condition when Butts Canyon Road to the south of the Project is closed due to wildfire and Project traffic must evacuate to the north on Butts Canyon Road, the roundabout that will be constructed by the Project applicant at the SR 29/Butts Canyon Road intersection shall include a southbound bypass lane to increase intersection capacity.*

MM 3.16-5 Implement SR 29 Traffic Signal Evacuation Operational Enhancement Measures

- Prior to issuance of the first certificate of occupancy for any Project uses, the applicant shall design, obtain permits for, and install improvements to the signalized intersection of SR 29/SR 53 intersection in Lower Lake and the two signalized intersections on SR 29 in Middletown (SR 175 and Wardlaw Street). The improvements would be funded by the Project applicant who shall obtain any necessary permits from Caltrans and/or Lake County. The variable message signs and traffic signal controllers shall be connected to Caltrans and Lake County traffic operations staff so they can be managed remotely during an evacuation. Improvements at the SR 29/SR 53 intersection in Lower Lake shall include extending the length of the northbound left turn pocket by 175 feet to a length of approximately 400 feet which could be accomplished by restriping the existing striped median, installing variable message signs on three approaches (i.e., eastbound, southbound, and westbound), and developing and installing wildfire signal timing plans that can be implemented by County staff during a wildfire that significantly extend maximum green times on the northbound approach. Improvements at the two intersections on SR 29 in Middletown include developing and installing wildfire signal timing plans that can be implemented by County staff during a wildfire that significantly extend maximum green times on the northbound and/or southbound approaches depending on conditions.

Explanation of Purpose/Effectiveness

The traffic signals located on SR 29 in Lower Lake at SR 53 and in Middletown at SR 175 and Wardlaw Street are bottlenecks during a wildfire event in South Lake County. These bottlenecks existed in prior wildfire evacuations and would be exacerbated by added Project evacuation trips. This measure would involve preparing and implementing traffic signal timing plans for wildfire events. The traffic signal timing plans for wildfire events would be designed for different scenarios and would significantly extend green times on key approaches. For example, a signal timing plan for a wildfire in South Lake County

would significantly extend green time for northbound traffic at the SR 29/SR 53/Main Street intersection in Lower Lake until police resources could arrive at the intersection to manage traffic congestion. This measure would also require extending the length of the northbound left turn pocket (which currently has a storage length of approximately 225 feet) and installing variable message signs on the approaches to the SR 29/SR 53/Main Street intersection in Lower Lake. The variable message signs would be installed on the eastbound, southbound, and westbound approaches to notify drivers that an evacuation notice has been issued for South Lake County and that traveling to southbound SR 29 is prohibited.

The above improvements would be funded by the applicant and implemented by Lake County in collaboration with Caltrans. The implementation of improvements within the Caltrans right-of-way is subject to independent Caltrans authorization and may result in additional permit requirements.

MM 3.16-6 Provide Dedicated Project Evacuation Shuttles for Phase 1 Hotel Uses

- Prior to the issuance of the first certificate of occupancy for any Project hotel uses, the applicant shall acquire and provide storage for dedicated evacuation shuttle buses that can serve 45 percent of all guests (i.e., seven 20-person buses at full occupancy of all Phase 1 hotel uses). Applicant shall identify and provide signage for bus stop evacuation pick-up zones at all hotels, and identify evacuation routes and shelter locations. Applicant shall designate shuttle drivers and provide ongoing training for staff and drivers for the shuttle buses.
- The Project shall obtain, maintain, and store dedicated evacuation shuttles for hotel guests, as individual hotel projects are completed, at a rate of 0.9 shuttle bus seats per room. If shuttle buses with a 20-person capacity are acquired, a total of seven dedicated evacuation shuttle buses for hotel guests would be provided for the 147 hotel units when all Phase 1 hotels are completed. The Project shall train employees to operate the shuttles and be aware of alternative routes to designated shelter locations.

Explanation of Purpose / Effectiveness

The transportation analysis conducted for the Final EIR indicates that 45 percent of hotel guests will arrive by shuttle. These hotel guests would not be able to evacuate from the resort in their own vehicles during an evacuation event and would require transportation assistance from the Project. Phase 1 of the Project would provide 147 hotel rooms. At full occupancy with two guests per room, approximately 132 guests would have traveled to the resort via shuttle. This equates to 0.9 guests arriving via shuttle per room. This measure would provide a fleet of dedicated evacuation shuttles for use in evacuating hotel guests that initially travel to the site via shuttle, taxi, or other shared ride vehicles.

MM 3.16-7 Future Phases - Updated South Lake County Evacuation Traffic Management Plan

As part of the future project-level CEQA evacuation assessment of full build-out of the Project and prior to issuance of the first certificate of occupancy for any uses beyond those included in Phase 1, the Project shall develop evacuation time reduction strategies to reduce forecast evacuation levels in the Evacuation Area, which the Project will be

required to implement after occupancy of such uses. The measures would include any combination of demand, supply, and/or communication strategies as described below such that (1) the added evacuation time estimates (ETEs) (i.e., time until the last evacuee leaves the Evacuation Area) due to Project full build-out evacuation trips shall not exceed one hour beyond the total cumulative no project ETEs for a full evacuation of the Evacuation Area under either Scenario A or B, and (2) the estimated number of added Project full build-out evacuation trips on Butts Canyon Road shall not exceed its evacuation capacity.

Prior to issuance of the first certificate of occupancy for any use beyond those included in Phase 1, the applicant shall fund the administrative costs for preparation and adoption of a South Lake County Evacuation Plan (Evacuation Plan) that includes strategies to reduce overall cumulative ETEs for the Evacuation Area as described above, and the Evacuation Plan shall have been approved by the Lake County Office of Emergency Services (OES), the Lake County Sheriff, the South Lake County Fire Protection District, and the California Highway Patrol (CHP). Prior to the approval of the Evacuation Plan, a project-level CEQA analysis shall be conducted that analyzes the impacts of any proposed use beyond those included in Phase 1 on evacuation routes, and confirms that the strategies included in the Evacuation Plan meet the performance standards described above related to added ETEs and the evacuation capacity of Butts Canyon Road. The approved version of the South Lake County Evacuation Plan shall be incorporated into an updated version of the Lake County EOP (Lake County Office of Emergency Services).

- Demand Strategies – demand-side strategies that may reduce evacuation time estimates (ETEs) and evacuation trips include vehicle reduction and phased evacuation measures. A vehicle reduction strategy may include a combination of land use program reductions and/or measures to increase vehicle occupancy (i.e., additional shuttles). A community-wide policy encouraging households to limit the number of evacuating vehicles to one per household is another demand reduction strategy that could help reduce overall evacuation times. Reduction of the number of housing units shall be implemented as a strategy only if implementation of all other feasible demand-side, supply-side, and communication strategies would not reduce ETEs or exceedance of the capacity of Butts Canyon Road sufficiently to meet the performance standards described above.
- Supply Strategies – supply-side strategies that may reduce ETEs include road lane widening, shoulder widening to provide an additional egress lane, contraflow lane reversal operations (i.e., allowing two lanes of outbound traffic, if needed), and intersection traffic control measures.
- Communication Strategies – communication strategies that may reduce ETEs include early warning systems, enhanced communication systems, and dynamic route guidance and monitoring.

The above strategies are programmatic in nature and may be refined following the additional project-level CEQA analysis described above based on more specific details regarding future Project phases that will be included in application submittals for such phases, evolving evacuation analysis methods, any future changes to roadway infrastructure and/or capacity, and/or new or enhanced evacuation mitigation strategies.

Explanation of Purpose / Effectiveness

The following provides a description of evolving wildfire evacuation strategies and an illustrative combination of strategies to accomplish the stated performance standard. The illustrative combination is described in the chronological order of an evacuation beginning with wildfire detection.

- *Early Detection and Enhanced Communication Systems:*

  New wildfire early detection systems technology including wildfire cameras, smoke sensors, gas sensors, and drones is being developed and employed to provide more time for evacuation notification. Systems have been developed to analyze data collected from detection devices using artificial intelligence and cloud-based tools. Wildfire early detection systems technology is relatively new and data to quantify the effectiveness of the systems on reducing evacuation times based on actual applications is pending.

  Enhanced communications systems can take the form of hardened communication systems to maintain power for communications infrastructure like cell towers during wildfire, improved notification systems for evacuation orders, and/or traffic monitoring and wayfinding (i.e., variable message signs) that can be used to provide dynamic traffic guidance to respond to evacuation route bottlenecks and changing conditions. Communications systems have the potential to allow evacuees to begin their evacuation sooner and/or better manage evacuations in progress, but may have varying effects on the amount of added evacuation time from the time of the evacuation order.

  An alternative evacuation approach that would be supported by enhanced communication systems is a managed and phased evacuation declaration for South Lake County communities rather than a single mass evacuation as analyzed. Evacuating in phases, based on vulnerability, location, or other factors, could enable subsequent traffic surges on major evacuation routes to be reduced and managed over a longer time frame and could be planned to result in traffic levels that flow more efficiently than when mass evacuations include large areas evacuating simultaneously. Law enforcement personnel and Office of Emergency Services staff would be responsible for ensuring that evacuations are phased appropriately, taking into consideration the vulnerability of communities when making decisions. A phased evacuation approach was applied for the 2015 Valley Fire.

  In the event of an evacuation declaration, law enforcement and the on-site Emergency Response Center staff would have the option to conduct a phased evacuation of Guenoc Valley Project evacuees, relocate evacuees within the Project, and/or instruct evacuees to shelter at temporary refuge areas such as the maintained polo field, golf course, grazed areas, and vineyards.

- *Supply Strategies*

  Intersection traffic control measures such as installation of traffic signals for emergency traffic management along Butts Canyon Road at Snell Valley Road and at Howell Mountain Road in Pope Valley is a supply strategy that would enhance management of traffic at the two primary cross-streets in the approximately 10-mile section of Butts Canyon Road south of the Project.

  A supply strategy in South Lake County that would benefit the most congested corridor is the widening of shoulders on SR 29 sufficient to provide shoulder evacuation lanes, perhaps initially in the northbound direction from Hidden Valley Lake to Lower Lake. The State Route 29 South Corridor Engineered Feasibility Study (2014) prepared for Caltrans District 1 and Lake County/City Area Planning Council (Lake APC) called for shoulder widening along segments of SR 29 between Middletown and Lower Lake.

The above early detection, communication, and supply strategies could be applied in combination to reduce overall ETEs, but it is possible that they might not accomplish the ETE reduction performance standard. If those strategies do not achieve the performance standard, the remaining ETE reduction would need to come from demand-side strategies that would include additional shuttles for hotel guests but would primarily involve reducing the number of Project evacuation trips by reducing the amount of development that would occur between Phase 1 and full build-out of the Project. This would involve reduction of the 1,400 estate units and estimated 1,220 employees that would generate up to 80 percent of all Project evacuation trips at full build-out.

MM 3.16-8 Future Phases - Provide Dedicated Project Evacuation Shuttles for Full Build-out Hotel Uses

Consistent with **Mitigation Measure 3.16-6**, prior to the issuance of the first certificate of occupancy for any new hotel uses beyond those included in Phase 1, the applicant shall acquire and provide storage for dedicated evacuation shuttle buses that can serve 45 percent of all guests. Applicant shall identify and provide signage for bus stop evacuation pick-up zones at all hotels and identify evacuation routes and shelter locations. Applicant shall designate shuttle drivers and provide ongoing training for staff and drivers for the shuttle buses, including information on alternative evacuation routes and shelter locations. If shuttle buses with a 20-person capacity are acquired, a total of up to eighteen dedicated evacuation shuttle buses for hotel guests would be provided for up to 400 hotel units when all hotels are completed.

Explanation of Purpose / Effectiveness

The transportation analysis conducted for the Final EIR indicates that 45 percent of hotel guests will arrive by shuttle. These hotel guests would not be able to evacuate from the resort in their own vehicles during an evacuation event and would require transportation assistance from the Project. This measure would provide a fleet of dedicated evacuation shuttles for use in evacuating hotel guests that initially travel to the site via shuttle, taxi, or other shared ride vehicles.

MM 3.16-9 Implement Operational Wildfire Risk Reduction Activities

The Applicant and/or HOA shall ensure that the following wildfire risk reduction measures are conducted throughout the Guenoc Valley Site in accordance with the Wildfire Prevention Plan:

- **HOA contract with a wildfire expert for Project duration to support homeowner education and response planning**. The HOA will be required by its by-laws to contract with a wildfire expert for the duration of the Project, with costs paid by the HOA; the HOA shall consult with the wildfire expert in its implementation of wildfire prevention measures, including those identified within the WPP. The HOA will also cover the costs associated with having on-site at least one individual with wildfire expertise related to evacuation and emergency response at the Project's Emergency Response Center.
- **Defensible space for all buildings (minimum 100 ft for residential, and 300 ft for non-residential).** The project CC&Rs will require that homeowners and commercial/facility managers establish and maintain defensible space of no less than 100 feet for residential structures and no less than 300 feet for commercial structures in accordance with Zone 0, Zone 1, and Zone 2 guidance. Dead, dying, invasive, poorly-maintained, and fire-prone vegetation shall be removed and/or reduced within these areas in accordance with the WPP. Trees and shrubs should be selectively addressed to reduce flammable vegetation parts, including pruning dead or lower branches. The HOA and wildfire expert shall inspect properties annually to ensure compliance.
- **Vegetation management for fire risk reduction.** A Vegetation Management Plan (VMP) shall be prepared and updated annually by a qualified wildfire expert to organize and monitor active landscape management strategies as outlined in the WPP. The VMP shall include livestock grazing throughout the undeveloped rural landscapes as well as certain resort, residential, and vineyard landscapes and manual removal of dead, dying, or invasive vegetation through mowing, trimming, cutting, and brush removal. Ongoing vegetation management shall be conducted in accordance with the VMP.
- **HOA funding for annual vegetation and defensible space management.** The HOA shall provide annual funding for implementation of the VMP, including vegetation management and defensible space upkeep.
- **Strategically placed fire breaks and resort edge defensible space.** One-hundred-foot wide shaded fuel breaks shall be established and maintained at select vulnerable areas of the project boundary as indicated in the WPP. The fire break along the northern property boundary shall be installed prior to occupancy of structures north of Butts Canyon Road, and the fire break along the southern property boundary shall be installed prior to the occupancy of structures south of Butts Canyon Road.
- **Roadside reduced fuel zone (40 ft on either side of road beyond 10ft hardscape shoulder).** All roadways shall be bordered on each side by a 50-foot fuel reduction zone, including to the extent that the topography feasibly permits, an area of approximately 10 feet on each side of the roadways improved with hardscape within the total 50-foot fuel reduction zone. Prior to issuance of the first certificate of occupancy for a structure within each subdivision under each final

map, the full roadway fire break network for that subdivision shall have been completed.

- **Restrictions on Debris Burning**. The project CC&Rs will include strict prohibitions against burning of yard waste, cleared vegetation and other forms of debris. No open fires will be permitted.
- **Parking restricted on primary access roads.** Signs shall be installed along project roadways to restrict parking and enforced by the HOA.
- **Opt-out alert and communication system.** All residents, visitors, and employees will be enrolled in an opt-out phone-based communication system, such as Nixle, to receive emergency notifications. This system will supplement the site-wide emergency siren system to ensure that everyone is alerted of important emergency information and updates.

Explanation of Purpose/Effectiveness

This mitigation ensures that the various components of the Wildfire Prevention Plan that require long-term maintenance or upkeep are conducted for the duration of the project. These measures, particularly active vegetation management, were shown in the wildfire modeling to have large landscape-level benefits to reduction of fire intensity. The mitigation measures are projected to further decrease fire behavior throughout the site, improve containment likelihood on the site, decrease rapid fire growth from residual ignitions, and improve structure ignition resistance, due to robust defensible space and other programs adjacent to structures, compared to the design features alone.

The WPP describes a robust suite of risk-reduction strategies aimed at reducing the ignition potential of structures located on the site. In addition to site-scale grazing and active landscape management, these activities include targeted fuel reduction around structures, the creation of a robust non-combustible zone adjacent to buildings, robust home hardening and construction techniques that meet and exceed the applicable building codes, rapid fire response by trained firefighters responding from a new emergency response center, efficient and timely alerting through an early detection and alerting system, and ongoing educational programs for residents and guests. These risk reduction activities are projected to reduce the likelihood of structure ignition for existing and proposed structures on the site by decreasing their ignitability (through home hardening and defensible space), decreasing their exposure (through reductions in fire intensity and ember deposition adjacent to the structures), and decreasing the time it takes for firefighters to arrive at and defend them. Moreover, the WPP and mitigation measures would improve wildfire resilience for the surrounding communities of Hidden Valley Lake and Middletown by slowing fire rate of spread and increasing the time it takes for fire to spread towards these communities, by providing enhanced fire detection and response capabilities, and by improving the likelihood of suppressing fires that occur on the Project Site on east wind days.

Section 4 | Assessment of Environmental Impacts from Project Modifications

4.1 INTRODUCTION AND SCOPE OF ANALYSIS

This section addresses the potential for new significant environmental effects or a substantial increase in the severity of environmental impacts beyond those described in the 2020 EIR as a result of the Project Modifications summarized in **Section 2** of this PREIR. CEQA *Guidelines* Section 15234(d) specifies that for "those portions of an environmental document that a court finds to comply with CEQA, additional environmental review shall only be required as required by the court consistent with principles of res judicata [explained further in **Section 1.1.4** of this PREIR]. In general, the agency need not expand the scope of analysis on remand beyond that specified by the court." The Ruling found that the 2020 EIR adequately complied with CEQA in all areas except for its analysis of impacts relating to community evacuations, which have been addressed in **Section 3** of this PREIR. Due to the minor Project Modifications resulting from the Settlement Agreement, the addition of the Grange Road Connector, and compliance with new regulations that have been adopted since the 2020 EIR, additional analysis is included in this **Section 4** to assess whether the Project Modifications would result in new or substantially more severe significant impacts beyond those described in the 2020 EIR, and whether or not new or modified mitigation measures are required. The Proposed Project would continue to have potential impacts in all of the environmental resource areas listed below and a full description of those impacts and analyses as required by CEQA is included in the 2020 EIR (**Appendix D**). Consistent with CEQA *Guidelines* Section 15234(d), **Section 4** of the PREIR includes an analysis of only those environmental issue areas for which the Project Modifications may result in new or increased impacts.

Some Project Modifications do not involve physical changes to the environment or would not change the Phase 1 Development Area or APE compared to what was analyzed in the 2020 EIR. Throughout this PREIR, the analysis of Project Modifications will be grouped, when appropriate, into the categories shown in **Table 4.1-1**.

The Project Modifications result in a Phase 1 Modified Area of Potential Effect (APE) that is 2,453 acres, approximately 505 acres less than the 2020 Project APE, and a Phase 1 Development Area that is 1,202 acres, approximately 213 acres less than the 2020 EIR Development Area. While the Phase 1 Modified APE has decreased in size, approximately 333 acres of the current APE is proposed within areas that are located outside of the Phase 1 APE as previously depicted in the 2020 Final EIR. These new APE areas encompass the Grange Road Connector APE, new connector roadway segments, a higher concentration of resort residential parcels in the Maha Farms community, and a higher concentration of residential estates in the Bohn Ridge and Denniston Golf Estates communities. **Figure 2-2** illustrates the boundaries of the 2020 APE as compared to the Modified APE. The following APE additions are addressed throughout this section (refer to **Section 2.2** of this PREIR for a complete description):

- Grange Road: The Grange Road Connector APE is approximately 3.8 miles, of which 1.6 miles are located on the off-site Comstock Ranch property and the remaining 2.2 miles are located on the Guenoc Valley Site.
- Connector Roads: the Project Modifications include 4.8 miles of 'Connector Roadways' within the Guenoc Valley Site to ensure there are no dead-end or non-looped roads greater than one mile.
- Parcel Reconfiguration: While the 2020 APE encompassed the entire boundary of most residential parcels, design level details were utilized where available. Because the density of resort residential parcels has increased in certain areas, these design level plans will need to be revised and the entire extent of the resort residential parcels has been included in the Modified APE.

Table 4.1-1: Project Modification Summary

Project Modification	Does Project Modification result in physical changes to the environment beyond the boundaries of the Phase 1 APE or changes to the Development Area in 2020 EIR? (or Original Project)	Categories of Environmental Effects Where Changes Could Occur Beyond 2020 EIR Analysis
Parcel Reconfiguration		
Elimination of Camping Area	No. Overall size of APE and Development Area is reduced.	None. Impacts are reduced.
Elimination of remote residential parcels within the Equestrian Center, Red Hill Estates and Trout Flat Communities, and consolidation of those parcels within the boundaries of the prior APE.	Yes. Overall size of APE is reduced and no changes to the boundary of the APE. However, while the overall *size* of Development Area for residential parcels is the same, the location of the Development Area has shifted to provide a greater density of residential parcels within the previously studied APE. A greater density of residential parcels within certain areas of the APE could have altered impacts depending on the resources in those areas.	▪ Agricultural Resources ▪ Biological Resources ▪ Cultural Resources ▪ Tribal Cultural Resources
Elimination of 12.5 miles of previously proposed roadways and associated utility corridors from consolidation of remote parcels and removal of the camping area.	No. Overall size of APE and Development Area is reduced.	None. Impacts are reduced.
New 'Connector Roadways' (4.8 miles) to ensure there are no dead-end or non-looped roads greater than one mile.	Yes. To the maximum extent feasible, the new Connector Roadways were sited within the APE studied in the 2020 EIR, however several short stretches are located outside of the previously studied APE. This Development Area increase is more than offset by the elimination of 12.5 miles of previously-proposed roads (see previous line).	▪ Agricultural Resources ▪ Biological Resources ▪ Cultural Resources ▪ Tribal Cultural Resources ▪ Hydrology
Grange Road Connector		
Addition of a proposed emergency ingress and egress road called the "Grange Road Connector" that will connect the Guenoc Valley Site with the County-maintained Grange Road.	Yes. The on-site portion of the Grange Road Connector was previously studied in surveys conducted for the 2020 EIR, but was not previously contemplated for development and thus was not included in the defined APE or	▪ Agricultural Resources ▪ Biological Resources ▪ Cultural Resources

Project Modification	Does Project Modification result in physical changes to the environment beyond the boundaries of the Phase 1 APE or changes to the Development Area in 2020 EIR? (or Original Project)	Categories of Environmental Effects Where Changes Could Occur Beyond 2020 EIR Analysis
The Grange Road Connector will be 3.8 miles (14 acres of impact), with 2.2 miles occurring on the Guenoc Valley Site and 1.6 miles on the off-site Comstock Ranch.	Development Area. The off-site portion of the Grange Road Connector was not studied or analyzed in the 2020 EIR. To the maximum extent feasible, the Grange Road Connector utilizes existing ranch roads and vineyard avenues, but some open land areas would be disturbed.	▪ Tribal Cultural Resources ▪ Hydrology ▪ Transportation and Traffic ▪ Wildfire
GHG Emission Reduction Measures		
Residential land use measures, including: ▪ The capacity of residential PV systems shall be equal to or greater than the minimum projected needs of the residential land uses; ▪ Repair and maintenance of PV systems will be the responsibility of the Applicant enforced through the HOA bylaws; ▪ Each residence will have Level 2 or higher EVSE; and ▪ No natural gas infrastructure, including propane tanks or propane distribution pipelines will be allowed for residential structures.	No. The residential PV system capacity can be accommodated in the APE and previously studied Development Area for the solar farms analyzed in the 2020 EIR or within each parcel's specific Development Footprint as allowed by the Design Guidelines. There would be no change in ground disturbance, APE, or Development Area associated with the residential GHG reduction measures. The measures specifying future repair and maintenance of the PV systems involve no ground disturbance.	None. Impacts are reduced.
Commercial land use measures, including: ▪ Repair and maintenance of PV systems will be the responsibility of the Applicant enforced through the CC&Rs of each resort; ▪ No natural gas infrastructure, including propane tanks or propane distribution pipelines, will be allowed for non-residential structures with the exception of natural gas or propane-fueled cooktops in restaurant kitchens and natural gas fueled or propane fire pits in the outdoor patio areas of restaurants; ▪ Performance standards associated with the purchase of GHG Offset Credits prioritizing local credits; and	No. Forty-seven acres of proposed on-site solar farms were included in the APE and Development Area analyzed in the 2020 EIR; these previously studied facilities will have sufficient capacity to accommodate commercial land use energy needs. The measures specifying future repair and maintenance of the PV systems, as well as measures requiring the purchase and performance standards associated with GHG Offset Credits, involve no ground disturbance.	None. Impacts are reduced.

Project Modification	Does Project Modification result in physical changes to the environment beyond the boundaries of the Phase 1 APE or changes to the Development Area in 2020 EIR? (or Original Project)	Categories of Environmental Effects Where Changes Could Occur Beyond 2020 EIR Analysis
▪ An independent, third-party expert on GHG mitigation and offsets will be retained to ensure the Applicant has complied with the GHG emission reduction measures.		
Updated Wildfire Prevention Plan (WPP)		
Addition of 10 feet of hardscape on either side of Project roadways for additional wildfire protection.	No. No changes to the APE or Development Area. The 2020 EIR APE and Development Area included a minimum of 50 feet of width on either side of roadways to encompass the potential fuel reduction zone. The additional 10 feet of hardscape would occur within the previously studied 50-foot fuel reduction zone.	▪ Minor visual change ▪ Hydrology (increase run-off)
Funding and staffing for the on-site Emergency Response Center, including: ▪ Payment to the SLCFPD to staff and equip the Center; ▪ The HOA will be required to contract with and pay for a wildfire expert; and ▪ The Emergency Response Center will have on-site at least one individual with wildfire expertise related to evacuation and emergency access, the cost of which will be paid by the Guenoc Valley Project HOA.	No. The Emergency Response Center was proposed and analyzed in the 2020 EIR and no physical changes will occur to the proposed structure as a result of the Project Modifications. The Project Modifications resulting in changes to staffing and funding sources will involve no ground disturbance that was not analyzed in the 2020 EIR.	None. Impacts are reduced.
The following clarifications to operational practices as recommended by regional wildfire experts: ▪ Mechanical vegetation removal will target dead or dying shrubs and trees; ▪ Landscaping maintenance practices including spacing and pruning; and ▪ Annual inspections by the HOA wildfire expert.	No. No changes to the APE or Development Area. These clarifications pertain to the future wildfire practices during operation of Phase 1 of the Proposed Project, as modified.	None. Impacts are reduced.
Drought Management Plan		
The DMP will guide how the water system operators operate the system during a declared drought and how water users of various types will be expected to modify their water consumption.	No. The Drought Management Plan will not involve ground disturbance.	▪ Hydrology

4.1.1 Environmental Categories with No Changes in Impacts

Aesthetics

Section 3.1 of the 2020 EIR (**Appendix D**) analyzed whether the Original Project would substantially degrade a scenic vista or the existing visual character or quality of public views of the site and its surroundings, or introduce a new source of light or glare. As illustrated in **Table 4.1-1**, the categories of Project Modifications that involve physical changes to the environment include the Parcel Reconfiguration, Grange Road Connector, and Connector Roadways, as well as the additional 10-foot aggregate shoulder along roadways in the Updated WPP category. These Project Modifications will not have a substantial change on aesthetic resources or sources of light or glare compared to what was analyzed in the 2020 EIR. The Parcel Reconfiguration would increase the density of proposed residential estates in areas where residential estates were already proposed and analyzed, and would leave a larger undeveloped wildland-urban interface that would provide a visual buffer from off-site vantage points. The additional 10-foot aggregate shoulder along roadways would function as additional fire protection and pedestrian walkways, and would be consistent with the previously analyzed aesthetic impacts of the proposed road network. The Grange Road Connector would be primarily located on existing ranch roads and would not be visible from public vantage points, and would not degrade the visual character of the area or result in new sources of light or glare beyond those described in the 2020 EIR, as street lighting is not proposed. Project Modifications that do not involve physical changes to the environment, such as the GHG Reduction Measures, the rest of the Updated WPP measures, and the Drought Management Plan (DMP), would have no potential to impact aesthetic resources beyond that described in the 2020 EIR. Therefore, the Project Modifications have no potential to result in new or substantially more severe impacts related to aesthetic resources and these effects are not discussed further in this PREIR.

Noise

Section 3.10 of the 2020 EIR (**Appendix D**) analyzed the potential for the Original Project to result in impacts related to noise, including construction activities generating substantial temporary increases in ambient noise level. The Grange Road Connector alignment would be no closer to off-site sensitive receptors than the project components analyzed in the 2020 EIR and therefore would not result in new or more significant noise impacts, and **Mitigation Measures 3.10-1** and **3.10-2** would continue to apply to the Modified Project to reduce potential impacts to less-than-significant levels. Therefore, the construction of those categories of Project Modifications that involve physical changes to the environment (the Parcel Reconfiguration, Grange Road Connector, Connector Roadways, and the additional 10-foot aggregate shoulder) would have similar construction noise impacts compared to what was analyzed in the 2020 EIR and the same mitigation measures would continue to apply to reduce impacts to less-than-significant levels. The potential for operational activities to generate substantial increases in ambient noise was found to be less than significant for Phase 1 and the Project Modifications would not result in new or more significant operational noise. The potential for increased traffic noise on the local roadway network was found to be a significant and unavoidable impact; the Project Modifications would not change the number of expected vehicle trips and therefore would not change the conclusions of the 2020 EIR with respect to traffic noise. The 2020 EIR also analyzed the potential for the Original Project to expose people to excessive noise levels due to a private airstrip, but the Project Modifications would not result in changes to the use, location, or operation of the helipads that would affect this impact analysis. Project Modifications that do not involve physical changes to the environment (GHG Reduction Measures, the rest of the Updated WPP measures, and the DMP) would have no potential to result in new or substantially more severe impacts related to noise. Therefore, the Project

Modifications would not have new or substantially more severe impacts related to noise, and these effects are not discussed further in this PREIR.

Population and Housing

Section 3.11 of the 2020 EIR (**Appendix D**) analyzed the potential for the Original Project to induce substantial unplanned population growth. The Project Modifications do not include more residential lots or commercial development, and therefore will not have a substantial change to population and housing compared to what was analyzed in the 2020 EIR. The Grange Road Connector would be used for emergency ingress and egress only and would not indirectly induce population growth or allow access to an area that was previously unavailable. Therefore, the Project Modifications have no potential to result in new or substantially more severe impacts related to population and housing, and these effects are not discussed further in this PREIR.

Public Services

Section 3.12 of the 2020 EIR (**Appendix D**) analyzed the potential for the Original Project to result in impacts related to public services including law enforcement, fire protection, schools, and parks and recreation. The Project Modifications do not include more residential lots or commercial development, and therefore will not have a substantial change to law enforcement, schools, or parks and recreation compared to what was analyzed in the 2020 EIR. The Updated WPP and Settlement Agreement Project Modifications include changes to the funding for the proposed emergency center and guarantee on-site staffing and funding to the SLCFPD, which will eliminate the potential for impacts to Fire Protection Public Services. Therefore, the Project Modifications have no potential to result in new or substantially more severe impacts related to public services beyond what was analyzed in the 2020 EIR, and these effects are not discussed further in this PREIR.

Utilities

Section 3.14 of the 2020 EIR (**Appendix D**) analyzed the potential for the Original Project to result in impacts related to utilities including: water supply, wastewater services, and stormwater collection and treatment; solid waste; and electrical, gas, and telecommunication. Project Modifications that involve physical changes to the environment (the Parcel Reconfiguration, Grange Road Connector, Connector Roadways, and the additional 10-foot aggregate shoulder) will not result in a substantial change to demand for utilities compared to what was analyzed in the 2020 EIR because the same total number of hotel and residential units are proposed. Although the total utility demand will remain unchanged, as a result of the Parcel Reconfiguration increasing the density of residential lots, the amount of improvements associated with the utility distribution network will be decreased. Fewer miles of pipeline and electrical conduit will be required, and therefore the potential impacts of the utility improvements will be reduced under the Project Modifications. The Original Project's Stormwater Design Report and the Grading and Drainage Plan (see Appendices SW and SPOD of the 2020 EIR, **Appendix D**) would apply to the Project Modifications, including the relocated residential parcels and the Grange Road Connector. The GHG Reduction Measures that require the electrical demand to be met entirely by on-site renewable energy would reduce or eliminate the potential impact to electrical providers, and the removal of natural gas/propane (except for restaurant cooktops and fire pits in outdoor patio areas of restaurants) will reduce or eliminate the potential impact to gas utilities. Therefore, the Project Modifications would not result in new or substantially more severe impacts related to utilities, and these effects are not discussed further in this PREIR.

Energy

Section 3.15 of the 2020 EIR (**Appendix D**) analyzed whether the Original Project would result in wasteful, inefficient, or unnecessary consumption of energy during construction and operation, or conflict with a State or local plan for renewable energy or energy efficiency. Potential impacts due to construction and operation were potentially significant, and mitigation measures addressing air quality, GHG emissions, and traffic management would reduce the impacts to less-than-significant levels. Those categories of Project Modifications that involve physical changes to the environment (the Parcel Reconfiguration, Grange Road Connector, Connector Roadways, and the additional 10-foot aggregate shoulder) would have similar energy impacts compared to what was analyzed in the 2020 EIR and the same mitigation measures would continue to apply to reduce impacts to less-than-significant levels.

The Project Modifications that do not involve physical change to the environment (GHG Reduction Measures, the rest of the Updated WPP measures, and the DMP) will not have a substantial change to the construction or operational energy expenditure and therefore will not result in a new or substantially more severe impact related to energy use. Project Modifications that increase renewable energy commitments will better align the Proposed Project with State and local plans for renewable energy use and overall energy efficiency, and therefore these Project Modifications would have a beneficial impact in this area. Accordingly, the Project Modifications would not result in a new or substantially more severe impact related to energy use, and these effects are not discussed further in this PREIR.

Indirect Effects

Section 4.1 of the 2020 EIR (**Appendix D**) assessed whether the Original Project would cause indirect effects, which are defined by the CEQA Guidelines Section 15385(a)(2) as those impacts which are "caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems." Project Modifications that do not involve physical change to the environment (GHG Reduction Measures, the Updated WPP measures, and the DMP) would have no potential to cause indirect effects. The Parcel Reconfiguration, Connector Roadways, and additional 10-foot aggregate shoulder will not result in new indirect effects. The Grange Road Connector would be used for emergency ingress and egress only and would not indirectly induce population growth or allow access to an area that was previously unavailable. Therefore, the Project Modifications would not result in new or substantially more severe indirect effects, and such effects are not discussed further in this PREIR.

Significant and Irreversible Environmental Effects

Section 4.4 of the 2020 EIR (**Appendix D**) assessed the potential for the Original Project to cause significant and irreversible environmental effects in accordance with Section 15126.2 (c) of the CEQA Guidelines. As analyzed in the 2020 EIR, implementation of the Original Project would result in the long-term commitment of Project Site resources to urban land use. The Proposed Project would result in or contribute to the conversion of undeveloped land to urban uses, and irreversible consumption of energy and natural resources associated with the future uses on the Guenoc Valley Site. Project Modifications that do not involve physical change to the environment (GHG Reduction Measures, the Updated WPP measures, and the DMP) would have no potential to increase the severity of the conversion of undeveloped land to urban uses, and the Project Modifications that change the Development Area (Parcel

Reconfiguration, Grange Road Connector, and Connector Roadways) result in overall fewer acres of undeveloped land being converted. Project Modifications that increase renewable energy commitments will better align the Proposed Project with State and local plans for renewable energy use and overall energy efficiency, and therefore these Project Modifications would have a beneficial impact as it relates to the irreversible consumption of energy. Therefore, the Project Modifications would not result in new or substantially more severe significant and irreversible environmental effects, and such effects are not discussed further in this PREIR.

4.1.2 Explanation of Checklist Evaluation Categories

The purpose of the analysis below is to determine if the Project Modifications would result in new or substantially more severe environmental impacts beyond those described in the 2020 EIR and the need for new or altered mitigation. Any new information pertaining to the environmental setting or regulatory setting for each issue area is included in each relevant section, with the full description of the regulatory setting and environmental setting for the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure contained in the 2020 EIR (**Appendix D**).

The columns "2020 EIR Conclusions" follow the same format as the 2020 EIR and summarize the results of the separate analyses conducted for the Guenoc Valley Site (for both Phase 1 and future phases), as well as the Off-Site Areas (the Middletown Housing Site and Off-Site Infrastructure). The significance of each issue area from the 2020 EIR, mitigation measures that were recommended (if required), and the level of significance after mitigation is summarized in these columns. The entire analysis for each impact area is contained in **Appendix D**.

In the column "Do Project Modifications Result in New or Substantially More Severe Significant Impacts?", a "no" answer does not necessarily mean that there are no potential impacts in the environmental category, but that there is no relevant change in the condition or status of the impact compared to the analysis contained within the 2020 EIR. A 'yes' answer in this column indicates that the Project Modifications may result in a new impact or a substantial increase in the severity of an impact that has not already been evaluated and mitigated by the previous EIR. If a 'yes' answer is given, additional mitigation measures may be specified, or modifications may be made to existing mitigation measures, and additional analysis is provided to conclude whether or not the Project Modifications result in new or substantially more severe impacts after mitigation.

4.2 LAND USE AND AGRICULTURE

4.2.1 Introduction

The 2020 EIR, Volume II, Section 3.2.2 includes a detailed description of the environmental setting related to the land use and agricultural resources of the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety within this PREIR. **Section 4.2.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR. There have been no substantial changes to the land use and agricultural "Regulatory Setting" since preparation of the 2020 EIR. The full discussion of the environmental and regulatory settings is provided in the 2020 EIR (**Appendix D**). **Section 4.2.3** of this PREIR provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects, and mitigation is discussed in **Section 4.2.4**.

4.2.2 Environmental Setting

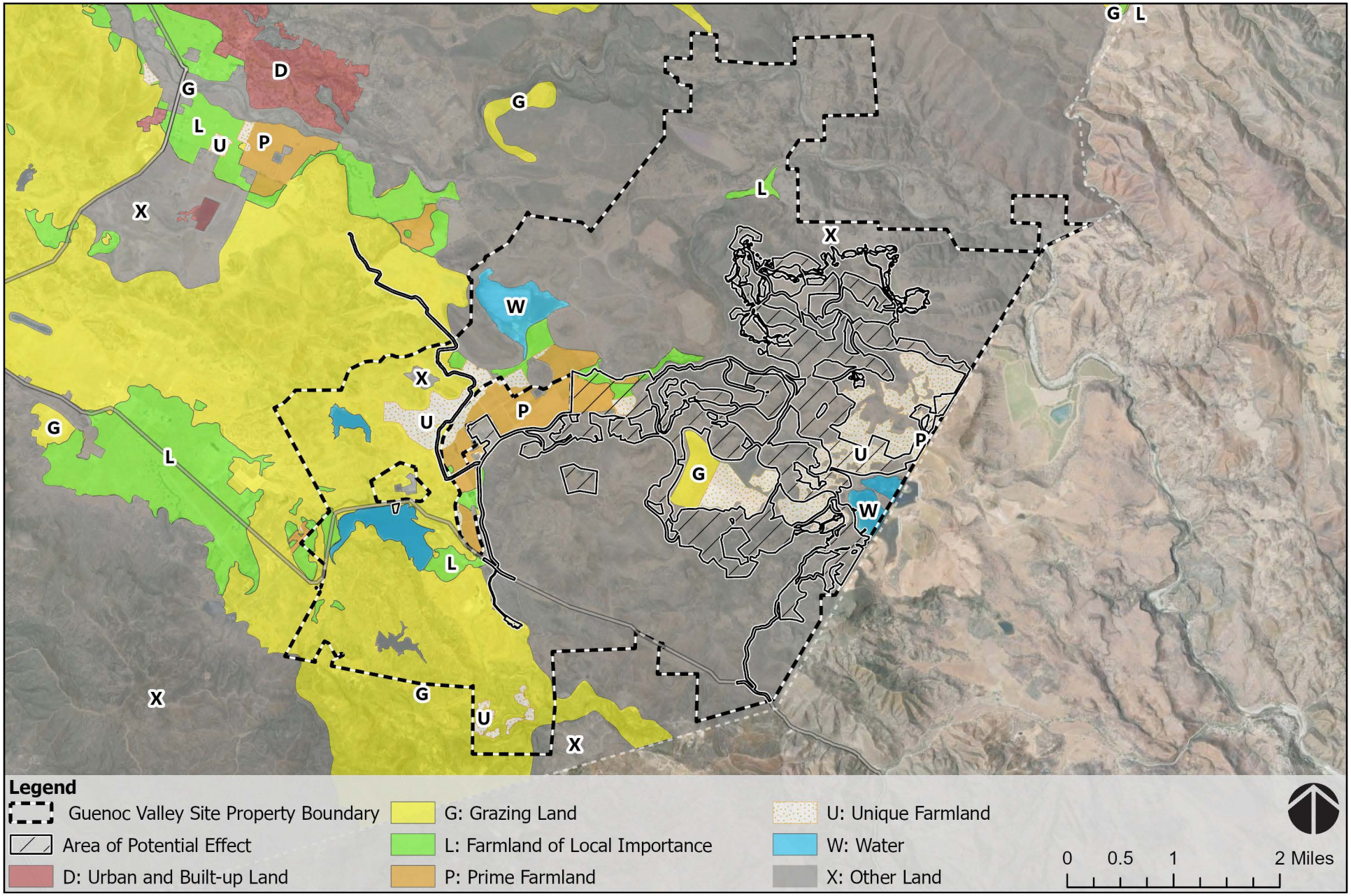
Agricultural Resources

The Farmland Mapping and Monitoring Program (FMMP) applies one of six farmland designations to land: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, and Other; the definitions can be found in Section 3.2.2 of the 2020 EIR, Volume II. These classifications combine the actual farming use of the land with the technical soil ratings that determine a land area's suitability for farming. The California Department of Conservation strives to update these maps every two years on even calendar years, to ensure the maps reflect the continuous improvements in mapping technology and allows each cycle to be more accurate (Department of Conservation, 2023). At the time of the publication of the 2020 EIR, the 2016 FMMP mapping data was available, but in May 2024 updated 2020 mapping was published for Lake County (Department of Conservation, 2024). The 2016 FMMP mapping for the entire Guenoc Valley Site is depicted in Figure 3.2-1 of the 2020 EIR, and the updated 2020 FMMP mapping for the Guenoc Valley Site and Grange Road Connector APE is shown in **Figure 4-1a**. The Grange Road Connector is mapped primarily as Grazing Land with small areas of Prime Farmland and Farmland of Local Importance, as shown in **Figure 4-1b**. Throughout the Guenoc Valley Site, additional vineyards have been mapped as Unique Farmland and some areas previously mapped as Farmland of Local Importance were remapped in the 2020 FMMP as Unique Farmland, particularly in and around the Upper Bohn Lake area. At the time of the 2020 EIR, the Guenoc Valley Site contained approximately 398 acres of Unique Farmland as mapped by the FMMP, and now there are over 913 acres of mapped Unique Farmland (Department of Conservation, 2024).

Under the Williamson Act, landowners may enter into contracts with local governments by which, in exchange for agreeing to keep land in agricultural use for ten or more years, the landowners gain a preferential assessment for tax purposes. In Lake County, parcels zoned as Agricultural Preserve Zones may be enrolled in Williamson Act contracts. The Comstock Ranch property immediately north of the Project Site is zoned as Rural Lands (RL) and therefore is not under a Williamson Act Contract (Lake County, 2023b). As stated in the 2020 EIR, none of the Guenoc Valley Site parcels are enrolled in a Williamson Act Contract.

Forestry Resources

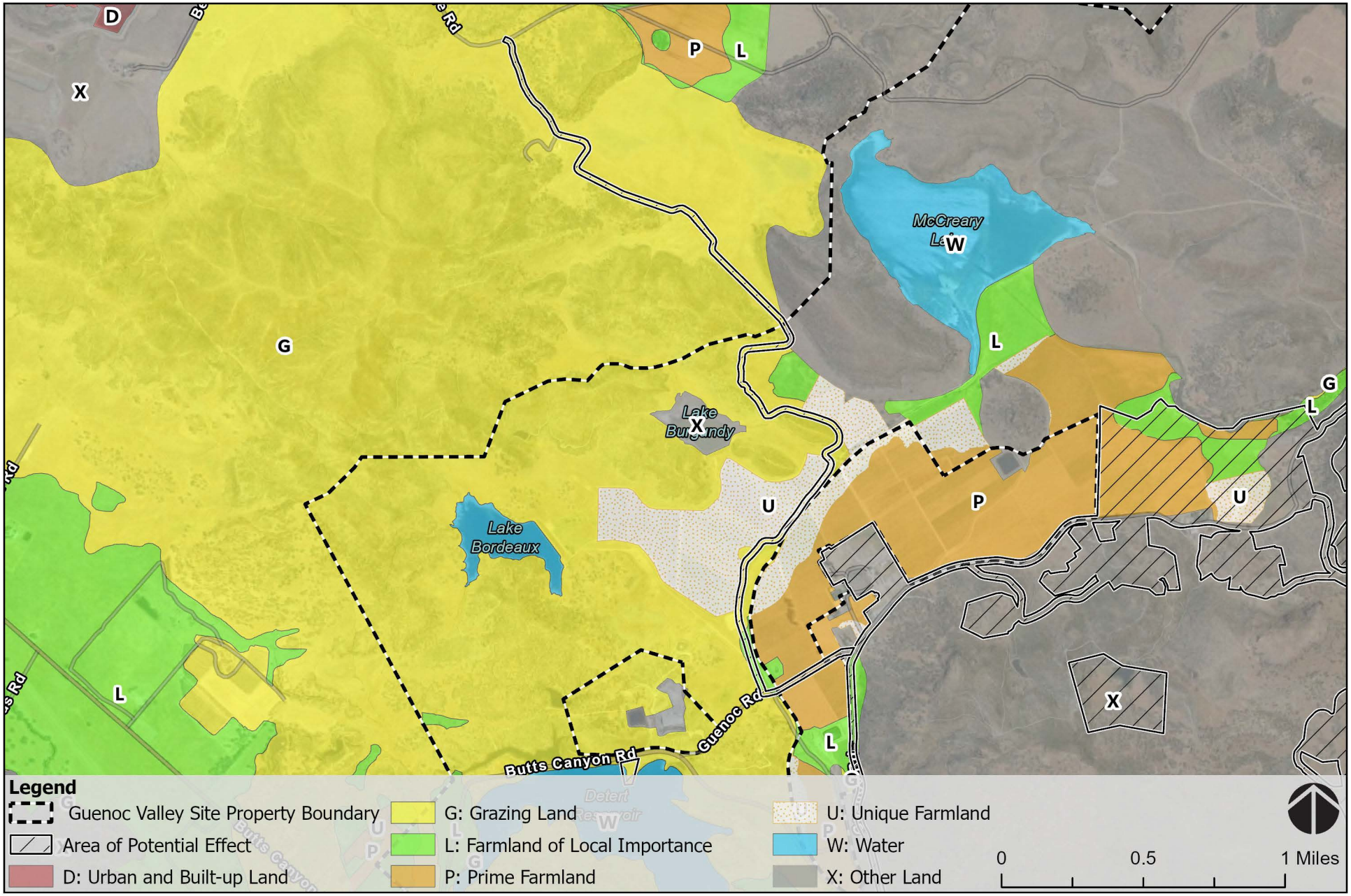
Forest land is defined in PRC Section 12220(g) as land that can "support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Timberland is defined in PRC Section 4526 as "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees." Timberland Production Zone is an area zoned to be devoted to growing and harvesting timber or for growing and harvesting timber and compatible uses, as defined in the Government Code 51104. As discussed further in **Section 4.4** of this PREIR**,** the terrestrial habitats within the Grange Road Connector are largely agriculture, developed lands, and non-native annual grasslands, with smaller amounts of rock outcrop, leather oak chaparral, and blue oak woodland. None of these habitats are considered timber or forest land; impacts to oak woodlands are discussed in **Section 4.4**.



Source: California Important Farmland, Farmland, California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, FMMP, California Farmland; County of Napa, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of

FIGURE 4-1a

FARMLAND MAP



Source: California Important Farmland, Farmland, California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, FMMP, California Farmland; Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, County of Napa,

FIGURE 4-1b

GRANGE ROAD FARMLAND MAP

Land Use and Zoning

The Lake County General Plan 2008 designates the Grange Road Connector as Rural Lands and Agriculture (off-site portion) and Resource Conservation, Agriculture, and Rural Residential (on-site portion) (**Figure 4-2**; Lake County, 2008). Brief descriptions of these land use designations are provided below, and the complete descriptions are found in the 2020 EIR, Volume II, Section 3.2.2 (**Appendix D**):

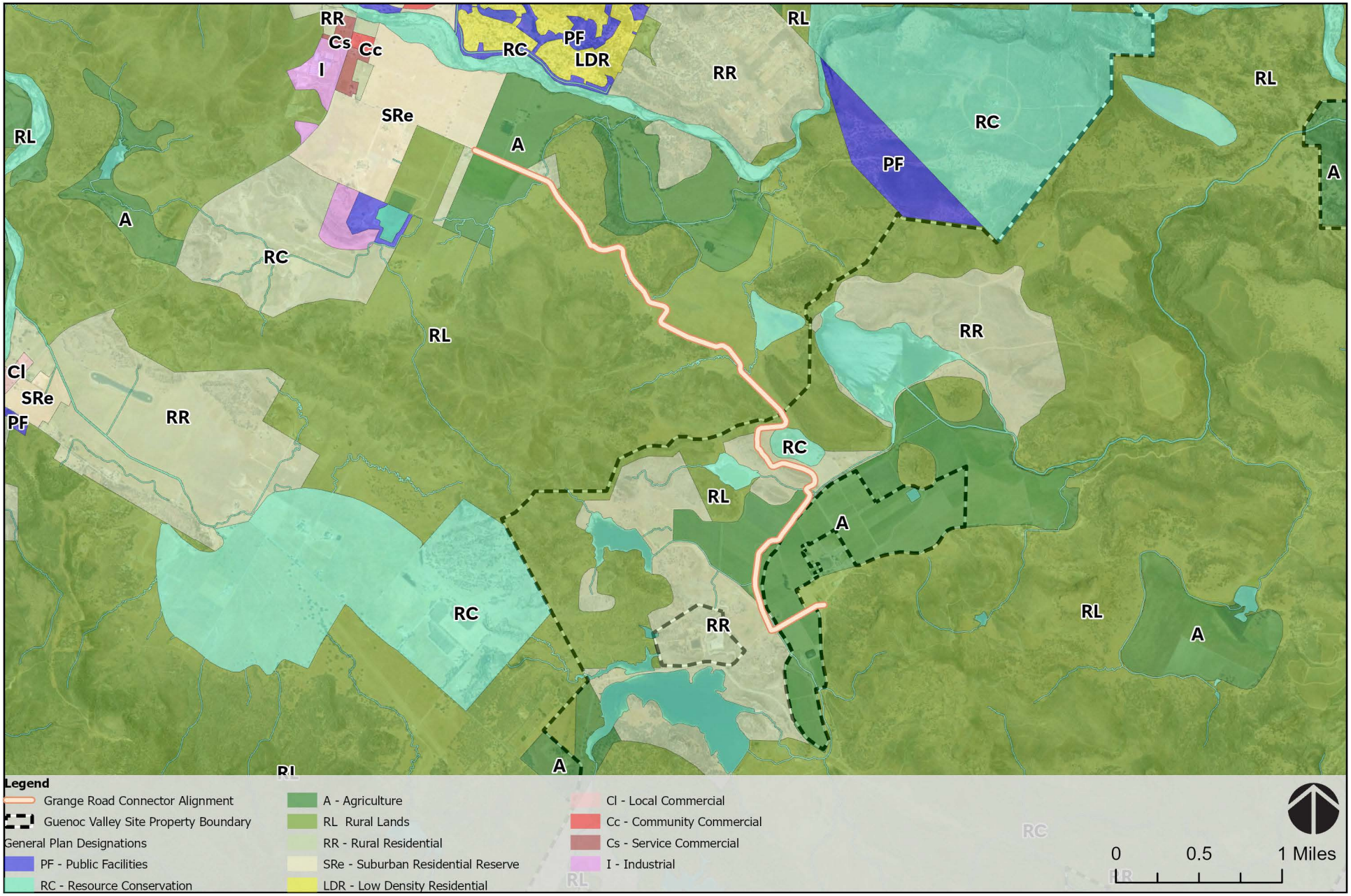
- **Agriculture:** This land use category includes areas with prime farmland, vineyard soils and grazing lands, along with areas characterized by steep slopes and limited services. One purpose of this land use category is to protect the County's valuable agricultural resources and to prevent development that would preclude its future use in agriculture.
- **Rural Lands:** The purpose of this land use category is to allow rural development in areas that are primarily in their natural state, although some agricultural production, especially vineyards, can occur. The category is appropriate for areas that are remote, or characterized by steep topography, fire hazards, and limited access. Typical uses permitted by right include, but are not limited to, animal raising, crop production, single family residences, game preserves and fisheries.
- **Rural Residential:** This land use category is designed to provide single-family residential development in a semi-rural setting. Large lot residential development with small-scale agricultural activities is appropriate. These areas are intended to act as a buffer area between the urban residential development and the agricultural areas of the County.
- **Resource Conservation:** The purpose of this land use category is to assure the maintenance or sustained generation of natural resources within the County. The highest priority for these lands is to provide for the management of the County's natural infrastructure. This management should include, but is not limited to, functioning as watershed lands which collect precipitation and provide for the important filtering of water to improve water quality.

The Lake County Zoning Ordinance designations for the Grange Road Connector are Agriculture (A), Rural Lands (RL), and Rural Residential (RR) (both on- and off-site portions), as shown on **Figure 4-3**. The purpose of each designation is:

- **Agriculture (A):** To protect the County's agricultural soils, provide areas suitable for agriculture, and prevent development that would preclude their future use in agriculture.
- **Rural Lands (RL):** To provide for resource related and residential uses of the County's undeveloped lands that are remote and often characterized by steep topography, fire hazards, and limited access.
- **Rural Residential (RR):** To provide for single-family residential development in a semi-rural setting along with limited agriculture.

4.2.3 Impacts

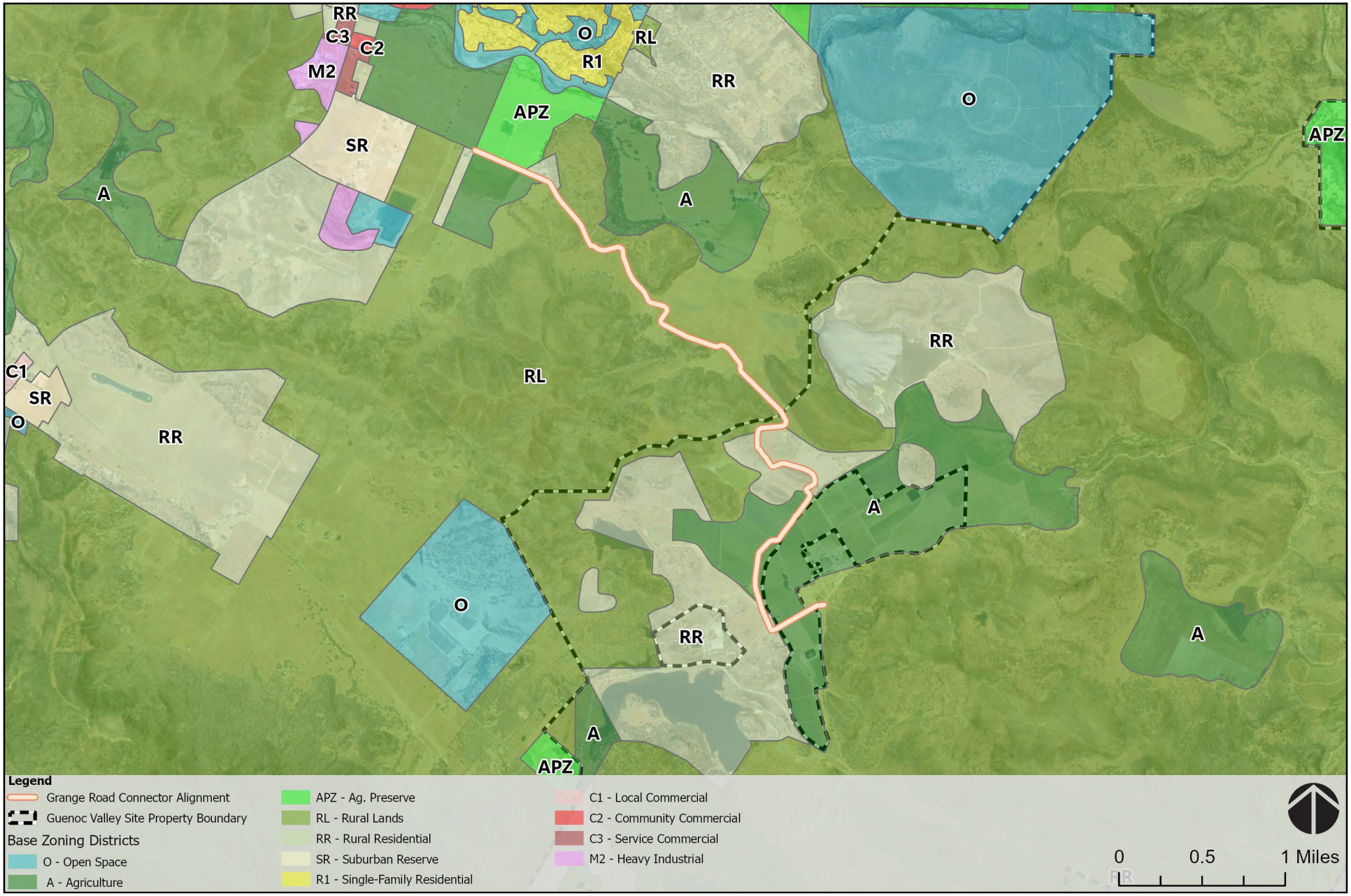
The land use and agricultural resource impacts of the Original Project were determined by analyzing changes to the existing conditions that would occur as a result of the proposed land uses within the area. This analysis of the Project Modifications follows the same methodology outlined in Section 3.2.4 of the 2020 EIR, focusing on whether the Project Modifications would have new or substantially more severe significant effects than those described in the 2020 EIR. Refer to Section 3.2.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology and significance criteria relating to land use and agricultural impacts.



Source: Lake County Community Development and General Plan;
Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Esri,

FIGURE 4-2

EXISTING LAKE COUNTY GENERAL PLAN LAND USE DESIGNATIONS



Source: Lake County Community Development and Zoning;
Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Esri,

FIGURE 4-3

EXISTING LAKE COUNTY ZONING DESIGNATIONS

IMPACT 3.2-1	CONFLICT WITH LAND USE PLANS, POLICIES, OR REGULATION ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Less than Significant	Less than Significant (Workforce Housing) and No Impact (Infrastructure)	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

The Original Project included the following amendments or updates to existing land use plans which were analyzed in the 2020 EIR: an amendment to the Special Study Area map of the Middletown Area Plan; an amendment to the Lake County General Plan land use map designations to Resort Commercial; and a Zoning Ordinance Amendment to introduce the new "GVD" (Guenoc Valley District) zoning district. The Project Modifications would result in smaller average residential parcel size and denser neighborhoods as shown in **Figures 2-3** and **2-4**, but would not otherwise change the land use designations being sought by the Original Project or the conclusions within the 2020 EIR. The inclusion of the Grange Road Connector would not fundamentally change the surrounding land uses of the off-site Comstock Ranch property or the affected portion of the Guenoc Valley Site. Although widening and paving of the existing ranch roads and new road construction would permanently replace a small quantity of rural and agricultural lands, the vast majority of adjacent land uses would not change. The GHG-related Project Modifications would ensure that the proposed development is more consistent with local, State, and federal policies related to climate change and minimizing GHG emissions. The Modified Project would not result in any new significant environmental effects or an increase in the severity of previously identified effects associated with conflicts to land use plans, policies, or regulations as compared to the 2020 EIR.

IMPACT 3.2-2	CREATE LAND USE CONFLICTS OR BE INCOMPATIBLE WITH EXISTING OR PROPOSED ADJACENT LAND USES		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Less than Significant	No
Mitigation Measures	MM 3.2-1: Right to Farm Disclosure	None Required	No Modifications Necessary
Significance After Mitigation	Less than Significant	N/A	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

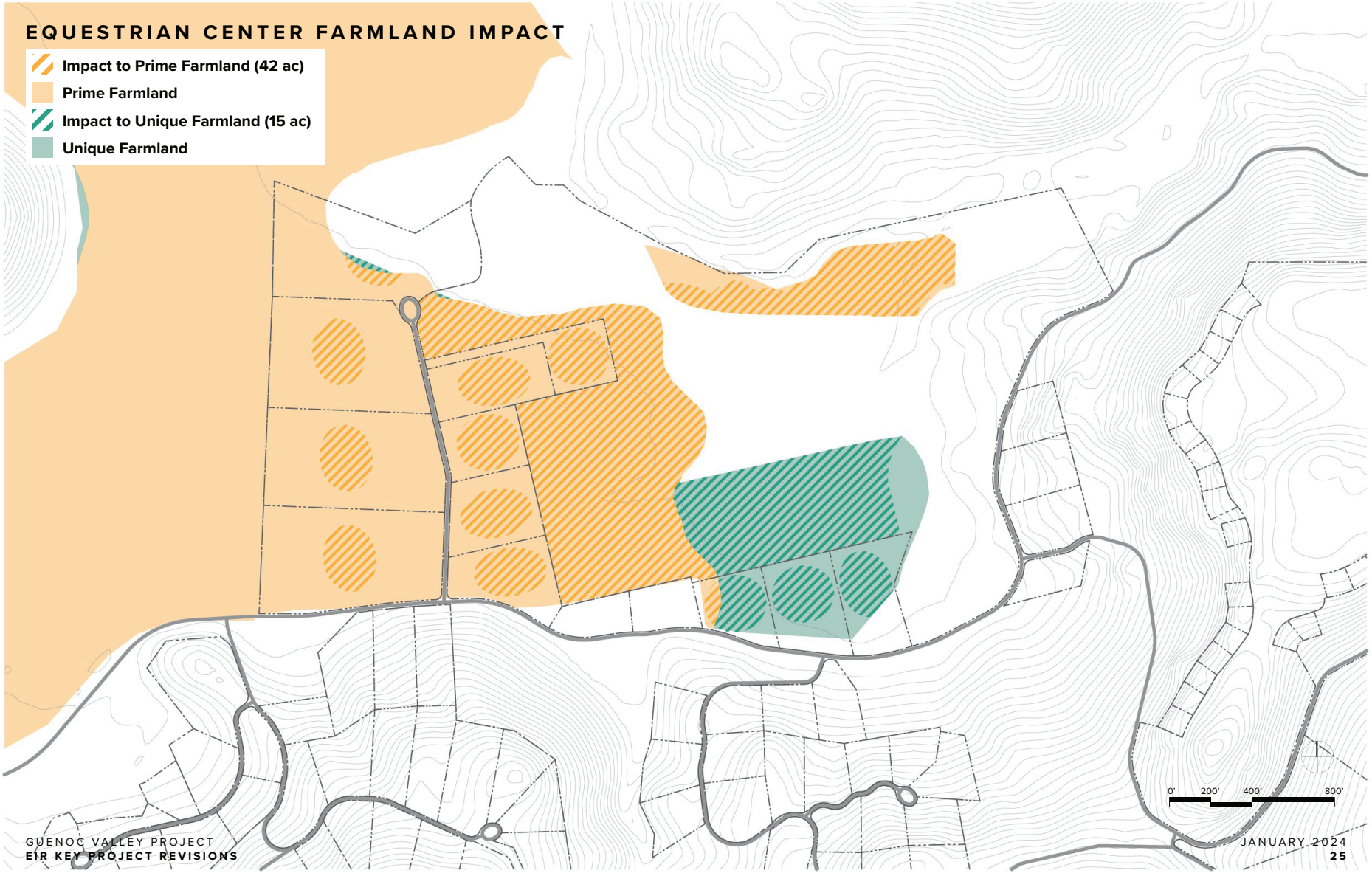
As analyzed in the 2020 EIR, development of the Proposed Project would change the character of the Guenoc Valley Site and replace rural and agricultural lands with residential and commercial uses, supporting infrastructure, and other utilities. The 2020 EIR found that the proposed development would not result in compatibility conflicts with surrounding residences, but there could be potentially significant impacts related to the incompatibility of the Proposed Project with ongoing agricultural operations. **Mitigation Measure 3.2-1** ensures compliance with the County's Right-to-Farm Ordinance and requires a description of adjacent agricultural operations to ensure potential buyers are fully informed on potential noise, odor, and dust associated with active agriculture. The Project Modifications would not change the number of proposed residential lots or introduce more development that would increase the severity of impacts to active agricultural operations. The Grange Road Connector would not result in new or substantially more significant conflicts with agricultural operations, as the road would only be used in the event of an emergency and would not introduce daily traffic to the Comstock Ranch property or through the northern portion of the Project Site that would conflict with the existing grazing and vineyard land uses. **Mitigation Measure 3.2-1** would continue to apply and would reduce impacts to less than significant for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with land use conflicts as compared to the 2020 EIR.

IMPACT 3.2-3	CONVERT PRIME FARMLAND, UNIQUE FARMLAND, OR FARMLAND OF STATEWIDE IMPORTANCE (IMPORTANT FARMLAND), AS SHOWN ON MAPS PREPARED PURSUANT TO THE FMMP OF THE CALIFORNIA RESOURCES AGENCY, TO NON-AGRICULTURAL USE		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant (Phase 1) and Potentially Significant (Future Phases)	Less than Significant (Workforce Housing) and No Impact (Infrastructure)	No
Mitigation Measures	MM 3.2-2: Agricultural Conservation	None Required	No Modifications Necessary
Significance After Mitigation	Significant and Unavoidable	N/A	No (Impact remains Significant and Unavoidable)

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, agricultural resources on the Guenoc Valley Site include Prime Farmland and Unique Farmland (collectively referred to as 'Important Farmland'). The 2020 EIR determined that the Proposed Project has the potential to impact farmland through development at the Equestrian Center Community, Maha Farm Community, and Back of House area, which is a significant impact. **Mitigation Measure 3.2-2** requires acre for acre long-term permanent protection of farmland of equivalent quality, so every acre of Prime and Unique Farmland converted would result in the same number of acres of Important Farmland preserved elsewhere on the property or in the vicinity. While **Mitigation Measure 3.2-2** would reduce the level of impact, there would still be a net loss of Important Farmland as a result of Phase 1 of the Proposed Project, and the impact was identified as significant and unavoidable in the 2020 EIR.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to impact additional Important Farmland. The remote parcels that were relocated were on areas mapped as 'Other Land' and some of them, particularly within the Equestrian Center Community, were relocated to areas of Prime Farmland, Unique Farmland, and Farmland of Local Importance (**Figure 4-4**). While the same 1.5-acre development envelope is associated with each residential estate lot, the Parcel Reconfiguration has resulted in increased density of lots within mapped Important Farmland. In addition to the Parcel Reconfiguration changing where on the Guenoc Valley Site the impacts will occur, the underlying FMMP mapping of Important Farmland has undergone two revisions in 2018 and in 2020 since the 2016 data that was available for use in the 2020 EIR.



Source: SWA Group, 2024

FIGURE 4-4

EQUESTRIAN CENTER FARMLAND IMPACT WITH MODIFICATIONS

The updated 2020 FMMP data has vastly expanded the area designated as Unique Farmland across the Guenoc Valley Site, particularly near the Upper Bohn Lake area, and there are now approximately 515 additional acres of mapped Unique Farmland on the Guenoc Valley Site, as shown in **Figure 4-5a**.

To further illustrate the expanded FMMP mapping, **Figure 4-5b** depicts aerial photographs from 2016 and 2022 near the Upper Bohn Lake area where the most extensive mapping change occurred. **Figure 4-5b** shows the 2016 aerial photograph with the 2016 Important Farmland data overlaid on the left side (which was available at the time of the 2020 EIR), while the right side shows a 2022 aerial photograph with the most recent 2020 Important Farmland data overlaid. As demonstrated therein, the extent of planted vineyard or farmland has not changed, nor has the Modified APE in this area (refer to **Figure 2-3a**), but the mapped Important Farmland increased to more accurately reflect the planted vineyard. The increase in mapped Important Farmland is due primarily to refinements in mapping technologies conducted by the Department of Conservation, and not due to changes in the underlying resources or soil characteristics. Because the amount of Important Farmland impacts analyzed in the 2020 EIR was based on 2016 FMMP data that has been superseded, the Original Project APE was recalculated against the current (2020) FMMP data. **Figure 4-5c** shows the 2020 APE (left) and the Modified APE (right) on the current FMMP data and the impacts are presented in **Table 4.2-1**.

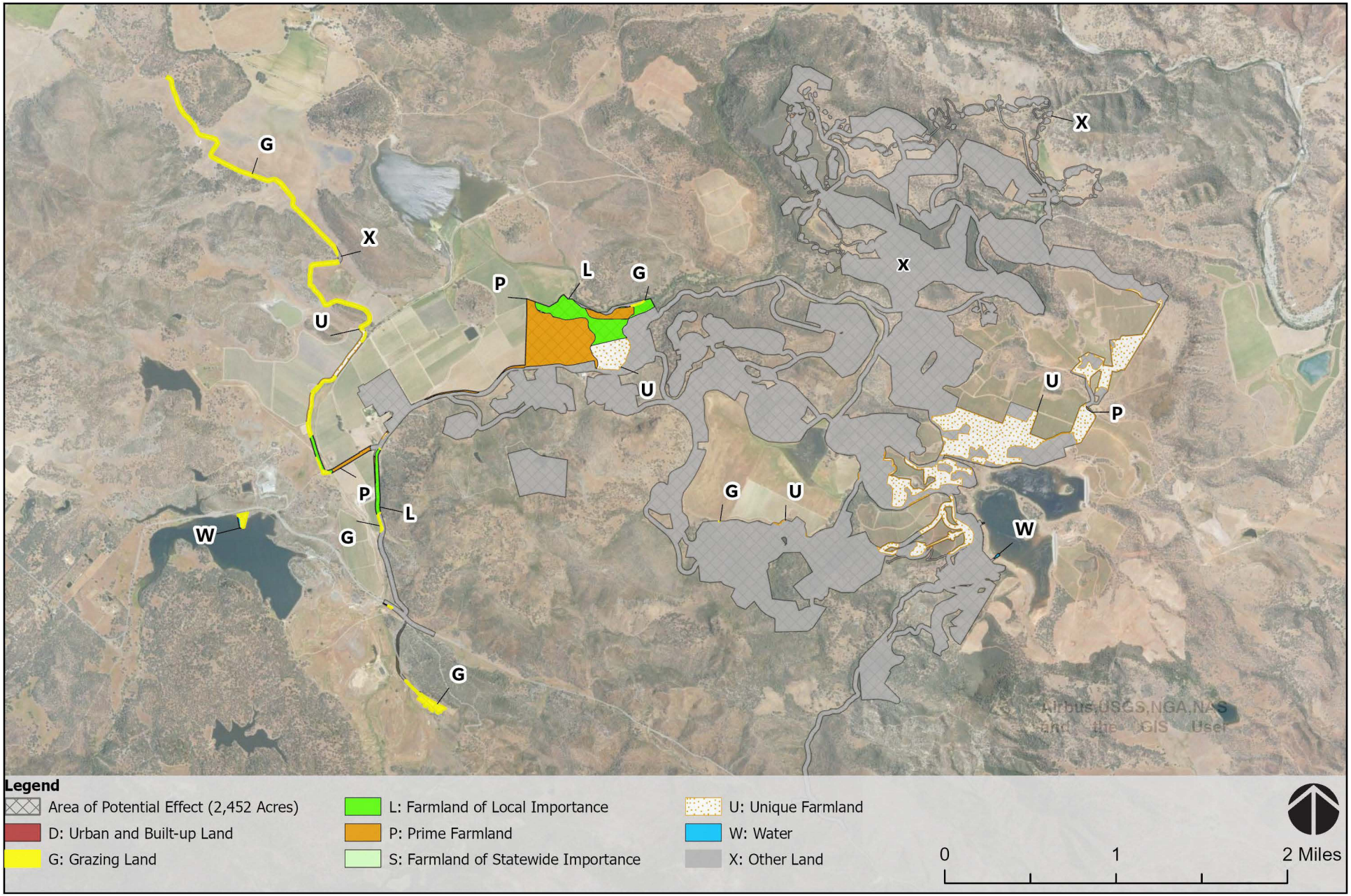
Table 4.2-1: 2020 FMMP Farmland Impacts

2020 FMMP Data: Farmland Type	2020 APE Impacts	Modified APE Impacts	Change
Prime Farmland	110.0	86.7	-23.3
Unique Farmland	168.1	193.6	+25.5
Farmland of Local Importance	47.3	45.2	-2.1
Total	**325.4**	**325.5**	**+0.1**

Source: Department of Conservation, 2024

The amount of unique farmland that will be impacted by the Modified APE increased, although there were significant decreases in the amount of Prime Farmland and a small decrease in the amount of Farmland of Local Importance that will be impacted by the Modified APE when compared to the original 2020 APE. Overall, the impacts to Important Farmland of the Modified APE remain relatively consistent (+0.1 acre) with the impacts of the 2020 APE when compared to the current FMMP data.

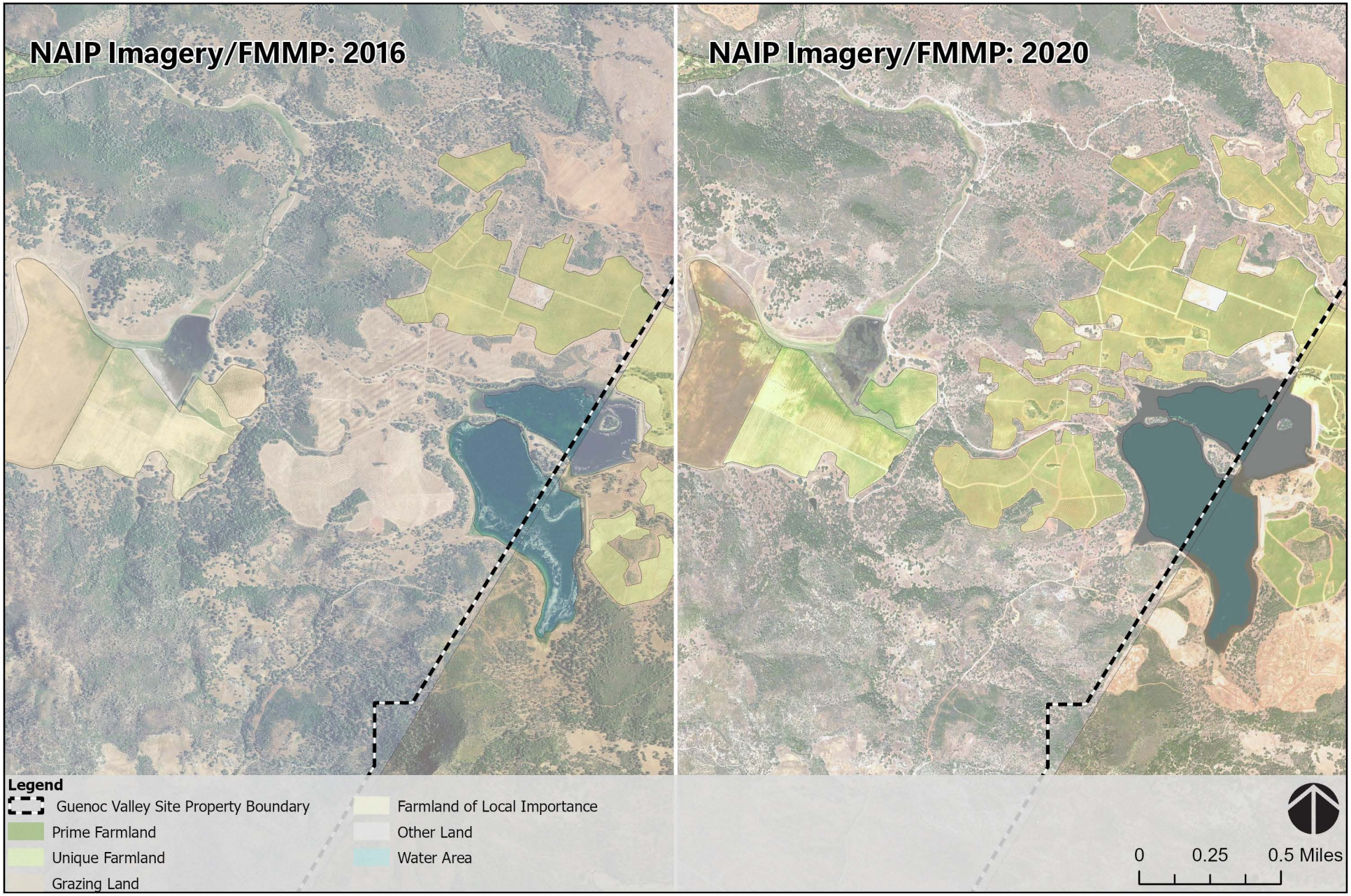
Therefore, the physical impacts of the Project Modifications remain fairly consistent when compared to the 2020 EIR, and **Mitigation Measure 3.2-2** will continue to require acre-for-acre permanent preservation of impacts to mapped farmland. **Mitigation Measure 3.2-2** will still apply to the Modified Project, but will not result in a reduction to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or an increase in the severity of previously identified effects associated with farmland, and the impact will remain significant and unavoidable for the same reasons described in the 2020 EIR.



Source: Williamson Act enrollment within the participating jurisdiction, Division of Land Resource Protection;
Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Esri, USDA FSA

FIGURE 4-5a

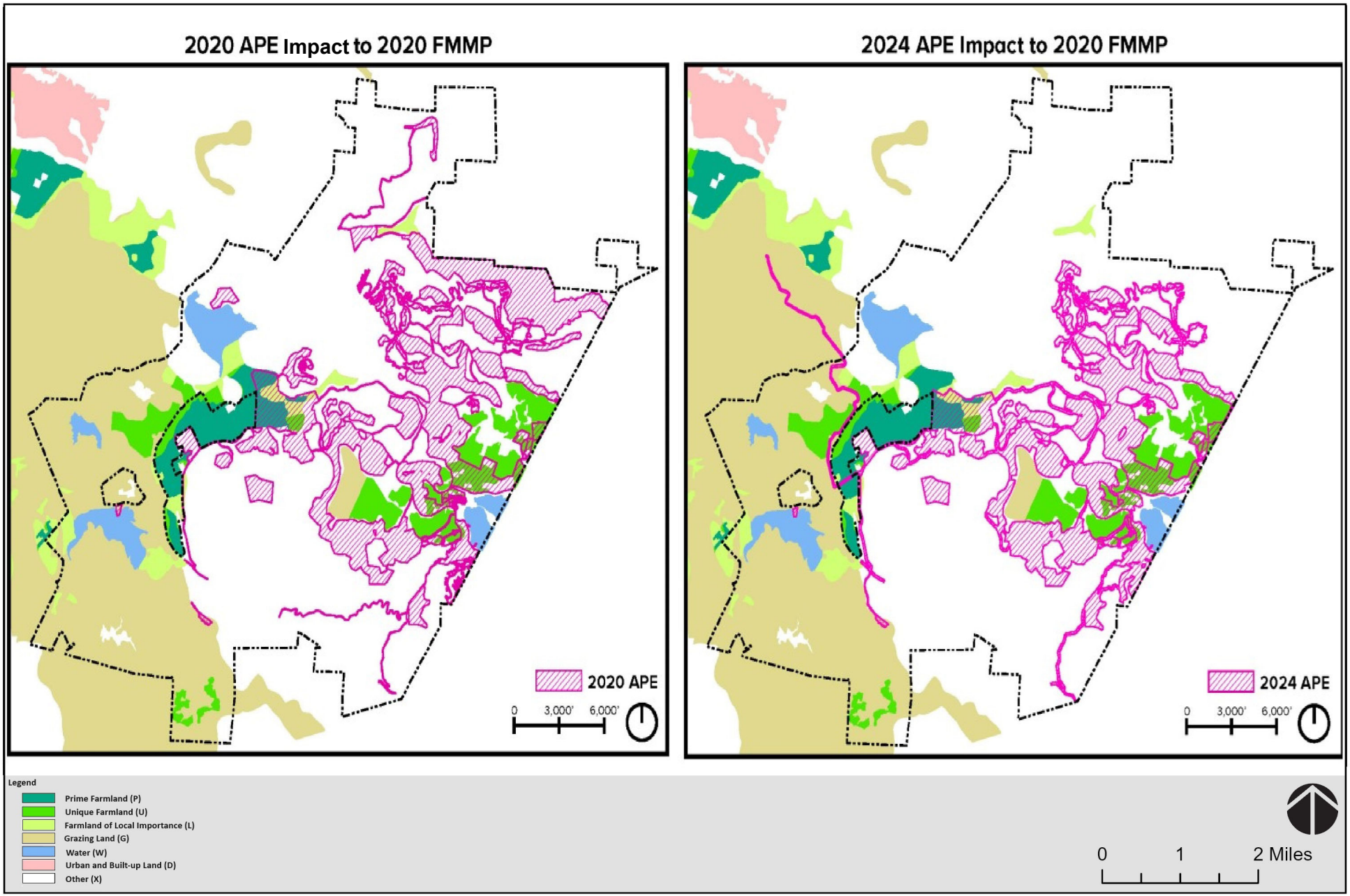
FARMLAND WITHIN MODIFIED PHASE 1 APE



Source: Lake County Community Development and General Plan; Farmland Mapping and Monitoring Program, Division of Land Resource Protection, California Department of Conservation

FIGURE 4-5b

PLANTED VINEYARDS NEAR UPPER BOHN



Source: Lake County Community Development and General Plan; Farmland Mapping and Monitoring Program, Division of Land Resource Protection, California Department of Conservation

FIGURE 4-5C

FMMP 2016 vs 2020

IMPACT 3.2-4	CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	No Impact	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, approximately 1,097 acres of land on the Guenoc Valley Site currently zoned for agriculture would be amended to the new GVD zoning district under the Proposed Project. The Guenoc Valley Zoning District would include an Agricultural Preserve Combining District, approximately 1,743 acres in size, which would have certain restrictions on development to preserve agricultural lands on the site. As a result, the 2020 EIR determined that the potential for the Proposed Project to result in conflicts with existing agricultural zoning would be less than significant.

The Project Modifications would not change the proposed GVD zoning district, but the Agricultural Preserve Combining District would be reduced by approximately 90 acres to accommodate the Parcel Reconfiguration. Nevertheless, the overall size of the Agricultural Preserve Combining District would be 1,653 acres under the Project Modifications, which is roughly 556 acres more than the area of currently zoned agricultural land within the overall Guenoc Valley Site. The Project Modifications do not propose new land uses that would result in conflicts with existing agricultural zoning. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with conflicts with agricultural zoning as compared to the 2020 EIR.

IMPACT 3.2-5	RESULT IN THE LOSS OF FOREST LAND OR CONVERSION OF FOREST LAND TO NON-FOREST USE		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	No Impact (Phase 1) and Less than Significant (Future Phases)	Less than Significant (Workforce Housing) and No Impact (Infrastructure)	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, neither the Guenoc Valley Site nor adjacent properties are zoned for timberland, forest land, or timberland production. Approximately 61 acres of Douglas fir forest concentrated in the southernmost portion of the site is considered the only commercially harvestable forest land within the Guenoc Valley Site, but as analyzed in the 2020 EIR, no Phase 1 development is proposed for this area and therefore there was no impact.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would add the Grange Road Connector and Connector Roadways to the area that will be graded and disturbed and the Parcel Reconfiguration would increase the density of development in the central portion of the site, however none of these Project Modifications would impact the Douglas fir forest in the southern portion of the property. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with forest land as compared to the 2020 EIR.

IMPACT 3.2-6	CUMULATIVE LAND USE AND AGRICULTURAL IMPACTS		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As explained further in the 2020 EIR and **Section 4.13** of this PREIR, the context for evaluation of potential cumulative impacts for land use and agriculture varies depending on the specific impact being evaluated. For land use consistency and compatibility, the cumulative context is the immediate vicinity of the Guenoc Valley Site where potential incompatibilities could occur at the interface of the property boundary, while the cumulative context for agricultural resources is Lake, Napa, and Sonoma counties which contain a wide variety of agricultural uses and similar soils that are found in these adjacent areas (see **Appendix D**). Planned cumulative projects in the region are described in **Table 4.13-1**, and while some changes have occurred to the cumulative projects since the 2020 EIR, the main projects that will bring new people into the region (i.e., buildout of the Hidden Valley Community, Valley Oaks Community, and the Guenoc Valley Water Rights Modification Project) and the types of projects proposed (i.e., residential development, commercial, and agricultural development) remain consistent from the 2020 EIR.

As the cumulative setting area continues to develop, land use conflicts could occur as residential development is located adjacent to existing rural uses and as any urban development is located adjacent to active agriculture. However, land use conflicts are site-specific and generally do not result in cumulative, community-wide impacts. The Original Project's contribution to significant impacts related to land use compatibility were found to be less than significant, and the Project Modifications would not result in new significant environmental effects or an increase in the severity of previously identified significant effects. No additional mitigation for cumulative development relating to land use compatibility would be required.

Planned cumulative projects in the region are described in **Table 4.13-1**, and there has been a slight increase in agricultural projects (primarily cannabis development applications) since the preparation of the 2020 EIR. Within south Lake County, a majority of agricultural land has been designated Important Farmland, including portions of the Guenoc Valley Site. Loss of farmland is occurring throughout California, including in Lake County, and the 2020 EIR determined that the loss of Important Farmland would be cumulatively significant. The Project Modifications in combination with a change in the FMMP mapping designations within the site result in an increase the amount of Important Farmland that would be converted, but the same mitigation measure requiring the off-set through on-site mitigation would apply to the Modified Project, resulting in a larger area of preserved farmland. The 2020 EIR determined

that **Mitigation Measure 3.2-3** would reduce the Original Project's contribution to the cumulative effects to less than significant levels, and this mitigation measure would reduce the impacts of the Modified Project for the same reasons explained in the 2020 EIR. No additional mitigation for cumulative impacts would be required.

4.2.4 Mitigation Measures

No changes to the mitigation measures are warranted as a result of the Project Modifications. A full list of the mitigation measures is included in the MMRP in **Section 5** of this PREIR.

4.3 AIR QUALITY

4.3.1 Introduction

Section 3.3.2 of the 2020 EIR includes complete air quality setting information (e.g., topography, climate, meteorology, pollutants, etc.) related to the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety here. **Section 4.3.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR and **Section 4.3.3** describes regulations that are new or updated since preparation of the 2020 EIR. The full discussion of the environmental setting and regulatory setting are available in the 2020 EIR (**Appendix D**). **Section 4.3.4** of this PREIR describes the methods of and thresholds of significance, and provides a discussion on whether the Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects. Mitigation for impacts to air quality is discussed in **Section 4.3.5**.

4.3.2 Environmental Setting

The Grange Road Connector APE is located in the Lake County Air Basin (LCAB) within the jurisdictional boundaries of the Lake County Air Quality Management District (LCAQMD), similar to the Guenoc Valley Site. Ambient concentrations of air pollutants are determined by the amount of emissions released by pollutant sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution of air pollutants include terrain, wind, atmospheric stability, and the presence of sunlight. The LCAB is bounded on all sides by mountains that create a bowl-like air basin that minimizes the influence of outside meteorology. These factors affect air quality on a regional scale throughout the LCAB, and are similar for the off-site portion of the Grange Road Connector as well as the Guenoc Valley Site itself.

Pollutants of Concern

Air pollutants emitted by stationary and mobile sources are regulated by federal and state law. Certain regulated pollutants are known as "criteria air pollutants" or "CAPs" and are emitted as primary and secondary pollutants. The CAPs are ground-level ozone (O_3), carbon monoxide (CO), nitrogen oxides (NO_X), sulfur dioxide (SO_2), particulate matter (PM), and lead (Pb). Refer to Section 3.3.2 of the 2020 EIR (**Appendix D**) for a complete description of these CAPs. The U.S. Environmental Protection Agency (USEPA) has developed National Ambient Air Quality Standards (NAAQS) for the CAPs. Primary standards are designed to protect the public health and secondary standards are intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. At the state level, California Air Resources Board (CARB) has developed California Ambient Air Quality Standards (CAAQS). The federal and State ambient standards were developed independently, with differing

purposes and methods. As a result, the federal and State standards differ in some cases. In general, the CAAQS are more stringent, particularly for ozone and particulate matter (PM_{10} and $PM_{2.5}$), than the federal standards. **Table 4.3-1** shows the current attainment status of the LCAB with the NAAQS and CAAQS, which demonstrates that the LCAB is in attainment or unclassified for all CAPs, consistent with conditions when the 2020 EIR was published.

Table 4.3-1: LCAB CAAQS and NAAQS Attainment Status

Criteria Air Pollutant	Averaging Time	CAAQS Status	NAAQS Status
Ozone	1-Hour	Attainment	N/A
	8-Hour	Unclassified/Attainment	Unclassified/Attainment
CO	1-Hour	Attainment	Unclassified/Attainment
	8-Hour	Unclassified/Attainment	Unclassified/Attainment
NO_2	1-Hour	Attainment	Unclassified/Attainment
	Annual	Unclassified/Attainment	Unclassified/Attainment
SO_2	1-Hour	Attainment	Unclassified/Attainment
	Annual	Unclassified/Attainment	Unclassified/Attainment
PM_{10}	24-Hour	Attainment	Unclassified
	Annual	Attainment	N/A
$PM_{2.5}$	24-Hour	Attainment	Unclassified/Attainment
	Annual	Attainment	Unclassified/Attainment
Lead	30-Day/3-Month	Attainment	Unclassified/Attainment
Sulfates	24-Hour	Attainment	N/A
Hydrogen Sulfides	1-Hour	Attainment	N/A
Visibility Reducing Particles	8-Hour	Attainment	N/A

Source: CARB, 2022a

Sensitive Receptors

Consistent with the 2020 EIR, sensitive receptors include schools, hospitals, and convalescent homes because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality related health problems. In addition, residential areas and recreational areas are also considered to be sensitive receptors. The 2020 EIR lists four sensitive receptors (either residences or residential neighborhoods); the Project Modifications are no closer to any of the listed sensitive receptors compared to the Original Project (**Appendix D**). The nearest sensitive receptors to the Grange Road Connector are the same rural residential homes located approximately 3,000 feet northwest of McCreary Lake and 4,000 feet from the previously proposed potential solar field location; these homes are approximately 4,500 feet northeast of the Grange Road Connector.

Community Air Protection Program AB 617 Communities

AB 617 established the Community Air Protection Program, which identifies communities that may be affected by a high cumulative exposure burden for toxic air contaminants (TACs) and criteria air pollutants (CAPs) (Bay Area Air Quality Management District [BAAQMD], 2022). There are no AB 617 communities

located in the vicinity of the Guenoc Valley Site, and the nearest is the City of Richmond located over 50 miles south (CARB, 2024).

4.3.3 Regulatory Setting

Federal

The EPA implements national air quality programs, described in their entirety in Section 3.3.3 of the 2020 EIR, including establishing NAAQS to define levels of air quality that protect the public health and welfare from the known adverse effects of air pollutants. On January 27, 2023, the EPA issued for public comment a proposed rule considering lowering the NAAQS for primary annual particulate matter 2.5 microns in size ($PM_{2.5}$) from its current level of 12.0 µg/m^3 to within the range of 9.0 to 10.0 µg/m (USEPA, 2023a). However, that rule has not yet been adopted as the date of the publication of this PREIR, and therefore the NAAQS analyzed in the 2020 EIR remain in effect.

Local

The LCAQMD maintains the air quality conditions in Lake County through a robust program of plans, regulations, enforcement, and technical innovations that are described in depth in Section 3.3.3 of the 2020 EIR (**Appendix D**). Due to the good air quality in the LCAB, the LCAQMD has not adopted CEQA thresholds relating to air quality, and therefore the BAAQMD thresholds were considered in the 2020 EIR.

Bay Area Air Quality Management District 2022 CEQA Air Quality Guidelines

On April 20, 2022, the BAAQMD adopted updated *CEQA Air Quality Guidelines* that supersede the previous 2017 CEQA guidance relied upon in the 2020 EIR. The 2022 *CEQA Air Quality Guidelines* are designed to provide recommended procedures to evaluate potential air quality and climate impacts during the environmental review process for land use projects, consistent with CEQA requirements. The 2022 Guidelines contain instructions and examples for how a lead agency can evaluate, measure, and mitigate air quality and climate impacts generated from land use construction and operational activities. They focus on generated emissions of CAPs and precursors, odors, toxic air contaminants, and GHGs from local plans and projects. The Guidelines provide two methods for lead agencies to assess a project's potential impacts: screening criteria and thresholds of significance.

4.3.4 Impacts

Method of Analysis

For the 2020 EIR, the air quality impacts of the Original Project were determined by modeling the potential air pollutant emissions during the construction and operation phases of the development using the California Emissions Estimator Model, Version 2016.3.2 (CalEEMod), a CARB-recommended air quality model. Details of the modeling methodology and assumptions are provided in Section 3.3.4 of the 2020 EIR and the model output files are included as Appendix AIR of the 2020 EIR (**Appendix D**). The CalEEMod estimated the amount of CAP emissions that could occur during construction, specifically PM_{10} and $PM_{2.5}$ during site grading and reactive organic gas (ROG), NOx, and CO from diesel-fired construction equipment. Construction was estimated to occur in phases: Phase 1A, consisting of the primary resort facilities as well as supporting infrastructure such as roads, utilities, and support services, and on and off-site workforce housing was modeled to occur between April 2020 and December 2023; Phases 1B and 1C were assumed to occur between December 2023 and November 2030, and would include the buildout of residential lots

based on market conditions. Construction of future phases of the Proposed Project was assumed to occur after the completion of Phase 1, and for modeling purposes, was assumed to occur between November 2030 and December 2040.

The CalEEMod inputs for the Original Project include the timing of construction sub-phases such as demolition, grading, construction, paving, etc. (see **Table 4.3-2**), as well as the anticipated number and types of construction equipment and their assumed operational usage (hours per day). These inputs were based on the number of hotels, resort residential parcels, and residential estates, as well as the lot sizes and grading area for the Original Project (**Appendix D**). The Project Modifications result in a Development Area that is 1,202 acres, approximately 213 acres less than the Original Project. As a result, the number of hours that equipment is required to prepare and grade the site would decrease because there are 213 fewer acres requiring site preparation. The number of hotels units, resort residential parcels, and residential estates remains the same or slightly reduced, so equipment usage for building construction and architectural coating would be roughly the same or reduced. Finally, there is a decrease of 3 miles of roads requiring paving (see **Table 4.3-2**). The number of construction workers commuting to the Project Site and materials deliveries were also factored into the CalEEMod to quantify potential emissions due to those vehicle trips; although slightly fewer workers or materials may be needed as a result of the Project Modification including parcel reconfiguration, this PREIR conservatively assumes those vehicular trips would remain the same as the 2020 EIR.

Table 4.3-2: Project Modifications by Construction Sub-Phase

Construction Sub-Phase	Project Modifications Compared to Original Project
Demolition	No Change
Site Preparation	213 fewer acres requiring preparation
Grading	213 fewer acres requiring grading
Building Construction	No Change
Paving	3 fewer miles of road requiring paving
Architectural Coating	No Change

Operational CAP emissions could include ozone precursors (ROGs and NOx), CO, PM_{10}, $PM_{2.5}$, and sulfur oxide (SO_x). The 2020 EIR estimated that the operational phase would begin in 2022. The operational emissions were calculated based the type of land use, for example commercial shopping centers, single family houses, or hotels, as well as the vehicular trips of the users. As discussed further in **Section 4.10** below, the number of operational trips associated with the Proposed Project would likely be unchanged as a result of the Project Modifications.

The 2020 EIR included a CO Hot Spot Analysis to assess intersections that may have a potential significant impact due to carbon monoxide from increased vehicular idling. The CO Protocol outlines a screening process for determining which intersections may have a potentially significant impact. Based on the CO Protocol, a combination of screening and quantitative analysis was conducted for the Original Project. Finally, TACs and hazardous air pollutants (HAPs) were analyzed in the 2020 EIR consistent with guidance from USEPA and CARB.

In April 2022, the California Air Pollution Control Officers Association (CAPCOA) released a newer version of the CalEEMod, Version 2022.1. Version 2022.1 has an updated user interface, more land use categories,

updated emissions factors to reflect more types of equipment and more energy-efficient technologies that have been developed, and additional inputs to better reflect regulatory requirements such as CCR Title 24, known as the California Building Standards Code, which contains energy conservation standards applicable to all new or altered residential and non-residential buildings throughout California. Both versions of CalEEMod include emissions factors that decrease over time as appropriate to account for assumed energy efficiencies, incorporation of renewable energy sources, and technological advancements (CAPCOA, 2016; CAPCOA, 2022). Therefore, although the 2020 EIR modeled a construction phase that would end in December 2023 and operation beginning as early as 2022, predating this PREIR, assuming construction and operation occurs earlier in time will yield a more conservative assessment of potential CAP emissions.

The Modified Project has approximately 213 fewer acres of development impact area and fewer miles of roads, and construction and operation will occur at a later date than what was modeled in the 2020 EIR. Therefore, the reliance upon the emissions modeling conducted for the 2020 EIR (Appendix AIR) results in a more conservative assessment of the emissions resulting from the Modified Project. This PREIR qualitatively assesses the potential for air quality impacts using the modeling provided in Appendix AIR of the 2020 EIR (**Appendix D**). This analysis addresses whether the Project Modifications would have new or substantially more severe significant effects than those described in the 2020 EIR. Refer to Section 3.3.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology relating to air quality impacts.

Thresholds of Significance

The LCAB is in attainment or unclassified for all CAPs, and therefore the LCAQMD has not adopted CEQA thresholds relating to air quality. Similar to the 2020 EIR, because the LCAQMD does not have standards for thresholds of significance for CAPs for project-level analyses, the BAAQMD thresholds were reviewed to determine if mitigation should be implemented. “BAAQMD’s thresholds are based on the air quality within the San Francisco Bay Area Air Basin (SFBAAB). Air quality within the SFBAAB is worse than air quality within the LCAQMD. The SFBAAB is nonattainment for several state and federal ambient air quality standards whereas the LCAQMD is in attainment for all state and federal standards. Consequently, using BAAQMD’s significance thresholds to determine if mitigation is warranted is an extremely conservative approach. This is a similar approach, however, that is used by the Northern Sonoma County Air Pollution Control District, which also has not adopted its own air quality standards” (refer to Section 3.3.4 of the 2020 EIR; **Appendix D**).

In 2022, BAAQMD updated its CEQA thresholds for climate impacts, however the numerical thresholds for CAPs remain the same as the 2017 thresholds utilized in the 2020 EIR (BAAQMD, 2022). The 2022 BAAQMD Guidelines also include Best Practices for Centering Environmental Justice, Health, and Equity, to provide guidance on analyzing potential impacts to overburdened or disadvantaged communities. Refer to Section 3.3.4 of the 2020 EIR (**Appendix D**) for a complete description of the significance criteria relating to air quality impacts.

Impacts

IMPACT 3.3-1	CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

The LCAB is currently in attainment for all state and federal air quality standards, similar to 2020. Consequently, there are no air quality plans for the LCAB. Thus, there are no applicable air quality plans and this impact remains less than significant with the Project Modifications.

IMPACT 3.3-2	GENERATE CONSTRUCTION RELATED EMISSIONS RESULTING IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA AIR POLLUTANT FOR WHICH THE PROJECT REGION IS NONATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.3-1	MM 3.3-1	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, development of the Original Project has the potential to result in the emission of CAPs from site preparation (e.g., excavation, grading, and clearing), off-road equipment,

material transport, rock crushing activities, generators, worker vehicles, vehicle travel on unpaved roads, paving, and application of architectural coatings. As determined in the 2020 EIR, construction of the Proposed Project could exceed the BAAQMD thresholds, and as a result **Mitigation Measure 3.3-1** requires that dust and construction control measures be implemented to minimize emissions from construction activities. With inclusion of this mitigation measure, the modeled emissions from construction activities were determined in the 2020 EIR to be less than the BAAQMD significance thresholds, and this impact would be less than significant.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact, as they would not change the amount of time that construction equipment is running or the types of equipment that are required. The Project Modifications would add the Grange Road Connector and Connector Roadways to the area that will be graded and disturbed, however, the overall Development Area and associated grading activities associated with the Modified Project will be reduced as a result of the Parcel Reconfiguration, including elimination of the camping area, and overall reduction in the linear miles of roadways and utilities previously required for connection to remote parcels. This overall decrease in the size of the Development Area (213 acres) will ultimately result in fewer CAP emissions due to construction activities as compared to the Original Project analyzed in the 2020 EIR. **Mitigation Measure 3.3-1** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with construction emissions as compared to the 2020 EIR.

IMPACT 3.3-3	**GENERATE OPERATIONAL RELATED EMISSIONS IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA AIR POLLUTANT FOR WHICH THE PROJECT REGION IS NONATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARDS**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.3-2	MM 3.3-2	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, operation of the Original Project would result in the generation of CAP emissions from sources that can be grouped into the following categories:

- Area Emissions (e.g., cooktops, water heaters, heating units, consumer products, painting, and landscape equipment operation)
- Energy Emissions (e.g., indirect emissions from the generation of electricity utilized within the site)
- Mobile Emissions (e.g., vehicle emissions during operation)
- Waste Emissions (e.g., emissions resulting from processing waste produced by the Project)
- Water Emissions (e.g., emissions from treating and transporting water)

The 2020 EIR determined that the operational emissions of the Original Project would exceed the BAAQMD thresholds, resulting in a potentially significant impact. **Mitigation Measure 3.3-2** requires a range of actions to reduce emissions, including solar energy commitments, use of low VOC paints, energy-efficient lighting, low-flow appliances, recycled water irrigation systems, and drought tolerant vegetation. With inclusion of this mitigation measure, the 2020 EIR concluded that this impact would be reduced to less than significant.

While the Project Modifications involving GHG Reduction measures (refer to full description in **Section 2.2.1** of this PREIR) would be mostly effective at reducing climate change emissions, CAPs emissions would also be reduced as a result of the elimination of natural gas/propane usage in residential and non-residential uses (with the exception of cooktops and outdoor patio fire pits in restaurants), as well as the commitment to utilizing solar energy to meet 100 percent of the Project needs, versus other types of renewable energy. The 2020 EIR analyzed the potential CAP emissions of the Original Project due to the combustion of propane in boilers, stoves, heating units, and other equipment on the Guenoc Valley Site; the Project Modifications disallow the future use of natural gas or propane within the Guenoc Valley Site, with the only exception being the use of natural gas or propane for cooktops and outdoor fire pits in restaurants. As such, the 2020 EIR overstates the potential CAP emissions resulting from the Modified Project as it does not account for the reduction in emissions from area sources and indirect energy sources with inclusion of the Project Modifications. Other Project Modifications such as the Updated WPP, DMP, Grange Road Connector, and Connector Roadways would not increase operational emissions, as the same number of employee and patron trips, waste generation, and water usage is anticipated. With the increase in density of residential lots and removal of the remote lots, there will be slight decreases in the distances that residents travel to their homes and therefore a slight decrease in mobile emissions, but this difference is likely negligible. Because area emissions may be reduced due to the removal of natural gas/propane, energy emissions may be reduced through the commitment to 100 percent solar energy, and mobile emissions may be less due to the increased density of residential lots, reliance upon the modeled emissions in the 2020 EIR presents a more conservative analysis. **Mitigation Measure 3.3-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with operational emissions as compared to the 2020 EIR.

IMPACT 3.3-4	CARBON MONOXIDE EMISSIONS AT LOCAL INTERSECTIONS COULD VIOLATE AN AIR QUALITY STANDARD OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	Less than Significant	Less than Significant	N/A

Notes: *Impact numbering retained from the 2020 EIR.

CO is a localized pollutant of concern, and CO concentration levels are highest near intersections with slow or idling traffic, typically where the level of service (LOS) is E or F. As described in the 2020 EIR, operation of the Proposed Project has the potential to cause increased concentrations of CO from mobile sources if it were to exacerbate congestion at intersections in the area. The CO hotspot analysis conducted in the 2020 EIR found that although the Original Project would increase vehicle trips and delay at certain intersections, Project-generated CO emissions would not result in or substantially contribute to concentrations that exceed the 1-hour or 8-hour ambient air quality standards for CO, and as a result this impact would be less than significant.

As further discussed in **Section 4.10** of this PREIR, the Project Modifications do not result in a change in the number of trips associated with the Modified Project as the same number of hotel units and residences are proposed. Therefore, there is no change in anticipated traffic or LOS impacts to area roadways and impacts due to CO would remain less than significant. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with CO as compared to the 2020 EIR.

IMPACT 3.3-5	EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	Less than Significant	Less than Significant	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, the Proposed Project has the potential to expose sensitive receptors to concentrations of TACs in two ways: 1) expose off-site sensitive receptors to construction activities, which result in the emission of particulate matter from diesel-fueled engines, and 2) locating residences in proximity to sources of TACs. The 2020 EIR found that the Original Project would not significantly expose off-site sensitive receptors to TACs. Since the preparation of the 2020 EIR, the BAAQMD has provided additional best practices guidance for reviewing potential environmental justice impacts to overburdened communities and/or AB 617 communities. There are no AB 617 communities within 50 miles of the Guenoc Valley Site, and therefore no additional analysis is warranted as a result of the updated BAAQMD Guidelines. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact, as they would not change the location of where construction is occurring. The Project Modifications would add the Grange Road Connector and Connector Roadways to the area that will be graded and disturbed, however these Project components are no closer to sensitive receptors compared to what was analyzed in the 2020 EIR. The potential for the future on-site uses to be impacted by TACs emitted from off-site sources was analyzed in the 2020 EIR. There are no industrial uses located in the vicinity of the Guenoc Valley Site or off-site areas; the primary source of potential TACs would be high-volume roadways. However, this impact was found to be less-than-significant due to the distance between the Proposed Project and off-site highways. The relocation of remote residential parcels away from the urban-wildland interface will increase residential density in the central portion of the Guenoc Valley Site, and locate residences further from potential sources of TACs. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with TACs as compared to the 2020 EIR.

IMPACT 3.3-6	RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	Less than Significant	Less than Significant	N/A

Notes: *Impact numbering retained from the 2020 EIR.

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. As described in the 2020 EIR, odor impacts could occur during construction from diesel exhaust emissions from on-site construction equipment, or during the operation phase from the proposed on-site wastewater treatment and recycling systems. The 2020 EIR determined that potential impacts due to construction activities would be less-than-significant due to the distance to off-site sensitive receptors, and noted that diesel reduction measures in **Mitigation Measure 3.3-1** would further reduce DPM. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact, as they would not change the location of where construction is occurring. The Project Modifications would add the Grange Road Connector and Connector Roadways to the area that will be graded and disturbed, however these Project components are no closer to sensitive receptors compared to what was analyzed in the 2020 EIR.

As further described in Section 2 of the 2020 EIR, seven small water reclamation plants (WRPs) are planned for Phase 1 and would employ either a natural wastewater treatment system or a small biological package styled treatment system. All of the wastewater systems will include advance filtration and disinfection systems to reduce odors and comply with the State of California's Recycled Water Laws. Additionally, the nearest sensitive receptor would be located over 3,200 feet from the nearest WRP, and therefore this impact would be less than significant. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact, and the Grange Road Connector and Connector Roadways would similarly not result in the relocation of any WRPs closer to sensitive receptors. The relocation of remote residential parcels away from the urban-wildland interface will increase residential density in the central portion of the Guenoc Valley Site, further from the edges of the property boundary. No relocation of the WRPs is anticipated to accommodate the relocated parcels. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with odors as compared to the 2020 EIR.

4.3.5 Mitigation Measures

No changes to the mitigation measures are warranted as a result of the Project Modifications. A full list of the mitigation measures is included in the MMRP in **Section 5** of this PREIR.

4.4 BIOLOGICAL RESOURCES

4.4.1 Introduction

The 2020 EIR, Volume II, Section 3.4.2 includes a detailed description of the environmental setting related to biological resources on the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Improvement Areas that is not repeated in its entirety within this PREIR. **Section 4.4.2** of this PREIR includes a description of only the environmental setting related to biological resources that has changed since the 2020 EIR. **Section 4.4.3** of this PREIR includes a description of relevant laws and ordinances that have been passed or amended since preparation of the 2020 EIR. The full discussion of the environmental and regulatory settings is available in the 2020 EIR (**Appendix D**). **Section 4.4.4** of this PREIR describes methods of analysis and provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects. Mitigation for impacts to biological resources is discussed in **Section 4.4.5**.

4.4.2 Environmental Setting

The 2020 EIR, Volume II, Section 3.4.2 provided information on the biological resources setting, including habitat types, wetlands and waters, wildlife movement corridors, and designated critical habitat that occurs within or near the Guenoc Valley Site. The 2020 EIR additionally described the special-status plants and wildlife with the potential to occur within the Guenoc Valley Site. These topics are discussed in detail below, focusing on changes or updates that have occurred since the 2020 EIR.

Habitat Types

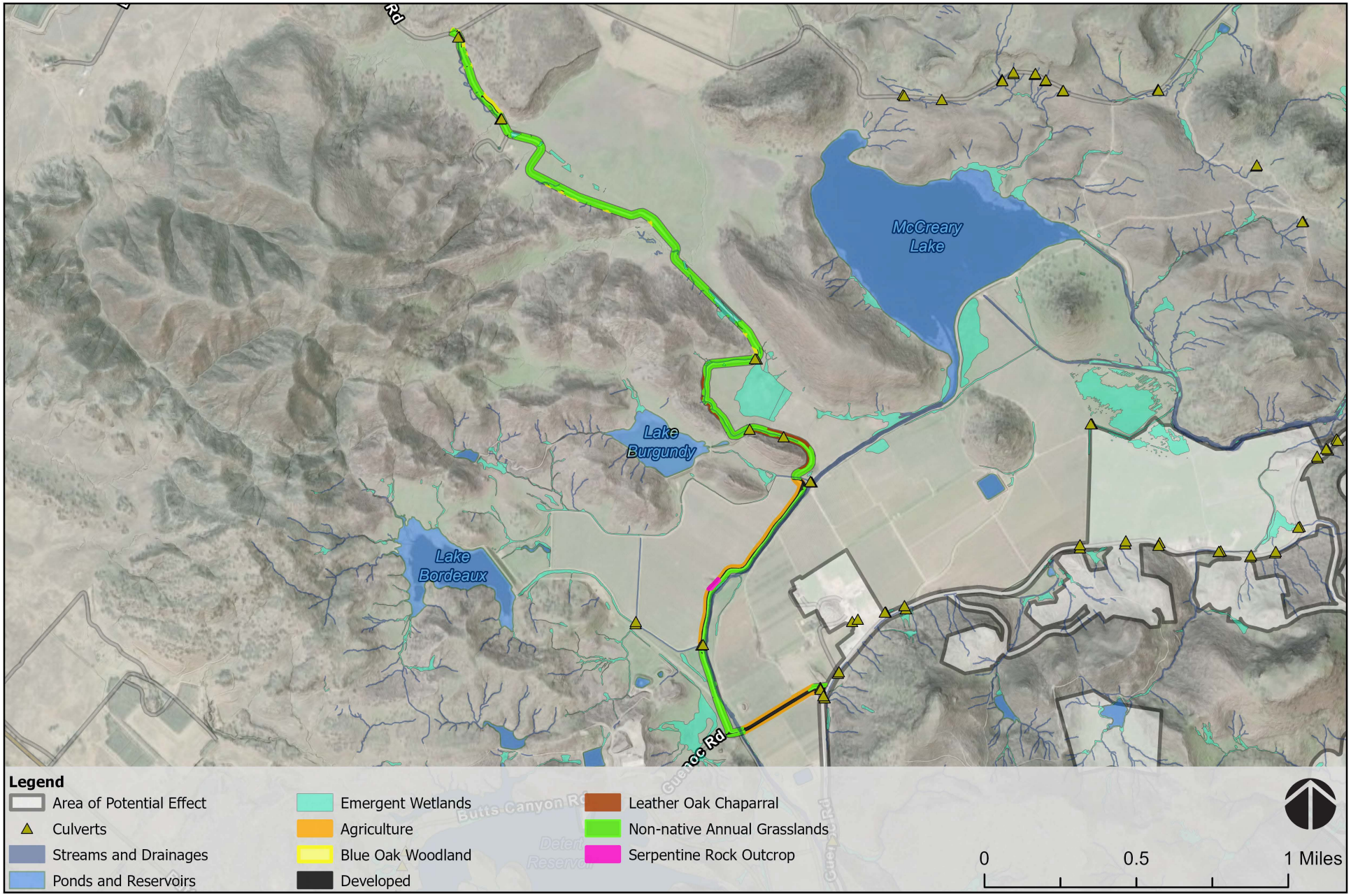
There were 22 terrestrial habitat types and 3 aquatic habitat types observed within the Guenoc Valley Site, each described in detail in the 2020 EIR (**Appendix D**). While the Project Modifications would result in an overall reduction of the APE and Development Area, changes to the Connector Roadway alignments and Parcel Reconfiguration would result in impacts in areas not previously assessed in the 2020 EIR at the project level, and the addition of the Grange Road Connector would result in impacts in an area adjacent to the Guenoc Valley Site that was not assessed at the project or programmatic level in the 2020 EIR. Therefore, an updated Biological Resources Assessment (BRA) was prepared for the Project Modifications that includes: 1) the areas of potential impacts outside of the Guenoc Valley Site associated with the off-site portion of the Grange Road Connector that were not previously assessed; 2) the on-site portions of the Grange Road Connector that were described at a programmatic level in the 2020 EIR; and 3) all other areas within the Guenoc Valley Site that, due to the Project Modifications, are within the Modified APE but outside of the 2020 APE and were therefore only described at the programmatic level in the 2020 EIR (Biological Resources Assessment [**Appendix I-1**]). A supplemental botanical memo was also prepared for 19 patches of land scattered across the Guenoc Valley Site that had been generally surveyed from adjacent habitat but for which transects had not been walked, described in Appendix I as “desktop assessed” (WRA Special-Status Plant Survey [**Appendix I-2**]). Botanical surveys conducted in 2024 for the previously ‘desktop assessed’ areas covered 69 acres, which included the 55 acres discussed in Appendix I and immediately adjacent habitat (**Appendix I-2**).

Table 4.4-1 provides a breakdown of habitat type acreages within the totality of the Guenoc Valley Site that considers the updated BRA included in **Appendix I-1** and the WRA Special-Status Plant Survey included as **Appendix I-2**. Additionally, the habitat types mapped within the portion of the Grange Road Connector that falls outside of the Guenoc Valley Site are identified in the table below and depicted in **Figure 4-6**.

Table 4.4-1: Habitat Types

Habitat Type	Acres on the Guenoc Valley Site from 2020 EIR	Updated Acres on Guenoc Valley Site Plus Grange Road Connector
Terrestrial		
Developed	218.2	213.3
Agriculture (currently developed)	1,001.6	1,279.6
Rock outcrop	37.9	13.8
Serpentine rock outcrop	N/A	18.9
Non-native annual grassland	2,259.4	2,284.1
Purple needlegrass grassland	11.7	12.1
Leather oak chaparral	2,573.2	2,529.8
Scrub oak chaparral	49.8	50.1
Chamise chaparral	987.2	978.1
Whiteleaf manzanita chaparral	150.4	150.5
Musk brush chaparral	33.1	31.8
California Yerba Santa scrub	37.9	38.2
Deer weed scrub	19.7	19.7
White alter grove	10.9	10.9
Brewer willow thicket	3.6	4.5
Douglas fir forest	61.5	58.6
Sargent cypress woodland	10.7	10.7
Foothill pine woodland	1,400.7	1,379.0
Interior live oak woodland	756.5	749.7
Valley oak woodland	49.3	48.7
Blue oak woodland	3,472.4	3,454.5
Blue oak savanna	1,238.7	1,215.2
Mixed oak woodland	174.9	172.6
Aquatic		
Streams and drainages	199.3 (1,079,758 linear feet)	191.7
Ponds and reservoirs	658.1	661.2
Emergent wetlands	429.7	407.4
Totals*	**15,846.4**	**15,984.7**

Notes: *The total updated acreage exceeds the acreage presented in the 2020 EIR for the Guenoc Valley Site due to the inclusion of the portion of the Grange Road Connector that is outside of the Guenoc Valley Site. Additionally, a portion of land internal to the Guenoc Valley Site identified as "Not in Project Site" in the 2020 EIR (See Figure 2-1 of the 2020 EIR) is now partially within the Modified APE. Impacts within this area are limited to road alignments along existing farm roads in an area that will be leased out for maintenance of existing vineyard.



Source: Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, County of Napa, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc,

FIGURE 4-6

BIOLOGICAL COMMUNITIES WITHIN GRANGE ROAD CONNECTOR

Precise boundaries of habitat types can shift in their distribution over time due to ecological succession or natural occurrences (e.g., wildfire). The Guenoc Valley Site experienced the Valley Fire in August 2020 after the Final EIR was prepared, and ongoing vineyard development as allowed by the Guenoc Water Rights Modification Project has occurred, which resulted in some variation in habitat acreages as compared to the 2020 EIR. Approximately 276 acres of additional vineyard has been developed on the property, which has resulted in the conversion of other habitat types. These changes in habitat distribution, either due to previously-authorized agricultural conversion or due to natural occurrences, are not evaluated herein as the 2020 EIR (Volume II Section 2.5.2.10) already considered an extended timeframe for development commencing in mid-2020 and continuing over the course of approximately 8-10 years. Section 3.4.4 of Volume II of the EIR considered the potential for habitats and vegetative communities to shift over time and presented an analysis and mitigation based on the assumption that construction would not commence for several years following publication of the 2020 EIR and would continue for approximately 8-10 years. Therefore, natural shifts in vegetation and previously-authorized agricultural conversions were accounted for in the 2020 EIR analysis. Only those 333 acres within the Modified APE that were previously reviewed at a programmatic level have been subject to additional surveys, mapping, and analysis included in two supplemental biological reports to ensure a project-level assessment of potential impacts (**Appendix I-1** and **Appendix I-2**).

No substantial changes to the condition or quality of terrestrial habitats were observed, therefore full habitat descriptions are not repeated herein. Complete descriptions of each of the habitat types are provided in Volume II, Section 3.4.2 of the 2020 EIR (**Appendix D**).

One new terrestrial habitat type was observed as a result of the supplemental BRA: serpentine rock outcrop. This habitat type was previously identified as rock outcrop, however, since publication of the 2020 EIR, the California Department of Fish and Wildlife (CDFW) has provided further descriptors of rock outcrop habitats to include specific subtypes of rock outcrops that are considered sensitive. Therefore, updated mapping of this habitat type is not a reflection of changed conditions within the Guenoc Valley Site, but rather a reflection of updated habitat classification systems. This habitat is described below.

Serpentine Rock Outcrop

This natural community occurs on rocky serpentine slopes, ridges, and outcrops in the California Coast Range, Klamath Mountains, Sierra Nevada Range and foothills, and southern Cascades (**Appendix I-1**). Vegetative cover is sparse. Where vegetation is present, plant species are characterized by serpentine indicator species (**Appendix I-1**). Within the totality of the Guenoc Valley Site and Grange Road connector, 18.9 acres of this habitat occurs. Plant species present include sickle leaf onion (*Allium falcifolium*), golden buckwheat (*Eriogonum luteolum* var. *luteolum*), western flax (*Hesperolinon* spp.), and Sonoma lessingia (*Lessingia ramulosa*).

Wetlands and Waters

Aquatic habitats within the Guenoc Valley Site and the footprint of the Grange Road Connector have the potential to be jurisdictional wetlands or waters of the U.S. under the Clean Water Act (CWA). An Aquatic Resources Delineation Report was prepared in support of the 2020 EIR for the 2020 APE. This report conservatively assumes that all aquatic features within the Modified APE are potentially jurisdictional. No new aquatic habitat types were observed on the Guenoc Valley Site or the off-site portion of the Grange Road Connector as a result of the supplemental BRA (**Appendix I-1**).

Appendix I-1, similar to the 2020 EIR, identified streams and drainages, ponds and reservoirs, and emergent wetlands. Specifically, these areas include the following:

- Streams and Drainages: perennial streams, intermittent streams, ephemeral streams, and ephemeral ditches
- Ponds and Reservoirs: Open waters
- Emergent wetlands: seasonal wetland depressions, seasonal wetland ditches, seasonal wetland pond fringes, seasonal wetland seeps/swales, seasonal wetland wet meadow, stream fringe/in-stream wetlands, and riparian woodland

Complete descriptions of the aquatic habitat types are provided in Volume II Section 3.4.2 of the 2020 EIR and includes streams and drainages, ponds and reservoirs, and emergent wetlands.

Wildlife Movement

The Guenoc Valley Site and surrounding area continues to remain a mixture of low-density residential and agricultural development and open space, consistent with what was presented in the 2020 EIR, Volume II, Section 3.4.2. The 2020 EIR reviewed the California Essential Habitat Connectivity Project and the Building Landscape Connectivity for Climate Adaptations: Mayacamas to Berryessa Connectivity Network (M2B) Final Report. Per the California Essential Habitat Connectivity Project, the Guenoc Valley Site is not within an Essential Connectivity Area. However, the M2B study identified high levels of riparian permeability within the Guenoc Valley Site as well as multiple potential wildlife movement corridors and four least-cost pathways. There are no changes to the general setting as it relates to wildlife movement in the region, and no changes to the California Essential Habitat Connectivity Project and M2B study have occurred (Spencer, 2010; Pepperwood Preserve, 2018). Therefore, there are no changes to the wildlife movement setting as presented in the 2020 EIR. A complete description of the wildlife movement setting is provided in the 2020 EIR, Volume II, Section 3.4.2.

Critical Habitat

As stated within the 2020 EIR Volume II Section 3.4.2, no Critical Habitat, Essential Fish Habitat, or other habitat designated by federal, State, or local conservation plans occur on the Guenoc Valley Site. An updated review of the U.S. Fish and Wildlife Service (USFWS) mapper of Critical Habitat and the National Oceanic and Atmospheric Administration mapper of Essential Fish Habitat confirmed that Critical Habitat and Essential Fish Habitat remain absent from the Guenoc Valley Site and immediately adjacent land, including the portion of the Grange Road Connector outside of the Guenoc Valley Site (USFWS, 2024; National Oceanic and Atmospheric Administration [NOAA], 2024).

Special-Status Wildlife

A BRA was prepared to assess the footprint of the Grange Road Connector and the portion of the Guenoc Valley Site that was assessed at a programmatic level in the 2020 EIR but which now falls within the Modified APE. Section 5.2 of the BRA (**Appendix I-1**) assessed the potential for these areas to support special-status species based on surveys completed following publication of the 2020 EIR, as well as updated database searches from the USFWS, CDFW, and CNPS. There are 24 special-status wildlife species that have the potential to occur within the Modified APE, as summarized in **Table 4.4-2**.

Table 4.4-2: Special-Status Wildlife with Potential to Occur within the Modified APE

Species	Status	Potential to Occur	Change Since 2020 EIR
Mammals			
Pallid bat (*Antrozous pallidus)*	SSC	Observed onsite (foraging)	No change
Ring-tailed cat (Ringtail) *(Bassariscus astutus)*	CFP	Moderate	No change
Townsend's big-eared bat *(Corynorhinus townsendii)*	SSC	High	No change
Western red bat *(Lasiurus blossevillii)*	SSC	Moderate	No change
American badger *(Taxidea taxus)*	SSC	Moderate	No change
Birds			
Tricolored blackbird *(Agelaius tricolor)*	ST, SSC	High	No change
Grasshopper sparrow *(Ammodramus savannarum)*	SSC	High	No change
Golden eagle *(Aquila chrysaetos)*	CFP	Observed onsite (nesting and foraging)	No change
Long-eared owl *(Asio otus)*	SSC	Moderate	No change
Burrowing owl *(Athene cunicularia)*	SSC	Moderate	No change
Northern harrier *(Circus hudsonius)*	SSC	Observed onsite (foraging)	No change
Olive-sided flycatcher *(Contopus cooperi)*	SSC	Moderate	No change
White-tailed kite *(Elanus leucurus)*	CFP	Observed onsite (foraging)	No change
American peregrine falcon *(Falco peregrinus anatum)*	CFP	Observed onsite (nesting)	No change
Bald eagle *(Haliaeetus leucocephalus)*	SE, CFP	Observed onsite (nesting and foraging)	No change
Yellow-breasted chat (*Icteria virens)*	SSC	Moderate	No change
Least bittern *(Ixobrychus exilis)*	SSC	Moderate	No change
Loggerhead shrike *(Lanius ludovicianus)*	SSC	High	No change
Purple martin *(Progne subis)*	SSC	High	No change
Yellow warbler *(Setophaga* [*Dendroica*] *petechia brewsteri)*	SSC	Observed onsite (foraging)	No change
Yellow-headed blackbird (*Xanthocephalus xanthocephalus)*	SSC	Observed onsite (nesting)	No change
Insects			
Monarch Butterfly (Danaus plexippus)	FC	Moderate	Newly considered under Federal Endangered Species Act
Reptiles			
Northwestern pond turtle *(Actinemys marmorata)*	SSC	Observed onsite (multiple locations)	No change
Amphibians			
Foothill yellow-legged frog *(Rana boylii)*	SSC	Observed onsite (multiple locations)	No change

Notes:
CFP – California Fully Protected Species
SE – State Endangered
ST – California State Listed Threatened Species
SC – California State Listed Candidate Species
SSC – California Species of Special Concern
FC – Federal Candidate

There is one new species identified in **Table 4.4-2** that was not assessed in the 2020 EIR: Monarch butterfly. The Monarch butterfly was identified as a "Candidate" species for listing on December 17, 2020, and therefore was not considered in the 2020 EIR as it was not designated as a Candidate species at that time. An account of this species and its potential to occur within the Modified APE is presented below.

Additionally, western pond turtle has been re-classified as northwestern pond turtle and is described within this PREIR as northwestern pond turtle. The northwestern pond turtle was proposed for federal Threatened status on October 3, 2023 (88 FR Vol 190, 68370) with a rule under section 4(d) of the Federal Endangered Species Act (FESA). Critical Habitat for northwestern pond turtle has not been designated, nor has a Recovery Plan been completed (**Appendix I-1**). No other changes to the species description for the northwestern pond turtle have occurred, and more details about this species can be found in the 2020 EIR under 'western pond turtle'. Finally, at the time of the 2020 EIR, foothill yellow-legged frog was considered a State species of special concern and was a State candidate for listing under the California Endangered Species Act (CESA). However, it was determined that formal listing was not warranted. Therefore, this species is only considered now as a species of special concern. No other changes to the species description for the foothill yellow-legged frog have occurred, and more details can be found in the 2020 EIR (**Appendix D**). There are no other newly considered special-status species not considered in the 2020 EIR. Potential for species to occur remains the same, and no new special-status animals have been observed since the 2020 EIR.

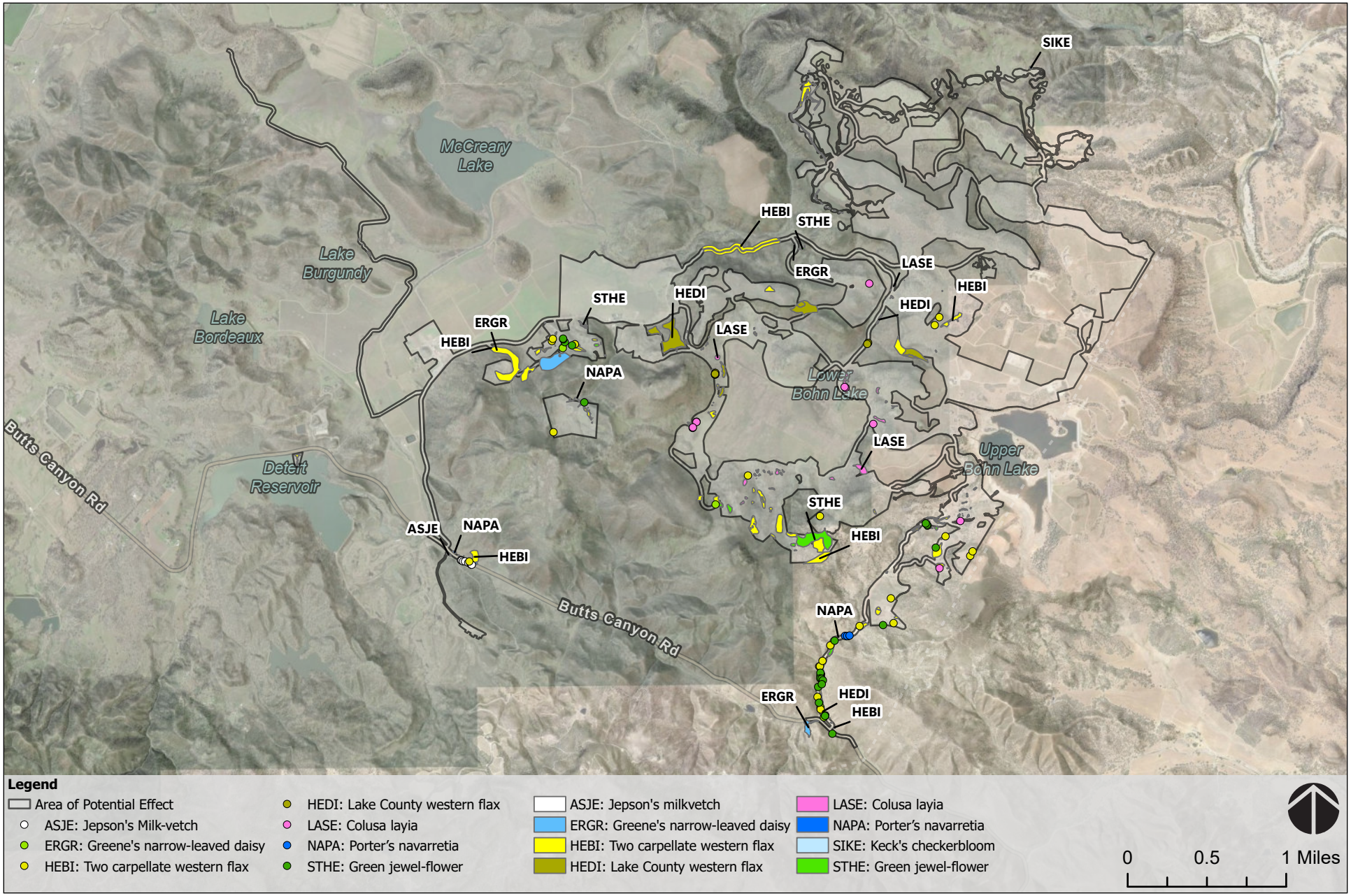
Monarch Butterfly

A description of Monarch butterfly is provided in Section 5.2.2 of **Appendix I-1**. As stated within **Appendix I-1**, Monarch butterfly is found throughout the United States, southern Canada, and Central America. It also occurs in parts of South America and other continents. In North America, this species spends the spring and summer months breeding and foraging across much of its range. The monarch butterfly generally uses milkweed (*Asclepias spp*.) for both breeding and as a nectar source, although nectar may also be obtained from a variety of additional plant species. From August to October, monarchs will migrate to winter roost sites along the California coast and central Mexico. At roost sites, monarchs will congregate in thousands or millions on a tree or group of trees. Monarchs prefer overwintering habitat comprised of a relatively dense grove of trees with some understory, located near water and nectar sources and protected from the wind by topographic landforms or trees. Winter roost sites are often on south, southwest, or west facing slopes which may provide more favorable temperature regimes and wind protection. Monarch butterflies typically arrive in mid-October to overwintering sites along the California coast and remain until late February or March.

Monarchs roost along the coast, which is outside the Modified APE; therefore, there is no potential for roosting. This species may be seen migrating across the Modified APE, but the Project Modifications will not remove roost sites. Host (milkweed) and nectar plants are present in the Modified APE, and monarchs may breed in the Modified APE in spring/early summer.

Special-Status Plants

In addition to the special-status wildlife identified above, **Appendix I-1** and **I-2** identified 61 special-status plant species with the potential to occur within the Modified APE. **Table 4.4-3** summarizes those special-status plant species that have the potential to occur within the Modified APE based on **Appendix I-1** and **I-2** and the data collected in support of the 2020 EIR. These plant populations are depicted in **Figure 4-7**.



Source: Lake County Community Development and General Plan; County of Napa, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS, Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Pictometry International, The County of Napa, Maxar

FIGURE 4-7

SPECIAL STATUS PLANTS WITHIN PHASE 1 APE

Table 4.4-3: Special-Status Plants with Potential to Occur within the Modified APE

Species	Status	Potential to Occur	Change Since 2020 EIR
Napa false indigo (*Amorpha californica var. napensis*)	1B.2	Moderate	No change
Bent-flowered fiddleneck (*Amsinckia lunaris*)	1B.2	Moderate	No change
Konocti manzanita (*Arctostaphylos manzanita ssp. elegans*)	1B.3	Observed onsite outside 2020 APE	No change, observations outside of Modified APE
Clara Hunt's milk-vetch (*Astragalus claranus*)	FE, ST, 1B.1	Moderate	No change
Jepson's milk-vetch (*Astragalus rattanii var. jepsonianus*)	1B.2	Observed onsite within 2020 APE	No change, observations are within Modified APE
Big-scale balsamroot (*Balsamorhiza macrolepis*)	1B.2	Observed onsite within 2020 APE	Observed onsite, observations outside of Modified APE
Watershield *(Brasenia schreberi)*	2B.3	Moderate	No change
Narrow-anthered brodiaea (*Brodiaea leptandra*)	1B.2	Observed onsite outside 2020 APE	No change, observations outside of Modified APE
Pink creamsacs (*Castilleja rubicundula var. rubicundula*)	1B.2	Moderate	No change
Rincon Ridge ceanothus (*Ceanothus confuses*)	1B.1	Moderate	No change
Calistoga ceanothus (*Ceanothus divergens*)	1B.2	Moderate	No change
Holly-leaved ceanothus (*Ceanothus purpureus*)	1B.2	Moderate	No change
Sonoma ceanothus (*Ceanothus sonomensis*)	1B.2	Moderate	No change
Dwarf soaproot (*Chlorogalum pomeridianum var. minus*)	1B.2	Moderate	No change
Serpentine cryptantha (*Cryptantha dissita*)	1B.2	Moderate	No change
Deep-scarred cryptantha (*Cryptantha excavate*)	1B.1	Moderate	No change
Cascade downingia (*Downingia willamettensis*)	2B.2	Moderate	No change
Brandegee's eriastrum (*Eriastrum brandegeeae*)	1B.1	Moderate	No change
Greene's narrow-leaved daisy (*Erigeron greenei*)	1B.2	Observed onsite within 2020 APE	No change, observations are within Modified APE
Snow Mountain buckwheat (*Eriogonum nervulosum*)	1B.2	Moderate	No change
Loch Lomond button-celery (*Eryngium constancei*)	FE, SE, 1B.1	Moderate	No change
Jepson's coyote thistle (*Eryngium jepsonii*)	1B.2	Moderate	No change
Adobe-lily (*Fritillaria pluriflora*)	1B.2	Moderate	No change
Boggs Lake hedge-hyssop (*Gratiola heterosepala*)	SE, 1B.2	Moderate	No change
Hall's harmonia (*Harmonia hallii*)	1B.2	Moderate	No change
Congested-headed hayfield tarplant (*Hemizonia congesta ssp. congesta*)	1B.2	Moderate	No change
Glandular western flax (*Hesperolinon adenophyllum*)	1B.2	Moderate	No change

Species	Status	Potential to Occur	Change Since 2020 EIR
Two-carpellate western flax (*Hesperolinon bicarpellatum*)	1B.2	Observed onsite within 2020 APE	No change, observations are within Modified APE
Lake County western flax (*Hesperolinon didymocarpum*)	SE, 1B.2	Observed onsite within 2020 APE	No change, observations are within Modified APE
Drymaria-like western flax (*Hesperolinon drymarioides*)	1B.2	Moderate	No change
Sharsmith's western flax (*Hesperolinon sharsmithiae*)	1B.2	Moderate	No change
Bolander's horkelia (*Horkelia bolanderi*)	1B.2	Moderate	No change
Santa Lucia dwarf rush (*Juncus luciensis*)	1B.2	Moderate	No change
Burke's goldfields (*Lasthenia burkei*)	FE, SE, 1B.1	Moderate	No change
Colusa layia (*Layia septentrionalis*)	1B.2	Observed onsite within 2020 APE	No change, observations are within Modified APE
Legenere (*Legenere limosa*)	1B.1	Moderate	No change
Jepson's leptosiphon (*Leptosiphon jepsonii*)	1B.2	Moderate	No change
Sebastopol meadowfoam (*Limnanthes vinculans*)	FE, SE, 1B.1	Moderate	No change
Cobb Mountain lupine (*Lupinus sericatus*)	1B.2	Moderate	No change
Marsh microseris (*Microseris paludosa*)	1B.2	Moderate	No change
Baker's navarretia (*Navarretia leucocephala ssp. bakeri*)	1B.1	Moderate	No change
Small pincushion navarretia (*Navarretia myersii ssp. deminuta*)	1B.1	Moderate	No change
Porter's navarretia (*Navarretia paradoxinota*)	1B.3	Moderate	Observed onsite, within Modified APE
Marin County navarretia (*Navarretia rosulata*)	1B.2	Moderate	No change
Slender Orcutt grass (*Orcuttia tenuis*)	FT, SE, 1B.1	Moderate	No change
Sonoma beardtongue (*Penstemon newberryi var. sonomensis*)	1B.3	Moderate	No change
Bearded popcornflower (*Plagiobothrys hystriculus*)	1B.1	Moderate	No change
Eel-grass pondweed (*Potamogeton zosteriformis*)	2B.2	Moderate	No change
Lake County stonecrop (*Sedella leiocarpa*)	FE, SE, 1B.1	Moderate	No change
Napa checkerbloom (*Sidalcea hickmanii ssp. napensis*)	1B.1	Moderate	No change
Keck's checkerbloom (*Sidalcea keckii*)	FE, 1B.1	Observed onsite within 2020 APE	No change, observations are within Modified APE
Marsh checkerbloom (*Sidalcea oregana ssp. hydrophila*)	1B.2	Moderate	No change
Socrates Mine jewelflower (*Streptanthus brachiatus ssp. brachiatus*)	1B.2	Moderate	No change
Freed's jewelflower (*Streptanthus brachiatus ssp. hoffmanii*)	1B.2	Moderate	No change
Green jewelflower (*Streptanthus hesperidis*)	1B.2	Observed onsite within 2020 APE	No change, observations are within Modified APE

Species	Status	Potential to Occur	Change Since 2020 EIR
Three Peaks jewelflower (*Streptanthus morrisonii ssp. elatus*)	1B.2	Observed onsite outside 2020 APE	No change, observations outside of Modified APE
Kruckeberg's jewelflower (*Streptanthus morrisonii ssp. kruckebergii*)	1B.2	Moderate	No change
Early jewelflower (*Streptanthus vernalis*)	1B.2	Moderate	No change
Slender-leaved pondweed (*Stuckenia filiformis ssp. alpine*)	2B.2	Moderate	No change
Napa bluecurls (*Trichostema ruygtii*)	1B.2	Moderate	No change
Oval-leaved viburnum (*Viburnum ellipticum*)	2B.3	Moderate	No change

Notes:
FE – Federally Listed Endangered Species
FT – Federally Listed Threatened Species
SE – California State Listed Endangered Species
ST – California State Listed Threatened Species
CNPS Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere
CNPS Rank 2B – Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
Threat Rank 0.1 – Seriously Threatened in California
Threat Rank 0.2 – Fairly Threatened in California
Threat Rank 0.3 – Not Very Threatened in California

Since publication of the 2020 EIR there are no new special-status plant species with the potential to occur within the Modified APE. No changes to the status of plants considered in the 2020 EIR have occurred. Porter's navarretia was previously determined to have a moderate potential to occur and has since been observed on the Guenoc Valley Site within the Modified APE. Big-scale balsamroot was previously within the 2020 APE, however, with Project Modifications all populations of this species have been avoided and it is not within the Modified APE. Potential to occur within the Modified APE is still considered high.

4.4.3 Regulatory Setting

Clean Water Act

2015 Clean Water Rule

In 2015, the U.S. Army Corp of Engineers (USACE) and USEPA published the "Clean Water Rule" clarifying the scope of coverage of the CWA. Upon issuance however, numerous lawsuits were filed and consolidated in the Sixth Circuit, immediately putting a "stay" on its implementation. In January 2018, the U.S. Supreme Court dissolved the stay. The 2015 Clean Water Rule remained in effect in 22 states, including California, the District of Columbia, and the U.S. territories until December 23, 2019.

Repeal of 2015 Clean Water Rule

On October 22, 2019, the EPA and the USACE published a final rule to repeal the 2015 Clean Water Rule and restore the regulatory methodology that existed prior to the 2015 Rule. Under this rule, which became effective on December 23, 2019, jurisdictional waters of the U.S. were defined by the 1986/1988 regulatory definition of waters of the U.S. under CWA regulations 40 CFR 230.3(s). This corresponds to the CWA described in the 2020 EIR (**Appendix D**).

Navigable Waters Protection Rule

On January 23, 2020, the USEPA and the USACE finalized the Navigable Waters Protection Rule (NWPR) to define waters of the U.S. On April 21, 2020, the USEPA and the USACE published the NWPR in the Federal Register. On June 22, 2020, 60 days after publication in the Federal Register, the NWPR became effective across the nation including the State of California. The NWPR eliminated the case specific application of the significant nexus test articulated in the Rapanos decision.

Remand and Vacatur of the Navigable Waters Protection Rule

On August 30, 2021, the NWPR was remanded and immediately vacated by the United States District Court for the District of Arizona in the case of *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency*. In light of this order, the USEPA and the USACE halted implementation of the NWPR nationwide and reinstated the pre-2015 definition of waters of the U.S. Under the pre-2015 definition, the USACE and USEPA require the case specific application of the significant nexus test, as articulated in the Rapanos decision, to determine jurisdictionality.

Final Rule to Amend the January 2023 Rule

In January 2023, a revised definition of waters of the U.S. was promulgated (January 2023 Rule). However, on May 25, 2023, the Supreme Court decided *Sackett v. Environmental Protection Agency*. Although this case was not specific in challenging the amended definition of waters of the U.S., the Court considered the jurisdictional standards set forth within the January 2023 Rule. After several revisions, the USEPA on August 29, 2023 issued the final rule to amend the January 2023 rule, thus conforming the January 2023 rule to the *Sackett v. Environmental Protection Agency* decision. Due to ongoing litigation in numerous states, the operational definition of waters of the U.S. varies from state to state. California currently operates under the January 2023 Rule, as amended under the final rule to amend the January 2023 rule. Under this definition, waters of the U.S. are "relatively permanent, standing or continuously flowing bodies of water" and includes wetlands when such wetlands have "continuous surface connection to bodies that are "waters of the United States" in their own right".

4.4.4 Impacts

Method of Analysis

Impacts to biological resources were determined utilizing information gathered during preparation of the 2020 EIR in addition to information collected since publication of the EIR. Updated background research cited herein and included in **Appendix I-1** was also utilized. This analysis conservatively presents a worst-case scenario and assumes the maximum potential impacts to sensitive biological resources. For example, similar to the 2020 EIR, the Design Guidelines would limit the developable space within residential lots. However, as the precise building locations within these lots are unknown at this time, this analysis conservatively assesses for total loss of habitat within the lot or maximum allowable impacts in the case of oak-dominated habitats. This is consistent with the methodology for impacts to biological resources contained within Volume II, Section 3.4.4 of the 2020 EIR (**Appendix D**).

Table 4.4-4 provides a breakdown of the impact acreages by habitat type of the 2020 APE and the Modified APE. For simplicity, the totality of the Grange Road Connector is represented in **Table 4.4-4** even though a portion of the Grange Road Connector lies outside of the Guenoc Valley Site.

Table 4.4-4: Habitat Types Within the 2020 APE and Modified APE

Habitat Type	Updated Acres on Guenoc Valley Site and Grange Road Connector	Acres Within Modified APE	Acres within 2020 APE	Impact Change from 2020 EIR	Habitat Sensitivity
Terrestrial					
Developed	213.3	70.0	81.0	-11.0	Non-sensitive
Agriculture (currently developed)	1,279.6	309.7	291.8	+17.9	Non-sensitive
Rock outcrop	13.8	2.0	8.0	-6.0	Non-sensitive
Serpentine rock outcrop	18.9	3.9	N/A	N/A	Sensitive
Non-native annual grasslands	2,284.1	438.3	554.1	-115.8	Non-sensitive
Purple needlegrass grassland	12.1	5.7	8.0	-2.3	Sensitive
Leather oak chaparral	2,529.8	170.0	197.9	-27.9	Non-sensitive
Scrub oak chaparral	50.1	31.3	29.3	+2	Non-sensitive
Chamise chaparral	978.1	242.5	351.7	-109.2	Non-sensitive
Whiteleaf manzanita chaparral	150.5	61.3	57.3	+4.0	Non-sensitive
Musk brush chaparral	31.8	2.8	19.5	-16.7	Sensitive
California yerba santa scrub	38.2	6.0	6.9	-0.9	Non-sensitive
Deer weed scrub	19.7	0.0	0.9	-0.9	Non-sensitive
White alder grove	10.9	0.0	0.1	-0.1	Sensitive
Brewer willow thicket	4.5	1.1	0.04	+1.06	Sensitive
Douglas fir forest	58.6	0.0	0.0	0.0	Non-sensitive
Sargent cypress woodland	10.7	0.0	0.0	0.0	Sensitive
Foothill pine woodland	1,379.0	126.1	206.1	-80.0	Non-sensitive
Interior live oak woodland	749.7	58.0	189.0	-131.0	Sensitive
Valley oak woodland	48.7	1.0	13.1	-12.1	Sensitive
Blue oak woodland	3,454.5	153.0	599.4	-446.4	Sensitive
Blue oak savanna	1,215.2	96.0	269.4	-173.4	Sensitive
Mixed oak woodland	172.6	0.0	0.0	0.0	Sensitive
Total	**14,724.4**	**2,408.4**	**2,877.6**	**-469.2**	**--**
Aquatic					
Streams and drainages	191.7	13.1	13.1	0.0	Sensitive
Ponds and reservoirs	658.1	9.3	7.4	+1.9	Sensitive
Emergent wetlands	429.7	22.4	49.6	-27.2	Sensitive
Total	**1,279.5**	**44.8**	**69.9**	**-25.1**	--

Source: 2020 EIR, BRA (**Appendix I-1**) and Updated Oak Mitigation Plan (**Appendix J**)

Impacts

This analysis of the Project Modifications follows the same methodology outlined in Section 3.4.4 of the 2020 EIR, focusing on whether the Project Modifications would have new or substantially more severe significant effects than those described in the 2020 EIR. Refer to Section 3.4.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology and significance criteria relating to biological resources impacts.

IMPACT 3.4-1	**SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY THROUGH HABITAT MODIFICATIONS OR INDIRECTLY, ON ANY SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL-STATUS SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY CDFW OR USFWS**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant	Significant	No
Mitigation Measures	MM 3.4-1 through MM 3.4-13; MM 3.9-1, 3.9-2; MM 3.4-21; MM 3.10-2 (Phase I) MM 3.4-1 through MM 3.4-14; MM 3.4-21; MM 3.9-1, 3.9-2; MM 3.10-2 (Future Phases)	MM 3.4-1 through 3.4-2, 3.4-6 through 3.4-8; 3.4-10, 3.4-11, 3.4-13; MM 3.9-1, 3.9-2; MM 3.10-2 (Workforce Housing) MM3.4-8 and 3.4-9 (Infrastructure)	Modifications to MM 3.4-2, 3.4-8, and 3.4-10; all other mitigation measures applicable as originally written
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, an impact to special-status species may be considered significant if a project has the potential to result in direct or indirect harm to a special-status species or individuals of that species. **Mitigation Measures 3.4-1** through **3.4-13**, **3.4-21**, and **3.10-2** will ensure that general construction impacts and impacts to specific species are reduced to less-than-significant levels. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to result in displacement of special-status species and conversion or degradation of habitat they rely on, and therefore the impact discussions below focus on this subset of Project Modifications. **Mitigation Measures 3.4-1** through **3.4-13**, **3.4-21**, and **3.10-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in

the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with special-status species as compared to the 2020 EIR, as explained in more depth by species below.

Construction

As there is no Critical Habitat or Essential Fish Habitat within or adjacent to the Guenoc Valley Site or Modified APE, impacts to these resources would not occur. As noted under Impact 3.4-1 of the 2020 EIR, construction in general has the potential to displace special-status species and convert or degrade habitat they rely on, which would be a potentially significant impact. The Project Modifications result in an overall decrease in the size of the Development Area (213 acres), which will ultimately result in a slightly lesser impact to special status species due to construction activities as compared to the Original Project analyzed in the 2020 EIR. **Mitigation Measures 3.4-1** and **3.4-2** include construction best management practices (BMPs) to reduce the likelihood that this would occur, and these measures would continue to apply to the Modified Project. **Section 4.4.5** of this PREIR contains a minor modification to **Mitigation Measure 3.4-2** to clarify that this mitigation measure also applies to the Grange Road Connector, as this mitigation measure specified the necessary content of worker environmental awareness training by construction location. **Mitigation Measures 3.4-1** and **3.4-2** (as updated) would continue to reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR.

Special-Status Plants

Several special-status plants have been observed within the Modified APE, and there are several other special-status plants that have the potential to occur within the Modified APE. Since publication of the 2020 EIR there are no new special-status plant species with the potential to occur within the Modified APE and no changes have occurred to the status of plants considered in the 2020 EIR. The 2020 EIR determined that Porter's navarretia had a moderate potential to occur, and it has since been observed within the Modified APE (**Appendix I-1**). This plant is not listed under the FESA or CESA and is considered herein solely for its CNPS Rank (1B.3). Although this additional plant has been observed within the Modified APE, the 2020 EIR already assumed those plants with a moderate to high potential to occur may establish within an impact area due to the long timeframe for development and therefore put forth mitigation for special-status plants that have been observed and those that may establish over time. Surveys conducted across the remainder of the Modified APE did not identify any other new special status plants that were not included in the 2020 EIR. **Mitigation Measure 3.4-3** includes a preconstruction survey for special-status plants within a reasonable timeframe prior to development and includes avoidance measures where possible and options for transplanting and/or compensatory planting when plants cannot be avoided, which reduces this impact to less-than-significant levels. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that change the APE or Development Area (Parcel Reconfiguration, Grange Road Connector, and Connector Roadways) result in an overall decrease in the size of the Development Area (213 acres), which will ultimately result in more undeveloped land available to serve as transplanting or compensatory planting locations, and a significant portion of the Guenoc Valley Site would be conserved as open space. **Mitigation Measure 3.4-3** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with special-status plants as compared to the 2020 EIR.

American Badger

American badger has not been observed within the Modified APE. As discussed within the 2020 EIR, American badger has the potential to utilize grassland habitat for foraging, denning, and raising of young. The 2020 EIR determined that potential impacts could occur to American badger due to habitat conversion or from direct mortality of denning badgers caused by construction activities. The 2020 EIR found that impacts due to conversion of American badger habitat were less than significant. As shown in **Table 4.4-4**, the 2020 APE would impact up to 562.1 acres of grasslands, while the Modified APE would result in impacts to up to 444.0 acres of grasslands. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that change the APE or Development Area (Parcel Reconfiguration, Grange Road Connector, and Connector Roadways) would reduce potential impacts to American badger habitat by 118.1 acres and this impact would remain less than significant.

The 2020 EIR also analyzed the potential for active badger dens to be impacted by construction activities, which would be a potentially significant impact, and included **Mitigation Measure 3.4-4** to reduce this impact to less than significant. **Mitigation Measure 3.4-4** would require preconstruction surveys before construction within open grasslands to ensure that active dens are identified and impacts to American badgers avoided through consultation with CDFW in the event an active den is identified and use of passive measures such as den exclusion. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would include the same construction activities and therefore this would remain a significant impact without mitigation. However, there are no new project components that would increase this impact compared to what was analyzed in the 2020 EIR, and likelihood of encountering an active American badger den is reduced compared to the 2020 EIR given the reduced impacts to suitable habitat as a result of the Parcel Reconfiguration. **Mitigation Measure 3.4-4** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with American badger as compared to the 2020 EIR.

Ringtail

Ringtail has not been observed within the Modified APE. As discussed within the 2020 EIR, ringtail has the potential to occur within oak woodland, rock outcrops, chaparral, and similar habitats. The 2020 EIR determined that potential impacts could occur to ringtail due to habitat conversion or to direct mortality caused by destruction of birthing dens that could result from construction activities. The 2020 EIR determined that impacts due to conversion of ringtail habitat were less than significant. As shown in **Table 4.4-4**, the 2020 EIR assessed impacts of up to a collective 1,726.6 acres to oak woodland, rock outcrops, and chaparral, while the Modified APE would result in impacts of up to 725.8 acres of these habitats. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that change the APE or Development Area (Parcel Reconfiguration, Grange Road Connector, and Connector Roadways) would result in a reduction in the magnitude of impacts to ringtail habitat of 1,000.8 acres and this impact would remain less than significant.

The 2020 EIR analyzed the potential for active ringtail birthing dens to be impacted by construction activities, and included **Mitigation Measure 3.4-5** to reduce this impact to less than significant. **Mitigation Measure 3.4-5** would require preconstruction surveys before construction within suitable denning habitat

to ensure that active birthing dens are identified and impacts to ringtails avoided through avoidance of active dens until a qualified biologist determines the den is no longer active. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would include the same construction activities and therefore this would be a significant impact without mitigation. However, there are no new project components that would increase this impact compared to what was analyzed in the 2020 EIR, and the likelihood of encountering an active ringtail den is reduced compared to the 2020 EIR given the reduced impacts to suitable habitat due to the Parcel Reconfiguration. **Mitigation Measure 3.4-5** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with ringtail as compared to the 2020 EIR.

Special-Status Bats

Pallid bat, western red bat, and Townsend's big-eared bat have the potential to roost and forage on the Guenoc Valley Site and Grange Road Connector, especially in areas oak habitat, rock outcrops, and riparian areas. The 2020 EIR analyzed potential impacts due to habitat conversion, direct mortality caused by construction activities, and disturbance that would result should construction activities occur during nighttime hours. The 2020 EIR determined that impacts due to conversion of bat habitat were less than significant. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that change the APE or Development Area (Parcel Reconfiguration, Grange Road Connector, and Connector Roadways) result in an overall decrease in the size of the Development Area (213 acres), which will ultimately result in more undeveloped land being retained as bat habitat. Therefore, this impact will remain less than significant.

The 2020 EIR determined that destruction of an active special-status bat roost or direct injury or mortality caused by construction activities would be a significant impact, and that **Mitigation Measure 3.4-6** would reduce this to less-than-significant levels. **Mitigation Measure 3.4-6** includes a preconstruction survey to identify trees with suitable roost features. Trees with suitable roost features would be assumed active and removed over a two-day process using hand tools, timed as possible during the bat active season and outside the maternity season as possible. Construction methodologies are unchanged from the 2020 EIR, thus this impact would remain significant without mitigation. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. There are no new project components that would increase this impact, and the likelihood of encountering an active bat roost would be reduced due to the decrease in construction activities within forested or woodland habitat. **Mitigation Measure 3.4-6** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with special-status bat roosts as compared to the 2020 EIR.

As noted above, the 2020 EIR assessed the potential for nighttime construction activities to impact special-status bats. The Project Modifications do not alter the time of day that construction activities are proposed. Although construction is anticipated to occur primarily during daylight hours, any nighttime construction noise would have the potential to disrupt nighttime foraging of bats and may result in displacement of bats. As discussed in the 2020 EIR, construction of Phase 1 would occur in phases over a long period of time such that significant areas of habitat would not be disturbed at any one time.

Additionally, under **Mitigation Measure 3.10-2** as presented in the 2020 EIR, overall construction noise would be reduced. **Mitigation Measures 3.4-6** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with nighttime construction activities as compared to the 2020 EIR.

Special-Status, Nesting, and Migratory Birds

Special-status and migratory birds have the potential to nest throughout the Guenoc Valley Site and Grange Road Connector. The 2020 EIR assessed potential impacts to special-status, nesting, and migratory birds resulting from habitat conversion, nest disturbance from construction activities, and sensory disturbance from use of artificial lighting.

The 2020 EIR determined that impacts due to habitat conversion would be less than significant due to the amount of undeveloped land remaining after implementation of the Original Project. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications, specifically the Parcel Reconfiguration, Grange Road Connector, and Connector Roadways, result in an overall decrease in the size of the Development Area (213 acres), which will ultimately result in more undeveloped land being retained as potential bird habitat. Therefore, this impact will remain less than significant.

As discussed in the 2020 EIR, construction activities have the potential to result in sensory disturbance to nesting birds, should construction activities commence during the active nesting season (February 1 through August 31). Nest destruction, abandonment, or failure due to Project activities is a significant impact, and **Mitigation Measure 3.4-8** will reduce this impact to less-than-significant levels. **Mitigation Measure 3.4-8** requires a preconstruction nesting bird survey for construction commencing or re-commencing during the general nesting season and, if an active nest is identified, a disturbance-free buffer will be demarcated until the nest is no longer active. As further described in **Mitigation Measure 3.4-8**, guiding documents such as recovery plans shall be reviewed during construction to ensure that active nests present at the inception of disturbance are afforded an appropriate buffer such that species-specific noise thresholds are not exceeded. The 2020 EIR also determined that **Mitigation Measures 3.10-1** and **3.10-2** would further reduce this impact by reducing construction-related noise. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. Construction of the Modified Project would utilize the same methodologies as the Original Project and would therefore have the same potential to result in disturbance of nesting birds, though it is noted that the reduction in the APE would reduce the geographical extent of this impact. **Mitigation Measures 3.4-8**, **3.10-1**, and **3.10-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with nesting birds as compared to the 2020 EIR. **Section 4.4.5** of this PREIR contains a minor modification to this mitigation measure to clarify that **Mitigation Measure 3.4-8** also applies to the Grange Road Connector, as this mitigation measure specified survey areas.

The 2020 EIR also assessed potential impacts resulting from increased use of artificial light as artificial lighting has the potential to impact birds. While the Design Guidelines would restrict allowable lighting features, including light type, intensity, shielding, and timing and would avoid much of this impact, this impact was still deemed potentially significant. **Mitigation Measure 3.4-7** was included to reduce artificial

lighting impacts to a less-than-significant level by reducing the use of potentially attractive lighting and minimizing spillage of lighting, especially into areas of sensitive habitat. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would result in a similar use artificial lighting, though it is noted that the reduction in the APE due to the Parcel Reconfiguration would reduce the geographical scale of this impact. **Mitigation Measure 3.4-7** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with artificial lighting as compared to the 2020 EIR.

Burrowing Owl

Burrowing owl has not been observed within the Modified APE during surveys completed in support of the 2020 EIR and this PREIR. However, there are known historical occurrences of this species within the Guenoc Valley Site. Burrowing owl has the potential to utilize grassland and agricultural habitat for foraging and may utilize small mammal burrows within grasslands for burrowing, and potential impacts could occur due to habitat conversion or direct injury and mortality in the event that an active burrow is destroyed during construction activities. The 2020 EIR determined that impacts resulting from habitat conversion would be less than significant due to the amount of suitable burrowing and foraging habitat that would be left undeveloped. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. As shown in **Table 4.4-4**, the 2020 APE included impacts of up to 562.1 acres to grasslands and 291.8 acres of agricultural habitat, while the Modified APE would result in impacts to up to 444.0 acres of grasslands and 309.7 acres of agricultural areas. Therefore, the Modified Project would be a reduction in impacts of 118.1 acres of potential burrow habitat and 100.2 acres of foraging habitat, which includes the Parcel Reconfiguration, Grange Road Connector, and Connector Roadways. As impacts to suitable habitat is reduced under the Modified Project, this impact would remain less than significant.

The 2020 EIR also addressed the potential for active burrowing owl burrows to be impacted by construction activities. Destruction of an active burrowing owl was considered a significant impact, and **Mitigation Measure 3.4-9** was included to reduce this impact to a less-than-significant level. **Mitigation Measure 3.4-9** would require preconstruction surveys consistent with CDFW protocol guidelines. Active burrows would be afforded a disturbance-free buffer until a qualified biologist determines the burrow is no longer active. Exclusion would only occur outside of the nesting season and only using passive methods. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would include the same construction methodologies and therefore this would remain a significant impact without mitigation. However, there are no new project components that would increase this impact compared to what was analyzed in the 2020 EIR, and likelihood of encountering an active burrowing owl burrow is reduced compared to the 2020 EIR given the reduced impacts to suitable habitat. **Mitigation Measure 3.4-9** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with burrowing owl as compared to the 2020 EIR.

Northwestern Pond Turtle

Northwestern pond turtle has been observed within Bucksnort Creek, Putah Creek, and along the banks of an unnamed reservoir within the Guenoc Valley Site and has the potential to occur within other aquatic features that contain basking sites. The 2020 EIR determined that impacts could occur to northwestern pond turtle though habitat conversion, direct injury or mortality to individuals during construction within suitable habitat, and habitat degradation through impaired runoff. The 2020 EIR determined that impacts resulting from habitat conversion would be less than significant due to the amount of suitable remaining habitat. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. Even with the addition of the Grange Road Connector and the Connector Roadways, the Modified Project would result in a maximum potential impact to aquatic habitats of 25.1 fewer acres than the Original Project (**Table 4.4-4**) due to the Parcel Reconfiguration, and this impact would remain less than significant.

The 2020 EIR determined that a significant impact could occur if construction within suitable northwestern pond turtle habitat caused displacement, direct injury or mortality, or disruption of nesting, foraging, and other behaviors, and **Mitigation Measure 3.4-10** would reduce this impact to a less-than-significant level. **Mitigation Measure 3.4-10** would time ground disturbance on and within 300 feet of northwestern pond turtle habitat between July 1 and October 31 to avoid the peak nesting season and winter inactivity periods for northwestern pond turtle. Where infeasible, a qualified biologist will identify suitable nesting/overwintering areas to be disturbed and will either place a disturbance free buffer, or coordinate relocation with CDFW. All work on and within 300 feet of suitable northwestern pond turtle habitat would only occur under the supervision of a qualified biologist, or after installation of northwestern pond turtle exclusionary fencing deemed acceptable by a qualified biologist. The Project Modifications would include the same construction methodologies and therefore this would remain a significant impact without mitigation. While the Grange Road Connector would result in construction adjacent to Bucksnort Creek, a waterbody where northwestern pond turtle has been previously identified, the stretch of the road alignment adjacent to the stream is an existing vineyard road that receives regular vineyard-related traffic including tractors and worker vehicles. The 2020 EIR assumed that northwestern pond turtle is potentially present in areas of suitable habitat, which includes Bucksnort Creek, and therefore construction of the Project Modifications (including upgrades to the existing vineyard road that will become the Grange Road Connector), will not cause a new significant impact or increase the severity of the impact as previously assessed. **Mitigation Measure 3.4-10** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with direct impacts to northwestern pond turtle as compared to the 2020 EIR. While the potential level of impacts remains unchanged, it is noted that **Mitigation Measures 3.4-10** has been revised to account for the nomenclature update to northwestern pond turtle and to include USFWS as a cooperating agency due to the reclassification of this species and updated jurisdictional status with USFWS and associated protections.

The 2020 EIR further assessed the potential degradation of aquatic habitats that may support northwestern pond turtle should impaired runoff enter aquatic habitats, which would be a significant impact. **Mitigation Measure 3.9-1** and **3.9-2** would reduce this impact to a less-than-significant level through permitting under the Construction General Permit, which includes a requirement for a Stormwater Pollution Prevention Plan (SWPPP) with construction BMPs and inspections throughout construction to avoid production of impaired runoff. **Mitigation Measure 3.9-2** requires that on-site aggregate and concrete production be conducted in accordance with requirements of the Central Valley

Regional Water Quality Control Board (RWQCB). Adherence to these standards would prevent the exceedance of water quality standards. The Modified Project would not introduce new construction methodologies that would increase this impact compared to what was evaluated in the 2020 EIR and it would similarly be required to be permitted under the Construction General Permit. **Mitigation Measures 3.9-1** and **3.9-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with indirect impacts to northwestern pond turtle as compared to the 2020 EIR.

Foothill Yellow-Legged Frog

Foothill yellow-legged frog has been observed along Bucksnort Creek near McCain Creek within the Guenoc Valley Site and has the potential to occur within other aquatic features that have suitable habitat, such as wetted streams and associated riparian habitat. The 2020 EIR determined that impacts could occur to foothill yellow-legged frog though habitat conversion, direct injury or mortality to individuals during construction within suitable habitat, and habitat degradation through impaired runoff. The 2020 EIR determined that impacts resulting from habitat conversion would be less than significant due to the amount of suitable remaining habitat. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. Even with the addition of the Grange Road Connector and the Connector Roadways, the Modified Project would result in a maximum potential impact to aquatic habitats of 25.1 fewer acres than the Original Project (**Table 4.4-4**) with inclusion of the Parcel Reconfiguration, and this impact would remain less than significant.

The 2020 EIR determined that a significant impact could occur if construction within suitable foothill yellow-legged frog habitat caused displacement, direct injury or mortality, or disruption of natural behaviors, and **Mitigation Measure 3.4-11** would reduce this impact to a less-than-significant level. This measure would time ground disturbance on and within 100 feet of habitat known to support foothill yellow-legged frog during the dry months and outside of the breeding season if possible. Where infeasible, work would only occur under the supervision of a qualified biologist, or after installation of foothill yellow-legged frog exclusionary fencing deemed acceptable by a qualified biologist. Preconstruction surveys will be completed for all impacts to suitable foothill yellow-frog habitat, and avoidance or relocation methods are outlined in **Mitigation Measure 3.4-11** based on the timing and location of the observation. The Project Modifications would include the same construction methodologies and therefore this would remain a significant impact without mitigation. While the Grange Road Connector would result in construction adjacent to Bucksnort Creek, a waterbody where foothill yellow-legged frog has previously been identified, the stretch of the road alignment adjacent to the stream is an existing vineyard road that is regularly disturbed. The 2020 EIR assumed that foothill yellow-legged frog is potentially present in areas of suitable habitat, which includes Bucksnort Creek, and therefore construction of the Project Modifications (including upgrades to the existing vineyard road that will become the Grange Road Connector), will not cause a new significant impact or increase the severity of the impact as previously assessed. **Mitigation Measure 3.4-11** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with direct impacts to foothill yellow-legged frog as compared to the 2020 EIR.

The 2020 EIR further assessed the potential degradation of aquatic habitats that may support foothill yellow-legged frog should impaired runoff enter aquatic habitats, which would be a significant impact. **Mitigation Measure 3.9-1** and **3.9-2** would reduce this impact to a less-than-significant level through

permitting under the Construction General Permit, which includes the same SWPPP requirements and Central Valley RWQCB oversight discussed above. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Modified Project would not introduce new construction methodologies that would increase this impact compared to what was evaluated in the 2020 EIR and it would similarly be required to be permitted under the Construction General Permit. **Mitigation Measures 3.9-1** and **3.9-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with indirect impacts to foothill yellow-legged frog as compared to the 2020 EIR.

Monarch Butterfly

As Monarch butterfly was not considered a special-status species at the time of circulation of the 2020 EIR, there is no assessment of potential impacts to Monarch butterfly presented within the 2020 EIR (**Appendix D**). Section 7.2.2 of the supplemental BRA (**Appendix I-1**) analyzes potential impacts to Monarch butterfly resulting from the Modified Project. Although Monarch butterfly has no formal protection as it is currently a Candidate for listing, this PREIR assesses the level of potential impacts to this species. As stated in **Appendix I-1**, the Guenoc Valley Site and Grange Road Connector are outside of the wintering roost range of this species, and therefore roosts would not be impacted. Foraging and breeding habitat does occur throughout the Guenoc Valley Site where nectar sources occur and where larval host plants (milkweed) occur. Of the nearly 16,000 acres that comprises the Guenoc Valley Site and Grange Road Connector, approximately 84.7 percent would not be developed under Phase 1. The Project Modifications result in an overall decrease in the size of the Development Area (213 acres) and an associated increase in the amount of undeveloped space compared to the Original Project. Therefore, the majority of potential habitat would remain in its current state and useable for Monarch butterfly during the spring and summer months when it may be present. This would be a less-than-significant impact.

Invasive Species

The 2020 EIR determined that creation of palustrine habitats has the potential to increase the presence of invasive species, specifically bullfrogs, which is a significant impact, and included **Mitigation Measure 3.4-12** to reduce this impact to a less-than-significant level. **Mitigation Measure 3.4-12** includes creation of a bullfrog management plan to address the potential increase in bullfrogs resulting from creation of palustrine habitat. The Project Modifications would not result in creation of bullfrog habitat or changes to the palustrine habitat proposed for creation under the 2020 EIR. Therefore, there would be no new impact beyond those areas already identified in the 2020 EIR, and no new or more significant impact would occur. **Mitigation Measure 3.4-12** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with indirect impacts due to the presence of invasive species as compared to the 2020 EIR.

Operation

Special-Status Plants

As discussed within the 2020 EIR, potential operational impacts to special-status plants would include loss incidental to wildfire prevention activities, which would be a less-than-significant impact. The Project Modifications including the Grange Road Connector, GHG Emissions Reduction Measures, and DMP would have no potential to change the severity of this impact as they do not include alterations to operational activities. The Updated WPP, which has been modified to reflect the Parcel Reconfiguration, includes

alterations to where landscape management activities would occur to align the new parcel and road alignments; while the methodology for fuel load management is unchanged from what was analyzed in the 2020 EIR, the Updated WPP (**Appendix F**) clarifies that mechanical vegetation removal will target dead and dying shrubs and trees. Figure 17 of **Appendix F** reallocates "Residential/Resort/Facility Grazing Areas" to "Active Landscape Management Areas" to reflect where relocated Residential/Resort/Facility areas are now proposed to remain as undeveloped open space. The Updated WPP does not result in changes to future operational activities that would increase the potential for impact to special-status plants. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with special-status plants as compared to the 2020 EIR.

Special-Status Wildlife

As noted in the 2020 EIR, the majority of potential impacts to special-status wildlife species would occur during the construction phase. High levels of noise during operation could impact special-status wildlife, particularly near the proposed float dock and helicopter landing pads, but the 2020 EIR determined that a less-than-significant impact to special-status wildlife would occur with inclusion of **Mitigation Measures 3.10-1** through **3.10-4** to reduce noise impacts. **Mitigation Measure 3.10-4** limits aircraft and non-emergency helicopter flight times, which would protect biological resources as assessed in Impact 3.4-1 of the 2020 EIR (**Appendix D**). The Project Modifications do not include characteristics that would increase operational noise production beyond what was considered in the 2020 EIR. None of the Project Modifications would change the noise output of the proposed development. The Parcel Reconfiguration would increase the amount of undeveloped space compared to the Original Project, which would further reduce the potential for operational noise impacts to sensitive species. For example, the removal of the camping area would wholly remove any potential increase in ambient noise in the immediate vicinity of that area. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with noise impacts to special-status wildlife as compared to the 2020 EIR.

The 2020 EIR additionally assessed whether increased recreational uses and human activity within undeveloped areas, specifically around aquatic habitats, would result in significant impacts to special-status wildlife. Increased human activity could result in degradation of aquatic habitat that foothill yellow-legged frog and northwestern pond turtle may utilize, which is a potentially significant impact. **Mitigation Measure 3.4-13** would reduce this impact to a less-than-significant level. **Mitigation Measure 3.4-13** would provide public education on the value of these habitats and action items for visitors to adhere to in order to prevent habitat degradation. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. Although the Project Modifications result in a smaller Modified APE compared to the Original Project, the level of human activity in these areas is likely similar to what was evaluated in the 2020 EIR and therefore, the potential for foothill yellow-legged frog and northwestern pond turtle to be impacted by increased human activity during operation remains a potentially significant impact. **Mitigation Measure 3.4-13** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with operational impacts to wildlife within aquatic habitats as compared to the 2020 EIR.

Finally, the 2020 EIR considered the potential impacts to special-status birds resulting from the likely increase in domestic cats within the Guenoc Valley Site, which could lead to a significant impact.

Mitigation Measure 3.4-21 would reduce this impact to a less-than-significant level. **Mitigation Measure 3.4-21** includes education of residents on action items to reduce or prevent domestic cat predation of wildlife. Project Modifications such as the GHG Reduction Measures, Updated WPP, Grange Road Connector, Connector Roadways, and DMP, would have no potential to increase the severity of this impact. The Parcel Reconfiguration will increase the density of proposed developments and may reduce the geographical area that domestic cats are likely to wander, this PREIR conservatively assumes that the level of impact would remain the same as the 2020 EIR. Therefore, **Mitigation Measure 3.4-21** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with domestic cat predation as compared to the 2020 EIR.

IMPACT 3.4-2	**SUBSTANTIAL ADVERSE EFFECT ON ANY RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL PLANS, POLICIES, REGULATIONS, OR BY CDFW OR USFWS**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant	Significant (Workforce Housing) No Impact (Infrastructure)	No
Mitigation Measures	MM 3.4-1, 3.4-15 through 3.4-18; MM 3.9-1, 3.9-2 (Phase I) MM 3.4-1, 3.4-14 through 3.4-18; MM 3.9-1, 3.9-2 (Future Phases)	MM 3.4-1, 3.4-15, 3.4-16; MM 3.9-1 (Workforce Housing) None Required (Infrastructure)	Modifications to Mitigation Measures 3.4-15 and 3.4-18; all other mitigation measures applicable as originally written
Significance After Mitigation	Less than Significant	Less than Significant (Workforce Housing) No Impact (Infrastructure)	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, potentially significant impacts would occur to sensitive natural communities if sensitive habitat types are directly converted, disturbed through the process of construction and maintenance of a project, or indirectly disturbed by construction or ongoing activity associated with a project. Indirect impacts may occur due to narrow buffers from development, connectivity of resources such as groundwater, non-discrete impacts such as pollution, and other project-related impacts. As with the 2020 EIR, sensitive habitats include purple needlegrass grassland, musk-brush chaparral, white alder grove, brewer willow thicket, Sargent cypress woodland, oak habitat, and aquatic habitats. Sargent

cypress woodland was not within the 2020 APE and is not within the Modified APE and is therefore not discussed further (**Figure 4-8**). Serpentine rock outcrop is a newly defined sensitive habitat and is discussed herein. **Mitigation Measures 3.4-1**, **3.4-15** through **3.4-18**, **3.9-1** and **3.9-2** will ensure that impacts to sensitive habitats are reduced to less-than-significant levels.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to change the level of impact compared to what was analyzed in the 2020 EIR, and therefore the impact discussions below focus on this subset of Project Modifications. **Mitigation Measures 3.4-1**, **3.4-15** through **3.4-18**, **3.9-1** and **3.9-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with sensitive habitats as compared to the 2020 EIR, as explained in more depth by habitat type below.

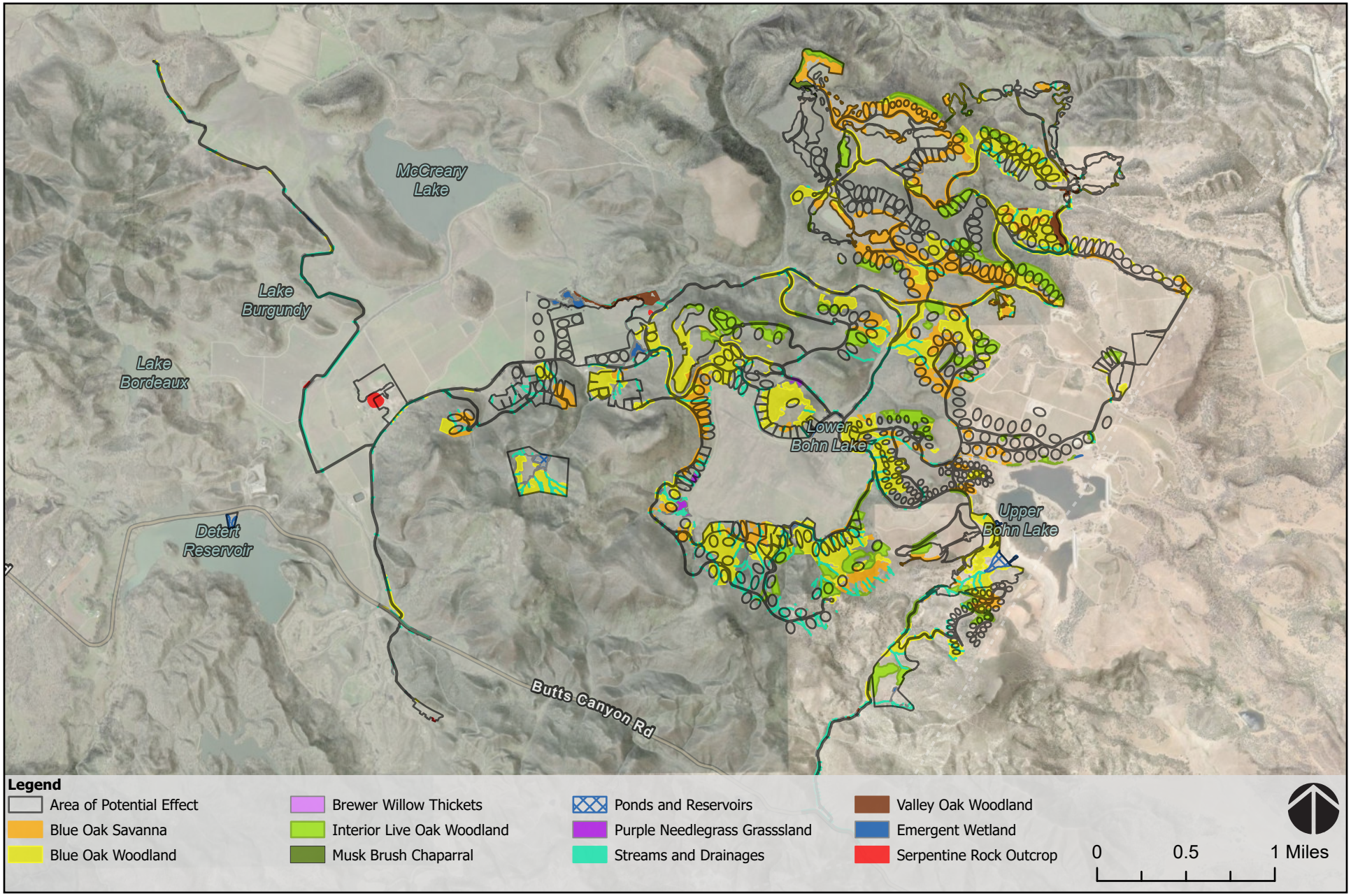
Construction

Purple Needlegrass

The 2020 EIR assessed impacts of up to 8.0 acres of purple needlegrass due to the Original Project, which is a significant impact. In order to reduce this impact to less than significant, **Mitigation Measure 3.4-15** requires that this habitat type be avoided as possible and includes options for mitigating impacts to habitat that cannot be avoided, through preservation, creation, restoration, or enhancement at a 2:1 ratio. The Project Modifications would result in up to 5.7 acres of impacts to purple needlegrass (up to 47.1 percent converted of the total 12.1 acres across the Guenoc Valley Site and Grange Road Connector). Therefore, the Project Modifications will reduce impacts to purple needlegrass by approximately 2.3 acres (21.3 percent). The quality and condition of purple needlegrass is unchanged since the 2020 EIR, but because purple needlegrass is a sensitive habitat type this would still be a potentially significant impact. **Mitigation Measure 3.4-15** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with purple needlegrass as compared to the 2020 EIR.

Musk-brush Chaparral

The 2020 EIR identified impacts of up to 19.5 acres of musk-brush chaparral due to the Original Project, which is a significant impact. In order to reduce this impact to less than significant, **Mitigation Measure 3.4-15** requires that this habitat type be avoided as possible and includes options for mitigating habitat that cannot be avoided through preservation, creation, restoration, or enhancement at a 2:1 ratio. The Project Modifications would result in up to 2.8 acres of impacts to musk-brush chaparral (8.8 percent of the total habitat). The Project Modifications will reduce impacts to this sensitive habitat type by 16.7 acres. The quality and condition of musk-brush chaparral is unchanged since the 2020 EIR, however as musk-brush chaparral is a sensitive habitat type, impacts to up to 2.8 acres of musk-brush chaparral would still be a potentially significant impact. **Mitigation Measure 3.4-15** would continue to apply and would reduce this impact to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with musk-brush chaparral as compared to the 2020 EIR.



Source: Lake County Community Development and General Plan; County of Napa, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS, Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Pictometry International, The County of Napa, Maxar

FIGURE 4-8

SENSITIVE HABITATS WITHIN MODIFIED PHASE 1 APE

White Alder Grove

The 2020 EIR identified impacts to 0.1 acres of white alder grove, which was a potentially significant impact. The Project Modifications, specifically the Parcel Reconfiguration, would result in complete avoidance of white alder grove and no impacts to this sensitive habitat would occur. Therefore, no mitigation is necessary and **Mitigation Measure 3.4-15**, which was recommended in the 2020 EIR for impacts to white alder grove, would not apply to Phase 1 as it relates to white alder grove.

Brewer Willow Thicket

The 2020 EIR identified impacts of up to 0.04 acres of brewer willow thicket, which is a significant impact. In order to reduce this impact to less than significant, **Mitigation Measure 3.4-15** requires that this habitat type be avoided as possible and includes options for mitigating impacts to habitat that cannot be avoided through preservation, creation, restoration, or enhancement at a 2:1 ratio. The Project Modifications would result in 1.1 acres of impacts to brewer willow thicket (a conversion rate of 24.4 percent). The Project Modifications will result in an increase in impacts to this habitat, but the majority of brewer willow thicket would be preserved (minimum of 75.6 percent). **Mitigation Measure 3.4-15** would continue to apply and would decrease impacts to brewer willow thicket by prioritizing avoidance of this habitat type followed by mitigating impacts at a 2:1 ratio, which will continue to reduce impacts to brewer willow thicket to a less-than-significant level. Even with the increase in impacted acreage, sufficient unimpacted brewer willow thicket would remain to fulfill mitigation through preservation, even if the full 1.1 acres within the Modified APE is impacted, and sufficient undeveloped open space remains should mitigation be completed through creation, enhancement, or restoration. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with brewer willow thicket as compared to the 2020 EIR.

Serpentine Rock Outcrop

As discussed in **Section 4.4.2** of this PREIR, serpentine rock outcrop is a newly classified sensitive habitat type pursuant to updated CDFW habitat classification systems, and conversion of this habitat would be a significant impact. The onsite rock outcrops were previously classified in the 2020 EIR as non-sensitive, and 18.9 acres within the Project Site meet the standard of serpentine rock outcrop, which is considered a sensitive habitat type. Up to 3.9 acres of this habitat type falls within the Modified APE, resulting in a conversion rate of 20.6 percent. As this habitat type was not described at the time of publication of the 2020 EIR, no analysis of the level of impacts to this habitat type was presented. In order to reduce potential impacts to less-than-significant levels, serpentine rock outcrops have been added to the sensitive habitat mitigation included as **Mitigation Measure 3.4-15**. **Mitigation Measure 3.4-15** provides compensatory mitigation in the form of habitat preservation, restoration, creation, and/or enhancement of in-kind habitat at a 2:1 ratio. As creation of serpentine rock outcrops is not a feasible method of mitigation, mitigation for rock outcrops as outlined in **Mitigation Measure 3.4-15** would be limited to preservation, restoration, or enhancement. As up to 3.9 acres of serpentine rock outcrop would be impacted by the Modified Project, up to 7.8 acres of serpentine rock outcrop would be needed to satisfy mitigation through preservation. A total of 15.0 acres of serpentine rock outcrop occurs throughout the Guenoc Valley Site and outside of the Modified APE and would be sufficient to mitigate for the Proposed Project based on preservation alone. In addition to preservation, the option to restore or enhance serpentine rock outcrops would be available as high levels of invasive vegetation was observed in areas where vegetative cover was present. With inclusion of **Mitigation Measure 3.4-15**, impacts to serpentine rock outcrop would be less-than-significant.

Oak Woodland and Savanna

The 2020 EIR identified impacts to oak habitat up to the following:

- 257 acres of blue oak woodland
- 146 acres of blue oak savanna
- 72 acres of interior live oak woodland
- 2 acres of valley oak woodland

The 2020 EIR determined that conversion of oak woodland and oak savanna was a potentially significant impact that was reduced to less-than-significant levels through inclusion of **Mitigation Measure 3.4-16**. **Mitigation Measure 3.4-16** includes adherence to an oak mitigation plan that would offset impacts through preservation and compensatory plantings. Even with the addition of the Grange Road Connector and the Connector Roadways, the Parcel Reconfiguration results in an overall decrease in the APE and Development Area (213 acres). With consideration of the Project Modifications, the following maximum potential impacts to oaks were identified:

- 153 acres of blue oak woodland
- 96 acres of blue oak savanna
- 58 acres of interior live oak woodland
- 1 acre of valley oak woodland

Although this impact has decreased for every type of oak habitat, conversion of oak habitat would still be considered a significant impact. Therefore, **Mitigation Measure 3.4-16** as presented in the 2020 EIR would apply to the Modified Project. The Oak Mitigation Plan included as Appendix OAK to Volume III of the 2020 EIR has been revised to reflect the updated impact acreages and is included herein as **Appendix J**. The methodology and standards set forth in the Oak Mitigation Plan are unchanged, and revisions are limited to acreage accounts. **Mitigation Measure 3.4-16** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with oak woodlands and oak savannah as compared to the 2020 EIR.

Aquatic Habitats

The direct impact of aquatic resources through loss, modification, or degradation would be a significant impact. **Mitigation Measure 3.4-17** would reduce impacts to less-than-significant levels by prioritizing avoidance as possible, followed by preservation, restoration and/or habitat creation at a minimum 1:1 ratio and consistent with agency permitting requirements. Even with the addition of the Grange Road Connector and the Connector Roadways, the Modified Project would result in a maximum potential impact to aquatic habitats of 25.1 fewer acres than the Original Project (**Table 4.4-4**) due to the Parcel Reconfiguration. Although impacts of the Modified Project would be less, direct conversion of aquatic habitat would still be a significant impact without mitigation. **Mitigation Measure 3.4-17** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with aquatic habitats as compared to the 2020 EIR.

In addition to direct conversion of habitat, indirect impacts resulting in degradation of aquatic habitat would be significant if runoff produced during the construction phase result in impaired water quality.

Although the Modified APE is generally smaller than what was evaluated in the 2020 EIR, construction of project components still poses a significant risk to waters due to impaired runoff. **Mitigation Measures 3.9-1** and **3.9-2** would reduce this impact to a less-than-significant level through permitting under the Construction General Permit, which includes a requirement for a SWPPP that includes construction BMPs and inspections throughout construction. **Mitigation Measure 3.9-2** would further reduce this impact by ensuring that on-site aggregate and concrete production be conducted in accordance with requirements of the Central Valley RWQCB. The Modified Project would not introduce new construction methodologies that would increase this impact compared to what was evaluated in the 2020 EIR and it would similarly be required to be permitted under the Construction General Permit. **Mitigation Measures 3.9-1** and **3.9-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with indirect impacts to aquatic habitats as compared to the 2020 EIR.

Operation

The 2020 EIR determined that significant operation impacts to sensitive habitats following construction would be limited to ongoing wildfire management activities and **Mitigation Measure 3.4-18** would reduce this impact to a less-than-significant level. **Mitigation Measure 3.4-18** would reduce impacts by avoiding sensitive habitats with a limited distribution and by restricting what types of wildfire management actions and tools are allowable within other sensitive habitats. The Project Modifications including the Grange Road Connector, GHG Emissions Reduction Measures, and DMP would have no potential to change the severity of this impact as they do not include alterations to operational activities. The Updated WPP (**Appendix F**) which has been modified to reflect the Parcel Reconfiguration includes alterations to where landscape management activities would occur to align with the new parcel and road alignments, but the methodology of wildfire management as it relates to fuel load management is unchanged. Figure 17 of **Appendix F** reallocates "Residential/Resort/Facility Grazing Areas" to "Active Landscape Management Areas" to reflect where relocated Residential/Resort/Facility areas are now proposed to remain as undeveloped open space. The Updated WPP does not result in changes to future operational activities that would increase the potential for impact to sensitive habitats. As discussed above, serpentine rock outcrop has been newly identified as a sensitive habitat and therefore, **Mitigation Measure 3.4-18** has been revised to discuss serpentine rock outcrop. As this habitat definitionally has minimal vegetation cover (less than 10 percent), it would not require wildfire management activities. Therefore, its addition to **Mitigation Measure 3.4-18** is simply to ensure that staging activities would not occur in these areas, thus ensuring impacts to serpentine rock outcrop would not occur as a result of wildfire management activities. **Mitigation Measure 3.4-18** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with sensitive habitats as compared to the 2020 EIR.

IMPACT 3.4-3	SUBSTANTIAL ADVERSE EFFECT ON STATE OR FEDERALLY PROTECTED WETLANDS THROUGH DIRECT REMOVAL, FILLING, HYDROLOGICAL MODIFICATION, OR OTHER MEANS		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant	Less than Significant	No
Mitigation Measures	MM 3.4-1, 3.4-17; MM 3.9-1, 3.9-2 (Phase I) MM 3.4-1, 3.4-17; MM 3.9-1, 3.9-2 (Future Phases)	None Required	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, potentially significant impacts would occur to state or federally protected wetlands or waters if a project resulted in the direct conversion of wetlands, resulted in runoff and erosion that degrades habitat quality, or altered a watercourse or supporting adjacent habitat, such as a riparian community. **Mitigation Measures 3.4-1**, **3.4-17**, **3.9-1**, and **3.9-2** will ensure that impacts to jurisdictional wetlands and waters are reduced to less-than-significant levels. Consistent with the 2020 EIR, this PREIR conservatively assumes that all surface water resources are potentially jurisdictional. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to change the level of impact compared to what was analyzed in the 2020 EIR, and therefore the impact discussions below focus on this subset of Project Modifications. **Mitigation Measures 3.4-1**, **3.4-17**, **3.9-1**, and **3.9-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with jurisdictional wetlands and waters as compared to the 2020 EIR, as explained in more depth by habitat type below.

Construction

The 2020 EIR determined that impacts to surface waters that have the potential to be considered jurisdictional wetlands or waters would constitute a significant impact and included **Mitigation Measure 3.4-17** to reduce impacts to a less-than-significant level. **Mitigation Measure 3.4-17** would require consultation with the RWQCB, USACE, and CDFW to identify jurisdictional habitats, to obtain necessary permits prior to impacts to jurisdictional features, and adhere to all permit terms and conditions.

Mitigation Measure 3.4-17 sets minimum mitigation actions for impacts to aquatic habitats that cannot be avoided, including preservation, restoration and/or habitat creation at a minimum 1:1 ratio and consistent with agency permitting requirements. Project Modifications would not alter the type of impacts to potentially jurisdictional surface waters and would include direct conversion for urban uses, roadway crossings, and similar impacts as already assessed in the 2020 EIR. As shown in **Table 4.4-4**, the Project Modifications would result in maximum potential impacts to aquatic habitats that are 25.1 acres less than what was evaluated in the 2020 EIR. Although the Project Modifications decrease this impact, direct conversion of aquatic habitat with the potential to be jurisdictional would still be a significant impact. **Mitigation Measure 3.4-17** would continue to apply and would reduce this impact to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with jurisdictional wetlands and waters as compared to the 2020 EIR.

Operation

Operation of Phase 1 would not result in the removal, fill, or modification of wetlands or waters beyond that occurring for construction. There would be no impact. None of the Project Modifications would result in operational impacts to jurisdictional waters or wetlands. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with jurisdictional waters and wetlands during the operational phase as compared to the 2020 EIR.

IMPACT 3.4-4	**INTERFERE SUBSTANTIALLY WITH THE MOVEMENT OF ANY NATIVE RESIDENT OR MIGRATORY WILDLIFE SPECIES OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS, OR IMPEDE THE USE OF NATIVE WILDLIFE NURSERY SITES**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant	Less than Significant (Workforce Housing) No Impact (Infrastructure)	No
Mitigation Measures	MM 3.4-7, 3.4-19 (Phase I) MM 3.4-7, 3.4-14, 3.4-19, 3.4-20 (Future Phases)	None Required	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant (Workforce Housing) No Impact (Infrastructure)	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, potential impacts to wildlife movement or nursery sites would be considered significant if a project resulted in the significant restriction of wildlife movement, alteration of a known wildlife corridor, or any adverse impact to known nursery sites. The Original Project would result in a potentially significant impact relating to wildlife movement, primarily due to proposed fences and proposed lighting on the Project Site. **Mitigation Measures 3.4-7** and **3.4-19** will ensure that impacts to wildlife movement and use are reduced to less-than-significant levels. Appendix WILDLIFE to the 2020 EIR identified where least cost wildlife movement pathways were preserved within designated open space and provided an additional approximately 400 acres of Habitat Connectivity Easements to preserve least cost pathways in and near development lots to ensure a minimum 300-foot width of the corridor preserved. With consideration of Appendix WILDLIFE and project design, the 2020 EIR determined impacts to wildlife movement corridors were less than significant. Project Modifications would not impact additional M2B pathways beyond what was already identified in the 2020 EIR. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to change the level of impact compared to what was analyzed in the 2020 EIR, and therefore the impact discussions below focus on this subset of Project Modifications. **Mitigation Measures 3.4-7** and **3.4-19** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with wildlife movement or nursery sites as compared to the 2020 EIR, as explained in more depth by habitat type below.

Fencing

The 2020 EIR determined that fencing has the potential to result in wildlife entrapment or exclusion and can restrict wildlife access and movement to and through areas of otherwise suitable habitat. This impact was determined to be significant, and **Mitigation Measure 3.4-19** was presented to reduce this impact to a less-than-significant impact. **Mitigation Measure 3.4-19** further defines and limits allowable fencing location and design beyond the restrictions already identified in the Design Guidelines. This includes prohibitions against bottom rails that would preclude small animal dispersal and setting of top rails higher than six feet. Since the 2020 EIR, there have been no changes to the Design Guidelines and the allowable height, type, and amount of fencing allowed is unchanged since the 2020 EIR. The Parcel Reconfiguration would result in placement of fencing associated with resort and residential uses within a smaller, denser area with no fencing in areas previously assumed to have some level of fencing. Although the extent of fencing would be reduced under the Project Modifications, there is still the potential to significantly limit wildlife movement even when considering the Design Guidelines. **Mitigation Measure 3.4-19** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with fencing as compared to the 2020 EIR.

Lighting

The 2020 EIR considered potential impacts to wildlife movement due to an increase in artificial lighting on the Guenoc Valley Site which could lead to stranding, disorienting, attracting, or otherwise disrupting the natural dispersal and migratory behaviors of wildlife. Per the Design Guidelines, the Proposed Project would adhere to the Dark Sky Initiative standards that include use of color balanced light that is matte,

shielded from spillage, and set on a timer to avoid unnecessary use. However, this impact was still determined to be significant, and **Mitigation Measure 3.4-7** was presented to reduce this impact to a less-than-significant impact by further limiting the type and use of artificial lighting. The Parcel Reconfiguration would increase the density of proposed lots and minimize the more remote lots adjacent to the urban-wildland interface, which would reduce the potential for the spread of artificial lighting compared to the Original Project. Although the spread of artificial lighting would be less than what was evaluated in the 2020 EIR, this would still constitute a potentially significant impact, as discussed under Impact 3.4-1 for Special-Status, Nesting, and Migratory Birds. **Mitigation Measure 3.4-7** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with lighting as compared to the 2020 EIR.

Open Space

The 2020 EIR identified 2,765 contiguous acres of open space within the Guenoc Valley Site to demonstrate that sufficient open space remained available to meet open space mitigation requirements of the 2008 Langtry Farms Water Rights Modification Project Open Space Preservation Plan (2008 OSPP). The Project Modifications would not infringe on this designated open space area (see **Figure 2-1**) and sufficient open space would remain to meet existing mitigation requirements of the 2009 Water Rights EIR.

The 2020 EIR determined that impacts to wildlife movement would be minimized considering the amount of open space remaining, preservation of known corridors, clustering of development, and restrictions on fencing and lighting within the Design Guidelines. This impact was deemed less than significant with consideration of **Mitigation Measure 3.4-7** and **3.4-19** as discussed above. The Project Modifications would result in a smaller APE and would maintain the OSPP area, corridors, and Habitat Connectivity Easement areas. **Mitigation Measure 3.4-7** and **3.4-19** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with open space as compared to the 2020 EIR.

IMPACT 3.4-5	CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES, SUCH AS A TREE PRESERVATION POLICY OR ORDINANCE		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant	Significant (Workforce Housing) No Impact (Infrastructure)	No
Mitigation Measures	MM 3.4-16 (Phase I) MM 3.4-14, 3.4-16 (Future Phases)	MM 3.4-16 (Workforce Housing) None Required (Infrastructure)	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant (Workforce Housing) No Impact (Infrastructure)	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As discussed in the 2020 EIR, potential conflicts with existing local policies and ordinances may be considered significant if a project resulted in construction or use of land contrary to the overall goals of existing local regulations, or if a project conflicts with specific allowable uses or compensatory requirements. This was identified as a potentially significant impact, and **Mitigation Measures 3.4-16** will reduce impacts related to conflict with existing local policies and ordinances to less-than-significant levels. The primary potential conflict between the Original Project and local policies or ordinances would be conflict with Lake County Code § 30-21, which protects oak woodland. **Mitigation Measure 3.4-16** requires adherence to the Oak Mitigation Plan, which was prepared consistent with local policies and ordinances and was included as Appendix OAK in Volume III of the 2020 EIR.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. As discussed under Impact 3.4-1 above, the Modified Project (specifically the Parcel Reconfiguration, Grange Road Connector, and Connector Roadways) would result in the following changes to the maximum potential oak impacts in comparison to the Original Project:

- A decrease of 446.4 acres of blue oak woodland maximum impacts
- A decrease of 173.4 acres of blue oak savanna maximum impacts
- A decrease of 131.0 acres of interior live oak woodland maximum impacts
- A decrease of 12.1 acres of valley oak woodland maximum impacts

Although overall impacts to oaks would decrease, this would still constitute a potential conflict with Lake County Code § 30-21. The Oak Mitigation Plan described in **Mitigation Measure 3.4-16** has been revised to reflect the Project Modifications and is included as **Appendix J**. The methodology, performance standards, and other metrics of the Oak Mitigation Plan are unchanged. Revisions are limited to updates to the project description and updated mapping demonstrating locations of oak impacts and potential mitigation areas. **Mitigation Measure 3.4-16** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with conflict with local plans or policies as compared to the 2020 EIR.

IMPACT 3.4-6	**CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant	No Impact	No
Mitigation Measures	MM 3.4-16 (Phase I) MM 3.4-14, 3.4-16 (Future Phases)	None Required	No Modifications Necessary
Significance After Mitigation	Less than Significant	No Impact	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, conflicts with existing conservation plans may be considered significant if a project resulted in construction or use of land contrary to the overall goals of an existing conservation plan. This was identified as a potentially significant impact, and **Mitigation Measures 3.4-16** will reduce this impact to less-than-significant levels. Existing habitat plans that cover the Guenoc Valley Site include the 2008 OSPP and the 2008 Oak Tree Replacement Plan that were both developed as mitigation for the 2009 Water Rights EIR. As the Proposed Project introduces new areas of development that would impact open space and oak trees, there is the potential for either of these plans to be impacted by the Proposed Project, which would be a significant impact. Each of these plans is therefore discussed below.

Open Space Preservation Plan

During preparation of the 2020 EIR, the 2008 OSPP was revised to ensure that sufficient open space remained to satisfy mitigation of the 2009 Water Rights EIR. The updated OSPP as presented within Appendix OSPP of Volume III of the 2020 EIR identified sufficient open space to be set aside as the Open Space Combining District. This area is unchanged by the Project Modifications, as shown in **Figure 2-1**. Therefore, Appendix OSPP of the 2020 EIR does not require revisions, and the Modified Project remains consistent with the OSPP. The Project Modifications would not result in any new significant effects or a

substantial increase in the severity of previously identified significant impacts associated with conflict with the OSPP as compared to the 2020 EIR.

Oak Tree Replacement Plan

In addition to impacts to oaks and oak woodlands, the Proposed Project could result in conflicts with the 2008 Oak Tree Replacement Plan if it impacted oaks such that sufficient oak mitigation areas are not available to mitigate the 2009 Water Rights EIR and the Proposed Project. During preparation of the 2020 EIR, the 2008 Oak Tree Replacement Plan was revised to ensure that sufficient mitigation areas remained to satisfy mitigation of the 2009 Water Rights EIR in addition to the Original Project. A revised Oak Mitigation Plan was prepared pursuant to **Mitigation Measure 3.4-16** to review oak mitigation areas and confirm that the combined mitigation of the 2009 Water Rights EIR and the Proposed Project remain feasible. As discussed above, overall impacts to oaks would be reduced under the Project Modifications, and sufficient mitigation areas are available to satisfy combined mitigation of the 2009 Water Rights EIR and the Modified Project (**Appendix J**). **Mitigation Measure 3.4-16** would ensure compliance with the Oak Tree Replacement Plan by identifying oak woodland preservation areas necessary to satisfy the 2009 Water Rights EIR prior to construction of the Modified Project. Therefore, the Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with conflict with the 2008 Oak Tree Replacement Plan as compared to the 2020 EIR.

IMPACT 3.4-7	**CUMULATIVE IMPACTS TO BIOLOGICAL RESOURCES**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Significant	Less than Significant	No
Mitigation Measures	MM 3.4-1 through MM 3.4-13; 3.4-15 through 3.4-21 (Phase I) MM 3.4-11 through MM 3.4-21 (Future Phases)	None Required	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As explained further in the 2020 EIR and **Section 4.13** of this PREIR, a significant cumulative impact to biological resources would occur if the Proposed Project, in addition to recent, ongoing, and foreseeable development, caused a cumulatively significant impact to biological resources. Planned cumulative projects in the region are described in **Table 4.13-1**, and while some changes have occurred to the cumulative projects since the 2020 EIR, the main projects in the region remain consistent (i.e., buildout of

the Hidden Valley Community, Valley Oaks Community, and the Guenoc Valley Water Rights Modification Project). All projects have the potential to impact biological resources during construction and operation, but compliance with Federal, State, and County land use and environmental regulations would reduce impacts. The 2020 EIR determined that significant cumulative impacts to biological resources would not occur with consideration of **Mitigation Measures 3.4-1** through **3.4-13**, and **3.4-15** through **3.4-21**. These same measures would ensure the Project Modifications would not result in new significant environmental effects or an increase in the severity of previously identified significant effects. No additional mitigation for cumulative development would be required.

4.4.5 Mitigation Measures

This PREIR has identified modifications to several biological resources mitigation measures to ensure the potential impacts of the Project Modifications are reduced to less-than-significant levels. Each mitigation measure with revisions is discussed below, and a presentation of changes in underline ~~strikeout~~ is provided in **Section 5** of this PREIR.

Mitigation Measure 3.4-2 outlines the worker environmental awareness training program and includes a table that identifies which species shall be included within training materials based upon which construction location personnel are assigned to. The phrase 'Grange Road Connector' has been added to this measure to clarify that the environmental training would apply to the totality of the Grange Road Connector, even that portion outside of the Guenoc Valley Site.

Similarly, **Mitigation Measure 3.4-8** requires preconstruction nesting bird surveys for work completed on the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Improvement Areas. The Grange Road Connector has been added to this measure to clarify that the preconstruction surveys would apply to the totality of the Grange Road Connector, even that portion outside of the Guenoc Valley Site.

Mitigation Measure 3.4-10 has also been revised as western pond turtle has been re-classified to northwestern pond turtle since publication of the 2020 EIR. Additionally, northwestern pond turtle was proposed for federal Threatened status on October 3, 2023 (88 FR Vol 190, 68370) with a rule under section 4(d) of the Endangered Species Act. Therefore, Mitigation Measure 3.4-10 has been revised to account for USFWS's jurisdiction over northwestern pond turtle and associated implications of listing under FESA.

Both **Mitigation Measures 3.4-15** and **3.4-18** relate to sensitive habitat mitigation. As serpentine rock outcrop has been recently described and classified as sensitive, it has been added to these mitigation measures. The mechanisms of mitigation remain unchanged.

No other changes to the mitigation measures are warranted as a result of the Project Modifications. A full list of the mitigation measures is included in the MMRP in **Section 5** of this PREIR.

4.5 CULTURAL RESOURCES

4.5.1 Introduction

The 2020 EIR, Volume II, Section 3.5.2 includes a detailed description of the environmental setting related to cultural resources on the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety within this PREIR. **Section 4.5.2** of this PREIR includes a description

of the environmental setting that has changed since the 2020 EIR, including a discussion of the setting within the Modified APE areas. There have been no substantial changes to the cultural resources "Regulatory Setting" since preparation of the 2020 EIR. The full discussion of the environmental and regulatory settings is available in the 2020 EIR (**Appendix D**). **Section 4.5.3** of this PREIR describes methods of analysis and provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects. Mitigation for impacts to cultural resources is discussed in **Section 4.5.4**.

Since publication of the 2020 EIR, tribal cultural resources are analyzed separately, and therefore Impact 3.5-4 regarding tribal cultural resources (formerly contained within the Cultural Resources section of the 2020 EIR) has been moved to **Section 4.11** of this PREIR.

4.5.2 Environmental Setting

The same prehistoric, ethnographic, and historic settings that are discussed in the 2020 EIR with respect to the Guenoc Valley Site are applicable to the Modified APE, including the Grange Road Connector APE and the Connector Roadways. The prehistoric patterns applicable to the Modified APE are as follows:

- Post Pattern (11,000 B.C. to 8,000 B.C.);
- Borax Lake Pattern (8,000 B.C. to 6,500 B.C.);
- Early Berkeley Pattern (6,500 B.C. to 2,500 B.C.);
- Mendocino Pattern (3,000 B.C. to A.D. 500);
- Berkeley Pattern (1,200 B.C. to A.D. 800); and
- Augustine Pattern (post A.D. 500).

Please refer to the 2020 EIR, Volume II, Section 3.5.2 for a complete description of the prehistoric patterns that are applicable to the on- and off-site APE. The ethnographic setting for the Grange Road Connector and Connector Roadways remains the same as that described in the 2020 EIR. At the time of European settlement, the Project region was included in the territory controlled by the Lake Miwok, bounded by the territories of Patwin and Wappo. The Lake Miwok controlled the western and middle portions of the Guenoc Ranch, while the Patwin controlled the eastern part of the ranch (**Appendix D**). Similarly, the historic setting and description of Spanish occupation in the region remains the same as that described in the 2020 EIR (**Appendix D**).

4.5.3 Impacts

Methods of Analysis

Numerous cultural resources investigations have been conducted on at the Guenoc Valley Site since the 1950s, and Section 3.5.4 of the 2020 EIR includes detailed methodology of the numerous focused pedestrian surveys across the property. In 2000, over 6,847 acres were surveyed in support of a pending water rights application and vineyard development project (Origer and Schroder, 2000). Between 2018 and 2019, an additional approximately 4,800 acres were surveyed (Alshuth and Origer, 2018; Alshuth and Origer, 2019a; Alshuth and Origer, 2019b). Additional studies conducted in 2019 included a 200-foot buffer around the 2020 APE (Analytical Environmental Services [AES], 2019). As a result of these studies, 42 cultural resources were identified in the record search on the Guenoc Valley Site, although only 40 could be relocated in the 2018 – 2019 surveys, and 14 new resources were identified (Alshuth and Origer, 2018; Alshuth and Origer, 2019a; Alshuth and Origer, 2019b). Of these resources, 37 are located within the 2020 APE as detailed in Table 3.5-1 of the 2020 EIR (**Appendix D**), and 18 resources are located within

the 200-foot buffer around the 2020 APE (AES, 2019). As further described in the 2020 EIR, many of these resources are not eligible for inclusion on the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR).

Two Cultural Resources Investigations were prepared for the Project Modifications. These include an investigation focused on the Grange Road Connector APE that involved a record search request completed by the Northwest Information Center (NWIC) (NWIC File No.: 22-0980) followed by intensive pedestrian surveys (Grange Road Connector Cultural Investigation [**Appendix K-1**]). No resources have been recorded within the Guenoc Road Connector APE or a 0.25-mile radius surrounding the Guenoc Road Connector APE, as reported by the NWIC. Five previous archaeological surveys of the Grage Road Connector APE have been completed that include some or all of the Grange Road area, and a sixth survey has been completed within the 0.25-mile radius as shown in **Table 4.5-1**. Following the NWIC Record Search, field surveys were conducted of the Grange Road Connector APE by Montrose archeologists on March 20, April 19, and November 6, 2023. Two isolates, an historic bottle base and an obsidian biface, were observed in the off-site portion of the Grange Road Connector APE, but isolates by definition are not eligible for inclusion on the CRHR.

Table 4.5-1: Cultural Resources Studies Conducted in Vicinity of Grange Connector APE

Report No.	Author	Title	Date
S-012159	None listed	Cultural Resource Assessment of Site 2, Hidden Valley Lake Wastewater Treatment System, Lake County, California	1990
S-020737	Patti J. Johnson and Ann S. Peak	Survey of Cultural Resources, Guenoc Ranch, Lake and Napa Counties, California	1974
S-023131	Thomas Origer and Sue-Ann Schroder	A Cultural Resources Survey of Selected Portions of Guenoc Ranch, Lake and Napa Counties, California	2000
S-047190	J. Charles Whatford	Valley Fire Cultural Resources Narrative	2015
S-047663	Michael Darcangelo and Jennifer Thomas	Cultural Resources Monitoring for the Valley Fire in Lake, Napa, and Sonoma Counties, California	2016
S-049335	None listed	Cultural Resources Inventory Report, Emergency Hazardous Tree Removal Project, Lake County, California, FEMA-4240-DR-CA PW 33-A	2017

Source: Cultural Reports (**Appendix K**)

A second investigation by Origer & Associates focused on other on-site areas of the Modified APE not previously subject to pedestrian surveys (approximately 110 acres) that were analyzed at a programmatic level in the 2020 EIR (Modified APE Cultural Resources Investigation [**Appendix K-2**]). A NWIC Record Search (NWICE File No.: 23-1320) was conducted by Origer & Associates to support this investigation, which revealed 14 additional surveys within their area of study and 9 within a 0.25-mile radius, including several of the same studies listed in **Table 4.5-1**. The NWIC record search identified 53 cultural resources within a 0.25-mile radius of the Modified APE. Following the NWIC Record Search, field surveys were conducted the week of April 2, 2024 of the remaining Modified APE by archeologists from Tom Origer & Associates accompanied by Tribal representatives from the Middletown Rancheria and Mishewal-Wappo Tribe of Alexander Valley. These surveys were conducted to determine if resources that were previously identified near the edges of the Modified APE will be impacted by the shifted layout, or if resources are present in areas not previously surveyed (e.g., Connector Roadways).As a result of these surveys, five isolated prehistoric specimens and two new archaeological sites were located. The isolates, which are not eligible for CRHR inclusion, include two obsidian flakes, one obsidian biface fragment, a chert flake, and

an obsidian chunk. The two additional archeological sites are the Creek Overlook Site and the Sunshine Midden Site. The Creek Overlook Site is approximately 80 meters by 50 meters, centered outside but partially overlapping the Modified APE, and contains midden soils and obsidian, chert, and basalt flakes. The Sunshine Midden Site is approximately 70 meters by 75 meters, mostly outside of the Modified APE, and contains midden soils, possible house pits, obsidian biface, Napa Valley obsidian, basalt flakes, and a possible basalt chopper and groundstone fragments (**Appendix K-2**).

Impacts

This analysis of the Project Modifications follows the same methodology outlined in Section 3.5.4 of the 2020 EIR, focusing on whether the Project Modifications would have new or substantially more severe significant effects than those described in the 2020 EIR. Refer to Section 3.5.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology and significance criteria relating to cultural resources impacts.

IMPACT 3.5-1	**CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORICAL RESOURCE AS DEFINED IN § 15064.5**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	No Impact	Potentially Significant
Mitigation Measures	MM 3.5-1	None Required	Modifications to MM 3.5-1
Significance After Mitigation	Less than Significant	N/A	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, historic-era sites within the Guenoc Valley Site include mine adits, corrals associated with the Ink Ranch, cabins, foundations, and debris scatters, and the Langtry house complex, as well as historic foundations or rock walls at P-17-399, -406, -412, -425, -1996, -2043, and -2952 and the Bohn Hills historic debris scatter. The 2020 EIR determined that the Original Project has the potential to impact historic resources, which is a potentially significant impact. **Mitigation Measure 3.5-1** requires that the sites be avoided during construction to the extent feasible and, in the event that the sites cannot be avoided, the measure requires further archaeological investigation including additional research, recordation, and/or analysis be conducted to assess NRHP and CRHR eligibility. With inclusion of this mitigation measure, the 2020 EIR concluded that this impact would be reduced to less-than-significant levels. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied

Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to impact these same previously identified resources but to-date no new historic-era resources have been identified or would be impacted that would increase the severity of this impact (Appendix CUL in the 2020 EIR and **Appendix K**). At least one resource (P17-000412) is no longer near the APE after removal of the more remote parcels. **Mitigation Measure 3.5-1** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with historical resources as compared to the 2020 EIR.

IMPACT 3.5-2	**CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF AN ARCHAEOLOGICAL RESOURCE PURSUANT TO § 15064.5**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.5-1, 3.5-2 (Phase I) MM 3.5-1, 3.5-2, 3.5-3 (Future Phases)	MM 3.5-2	Modifications to MM 3.5-1 and MM 3.5-2 (Phase I) MM 3.5-1, 3.5-2, 3.5-3 (Future Phases)
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

Numerous prehistoric resources have been located on the Guenoc Valley Site (refer to Table 3.5-1 of the 2020 EIR), including prehistoric sites that include lithic scatters, occupation sites, rock walls, bedrock mortars, and midden sites. The 2020 EIR determined that development of the Original Project could have a significant impact on these resources. **Mitigation Measure 3.5-1** requires that the sites be avoided during construction to the extent feasible and, in the event that the sites cannot be avoided, the measure requires further archaeological investigation including additional research, recordation, and/or archeological testing be conducted to assess NRHP and CRHR eligibility. **Mitigation Measure 3.5-2** includes worker awareness training, development of an Unanticipated Discoveries Plan in the event that unknown resources are identified during earthmoving activities, construction monitoring to ensure protection of known resources, and coordination with the Middletown Rancheria on development of a Treatment Plan. The 2020 EIR concluded that, together, these mitigation measures would reduce the potential impact of Phase 1 to less than significant. **Mitigation Measure 3.5-3** requires that appropriate cultural resources studies are conducted prior to initiation of future phases of the Project, which in combination with **Mitigation Measures 3.5-1** and **3.5-2**, was determined to reduce impacts of the future phases to less than significant.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to impact these same previously identified resources and the two newly identified resources that partially overlap with the fringes of residential parcels within the Modified APE (Appendix CUL in the 2020 EIR and **Appendix K**). A small portion of each of these resources extends into the edges of two residential estate parcels near the Denniston Golf Estates community. As discussed in **Section 2.2** of this PREIR, the exact building footprint for these residential estates has not been designed and therefore it is feasible to site the building development footprints in these areas to avoid the resources in compliance with **Mitigation Measure 3.5-1**. Direct impacts to these resources can be avoided. **Mitigation Measure 3.5-1** has been updated to specifically identify that these resources will be avoided by the project design. Furthermore, several cultural resources will no longer be near or within the Modified APE after removal of the more remote parcels and roads leading to them, as shown in **Table 4.5-2**. Therefore, the Project Modifications will have a lesser impact to prehistoric or archeological resources as compared to the Project analyzed in the 2020 EIR. **Mitigation Measures 3.5-1** through **3.5-3** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with archaeological resources as compared to the 2020 EIR.

Table 4.5-2: Cultural Resources Avoided by Project Modifications

Primary No.	Trinomial No.	Description	Date Recorded	Location
P-17-000256	CA-LAK-235	Prehistoric occupation site	1957, 1974	Road
P-17-000414	CA-LAK-402	Prehistoric occupation site	1974, 2018	Road, camping area
P-17-000419	CA-LAK-407	Prehistoric occupation site	1974, 2000, 2018	Road, barn
P-17-000424	CA-LAK-412	Prehistoric occupation site	1974, 2000, 2018	Road, barn
P-17-002023	CA-LAK-1924H	Cabin foundation, rock wall, debris	2000	Road
P-17-002024	CA-LAK-1925	Lithic scatter	1997, 2018	Road
P-17-002956	-	Rock wall	2018	Camping area
P-17-002957	-	Rock wall	2018	Residential parcel

Sources: Table 3.5-1 of 2020 EIR (**Appendix D**), AES, 2019, Grange Road Connector Cultural Investigation (**Appendix K-1**), and Modified APE Cultural Resources Investigation (**Appendix K-2**)

IMPACT 3.5-3	DISTURB ANY HUMAN REMAINS, INCLUDING THOSE INTERRED OUTSIDE OF FORMAL CEMETERIES		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.5-1; MM 3.5-4	MM 3.5-4	Modifications to MM 3.5-1; No Modifications for MM 3.5-4
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, Native American remains have been identified at P-17-000256 and there is the potential for human remains to be uncovered at other prehistoric village or occupation sites, including: P-17-000116, -000252, -000256, -000405, -000411, -000414, -000416, -000420, -002019, and -002121 (**Appendix D**). In addition, construction and earthmoving activities could also result in damage to as-yet-unknown Native American grave sites. The 2020 EIR concluded that this would be a significant impact. **Mitigation Measure 3.5-1** requires that these specific locations should be avoided through Project planning and buffer zones established around each location that contains known or suspected human remains to assist in avoidance. **Mitigation Measure 3.5-4** requires that all work cease within 100 feet of a find and outlines the procedures established in the California Health and Safety Code for human remains. Together, these mitigation measures reduce this impact to less-than-significant levels.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to impact these same previously identified resources but to-date, no new resources would be impacted that would increase the severity of this impact (Appendix CUL in the 2020 EIR and **Appendix K**). As discussed above, two additional resources have been identified that partially overlap with residential estate parcels in the Modified APE; however these resources can be avoided by the project design and existing mitigation measures are sufficient to avoid impacts. Furthermore, as shown in **Table 4.5-2** above, the Project Modifications have removed the development components in the vicinity of P-17-00256 and P-17-000414 that have a known Native American remains or an elevated potential for remains to occur. Therefore, the Project Modifications may have a slightly lesser impact to human remains as compared to the Project analyzed in the 2020 EIR. **Mitigation Measures 3.5-1** and **3.5-4** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons

stated in the 2020 EIR. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with disturbance of human remains as compared to the 2020 EIR.

IMPACT 3.5-5	CUMULATIVE IMPACTS TO CULTURAL RESOURCES		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Potentially Significant	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.5-1, 3.5-2; MM 3.5-4 (Phase 1) MM 3.5-1, 3.5-2, 3.5-3, 3.5-4 (Future Phases)	MM 3.5-2; MM 3.5-4	Modifications to MM 3.5-1 and 3.5-2; No modifications to 3.5-3 and 3.5-4
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As explained further in the 2020 EIR and **Section 4.13** of this PREIR, the context for evaluation of potential cumulative impacts on cultural resources and tribal cultural resources (TCRs) is based on development in the region, including projected build out under the Middletown Area Plan and approved or potential projects in the County. Cumulative projects in the southeastern Lake County region described in **Section 4.13** could have a potentially significant cumulative effect to cultural resources and TCRs. There are numerous federal, State, and local laws, regulations, and ordinances that seek to protect cultural resources, in addition to policies that require resource inventory and consultation with the Middletown Rancheria. The Original Project's contribution to significant cumulative impacts related to the area's cultural resources and TCRs were found to be less than significant with mitigation, and the Project Modifications would not result in new significant environmental effects or an increase in the severity of previously identified significant effects. No additional mitigation for cumulative development would be required.

4.5.4 Mitigation Measures

This PREIR has identified modifications to two cultural resources mitigation measure to ensure the potential impacts of the Project Modifications are reduced to less-than-significant levels. The mitigation measures with revisions are discussed below, and a presentation of changes in underline ~~strikeout~~ is provided in **Section 5** of this PREIR.

Mitigation Measure 3.5-1 has been updated to add specific reference to the Creek Overlook Site and the Sunshine Midden Site in the list of resources that shall be avoided. Note that although some resources listed in **Mitigation Measure 3.5-1** are no longer within the Modified APE, no resources have been deleted

to provide a more conservative and enforceable measure for protection of these resources in future phases.

Mitigation Measure 3.5-2 has been updated to move the Tribal Cultural Adviser and Unanticipated Discoveries Plan to the new Tribal Cultural Resources (**Section 4.11** of this PREIR) analysis. Provisions to halt work in the event of an inadvertent discovery have been reiterated in this measure.

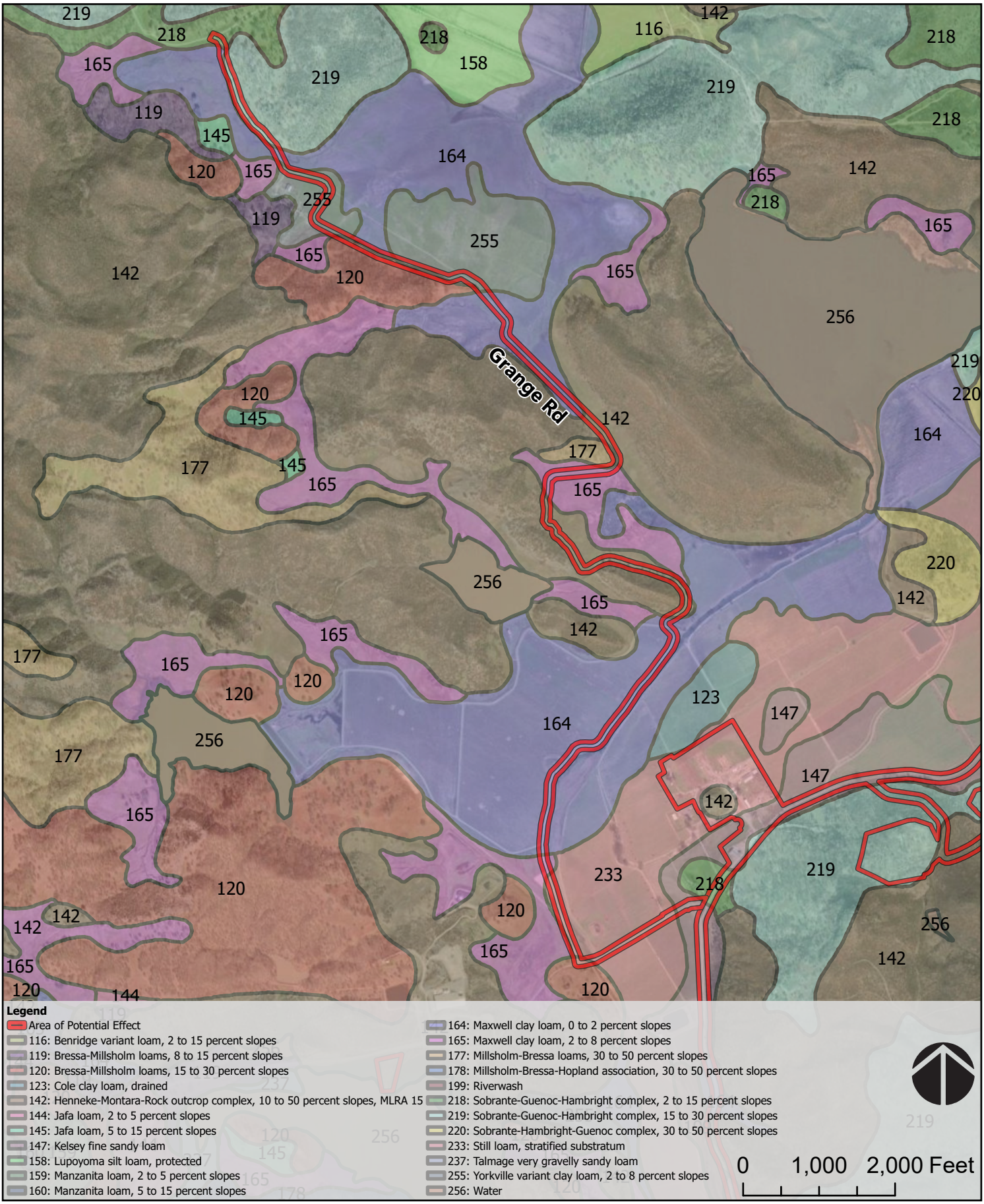
4.6 GEOLOGY AND SOILS

4.6.1 Introduction

The 2020 EIR, Volume II, Section 3.6.2 includes a detailed description of the environmental setting related to geology and soils on the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety within this PREIR. **Section 4.6.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR. There have been no substantial changes to the geology and soils "Regulatory Setting" since preparation of the 2020 EIR. The full discussion of the environmental and regulatory settings is available in the 2020 EIR (**Appendix D**). **Section 4.6.3** of this PREIR provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects, while mitigation for impacts to geology and soil resources is discussed in **Section 4.6.4**.

4.6.2 Environmental Setting

The Grange Road Connector APE is approximately 3.8 miles, of which 1.6 miles are located on the off-site Comstock Ranch property and the remaining 2.2 miles are located on the Guenoc Valley Site. The topography, geologic conditions, soils, and seismicity of the on-site portion are discussed in the 2020 EIR. The off-site portion of the Grange Road Connector APE is underlain by Mesozoic aged plutonic rocks and Quaternary aged rocks of the Sonoma Volcanics, similar to the rest of the Guenoc Valley Site (California Department of Conservation [CDC], 2010). The same regional faults and seismic conditions that are discussed in the 2020 EIR with respect to the Guenoc Valley Site are applicable to the off-site portion of the Grange Road Connector APE and there are no faults or fault zones in the immediate vicinity (refer to Figure 3.6-1 in the 2020 EIR). The potential for strong seismic ground shaking is similar for the on- and off-site portion of the Grange Road Connector APE. The topography of the off-site portion is gently sloping with elevations ranging from 950 to 1,000 feet above mean sea level (amsl). Soils underlying the Grange Road Connector have varying characteristics. The Natural Resources Conservation Service (NRCS) Web Soil Survey Application provides information about soil characteristics on a broad scale. Web Soil Survey maps out soil types by "map unit." Soils mapped on the off-site portion of the Grange Road Connector APE are shown in **Table 4.6-1** and **Figure 4-9**. The dominant soil texture is loam, which typically consist of 20-25% clay, 35-40% silt, and 40-45% sand. NRCS also rates erosion hazards based on slope, soil erodibility, and index of rainfall erosivity. The erosion potential of the off-site Grange Road Connector ranges from slight to moderate. The risk of soil corrosion refers to soil-induced electrochemical or chemical action that may corrode or weaken concrete or steel. The rate of corrosion of concrete is largely based on the sulfate and sodium content, texture, moisture content, and acidity of the soil. The rate of corrosion of uncoated steel is related to factors such as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. About half of the area has a moderate to high risk of corroding steel while very little of the soils have a risk of concrete corrosion (NRCS, 2023).



Source: Lake County Community Development and General Plan; Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Pictometry International, The County of Napa, Maxar

FIGURE 4-9

SOILS WITHIN GRANGE ROAD CONNECTOR

Physical soil constraints include shrink-swell potential, slope, and depth to bedrock. Soils with shrink-swell potential are also known as expansive soils. These soils expand when wet and shrink when dry, potentially causing damage to building structures. Shrink-swell potential is often measured as linear extensibility, which is the percent volume change between an unconfined clod in a moist and a dry state. The linear extensibility ranges from low (1.5 percent) to moderate (7.5 percent).

Table 4.6-1: Grange Road Connector Soil Map Units

Map Unit Symbol	Map Unit Name	Erosion Hazard Per Lake County Municipal Code Chapter 30
119	Bressa-Millsholm loams, 8 to 15 percent slopes	Moderate
120	Bressa-Millsholm loams, 15 to 30 percent slopes	Severe
142	Henneke-Montara-Rock outcrop complex, 10 to 50 percent slopes, MLRA 15	Severe
145	Jafa loam, 5 to 15 percent slopes	Moderate
164	Maxwell clay loam, 0 to 2 percent slopes	Slight
165	Maxwell clay loam, 2 to 8 percent slopes	Moderate
177	Millsholm-Bressa loams, 30 to 50 percent slopes	Severe
218	Sobrante-Guenoc-Hambright complex, 2 to 15 percent slopes	Moderate
219	Sobrante-Guenoc-Hambright complex, 15 to 30 percent slopes	Moderate
255	Yorkville variant clay loam, 2 to 8 percent slopes	Moderate

Source: NRCS, 2023 and Lake County Municipal Code Chapter 30 (Ord. No. 2830, § 1, 7-17-2007)

A search of the University of California Museum of Paleontology database for Lake County (University of California Museum of Paleontology [UCMP], 2023) indicates that at least 462 fossil specimens have been recorded in Lake County. These specimens include bivalves and gastropods, as well as fossil horse, raccoon, and deer. Many of the finds have come from the McLeod Creek area north of Clear Lake, Herndon Creek to the southeast of Clear Lake, and from Little Indian Valley to the east of Clear Lake. None of the specimen locations described are near the Grange Road Connector or Guenoc Valley Site.

In addition to the Grange Road Connector APE, the Project Modifications include 4.8 miles of 'Connector Roadways' within the Guenoc Valley Site to ensure there are no dead-end or non-looped roads greater than one mile. The APE for the new Connector Roadways was sited within the APE previously analyzed in the 2020 EIR to the maximum extent feasible, although some stretches of roadway are outside of the APE analyzed in the 2020 EIR. The 2020 EIR identifies and depicts the soils mapped across the entire 16,000-acre Guenoc Valley Site, including those soils that underlay the Connector Roadways APE. Refer to Table 3.6-2 and Figure 3.6-2 within the 2020 EIR for a complete description of these soils (**Appendix D**).

4.6.3 Impacts

The geological and soil impacts of the Original Project were determined by analyzing changes to the existing conditions that would occur as a result of the proposed land uses within the area. This analysis of the Project Modifications follows the same methodology outlined in Section 3.6.4 of the 2020 EIR, focusing on whether the Project Modifications would result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects than those described in the 2020 EIR. Refer to Section 3.6.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology and significance criteria relating to geology and soil impacts.

IMPACT 3.6-1	DIRECTLY OR INDIRECTLY CAUSE POTENTIAL SUBSTANTIAL RISK OF LOSS, INJURY, OR DEATH DUE TO SEISMIC RELATED HAZARDS		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant (Workforce Housing) and Less than Significant (Infrastructure)	No
Mitigation Measures	MM 3.6-1: Final Design-Level Geotechnical Report(s)	MM 3.6-1: Final Design-Level Geotechnical Report(s)	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, development of the Proposed Project would occur in an area that has the potential to experience strong seismic shaking, and the potential for liquefaction or seismically-induced landslides as a result of ground shaking. **Mitigation Measure 3.6-1** will ensure that a design-level geotechnical report is prepared and recommendations are incorporated into any Project plans. With inclusion of this mitigation measure, as well as compliance with the California Building Code, County General Plan Policy HS-2.11, and the County's building permit process, this impact would be less than significant. The Project Modifications would not change the number of proposed residential lots or the number of people who may be exposed to ground shaking as a result of the Project; the relocation of some of the proposed residential parcels would still be subject to the same mitigation and regulatory requirements that reduce potential impacts. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would not be located in areas that are more prone to seismic shaking, liquefaction or seismically-induced landslides as a result of ground shaking (NRCS, 2023). **Mitigation Measure 3.6-1** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with seismic-related hazards as compared to the 2020 EIR.

IMPACT 3.6-2	SUBSTANTIAL SOIL EROSION OR LOSS OF TOPSOIL		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

Development of the Proposed Project has the potential to result in soil erosion or loss of topsoil through grading activities, vegetation removal, and other construction activities. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would add the Grange Road Connector and Connector Roadways to the area that will be graded and disturbed, however, the overall grading area associated with the Modified Project will be reduced as a result of the Parcel Reconfiguration, including elimination of the camping area and roadways and utilities to relatively remote parcels. The Modified Project would still be required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which includes implementation of a SWPPP during construction activities. The Construction General Permit conditions require that the SWPPP include adequate control measures to prevent erosion during construction and operation to reduce the discharge of sediment and other pollutants to surface waters. Construction activities would be required to be routinely inspected by a Qualified SWPPP Practitioner (QSP). Additionally, the Lake County Grading Ordinance includes measures to reduce erosion such as diverting runoff from steep, bare slopes, and minimizing the amount of soil exposed at any one time, and no winter grading can occur on soils with an erosion hazard rating of ‘severe’. The Modified Project will obtain a grading permit from the County prior starting any earthwork. The Project Modifications would result in an overall reduction in grading, and therefore will not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with soil erosion and loss of topsoil as compared to the 2020 EIR.

IMPACT 3.6-3	DEVELOPMENT ON EXPANSIVE SOILS OR ON UNSTABLE SOILS		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant (Workforce Housing) and Less than Significant (Infrastructure)	No
Mitigation Measures	MM 3.6-1: Final Design-Level Geotechnical Report(s)	MM 3.6-1: Final Design-Level Geotechnical Report(s)	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

Development of the Proposed Project would occur in an area that has soils ranging from low to moderate shrink-swell capacity, which is an indicator of expansive soils. **Mitigation Measure 3.6-1** will ensure that a design-level geotechnical report is prepared and recommendations are incorporated into any Project plans. With inclusion of this mitigation measure, as well as compliance with the California Building Code, County General Plan Policy HS-2.11, and the County's building permit process, this impact would be less than significant.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would not be located on any new or unique soils types that differ from those within the original APE. **Mitigation Measure 3.6-1** would continue to apply and would reduce impacts to less than significant. The Project Modifications would not result in any new or substantially more severe significant impacts associated with expansive or unstable soils as compared to the 2020 EIR.

IMPACT 3.6-4	HAVE SOILS INADEQUATE TO SUPPORT SEPTIC OR ALTERNATIVE WASTEWATER SYSTEMS		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	No Impact	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

The proposed wastewater infrastructure plan is described in Appendix WW of the 2020 EIR. Three different types of residential wastewater systems were analyzed in the 2020 EIR (see Appendix WW) that will be chosen on an individual basis based on site considerations, including soil suitability. While the majority of the proposed development would be served by sewer collection, wastewater treatment and reuse systems, some development areas, including the more remote residential estates, may utilize septic systems. Each septic system must comply with the Sanitation Permit process through Lake County's Environmental Health Department. Adherence to these regulatory requirements would ensure a less-than-significant impact.

With one exception, the Project Modifications, including the Grange Road Connector, Collector Roadways, GHG Reduction Measures, Updated WPP, and DMP, do not involve the production of wastewater and would therefore have no new or substantially more severe significant impacts relating to soils that cannot support wastewater systems. However, the Parcel Reconfiguration would result in the removal of larger and more remote lots which cannot be readily served by the centralized wastewater collection and treatment systems, and the relocation of those lots to centralized areas that will be served by the proposed wastewater treatment plants. As a result, the Parcel Reconfiguration would likely reduce the number of on-site septic systems by increasing the density of residential units within the various communities, making it more feasible to connect these units to the proposed on-site wastewater treatment system. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with soils that cannot support wastewater systems as compared to the 2020 EIR.

IMPACT 3.6-5	DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.6-2: Worker Training, Cease Work, Consult with Qualified Paleontologist	MM 3.6-2: Worker Training, Cease Work, Consult with Qualified Paleontologist	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

While no specific unique paleontological or geological resources have been identified on the Guenoc Valley Site, paleontological specimens may exist in areas with sedimentary or metamorphic deposits, and therefore the Proposed Project could result in a significant impact to paleontological resources. **Mitigation Measure 3.6-2** requires that a qualified paleontologist provide worker awareness training and if a resource is identified, work shall cease in the area until a qualified paleontologist can assess the discovery. With the implementation of this mitigation measure, impacts would be reduced to less-than-significant levels. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would not be located on any areas containing unique paleontological or geological resources. A large portion of the off-site Grange Road Connector alignment is underlain by Sonoma Volcanics, which are not likely to contain fossil resources. However, there is the possibility that unknown resources could be exposed, and **Mitigation Measure 3.6-2** would continue to apply to the Project Modifications and would reduce impacts to less than significant. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with paleontological or geological resources as compared to the 2020 EIR.

IMPACT 3.6-6	CUMULATIVE GEOLOGY AND SOILS IMPACTS		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.6-1 and MM 3.6-2	MM 3.6-1 and MM 3.6-2	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As explained further in the 2020 EIR and **Section 4.13** of this PREIR, the context for evaluation of potential cumulative impacts on geology, soils, and seismicity is based on development in the region, including projected build out under the Middletown Area Plan and approved or potential projects in the County. However, the geologic analysis of cumulative impacts is generally site-specific, rather than cumulative in nature. For example, seismic events may damage or destroy a building, but the construction of a development project on one site will not cause any adjacent parcels to become more susceptible to seismic events, nor can a project affect local geology in such a manner as to increase risks regionally. The Original Project's contribution to significant impacts related to the area's geology were found to be less than significant, and the Project Modifications would not result in new significant environmental effects or an increase in the severity of previously identified significant effects. No additional mitigation for cumulative development would be required.

4.6.4 Mitigation Measures

No changes to the mitigation measures are warranted as a result of the Project Modifications. A full list of the mitigation measures is included in the MMRP in **Section 5** of this PREIR.

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Introduction

Section 3.7.2 of the 2020 EIR includes complete environmental setting information related to GHG emissions and climate change that is not repeated in its entirety here. **Section 4.7.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR and **Section 4.7.3** describes any relevant regulations that are new or updated since preparation of the 2020 EIR. The full discussion of the environmental setting and regulatory setting are available in the 2020 EIR (**Appendix D**). **Section 4.7.4** of this PREIR describes methods of analysis and thresholds of significance, and provides a discussion on whether the Project Modifications would result in new significant effects or a substantial increase in the

severity of previously identified effects. Mitigation for impacts to GHG emissions is discussed in **Section 4.4.5** of this PREIR.

4.7.2 Environmental Setting

Existing Climate Setting

Since the publication of the 2020 EIR, the general trend of global climate change has continued. The primary focus of efforts to mitigate climate change is on lowering the concentration of GHGs in the atmosphere. Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) are the principal GHGs. When concentrations of these gases exceed historical concentrations in the atmosphere, the greenhouse effect is intensified. CO_2, CH_4, and N_2O occur naturally and are also generated through human activity. Anthropogenic emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing, natural gas leaks from pipelines and industrial processes and incomplete combustion associated with agricultural practices, landfills, energy providers and other industrial facilities.

In emissions inventories, GHG emissions are typically reported as metric tons (MT) of CO_2 equivalents (CO_2e). CO_2e is calculated as the product of the mass emitted of a given GHG and its specific global warming potential (GWP). While CH_4 and N_2O have much higher GWPs than CO_2, CO_2 is emitted in higher quantities and it accounts for the majority of GHG emissions in CO_2e, both from commercial developments and human activity in general.

GHG Emissions Estimates

The existing climate setting discussion of the 2020 EIR (Volume II, Section 3.7.2) is primarily based on data from 2017. More recent data is presented here to update the existing climate setting. In 2021, the United States emitted approximately 6.34 billion tons of CO_2e, a decrease from the estimated 6.46 billion tons of CO_2e emitted in 2017 as reported by the USEPA (USEPA, 2023b). Similar to GHG emissions presented in the 2020 EIR, of the five main sectors – residential and commercial, industrial, agriculture, transportation, and electricity generation – the transportation sector accounts for the highest portion of GHG emissions in 2021 (28.5 percent, down from 29 percent in 2017), followed closely by electricity production (25 percent, down from 28 percent in 2017) (USEPA, 2023b).

California emitted approximately 381.3 million MT of CO_2e in 2021, a substantial decrease compared to the 424 million MT of CO_2e emitted in 2017 (CARB, 2023). However, there have been several major events that have caused shorter-term changes in emissions, including the COVID-19 pandemic and the 2020-2022 drought. Of particular note, the transportation sector showed the largest increase in emissions (7.4 percent) compared to 2020, likely due to passenger vehicles whose emissions rebounded after COVID-19 shelter-in-place orders were lifted. The overall transportation sector emissions in 2021 remained 10.2 percent below pre-pandemic (2019) levels. The electricity sector emissions also increased 4.8 percent between 2020 and 2021, likely due to a substantial decrease in hydropower generation during the then ongoing drought (CARB, 2023). Per capita GHG emissions in California have continued to drop and were 9.7 MT per person in 2021, a 30 percent decrease from the 2001 peak and a decrease of about 1.0 MT per person compared to 2017 (CARB, 2023).

4.7.3 Regulatory Setting

Federal

Inflation Reduction Act

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the U.S. by 40 percent as compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles, and includes measures that will make homes more energy efficient.

State

Assembly Bill 1279: California Climate Crisis Act

California Climate Crisis Act (AB 1279) requires the State to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. The bill also requires California to reduce statewide anthropogenic GHG emissions by 85 percent below 1990 levels, and directs CARB to work with relevant state agencies to achieve these goals.

2022 Scoping Plan for Achieving Carbon Neutrality

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which builds on the 2017 Scoping Plan that was in effect at the time of the 2020 EIR, as well as the requirements set forth by AB 1279, which directs the State to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The 2022 Scoping Plan creates a sector-by-sector roadmap for California that deploys "a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor" (CARB, 2022b).

Senate Bill 1020: Clean Electricity

SB 1020 codifies into law a state policy that eligible renewable energy resources and zero-carbon resources supply: 1) 90% of all retail sales of electricity to California end-use customers by December 31, 2035, 95% by December 31, 2040, and 100% by December 31, 2045; and 2) 100% of electricity procured to serve all State agencies by December 31, 2035. To achieve these objectives, SB 1020 requires that CARB and the California Energy Commission (CEC) use unspecified programs authorized under existing statutes and employ measures to ensure that implementation of the policy does not cause increases in GHG emissions elsewhere, a concept also known as leakage.

Building Energy Standards

The **2022 Title 24 Standards** improve upon the 2019 standards for new construction, additions, and alterations to residential and nonresidential buildings. The CEC adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the California Building Standards Code (CALGreen) in December 2021. The 2022 Energy Code went into effect on January 1, 2023. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses: 1) Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units. 2) Establishing electric-

ready requirements for single-family homes to position owners to use cleaner electric heating, cooking, and electric vehicle (EV) charging options whenever they choose to adopt those technologies. 3) Expanding PV system and battery storage standards to make clean energy available on-site and complement the state's progress toward a 100% clean electricity grid. 4) Strengthening ventilation standards to improve indoor air quality.

Title 24, Part 11. In 2008, the California Building Standards Commission adopted the nation's first green building standards; the CALGreen Code (CALGreen; Part 11 of Title 24) establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CEC updates the Title 24 Energy Code every 3 years, and the 2022 Title 24 Energy Code was adopted in August 2021 and went into effect on January 1, 2023. When compared to the 2019 Title 24 Standards, the 2022 amendments include measures that will further reduce energy use in single family, multifamily, and nonresidential buildings, through the following strategies:

- New standards for electric heat pumps for space conditioning and water heating, as appropriate for the various climate zones in California,
- Require PV and battery storage systems for newly constructed multifamily and selected nonresidential buildings,
- Updated efficiency measures for lighting, building envelope, heating, ventilation, and air conditioning (HVAC), and
- Improvements to reduce the energy loads of certain equipment covered by (i.e., subject to the requirements of) the Energy Code that perform a commercial process that is not related to the occupant needs in the building (such as refrigeration equipment in refrigerated warehouses, or air conditioning for computer equipment in data processing centers).

Local

The LCAQMD maintains the air quality conditions in Lake County through a robust program of plans, regulations, enforcement, and technical innovations that are described in depth in Section 3.3.3 of the 2020 EIR (**Appendix D**). Because the LCAQMD has not adopted CEQA thresholds relating to GHGs, the BAAQMD thresholds were utilized for the 2020 EIR.

Bay Area Air Quality Management District 2022 CEQA Air Quality Guidelines

On April 20, 2022, the BAAQMD adopted updated *CEQA Air Quality Guidelines* that supersede the previous 2017 CEQA guidance relied upon in the 2020 EIR. The 2022 *CEQA Air Quality Guidelines* are designed to provide recommended procedures to evaluate potential air quality and climate impacts during the environmental review process for land use projects, consistent with CEQA requirements. The 2022 Guidelines contain instructions and examples for how a lead agency can evaluate, measure, and mitigate air quality and climate impacts generated from land use construction and operational activities. They focus on generated emissions of CAPs and precursors, odors, toxic air contaminants, and GHGs from local plans and projects. The Guidelines provide two methods for lead agencies to assess a project's potential impacts: screening criteria and thresholds of significance.

For GHG emissions, the 2022 BAAQMD CEQA Guidelines removes the quantitative (e.g., numerical or 'bright-line') thresholds and instead recommends evaluating the climate impacts of land use projects based on the extent to which a project's design elements would provide a "fair share" reduction in GHG emissions. The BAAQMD CEQA Guidelines provides two possible approaches to assess this. Under

Approach A, projects that incorporate certain minimum design elements are considered to have less-than-significant climate impacts. There are four minimum design elements outlined in Approach A of the BAAQMD CEQA Guidelines, which are summarized below.

- The project will not include natural gas appliances or natural gas plumbing.
- The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
- The project will achieve a reduction in project-generated vehicle miles traveled (VMT) 15% below the existing VMT per capita.
- The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

Alternatively, under Approach B, the BAAQMD states that a project will have a less-than-significant impact relating to GHG emissions if it is consistent with a local GHG reduction strategy that meets CEQA Guidelines Section 15183.5(b) requirements.

4.7.4 Impacts

Method of Analysis

For the 2020 EIR, construction and operational GHG emissions were estimated using the CalEEMod, Version 2016.3.2 model. Details of the modeling methodology and assumptions are provided in Section 3.7.4 of the 2020 EIR and the model output files are included as Appendix AIR of the 2020 EIR (**Appendix D**). The 2020 EIR estimated the amount of GHG emissions that could occur during construction from on- and off-road vehicles, stationary equipment such as air compressors and generators, as well as other sources including transportation, electricity use, natural gas use, and solid waste disposal. The calculation of the one-time loss of sequestered carbon was calculated using CalEEMod default values and methodology. Construction was estimated to occur in phases: Phase 1A, consisting of the primary resort facilities as well as supporting infrastructure such as roads, utilities, and support services, and on and off-site workforce housing was modeled to occur between April 2020 and December 2023; Phases 1B and 1C were assumed to occur between December 2023 and November 2030, and would include the buildout of residential lots based on market conditions. Construction of future phases of the Proposed Project was assumed to occur after the completion of Phase 1, and for modeling purposes, was assumed to occur between November 2030 and December 2040.

Operational GHG emissions from build-out of the Original Project were estimated using CalEEMod and included direct mobile sources, including residential and commercial vehicle trips, as well as indirect GHG emissions sources from electricity use, solid waste disposal, and water and wastewater systems. Operational GHG emissions for Phase 1 of the Original Project were modeled for operational year 2022, as well as year 2030 for comparison with full buildout of future phases of the Proposed Project. Although the future phases of the Proposed Project would be built out in multiple phases between 2030 and 2040 (or after), the modeling conservatively assumes an operational year of 2030 due to the consideration that operational emission factors improve over time and some components of the future phases of the Proposed Project may become operational before the year 2040.

Similar to the analysis of air quality impacts provided in **Section 4.3.4** of this PREIR, the estimated GHG emissions presented in the 2020 EIR are likely overstated as they do not consider the various new GHG Reduction Measures incorporated into the Modified Project, described more fully in **Section 2.2.1**.

Further, the Project Modifications result in a Development Area that is 1,202 acres, approximately 213 acres less than the Original Project. As a result, the number of hours that equipment is required to prepare and grade the site would decrease because there are 213 fewer acres requiring site preparation and grading. The operational emissions are estimated from the amount of commercial space, number of homes and hotel units, and the expected vehicle trips associated with these land uses. As discussed further in **Section 4.10** below, the overall amount of development proposed is the same or reduced, and the number of operational trips associated with the Modified Project is unchanged as a result of the Project Modifications.

Another reason the estimated GHG emissions presented in the 2020 EIR are likely overstated is because, as stated above, construction was assumed to begin in 2020. Because construction and operation of the Modified Project will happen later, emissions would be lower than previously estimated because newer motor vehicles and construction equipment must meet more stringent emission standards. Within CalEEMod, later years of construction and operation assumes a fleet mix of more recent vehicles and equipment with lower emission rates. As a result, construction and operation emissions are expected to be lower than estimated in the 2020 EIR because they will occur at a later date than what was modeled.

The Modified Project has approximately 213 fewer acres of development impact area and fewer miles of roads, and construction and operation will occur at a later date than what was modeled in the 2020 EIR. Therefore, the reliance upon the emissions modeling conducted for the 2020 EIR (Appendix AIR) results in a more conservative assessment of the emissions resulting from Modified Project. This PREIR qualitatively assesses the potential for GHG impacts based on the modeling provided in Appendix AIR of the 2020 EIR (**Appendix D**). This analysis addresses whether the Project Modifications would have new or substantially more severe significant effects than those described in the 2020 EIR. Refer to Section 3.7.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology relating to GHG impacts.

Thresholds of Significance

As stated in the 2020 EIR, criteria for determining the significance of impacts due to GHG emissions are based on Appendix G of the CEQA Guidelines and relevant agency thresholds. Impacts due to GHG emissions would be considered significant if the Proposed Project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The LCAQMD has not adopted CEQA significance thresholds for impacts relating to GHG emissions. Similar to the 2020 EIR, because the LCAQMD does not have standards for thresholds of significance for GHGs for project-level analyses, the BAAQMD thresholds were reviewed to determine if mitigation should be implemented. In 2022, the BAAQMD updated its CEQA thresholds and removed the following quantitative thresholds previously considered in the 2020 EIR:

- Compliance with a Qualified Greenhouse Gas Reduction Strategy; or
- 1,100 MT of CO_2e per year; or
- 4.6 MT of CO_2e per service population (employees plus residents) per year (for 2020) or
- 2.6 MT CO_2e per service population (for 2030).

Now, per the 2022 BAAQMD CEQA Air Quality Guidelines, a project's GHG emissions would be cumulatively considerable if it did not contribute its "fair share" towards minimizing GHG emissions. "If a project would contribute its "fair share" of what is needed to achieve the State's long-term GHG reduction goals, then the lead agency can find that the project is adequately contributing to solving the problem of global climate change and that project's impact is not significant." BAAQMD further determined the necessary design elements required for new land use projects to incorporate that will achieve carbon neutrality by 2045:

1. Buildings:
    a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
    b. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

2. Transportation:
    a. The project will achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target that reflects the recommendations provided in the Governor's Office of Planning and Research's *Technical Advisory: Evaluating Transportation Impacts in CEQA*:
        i. Residential projects: 15 percent below the existing VMT per capita
        ii. Office projects: 15 percent below the existing VMT per employee
        iii. Retail projects: no net increase in existing VMT
    b. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

Alternatively, projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Impacts

IMPACT 3.7-1	GENERATE GREENHOUSE GAS EMISSIONS EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.7-1; MM 3.7-2; MM 3.4-16	MM 3.7-1; MM 3.7-2; MM 3.4-16	Modifications to MM 3.7-1; all other mitigation measures applicable as originally written
Significance After Mitigation	Significant and Unavoidable	Significant and Unavoidable	No (Impact remains Significant and Unavoidable)

Notes: *Impact numbering retained from the 2020 EIR.

The 2020 EIR analyzed the potential GHG emissions from the following Project-related activities:

- Construction Emissions;
- Land Use Change and loss of Carbon Sequestration; and
- Operational Activities.

Construction of the Proposed Project would emit GHGs through fossil fuel combustion by vehicles and equipment. Because the BAAQMD adopted significance threshold at the time was 1,100 MT CO_2e for operational activities but no construction threshold was adopted, the 2020 EIR amortized construction emissions over 30 years and added them to operational emissions. The calculation of the one-time loss of sequestered carbon is the product of the converted acreage value and the carbon content value for each land use type (vegetation community). The 2020 EIR notes that the loss of carbon sequestration capacity could contribute to global change, but the loss of carbon sequestration capacity does not represent Project-generated GHG emissions. As discussed above, operational emissions were calculated in the 2020 EIR through the CalEEMod for both the unmitigated Project and the mitigated Project that included **Mitigation Measure 3.7-1**. **Mitigation Measure 3.7-1** requires a host of emission reduction measures that can be grouped into the following categories: Transportation Demand Management (TDM) measures, Project-wide measures, residential measures, resort/commercial measures, and purchase of GHG credits (14,865 MT CO_2e). The 2020 EIR conservatively did not quantify the reduction in GHG effects from the implementation of other required mitigation measures that may further reduce GHG emissions, such as **Mitigation Measure 3.4-16** to protect oak woodlands and partially offset the loss of carbon sequestration. While inclusion of **Mitigation Measure 3.7-1** was estimated to reduce GHG emissions by 7,189 MT CO_2e

and 13,316 MT CO_2e for Phase 1 and All Phases, respectively, the estimated emissions of the Original Project were above the BAAQMD significance thresholds and this impact was identified as significant and unavoidable in the 2020 EIR.

Table 4.7-1 summarizes the analysis assumptions in the 2020 EIR emission estimates for the Original Project and provides a comparison with the Project Modifications and current regulatory framework.

Table 4.7-1: Original Project Compared to Project Modification and Current Conditions

Original Project	Comparison to Project Modifications or Current Conditions
State Regulations	
2016 Title 24 Energy Efficiency Standards	2022 Title 24 Energy Efficiency Standards have been adopted with more stringent requirements that would further reduce the potential for GHG emissions. The Modified Project must follow these updated regulations.
Green Building Code Standards	2022 Green Building Code Standards have been adopted with more stringent requirements that would further reduce the potential for GHG emissions. The Modified Project must follow these updated regulations.
CalRecycle Waste Diversion and Recycling Mandate (75%)	No Change
Project Design Features	
Phase 1 Development Area of 1,415 acres	Phase 1 Development Area of 1,202 acres. Reduction of 213 acres in development footprint would reduce construction activities and associated GHG emissions.
Renewable energy for residential and non-residential demand. Some sources of renewable energy, such as hydropower, have associated CO_2e emissions.	Project Modifications require on-site generation of solar power to meet 100% demand for residential and non-residential uses. Solar energy production does not emit CO_2e, resulting in a reduction in GHG emissions in comparison to the Original Project.
No woodburning or gas hearths in residential uses	No Change
Use of natural gas or propane in residential and commercial uses for cooktops, water heaters, and heating units	No natural gas infrastructure, including propane tanks or propane distribution pipelines will be allowed for residential and non-residential structures with the exception of restaurant cooktops and fire pits in outdoor patio areas of restaurants. Any existing natural gas lines within the site are to be capped and removed. This will result in a reduction in GHG emissions in comparison to the Original Project.
Recycling and reuse of wastewater	No Change
Providing workforce housing and shuttles to minimize VMT	No Change
Drought tolerant native vegetation in landscaping	No Change

Original Project	Comparison to Project Modifications or Current Conditions
Passive site design and planning measures to minimize HVAC	No Change
Site design and lot layout to minimize conversion of oak woodlands	No Change
Electric fleet for the resort commercial uses (no less than 75%)	No Change
Installation of 300 EV charging stations	No Change
Providing on-site refuse collection for recyclable, compostable, and standard waste	No Change
Site-wide lighting design to preserve nighttime dark skies minimizes use of outdoor lights, requires energy-efficient lamps and motion sensing light systems.	No Change

Project Modifications such as the Updated WPP, DMP, Parcel Reconfiguration, Grange Road Connector, and Connector Roadways would not increase the severity of GHG emissions, as the same number of employee and patron trips, waste generation, and water usage is anticipated, and the overall linear miles of roadways is reduced as a result of the Parcel Reconfiguration. With the increase in density of residential lots and removal of the remote lots, there will be slight decreases in the distances that residents travel to their homes and therefore a slight decrease in mobile emissions, but this difference is likely negligible. The Project Modifications involving GHG Reduction Measures would result in a decrease in GHG emissions compared to what was analyzed in the 2020 EIR. Specifically, the GHG Reduction Measures will ensure the capacity of the residential PV systems will be equal to or greater than the minimum projected needs of residential land uses, while also mandating Level 2 or higher EVSE for each residence, and eliminating natural gas/propane use for all residences and most non-residential uses, with the exception of restaurant cooktops and fire pits in the outdoor patio areas of restaurants. In the 2020 EIR, all commercial properties were proposed to be constructed "Solar Ready" pursuant to California Energy Code and would be connected to the same grid options that included the production of on-site renewable solar energy, however the GHG Reduction Measures now require on-site production of solar energy for all commercial uses. Additionally, while **Mitigation Measure 3.7-1** required the one-time purchase of 14,865 offset credits, the GHG Reduction Measures now require the annual purchase of 14,865 offset credits with performance standards prioritizing local credits and an independent, third-party expert to ensure compliance with the GHG emission reduction measures. Further, the Parcel Reconfiguration results in similar impacts to oak woodlands and forested areas (refer to **Section 4.4** of this PREIR), and therefore carbon sequestration impacts would not change as a result of the Project Modifications.

As discussed above, since the issuance of the 2020 EIR, the BAAQMD adopted new significance thresholds for the consideration of GHG impacts. **Table 4.7-2** provides a discussion of the consistency of the Modified Project with the recently adopted 2022 BAAQMD CEQA Air Quality Guidelines GHG significant thresholds.

Table 4.7-2: Consistency with 2022 BAAQMD CEQA Air Quality Guidelines GHG Significant Thresholds

Design Elements Required for New Land Use Projects to Incorporate that will Achieve Carbon Neutrality by 2045	Is the Project Consistent?
1. Buildings	
a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).	Not Consistent. No natural gas infrastructure or use, including propane tanks or propane distribution pipelines, will be allowed for residential and non-residential structures with the exception of restaurant cooktops and fire pits in outdoor patio areas of restaurants. Any existing natural gas lines within the site are to be capped and removed. However, the use of natural gas or propane fueled restaurant cooktops and outdoor patio fire pits is not consistent with this objective. Mitigation Measure 3.7-1 has been revised to require that the use of natural gas or propane at restaurants be minimized and replaced with alternative equipment to the extent consistent with the restaurants' commercial needs or requirements.
b. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.	Consistent with implementation of previously identified Mitigation. As described in **Section 4.1.1** of this PREIR, Section 3.15 of the 2020 EIR (**Appendix D**) analyzed whether the Original Project would result in wasteful, inefficient, or unnecessary consumption of energy during construction and operation, or conflict with a State or local plan for renewable energy or energy efficiency. Potential impacts due to construction and operation were identified to be potentially significant, and mitigation measures addressing air quality, GHG emissions, and traffic management would reduce the impacts to less-than-significant levels. These include Mitigation Measure 3.3-1: Measures to Reduce Short-term Construction Related Emissions, Mitigation Measure 3.7-1: Operational GHG Emissions, and Mitigation Measure 3.13-4: Implement a Transportation Demand Management (TDM) Program. The categories of Project Modifications that involve physical changes to the environment (the Parcel Reconfiguration, Grange Road Connector, Connector Roadways, and the additional 10-foot aggregate shoulder) would have similar energy impacts compared to what was analyzed in the 2020 EIR and the same mitigation measures would continue to apply to reduce impacts to less-than-significant levels. The Project Modifications that do not involve physical change to the environment (GHG Reduction Measures, the rest of the Updated WPP measures, and the DMP) will not have a substantial change to the construction or operational energy expenditure and therefore will not result in new or substantially more significant severe impact related to energy use. Project Modifications that increase renewable energy commitments will better align the Modified Project with State and local plans for renewable energy use and overall energy efficiency, and therefore these Project Modifications would have a beneficial impact in this area. No

Design Elements Required for New Land Use Projects to Incorporate that will Achieve Carbon Neutrality by 2045	Is the Project Consistent?
	new mitigation measures beyond those identified in the 2020 EIR are required.
2. Transportation	
a. The project will achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target that reflects the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory: Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT	Not consistent. As described in **Section 4.10** of this PREIR, Section 3.13 of 2020 EIR included an assessment of the Original Project's consistency with the threshold of a 15 percent reduction in per capita VMT over existing conditions. Due to the rural nature of the Project setting and associated longer distances required for travel to work, schools, shopping centers, etc., the 2020 EIR determined that the Original Project has a higher VMT per capita than the Lake County or Bay Area regional averages, which is a significant impact. Mitigation Measure 3.13-4, which was also identified in the 2020 EIR as a mitigation measure to reduced GHG impacts, requires that the applicant implement a Transportation Demand Management (TDM) Plan that has a stated objective of reducing VMT by 15 percent. A draft of the TDM Plan was included as Appendix TDM to the 2020 EIR and a revised version was Attachment B to the Final EIR Errata. Measures included within the Revised TDM Plan include: private shuttle service for employees where public transit lines are unavailable; on-call Dial-a-Ride service to connect the Guenoc Valley Site to Middletown; carpool and ride-matching assistance program; preferential on-site parking for carpoolers; dedicated parking for car share services; on-site sales of transit passes; a TDM Coordinator to facilitate and publicize activities conducted under the TDM Plan; transportation and commute information kiosks in common gathering areas, among others. The 2020 EIR conclusion that the Original Project would have a significant and unavoidable impact to VMT and may not meet a 15 percent per capita VMT reduction is mainly an acknowledgement that the extensive set of TDM measures cannot be conclusively proven to be sufficient to achieve the desired reduction, although it should be noted that the TDM Plan will have significant reductions in VMT. With the increase in density of residential lots and removal of the remote lots as part of the Parcel Reconfiguration, there will be slight decreases in the distances that residents travel to their homes once they reach the Guenoc Valley Site, but this slight decrease in on-site VMT is likely negligible. The Project Modifications do not result in a change in the number of proposed visitors to the site as the same (or fewer) number of hotel units and residences are proposed. Therefore, the Project Modifications will not increase the severity of this impact. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with VMT as compared to the 2020 EIR,

Design Elements Required for New Land Use Projects to Incorporate that will Achieve Carbon Neutrality by 2045	Is the Project Consistent?
	however the Project would not be consistent with this design measures and this impact would remain significant and unavoidable.
b. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.	Consistent with revised Mitigation Measure 3.7-1. The CALGreen voluntary Tier 2 requirements related to the installation of off-street electric vehicle infrastructure would require that that: 1) for each dwelling unit, a dedicated Level 2 EVSE shall be installed; 2) forty (40) percent of the total number of parking spaces in the resort residential and hotel uses shall be equipped with low power Level 2 EV charging receptacles, and 15 percent of those parking spaces must be provided with Level 2 EVSE chargers; and 3) forty-five (45) percent of the total number of parking spaces in the non-residential uses shall be equipped with low power Level 2 EV charging receptacles, and 33 percent of those parking spaces must be provided with Level 2 EVSE chargers. The Project Modification GHG Reduction Measures require the installation of one fully operable Level 2 or higher capacity in an appropriate location at each residential land use structure, and at least 300 fully-operable, publicly-accessible Level 2 or higher-capacity EVCS of at least 240 volts with at least two ports per charger and 20 fully operable publicly-accessible Level 3 EVCS/Fast Chargers. While these measures are generally consistent with this design measure, depending on the number of parking spaces actually developed, the Modified Project may not fully comply with the most recently adopted version of the CALGreen voluntary Tier 2 measure to provide 45 percent of the total number of parking spaces in the non-residential uses with low power Level 2 EV charging receptacles, and 33 percent of those parking spaces with Level 2 EVSE chargers. **Mitigation Measure 3.7-1** has been revised to require that the Project achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. With incorporation of this mitigation measure, the Proposed Project would be consistent with this design measure.

The GHG Reduction Project Modifications will result in significant decreases in the climate impacts associated with the Modified Project. The Project Modifications better align the proposed development with the BAAQMD's recommended design elements for new land use projects to achieve carbon neutrality by 2045, including the elimination of most natural gas/propane use (with the exception of restaurant cooktops and fire pits in outdoor patio areas of restaurants), the installation of EV charging stations at residential and non-residential lands uses, and the numerous energy efficiency measures incorporated into the design. However, as shown in **Table 4.7-2** above, even with these measures the Modified Project does not fully incorporate the design elements for new land use projects identified in the new BAAQMD CEQA Guidelines that will achieve carbon neutrality by 2045. As concluded in the 2020 EIR, this is a significant impact. As discussed further in the 2020 EIR (**Appendix D**) and **Section 4.10** of this PREIR, while

the TDM Plan required by **Mitigation Measure 3.13-4** has a goal of a 15 percent reduction in VMT, due to the hospitality focus and rural setting, the measures would not reduce Project-related VMT to 15 percent below the regional average. As such, the GHG emissions resulting from the increase in VMT are significant and unavoidable. Further, the Project does not fully eliminate the use of natural gas. Even with the implementation of mitigation, the Modified Project cannot demonstrate compliance with the 2022 BAAQMD significance thresholds. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with GHG emissions as compared to the 2020 EIR, however this impact would remain significant and unavoidable.

IMPACT 3.7-2	**CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.7-1	MM 3.7-1	No Modifications Necessary**
Significance After Mitigation	Significant and Unavoidable	Significant and Unavoidable	No (Impact remains Significant and Unavoidable)

Notes: *Impact numbering retained from the 2020 EIR.
**No modifications were necessary to this measure due to the analysis of Project Modifications pursuant to Impact 3.7-2, but modifications were made to this measure as a result of the analysis contained in Impact 3.7-1, above.

To date, Lake County has not adopted any specific GHG reduction strategies or Climate Action Plans. The BAAQMD service population thresholds were considered in the 2020 EIR, and while **Mitigation Measure 3.7-1** would reduce the level of GHG emissions, the impact was determined to be significant and unavoidable. Since the publication of the 2020 EIR, the BAAQMD has adopted new guidance relating to climate change. As discussed in **Impact 3.7-2** above, the Project Modifications (namely the GHG Reduction Measures) minimize the GHG emissions and better align the Modified Project with the State's overall climate goals. The Project Modifications would not result in any new significant effects or a substantial Increase in the severity of previously identified significant impacts associated with GHG emissions as compared to the 2020 EIR. However, because the Modified Project cannot demonstrate compliance with the 2022 BAAQMD significance thresholds, this impact would remain significant and unavoidable.

4.7.5 Mitigation Measures

The Project Modifications include Greenhouse Emission Reduction Measures (summarized above and described in detail in **Section 2.2.1** of this PREIR). These measures have been identified to reduce the GHG emissions of the Original Project and in some cases exceed GHG reductions stipulated in the 2020 EIR. The

Greenhouse Emission Reduction Measures are additional and do not require changes to the mitigation measures identified in the 2020 EIR. **Mitigation Measure 3.7-1** has been revised to require that the Project achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2, and that the use of natural gas or propane at restaurants be minimized and replaced with alternative equipment to the extent consistent with restaurants' commercial needs or requirements. No other changes to the mitigation measures are warranted as a result of the Project Modifications. A full list of the mitigation measures, including revised **Mitigation Measure 3.7-1**, is included in the MMRP in **Section 5** of this PREIR.

4.8 HAZARDS AND HAZARDOUS MATERIALS

4.8.1 Introduction

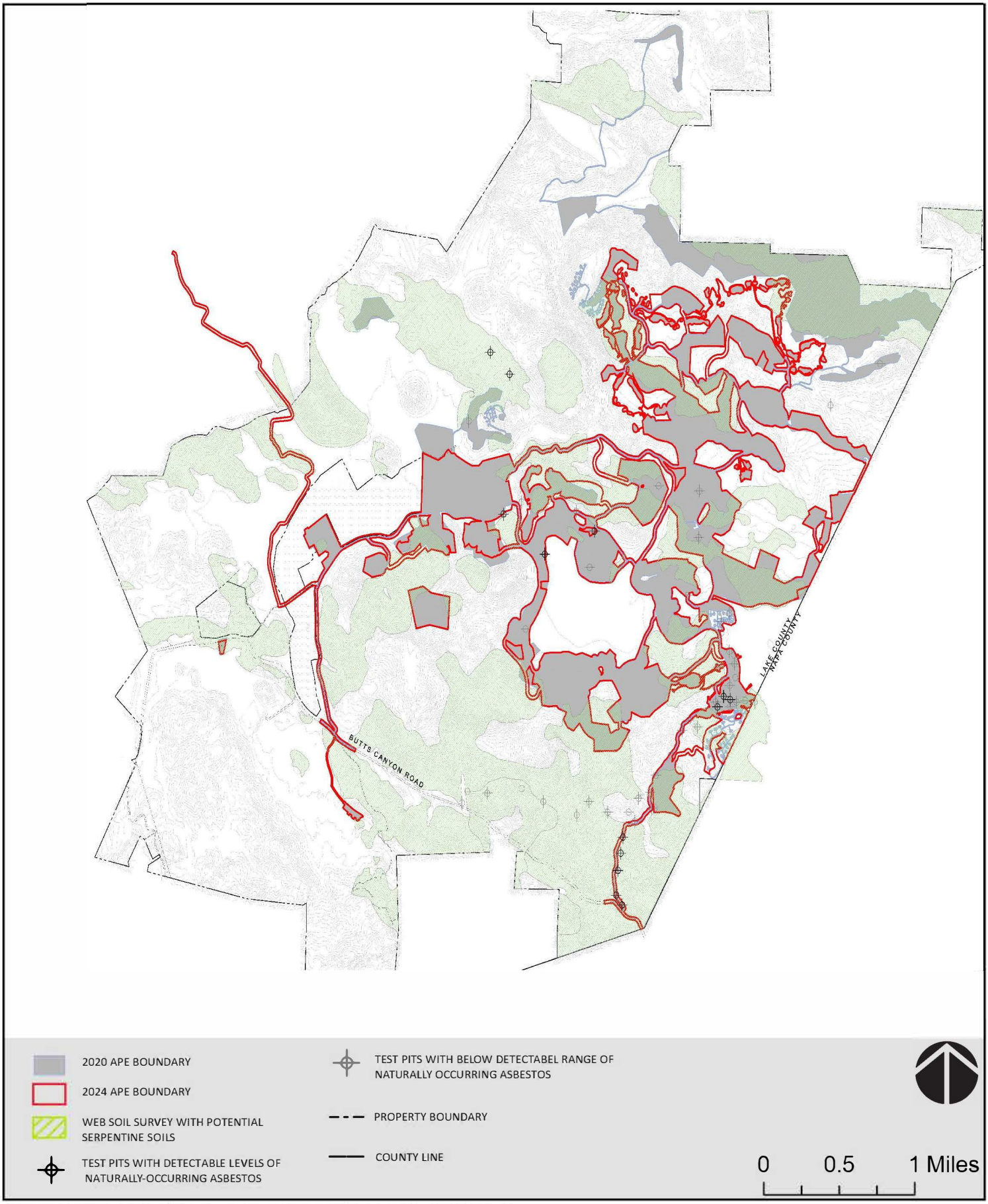
The 2020 EIR, Volume II, Section 3.8.2 includes a detailed description of the environmental setting related to hazards and hazardous materials on the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety within this PREIR. **Section 4.8.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR. There have been no substantial changes to the hazards and hazardous materials "Regulatory Setting" since preparation of the 2020 EIR. The full discussion of the environmental and regulatory settings is provided in the 2020 EIR (**Appendix D**). **Section 4.8.3** of this PREIR provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects, and mitigation is discussed in **Section 4.8.4**.

4.8.2 Environmental Setting

Ultramafic, ultrabasic, and serpentine soils occur within the Guenoc Valley Site, which can contain naturally occurring asbestos (NOA), as explained further in the 2020 EIR. The soils underlying the Grange Road Connector APE are listed in **Table 4.6-1**. **Figure 4-10** shows the serpentine soils on the Guenoc Valley Site and the off-site portion of the Grange Road Connector. An updated review of the State Water Resources Control Board's (SWRCB) GeoTracker database was conducted to determine if there are any known hazardous materials sites within 1 mile of the off-site portion of the Grange Road Connector; no known hazardous sites exist within the Grange Road Connector alignment or the 1-mile radius search (SWRCB, 2024a).

4.8.3 Impacts

The hazards and hazardous materials impacts of the Original Project were determined by analyzing changes to the existing conditions that would occur as a result of the proposed land uses within the area. This analysis of the Project Modifications follows the same methodology outlined in Section 3.8.4 of the 2020 EIR, focusing on whether the Project Modifications would result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects than those described in the 2020 EIR. Refer to Section 3.8.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology and significance criteria relating to hazards and hazardous materials impacts.



Source: Lake County Community Development and General Plan; Source: Esri, USDA FSA, County of Napa, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS, Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

FIGURE 4-10

SERPENTINE SOILS WITHIN MODIFIED PHASE 1 APE

IMPACT 3.8-1	CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Less than Significant	No
Mitigation Measures	MM 3.8-1	None Required	No Modifications Necessary
Significance After Mitigation	Less than Significant	N/A	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, development of the Proposed Project would include the routine use of hazardous materials common to construction activities, including but not limited to gasoline, diesel fuel, hydraulic fluid, solvents, oils, and paints. **Mitigation Measure 3.8-1** ensures that all contractors working on the Project Site prepare hazardous materials business plans that must be approved by Lake County's Division of Environmental Health. With inclusion of this mitigation measure, in addition to compliance with OSHA, Cal OSHA, and DTSC requirements, this impact would be less than significant. There are no Project Modifications that would change the amounts or types of chemicals and potentially hazardous materials that would be required for construction, and therefore there would be no potential for the Project Modifications to increase the severity of this impact. **Mitigation Measure 3.8-1** would continue to apply and would reduce construction-related impacts to less-than-significant levels for the same reasons stated in the 2020 EIR.

Operation of the Proposed Project would include the use of hazardous materials typical to residential and commercial land uses, as well as those associated with the proposed wastewater treatment plants. As further analyzed in the 2020 EIR, the use, storage, and transport of these chemicals would occur in accordance with manufacturer's guidelines and all applicable federal, State, and local regulations, and this impact is less than significant. Similar to construction, the Project Modifications would not include any changes to the amounts or types of chemicals needed during the operational phase of the Proposed Project and there would be no potential to increase the severity of this impact.

The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with the routine transport, use, or disposal of hazardous materials as compared to the 2020 EIR.

IMPACT 3.8-2	CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT OR FROM BEING LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES COMPILED PURSUANT TO GOVERNMENT CODE §65962.5		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.8-2; MM 3.8-3; MM 3.8-4; MM 3.8-5	MM 3.8-2; MM 3.8-5; MM 3.8-6	Modifications to MM 3.8-5 and 3.4-18; all other mitigation measures applicable as originally written
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, there are numerous project components that could result in a potentially significant impact to the public or the environment through the release of hazardous materials. The 2020 EIR discussed these impacts generally under the subheadings “Contaminated Soil and/or Groundwater”, “Demolition of Structures”, “Abandoned Geothermal Wells”, and “Naturally Occurring Asbestos.” **Mitigation Measures 3.8-2** through **3.8-5** would ensure that appropriate measures are taken to reduce this impact to less-than-significant levels. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. Regarding contaminated soils and/or groundwater, none of the Project Modifications would result in development within the existing hazardous materials sites identified on the property, nor have new hazardous materials sites been located within the off-site Grange Road Connector APE. There is the same potential for undocumented hazards to exist within the Modified APE, and **Mitigation Measure 3.8-2** would continue to reduce this impact to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications do not change the demolition of existing structures analyzed in the 2020 EIR, and therefore **Mitigation Measure 3.8-3** will continue to apply and reduce the impact to less than significant for the same reasons stated in the 2020 EIR. No new geothermal wells have been located on the Project Site since circulation of the 2020 EIR. The Parcel Reconfiguration would remove some potential residential lots from areas that contained known geothermal wells, however the Modified APE still includes geothermal wells and this remains a significant impact. **Mitigation Measure 3.8-4** would continue to apply and reduce this impact to less than significant for the same reasons stated in the 2020 EIR.

NOA occurs on the Project Site and construction activities occurring on ultramafic rock and serpentine soils pose a potentially significant hazard when NOA becomes airborne from soil-disrupting activities. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, could result in changes to the amount of development occurring on soils or substrate potentially containing NOA. As shown in **Figure 4-10**, the Original Project had approximately 1,000 acres overlaying soils that have the potential to contain NOA. The Modified APE contains only 669 acres of soils that may contain NOA. In addition and as discussed further in **Section 4.4** of this PREIR, serpentine rock outcrops have been designated by CDFW as sensitive habitat types since circulation of the 2020 EIR. **Mitigation Measure 3.4-18** was revised to add serpentine rock outcrops as a sensitive habitat type and limit the types of wildfire clearing that can occur in these areas during operation of the Modified Project. Therefore, the rock outcrops most likely to contain NOA will be avoided to the extent feasible and will no longer be subject to equipment use during wildfire clearing activities that could mobilize NOA and impact onsite workers and residents.

While the severity of this impact has decreased, it remains significant and **Mitigation Measure 3.8-5** would apply to the Proposed Project to protect onsite workers and residents from NOA. Since circulation of the 2020 EIR, the LCAQMD has more stringent requirements and reporting procedures to implement its existing Rule 4.467 "Asbestos Emissions Control Measure." **Section 4.8.5** of this PREIR contains a minor modification to **Mitigation Measure 3.8-5** to clarify that a Site-Specific Health and Safety Plan is a required component of the Asbestos Dust Mitigation Plan in accordance with the most up-to-date LCAQMD policies. **Mitigation Measure 3.8-5** (as updated) would continue to reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR.

IMPACT 3.8-3	**EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN 0.25 MILE OF AN EXISTING OR PROPOSED SCHOOL**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Not Applicable	Less than Significant	Not Applicable
Mitigation Measures	Not Applicable	None Required	Not Applicable
Significance After Mitigation	Not Applicable	N/A	Not Applicable

Notes: *Impact numbering retained from the 2020 EIR.

The Guenoc Valley Site is not located within 0.25 mile of an existing or proposed school, so Impact 3.8-3 of the 2020 EIR analyzed only the potential for the Middletown Housing Site and the Off-Site Infrastructure to have the potential to emit hazardous materials within 0.25 mile of a school. The on-site Project

Modifications would not be within 0.25 mile of a school and there are no Project Modifications affecting the Middletown Housing Site or the Off-Site Infrastructure. The off-site portion of the Grange Road Connector is approximately 4.5 miles from the nearest school. Therefore, the Project Modifications would have no potential to release hazardous materials within 0.25 mile of a school. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with the release of hazardous materials near a school as compared to the 2020 EIR.

IMPACT 3.8-4	**POTENTIAL FOR CUMULATIVE EFFECTS ASSOCIATED WITH HAZARDS AND HAZARDOUS MATERIALS**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Less than Significant	Less than Significant	Less than Significant
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As explained further in the 2020 EIR and **Section 4.13** of this PREIR, the context for evaluation of potential cumulative impacts on hazards and hazardous materials is based on development in the region, including projected build out under the Middletown Area Plan and approved or potential projects in the County. However, the analysis of cumulative hazardous materials impacts is generally site-specific, rather than cumulative in nature. For example, the use of common hazardous chemicals during construction could impact the health or safety of onsite workers but is unlikely to impact the safety of offsite residents in the surrounding community, and therefore the geographic scope is limited to the Project Site and immediate vicinity. The Original Project's contribution to significant impacts related to hazards and hazardous materials were found to be less than significant, and the Project Modifications would not result in new significant environmental effects or an increase in the severity of previously identified significant effects. No additional mitigation for cumulative development would be required.

4.8.4 Mitigation Measures

This PREIR has identified modifications to one hazardous materials mitigation measure to ensure the potential impacts of the Project Modifications are reduced to less-than-significant levels. As discussed in **Section 4.4.5** of this PREIR, several mitigation measures in the biological resources section have also been updated to minimize operational wildfire-related activities in serpentine soils. The mitigation measure with revisions is discussed below, and a presentation of changes in underline ~~strikeout~~ is provided in **Section 5** of this PREIR.

Mitigation Measure 3.8-5 outlines the specific components of the Asbestos Dust Mitigation Plan that is required to minimize impacts to onsite workers and residents due to the presence of naturally occurring asbestos. A Site-Specific Health and Safety Plan has been added to this measure to better comply with the current requirements of the LCAQMD.

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Introduction

The 2020 EIR, Volume II, Section 3.9.2 includes a detailed description of the environmental setting related to hydrology and water quality on the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety within this PREIR. **Section 4.9.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR and **Section 4.9.3** describes any relevant regulations that are new or updated. The full discussion of the environmental and regulatory settings is available in the 2020 EIR (**Appendix D**). **Section 4.9.4** of this PREIR provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects, and **Section 4.9.5** describes mitigation for impacts to hydrology and water quality.

4.9.2 Environmental Setting

Watersheds and Drainage

The Grange Road Connector APE is approximately 3.8 miles, of which 1.6 miles are located on the off-site Comstock Ranch property and the remaining 2.2 miles are located on the Guenoc Valley Site. The watershed, hydrologic conditions, and water quality of the on-site portion are discussed in the 2020 EIR. The off-site portion of the Grange Road Connector APE is located in the Upper Putah Creek watershed, within the Westside Subregion of the Sacramento River Basin (Basin), the same watershed as the Guenoc Valley Site. At the local watershed level, the off-site portion of the Grange Road Connector APE is located in the Crazy Creek-Putah Creek subwatershed (HUC 180201620307), and transitions to the Bucksnort Creek subwatershed (HUC 180201620305) when it enters the Guenoc Valley Site (USGS, 2018).

As further explained in the 2020 EIR, Bucksnort Creek is the primary drainage within the Guenoc Valley Site and most subwatersheds on the site drain to this creek. Bucksnort Creek flows north from the southwest side of the site through Detert Reservoir on to McCreary Lake, eventually discharging into Putah Creek. The Grange Road Connector APE is adjacent to Bucksnort Creek once the roadway enters the Guenoc Valley Site, following an existing vineyard access road that is adjacent to the stream. The Grange Road Connector then turns and crosses Bucksnort Creek over an existing bridge (see **Figure 4-6**).

Flooding

The Federal Emergency Management Agency (FEMA) oversees the delineation of flood hazard zones as it relates to the National Flood Insurance Program (NFIP) and the provision of federal disaster assistance. FEMA manages the NFIP and publishes the Flood Insurance Rate Maps (FIRMs), which show the expected frequency and severity of flooding by area, typically for the existing land use and type of drainage/flood control facilities present. Flood zones are determined by the probability of flooding within a certain time period, typically the 1% annual chance flood (100-year flood) or 0.2% annual chance flood (500-year flood). Floodplains are divided into flood hazard zones, designated by the potential for flooding of an area

during a flood event. Flood zones B, C, and X may include those areas that are located within the 100-year flood plain but are adequately protected by levee systems or other flood protection, while Zone A is designated as areas inundated by a 100-year storm event. The Grange Road Connector is covered by FEMA FIRM Nos. 06033C0869D and 06033C0960D, both effective since September 30, 2005 (FEMA, 2005). Figure 3.9-2 of the 2020 EIR depicts the FEMA Flood Zones on- and off-site and includes the area of the proposed Grange Road Connector; as shown therein, the majority of the Grange Road Connector APE is located in areas of Zone X (0.2% annual chance flood) but the portion along Bucksnort Creek is mapped as Zone A (1% annual chance). This portion of Bucksnort Creek has been analyzed by FEMA and the extent of the 100-year floodplain is depicted on the FIRM. While FEMA maps the floodplain extents the County Building Division ensures compliance with 44 CFR 60.3(a)(3) to ensure construction in flood zones is "Reasonably Safe" from flooding.

Surface Water Quality

Section 303(d) of the federal Clean Water Act requires states to monitor water pollution and report to the USEPA every two years. Waters that do not meet water quality standards are labeled impaired and are placed on a State list known as the 303(d) list. To improve water quality conditions, states often develop Total Maximum Daily Load (TMDL) cleanup plans. The 303(d) list was updated in 2022 and approved by the State Water Board on January 19, 2022 and the EPA on May 11, 2022 (SWRCB, 2024b). While the list of impaired waterbodies was updated, the status of the waters in and around the Guenoc Valley Site remains unchanged. There are no listed impaired waters on the Guenoc Valley Site or associated TMDL cleanup plans, although, as described in the 2020 EIR, the lower potion of Putah Creek (approximately 30 miles downstream) is impaired for mercury under Section 303(d) (SWRCB, 2022).

Groundwater

The Grange Road Connector APE is partially located within the Coyote Valley basin (Department of Water Resources [DWR], 2021). In 2021, California's Groundwater Update 2020 (Bulletin 118) was released, the first comprehensive update since 2003. California's reliance on groundwater has increased by between 10 to 20 percent since 2003 (DWR, 2021). The Coyote Valley (Basin 5-018) and Collayomi Valley (Basin 5-019) are both designated as Very Low Priority basins and therefore no Groundwater Sustainability Plans have been required for these basins yet (DWR, 2020). Groundwater conditions in these basins remain relatively unchanged from the 2020 EIR.

4.9.3 Regulatory Setting

State

General Permit for Construction Storm Water Discharges

On September 8, 2022, the SWRCB adopted updated SWRCB Order 2022-0057-DWQ, NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit), which superseded the previous Order 2009-0009-DWQ. The updated Order 2022-0057-DWQ went into effect on September 1, 2023 and establishes requirements for potential storm water discharges from construction activities to federal jurisdictional waters, and applies to site disturbances greater than one acre, as described below.

Similar to the previous General Permit, any construction activity affecting one or more acres of land, or any activity that is part of a common plan of development or sale that disturbs one acre or more, as well as construction activities for linear overhead/underground utility projects that result in disturbance of one

acre or more and have the potential to discharge to federal jurisdictional waters, must obtain a General Construction Activity Stormwater Permit Waste Discharge Identification Number. The permitting process requires the development and implementation of an effective SWPPP. The Project applicant must submit a Notice of Intent to the SWRCB to be covered by the General Permit and prepare the SWPPP prior to the beginning of construction. The SWPPP must include, among other things, BMPs to reduce pollutants and any more stringent controls necessary to meet water quality standards. Dischargers must also comply with water quality objectives as defined in the Central Valley Basin Plan. If Basin Plan objectives are exceeded, corrective measures would be required.

Local

Lake County Ordinance 3106

Lake County Ordinance 3106 was passed by the Board of Supervisors on July 27, 2021 and requires that all projects that require a CEQA analysis of water use also provide a DMP describing how the project will reduce water use during a declared drought emergency. Ordinance 3106 also requires a Hydrology Report addressing the approximate amount of water available for the project's identified water source, the approximate recharge rate of the identified water source, and cumulative impacts to surrounding areas.

4.9.4 Impacts

In the 2020 EIR, the hydrology and water quality impacts of the Proposed Project were determined by analyzing changes to the existing conditions that would occur as a result of the proposed land uses within the area. This analysis of the Project Modifications follows the same methodology outlined in Section 3.9.4 of the 2020 EIR, focusing on whether the Project Modifications would result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects than those described in the 2020 EIR. Refer to Section 3.9.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology and significance criteria relating to hydrology and water quality impacts.

IMPACT 3.9-1	**VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS OR OTHERWISE SUBSTANTIALLY DEGRADE SURFACE OR GROUND WATER QUALITY**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.9-1, 3.9-2 (Phase 1) MM 3.9-1 (Future Phases)	MM 3.9-1	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

Construction

As analyzed in the 2020 EIR, construction of the Proposed Project would result in the removal of vegetation and grading throughout the Development Area, the movement of approximately 10 million cubic yards of fill within the Project Site, and require numerous stream and drainage crossings for proposed roads. Grading, excavation, and other construction-related activities associated with Phase 1 could cause soil erosion or release spills associated with construction equipment, which could have adverse effects on receiving water quality at the Project Site and downstream, including Bucksnort Creek, Putah Creek and Lake Berryessa. As described in the 2020 EIR, the Proposed Project must prepare and adhere to a SWPPP in compliance with the SWRCB NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities ("General Permit"), and **Mitigation Measure 3.9-1** requires numerous Project-specific BMPs that shall be included in the SWPPP. As further described in the 2020 EIR, approximately 10 million cubic yards of cut and fill will be required for development of Phase 1, and a proposed rock crushing facility and portable concrete batch plant covering approximately 20 acres will be located on the site to facilitate the reuse of fill materials on the site. **Mitigation Measure 3.9-2** requires that the facility receive permit coverage from the Central Valley RWQCB and adhere to specific BMPs that will protect surface water resources. Together, the 2020 EIR concluded that **Mitigation Measures 3.9-1** and **3.9-2** would reduce this impact to less-than-significant levels.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would add the Grange Road Connector and Connector Roadways to the area that will be graded and disturbed, however, the overall grading area associated with the Modified Project will be reduced as a result of the Parcel Reconfiguration, including elimination of the camping area and overall reduction in the linear miles of roadways and utilities previously required for connection to relatively remote parcels. The construction of the Grange Road Connector is estimated to generate approximately 25,000 cubic yards of cut and require 23,250 cubic yards of fill, a negligible amount (0.25 percent) compared to the total cut and fill that will be processed for Phase 1 of the Project; furthermore, the amount of cut and fill required for the Modified Project will likely decrease as 3 fewer miles of road will be required and the overall Development Area has been reduced by 213 acres. The Proposed Project would still be required to obtain coverage under the NPDES Construction General Permit, which includes implementation of the SWPPP, and the proposed aggregate and concrete facility would comply with the permitting requirements of the Central Valley RWQCB. **Mitigation Measures 3.9-1** and **3.9-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would result in an overall reduction in grading, and therefore will not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with surface or groundwater quality as compared to the 2020 EIR.

Operation

The proposed wastewater infrastructure plan is described in Appendix WW of the 2020 EIR. As described in the 2020 EIR, the Proposed Project would include wastewater service areas to collect and treat wastewater from commercial uses, supporting uses, and some residential areas. These areas would be serviced by sanitary sewer systems and centralized WRPs that would produce recycled water available for reuse on the site. The WRPs would be permitted under the General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (Order WQ 2014-0153-DWQ), which is still in effect. The recycled water systems would be permitted separately from the treatment plants under the State's Water Reclamation Requirements for Recycled Water Use (Order WQ 2016-0068-DDW), which is still in effect. The recycled water systems as planned would be consistent with the regulations and standards covered

under the State's recycled regulations and associated standards contained in Title 22 Public Health rules. The 2020 EIR concluded that adherence to these regulatory requirements would ensure a less-than-significant impact.

With one exception, the Project Modifications including the Grange Road Connector, Connector Roadways, GHG Reduction Measures, Updated WPP, and DMP, do not involve the production of wastewater and would therefore have no new or substantially more severe significant impacts relating to operational water quality. However, the Parcel Reconfiguration, would result in the removal of larger and more remote lots which cannot be readily served by the centralized wastewater collection and treatment systems, and the relocation of those lots to centralized areas that will be served by the proposed wastewater treatment plants; these plants will be designed to a sufficient capacity to accommodate the increased density, and therefore this is not anticipated to increase any operational impacts. The removal of the camping area, which had a proposed WRP, means at least one WRP would not be required in the northern portion of the Guenoc Valley Site. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with surface or groundwater quality as compared to the 2020 EIR.

IMPACT 3.9-2	**SUBSTANTIALLY DECREASE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THE PROJECT MAY IMPEDE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant (Phase 1) Less than Significant (Future Phases)	Less than Significant (Workforce Housing) Potentially Significant (Infrastructure)	No
Mitigation Measures	MM 3.9-3 (Phase 1) None Required (Future Phases)	None Required (Workforce Housing) MM 3.9-3 (Infrastructure)	No Modifications Necessary
Significance After Mitigation	Less than Significant (Phase 1) N/A (Future Phases)	N/A (Workforce Housing) Less than Significant (Infrastructure)	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, the Proposed Project has the potential to impact groundwater supplies through increasing groundwater extraction or decreasing the amount of groundwater recharge. As analyzed in the 2020 EIR, a potable water system would be developed to supply drinking, interior, and recreation water demands and a second non-potable water system would be installed for all non-drinking

water and most exterior water demands, such as irrigation, non-recreational water (i.e., fountains), fire protection, and construction water demands. Groundwater supply wells would serve the potable water system; a combination of surface water (if within the allowable place of use [POU] for the surface water rights), recycled water, and groundwater would support the non-potable water system. A Water Supply Assessment (Appendix WSA to the 2020 EIR) provides a detailed analysis of the water demand for each of the water systems. The 2020 EIR found that the use of the proposed Off-Site Groundwater Well was a potentially significant impact to groundwater resources, and **Mitigation Measure 3.9-3**, which requires establishing a safe yield, limiting pumping to that safe yield, and ongoing monitoring, would reduce this impact to less-than-significant levels.

Groundwater Recharge

The Original Project analyzed in the 2020 EIR would have a less-than-significant effect as it relates to groundwater recharge due to the proposed drainage and stormwater detention areas providing opportunities for groundwater percolation. Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would alter the Development Area (Grange Road Connector, Connector Roadways, and Parcel Reconfiguration) could change the amount of impervious surface and therefore groundwater recharge compared to what was analyzed. However, the overall Development Area associated with the Modified Project will be reduced as a result of the Parcel Reconfiguration, including elimination of the camping area, and overall reduction in the linear miles of roadways and utilities previously required for connection to remote parcels. This overall decrease in the size of the Development Area (213 acres) equates to less impervious surfaces that could change groundwater recharge. Therefore, there are no new significant environmental effects or an increase in the severity of previously identified significant effects associated with groundwater recharge as compared to the 2020 EIR.

Groundwater Availability

The 2020 EIR and Water Supply Assessment (WSA) included additional analyses of water supply sufficiency in normal, dry and multiple dry years in accordance with SB 610 using the Basin Characterization Model (BCM) of California developed by the U.S. Geological Survey (USGS). As discussed in Appendix WSA to the 2020 EIR (**Appendix D**) and the Water Supply Assessment Addendum Memorandum (**Appendix G-1**), the BCM simulates watershed hydrologic processes based on recorded precipitation, potential evapotranspiration, soil data, and geologic conditions. Recognizing that climate change presents the potential to alter water availability in the future, the WSA analysis further incorporated a range of possible groundwater availabilities to account for potential variation due to climate change. The BCM outputs provided by the USGS include projected future runoff and recharge at the model cell level developed by running the BCM with inputs for future meteorological conditions, including precipitation and air temperature, provided by global climate models.

The WSA projected short-term (years 2020 – 2029) groundwater availability on the Guenoc Valley Site in a dry year to be 6,570 acre-feet per year (afy) and in a very dry year to be 4,800 afy. Future years (2030 – 2040) groundwater availability was projected to be 4,950 afy in a dry year and 3,740 afy in a very dry year (accounting for climate change). These groundwater availability projections reflect what is available below the property and do not differentiate between potable or non-potable, which is a factor of well construction and not overall availability. The total future phases demand of 1,927 afy is less than the available groundwater supplies of 3,740 afy in a very dry year, indicating that sufficient water is available in the aquifer even in a very dry year. At the time of preparation of the WSA in 2020, the BCM included

water years 1900 to 2016; currently the BCM has been updated to include water years 1896 to 2020. A total of eight water years have been added to the dataset that provides the foundation for this model, which is a relatively insignificant addition when over 116 years of precipitation data were utilized in the WSA. Historical precipitation records for the state of California are available from the California Office of Environmental Health Hazard Assessment (OEHHA) for 1896 to 2021. Using this dataset, the average precipitation from water years 1900 – 2016 (corresponding to the years available in the BCM dataset at the time of the WSA) was 23.53 inches. Years 1896, 1897, 2017, and 2019 were all wetter than normal years (OEHHA, 2023). Therefore, when the average precipitation is calculated for water years 1896 – 2020 (the dataset currently available in the updated BCM), the average precipitation increases slightly to 23.56 inches. This change is a negligible increase of 0.03 inches of precipitation and indicates that utilizing the very dry year modeling scenario from the WSA is a more conservative assessment of groundwater availability on the Guenoc Valley site.

Water Supply Infrastructure

While the Project Modifications result in a slight decrease of 50 hotel units and 16 residential estates, this PREIR assumes no change to the potable- or non-potable water demand to present a more conservative analysis. Therefore, the Project Modifications will not increase the severity of this impact due to increasing the amount of groundwater proposed to be extracted. As discussed in **Section 2.2.4** of this PREIR, since preparation of the 2020 EIR new groundwater wells have been drilled and tested on the Guenoc Valley Site consistent with the WSA and 2020 EIR recommendations. **Appendix G-1** presents the results of the well drilling and testing that was completed for these groundwater wells, and the demand and existing well capacity is summarized in **Table 4.9-1**. The non-potable water demand focuses on areas outside of the surface water POU where groundwater and recycled water will serve the non-potable water demand. Potable water can also serve to meet the non-potable water demand.

Table 4.9-1: Water Demands and Existing Well Capacity for Areas Not Using Surface Water

	Phase 1 Demand (afy)	Future Phases Demand (afy)*	Groundwater Supply Available from Existing Production Wells (afy)	Recycled Water (afy)	Existing Well Capacity – Phase 1 Demand Balance (afy)	Existing Well Capacity – Future Phases Demand Balance (afy)
Potable Water	249	685	1,042	N/A	793	357
Non-Potable Water	482	1,242	426	163 – 326**	107	-490
Total					**900**	**-133**

Notes: *The water demand for Full Build-Out of the Project will include the water demand of Phase 1 and additional water demand of future phases. The future phases water demand in **Appendix G-1** shows only the incremental increase of Future Phases, which has been added to Phase 1 to present the Full Buildout water demand for the Proposed Project.

**Phase 1 will produce 163 afy of recycled water. At full buildout of the Proposed Project, additional wastewater treatment plants will be constructed that will increase the recycled water generation to 326 afy.

Source: Water Supply Assessment Addendum Memorandum (**Appendix G-1**)

The existing wells on the Guenoc Valley Site are capable of producing 1,042 afy of potable water and 426 afy of non-potable water. In addition, the proposed wastewater treatment plants will generate 326 afy of recycled water that can be used for non-potable supply. The potable well capacity currently available on the Guenoc Valley Site exceeds the Phase 1 potable demand by 793 afy and the non-potable water available exceeds the Phase 1 non-potable demand by 107 afy. For future phases, the available potable supplies that can be produced by existing wells exceed demand by 357 afy. However, to meet the non-

potable demands of future phases, an additional well(s) will need to be drilled to supply 133 afy. This volume can be met with one additional well with a capacity of 82 gallons per minute (gpm), although one to two new wells may be drilled depending on localized conditions (**Appendix G-1**). Based on existing data about the wells on the site and test drilling that has been conducted since the 2020 EIR, this size well is feasible and the non-potable water demands of future phases can likely be accommodated with one to two new wells drilled on-site, depending on localized conditions at the exact location of future drilling (**Appendix G-1**). The installation of one to two new on-site non-potable wells would not be required until commencement of development of future phases of the Project, which shall be subject to additional environmental review in compliance with CEQA. Therefore, existing groundwater infrastructure on the Project Site is sufficient to meet the Phase 1 water demands and only one or two new wells would be required to be drilled to meet future phases demand. The drilling and testing of new wells were completed in accordance with the WSA, and the results indicate sufficient groundwater is available on the Guenoc Valley Site consistent with the analysis in the 2020 EIR. While the existing water supply infrastructure would need to be augmented with one or two new wells prior to construction of future phases, there is sufficient groundwater available below the property (see '**Groundwater Availability'** subsection above) and the well drilling program indicates it is feasible to drill one new non-potable well with a capacity of 82 gpm on the site. The Project Modification requiring the DMP does not increase the amount of groundwater that will be extracted, but does provide a framework for water use reduction, monitoring, and management in the event of a drought, which will allow the Modified Project to meet local or State objectives for water reduction measures in the event of a declared drought (Drought Management Plan [**Appendix G-2**]).

Mitigation Measure 3.9-3 relating to the Off-Site Well would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. This mitigation measure requires that a safe yield must be determined that meets the performance criteria of avoiding drawdown of groundwater beyond 300 feet of the well, prior to the issuance of an encroachment permit or grading permit for installation of off-site water line along Butts Canyon Road for the use of the Off-Site Well. The Project Modifications do not involve any alterations to the Off-Site Well construction or operation as compared to the 2020 EIR. Therefore, there are no new significant environmental effects or an increase in the severity of previously identified significant effects associated with the Off-Site Well as compared to the 2020 EIR. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with groundwater supplies or groundwater recharge as compared to the 2020 EIR.

IMPACT 3.9-3	SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN WHICH WOULD: RESULT IN EROSION, SILTATION OR FLOODING; EXCEED THE CAPACITY OF STORMWATER DRAINAGE SYSTEMS; OR PROVIDE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, the proposed roadways, buildings, parking lots, infrastructure, lakes, and landscaping would alter existing landform and could alter existing drainage patterns, and the increase in impervious surfaces could increase the rate and amount of stormwater runoff. As described in the 2020 EIR, the Proposed Project stormwater facilities are designed according to the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual, and include stormwater drainage areas that would be routed through self-retaining areas, bio-retention areas, or self-treating areas so there would be no net increase of stormwater leaving the site for the 2-year 24-hour storm. The 2020 EIR provided individual analyses for three main types of development proposed under the Project: roadways, residential estate parcels, and commercial areas. The 2020 EIR concluded that the incorporation of Low Impact Design (LID) measures and BASMAA recommendations resulted in a less-than-significant impact to drainage patterns and runoff across all three types of development.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would alter the Development Area (Grange Road Connector, Connector Roadways, and Parcel Reconfiguration) could change the stormwater runoff patterns compared to what was analyzed. The addition of the 10-foot aggregate or other hardscape shoulder to area roadways as part of the Updated WPP could also have an impact on stormwater runoff patterns. The Development Area includes the built components proposed for resort, residential, and roadway uses. The 1,202-acre Development Area encompasses and slightly overstates the proposed impervious surfaces, as in addition to paved roadways, buildings, and other impervious materials, it also includes landscaping around buildings which is typically considered permeable. The additional 10 feet of hardscape is included in the 1,202-acre Development Area. Because the overall development area associated with the Modified Project would decrease by 213 acres compared to the Original Project, the total impervious area associated with the project will be less than what was analyzed in the 2020 EIR even with inclusion of the 10 feet of hardscape along roadways. Furthermore, each of these Project Modifications will be subject to the same stringent design standards that will minimize potential impacts to drainage patterns and stormwater runoff

(Stormwater Technical Memorandum [**Appendix L**]). The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with drainage patterns or stormwater runoff as compared to the 2020 EIR.

IMPACT 3.9-4	**RESULT IN FLOOD HAZARD, TSUNAMI, OR SEICHE ZONES, RISK RELEASE OF POLLUTANTS DUE TO PROJECT INUNDATION**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Less than Significant (Workforce Housing) Potentially Significant (Infrastructure)	No
Mitigation Measures	MM 3.9-4, 3.9-5, 3.9-6	None Required (Workforce Housing) MM 3.9-6 (Infrastructure)	No Modifications Necessary
Significance After Mitigation	Less than Significant	N/A (Workforce Housing) Less than Significant (Infrastructure)	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As shown in Figure 3.9-2 of the 2020 EIR, FEMA has delineated a 100-year floodplain for a portion of Bucksnort Creek between Detert Reservoir and McCreary Lake, however the majority of the potential floodplains on the Guenoc Valley Site have not yet been delineated. Additionally, the failure of a reservoir dam could result in flooding hazards downstream. The 2020 EIR determined that the potential flooding hazard, whether due to development within a floodplain or failure of a reservoir dam, would be potentially significant. The 2020 EIR concluded that **Mitigation Measures 3.9-4** through **3.9-6**, which require mapping of floodplains and inundation zones and incorporation of these hazards into site plans, would reduce this impact to less-than-significant levels.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that would alter the Development Area (Grange Road Connector, Connector Roadways, and Parcel Reconfiguration) could change the flooding hazard risk compared to what was analyzed. The Grange Road Connector and Connector Roadways would not introduce new people or structures and therefore would not significantly increase this risk, and the Parcel Reconfiguration will remove the camping area and associated WRP from an area near Putah Creek where the flood hazard was not analyzed by FEMA. **Mitigation Measures 3.9-4** through **3.9-6** will continue to apply and will reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the

severity of previously identified significant impacts associated with flooding hazard as compared to the 2020 EIR.

IMPACT 3.9-5	CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN?		
	2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

The Guenoc Valley Site and the off-site portion of the Grange Road Connector are located within the Sacramento River Basin which is covered by the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin (Basin Plan). As described in the 2020 EIR, the Project Site lies partly within the Coyote Valley and Collayomi Valley Groundwater Basins, which have been identified under SGMA to be very low priority. SGMA does not require very low priority basins to be managed under a GSP and one has not been prepared for the Coyote Valley and Collayomi Valley Groundwater Basins. The 2020 EIR concluded that the Original Project has the potential to conflict with the Basin Plan, but because construction and operation of the Original Project would be required to comply with State policies and waste discharge requirements that have been designed by the RWQCB to protect the water quality objectives and beneficial uses identified in the Basin Plan, the impact would be less than significant. Furthermore, **Mitigation Measures 3.9-1** through **3.9-6** were identified to reduce the potential surface water quality impacts identified by Impacts 3.9-1 through 3.9-4, which would further minimize potential impacts to water quality.

As analyzed in Impacts 3.9-1 through 3.9-4 above, the Project Modifications would have no potential to increase the water demands of the Project and severity of these impacts, and although this impact is less than significant, the same mitigation measures would apply to further reduce potential impacts for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with water quality control plans or groundwater plans as compared to the 2020 EIR.

IMPACT 3.9-6	CUMULATIVE HYDROLOGY AND WATER QUALITY IMPACTS		
2020 EIR Conclusions			Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Future Phases	Other Phase 1 (Off-Site) Areas	
Significance Before Mitigation	Less than Significant	Less than Significant	No
Mitigation Measures	None Required	None Required	None Required
Significance After Mitigation	N/A	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As explained further in the 2020 EIR and **Section 4.13** of this PREIR, the context for evaluation of potential cumulative impacts for hydrology and water quality is regional development in or near Middletown. Planned cumulative projects in the region are described in **Table 4.13-1**, and while some changes have occurred to the cumulative projects since the 2020 EIR, the main projects that will bring new people into the region (i.e., buildout of the Hidden Valley Community, Valley Oaks Community, and the Guenoc Valley Water Rights Modification Project) and the types of projects proposed (i.e., residential development, commercial, and agricultural development) remain consistent from the 2020 EIR. There have been no substantive changes to the existing or planned developments in the vicinity of the Off-Site Well parcel. All projects have the potential to impact hydrology and water quality during construction and operation, but compliance with Federal, State, and County land use and environmental regulations would reduce impacts. The analysis of cumulative hydrology impacts within the 2020 EIR assessed all project components, including development of Phase 1 and future phases on the Guenoc Valley Site, the Middletown Housing Site, and the Offsite Infrastructure Improvements. As further explained in the 2020 EIR, with mitigation all project components (including the Off-Site Well) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Proposed Project would impede sustainable groundwater management of the basin. Mitigation Measure 3.9-3 inherently addresses the potential cumulative impact of the Off-Site Well in that the safe yield must prevent drawdown beyond 300 feet of the well to protect the groundwater basin and groundwater users in the cumulative geographic area. The Original Project's contribution to significant impacts related to the area's hydrology and water quality conditions were found to be less than significant with inclusion of Project design features, compliance with Federal, State and County land use and environmental regulations, or mitigation measures identified in this section. These same measures, including **Mitigation Measures 3.9-1** through **3.9-6**, would ensure the Project Modifications would not result in new significant environmental effects or an increase in the severity of previously identified significant effects. No additional mitigation for cumulative development would be required.

4.9.5 Mitigation Measures

No changes to the mitigation measures are warranted as a result of the Project Modifications. A full list of the mitigation measures is included in the MMRP in **Section 5** of this PREIR.

4.10 TRANSPORTATION AND TRAFFIC

4.10.1 Introduction

The 2020 EIR, Volume II, Section 3.13.2 includes a detailed description of the environmental setting related to transportation and traffic in the vicinity of the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety within this PREIR. **Section 4.10.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR and **Section 4.10.3** describes any relevant regulations that are new or updated. The full discussion of the environmental and regulatory settings is available in the 2020 EIR (**Appendix D**). **Section 4.10.4** of this PREIR describes methods of analysis and provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects. Mitigation for impacts to traffic is discussed in **Section 4.10.5**.

4.10.2 Environmental Setting

The regional roadway network is managed predominantly by Lake County and Caltrans, with CAL FIRE and other partner wildfire agencies (e.g. fire districts or local Firewise councils) providing vegetation and fuel management along roadways. The state highway system includes SR 29 and SR 175 in the vicinity of the Guenoc Valley Site. Recent improvements to these highways include the SR 29 South Corridor Engineered Feasibility Study (2014 joint study by Caltrans District 1 and Lake County/City Area Planning Council) and implementation of the SR 29 Konocti Corridor project. The SR 29 Konocti Corridor Project is a cooperative effort of Caltrans, the Local Area Planning Council (LAPC), and FHWA. In total, the project will widen an 8-mile section of SR 29 from a two-lane divided highway to a four-lane expressway. Segment 2C of the SR 29 Konocti Corridor Project (widening of the westernmost 3.1 mile segment of the project) was completed in June 2023 (Caltrans, 2023). "The Caltrans Milestone Report for Lake County (August 10, 2023) indicates that construction of the remaining Segments 2A and 2B is scheduled for completion in December 2030" (Wildfire Risk and Evacuation Assessment Report [**Appendix H-1**]). Additionally, in January 2023 the California Transportation Commission (CTC) allocated approximately $20.9 million in federal funding toward roadway, guardrail, and other improvements along SR 20 near Mid Lake Road, and $3.1 million in funding toward the removal of hazardous trees along various locations, including SR 175 (Lake County News, 2023).

4.10.3 Regulatory Setting

Caltrans Regional Growth Factors

Caltrans projects future traffic volumes on roadways within its jurisdiction to facilitate long-range planning and ensure facilities are designed with the appropriate capacity. Historically, growth factors were based on both projected travel trends and historical growth from two data sources—the "California Motor Vehicle Stock Travel and Fuel Forecast" (CMVSTAFF) and historical Average Vehicle Mile Traveled (AVMT) comparisons from "Traffic Volumes on the California State Highway System." On February 12, 2024, Caltrans released updated growth factors for District 1, which covers Lake County. The 2024 Growth Factor update was prepared after an extensive analysis of historical volumes on District 1 routes, review of the California Statewide Travel Demand Model, and Department of Finance population statistics for all counties within District 1.

Lake County Regional Transportation Plan/Active Transportation Plan (2022)

In 2022, the LAPC adopted the Regional Transportation Plan (RTP)/Active Transportation Plan, a long-range planning document intended to update the RTP to reflect recent laws and policies that have been adopted in relation to the management and improvement of the transportation system throughout Lake County (LAPC, 2022). This document identifies overarching goals, objectives, and specific policies intended to guide transportation development projects. Many of these policies apply to County-led transportation projects and not to individual land development projects, but those that may be relevant to the County's consideration of Proposed Project are provided below:

Policy OI-1: Coordinate, support and encourage multi-modal regional planning activities in Lake County across jurisdictional boundaries.

Policy OI-1.2: Coordinate with local and State agencies on health, security and emergency response planning efforts. Work cooperatively with local, regional and State agencies to ensure effective emergency response efforts are well coordinated during natural disasters such as wildfire or flood events.

Policy OI-1.4: Evaluate individual projects with an eye for potential regionwide impacts when formulating, designing and constructing transportation projects of various modes and at all levels.

Policy OI-1.5: Work with local jurisdictions to further housing goals of the region and to update and implement Regional Housing Needs Allocations (RHNA).

Objective OI-3: Reduce Greenhouse Gas emissions by promoting and facilitating transit use and increasing active transportation alternatives.

Policy OI-3.4: Support and facilitate the installation of electric vehicle charging stations for public use. Explore options for affordable, clean energy technology and programs.

Goal SHS: State Highway System (SHS): Provide a safe, well-maintained and efficient State highway network that addresses regional and statewide mobility needs for people, goods and services.

Objective SHS-1: Improve mobility on the State highway system throughout Lake County.

Objective LSR-1: Local Streets and Roads (LSR): Maintain, rehabilitate and construct local streets and roads consistent with local and regional needs, city and County area plans, and policies and Complete Streets policies.

Policy LSR-2.2: Support establishment of traffic impact fees to construct new transportation facilities associated with new development.

Policy LSR-3.2: Coordinate with local agencies on security and emergency response planning efforts, including the identification of key evacuation and emergency access routes.

Objective AT-1: Facilitate and promote walking, bicycling and other active modes of transportation.

Objective AT-2: Reduce Greenhouse Gas emissions and Vehicle Miles Traveled (VMT).

Policy AT-2.4: Encourage VMT reducing mitigation measures for discretionary development projects at the local and State level.

Objective PT-3: Provide a safe and accessible transit system.

Policy PT-3.3: Consider the impacts of new development (residential and commercial) on the transit system and identify appropriate mitigation measures to be incorporated into the proposed development.

Policy PT-3.6: Improve connectivity between transit facilities, pedestrian facilities and bicycle facilities.

Policy AV-3.1: Develop plans and support projects that are consistent with the County Office of Emergency Services (OES) response and recovery plans.

The Active Transportation Plan identifies Butts Canyon Road as a future Class III Bicycle Facility, noting that Class III bike lanes are less likely to be funded as they do not promote increased use by bicyclists of all abilities. Class III facilities are perceived by cyclists to have an unacceptable level of risk due to limited road widths, close proximity to traffic, and potential hazards at the edge of pavement such as steep drainage ditches and fixed objects. Class III facilities are typically most appropriate for low volume, low speed roads where bicycles can safely travel in the main vehicular travel lane.

4.10.4 Impacts

Method of Analysis

In the 2020 EIR, the transportation and traffic impacts of the Proposed Project were determined by evaluating the existing and proposed operational conditions at twenty-one (21) study intersections (shown in Figure 3.13-1 of the 2020 EIR), as required by the Lake County General Plan. Analysis of traffic operations was conducted using the 6th Edition of the *Highway Capacity Manual* (HCM) LOS methodology, which is fully described in the Traffic Impact Assessment (TIA; Appendix TIA of the 2020 EIR) and Section 3.13.4 of the 2020 EIR (**Appendix D**). Existing traffic volumes at each of the Project study intersections were determined by traffic counts conducted in May, June, and July 2019 to capture a range of traffic conditions, and were translated into LOS designations for each intersection. These 2019 traffic counts were then utilized to estimate traffic volumes in the Baseline year of 2022, which is when the Original Project was assumed to be completed. The Baseline (2022) conditions include additional traffic from reasonably foreseeable projects in the area, including additional homes to be constructed in the Hidden Valley Community and the Valley Oaks Development, combined with an average traffic growth rate of 1 percent per year.

The study intersections were then evaluated for seven scenarios:

- Existing Conditions – LOS based on existing peak hour volumes and existing intersection configurations;
- Existing Plus Project Phase 1 – existing traffic plus trips from Phase 1 of the Original Project;
- Baseline (No Project) Conditions – baseline was defined as the existing condition plus traffic attributable to predicted growth in the upcoming three years, assuming Project opening in 2022;

- Baseline Plus Project Phase 1 – the baseline traffic plus trips from Phase 1 of the Original Project;
- Cumulative Conditions – the forecasted year 2040 cumulative traffic volumes based on planned and approved projects;
- Cumulative Plus Project Phase 1 – the cumulative year 2040 traffic plus trips from Phase 1 of the Original Project; and
- Cumulative Plus Project Future Phases – the cumulative year 2040 traffic plus trips from Phase 1 and planned future phases of the Original Project.

Traffic counts were conducted at 14 intersections on August 19, 2022 in support of the Wildfire Evacuation Assessment (**Appendix H**). **Table 4.10-1** depicts the intersections from the Wildfire Evacuation Assessment that align with the study intersections from the TIA, the traffic counts from each study, and how the 2022 Baseline calculated in the 2020 TIA compares to the measured traffic counts conducted in 2022.

Table 4.10-1: Traffic Count Comparison (PM Peak Hour)

#*	Intersection**	2019 Count for 2020 TIA	2022 Baseline Estimated in 2020 TIA	2022 Count for 2024 Wildfire Assessment	Difference Between 2022 Count and 2022 Estimate	Percent Change (2022 Count Compared to Estimate)
1	SR 53/CR 140/SR 29/Main St	1,832	2,176	2,570	394	15%
2	SR 29/CR 122/Spruce Grove Rd S	990	1,318	1,215	-103	-8%
3	SR 29/CR 122/Spruce Grove Rd N	1,111	1,456	1,153	-303	-26%
4	SR 29/CR 105/Hidden Valley Rd/Spruce Rd Ext	1,077	1,434	1,180	-254	-22%
5	SR 29/Hartmann Rd	1,417	1,773	1,606	-167	-10%
6	SR 29/Grange Rd	1,219	1,568	1,403	-165	-12%
7	SR 29/CR 101/Butts Canyon Rd	1,260	1,499	1,451	-48	-3%
10	SR 29/Calistoga Rd/Wardlaw St	1,373	1,557	1,517	-40	-3%
12	SR 29/Calistoga Rd/CR 117C/Main St	1,298	1,492	1,598	106	7%

Source: Abrams Associates, 2020 (Appendix TIA of **Appendix D**), National Data and Surveying Services, 2022, and Fehr & Peers, 2024 (**Appendix H-1**)
*Original intersection numbering from the 2020 TIA
**Intersection name used in the 2024 Wildfire Assessment

As shown in **Table 4.10-1**, the traffic counts at several area intersections have increased, but overall the measured 2022 traffic is an average of 7 percent lower compared to the estimated 2022 Baseline in the 2020 TIA. The only two intersections where actual traffic was higher than the estimated Baseline were Intersection #1 (SR 53/SR 29/Main St.) near Clearlake which was 15 percent higher, and Intersection #12 (SR 29/Calistoga Rd./Main St.) in Middletown which was 7 percent higher. Although difficult to quantify, some increase in traffic during the peak tourist season (August 2022) is to be expected and could explain that the two intersections with increases are along two of the major traveling corridors to access regional recreational amenities like Clear Lake, while the other intersections studied did not show increases. More

importantly, the two intersections where increases were identified were both forecast to operate well within the established LOS standards under the baseline plus project scenario. There is no expectation that further analysis of these intersections would yield any additional useful information about the project's potential for impacts. These intersections were also both forecast to have acceptable operations under the cumulative buildout plus project (Phase 2) scenario and no additional mitigations would be required. The intersection with the greatest percent increase (#1 – SR 53/CR 140/SR 29/Main St) will be improved during a subsequent phase of the planned Konocti Corridor project, the first phase of which was completed in June 2023, after the 2022 traffic counts. This project improves an 8-mile section of SR 29 from a two-lane divided highway to a four-lane expressway, which will further alleviate known congestion in the area and construction-related congestion during summer peak travel season may account for the inflated baseline trips at Intersection #1.

Construction of the Modified Project has approximately 213 fewer acres of Development Area and therefore may result in a slight decrease in the overall worker trips required for the construction phase. Utilizing the TIA prepared for the 2020 EIR will therefore result in a conservative assessment of potential impacts due to Project construction activities. The Modified Project results in no increase to the number of resort units or residences and therefore the trip generation rate associated with the Modified Project will not change. The same number of employee, resident, and patron visits are expected during Project operations, and therefore the analysis of Project impacts presented in the 2020 TIA remains valid.

Caltrans provided updated growth factors in February 2024 for the entire District 1 that could potentially affect the background traffic assumed for the cumulative conditions, and therefore these growth factors were compared to the site-specific 20-year growth projected in the 2020 TIA. This comparison revealed the 2020 TIA utilized growth factors that were substantially higher than the 2024 Caltrans growth factors in all but two locations: (1) the intersection of SR 52, and (2) SR 29 and SR 29 south of SR 175. In both locations, the 2020 TIA was within 1 percent of the updated growth factors and adjusting the model by 1 percent would not affect the conclusions or mitigation presented in the 2020 TIA or 2020 EIR. Therefore, the assumed growth analyzed in the 2020 TIA ensures the Cumulative Condition, Cumulative plus Project, and Cumulative Plus Project Future Phases analyses remain valid.

This PREIR will qualitatively assess the potential for traffic impacts using the modeling provided in Appendix TIA of the 2020 EIR (**Appendix D**). This analysis will focus on whether the Project Modifications would have new or substantially more severe significant effects than those described in the 2020 EIR.

Impacts

IMPACT 3.13-1	**CONFLICT WITH PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING ROADWAYS DURING CONSTRUCTION**	
2020 EIR Conclusions		**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Off-Site Areas**	
Significance Before Mitigation	Less than Significant	No
Mitigation Measures	None Required	None Required
Significance After Mitigation	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, construction of the Original Project would increase traffic as a result of demolition and construction activities, and the EIR assumed a worst-case scenario of a single-phase construction period of 36 months. Construction traffic would include the delivery of heavy equipment and materials to the Guenoc Valley Site, removal of debris, and daily vehicle trips for workers. A Traffic Control Plan is required to be approved by the County Engineer prior to issuance of grading and building permits, which will ensure that truck drivers utilize the most direct routes, site ingress and egress is limited to appropriate entrances and signage or traffic signals may be required, warning signs will be installed, and street cleaning may be implemented if debris or mud become an issue. The County Engineer will also have the ability to limit the hours that importation and exportation of materials may occur if traffic becomes a nuisance. For these reasons, the 2020 EIR concluded that impacts due to construction traffic are less than significant.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications would add the Grange Road Connector and Connector Roadways to the area that will be graded and disturbed, however, the overall grading area associated with the Modified Project will be reduced as a result of the Parcel Reconfiguration, and therefore no additional workers or equipment are anticipated for construction. The Project Modifications will not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with construction traffic as compared to the 2020 EIR.

IMPACT 3.13-2	**CONFLICT WITH PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING ROADWAYS DURING OPERATION ASSUMING FUTURE BASELINE PLUS PROJECT CONDITIONS**	
2020 EIR Conclusions		**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Off-Site Areas**	
Significance Before Mitigation	Potentially Significant	No
Mitigation Measures	MM 3.13-1	No Modifications Necessary
Significance After Mitigation	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

In the 2020 EIR, the baseline plus Original Project (Phase 1) traffic conditions were developed by adding projected traffic from Phase 1 to the baseline traffic volumes and assessing the traffic volumes at the study intersections to determine the potential for Project-related delays in LOS. As shown in Table 3.13-6 of the 2020 EIR, all of the study intersections would continue to operate at acceptable conditions, with the exception of Intersection #7 (SR 29 at Butts Canyon Road), Intersection #20 (SR 29 at Tubbs Lane in Napa County), and Intersection #21 (SR 128 at Tubbs Lane in Napa County). The 2020 EIR concluded that **Mitigation Measure 3.13-1**, which requires the installation of a three-way traffic signal with crosswalks at Intersection #7, will reduce traffic impacts to less-than-significant levels. The Modified Project does not result in a change in the number of trips in comparison to the Original Project as a similar or reduced number of hotel units and residences are proposed. Therefore, the Project Modifications will not increase the severity of this impact, and **Mitigation Measure 3.13-1** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant effects associated with Phase 1 traffic as compared to the 2020 EIR.

IMPACT 3.13-3	CONFLICT WITH PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING TRANSIT DURING OPERATION	
2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Off-Site Areas	
Significance Before Mitigation	Less than Significant	No
Mitigation Measures	None Required	None Required
Significance After Mitigation	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR

As analyzed in the 2020 EIR, the Proposed Project would not result in a significant degradation of LOS on any roadway segments utilized for bus transit in the area, and would not conflict with any transit plans or goals of the County or Lake Transit. The Modified Project does not result in a change in the number of trips in comparison to the Original Project because the same or fewer hotel units and residences are proposed. Therefore, the Project Modifications will not increase the severity of this impact. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with public transit as compared to the 2020 EIR.

IMPACT 3.13-4	CONFLICT WITH PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING BICYCLE, OR PEDESTRIAN FACILITIES DURING OPERATION	
2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	Guenoc Valley Site Phase 1 and Off-Site Areas	
Significance Before Mitigation	Less than Significant	No
Mitigation Measures	None Required	None Required
Significance After Mitigation	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

The County does not have LOS standards for pedestrian or bicycle facilities, and the 2020 EIR found that the Proposed Project would not overcrowd existing facilities or result in decreases in performance or safety. While this impact was identified as less than significant, the Original Project would contribute to additional pedestrian and bicycle improvement measures in the vicinity of the Guenoc Valley Site in compliance with County and General Plan policies. Furthermore, although this impact is not significant, the 2020 EIR acknowledged that **Mitigation Measure 3.13-5** would require fair-share contributions towards pedestrian and bicycle infrastructure improvements relating to the Original Project's VMT impacts, which would further minimize any impacts to pedestrian or bicycle facilities. The Project Modifications do not result in a change in the number of proposed visitors to the site as the same or fewer number of hotel units and residences are proposed. Therefore, the Project Modifications will not increase the severity of this impact. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with pedestrian and bicycle facilities as compared to the 2020 EIR.

IMPACT 3.13-5	CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES § 15064.3, SUBDIVISION (B)	
2020 EIR Conclusions		Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?
Project Component	**Guenoc Valley Site Phase 1 and Off-Site Areas**	
Significance Before Mitigation	Potentially Significant	No
Mitigation Measures	MM 3.13-4, 3.13-5	No Modifications Necessary
Significance After Mitigation	Significant and Unavoidable	Significant and Unavoidable

Notes: *Impact numbering retained from the 2020 EIR.

The County does not have adopted CEQA thresholds for VMT analysis, and therefore the 2020 EIR utilized the OPR threshold of a 15 percent reduction in per capita VMT over existing conditions. Due to the rural nature of the Project setting and associated longer distances required for travel to work, schools, shopping centers, etc., the 2020 EIR determined that the Original Project has a higher VMT per capita than the Lake County or Bay Area regional averages, which is a significant impact. **Mitigation Measure 3.13-4** requires that the applicant implement a TDM Plan that has a stated objective of reducing VMT by 15 percent. A draft of the TDM Plan was included as Appendix TDM to the 2020 EIR and a revised version was Attachment B to the Final EIR Errata. Measures included within the Revised TDM Plan include: private shuttle service for employees where public transit lines are unavailable; on-call Dial-a-Ride service to connect the Guenoc Valley Site to Middletown; carpool and ride-matching assistance program; preferential on-site parking for carpoolers; dedicated parking for car share services; on-site sales of transit passes; a TDM Coordinator to facilitate and publicize activities conducted under the TDM Plan; transportation and commute information kiosks in common gathering areas, among others. The 2020 EIR conclusion that the Original Project would have a significant and unavoidable impact to VMT and may not meet a 15 percent per capita VMT reduction is mainly an acknowledgement that the extensive set of TDM measures cannot be conclusively proven to be sufficient to achieve the desired reduction, although it should be noted that the TDM Plan will have significant reductions in VMT. As described in the revised TDM Plan, implementation of **Mitigation Measure 3.13-4** is expected to reduce vehicle trips and VMT from the Original Project by up to 20 percent.

Under the Project Modifications, with the increase in density of residential lots and removal of the remote lots as part of the Parcel Reconfiguration, there will be slight decreases in the distances that residents travel to their homes once they reach the Guenoc Valley Site, but this slight decrease in on-site VMT is likely negligible. The Project Modifications do not result in a change in the number of proposed visitors to the site as the same number of hotel units and residences are proposed. Therefore, the Project Modifications will not increase the severity of this impact in comparison to the Original Project. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with VMT as compared to the 2020 EIR, however this impact would remain significant and unavoidable.

IMPACT 3.13-6	SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE (E.G., SHARP CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT)	
2020 EIR Conclusions		**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Off-Site Areas**	
Significance Before Mitigation	Less than Significant	No
Mitigation Measures	None Required	None Required
Significance After Mitigation	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, the Original Project would not cause or substantially increase any safety hazards due to design features or the introduction of incompatible uses to the area. Although the Proposed Project would increase pedestrian and vehicular traffic in the area, the 2020 EIR concluded that it is not expected to significantly impact or change the design of any transportation facilities or create any new safety problems.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. Project Modifications that include the Connector Roadways and Grange Road Connector would result in an overall increase in circulation safety in comparison to the Original Project, as there would be additional emergency ingress and egress from the site and there would be no dead-end or non-looped roads greater than one mile. The Project Modifications will not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with hazardous features or incompatible uses as compared to the 2020 EIR.

IMPACT 3.13-7	RESULT IN INADEQUATE EMERGENCY ACCESS	
2020 EIR Conclusions		**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Off-Site Areas**	
Significance Before Mitigation	Less than Significant	No
Mitigation Measures	None Required	None Required
Significance After Mitigation	N/A	N/A

Notes: *Impact numbering retained from the 2020 EIR.

As analyzed in the 2020 EIR, sufficient emergency access is determined by factors such as number of access points, roadway width, and proximity to fire stations. The 2020 EIR assessed the potential for Project traffic to result in impacts to emergency vehicle response times in the area, as well as whether emergency vehicles can adequately access the Project Site. With mitigation, the addition of Project traffic to area roadways would not result in any significant changes to LOS and therefore no significant impacts to emergency vehicle response times.

As discussed further above, the Project Modifications will not substantially increase the amount of Project-related traffic to area roadways compared with what was anticipated in the 2020 EIR, and therefore the Project Modifications would not result in an increase in this impact. Regarding the ability for emergency vehicles to access proposed uses within the Guenoc Valley Site, the Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures and DMP, would have no potential to increase the severity of this impact. Project Modifications that include the Connector Roadways and Grange Road Connector would result in an overall increase in circulation safety in comparison to the Original Project, as there would be additional emergency ingress and egress from the site and there would be no dead-end or non-looped roads greater than one mile. The Updated WPP is designed to increase emergency access and wildfire preparedness on the site. Refer to further discussion in **Section 3** of this PREIR. Therefore, the Project Modifications would have a beneficial impact as it relates to emergency access within the Guenoc Valley Site. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with emergency access as compared to the 2020 EIR.

IMPACT 3.13-8	**CONFLICT WITH PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING ROADWAYS DURING UNDER CUMULATIVE CONDITIONS**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Off-Site Areas**	**Future Phases**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	No
Mitigation Measures	MM 3.13-1, 3.13-2	MM 3.13-1, 3.13-2, 3.13-3	No Modifications Necessary
Significance After Mitigation	Less than Significant	Significant and Unavoidable	Less than Significant (Phase 1) Significant and Unavoidable (Future Phases)

Notes: *Impact numbering retained from the 2020 EIR.

In the 2020 EIR, the Cumulative plus Proposed Project (Phase 1) traffic conditions were developed by adding projected traffic from Phase 1 to the projected 2040 traffic volumes and assessing the traffic volumes at the study intersections to determine the potential for Project-related delays in LOS (see Table 3.13-8 of the 2020 EIR). The Cumulative plus Future Phases traffic conditions followed the same methodology, but analyzed both Phase 1 and Full Buildout of the Guenoc Valley Site (see Table 3.13-9 of the 2020 EIR).

Project-Level Analysis of Phase 1

As shown in Table 3.13-8 of the 2020 EIR, all of the study intersections would continue to operate at acceptable conditions, with the exception of Intersection #3 (SR 29 at Spruce Grove Road South), Intersection #4 (SR 29 at Hidden Valley Road), Intersection #5 (SR 29 at Hartmann Road), Intersection #7

(SR 29 at Butts Canyon Road), Intersection #20 (SR 29 at Tubbs Lane) and Intersection #21 (SR 128 at Tubbs Lane) which would all exceed their established thresholds. The 2020 EIR determined that the Original Project would not increase the traffic on the side street approaches by more than 10 percent at Intersections #20 and #21 in Napa County, and therefore the Project's contribution to congestion at these intersections would be considered less than significant. The 2020 EIR concluded that **Mitigation Measure 3.13-1**, which requires improvements to Intersection #7, and **Mitigation Measure 3.13-2**, which requires payment to Caltrans for a proportionate cost for the identified improvements to return the LOS operations at these intersections to an acceptable level, would reduce impacts to less than significant.

The Modified Project does not result in a change in the number of trips in comparison to the Original Project because a similar or reduced number of hotel units and residences are proposed. Therefore, the Project Modifications will not increase the severity of this impact, and **Mitigation Measures 3.13-1** and **3.13-2** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant effects associated with Phase 1 traffic in the Cumulative scenario as compared to the 2020 EIR.

Programmatic Analysis for Future Phases

As shown in Table 3.13-9 of the 2020 EIR, all of the study intersections would continue to operate at acceptable conditions, with the exception of Intersection #3 (SR 29 at Spruce Grove Road South), Intersection #4 (SR 29 at Hidden Valley Road), Intersection #5 (SR 29 at Hartmann Road), Intersection #7 (SR 29 at Butts Canyon Road), Intersection #20 (SR 29 at Tubbs Lane) and Intersection #21 (SR 128 at Tubbs Lane) which would all exceed their established thresholds. The 2020 EIR determined that the addition of traffic from future phases in the cumulative scenario would increase the side street approaches by more than 10 percent at Intersections #20 and #21 in Napa County which would be considered a significant impact. The 2020 EIR concluded that **Mitigation Measure 3.13-2** would reduce impacts to Intersections #3, #4, and #5 to less-than-significant levels, however **Mitigation Measure 3.13-1** would not reduce impacts to Intersection #7 to less-than-significant levels in the Cumulative plus Future Phases scenario. Therefore, the 2020 EIR included **Mitigation Measure 3.13-3**, which requires that traffic impact studies be prepared prior to approval of future phases and mitigation measures be developed as appropriate to address any conflicts with circulation policies resulting from future proposed development. The future traffic impact studies required by **Mitigation Measure 3.-13-3** will address Intersections #7, #20, and #21, among others. However, because certain improvements, such as those required to Intersections #20 and #21 in Napa County, may not be within the control of the County, future phases of the Proposed Project could cause conflicts with applicable plans, programs, plans, ordinances or policies addressing the circulation system. The 2020 EIR determined that this impact is significant and unavoidable.

The Modified Project does not result in a change in the number of trips in comparison to the Original Project as a similar or reduced number of hotel units and residences are proposed. Therefore, the Project Modifications will not increase the severity of this impact. **Mitigation Measures 3.13-1** through **3.13-3** would continue to apply but would not reduce impacts to less-than-significant levels. The Project Modifications would not result in any new significant effects or a substantial increase in the severity of previously identified significant impacts associated with Full Buildout traffic in the cumulative setting as compared to the 2020 EIR, however this impact would remain significant and unavoidable.

4.10.5 Mitigation Measures

No changes to the mitigation measures are warranted as a result of the Project Modifications. A full list of the mitigation measures is included in the MMRP in **Section 5** of this PREIR.

4.11 TRIBAL CULTURAL RESOURCES

4.11.1 Introduction

The 2020 EIR, Volume II, Section 3.5 included information and analysis pertaining to both cultural resources and tribal cultural resources. Since publication of the 2020 EIR, tribal cultural resources are now analyzed separately; therefore this PREIR separates the discussion of cultural and tribal cultural resources. The 2020 EIR, Volume II, Section 3.5.2 includes a detailed description of the environmental setting related to tribal cultural resources in the vicinity of the Guenoc Valley Site, Middletown Housing Site, and Off-Site Infrastructure Areas that is not repeated in its entirety within this PREIR. **Section 4.11.2** of this PREIR includes a description of the environmental setting that has changed since the 2020 EIR. There have been no substantial changes to the tribal cultural resource "Regulatory Setting" since preparation of the 2020 EIR. The full discussion of the environmental and regulatory settings is available in the 2020 EIR (**Appendix D**). **Section 4.11.3** of this PREIR describes methods of analysis and provides a discussion on whether Project Modifications would result in new significant effects or a substantial increase in the severity of previously identified effects. Mitigation for impacts to tribal cultural resources is discussed in **Section 4.11.4**.

4.11.2 Environmental Setting

Tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant. A cultural landscape that meets these criteria is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Historical resources, unique archaeological resources, or non-unique archaeological resources may also be tribal cultural resources if they meet these criteria.

Please refer to the 2020 EIR, Volume II, Section 3.5.2 for a complete description of the prehistoric patterns that are applicable to the on- and off-site APE. The ethnographic setting for the Grange Road Connector and Connector Roadways remains the same as that described in the 2020 EIR. At the time of European settlement, the Project region was included in the territory controlled by the Lake Miwok, bounded by the territories of Patwin and Wappo. The Lake Miwok controlled the western and middle portions of the Guenoc Ranch, while the Patwin controlled the eastern part of the ranch (**Appendix D**).

4.11.3 Impacts

Methodology

Two Cultural Resources Investigations were prepared for the Project Modifications; please refer to the Methodology discussion in **Section 4.5.3** of this PREIR for a complete description of the two additional Cultural Resources Investigations conducted for this PREIR, which included an evaluation of cultural and

tribal cultural resources. These Cultural Resources Investigations included field surveys conducted on March 20, April 19, and November 6, 2023 as well as additional surveys the week of April 2, 2024.

AB 52 and SB 18 notification letters were sent to tribes on March 28, 2024. A response requesting consultation was received by Middletown Rancheria on March 29, 2024 and the County of Lake is currently in consultation with the Tribe.

Impacts

This analysis of the Project Modifications follows the same methodology outlined in Section 3.5.4 of the 2020 EIR, focusing on whether the Project Modifications would have new or substantially more severe significant effects than those described in the 2020 EIR. Refer to Section 3.5.4 of the 2020 EIR (**Appendix D**) for a complete description of the methodology and significance criteria relating to tribal cultural resources impacts.

IMPACT 3.5-4	**CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE PURSUANT TO §21080.3.1 AND §21080.3.2**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.5-1, 3.5-2 (Phase 1) MM 3.5-1, 3.5-2, 3.5-3 (Future Phases)	MM 3.5-2	New measures TCR-1 and TCR-2 and modifications to MM 3.5-1; all other mitigation measures applicable as originally written
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Notes: *Impact numbering retained from the 2020 EIR.

As described in the 2020 EIR, California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities. TCRs can only be identified by members of the Native American community, thus requiring consultation under CEQA. Additionally, Section 106 of the NHPA is integral to the protection of historic properties including cultural and sacred resources and traditional cultural properties (TCPs) of significance to the Tribe. Refer to Section 3.5 of the 2020 EIR (**Appendix D**) for a discussion of the consultation that has occurred with the Middletown Rancheria regarding the Proposed Project. As described in the 2020 EIR, the Middletown Rancheria identified that the Proposed Project could impact TCRs, which would be a potentially significant impact. **Mitigation Measures 3.5-1** through **3.5-3** require establishment of buffer zones and fencing to protect TCRs, implementation of minimization measures in consultation with the Tribe, and direct consultation with the Middletown Rancheria if any previously unknown finds are made during

construction. The 2020 EIR concluded that these mitigation measures would reduce impacts to TCRs to a less-than-significant level.

Project Modifications that would result in no changes to the APE or Development Area, including the GHG Reduction Measures, Updated WPP, and DMP, would have no potential to increase the severity of this impact. The Project Modifications that result in changes to the APE and previously studied Development Area (see **Table 4.1-1**), including the Parcel Reconfiguration, Connector Roadways, and Grange Road Connector, would have the potential to impact these same previously identified resources. As discussed in **Section 4.5** above, two new resources have been identified but both can be avoided in compliance with **Mitigation Measure 3.5-1** and therefore the severity of this impact has not increased (Appendix CUL in the 2020 EIR and **Appendix K**). Tribal representatives from Middletown Rancheria and Mishewal-Wappo Tribe of Alexander Valley were present during the surveys conducted in support of this PREIR. Furthermore, as shown in **Table 4.5-2** above, the Project Modifications have removed some development components in the vicinity of known TCRs. Therefore, the Project Modifications may have a slightly lesser impact to TCRs as compared to the Project analyzed in the 2020 EIR. New mitigation measures have been added that align with the separate Cultural Resources (**Section 4.5** of this PREIR) and Tribal Cultural Resources (**Section 4.11** of this PREIR) analyses in this PREIR. Specifically, **Mitigation Measure TCR-1** implements **Mitigation Measure 3.5-1** requiring avoidance and the establishment of buffers around resources, further clarifying that these requirements apply to TCRs. The Unanticipated Discoveries Plan was moved to a new **Mitigation Measure TCR-2**, although no changes were made to the requirements of the Unanticipated Discoveries Plan. Construction monitoring and qualifications for TCR monitoring were added to **Mitigation Measure TCR-2**. Additionally, **Mitigation Measures 3.5-1** through **3.5-3** would continue to apply and would reduce impacts to less-than-significant levels for the same reasons stated in the 2020 EIR. The Project Modifications would not result in any new significant environmental effects or an increase in the severity of previously identified significant effects associated with TCRs as compared to the 2020 EIR.

IMPACT 3.5-5	**CUMULATIVE IMPACTS TO TRIBAL CULTURAL RESOURCES**		
2020 EIR Conclusions			**Do Project Modifications Result in New Significant Effects or a Substantial Increase in the Severity of Previously Identified Effects?**
Project Component	**Guenoc Valley Site Phase 1 and Future Phases**	**Other Phase 1 (Off-Site) Areas**	
Significance Before Mitigation	Potentially Significant	Potentially Significant	Potentially Significant
Mitigation Measures	MM 3.5-1, 3.5-2; MM 3.5-4 (Phase 1) MM 3.5-1, 3.5-2, 3.5-3, 3.5-4 (Future Phases)	MM 3.5-2; MM 3.5-4	New measures TCR-1 and TCR-2 and modifications to MM 3.5-1; all other mitigation measures applicable as originally written
Significance After Mitigation	Less than Significant	Less than Significant	Less than Significant

Note: *Impact numbering retained from the 2020 EIR.

As explained further in the 2020 EIR and **Section 4.13** of this PREIR, the context for evaluation of potential cumulative impacts on cultural resources and TCRs is based on development in the region, including projected build out under the Middletown Area Plan and approved or potential projects in the County. Cumulative projects in the southeastern Lake County region described in **Section 4.13** could have a potentially significant cumulative effect to cultural resources and TCRs. There are numerous federal, State, and local laws, regulations, and ordinances that seek to protect cultural resources, in addition to policies that require resource inventory and consultation with the Middletown Rancheria. The Original Project's contribution to significant cumulative impacts related to the area's cultural resources and TCRs were found to be less than significant with mitigation, and the Project Modifications would not result in new significant environmental effects or an increase in the severity of previously identified significant effects. No additional mitigation for cumulative development would be required.

4.11.4 Mitigation Measures

This PREIR has identified the need to separate TCR mitigation measures from cultural mitigation measures to ensure the potential impacts of the Project Modifications are reduced to less-than-significant levels. The mitigation measures with revisions is discussed below, and a presentation of changes in underline ~~strikeout~~ is provided in **Section 5** of this PREIR.

Mitigation Measure 3.5-1 has been updated to add specific reference to the Creek Overlook Site and the Sunshine Midden Site in the list of resources that shall be avoided.

Mitigation Measure TCR-1 has been added to implement **Mitigation Measure 3.5-1**, which requires avoidance and the establishment of buffers around resources, and further clarifies that these requirements apply to TCRs.

The Unanticipated Discoveries Plan was moved to a new **Mitigation Measure TCR-2**, although no changes were made to the requirements of the Unanticipated Discoveries Plan. Construction monitoring and qualifications for TCR monitoring were added to **Mitigation Measure TCR-2**.

4.12 OTHER CEQA CONSIDERATIONS

4.12.1 Cumulative Impact Analysis

Organization

Section 4.2 of the 2020 EIR provides a background of the cumulative impact assessment methodology and a summary of each of the specific environmental resource areas analyzed previously. However, the analysis of potential cumulative impacts in each environmental issue area is discussed within that topical section in Section 3 of the 2020 EIR. As an example, the potential cumulative aesthetic impacts are assessed in Impact 3.1-3 in Section 3.1 "Aesthetics" and summarized in Section 4.2. Following a similar structure, the cumulative impacts of the Proposed Project are discussed in each relevant topical section above and summarized in the '**Cumulatively Considerable Impacts**' section below.

Cumulative Context

As explained in Section 4.2 of the 2020 EIR, the "context for the cumulative impact analysis within [the 2020] EIR includes all past, present, and probable future development as identified in CEQA Guidelines

§15130(a)(3)(b), and is based on long-term development levels projected in the Lake County General Plan (2008) as well as reasonably foreseeable development projects in the vicinity of the Guenoc Valley Site and Middletown Housing Site." The same context remains applicable to the PREIR, although reasonably foreseeable projects have been updated to reflect current conditions. Some projects previously proposed have been withdrawn and new development applications have been initiated. **Table 4.13-1** lists the current reasonably foreseeable projects that form the basis of the cumulative impact analysis in this PREIR.

Table 4.12-1: Reasonably Foreseeable Projects

Project Name	Type / Description	Status
Valley Oaks Subdivision	Unchanged from 2020 EIR	Unchanged from 2020 EIR
Hidden Valley Lake Subdivision	Unchanged from 2020 EIR	Unchanged from 2020 EIR
Middletown Multi-Use Path	Unchanged from 2020 EIR	Unchanged from 2020 EIR
Gardiner Horse Facility	Unchanged from 2020 EIR	Approved and Active
AT&T Pope Valley Telecommunication Facility	Unchanged from 2020 EIR	Approved and Active
Guenoc Valley Water Rights Modification Project	Vineyard and Surface Water Use and Development	Approved, construction in progress
Major Use Permit UP 18-25	Cannabis	Approved and Active
Major Use Permit UP 18-20	Cannabis	Approved and Active
Major Use Permit UP 18-22	Cannabis	Approved and Active
Redwood Credit Union – Lower Lake	Commercial	Complete
Wild Diamond Vineyard	Vineyard	Complete
Nikki Island Resort DR 21-01	Small resort (9 lodging units) and amenities	In process
Chrisp Law Office	New 6,200 sf office	Approved
KCA Kelseyville Christian Academy School UP 21-52	New private school, grades pre-Kindergarten through 9th	In process
Putah Storage UP 22-12	Public storage and private manufacturing facility	In process
Getaway Campground UP 22-28	Campground (59 cabins) and Manager residence	Approved
Minor Modification to Red Hills Energy Project MMU 23-02	Minor modification to approved biomass energy project	Approved
Use Permits, Various	Cannabis; Lake County is processing 58 cannabis permits throughout the County.	In process

Source: CEQANet, 2024; Lake County, 2024

The following projects were considered reasonably foreseeable in the 2020 EIR but have since been withdrawn or abandoned, and are no longer part of the cumulative context for the PREIR:

- UP 18-12 – Withdrawn 08/19/2020
- UP 18-26 – Absorbed by Use Permit UP 18-25
- Dollar General Retail Store

Cumulatively Considerable Impacts

A discussion of the potential for cumulative impacts resulting from the Project Modifications in light of the changes to the cumulative setting described above is provided within the individual environmental topic sub-chapters of Section 4 of this PREIR. As described throughout this chapter, the Project Modifications would not result in new cumulative impacts or a substantial increase in the severity of a cumulative impact that has not already been evaluated and for which mitigation measures have not been identified in the 2020 EIR. As such, the Project Modifications would not result in new or substantially more severe cumulative impacts as compared to the analysis contained within the 2020 EIR. As described in the 2020 EIR, the Proposed Project with Modifications would make a significant and unavoidable cumulatively considerable contribution to cumulative impacts related to traffic noise levels, GHGs, and transportation and traffic. The Proposed Project with Modifications would contribute to cumulative impacts related to land use and agriculture, air quality, biological resources, cultural resources, and geology and soils, but the Proposed Project's contribution to the impacts would be reduced to less than cumulatively considerable by the mitigation measures presented in **Section 4.0** of this PREIR.

4.12.2 Significant and Unavoidable Impacts

As analyzed in this PREIR, the Project Modifications would not result in new significant and unavoidable impacts or a substantial increase in the severity of the significant and unavoidable impacts identified in the 2020 EIR. Refer to the 2020 EIR, Volume II, Section 4.3, for the full list of the significant and unavoidable impacts associated with the Proposed Project.

Section 5 | Updated Mitigation Monitoring and Reporting Program

5.1 INTRODUCTION

CEQA requires that a Lead Agency establish a program to report on and monitor measures adopted as part of the environmental review process to mitigate or avoid significant effects on the environment. This MMRP is designed to ensure that the mitigation measures identified in the EIR for the Guenoc Valley Mixed Use Planned Development Project (Proposed Project) are fully implemented. The MMRP, as presented in **Table 5-1**, describes the implementation and timing of mitigation responsibilities and standards, and verification of compliance for the mitigation measures identified in the PREIR.

Table 5-1 presents all applicable requirements of the recommended mitigation measures and is organized in the same order as the contents of the 2020 EIR, by topic. Monitoring responsibilities have been distributed between the County and the Applicant under this MMRP. All monitoring actions, once completed, would be reported (in writing) to Lake County staff, which would maintain mitigation monitoring records for the Proposed Project.

Any text revisions to the mitigation measure language compared to what was previously considered in the 2020 EIR are shown in ~~strikethrough~~ (to indicate deletions) or underline (to indicate additions). Some text has been moved from cultural mitigation measures to new tribal cultural mitigation measures; this moved text is shown with ~~double-strikethrough~~ and double-underline.

The components of the MMRP table are described below.

- **Mitigation Measure:** The mitigation measures are taken verbatim from the 2020 EIR. Mitigation measures are assigned the same number as in the EIR.
- **Implementation and Timing:** Identifies the timing for the implementation of each action.
- **Responsibility for Implementation:** Identifies the authority responsible for implementing the mitigation measure.
- **Responsibility for Monitoring:** Identifies the authority responsible for monitoring implementation of the mitigation measure.

5.2 PROJECT COMMITMENTS

In addition to mitigation responsibilities listed in **Table 5-1**, the Applicant has committed to certain actions that would reduce the environmental effects of the Project, including effects related to wildfire prevention and response. A number of project commitments are outlined in **Table 5-2**, along with the timing, responsible party for implementation, and responsible party of monitoring. It should be noted that **Table 5-2** is not inclusive of all of the project's environmental commitments. Other measures may be described in the 2020 Final EIR, Volume II, Section 2.0 Project Description, and the appendices cited

therein, including but not limited to the Design Guidelines (Appendix DG) and zoning ordinance requirements (Appendix GVD).

5.3 SETTLEMENT AGREEMENT MEASURES

In addition to mitigation responsibilities listed in **Table 5-1** and project commitments in **Table 5-2**, the Applicant voluntarily entered into a Settlement Agreement with the State to resolve the State's petition and appeal (**Appendix C**). The Settlement Agreement stipulated several Project Modifications that the Applicant has agreed to incorporate into the Project pertaining to wildfire prevention and protection, GHG emissions, and land use, which are listed in **Table 5-3**. The timing, responsible party for implementation, and responsible party of monitoring, are also listed in **Table 5-3**.

Table 5-1: Mitigation Monitoring and Reporting Plan

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.1	**Aesthetics**			
3.1-1	**Off-Site Workforce Housing Lighting Design** All exterior lighting shall be required to be of the fully-cut off and fully-shielded style to direct light downward (and not up or away) from the light source. The applicant shall coordinate with the County to ensure the lighting plan is consistent with the International Dark Sky Association Model Lighting Ordinance.	Lighting plans consistent with these requirements shall be submitted to **County prior to approval of building permit**. (Use Permit COA)	Applicant	County
3.2	**Land Use and Agriculture**			
3.2-1	**Right-to-Farm Disclosure** In accordance with the Lake County Code, the Applicant and/or HOA will inform prospective buyers of property, future owners, and current occupants of the project site of the County's Right-to-Farm Ordinance. This notification requirement will be included in the conditions, covenants, and restrictions (CC&Rs) for the Proposed Project. Additionally, buyers shall sign an acknowledgement of the disclosure statements once informed of the Right-to-Farm Ordinance, which shall be kept on file by an authorized agent of the Applicant and/or HOA. The notification shall include a description of adjacent agricultural operations so that buyers within the Proposed Project are aware of operational aspects of agricultural uses (e.g. noise, odors, and dust). The disclosure shall also state that operations from the agricultural equipment may routinely exceed the Lake County Noise Ordinance standards.	Applicant to put note on Final Maps. County to **require note to be recorded with Final Maps**.	Applicant/County	County
3.2-2	**Agricultural Conservation** For every acre of prime farmland and unique farmland identified by the Farmland Mapping and Monitoring Program that is converted to non-agricultural uses, the Applicant shall place an agricultural conservation easement, deed restriction, or other form of long-term permanent protection on farmland of equivalent quality to the farmland that would be converted. This farmland shall be permanently protected and located within 100 miles of the Guenoc Valley Site. This farmland shall also have access to necessary infrastructure for farmland operations, such as roads. There shall be at least a 100 foot buffer between the easement and residential development (a smaller buffer may be utilized if determined acceptable by the agricultural commissioner).	Applicant to record agricultural conservation easement, deed restriction, or other form of long- term permanent protection on farmland as required by County **prior to submittal of Final Maps, and provide proof recordation with submittal of Final Maps**.	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	For Phase 1, this will require that approximately 28.4 acres of Prime Farmland, and approximately 22.1 acres of Unique Farmland are permanently preserved in accordance with this mitigation measure. The acreage requirements for future phases will be based on the specific development proposals and associated area of impacted farmland. The County shall verify the precise size of impact and therefore the relative size of land to be conserved prior to approval of the associated final phased tentative maps.			
3.3	**Air Quality**			
3.3-1	**Measures to Reduce Short-term Construction Related Emissions** The following measures will be implemented by the Proposed Project to reduce emissions of criteria pollutants and DPM from construction. a) Prior to approval of Grading or Improvement Plans- (whichever occurs first) the Applicant shall submit to LCAQMD a Construction Emission/Dust Control Plan within 30 days prior to groundbreaking. The following shall be listed on the improvement plans as standard notes: ▪ During construction, emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area, shall be controlled so that dust does not remain visible in the atmosphere beyond the boundary line of the emission source. ▪ When wind speeds result in dust emissions crossing property lines, and despite the application of dust control measures, grading and earthmoving operations shall be suspended and inactive disturbed surface areas shall be stabilized. ▪ Fugitive dust generated by active operations, open storage piles, or from a disturbed surface area shall not result in such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as No. 2 on the Ringlemann Chart (or 40 percent opacity). ▪ All exposed soils be watered as needed to prevent dust density as described above and in order to prevent dust from visibly exiting the property. ▪ Any visible tracked out dirt on a paved road where vehicles enter and exit the work area must be removed at the end of the workday or at least one time per day. Removal shall be accomplished by using wet sweeping or a HEPA	Applicant submit to LCAQMD a Construction Emission/Dust Control Plan and other information conforming to this Mitigation Measure within 30 days prior to groundbreaking. County to review prior to issuing Grading or Improvement Plans- (whichever occurs first). (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
filter equipped vacuum device. Dirt from vehicles exiting the site shall be removed through the use of a gravel pad, a tire shaker, a wheel wash system, or a pavement extending for not less than 50 feet from the intersection with the paved public road. ▪ All haul trucks transporting soil, sand, or other loose material offsite shall be covered. ▪ All vehicle speeds on unpaved roads shall be limited to 25 mph. ▪ During construction the contractor shall, where feasible, utilize existing power sources (e.g., power poles) or clean fuel (i.e. gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators. ▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. Signs shall be posted in the designated queuing areas of the construction site to remind off-road equipment operators that idling time is limited to a maximum of 5 minutes. b) In conjunction with the submittal of the Construction Emission/Dust Control Plan, the prime contractor shall submit to the District a comprehensive inventory (i.e., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used in aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall contact the LCAQMD prior to the new equipment being utilized. Except in the event of emergency work, when no notice shall be required, the project representative shall provide the District, at least one business day prior to the use of subject heavy-duty off road equipment with the anticipated construction timeline including start date, name and phone number of the property owner, project manager and on-site foreman. The equipment inventory shall meet the minimum requirements as specified in MM 3.3-1c, including the use of Tier 4 engines or better to the maximum extent feasible, and Level 3 Diesel Filters during all phases of development. c) To the maximum extent feasible, the contractors shall utilize Tier 4 engines or better, and Level 3 Diesel Filters during all phases of development. Compliance must be demonstrated with submittal of the equipment inventory, prior to			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	approval of dust control plans.			
3.3-2	**Project Measures to Reduce Operational Emissions** Prior to the issuance of the first certificate of occupancy for the relevant portion of the project (i.e., residential or commercial), as appropriate, the Applicant shall provide documentation to the County that the following measures have been achieved. It should be noted that these measures do not apply to on-going uses within the property that are not a component of the Proposed Project, including agricultural operations conducted under third party leases. *Transportation Demand Management Measures* Implement MM 3.13-4 to develop and implement a Transportation Demand Management (TDM) Program to achieve a reduction in vehicle miles traveled (VMT) as a result of the Proposed Project. At a minimum these measures will include: ▪ Dedicated on-site parking for shared vehicles (vanpools/carpools); ▪ Adequate, safe, convenient, and secure on-site bicycle parking and storage in the commercial portion of the project; and ▪ Use of an electric fleet for internal transport vehicles (excluding trucks and other ranch vehicles for on-going agricultural and grazing activities) to the extent feasible (no less than 75%), including the golf course. *Project Wide Measures* ▪ Use energy-efficient lighting that will reduce indirect criteria pollutants and greenhouse gas (GHG) emissions. Using energy-efficient lighting will reduce energy usage and, thus, reduce the indirect GHG emissions from the Proposed Project. Energy-efficient lighting includes adaptive lighting systems or systems that achieve energy savings beyond those required by Title 24 lighting requirements to the maximum extent feasible. ▪ Utilize low-flow appliances and fixtures; Use of state-of-the-art irrigation systems that reduce water consumption including graywater systems and rainwater catchment. ▪ Use of drought-tolerant and native vegetation. ▪ Low volatile organic compound paint shall be utilized for parking areas and the interiors and exteriors of the both residential and non-residential	Applicant to prepare TDM Program compliant with this Mitigation Measure and submit to County. County to review and approve prior to issuance of the first certificate of occupancy. (Use Permit COA) Lighting plans consistent with these requirements shall be submitted to County prior to approval of building permit. (Use Permit COA) Improvement Plans consistent with these requirements shall be submitted to County prior to approval of Final Maps. (TM COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
buildings. *Residential Measures* ▪ Facilitate achievement of zero net energy buildings through installation of solar photovoltaic systems consistent with the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6. Compliance with this requirement must be demonstrated prior to issuance of occupancy permits for residential uses. ▪ Provide electrical outlets on the outside of the homes or outlets within the garages to encourage the use of electrical landscaping equipment. ▪ Use water efficient landscapes and native/drought-tolerant vegetation. ▪ Install smart meters and programmable thermostats. ▪ Use energy-efficient appliances in the residences where available. These include appliances that meet U.S. Environmental Protection Agency (USEPA) Energy Star Criteria. *Resort/Commercial Measures* ▪ Facilitate achievement of zero net energy buildings through the construction standards required under the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6 and the use of rooftop or on-site photovoltaic systems, with or without storage, or the acquisition of renewable energy or energy credits from another source, or generation onsite. Zero Net Energy shall mean that on a community-wide basis, the actual annual consumed energy will be less than or equal to the renewable generated energy utilized. It is the Project's goal to obtain enough renewable electrical energy for the Project's needs and to distribute it throughout the Guenoc Valley Site. Therefore, renewable energy supplies shall be secured and/or systems installed for each commercial structure prior to issuance of its final certificate of occupancy. ▪ Install on-site charging units for electric vehicles consistent with parking requirements in California Green Building Standards Code Section 5.106.5.2. ▪ Install electric water heating instead of gas water heating for some or all of the project's hot water needs, to the extent such technology is readily available and commercially practicable.			

<table>
<tr><th colspan="2">Mitigation Measure</th><th>Implementation and Timing</th><th>Responsible for Implementing</th><th>Responsibility for Monitoring</th></tr>
<tr><td>3.4</td><td>Biological Resources</td><td></td><td></td><td></td></tr>
<tr><td>3.4-1</td><td>Construction Best Management Practices (BMP)
A) Construction and staging areas shall not be larger than necessary and to the degree feasible shall be within areas otherwise scheduled for development. These areas shall be visibly demarcated prior to construction activities to prevent unnecessary impacts. Equipment shall not be kept outside established areas.
B) Construction areas shall be kept serviceably clean. Sufficient closed bins shall be provided for trash and debris. Washout, track out, and dust control BMPs shall be implemented as necessary. Construction vehicles and equipment shall be clean and free of mud or vegetation that could introduce plant pathogens or propagules of non native plants. This includes equipment hauled onto the site.
C) Pets shall not be allowed within construction areas.
D) Construction activities shall be carried out such that sensitive habitats are avoided. Materials shall not be placed where they may enter sensitive habitat, receiving waters, or a storm drain, or be subject to wind or runoff erosion and dispersion.
E) Equipment use shall be limited to the hours from 7:00 a.m. to 7:00 p.m. to the extent possible. Exceptions may be made if approved by the County for situations where a longer construction schedule would alleviate the potential for adverse environmental effects</td><td>The applicant shall include these requirements in construction contracts. (Use Permit COA)</td><td>Applicant</td><td>County</td></tr>
<tr><td>3.4-2</td><td>Work Environmental Awareness Training
Construction personnel working on the Proposed Project shall be provided with an Environmental Awareness Training tailored to the location they will be working on prior to the commencement of construction work by that personnel. This training shall include materials that describe the sensitive habitats and special status wildlife species with the potential to occur. Table 3.4-9 in Final EIR, Volume II, Section 3.4 dictates species for which environmental awareness training shall occur, based on location.
<table>
<tr><th>Species</th><th>Guenoc Valley Site (All Phases) and Grange Road Connector</th><th>Middletown Housing Site</th></tr>
<tr><td>Pallid bat (Antrozous pallidus)</td><td>X</td><td>X</td></tr>
<tr><td>Ring-tailed cat (Bassariscus astutus)</td><td>X</td><td></td></tr>
</table></td><td>The applicant shall include these requirements in construction contracts. (Use Permit COA)</td><td>Applicant</td><td>County</td></tr>
</table>

Mitigation Measure			Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
Townsend's big-eared bat *(Corynorhinus townsendii)*	X				
Western red bat *(Lasiurus blossevillii)*	X	X			
American badger *(Taxidea taxus)*	X				
Tricolored blackbird *(Agelaius tricolor)*	X				
Grasshopper sparrow *(Ammodramus savannarum)*	X				
Golden eagle *(Aquila chrysaetos)*	X				
Long-eared owl *(Asio otus)*	x	X			
Burrowing owl *(Athene cunicularia)*	X				
Northern harrier *(Circus cyaneus)*	X				
Olive-sided flycatcher *(Contopus cooperi)*	X	X			
White-tailed kite *(Elanus leucurus)*	X	X			
American peregrine falcon *(Falco peregrinus anatum)*	X				
Bald eagle *(Haliaeetus leucocephalus)*	X				
Yellow-breasted chat (*Icteria virens)*	X	X			
Least bittern *(Ixobrychus exilis)*	X				
Loggerhead shrike *(Lanius ludovicianus)*	X	X			
Purple martin *(Progne subis)*	X	x			
Yellow warbler *(Setophaga* [*Dendroica*] *petechia brewsteri)*	X	X			
Yellow-headed blackbird (*Xanthocephalus xanthocephalus)*	X				
Northwestern pond turtle *(Actinemys marmorata)*	X	X			
Foothill yellow-legged frog *(Rana boylii)*	X	X			

Topics covered shall include relevant biological information on these species, and the appropriate actions that shall be taken in the event of an occurrence. Training shall also include a description of construction best management practices and the importance of environmentally conscious construction. Training materials shall be prepared by a qualified biologist who shall train a member of the contractor's crew to provide follow-up trainings to newly hired employees during the construction period. The qualified biologist shall attend the Environmental Awareness Training quarterly,

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	at a minimum, to ensure that the training sufficiently covers the necessary materials. These materials may be updated as new information is available. Construction personnel shall sign a training log stating that they have received this training. Copies of this training log shall be maintained on the Guenoc Valley Site and shall be made available to inquiring agencies upon request. Construction personnel will also be trained to identify nesting bird behavior that indicates construction activities are causing a significant disturbance to nesting birds. This behavior includes vocalizing, making defensive flights at intruders, getting up from a brooding position, or flying off the nest. Should these behaviors be identified, construction workers will be trained to halt work in the vicinity of the nest until a qualified biologist determines a suitable nest buffer. Should a special-status species be observed by construction personnel, the qualified biologist will verify the observation and report the observation to CNDDB. The qualified biologist shall also report observations of special-status species identified during preconstruction surveys, if any.			
3.4-3	**General Special-Status Plant Mitigation** A) Pre-construction botanical surveys of herb-dominated habitats (i.e. grasslands, wetlands) with the potential to support special-status plants shall be conducted within those areas scheduled for groundbreaking during one of the two appropriate identification seasons prior to ground breaking. It should be noted that surveys conducted in 2018 and 2019 for Phase 1 would meet the requirements of this measure for construction activities occurring in 2020 and through a portion of 2021, depending on the exact timeframe of construction and the potential species impacted. Pre-construction surveys of shrub or woodland dominated habitats with the potential to support special-status plants shall be surveyed within one of the four appropriate identification seasons prior to groundbreaking for each specific component of the Proposed Project. Initial vegetation clearing along proposed roadways for fire management shall also be subject to these standards. Pre-construction surveys shall be completed by a qualified biologist during the appropriate identification period for plants with the potential to occur in the area scheduled for ground breaking. Results of the pre-construction survey shall be maintained on the Guenoc Valley Site and available to agencies upon request. B) In the event that the results of the pre-construction special-status plant surveys	The applicant shall perform pre-construction surveys prior to groundbreaking as described in Mitigation Measure 3.4-3, and implement mitigation for identified species within one year of identification and prior to occupancy. The County shall verify implementation of mitigation prior to issuance of certificates of occupancy (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
identify the presence of individual special-status plants within areas identified for ground disturbance activities, one of the following measures shall be conducted. 1) Individual occurrences of special-status plants shall be avoided by a minimum of 20 feet when possible. This buffer shall be demarcated by a qualified biologist with high-visibility fencing. Where ground disturbance would occur within 100 feet upslope of occurrences of special-status plants during the wet season (October 1 through April 1), silt fencing or straw wattles shall be installed between the work area and the 20-foot setback and shall not be removed until the disturbed areas have been revegetated or otherwise stabilized. OR 2) When avoidance of a special-status plant is not feasible, mitigation shall occur through transplanting or compensatory planting of in-kind species. Mitigation for special-status plants shall follow the general outline below. i. For compensatory plantings, in-kind species shall be planted at a minimum ratio of 2:1. Monitoring of mitigation activities shall be performed by a qualified biologist for a minimum of three years. The qualified biologist shall prepare an annual report on the progress of mitigation with recommended management actions. Mitigation shall be deemed complete once the qualified biologist has determined that the mitigation has achieved or exceeded 80 percent success following the minimum three years of monitoring. Additional years of monitoring and management shall occur should mitigation fail to meet success criteria. ii. Should transplanting of individual plants be considered, the transplanting shall be overseen by a qualified biologist. Plants shall be relocated to suitable habitats and shall be within designated open space as possible. A quantified biologist shall monitor all transplanted individuals for a minimum of three years to ensure successful establishment. The qualified biologist shall prepare an annual report on the success of transplanted plants. Should transplanting fail, compensatory actions shall occur as outlined			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	under (i). iii. Consultation with CDFW or USFWS shall occur as necessary, based on regulatory jurisdiction, should a special-status plant that does not have a history of successful transplantation and was not previously identified within the Phase 1 Area of Potential Effects be observed during preconstruction botanical surveys. For species with a demonstrated history of successful transplantation, then mitigation shall follow steps (i) and (ii) above.			
3.4-4	**American Badger Impacts** No more than 14 days before the start of ground disturbance activities on or within 200 feet of open grassland, a qualified biologist shall conduct pre-construction surveys to determine if American badger dens are present. If no dens are observed, no further mitigation is necessary. If American badger dens are determined to be present, the biologist shall monitor for activity to determine whether the den is active. If the den is determined to be occupied by a female with young, a 50-foot buffer shall be demarcated with high-visibility flagging until the qualified biologist has determined that young have matured and dispersed. No construction activities shall occur within the buffer while the den is actively supporting dependent young. If the den is determined to be active, but a female with young is not present, CDFW shall be contacted to determine if burrow exclusion using passive measures such as one way doors or equivalent may be utilized. Exclusion activities shall be attempted for a minimum of three days to discourage their use prior to any project-related ground disturbance. If the biologist determines that the dens have become inactive as a result of the exclusion methods, dens shall be excavated by hand to prevent them from being re occupied during construction.	The applicant shall perform pre-construction surveys the start of ground disturbance activities on or within 200 feet of open grassland as described in Mitigation Measure 3.4-4, and implement avoidance measures if required as described in Mitigation Measure 3.4-4. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County
3.4-5	**Ringtail Impacts** No more than 14 days before the start of ground disturbance activities within open grassland, oak woodland, or riparian forest habitat, a qualified biologist shall conduct pre construction surveys to determine if ringtail dens are present. If no active ringtail dens are observed, no further mitigation shall be recommended. If ringtail dens with young are determined to be present within the work area, the biologist shall establish a clearly marked exclusionary buffer of no less than 50 feet with high-visibility flagging. No ground disturbance shall take place within the buffer until the biologist determines the den no longer supports dependent young.	The applicant shall perform pre-construction surveys as described in Mitigation Measure 3.4-5 no more than 14 days before the start of ground disturbance activities within open grassland, oak woodland, or riparian forest habitat, and implement avoidance	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
		measures if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)		
3.4-6	**Bat Maternity Roosts and Special-Status Bat Impacts** Pre-construction survey(s) for bat roosts shall be conducted no more than 14 days prior to the start of construction in locations suitable for roosts or tree removal. Surveys of potential bat roost habitat shall concentrate on large trees (DBH >12 inches) specifically looking for relevant bat use features such as loose bark or cavities, broadleaf trees in riparian woodland habitat, buildings, bridges, and cliffs/rocky outcroppings on or within 100 feet of any planned work areas. Prior to construction on the Middletown Housing Site, foliage suitable for western red bat roosting shall also be surveyed. If no potential bat roosts are observed, no further mitigation shall be necessary. For trees proposed for removal that have been identified as potentially suitable habitat for special-status bat species, the following shall apply. Trees proposed for removal that have been identified as potentially suitable special-status bat habitat shall be removed using the two-day phased removal method described below: On day 1, branches and small limbs not containing potential bat roost habitat (cavities, crevices, exfoliating bark, etc.) shall be removed using chainsaws only. The remainder of the tree shall be removed on day 2. Removal shall occur during seasonal periods of bat activity. Removal shall occur as possible outside of maternity season. The maternity roosting season for bats is approximately February 1 through September 1 (but varies due to rainfall and temperature). The best time for removal of structures that may support maternity roosting is between February 1 and April 15. If an active maternity roost is detected, the tree(s) or structures shall be retained until after the young bats are no longer dependent on their parents for care as determined by a qualified biologist. If a special-status bat roost is observed during preconstruction	The applicant shall perform pre-construction surveys as described in Mitigation Measure 3.4-6 no more than 14 days prior to the start of construction in locations suitable for roosts or tree removal, and implement avoidance measures as described in Mitigation Measure 3.4-6 if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	surveys, appropriate avoidance or exclusion measures shall be developed in consultation with CDFW.			
3.4-7	**Artificial Lighting Impacts** Lighting fixtures associated with the construction and operation of the Proposed Project shall be designed to ensure maximum efficiency, eliminate direct upward light, and reduce spill consistent with Design Guidelines and shall follow the general principles below: ▪ Site-wide lighting shall promote dark sky policies; ▪ Lighting along roadways, pathways, and within parking areas shall only be used to the extent necessary to guide nighttime navigation and ensure safety and security; ▪ Lighting shall not be placed or illuminate higher than necessary to provide efficient lighting for its intended purpose; ▪ Lighting shall be deliberately directed downward and away from sensitive habitat types; ▪ Nighttime lighting shall also be reduced to the maximum extent feasible by turning off lights from the hours of 11 p.m. to 7 a.m., unless they are essential for safety or security purposes and are properly designed and installed to reduce light spillage. Lights that must be used during these designated nighttime hours shall be dimmed in order to reduce the intensity of light projected by the Proposed Project as possible and shall be minimized as appropriate through motion-sensitive lighting, lower intensity lights, and appropriately programmed timed lights. Appropriate lighting consistent with these measures and the Proposed Project's Design Guidelines shall be adhered to for all phases of construction at project-related sites.	Lighting plans consistent with these requirements shall be submitted to County prior to approval of building permits. (Use Permit COA)	Applicant	County
3.4-8	**Special-Status Birds – Nesting** Should any groundbreaking or construction-related work begin within the general Should any groundbreaking or construction-related work begin within the general nesting season (February 1 through August 31), a pre-construction nesting bird survey on and within 200 feet of ground-disturbing activities shall be completed by a qualified biologist no more than five days prior to the start of work. If no active nests are observed, no further mitigation shall be recommended.	Should any groundbreaking or construction-related work begin within the general nesting season (February 1 through August 31), the applicant shall perform a pre- construction	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	If active nests are observed during the pre-construction survey, a qualified biologist shall demarcate a protective, high-visibility buffer around the nest. Buffer size shall be determined by the biologist based on species, nest location, planned disturbance footprint, and presence of any visual or auditory buffers. The qualified biologist shall also consider any species-specific plans related to acceptable nest-avoidance measures compared to anticipated disturbance levels of construction. The exclusionary buffer shall remain in place until the chicks have fledged, are feeding independently and are no longer dependent on the nest as determined by a qualified biologist. Due to the known presence of several nesting raptor species, including eagles, on the overall Guenoc Valley Site primarily outside of the APE, targeted surveys for active raptor nests shall be conducted. For construction activities planned on the Guenoc Valley Site, Grange Road Connector, Middletown Housing Site, or the Off-Site Infrastructure Improvement Areas within 0.5 miles of a documented eagle or protected falcon species nest, pre- construction surveys shall be conducted in accordance with the most current guidance available from USFWS and CDFW. If a special-status raptor nest is determined to be present on or within 0.5 miles of the work area, consultation with the USFWS and/or CDFW, based on regulatory jurisdiction, shall occur and any measures recommended or required by those agencies shall be incorporated into the project design.	nesting bird survey on and within 200 feet of ground-disturbing activities as described in Mitigation Measure 3.4-8 no more than 5 days prior to the start of work, and implement avoidance measures as described in Mitigation Measure 3.4-8 if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)		
3.4-9	**Special-Status Birds – Burrowing Owl** A pre-construction survey shall be performed by a qualified biologist prior to the start of ground disturbing activities where suitable burrowing owl burrows (such as ground squirrel complexes) are present. The survey shall be performed according to the standards set forth by the Staff Report for Burrowing Owl Mitigation (CDFW, 2012). Pre- construction surveys shall occur no more than 14 days prior to ground disturbance. Should a burrow be observed in use by a burrowing owl, or if a burrow shows signs of use (pellets, whitewash, feathers), project activities shall be excluded within a 250-foot high-visibility buffer until the qualified biologist determines the owls are no longer present. For active burrows within an area of impact, passive exclusion techniques, such as	The applicant shall perform a pre- construction survey as described in Mitigation Measure 3.4-9 no more than 14 days prior to ground disturbance, and implement avoidance measures as described in Mitigation Measure 3.4-9 if required. The applicant shall include these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	one way doors, may be used to exclude burrowing owls from occupied burrows outside the nesting season or if the qualified biologist determines the burrow does not support an active nest. Once exclusion is completed and the biologist determines that the burrow is not occupied, the burrows shall be collapsed.			
3.4-10	**Northwestern Pond Turtle Impacts – Construction** To the extent possible, initial ground disturbance, vegetation clearing, and associated project activities within 300 feet of ponds, reservoirs, or wetted streams where northwestern pond turtle has been documented or may potentially occupy, as determined by a USFWS-approved qualified biologist, shall occur between July 1 and October 31 to avoid the peak nesting season and winter inactivity periods for northwestern pond turtle. If work must occur within 300 feet of occupied or potentially occupied aquatic habitat between November 1 and June 31, a qualified biologist will conduct a preconstruction survey and identify areas with potential to support nesting or occupation by overwintering turtles, as applicable, depending on the season. These specific areas will be avoided if feasible. If these areas cannot be avoided, a qualified biologist will conduct a pre-construction survey within 48 hours of the start of construction in these identified areas to survey for turtle nests. Any active nests will be flagged and avoided. If nests cannot be avoided, the USFWS-approved qualified biologist will contact the USFWS to determine next steps. Any measures prescribed by USFWS to avoid take of nesting northwestern pond turtle shall be adhered to. ~~If these areas cannot be avoided, a qualified biologist will monitor their initial disturbance and relocate any pond turtles or turtle eggs that are uncovered or install an exclusion fence around the area, whichever is determined to be the best option to ensure survival of the turtle via discretion of the qualified biologist. If relocation is deemed appropriate, the qualified biologist will coordinate with CDFW to develop the relocation strategy.~~ During the active period and outside of peak nesting (July 1 to October 31), a preconstruction survey for northwestern pond turtle shall be completed by a qualified biologist no more than 14 days prior to the start of work within 300 feet of ponds, reservoirs, or wetted streams with the potential to support northwestern pond turtle. If the species is observed, the biologist shall provide measures to avoid direct impacts based on the planned work. Such measures may include a protective no-work buffer,	The applicant shall schedule initial ground disturbance per in Mitigation Measure 3.4-10. If such a schedule is not possible, the applicant shall perform a pre-construction survey as described in Mitigation Measure 3.4-10 no more than 14 days prior to the start of work within 300 feet of ponds, reservoirs, or wetted streams with the potential to support northwestern pond turtle, and implement avoidance measures as described in Mitigation Measure 3.4-10 if required. The applicant shall include these requirements in construction contracts. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	exclusion fencing, monitoring, or coordination with CDFW and USFWS if relocation is required. These measures shall be implemented in the following manner: ▪ If a no-work buffer of 300 feet is feasible, it shall be applied and no work shall occur within it. ▪ If a no-work buffer of 300 feet is not feasible, work may occur with an on-site biological monitor, or after the installation of an exclusion fence facilitated by the qualified biologist that encircles areas with potential to support pond turtles or otherwise prevents pond turtles from entering the impact area. Exclusionary fence shall be constructed of silt fence no lower than 24 inches in height and the bottom edge will be buried or otherwise secured to the ground to prevent turtles from crossing go under it. A qualified biologist will inspect the exclusion fence after its installation. ▪ If a pond turtle would be reasonably expected to incur injury from project work, a qualified biologist may relocate a pond turtle after coordinating with CDFW and USFWS.			
3.4-11	**Foothill Yellow-Legged Frog Impacts – Construction** Work within 100 feet of any wetted stream feature or associated riparian area where foothill yellow-legged frog (FYLF) has been documented shall occur during the dry months (July 1 through October 31) as possible. Timing shall also occur outside of the FYLF breeding season (March 1 to June 30) to the extent possible. If work must occur between October 31 and June 30, a monitor shall be present, or FYLF shall be excluded from active work areas by an exclusionary fence that is at least 24 inches tall and has a no-climb barrier installed along the top. Prior to commencement of work, a qualified biologist will inspect the fence and work area to ensure proper installation and clearance of FYLF. Pre-construction surveys for FYLF within any wetted stream feature near a work area shall be conducted by a qualified biologist within 5 days of the onset of construction activities. Surveys shall cover between left and right bankfull at least 500 feet upstream and 500 feet downstream of the work area for presence of all life stages. Surveys shall extend up to 30 feet above bankfull within 100 feet of work areas when suitable, accessible habitat is present. Surveys shall be conducted during the day and under optimal conditions for detecting FYLF. Additional pre construction surveys may be required as determined by the qualified biologist. If FYLF are detected, measures to avoid the species shall be implemented. Such measures may include, but are not	The applicant shall schedule work within 100 feet of any wetted stream feature or associated riparian area where foothill yellow-legged frog (FYLF) has been documented per in Mitigation Measure 3.4-11. If such a schedule is not possible, the applicant shall perform a pre- construction survey as described in Mitigation Measure 3.4-11 no at least 14 days prior to the onset of construction activities, and implement avoidance measures as described in Mitigation Measure 3.4-10 if required. The applicant shall include	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	limited to, a protective no-work buffer, exclusion fencing, monitoring, and/or coordination with CDFW. These measures shall be implemented in the following manner: ▪ If a work area is within 100 feet of a perennial or intermittent stream with potential to support FYLF and work must occur between November 1 and March 1, a monitor will be present during work and will ensure that no FYLF are harmed by project work. If FYLF are located during preconstruction surveys within 500 feet of a work area that is within 30 feet of a wetted stream between March 1 and July 1, a monitor will be present during work. If FYLF are located within 100 feet of a work area that is located within 30 feet of a stream between July 1 and November 1, a monitor will be present. Any FYLF detected will be avoided by construction activities by at least 50 feet unless the monitor is positioned between the FYLF and the construction activity. ▪ Work areas can optionally be enclosed with exclusion fence as described above and no monitoring would be required. ▪ If a FYLF is found to be in a work area and cannot be avoided, the qualified biologist will coordinate with CDFW to develop an acceptable relocation strategy.	these requirements in construction contracts. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)		
3.4-12	**Invasive Species Management – Operation** Non-native wildlife shall not be intentionally released onto the Project site, with the exception of approved stocking of fish within isolated waterbodies. In order to address the creation of bullfrog habitat as a result of the Proposed Project, a Bullfrog Management Plan shall be created. The Bullfrog Management Plan shall include the following provisions: ▪ Goals of the Bullfrog Management Plan; ▪ Identification of target areas for bullfrog management; ▪ Appropriate management actions designed to remove invasive bullfrogs such that an environmental benefit is achieved; ▪ A suitable method of monitoring, adaptive management, and reporting throughout the duration of management.	The applicant shall prepare a Bullfrog Management Plan that meets the requirements of Mitigation Measure 3.4-12 and submit to the County for review prior to issuance of the first grading plans. (Use Permit COA) The applicant shall ensure that implementation of the Bullfrog Management Plan and restrictions on the release of non-wildlife are included in the CC&Rs and is the responsibility of the HOA. (TM COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-13	**Aquatic Habitat Public Signage** Signage at primary public access locations in proximity to western pond turtle or foothill yellow-legged frog habitat shall be posted that describes the sensitive nature of these habitat types and their importance within the Guenoc Valley Site ecosystem. Signage shall also include action items for visiting public to encourage protection of these valuable resources. This may include, but is not limited to: ▪ Proper collection and disposal of trash; ▪ Leashing of pets to prevent harassment of wildlife; ▪ Passive activities to enjoy wildlife without disturbing natural behavior; ▪ Discouragement of removal of plants or other biological resources; and ▪ Restrictions on allowable transportation (vehicles, bicycles, horses, etc.) near sensitive habitat. Infrastructure shall also include waste receptacles sufficient in number and size to service public use of the Guenoc Valley Site with regular service to prevent over spilling. Removal of litter shall occur during servicing of waste receptacles.	Signage shall be installed prior to issuance of the first occupancy permit. (Use Permit COA) Maintenance of signage shall be the responsibility of the HOA, and this shall be included in the CC&Rs. (TM COA)	Applicant	County
3.4-14	**Future Phases Biological Review** Following the development of sufficient information related to future phases of development and prior to any on the ground impacts, a qualified biologist shall perform an updated and detailed analysis on impacts to biological resources within the future phases Area of Potential Effect. A report detailing any necessary survey methods, results, and analysis of potential future phases impacts shall be prepared to determine the application of Mitigation Measures 3.4-1 through 3.4 13, 3.4-15 through 3.4-21, 3.9- 1, 3.9-2, and 3.10-2 to future phases, and the need for additional mitigation measures beyond those measures to reduce impacts of future phases to a less than significant level. The analysis shall be to the level of detail presented within this EIR. Additional mitigation shall be presented for those impacts determined to be significant or potentially significant following the inclusion of Mitigation Measures 3.4-1 through 3.4 13, 3.4-15 through 3.4-21, 3.9-1, 3.9-2, and 3.10-2. Additional mitigation shall be designed such that impacts to biological resources are reduced to less-than-significant levels and include avoidance, compensation, and monitoring similar to mitigation identified for Phase 1.	Applicant shall include in application for SPD for future phases. County will ensure that this mitigation is implemented prior to approval of SPDs for future phases.	Applicant/County	County
3.4-15	**Impact to Sensitive Habitats** Sensitive habitats shall be avoided to the maximum extent feasible. In areas where full avoidance of sensitive habitat types is not possible, mitigation shall occur as	The applicant shall ensure that sensitive habitats are avoided as described in	Applicant/County	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
described below. This mitigation shall be applicable to impacts for purple needlegrass, musk- brush chaparral, white alder grove, Brewer willow thicket, Sargent cypress forest, serpentine rock outcrops, and native grasslands: ▪ Preservation of in-kind habitat shall occur at a minimum ratio of 2 acre:1 acre. ▪ Areas designated for preservation shall be maximized within identified protection areas, such as sensitive habitats within Habitat Connectivity Easement Areas. Sensitive habitats within the Open Space Combining District that are not required to mitigate for impacts to POU resulting from vineyard development approved in the 2009 FEIR may be used for the purpose of this mitigation. ▪ Preservation of in-kind habitat that occurs within residential lots shall occur only within open space prohibited from development (including landscaping and agricultural uses) by the Design Guidelines, or through the establishment of habitat easements within the residential lots. Preservation of sensitive habitat for the purposes of mitigation that occurs within deed-restricted open space shall be identified within the deed restriction and shall prohibit the development of that area identified for preservation. Preservation within deed-restrictions shall be preserved in perpetuity as a condition of the deed. ▪ Areas that area preserved for in-kind habitat that occur outside of residential lots, Habitat Connectivity Easement Areas, and the Open Space Combining District shall be avoided during future phases of development. Should unavoidable impacts to in-kind habitat preservation areas occur during future phases of construction, those impacts shall be subject to additional compensatory actions set forth in this mitigation. Should insufficient habitat occur to offset future impacts, a compensatory habitat restoration, enhancement, and/or creation mitigation measure shall be prepared and approved by the County prior to on the ground impacts of future development phases. ▪ Those areas selected for preservation shall be provided on a map to the County and approved by the County. Preservation of in-kind habitat shall be the preferred method of mitigation when possible. The Applicant may additionally satisfy the 2:1 mitigation ratio through restoration, creation, and/ or enhancement of in-kind habitat. “In-kind” requires that habitats meet the classification criteria of their respective vegetative community as defined during the appropriate biological surveys. Mitigation performed through restoration, creation, or enhancement shall be monitored for a minimum of five years	Mitigation Measure 3.4-15, and where avoidance is not feasible, implement mitigation described in Mitigation Measure 3.4-15. (Use Permit and TM COAs) The County shall review and approve mitigations prior to on the ground impacts of future development phases.		

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	by a qualified biologist. The biologist shall prepare an annual report on the status of mitigation activities along with adaptive management recommendations as necessary. These reports shall be maintained by the Applicant and available to agencies upon request. Success criteria shall be as follows and shall require additional years of monitoring and management should mitigation fail to meet success criteria: ▪ Purple needlegrass and native grasslands shall achieve a percent native plant cover that meets or exceeds that of the habitat impacted. Non-sensitive grasslands and herb-dominated habitat types are suitable for restoration and creation activities. ▪ Musk-brush chaparral shall be restored in non-sensitive suitable habitat. Mitigation shall occur at a 2:1 acre ratio and shall achieve a 75 percent acreage establishment. The monitoring biologist shall consider percent cover, species composition, overall health of plantings, and other indicators when determining success of establishment. ▪ White alder grove and Brewer willow thicket may be restored along riparian corridors where invasive species or bank stabilization issues have occurred. Mitigation shall occur at a 2:1 acre ratio and shall achieve a 75 percent acreage enhancement. The monitoring biologist shall consider percent cover, species composition, bank stability, overall health of plantings, and other indicators when determining success of establishment. ▪ Sargent cypress forest shall be enhanced through the removal of competing foothill pines at an acreage ratio of 2:1 once annually for a total of five years and/or Sargent cypress trees shall be replanted at a 2:1 ratio and monitored for a total of five years. Replanting shall achieve a 75 percent success rate. ▪ <u>Serpentine rock outcrop shall be enhanced through the removal of invasive species at an acreage ratio of 2:1 in similar habitat that has a dominant invasive species relative cover to achieve a percent native plant cover that meet or exceeds that of the habitat impacted.</u>			
3.4-16	**Oak Mitigation Plan** All project activities shall be subject to compliance with the Oak Mitigation Plan, dated June 2020, included as Appendix OAK to this Final EIR. Prior to approval of final maps, the Applicant shall demonstrate compliance within the Oak Mitigation Plan	Prior to approval of final maps, the Applicant shall demonstrate compliance within the Oak Mitigation	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	related to impacts to oaks and oak woodland canopy. Prior to issuance of grading and building permits, the Applicant or applicants for grading and building permits shall demonstrate compliance with the Oak Mitigation Plan related to impacts to oaks, mitigation compliance, building envelope and deed restrictions. The Oak Mitigation Plan for this project addresses impacts to oaks as a result of the Proposed Project. The Oak Mitigation Plan was prepared in accordance with the Lake County General Plan. The Oak Mitigation Plan includes the following: ▪ Goals of the mitigation plan; ▪ Method of impact identification appropriate for all phases of construction; ▪ Discussion on compliance with the Lake County General Plan and 2008 Oak Tree Replacement Plan per the 2009 FEIR; ▪ Proposed compensatory action suitable to meet mitigation goals; ▪ Compensatory planting ratios of 2:1 for smaller trees and 5:1 for larger trees; ▪ Success criteria for mitigation such that compensatory plantings for impacts to individual trees achieve a minimum of 80 percent success rate; ▪ Preservation for impacts to valley oak woodland, when applied, shall be no less than 3:1 of in-kind habitat type acreage, and 2:1 for all other types of oak woodland; ▪ A requirement of at least 7 years of monitoring, adaptive management, and reporting throughout the mitigation process; and ▪ Limitation of the total impact to oak woodlands to 1 acre on residential lots consistent with the design guidelines. The Oak Mitigation Plan shall be subject to Lake County review and approval prior to ground disturbance. Oaks present on the Middletown Housing Site shall be avoided. If full avoidance of oaks is not feasible, the measures in the Oak Mitigation Plan prepared for the Guenoc Valley Site shall apply. Replanting for oaks removed on the Middletown Housing Site may occur on the Middletown Housing Site or the Guenoc Valley Site.	Plan related to impacts to oaks and oak woodland canopy. (TM COA) Prior to issuance of grading and building permits, the Applicant or applicants for grading and building permits shall demonstrate compliance with the Oak Mitigation Plan related to impacts to individual oaks, mitigation compliance, building envelope and deed restrictions. (Use Permit COA)		
3.4-17	**Aquatic Resources Protection and Management** Consistent with governing regulations and policies, the following setbacks shall be incorporated into the project design: ▪ 30 feet from the top of bank of perennial streams;	Setbacks are incorporated into the Design Guidelines and shall be administered by the HOA. The County will review compliance prior to	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
▪ 20 feet from the top of bank of any intermittent stream; ▪ 20 feet from the edge of any adjacent wetlands or the ordinary high water mark of ephemeral streams or other bodies of water (including reservoirs and lakes); or ▪ To the outer extent of a riparian corridor. No setback is required or recommended for man-made stormwater or irrigation ditches. Should additional analysis of these features performed by a qualified biologist that determines larger setbacks are needed to ensure full protection of habitat based on factors such as slope, setbacks up to fifty feet may be required as possible and dictated by the conditions observed and analyzed. The setback distances identified above shall be delineated by a qualified biologist with high-visibility fencing or flagging prior to any construction activities occurring within 200 feet of the aquatic habitat features. No construction work or equipment staging shall occur within the setbacks unless a variance or permit is authorized to allow it. Prior to impacts, consultation shall occur with USACE and the RWQCB to determine the extent of federal and state jurisdictional wetlands and waters. A CWA Section 404 permit shall be obtained from USACE for impacts to any identified wetlands and waters subject to CWA jurisdiction, along with RWQCB state water quality certification for such permit under CWA Section 401, as necessary. An LSAA with CDFW shall be entered for those impacts to any identified streams subject to Fish and Game Code Section 1600 jurisdiction. Any necessary permits and approvals shall be obtained prior to the respective impacts for which they are required, and conditions of permits and approvals acquired for the Proposed Project shall be met. Mitigation shall occur consistent with the necessary permits and approval conditions required for the Proposed Project. Mitigation for direct impacts to aquatic habitats shall occur through a combination of habitat preservation, creation, or restoration/enhancement and shall, at a minimum, include the following: ▪ Should mitigation for aquatic resources occur through preservation, preservation shall occur at a minimum ratio of 2:1. Areas designated for preservation shall be maximized within the Open Space Combining District or within Habitat	issuance of building permits. Flagging shall be installed as described in Mitigation Measure 3.4-17. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)		

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
Connectivity Easement Areas, and may only occur within residential lots if preservation in perpetuity as a condition of the deed-restricted open space for the lot. Those areas selected for preservation shall be approved by the County and be subject to the compensatory actions set forth in this mitigation and necessary permit or approval conditions should future impacts to preserved habitats be identified. ▪ When mitigation occurs through the restoration or enhancement of habitat, mitigation shall occur at a minimum ratio of 2:1. Restoration and/or enhancement of habitat shall occur within the Open Space Combining District or within Habitat Connectivity Easement Areas as possible. Monitoring of mitigation activities shall be performed by a qualified biologist for a minimum of three years consistent with the terms of necessary permits. The qualified biologist shall prepare an annual report on the progress of mitigation with recommended management actions. Mitigation shall be deemed complete once the qualified biologist has determined that the success of restoration or habitat enhancement activities meets or exceeds 80 percent (measured either in acres or linear feet). Enhancement and restoration activities may include, but are not limited to, planting of native riparian or wetland vegetation, stabilization of banks, creating a natural channel along areas of manmade drainages, addition of habitat enhancement features that provide refugia or other important features for wildlife that may utilize the habitat, or removal of non-native vegetation. ▪ When mitigation occurs through the creation of habitat, creation shall occur at a minimum ratio of 1:1. A qualified biologist shall monitor habitat creation activities on an annual basis for a minimum of five years, and shall provide an annual report of these monitoring activities along with recommendations in order to ensure success of habitat creation. Following completion of habitat creation activities, a qualified biologist shall prepare an annual report on the progress of mitigation with recommended management actions. Mitigation shall not be deemed complete until the full 1:1 creation ratio has been met. ▪ In cases of conflict between permit terms and measures presented herein, those permit terms and conditions shall supersede those presented within this EIR. Alternative forms of mitigation not detailed above may serve to satisfy mitigating requirements to jurisdictional wetlands and waters as dictated by the appropriate permit(s). Alternative forms of mitigation include purchase of habitat credits from an approved mitigation bank at a ratio not less than 2:1, or payment of in-lieu fees as set by the appropriate agency.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.4-18	**Sensitive Habitat Impacts from Wildfire Clearing** Sensitive habitats included below shall be avoided during removal of dead vegetation and fire fuel load reduction necessary for safety purposes in managing wildfire risk to the degree feasible. The following sensitive habitats shall be addressed in the following manner as it relates to fire management fire breaks, lop and scatter, and masticating outside of development areas: ▪ Purple needlegrass grasslands – This habitat does not require wildfire risk fuel reduction activities. This habitat shall be avoided to the degree feasible. Equipment and vehicles shall not be used or staged within this habitat type. ▪ Musk brush chaparral – This habitat does not require wildfire risk fuel reduction activities. This habitat shall be avoided to the degree feasible. Equipment and vehicles shall not be used or staged within this habitat type. ▪ White alder grove – Due to limited distribution and association with natural riparian fire breaks, this habitat type should not require ongoing wildfire risk fuel reduction activities and shall be avoided as possible. Equipment and vehicles shall not be used or staged within this habitat type. If determined necessary by safety personnel, hand-clearing of dead vegetation may occur. ▪ Brewer willow thicket - Due to the limited distribution and association with natural riparian fire breaks, this habitat type does not require wildfire risk fuel reduction activities. This habitat shall be avoided to the degree feasible. Equipment and vehicles shall not be used or staged within this habitat type. ▪ Sargent cypress forest – This habitat may require occasional management for wildfire risk. Due to the sensitive nature of this habitat type, hand tools shall be the only acceptable use of vegetation management. No live Sargent cypress trees shall be felled. Equipment and vehicles shall not be used or staged within this habitat type. ▪ <u>Serpentine rock outcrop - Due to the limited distribution and low vegetation cover, this habitat type does not require wildfire risk fuel reduction activities. This habitat shall be avoided to the degree feasible. Equipment and vehicles shall not be used or staged within this habitat type.</u> ▪ Oak woodland - This habitat may require occasional management for wildfire risk. Due to the sensitive nature of this habitat type, hand tools or grazing shall be the only acceptable use of vegetation management. Should impacts to any living oak trees occur, they shall be mitigated for as outlined within the Oak Mitigation Plan. Equipment and vehicles shall not be used or staged	The applicant shall ensure compliance with Mitigation Measure 3.4-18. Applicant to incorporate these measures into the Wildfire Prevention Plan and obtain County approval of revised Wildfire Prevention Plan prior to approval of Grading or Improvement Plans- (whichever occurs first). The applicant shall include these requirements in construction contracts. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	within this habitat type. ▪ Oak savanna – Cover for this habitat type is dominated by non-native annual grasses and would not likely require management for wildfire risk except limited grazing or mowing immediately adjacent to high risk fire areas such as within 50 feet of roads. Equipment use and staging may occur within areas of non- native annual grassland provided that the driplines of oaks are not impacted. Should impacts to any living oak trees occur, mitigation shall occur as outlined within the Oak Mitigation Plan.			
3.4-19	**Wildlife Movement – Fencing** Use of fencing shall be minimized throughout the Guenoc Valley Site and shall adhere to those restrictions set forth in the Design Guidelines for all phases of development. Fencing shall not be installed for the purpose of wildlife exclusion except in the case of safety or protection of agricultural resources or residential development areas, and shall be designed to allow for continued movement of non-target species as possible. Unless approved by the Home Owner's Association or for ongoing protection of agricultural resources or property, fencing exceeding six feet in height shall not be used. Fencing materials designed for the purpose of wildlife entrapment or injury shall not be used. Full perimeter fencing for residential lots exceeding two acres in size shall be prohibited unless consistent with the following wildlife-friendly fencing measures: ▪ Fencing shall be reasonably visible to travelling wildlife to prevent collision with fencing, ▪ Fencing shall not include low rails or wires that would prevent smaller dispersing animals from passing, ▪ Fencing shall not present a top rail clearance exceeding six feet, and shall not exceed four feet when possible. Clearance height shall consider the ground slop approaching the fence such that the height of a jump required to clear the fence from the downslope side does not exceed six feet, and ▪ Materials that entangle or otherwise entrap wildlife, such as loose wire, top or bottom barbed wires, shall be prohibited.	Fencing requirements are incorporated into the Design Guidelines and shall be administered by the HOA. The County will review compliance prior to issuance of building permits. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)		
3.4-20	**Wildlife Movement – Future Phases** Future phases of development shall retain the clustered development design and restriction on maximum allowable residential lot development standards set forth within the Design Guidelines. Residential lots shall be restricted to an allowable	Applicant shall include in application for SP~~O~~D for future phases. County will ensure that this mitigation	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	development area of 1.5 acres unless further restricted by the Design Guidelines, for example, in areas of oak woodlands. Development of future phases shall avoid riparian corridors that commonly serve as wildlife passageways with development setbacks to the degree feasible, as identified in Mitigation Measure 3.4-17. Setbacks and sensitive habitat avoidance shall also be maximized. Prior to implementation of future phases, additional analysis on the overall impacts to wildlife movement of proposed future phases development shall be performed by a qualified biologist to the level of detail presented within this EIR, and determine the extent to which implementation of Mitigation Measure 3.4-19 will reduce the impacts of proposed future phases development on wildlife movement. Should implementation of Mitigation Measure 3.4-19 not reduce the impacts of proposed future phases development on wildlife movement to a less than significant level, additional mitigation shall be determined by a qualified biologist such that impacts to wildlife movement are reduced to less-than-significant levels. Such mitigation may include use of Habitat Corridor Easements or other forms of designating open space.	is implemented prior to approval of SP~~O~~Ds for future phases.		
3.4-21	**Domestic Cat Predation** The Home Owner's Association shall distribute to new residents informational resources on domestic cat predation on wildlife and methods to prevent such predation. These recommendations may include, but are not limited to: ▪ Encouraging cat owners to keep cats indoor as possible; ▪ Encouraging all residents to remove domestic cat attractants such as outdoor food bowls and uncovered trash; ▪ Affixing bells to collars; ▪ Having cats spayed or neutered to prevent establishment of feral colonies; and ▪ Ensuring backyard bird feeders are not accessible to cats.	HOA shall prepare educational materials to provide to future homeowners prior to occupancy. Ongoing implementation of this mitigation shall be handled by the HOA.	Applicant	County
3.5	**Cultural Resources**			
3.5-1	**Avoid Historical and Archaeological Resources, Apply Appropriate Mitigation** *Phase 1 and Future Phase General Provisions* All of the identified cultural resource sites shall be avoided during project construction, development, and operation activities. A shapefile database shall be transmitted to the Applicant and included in the final contract with the construction contractor to ensure that cultural resource locations are avoided. Each site shall be added to subdivision maps, and any residential properties that include cultural resources shall be deed restricted to avoid construction on or immediately adjacent	The applicant shall implement surveys, avoidance and monitoring as described in Mitigation Measure 3.5-1. The applicant shall include all of these requirements in construction contracts. (Use	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
to the resource. This shall be accomplished by establishing a buffer of 50 feet around the perimeter of the site and erecting a semi-permanent fence that will remain in place throughout construction. The fence shall be installed with a qualified archaeologist and tribal monitor in attendance, and shall determine the established buffer for the location. The buffer can be reduced or modified to accommodate sensitive environmental conditions, based on the assessment of the qualified archaeologist and tribal monitor or cultural advisor (see Mitigation Measure TCR-2 ~~3.5-2~~). If construction will encroach closer than 50 feet, a qualified archaeological and tribal monitor shall be retained to monitor those activities. Should cultural resources be uncovered within the buffer, all construction in the in the immediate area shall halt until the find can be assessed for NRHP/CRHR eligibility in accordance with current professional standards using minimization measures and the provisions of the Unanticipated Discoveries Plan developed in compliance with Mitigation Measure TCR-2 ~~3.5-2~~. *Phase 1 Site-Specific Avoidance Strategies* Site P-17-425 shall be incorporated into proposed buffer zones for wetlands or oak woodlands. Should ground-disturbing work be required within 50 feet of either site, a qualified professional archaeologist shall be retained to monitor construction activities. If site elements are discovered during monitoring, the archaeologist, in consultation with Middletown Rancheria, then the archeologist shall design an appropriate mitigation plan in consultation with Middletown Rancheria. The sites designated as lithic scatters (P-17-399, 400, 401, -404, -1363, -1470, -1957, -1958, -1959, -1960, -1961, -1962, -1963, and -2027, the Back of House vineyard lithic scatter site, ~~and~~ the Hilltop Site, the Creek Overlook Site, and the Sunshine Midden Site) have not been evaluated for the NRHP or CRHR. They shall be avoided and/or incorporated into open space or wetland or vegetation buffers wherever possible. If ground-disturbing work is required within 50 feet of any of these sites, they shall be examined under the CARIDAP unless different and/or additional mitigation measures are identified through consultation with the Middletown Rancheria (Tribe). Analyses shall be competed in the field to the extent possible. Four other sites (P-17-417, -2035, -2038, and -2041) include lithic scatters and	Permit COA) The applicant will delineate areas as described in Mitigation Measure 3.5-1 for deed restrictions on all final maps. (TM COA)		

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
bedrock mortars; these sites cannot be evaluated under the CARIDAP protocol. These sites should similarly be incorporated into open space or other natural resource buffers where feasible. Should construction impacts be unavoidable, each affected site shall be investigated by a qualified archaeologist in collaboration with the Tribe accordance with current professional standards in order to assess eligibility to the NRHP or CRHR unless different and/or additional mitigation measures are identified through consultation with the Tribe. For resources that cannot be avoided, site-specific minimization and mitigation measures will be developed in consultation between the archaeologist and Tribal monitor. Occupation sites have an elevated potential to contain data and other values which would make them eligible for listing on the NRHP or CRHR. These sites (P-17-116, -256, -405, -411, -414, -416, -420, -421, and -2039), therefore, shall be accorded an extra degree of protection. Each of these sites shall be avoided, incorporated into open space or wetland or vegetation buffers wherever possible. The sites are presumed eligible for listing on the NRHP/CRHR and therefore shall be protected by semi- permanent construction fencing, to be maintained until construction in the vicinity has finished. Should avoidance be infeasible, these sites shall be subject to intensive Phase II evaluation in accordance with an individual Treatment Plan designed for each specific site subject to consultation with Middletown Rancheria. The primary method of mitigation will be through minimization and avoidance measures. Only in cases where minimization or avoidance is infeasible, or there are no other means of mitigation, may a program of archaeological Data Recovery be implemented in accordance with current professional standards. Construction in the vicinity of the site shall not resume until minimization measures or Data Recovery has been completed. Historic sites within Phase 1 impact areas, including P-17-406, -412, -1996, -2042, -2043, -2952, -2956, the Bohn Hill debris scatter, and the Ink Ranch corrals, shall be incorporated into open space or wetland or vegetation buffers wherever possible and avoided with a 15-foot fenced buffer; the fence shall remain in place until all ground-disturbing work within 50 feet of the resource has been completed. Should construction impacts to historic sites be unavoidable, the individual site shall be visited, compared to existing resource records, re-documented through resource update forms, and evaluated for the NRHP/CRHR. If eligible, appropriate treatment methods shall be included in a Treatment Plan designed in consultation with the			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	Tribe, which shall be implemented prior to site disturbance. The Back of House vineyard site is located within an active vineyard and consequently has been disturbed; further disturbance will occur when the vineyard is removed prior to Back of House construction. This site has not been evaluated for NRHP/CRHR eligibility and will be more fully disturbed during construction of the Proposed Project. A CARIDAP testing and evaluation program shall be implemented prior to any new ground-disturbing activities at this location unless different and/or additional mitigation measures are identified through consultation with the Tribe. If the site is found or presumed eligible for listing on the NRHP/CRHR, a qualified professional archaeologist shall design an appropriate Treatment Plan in consultation with Middletown Rancheria; the Treatment Plan shall include the number and size of excavation units to be completed, laboratory or in-field analyses to be performed, documentation of results, and criteria to make a final recommendation to the NRHP/CRHR, all in accordance with Mitigation Measure 3.5-1. Construction activities in the vicinity of the site shall not resume until mitigation has been completed. Sites that may occur within Phase 1 development areas but which could not be relocated include: P-17-404, and -409. Accordingly, all ground disturbance proposed in areas where these sites have been previously plotted shall be monitored by a qualified archaeologist and Tribal monitor. In the event that site indicators are encountered, project-related activities shall cease and shall not resume within 50 feet of the find and the site shall be evaluated for NRHP/CRHR eligibility in accordance with the provisions of the Unanticipated Discoveries Plan unless different and/or additional mitigation measures are identified through consultation with the Tribe.			
3.5-2	**Worker Awareness Training, ~~Unanticipated Discoveries Plan,~~ Construction Monitoring, and Halt Work** [MOVED] ~~1) Tribal Cultural Advisor: Prior to initial ground disturbance, the Applicant shall retain a project Tribal Cultural Advisor designated by the Tribe, to direct all mitigation measures related to tribal cultural resources as defined by Public Resources Code 21074(a).~~ 1) Worker Awareness and Sensitivity Training: Prior to the beginning of grading (including ground-clearing) or any construction (including structure relocation), a qualified professional archaeologist shall administer a cultural resources awareness and sensitivity training program to all construction workers who will be performing grading or construction work. Either a tribal representative should	The applicant shall implement monitoring and other actions as described in Mitigation Measure 3.5-2. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
assist with administering the training, or the training materials should be approved by the Tribal Cultural Advisor. The program shall include a review of the types of finds that could occur, regulatory requirements, and a list of contacts (with telephone numbers) in case of accidental discoveries. The training program shall be repeated periodically as new construction workers are added to the project. 2) Construction Monitoring: The Applicant shall retain a team of professional archaeologists and tribal monitors to implement a monitoring program to observe initial ground disturbing activities from the surface to sub-soil (including testing, concrete pilings, debris removal, rescrapes, punchlists, pot-holing or auguring, boring, grading, trenching, foundation work and other excavations or other ground disturbance involving the moving of dirt or rocks with heavy equipment or hand tools within the Project area), ensure that buffer areas are marked, and halt construction in the case of new discoveries. The tribal monitoring shall be supervised by the project Tribal Cultural Advisor. The duration and timing of the archaeological monitoring activities shall be determined by the lead archaeologist in consultation with the Tribal Cultural Advisor. The duration and timing of tribal monitoring will be determined by a cultural resources monitoring agreement between the parties. The Tribal Cultural Advisor will coordinate with the construction field supervisor to confirm where ground disturbing activities will occur and determine the location its tribal monitor would survey, monitor, spot-check or remain stationary. Where feasible, the archaeological and tribal monitors will work together at the same locations. If the Tribal Cultural Advisor determines that full-time monitoring is no longer warranted, he or she may recommend that tribal monitoring be reduced to periodic spot-checking or cease entirely. Tribal monitoring would be reinstated in the event of any new or unforeseen ground disturbances. Depending on the scope and schedule of ground disturbance activities of the Project (e.g., discoveries of cultural resources or simultaneous activities in multiple locations that requires multiple tribal monitors, etc.) additional tribal monitors may be required on-site. If additional tribal monitors are needed, the Tribe shall be provided with a minimum of three (3) business days advance notice unless otherwise agreed upon between the Tribe and applicant. The on-site tribal monitoring shall end when the ground disturbance activities are completed, or			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
when the project Tribal Cultural Advisor has indicated that the site has a low potential for tribal cultural resources. 3) Halt Work: Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted within 100 feet of the find(s). A professional archaeologist certified by the Registry of Professional Archeologists (RPA) shall be notified and shall evaluate the find(s) and recommend mitigation procedures, if necessary. The findings and mitigation measures shall be reviewed and approved by the Lake County Community Development Director prior to commencing work. [MOVED] ~~3) Tribal Unanticipated Discoveries Plan: Prior to project construction, a qualified professional archaeologist shall be retained to prepare an Unanticipated Discoveries Plan in consultation with Middletown Rancheria, or to update an existing Unanticipated Discoveries Plan supplied by the Tribe. At a minimum, the Unanticipated Discoveries Plan shall include:~~ ~~▪ Minimization of impact strategies to be agreed upon by the archaeological monitor and tribal monitor or tribal cultural advisor. Minimization measures mean:~~ ~~○ Avoidance. Priority shall first be given to leaving cultural resources in place and avoidance of any further unnecessary disturbance. The highest priority is to avoid disturbance to cultural resources. All cultural resources shall be left in situ, that is, in place, in the same position in which they were discovered and shall not be removed from the discovery site until arrangements are made for reburial or transfer in accordance with the below. If leaving the resources in situ is not possible, temporary housing at a secured storage location at the discovery site mutually agreed upon by the archaeological and tribal monitor may be considered.~~ ~~○ Reburial. In situations where avoidance is not feasible, priority shall next be given to immediately reburying the cultural resources in the same location as found, only deeper. In the event that the cultural resources cannot be re- buried in the same location, only deeper, then priority shall next be given to immediately re- burying the cultural resources in an appropriate location within 100 feet of their original discovery in an area that shall not be subject to future			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
~~subsurface disturbances. If for any reason immediate reburial in place, only deeper, or in an appropriate location within 100 feet of the original discovery is not feasible, then cultural resources may be re-buried in an appropriate location as determined by the Tribal Cultural Advisor in an area that shall not be subject to future subsurface disturbances.~~ ~~○ Transfer. In the event that avoidance and reburial above described is not feasible, cultural resources may be removed and transferred to a location designated by the Middletown Rancheria.~~ ~~○ Laboratory studies, scientific analysis, curation, or video recording shall only be permitted if required to assess CRHR eligibility, or if such strategies are the only means available to mitigate impacts to CRHR eligible resources. Prior to conducting any such studies, the tribal cultural advisor must be consulted. The archaeologist may draw the cultural resources for mapping purposes; however, no electronic means of recording the cultural resources shall be permitted without prior consultation with the Middletown Rancheria.~~ ~~▪ Description of field or laboratory methods to be used to investigate Unanticipated Discoveries (also applicable to known resources that will be impacted by project construction), to include types of excavation units, screening methods, and sample collection, as appropriate;~~ ~~▪ A list of permitted in-field analyses or laboratories to be used for specific analyses, as appropriate;~~ ~~▪ Provisions for reburial or transfer of recovered materials, developed in consultation with Middletown Rancheria.~~ ~~▪ Measures for documentation of results, including forwarding results to the NWIC as appropriate;~~ ~~▪ A Burial Treatment plan, provided by the Tribe, shall be followed if Native American remains are discovered during construction;~~ ~~▪ Maps (provided in pdf and shapefiles to the construction contractor, Applicant, and County) of areas that have not been included in a previous archaeological survey;~~ ~~▪ Maps of known resource locations (provided in pdf and shapefiles) shall be included in any construction documents that include identification of archaeological monitoring areas, identification of sites where pre-~~			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	~~construction archaeological testing or archaeological and tribal monitoring during construction is required, identification of appropriate buffer zones for individual site protection during construction, cease work requirements, unanticipated finds reporting requirements;~~ ~~• Assessment criteria to determine NRHP/CRHR eligibility; and~~ ~~• A no-collections policy will be instituted for the Proposed Project, except where a site-specific treatment plan or the Unanticipated Discoveries Plan developed in consultation with the Tribe, calls for collection of a sample of artifacts or materials and analysis.~~ ~~Should any cultural resources, such as wells, foundations, or debris, or unusual amounts of bone, stone or shell, artifacts, burned or baked soils, or charcoal be encountered during ground-disturbing activities, work shall cease within 100 feet of the discovery and the Construction Contractor, Applicant, and Middletown Rancheria shall be notified immediately. The Applicant shall retain a qualified professional archaeologist to assess the find in consultation with the Tribal Cultural Advisor. The Tribe must have an opportunity to inspect and determine the nature of the resource and the best course of action for avoidance, protection and/or treatment of tribal cultural resources to the extent permitted by law, should the find consist of prehistoric or historic-era materials related to Native American occupation or use of the vicinity. If the find appears to be eligible for listing on the NRHP or CRHR, or is determined to be a tribal cultural resource by the Middletown Rancheria, then the provisions of the Unanticipated Discoveries Plan shall be adhered to, which will include consultation with Middletown Rancheria for tribal cultural resources. If the find consists of historic-era materials unrelated to the Native American community, the archaeologist shall determine its significance in compliance with NHPA and CEQA criteria. If adverse effects to a cultural resource cannot be avoided, the Minimization Measures described under the requirements for the Unanticipated Discovery Plan shall be implemented to the extent feasible.~~			
3.5-3	**Future Phase Investigations** Because Future Phases of work will affect areas not yet included in an archaeological study, prior to undertaking construction in any Future Phase area, the Applicant shall retain a qualified professional archaeologist to complete a cultural resources study in coordination with Middletown Rancheria. The study shall determine whether any previous archaeological studies or cultural resources have been identified within the Future Phase development area. If no studies have been completed, or if previous study results are more than 15 years old, new studies shall be prepared including the	Applicant shall include in application for SP~~O~~D for future phases. County will ensure that this mitigation is implemented prior to approval of SP~~O~~Ds for future phases.	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	results of background research, field surveys, identification and evaluation of resources, documentation of results, and submission of the report to Lake County and the NWIC upon completion. New surveys shall include both professional archaeologists and the Tribal Cultural Advisor (or his/her designee). These efforts shall be completed prior to ground-disturbing activities. If significant historic-era resources or significant archaeological sites are present, the development proposal shall designate the area surrounding the site as open space and the site shall be completely avoided. If avoidance is not feasible, a qualified professional archeologist shall be retained to evaluate NRHP/CRHR eligibility of the site, and, if eligible, shall design an appropriate Treatment Plan in consultation with Middletown Rancheria. The minimization measures outlined in the Unanticipated Discoveries Plan described under Mitigation Measure TCR-2 ~~3.5-2~~ shall be adhered to as feasible. Construction activities in the vicinity of the site shall not occur until mitigation has been completed, and the construction monitoring provisions of Mitigation Measure TCR-2 ~~3.5-2~~ have been implemented. Any newly identified resources uncovered during Future Phases shall be treated in accordance with Mitigation Measure TCR-2 ~~3.5-2~~ requirements.			
3.5-4	**Cease Work, Contact County Coroner** California law recognizes the need to protect interred human remains, particularly Native American burials and items of cultural patrimony, from vandalism and inadvertent destruction. If human remains are uncovered during project construction, construction shall halt immediately within 100 feet of the find and the Lake County Coroner, County, and the Applicant shall be notified. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code §7050.5 and §7052 and California PRC §5097. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The County shall contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the County and a qualified professional archaeologist, shall develop a plan of action to avoid or minimize significant effects to the human remains prior to resumption of ground-disturbing activities.	The applicant shall implement monitoring and other actions as described in Mitigation Measure 3.5-4. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.6	**Geology and Soils**			
3.6-1	**Final Design-Level Geotechnical Report(s)** The Applicant shall submit final design-level geotechnical report(s) produced by a California Registered Civil Engineer or Geotechnical Engineer for County review and approval. The report(s) shall address and make recommendations on the following: 1. Road, pavement, and parking area design; 2. Structural foundations, including retaining wall design (if applicable); 3. Grading practices; 4. Erosion/winterization; 5. Special problems discovered onsite, (e.g., groundwater, compressive/expansive/unstable soils/liquefaction potential); and 6. Slope stability (landslides). It is the responsibility of the Applicant to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report. If the geotechnical report indicates the presence of critically expansive soils or other issues that could lead to structural defects, a certification of completion of the requirements of the geotechnical report shall be submitted to the County Community Development Department prior to issuance of building permits. This certification may be completed on a lot-by-lot basis or on a tract basis. This shall be so noted on the Improvement Plans, in the CC&Rs, and on the Informational Sheet filed with the Final Subdivision Map(s). The preliminary geotechnical engineering report performed by RGH Consultants, dated May 29, 2019 and revised December 6, 2019, indicated the presence of potentially expansive soils and landslides, which must be addressed in a design-level geotechnical report. At a minimum, the following recommendations of the preliminary geotechnical engineering report shall be adhered to: 1. In general, cut and fill slopes should be designed and constructed at slope gradients of 2:1 (horizontal to vertical) or flatter, unless otherwise approved by the geotechnical engineer in specified areas. In expansive soil areas and serpentinite or highly weathered mélange bedrock, cut and fill slopes should be no steeper than 3:1. Where steeper slopes are required, retaining walls should be	The applicant shall prepare reports and take actions as described in Mitigation Measure 3.6-1. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	used unless approved by the project geotechnical engineer. Fill slopes steeper than 2:1 will require the use of geogrid to increase stability. If the owner is willing to accept ongoing maintenance, steeper slopes may be constructed within roadway cutslopes on a case-by-case basis. Cutslopes up to 1:1 may be allowable in certain areas with certain remedial measures. In general, slopes within serpentinite-derived soils and Franciscan mélange or serpentinite bedrock are highly weathered and are less stable than slopes on younger and/or harder bedrock types. In addition, some of the younger volcanic bedrock formations are rubbly to agglomeritic in nature and may be prone to rockfalls or debris flows as the clayey matrix becomes saturated on steep slopes. The geotechnical engineer should review preliminary site-specific grading plans and profiles for potential slope stability concerns. and/or 2. The proposed building envelopes must be located outside unstable areas and steep slopes in order to reduce the risks associated with slope instability. Initially, a structural setback of approximately 50 feet from unstable areas and breaks in slope of 2:1 or steeper should be established. A site-specific study by the project geotechnical engineer should finalize recommended structural setbacks.			
3.6-2	**Worker Training, Cease Work, and Consult with Qualified Paleontologist** A qualified professional paleontologist (as defined by the Society of Vertebrate Paleontology, 2010) provide awareness training, in written or multi-media form for construction personnel involved in earth-moving activities. Construction personnel to be involved with earth-moving activities shall be informed that fossils could be discovered during excavation that these fossils are protected by laws, on the appearance of common fossils, and on proper notification procedures should fossils be discovered. In the unlikely event that paleontological resources are encountered, work shall cease within 50 feet of the discovery, and the County shall be notified immediately. The Applicant shall retain a qualified professional paleontologist (as defined by the Society of Vertebrate Paleontology, 2010) to assess the significance of the find and recommend appropriate treatment measures. Recommendations shall include, but are not limited to, salvage and treatment as described by the Society of Vertebrate Paleontology (2010); this treatment shall include preparation, identification,	The applicant shall implement monitoring and other actions as described in Mitigation Measure 3.6-2. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	determination of significance, and curation into a public museum. Any recommended mitigation shall be completed before construction resumes in the vicinity of the find.			
3.7	**Greenhouse Gases and Climate Change**			
3.7-1	**Operational GHG Emissions** Prior to the issuance of the first certificate of occupancy for the relevant portion of the project (i.e., residential or commercial), as appropriate, the Applicant shall provide documentation to the County that the following measures have been achieved. It should be noted that these measures do not apply to on-going uses within the property that are not a component of the Proposed Project, including agricultural operations conducted under third party leases. *Transportation Demand Management Measures* Implement MM 3.13-4 to develop and implement a TDM Program to achieve a reduction in VMT as a result of the Proposed Project. At a minimum these measures will include: ▪ Dedicated on-site parking for shared vehicles (vanpools/carpools); ▪ Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in the commercial portion of the project; and ▪ Use of an electric fleet for internal transport vehicles (excluding trucks and other ranch vehicles for on-going agricultural and grazing activities) to the extent feasible (no less than 75 percent), including the golf course. *Project Wide Measures* ▪ Use energy-efficient lighting that will reduce indirect criteria pollutants and GHG emissions. Using energy-efficient lighting will reduce energy usage and, thus, reduce the indirect GHG emissions from the project. Energy-efficient lighting includes adaptive lighting systems or systems that achieve energy savings beyond those required by Title 24 lighting requirements to the maximum extent feasible. ▪ Utilize low-flow appliances and fixtures; ▪ Use of state-of-the-art irrigation systems that reduce water consumption including graywater systems and rainwater catchment; ~~and~~ ▪ Use of drought-tolerant and native vegetation; and ▪ Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.	Applicant to prepare TDM Program compliant with this Mitigation Measure and submit to County. County to review and approve prior to issuance of the first certificate of occupancy. (Use Permit COA) Lighting plans consistent with these requirements shall be submitted to County prior to approval of building permit. (Use Permit COA) Improvement Plans consistent with these requirements shall be submitted to County prior to approval of Final Maps. (TM COA)	Applicant/County	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
Residential Measures ▪ Facilitate achievement of zero net energy buildings through installation of solar photovoltaic systems consistent with the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6. Compliance with this requirement must be demonstrated prior to issuance of occupancy permits for residential uses. ▪ Provide electrical outlets on the outside of the homes or outlets within the garages to encourage the use of electrical landscaping equipment. ▪ Use water efficient landscapes and native/drought-tolerant vegetation. ▪ Install smart meters and programmable thermostats. ▪ Use energy-efficient appliances in the residences where available. These include appliances that meet USEPAs Energy Star Criteria. *Resort/Commercial Measures* ▪ Facilitate achievement of zero net energy buildings through the construction standards required under the 2019 Building Energy Efficiency Standards, CCR Title 24 Part 6 and the use of rooftop or on-site photovoltaic systems, with or without storage, or the acquisition of renewable energy or energy credits from another source, or generation onsite. Zero Net Energy shall mean that on a community-wide basis, the actual annual consumed energy will be less than or equal to the renewable generated energy utilized. It is the Project's goal to obtain enough renewable electrical energy for the Project's needs and to distribute it throughout the Guenoc Valley Site. Therefore, renewable energy supplies shall be secured and/or systems installed for each commercial structure prior to issuance of its final certificate of occupancy. ▪ Install on-site charging units for electric vehicles consistent with parking requirements in California Green Building Standards Code Section 5.106.5.2. ▪ Install electric water heating instead of gas water heating for some or all of the project's hot water needs, to the extent such technology is readily available and commercially practicable. ▪ <u>Minimize the use of propane gas at restaurants and replace with alternative equipment to the maximum extent feasible.</u> *Purchase GHG Credits* Prior to the issuance of building permits, the Applicant shall purchase GHG emission credits from a CARB approved registry source or project to offset the difference between the mitigated project emissions and the recognized 2030 service population			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring

thresholds. The credits must be established using CARB-consistent protocols and permanently retired. The table below converts the service population thresholds to metric tons per year based on the service population of the Proposed Project. Additionally, the table illustrates the difference between the total project emissions and the thresholds.

Therefore, prior the issuance of building permits for Phase 1, the Applicant shall purchase 14,865 carbon offset credits.

OPERATIONAL GHG EMISSIONS - MITIGATED

Category	Year 2030		
	Phase 1	Future Phases	Total All Phases
	MT CO_2e per year		
Total Project Emissions	18,973	11,873	30,846
Service Population (Residents + Employees[1])	*1,580*	*2,990*	*4,570*
Service Population Project Emissions	*12.0*	*4.0*	*6.7*
BAAQMD Threshold (MT CO_2e/SP)[2]	2.6	2.6	2.6
BAAQMD Service Pop Threshold Converted to total MT CO_2e[3] per year	4,108	7,774	11,882
Total Annual Project Emissions Above Threshold	**14,865**	**4,099**	**18,964**

Notes:

1. Service population for Phase 1 includes both the project population increase from Phase 1 residential units and workforce housing, plus the 300 employment positions that would be generated. Service population for Future Phases includes the estimated population increase from future phases residential units and workforce housing, plus an estimated 200 employment positions.
2. 2030 service population threshold adjusted to account for 2017

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	Scoping Plan Update 40% Reduction Goal by 2030. 3. Calculated by multiplying the service population threshold by the service population of the project.			
3.7-2	**Construction GHG Emissions** Implement Mitigation Measure 3.3-1 to reduce GHG emissions from construction of the Proposed Project. a) To the maximum extent feasible, the contractors shall utilize Tier 4 engines or better, and Level 3 Diesel Filters during all phases of development. Compliance must be demonstrated with submittal of the equipment inventory, prior to approval of dust control plans.	Applicant submit to LCAQMD a Construction Emission/Dust Control Plan and other information conforming to this Mitigation Measure within 30 days prior to groundbreaking. County to review prior to issuing Grading or Improvement Plans- (whichever occurs first). (Use Permit COA)	Applicant	County
3.8	**Hazardous Materials**			
3.8-1	**Hazardous Materials Best Management Practices** The following mitigation measures shall be implemented prior to the issuance of grading permits: 1) Ensure through contractual obligations that all contractors prepare hazardous materials business plans and that they transport, store, and handle construction and remediation-related hazardous materials in a manner consistent with applicable regulations and guidelines. Components of the plan include, but are not limited to, transporting and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials in accordance with the applicable federal, State, and/or local regulatory agency protocols. The hazardous materials business plans shall be submitted to the Lake County Division of Environmental Health for review and approval. 2) In compliance with the CWA, a Stormwater Pollution Prevention Plan (SWPPP) shall be prepared for construction activities. Hazardous materials control measures identified in the SWPPP shall include, but not be limited to, the	The Applicant shall implement monitoring and other actions, and obtain permits as described in Mitigation Measure 3.8-1 prior is issuance of grading permits and during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	following: a. A spill prevention and countermeasure plan shall be developed, which identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used onsite. b. Petroleum products shall be stored, handled, used, and disposed of properly in accordance with provisions of the CWA (33 USC § 1251 to 1387). c. During the wet season, construction materials, including topsoil and chemicals, and quarried materials shall be stored, covered, and isolated to prevent runoff losses and contamination of surface and groundwater. d. Fuel and vehicle maintenance areas shall be established away from all drainage courses and designed to control runoff. e. Sanitary facilities shall be provided for construction workers. f. Disposal facilities shall be provided for soil wastes, including excess asphalt during construction and demolition. g. Require that at all times a supervisor or other responsible employee trained in the proper handling, use, cleanup, and disposal of all chemical materials used during construction activities shall be present onsite and provide appropriate facilities to store and isolate contaminants. h. Encountered groundwater shall be removed from trenches and excavations in such a manner as to reduce potential contact with construction materials, construction personnel, surface waters, and, to the extent required by regulation or requirements, shall be disposed of at an appropriately permitted facility such as a wastewater treatment plant in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit.			
3.8-2	**Prepare a Hazardous Materials Contingency Plan** Prior to issuance of the grading permits, the Applicant shall provide to Lake County Division of Environmental Health a site-specific hazardous materials contingency plan. The plan will describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is encountered during construction. The contingency plan shall identify conditions that could indicate potential hazardous materials contamination, including soil discoloration, petroleum or chemical odors, presence of underground storage tanks, or buried building material. Compliance with the plan will be included as a requirement within all construction bid specifications. If at any time during the course of constructing the Proposed Project evidence of soil and/or groundwater contamination with hazardous material is encountered,	The applicant shall prepare a site- specific hazardous materials contingency plan, implement monitoring and other actions, and obtain permits as described in Mitigation Measure 3.8-2 prior is issuance of grading permits and during construction. The applicant shall include all of these	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	construction shall immediately cease and the Lake County Division of Environmental Health shall be contacted. Construction in the area affected by the contamination shall remain stopped until there is resolution of the contamination problem (through such mechanisms as soil or groundwater sampling and remediation if potentially hazardous materials are detected above threshold levels) to the satisfaction of Lake County Division of Environmental Health and Central Valley Regional Water Quality Control Board (CVRWQCB); construction on areas not affected by the contamination may continue during the remediation process. The plan, and obligations to abide by and implement the plan, shall be incorporated into the construction contract specifications of the project.	requirements in construction contracts. (Use Permit COA)		
3.8-3	**Minimize Potential for Accidental Release of Hazardous Materials during Demolition** a) Prior to demolition of existing structures, the Applicant shall: 1) Identify locations that could contain hazardous residues; 2) Remove plumbing fixtures known to contain, or potentially containing, hazardous materials; 3) Determine the waste classification of the debris; 4) Package contaminated items and wastes; and 5) Identify disposal site(s) permitted to accept such wastes. These activities will be conducted in compliance with all applicable federal, state, and local laws. b) Prior to demolition of existing structures, the Applicant shall provide written documentation to the County that asbestos testing and abatement, as appropriate, has occurred in compliance with applicable federal, State, and local laws. c) Prior to demolition of existing structures, the Applicant shall provide written documentation to the County that lead-based paint testing and abatement, as appropriate, has been completed in accordance with applicable State and local laws and regulations. Abatement shall include the removal of lead-contaminated soil (considered soil with lead concentrations greater than 400 parts per million in areas where children are likely to be present). If lead-contaminated soil is to be removed, the Applicant shall submit a soil management plan to Lake County Division of Environmental Health.	The applicant shall implement Mitigation Measure 3.8-3 prior is issuance of grading permits and during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	County	County
3.8-4	**Reporting Geothermal Wells** As recommended by the Division of Oil, Gas, and Geothermal Resources (Division) within the Department of Conversion and according to the County General Plan, the following shall be performed concerning geothermal well sites for the Guenoc Valley	The applicant shall implement Mitigation Measure 3.8-4 prior is issuance of grading permits	County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	Site and the Off-Site Infrastructure Improvement Areas: 1) The location of any known geothermal wells on the property shall be clearly identified on the project construction plans and communicated to the appropriate County recorder for inclusion in the title information of the subject real property. 2) If any unknown geothermal well(s) is/are discovered during development, the County and the Division shall be notified immediately so that the newly discovered well(s) can be incorporated into the records and investigated in order to determine proper disposal, if required. Any previously unidentified wells found during project exploration and construction work shall be communicated to the appropriate County recorder for inclusion in the title information of the subject real property. This is to ensure that present and future property owners are aware of the wells located on the property, and the potentially significant issues associated with any improvements near geothermal wells. 3) Before work on a low or high temperature gradient well is performed, written approval from the Division in the form of an appropriate permit shall be obtained. This includes, but is not limited to, mitigating leaking fluids or gas from abandoned wells, modifications to well casings, and/or any other re-abandonment work. If any well needs to be lowered or raised (i.e., casing cut down or casing riser added) to meet the grade regulation standard of 6 feet below ground, a permit from the Division is required before work can start.	and during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)		
3.8-5	**Asbestos Dust Mitigation Plan** Prior to construction activities, an Asbestos Dust Mitigation Plan shall be prepared and submitted to the LCAQMD for review and approval ~~Lake County APCD~~. The Plan shall include the following components in order to reduce asbestos dust generation and meet the requirements of an asbestos dust mitigation plan as specified in Asbestos Airborne Toxic Control Measures (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations: 1) Track-out prevention and control measures: a) Removal of any visible track-out from a paved public road at any location where vehicles exit the construction site via wet sweeping or a HEPA filter equipped vacuum device at the end of the work day or at least once per day. b) Installation of one or more of the following track-out prevention measures: i. A gravel pad designed using good engineering practices to clean the tires of exiting vehicles; ii. A tire shaker;	The applicant shall prepare and implement an Asbestos Dust Mitigation Plan as ~~is~~ described in Mitigation Measure 3.8-5. The Plan must be approved by LCAQMD prior to ~~is~~ issuance of grading permits. ~~and~~ The Plan shall be implemented during construction. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	LCAQMD / County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
iii. A wheel wash system; iv. Pavement extending for not less than 50 consecutive feet from the intersection with the paved public road; or v. Other measure that is deemed by the LCAQMD ~~Lake County APCD~~ as effective as the measures listed above. 2) Active storage piles will be adequately wetted or covered with tarps. 3) Control for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days shall have one or more of the following done: a) Keep the surface adequately wetted; b) Establishment and maintenance of surface crusting that is sufficient to satisfy the test in subsection (h)(6) of the Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations; c) Application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations; d) Covering with tarp(s) or vegetative cover; e) Installation of wind barriers of 50 percent porosity around three sides of a storage pile; f) Installation of wind barriers across open areas; or g) Other measure that is deemed by the LCAQMD ~~Lake County APCD~~ as effective as the measures listed above. 4) Control for traffic on on-site unpaved roads, parking lots, and staging areas shall include the following: 1) A maximum vehicle speed limit of 15 mph or less; and 2) One or more of the following: i. Watering every two hours of active operations or sufficiently often to keep the area adequately wetted; ii. Applying chemical dust suppressants consistent with manufacturer's directions; iii. Maintaining a gravel cover with a silt content that is less than 5 percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of 3 inches on the surface being used for travel; or iv. Other measure that is deemed by the LCAQMD ~~Lake County APCD~~ as effective as the measures listed above. 5) Control for earthmoving activities shall include one or more of the following: a) Pre-wetting the ground to the depth of anticipated cuts;			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	b) Suspending grading operations when wind speeds are high enough to result in dust emissions crossing the project boundary despite the application of dust mitigation measures; c) Application of water prior to any land clearing; or d) Other measure that is deemed by the LCAQMD ~~Lake County APCD~~ as effective as the measures listed above. 6) No trucks shall be allowed to transport excavated material offsite until the following are performed: a) Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and b) Loads are adequately wetted and either: i. Covered with tarps; or ii. Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment. 7) Upon completion of the Proposed Project, disturbed surfaces shall be stabilized using one or more of the following methods: a) Establishment of a vegetative cover; b) Placement of at least 3 inches of non-asbestos-containing material; c) Paving; d) Any other measure sufficient to prevent wind speeds of 10 mph or greater from causing visible dust emissions. 8) If deemed applicable by LCAQMD ~~Lake County APCD~~, an air quality testing component shall be developed and contain the following: a) Type of air sampling device(s); b) Siting of air sampling device(s); c) Sampling duration and frequency; and d) Analytical method. 9) A Site-Specific Health and Safety Plan shall be a component of the overall Asbestos Dust Mitigation Plan. The Health and Safety Plan shall include measures to protect all onsite workers and residents throughout all phases of the project.			
3.8-6	**Conduct Shallow Groundwater Characterization Plan for Construction of Off-Site Water Pipeline** Prior to obtaining a dewatering permit associated with trenching activities for the off-site water pipeline in Butts Canyon Road, a Shallow Groundwater Characterization	Prior to obtaining a dewatering permit associated with trenching activities for the off-site	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	Plan will be developed in consultation with the CVRWQCB. The Shallow Groundwater Characterization Plan will outline the appropriate number of shallow groundwater samples to be collected and the analytes to be assessed in order to determine appropriate dewatering methods during pipeline construction. The results of the Shallow Groundwater Characterization Plan shall be provided to the Lake County Division of Environmental Health and CVRWQCB. Should the results indicate the presence of contaminated groundwater, an individual dewatering permit shall be obtained from the CVRWQCB, and all conditions adhered to Methods for disposal of contaminated groundwater may include but are not limited to transporting the water to an approved facility for treatment and discharge in accordance with NPDES permit requirements.	water pipeline in Butts Canyon Road, the applicant shall prepare and implement a Shallow Groundwater Characterization Plan will be developed in consultation with the CVRWQCB is described in Mitigation Measure 3.8-6. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)		
3.9	**Hydrology and Water Quality**			
3.9-1	**Storm Water Pollution Prevention Plan** Consistent with the requirements of the State Water Resources Control Board General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ), the Applicant shall undertake the Proposed Project in accordance with a project-specific SWPPP. The CVRWQCB, the primary agency responsible for protecting water quality within the project area, is responsible for reviewing and ensuring compliance with the SWPPP. The recommended BMPs, subject to review and approval by the CVRWQCB, include the measures listed below. However, the measures themselves may be altered, supplemented, or deleted during the CVRWQCB's review process, since the CVRWQCB has final authority over the terms of the SWPPP. *General Construction* a. Schedule and sequence construction activities to minimize the areal extent and duration of site disturbance at any time. b. Provide work exclusion zones outside of work areas to protect vegetation and to minimize the potential for removing or injuring trees, roots, vines, shrubs, and grasses. c. Avoid disturbance of riparian and wetland vegetation by installing flagging and temporary fencing.	The applicant shall obtain a project-specific SWPPP prior to ground disturbing activities and provide the County with verification of compliance with the permit. (Use Permit COA)	County	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
d. Use berms, ditches, or other structures to divert natural surface runoff around construction areas. e. Install weed-free fiber rolls, straw-wattles, coir logs, silt fences, or other effective devices along drainage channels to prevent soils from moving into creeks. f. Locate stockpiles at least 50 feet from creeks, drainage channels, and drainage swales, whenever possible. g. Install fiber rolls, straw-wattles, or silt fencing between stockpiles and creeks, drainage channels, and drainage swales. h. After excavating any open-cut slopes, install slope protection measures such as fiber rolls, drainage ditches, or erosion control fabrics to minimize the potential for concentrated surface runoff to cause erosion. i. Implement wind erosion or dust control procedures consisting of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. The contractor may choose to cover small stockpiles or areas as an alternative to applying water or other dust palliatives. j. Control water application rates to prevent runoff and ponding. Repair leaks from water trucks and equipment immediately. *Hazardous Materials* k. Keep hazardous materials and other wastes at least 100 feet from wetlands, creeks, drainage channels, and drainage swales, whenever possible. l. Store hazardous materials in areas protected from rain and provide secondary containment to prevent leaks or spills from affecting water quality. m. Implement the following hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants: ▪ Develop and implement strict on-site handling rules to keep construction and maintenance materials out of drainages and waterways. ▪ Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility. ▪ Maintain controlled construction staging, site entrance, concrete washout, and fueling areas a minimum of 100 feet from stream channels or wetlands whenever possible to minimize accidental spills and runoff of contaminants in stormwater.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	▪ Prevent raw cement; concrete, or concrete washings; asphalt, paint, or other coating material; oil or other petroleum products; or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses. *Dewatering and Treatment Controls* n. Prepare a dewatering plan prior to excavation. o. Impound dewatering discharges in sediment retention basins or other holding facilities to settle the solids and provide treatment prior to discharge to receiving waters as necessary to meet Basin Plan water quality objectives. p. In order to meet the Basin Plan water quality objectives, install turbidity barriers and collect and treat drainage and runoff water from any part of the work area that has become turbid with eroded soil, silt, or clay to reduce turbidity prior to discharge to receiving waters. *Temporary Stream Crossings* q. Construct temporary stream crossings using a temporary bridge with gravel approach ramps or temporary culverts backfilled with clean gravel/cobbles and topped with a gravel road base. r. Do not place earth and rockfill material in stream channels. s. Upon completion of the Proposed Project, remove or stabilize temporary stream crossings with banks graded to a stable angle.			
3.9-2	**Aggregate/Concrete Monitoring and Reporting Program** The Applicant shall undertake the proposed aggregate and concrete production facility in accordance with permit requirements of the CVRWQCB. The Applicant shall submit a Report of Waste Discharge to the CVRWQCB. The Applicant shall comply with monitoring requirements and discharge prohibitions identified by the CVRWQCB. The recommended discharge prohibitions, subject to review and approval by the CVRWQCB, include the specifications listed below. a. Aggregate wash water must be retained within designated operational area and may not be allowed to be percolated or disposed on land or to drainages. b. Aggregate wash and wastewater ponds must be lined and meet storage capacity requirements, maintain adequate freeboard, and be designed to protect ponds from inundation due to floods with a 100-year return frequency. c. Commingling aggregate wastewater and concrete wastewater is prohibited.	The applicant shall obtain a project-specific SWPPP prior to ground disturbing activities and provide the County with verification of compliance with the permit. (Use Permit COA)	County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	d. Construct continuous interior asphalt or concrete berms around batch plant equipment (mixing equipment, silos, concrete drop points, conveyor belts, admixture tanks, etc.) to facilitate proper containment and cleanup of releases. Rollover or flip top curbs or dikes should be placed at ingress and egress points. e. Direct runoff from the paved or unpaved portion of the concrete batch plant into a sump and pipe to a lined washout area or dewatering tank. f. All wastewater that contains residual concrete shall only be discharged to the concrete wastewater system (e.g., primary settling basin and secondary storage pond, or engineered alterative). g. Washout of concrete trucks must be conducted in a designated area with drainage to the concrete wastewater system. h. All stockpiled wastes and products shall be managed to prevent erosion of sediment to surface water drainage courses. i. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner consistent with Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.			
3.9-3	**Off-Site Groundwater Well Safe Yield Analysis and Monitoring** Prior to the issuance of an encroachment permit or grading permit for installation of off-site water line along Butts Canyon Road for the use of the off-site agricultural well for water supply on the Guenoc Valley Site, the Applicant shall provide to the County an analysis that defines the safe yield. The safe yield must be set to meet the following performance criteria: avoid drawdown of groundwater beyond 300 feet of the well. The analysis must incorporate pump testing of the well, and be certified by a Registered Professional Engineer or Registered Geologist. Groundwater pumping rates and durations must be limited to the safe yield determined in the hydraulic analysis. The safe yield analysis shall identify the location of one or more monitoring wells necessary to evaluate compliance with the performance criteria. Monitoring of groundwater pumping rates and durations and groundwater levels shall be performed quarterly for the first ten years of use. The Applicant shall be required to submit annual monitoring reports that provide quarterly groundwater pumping and groundwater level data to the Lake County Health Services Department for the first ten years of use. In the event these reports show an impact to the groundwater levels, the Lake County Health Services Department and the Applicant shall develop a Groundwater Management Plan in coordination with a geotechnical engineer for approval by the Community Development Director.	Prior to the issuance of an encroachment permit or grading permit for installation of off site water line along Butts Canyon Road for the use of the off-site agricultural well for water supply on the Guenoc Valley Site, the Applicant shall provide to the County an analysis that defines the safe yield as described in Mitigation Measure 3.9-3 and submit required monitoring reports as well as cooperate with the County to prepare a Groundwater Management Plan as described in	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
		Mitigation Measure 3.9-3. (Use Permit COA)		
3.9-4	**Floodplain Analysis** Prior to the issuance of a grading permit for any development within 1,500 feet of Bucksnort Creek or Putah Creek, the Applicant shall provide to the County a floodplain analysis certified by a Registered Professional Engineer. This analysis shall define the extent of floodwaters (floodplain) and the elevations associated with 100-year flood event within proposed development areas along these creeks. If, due to the performed analyses, the changes in the effective Floodplain Maps and Flood Insurance Studies occur, the Developer will apply for a Letter(s) of Map Revision with the Federal Emergency Management Agency. Prior to the issuance of a grading permit for development of the Middletown Housing Site, including off-site improvements, the Applicant shall provide to the County a floodplain analysis certified by a Registered Professional Engineer. The analysis shall identify any changes in the extent of the 100-year floodplain or changes in flood depths within 750 feet of the Middletown Housing Site that would occur as the result of the proposed housing development and associated improvements. Drainage features shall be incorporated into the project design to ensure that the development will not increase the extent or depth of flooding in adjacent areas. These features may include the additional of drainage swales or larger detention basin capacity within the site.	The Applicant shall provide to the County a floodplain analysis meeting the requirements of this Mitigation Measure with applications for any grading permit for development within 1,500 feet of Bucksnort Creek or Putah Creek, along with Letter(s) of Map Revision with the Federal Emergency Management Agency if required. (Use Permit COA) The Applicant shall provide to the County a floodplain analysis meeting the requirements of this Mitigation Measure with applications for any grading permit for development within the Middletown Housing Site.	Applicant	County
3.9-5	**Inundation Mapping** Prior to the issuance of a grading permit for any development within 4,000 feet of Bucksnort Creek or Putah Creek, the Applicant shall provide to the County inundation maps of Detert Reservoir (Guenoc Lake), Langtry Lake, Bordeaux Lake, Burgundy Lake, and McCreary Lake dams that have been approved by Division of Safety of Dams	The Applicant shall provide to the County inundation maps of Detert Reservoir (Guenoc Lake), Langtry Lake, Bordeaux Lake, Burgundy Lake, and McCreary Lake dams that have been approved by DSOD with applications for	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
		any grading permit for development within 4,000 feet of Bucksnort Creek or Putah Creek. (Use Permit COA)		
3.9-6	**Incorporation of Floodplains and Dam Inundation Zones in Site Plans** a. All site plans submitted to the County for the review of any development within 1,500 feet of Bucksnort Creek or Putah Creek shall identify the extent of the 100-year floodplain within proposed development areas. The 100-year floodplain shown shall be as certified by a Registered Professional Engineer. b. All site plans submitted to the County for the review of any development within 4,000 feet of Bucksnort Creek or Putah Creek shall identify the extent of the inundation zones of Detert Reservoir (Guenoc Lake), Langtry Lake, Bordeaux Lake, Burgundy Lake, and McCreary Lake dams within proposed development areas. Maximum inundation depths shall be identified on the site plans. c. For any facilities identified within the 100-year floodplain or inundation zone, including at the Guenoc Valley, Middletown Housing ,and off-site well sites, any hazardous materials or materials that may pollute flood waters such as, but not limited to fuel, oil, chemicals, pesticides, fertilizer, or cleaning products, shall be adequately protected from release in flood waters or relocated out of the 100-year floodplain and inundation zone.	Applicant to prepare site plans meeting the requirements of this Mitigation Measure and submit to County with applications for development as described in this Mitigation Measure. County to review and make determinations and require appropriate conditions of approval prior to any approvals of such conditionally permitted uses. (Use Permit COA)	Applicant/County	County
3.10	**Noise**			
3.10-1	**Restrict Construction Times in Areas in Proximity to Sensitive Receptors** Construction activities within 1 mile of occupied residential uses not within the Guenoc Valley Site, and where feasible, all construction deliveries, shall be restricted to occur between the hours of 7:00 A.M. and 7:00 P.M.	County to incorporate this restriction into the Conditions of Approval of the project. Applicant to add these requirements to construction contracts. (Use Permit COA)	Applicant/County	County
3.10-2	**Construction Noise Reduction** The following measures shall be implemented to reduce impacts of construction noise. ▪ To reduce construction noise levels at off-site sensitive receptors as well as	County to incorporate this restriction into the Conditions of Approval of the project. Applicant to	Applicant/County	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
wildlife within the site, construction contractors shall be required to implement the following measures. These measures would be incorporated into the construction plan: o Equipment and trucks used for project construction shall utilize the best available noise control techniques, such as improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds. o Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, to achieve a reduction of 5 dBA. Quieter procedures will be used, such as drills rather than impact equipment. o Stationary noise sources shall be located as far from adjacent receptors as possible, and they will be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures. o Locate fixed construction equipment such as compressors and generators as far as possible from sensitive receptors. Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power construction equipment. ▪ Designate a disturbance coordinator and conspicuously post this person's number around the project site and in adjacent public spaces. The disturbance coordinator shall receive all public complaints about construction noise disturbances and shall be responsible for determining the cause of the complaint, and implement any feasible measures to be taken to alleviate the problem. ▪ Well Drilling and Pipeline Construction Noise (Off-Site Infrastructure Improvement only): o Noise curtains shall be utilized during drilling of the well if, at the time of well construction, homes are occupied within 1,000 feet of the well.	add these requirements to construction contracts. (Use Permit COA)		

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
3.10-3	**Future Phases Noise Control** Prior to County approval of conditionally permitted uses which include more substantial exterior noise sources such as amphitheaters and event venues, a noise study shall be prepared by an acoustical engineer that identifies the necessary measures required to achieve compliance with the County's Noise Level Performance Standards at the nearest sensitive receptors. The County shall require that the measures identified in the noise study are implemented as a condition of approval of conditional use permits.	(Use Permit COA)	Applicant/County	County
3.10-4	**Restrict Aircraft and Non-Emergency Helicopter Flight Times** Inbound and outbound flight times to and from the float dock and helicopter landing pads shall be limited to the hours of 7 A.M. to 7 P.M. every day of the week with exceptions for emergency situations only.	County to incorporate this restriction into the Conditions of Approval of the project. (Use Permit COA)	County	County
3.13	**Transportation**			
3.13-1	**Implement Improvements at SR-29 and Butts Canyon Road** Prior to issuance of grading permits for Phase 1, the Developer shall execute and deliver to Caltrans an agreement to mitigate the impacts to the intersection of SR-29 and Butts Canyon Road by paying to Caltrans the cost of the following: State Route 29 at Butts Canyon Road (Intersection #7) – Installation of an intersection control improvement—roundabout or three-way traffic signal with crosswalks, depending on results of an Intersection Control Analysis (ICE).	Applicant to enter into an agreement with Caltrans that meets the requirements of this Mitigation Measure prior to issuance of grading permits for Phase 1. (Use Permit COA)	Applicant	County
3.13-2	**Pay Fair Share towards Lake County Intersection Improvements** The Developer shall execute and deliver to Caltrans an agreement that requires payment, or provides bonding for, a proportionate share of the construction costs of the following improvements. The timing for collection of the fees and implementation of the improvements will be at the discretion of Caltrans as the lead agency. ▪ State Route 29 at Hartmann Road (Intersection #5) – Expansion of the existing roundabout or other intersection control improvement, depending on the results of an Intersection Control Analysis (ICE; required under Baseline plus Phase 1). ▪ SR-29 at Spruce Grove Road South (Intersection #3) – Installation of an intersection control improvement—roundabout or three-way traffic signal with crosswalks, depending on results of an ICE (required under cumulative plus Phase 1).	Applicant to enter into an agreement with Caltrans that meets the requirements of this Mitigation Measure prior to recordation of Final Maps. (TM COA)	Applicant	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	▪ SR-29 at Hidden Valley Road (Intersection #4) – Installation of an intersection control improvement, roundabout or four-way traffic signal with crosswalks, depending on results of an ICE (required under cumulative plus Phase 1).			
3.13-3	**Conduct Traffic Study and Implement Mitigation for Future Phases** As specified in the Development Agreement, an updated Project Level traffic impact analysis shall be completed prior to approval of future Project phases to determine if future phases would conflict with adopted circulation plans and policies. Improvement measures determined for future phases shall be coordinated with applicable jurisdictional agencies as appropriate, including Lake County, Napa County, City of Calistoga, and Caltrans.	Applicant to prepare updated project-level traffic impact analysis and submit to County with applications for future phases. County to review and make determinations/coordinate with other agencies prior to any approvals of future phases.	Applicant/County	County
3.13-4	**Implement a Transportation Demand Management Program** Prior to issuance of occupancy permits for Phase 1, the Applicant shall develop and submit to the County a final Transportation Demand Management Program for the Proposed Project. The TDM plan shall identify all feasible measures to reduce the VMT per capita of the Proposed Project to below the regional average to the extent feasible. The goal of the TDM Program shall be a 15 percent in reduction in the VMT generated by the Proposed Project. The County shall verify compliance with the plan prior to issuance of occupancy permits for the Proposed Project. Additionally, the Applicant shall undertake annual monitoring and reporting of the TDM Plan, in accordance with Section 1.4 of Appendix TDM. Section 1.4 of Appendix TDM includes provisions regarding the timing, scope, and implementation of monitoring and reporting requirements, and requires the Applicant to adjust the TDM plan based on the monitoring results. The following strategies shall be identified within the TDM plan to reduce the VMT generated by the Proposed Project: ▪ *Private Shuttle Service* – There are currently no plans for Lake Transit to run buses along Butts Canyon Road near the project site and the nearest bus stops are about six miles away in Middletown. While it is possible Lake Transit might consider adding a stop on Butts Canyon Road in the future to serve project employees, it is our understanding that there is no funding available for it at this time. Alternatively, the project shall provide a frequent direct weekday shuttle service specifically for employees during the peak morning and evening commute periods. This could operate between the	Applicant to prepare TDM Program compliant with this Mitigation Measure and submit to County. County to review and approve prior to issuance of the first certificate of occupancy. (Use Permit COA)	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
project site any and off-site work force housing with a stop at the Lake Transit bus transfer point in Middletown. Please note that shuttles would need be fully accessible to passengers using wheelchairs. It is recommended the applicant also explore providing a real-time smart-phone app that tracks arrivals to make shuttle use more reliable and convenient. Shuttle service for patrons of the project has been assumed as part of this analysis. The current assumption is that regular shuttle service to and from San Francisco and Sacramento will accommodate approximately 40% of resort patrons. The management shall monitor and provide adequate shuttle headways to accommodate all employees and guests who wish to use the shuttle services. ▪ *On-call Dial-A-Ride Service* – The management shall provide free on-call dial-a-ride transportation service connecting the Guenoc Valley Site to the community of Middletown and to regional transit services. The service shall be made available to the general public within a 15 mile radius of the site, in addition to employees, patrons, and residents of the Proposed Project. ▪ *Carpool and Ride-Matching Assistance Program* – Although on-site employee parking is limited, the management shall offer personalized ride-matching assistance to pair employees interested in forming commute carpools. As an enhancement, management may consider using specific services such as ZimRide, TwoGo by SAP, Enterprise RideShare, 511.org RideShare or the equivalent. ▪ *Preferential Parking for Carpoolers/Vanpoolers* – The management shall offer preferential carpool parking for eligible commuters. To be eligible for carpool parking, the carpool shall consist of three or more people. The number of preferential parking spaces will be based on the number of participants in the program. The management shall monitor and provide adequate carpool spaces to meet or exceed potential demand. ▪ *Dedicated Parking Spaces for Car Share Services* – The management will set aside parking spaces to be dedicated for use by car share services to serve employees. This is expected to reduce parking demand and GHG emissions associated with the project by providing more flexibility for employees who otherwise utilize alternate modes. The availability of car share services within a project can potentially reduce the demand for employees to own their own cars. Car share services allow for employees to make midday trips without needing to have their own personal vehicle on site. The availability of car share services within a project can potentially reduce the demand for			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
employees to commute by car or even own their own cars. In addition to dedicating parking spaces for car share services for employees, the management may consider dedicating additional parking spaces for car share vehicles dedicated for guest use, if demand exists. The availability of such cars makes traveling to the Project site without a personal vehicle more appealing for some guests The management shall monitor and provide adequate car share spaces to meet or exceed potential demand. ▪ *On-Site Sales of Transit Passes* – The building management shall offer direct on-site sales of Lake County Transit Authority transit passes purchased and sold at a bulk group rate to employees. Although Lake Transit Authority does not currently operate transit service to the site directly, some employees who live in the greater Lake County and surrounding areas may take public transit to Middletown and then could take the private shuttle to the Project site. Offering on-site transit pass sales reduces the barrier of purchasing transit passes and provides a bulk discount to employees, further encouraging transit use as a primary commute mode. ▪ *TDM Coordinator* – Management shall designate a "*TDM coordinator*" to coordinate, monitor and publicize TDM activities. The effectiveness of providing a TDM Coordinator on auto mode share is uncertain but is generally seen as a supportive measure that is beneficial to implement the other TDM measures. The Project sponsor may instruct the management company to designate their on-site manager as the TDM coordinator, or they may designate someone else. ▪ *Transportation and Commute Information Kiosks* - An information board or kiosk will be located in a common gathering area (e.g., lobby, employee entrance, break, or lunch room). The kiosk will contain transportation information, such as Emergency Ride Home (ERH), transit schedules, bike maps, and 511 ride- matching. Information will be updated periodically by the designated TDM Coordinator. ▪ *Tenant Performance and Lease Language – TDM Requirements* - For all tenants, the applicant will draft lease language or side agreements that require the identification of a designated contact responsible for compliance and implementation of the TDM program. ▪ *Tenant/Employer Commute Program Training* - As needed and applicable, the applicant or property management will provide individual tenants of the project with initial TDM (and commute) program training, and commute			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	program start- up assistance. The overarching goals of this support function are to reduce commute trips for employees and assist with employee marketing and outreach. ▪ *Employee Transportation Brochure* - All employees will be provided with an Employee Transportation Brochure regarding the Commute Program. This brochure will include (but not be limited to) information about shuttle service, carpool parking, transit opportunities, ride-matching services, bicycle routes, and emergency rides home.			
3.13-5	**Pay a Fair Share towards Pedestrian and Bicycle Improvements** Prior to issuance of occupancy permits for Phase 1 and future phases, the Applicant shall enter into an agreement with the Lake City/County Area Planning Council to pay a proportionate impact fee towards pedestrian and bicycle improvement projects in Lake County and Middletown.	Applicant to enter into an agreement with Lake City/County Area Planning Council that meets the requirements of this Mitigation Measure prior to issuance of the first certificate of occupancy. (Use Permit COA)	Applicant/ Lake City/County Area Planning Council	County
3.16	**Wildfire**			
3.16-1	**Fire Prevention during Construction** Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. During construction, staging areas and areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak. Additionally, the following measures shall be required on the Guenoc Valley Site: ▪ Every work area shall have one round tip shovel, and one water type fire extinguisher accessible within 10 feet. ▪ Portable Fire Extinguisher rated at a minimum of 4/ABC or larger shall be in every vehicle, or piece of equipment except for privately owned vehicles. ▪ In general, during fire season, mowing of vegetation should be completed prion to noon.	Applicant to incorporate these measures into the Wildfire Prevention Plan and obtain County approval of revised Wildfire Prevention Plan prior to approval of Grading or Improvement Plans- (whichever occurs first). Wildfire Prevention Plan shall be issued to every contractor and construction crew. (Use Permit COA)	Applicant/County	County

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	▪ Hot Work shall have Fire Watch in place during and 30 minutes after. ▪ Persons activating 911 shall know where they are on property to give directions. ▪ All persons shall have access to a cell phone or radio system to activate 911. ▪ Persons activating 911 shall arrange an escort from the entrance at 22000 Butts Canyon Road to the location of the emergency for the first arriving emergency apparatus. ▪ Each construction site shall be provided with a hand held pressurized air horn such as a marine device (or similar) to alert others of an emergency. ▪ <u>A certified firefighter shall be available on-site during construction.</u>			
3.16-2	**Post-Wildfire Emergency Response** After a wildfire, response measures shall include actions to minimize slope instability and installation of warning signs. Immediate actions may include identifying impending threats to safety and property, checking all culverts to ensure proper drainage and installing erosion control mats and fiber rolls around steep areas. There shall also be long-term recovery and restoration actions to rehabilitate burned areas that have the potential to impact safety and property. The post wildfire emergency response plan (PWERP) will also include standards for a five-year long-term recovery and restoration plan to rehabilitate any burned areas that have the potential to impact safety and property. These measures could include restoring burned habitat, reforestation, mulching, and treating noxious weed infestations. This would be prepared by a qualified personnel with burned area restoration expertise and in coordination with and to the approval of the Lake County Department of Environmental Health.	Applicant to incorporate these measures into the Wildfire Prevention Plan and obtain County approval of revised Wildfire Prevention Plan prior to approval of Grading or Improvement Plans- (whichever occurs first). (Use Permit COA)	Applicant/County	County
<u>3.16-3</u>	**<u>Prepare South Lake County Evacuation Traffic Management Plan to Reduce Near-Term Evacuation Times, Incorporate in Updated Lake County Emergency Operations Plan (EOP), and Implement Evacuation Traffic Management Measures</u>** <u>The applicant shall fund the administrative costs for preparation and adoption of a South Lake County Evacuation Traffic Management Plan, which shall be adopted prior to the issuance of the first certificate of occupancy for Phase 1. Lake County Office of Emergency Services (OES) shall be the Lead Agency for adoption of the plan and implementation of the traffic management measures, working in collaboration with other responsible agencies as noted below. The Evacuation Traffic Management Plan strategies, in combination with other mitigation measures described below, shall</u>	<u>Applicant shall prepare the South Lake County Evacuation Traffic Management Plan compliance with this Mitigation Measure and submit to County OES. County to review and adopt prior to issuance of the first certificate of occupancy.</u>	<u>Applicant/County</u>	<u>County</u>

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
achieve a 15-minute reduction in total evacuation times for a full evacuation of South Lake County, thereby reducing the 30 minutes in added overall evacuation time due to Phase 1 Project evacuation trips. The Evacuation Traffic Management Plan shall be subject to the approval of the Lake County OES, the Lake County Sheriff, the South Lake County Fire Protection District, Caltrans, and the California Highway Patrol (CHP). The approved version of the South Lake County Evacuation Traffic Management Plan shall be incorporated into an updated version of the Lake County Emergency Operations Plan (Lake County Office of Emergency Services) and the Lake County Community Wildfire Protection Plan (CWPP), with evacuation management strategies and improvement measures to address major bottlenecks in the South Lake County evacuation network. These measures shall include but will not be limited to the following: ▪ *SR 29 Evacuation Traffic Reduction Measure* – at the time of an evacuation order for a full South Lake County evacuation and as determined by the Incident Commander and County Sheriff, CHP and/or other police enforcement personnel shall implement measures to stop through traffic on SR 29 through the evacuation area such as stopping northbound SR 29 traffic at Tubbs Lane in Napa County and southbound SR 29 traffic at SR 53 in Lower Lake, thus reducing traffic levels on SR 29 during an evacuation. This measure would prevent inbound traffic on SR 29 from accessing the South Lake County evacuation network but would allow outbound evacuating vehicles to exit via SR 29. ▪ *Hidden Valley Lake Evacuation Traffic Management Measure* – at the time of an evacuation order for a full South Lake County evacuation and as determined by the Incident Commander and County Sheriff, Lake County Sheriff and/or other police enforcement personnel shall implement traffic management for the Hidden Valley Lake community that addresses bottlenecks at the intersections of SR 29 and Hidden Valley Lake community egress roads. The officers would direct Hidden Valley Lake evacuating traffic away from the direction of the wildfire and in a coordinated direction to reduce or avoid conflicting movements at the intersections. ▪ *Guenoc Valley Project SR 29 Evacuation Traffic Reduction Measure* – at the time of an evacuation order for a full South Lake County evacuation, evacuating project traffic shall be directed to alternate routes to SR 29. Unless precluded by wildfire, evacuating project traffic shall be directed to the planned project egress intersections on Butts Canyon Road and to the south on Butts Canyon Road. This measure would not apply if Butts Canyon Road were closed due to wildfire. In that	(Use Permit COA)		

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	event (such as under Scenario B), evacuating project trips would be directed to travel north on Butts Canyon Road (or via Grange Road as needed), south on SR 29 to Middletown, and then north on SR 175 (presuming that SR 29 to the south over Mt. St. Helena was also closed). Additional details are described for this measure in Mitigation Measure 3.16-4. ▪ *SR 29 Traffic Signal Evacuation Operational Enhancement Measures* – a description of the traffic signal evacuation operational enhancement measures described in Mitigation Measure 3.16-5 shall be included in the Updated Lake County EOP.			
3.16-4	**Reduce Evacuation Time Impacts on SR 29 by Minimizing Project-Related Evacuation Traffic on SR-29** ▪ Prior to occupancy of any project uses, the applicant shall install variable message signs at the outbound lanes of the three project egress roads that connect to Butts Canyon Road and Grange Road. Lake County shall be the Lead Agency to oversee installation of the variable message signs within the project site. The variable message signs shall be connected to the on-site Emergency Response Center so that evacuation-related messages can be controlled by fire personnel managing the evacuation. At the time of an evacuation order for a full South Lake County evacuation, evacuating project traffic shall be directed to alternate routes to SR 29. Unless precluded by wildfire, evacuating Project traffic shall be directed to the planned egress intersections on Butts Canyon Road and to the south on Butts Canyon Road. ▪ The roundabout that will be constructed by the project applicant at the SR 29/Butts Canyon Road intersection shall include a southbound bypass lane to increase intersection capacity.	Applicant shall complete improvements prior to issuance of the first certificate of occupancy. (Use Permit COA)	Applicant	County
3.16-5	**Implement SR 29 Traffic Signal Evacuation Operational Enhancement Measures** ▪ Prior to issuance of the first certificate of occupancy for any Project uses, the applicant shall design, obtain permits for, and install improvements to the signalized intersection of SR 29/SR 53 intersection in Lower Lake and the two signalized intersections on SR 29 in Middletown (SR 175 and Wardlaw Street). The improvements would be funded by the project applicant who shall obtain permits from Caltrans and/or Lake County. The variable message signs and traffic signal controllers shall be connected to Caltrans and Lake County traffic operations staff so they can be managed remotely during an evacuation. Improvements at the SR 29/SR 53 intersection in Lower Lake shall include extending the length of the northbound left turn pocket by 175 feet to a length of approximately 400 feet	Applicant shall obtain permits for and complete improvements prior to issuance of the first certificate of occupancy. (Use Permit COA)	Applicant, County, Caltrans	County, Caltrans

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	which could be accomplished by restriping the existing striped median, installing variable message signs on three approaches (i.e., eastbound, southbound, and westbound), and developing and installing wildfire signal timing plans that can be implemented by County staff during a wildfire that significantly extend maximum green times on the northbound approach. Improvements at the two intersections on SR 29 in Middletown include developing and installing wildfire signal timing plans that can be implemented by County staff during a wildfire that significantly extend maximum green times on the northbound and/or southbound approaches depending on conditions.			
3.16-6	**Provide Dedicated Project Evacuation Shuttles for Phase 1 Hotel Uses** ▪ Prior to the issuance of the first certificate of occupancy for any Project hotel uses, the applicant shall acquire and provide storage for dedicated evacuation shuttle buses that can serve 45 percent of all guests (i.e., six 20-person buses at full occupancy of all Phase 1 hotel uses). Applicant shall identify and provide signage for bus stop evacuation pick-up zones at all hotels, and identify evacuation routes and shelter locations. Applicant shall designate shuttle drivers (hotel staff) and provide ongoing training for staff and drivers for the shuttle buses. ▪ The Project shall obtain, maintain, and store dedicated evacuation shuttles for hotel guests, as individual hotel projects are completed, at a rate of 0.9 shuttle bus seats per room. If shuttle buses with a 20-person capacity are acquired, a total of six dedicated evacuation shuttle buses for hotel guests would be provided for the 127 hotel units when all Phase 1 hotels are completed. The Project shall train employees to operate the shuttles and be aware of alternative routes to designated shelter locations.	Applicant shall acquire and provide storage for evacuation shuttle buses as required by Mitigation Measure prior to issuance of the first certificate of occupancy (Use Permit COA)	Applicant	County
3.16-7	**Updated South Lake County Evacuation Traffic Management Plan** As part of the future project-level CEQA evacuation assessment of full build-out of the Project and prior to issuance of the first certificate of occupancy for any uses beyond those included in Phase 1, the Project shall develop evacuation time reduction strategies to reduce forecast evacuation levels in the Evacuation Area, which the Project will be required to implement after occupancy of such uses. The measures would include any combination of demand, supply, and/or communication strategies as described below such that (1) the added evacuation time estimates (ETEs) (i.e., time until the last evacuee leaves the Evacuation Area) due to Project full build-out evacuation trips shall not exceed one hour beyond the total cumulative no project ETEs for a full evacuation of the Evacuation Area under either Scenario A or B, and (2) the	Applicant shall include in application for SPD for future phases. County will ensure that this mitigation is implemented prior to approval of SPDs for future phases.	Applicant/County	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
estimated number of added Project full build-out evacuation trips on Butts Canyon Road shall not exceed its evacuation capacity. Prior to issuance of the first certificate of occupancy for any use beyond those included in Phase 1, the applicant shall fund the administrative costs for preparation and adoption of a South Lake County Evacuation Plan (Evacuation Plan) that includes strategies to reduce overall cumulative ETEs for the Evacuation Area as described above, and the Evacuation Plan shall have been approved by the Lake County Office of Emergency Services (OES), the Lake County Sheriff, the South Lake County Fire Protection District, and the California Highway Patrol (CHP). Prior to the approval of the Evacuation Plan, a project-level CEQA analysis shall be conducted that analyzes the impacts of any proposed use beyond those included in Phase 1 on evacuation routes, and confirms that the strategies included in the Evacuation Plan meet the performance standards described above related to added ETEs and the evacuation capacity of Butts Canyon Road. The approved version of the South Lake County Evacuation Plan shall be incorporated into an updated version of the Lake County EOP (Lake County Office of Emergency Services). ▪ *Demand Strategies* – demand-side strategies that may reduce evacuation time estimates (ETEs) and evacuation trips include vehicle reduction and phased evacuation measures. A vehicle reduction strategy may include a combination of land use program reductions and/or measures to increase vehicle occupancy (i.e., additional shuttles). A community-wide policy encouraging households to limit the number of evacuating vehicles to one per household is another demand reduction strategy that could help reduce overall evacuation times. Reduction of the number of housing units shall be implemented as a strategy only if implementation of all other feasible demand-side, supply-side, and communication strategies would not reduce ETEs or exceedance of the capacity of Butts Canyon Road sufficiently to meet the performance standards described above. ▪ *Supply Strategies* – supply-side strategies that may reduce ETEs include road lane widening, shoulder widening to provide an additional egress lane, contraflow lane operations (i.e., allowing two lanes of outbound traffic, if needed), and intersection traffic control measures. ▪ *Communication Strategies* – communication strategies that may reduce ETEs include early warning systems, enhanced communication systems, and dynamic route guidance and monitoring.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	The above strategies are programmatic in nature and may be refined following the additional project-level CEQA analysis described above based on more specific details regarding future Project phases that will be included in application submittals for such phases, evolving evacuation analysis methods, any future changes to roadway infrastructure and/or capacity, and/or new or enhanced evacuation mitigation strategies.			
3.16-8	**Provide Dedicated Project Evacuation Shuttles for Full Build-out Hotel Uses** Consistent with Mitigation Measure 3.16-6, prior to the issuance of the first certificate of occupancy for any new hotel uses beyond those included in Phase 1, the applicant shall acquire and provide storage for dedicated evacuation shuttle buses that can serve 45 percent of all guests. Applicant shall identify and provide signage for bus stop evacuation pick-up zones at all hotels and identify evacuation routes and shelter locations. Applicant shall designate shuttle drivers and provide ongoing training for staff and drivers for the shuttle buses, including information on alternative evacuation routes and shelter locations. If shuttle buses with a 20-person capacity are acquired, a total of up to eighteen dedicated evacuation shuttle buses for hotel guests would be provided for up to 400 hotel units when all hotels are completed.	Applicant shall include in application for SPD for future phases. County will ensure that this mitigation is implemented prior to approval of SPDs for future phases.	Applicant/County	County
3.16-9	**Implement Operational Wildfire Risk Reduction Activities** The Applicant and/or HOA shall ensure that the following wildfire risk reduction measures are conducted throughout the Guenoc Valley Site in accordance with the Wildfire Prevention Plan: ▪ **HOA contract with a wildfire expert for Project duration to support homeowner education and response planning**. The HOA will be required by its by-laws to contract with a wildfire expert for the duration of the Project, with costs paid by the HOA; the HOA shall consult with the wildfire expert in its implementation of wildfire prevention measures, including those identified within the WPP. The HOA will also cover the costs associated with having on-site at least one individual with wildfire expertise related to evacuation and emergency response at the Project's Emergency Response Center. ▪ **Defensible space for all buildings (minimum 100 ft for residential, and 300 ft for non-residential).** The project CC&Rs will require that homeowners and commercial/facility managers establish and maintain defensible space of no	At time of first occupancy	Project Applicant	CalFire & Community Development Department.

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
less than 100 feet for residential structures and no less than 300 feet for commercial structures in accordance with Zone 0, Zone 1, and Zone 2 guidance. Dead, dying, invasive, poorly-maintained, and fire-prone vegetation shall be removed and/or reduced within these areas in accordance with the WPP. Trees and shrubs should be selectively addressed to reduce flammable vegetation parts, including pruning dead or lower branches. The HOA and wildfire expert shall inspect properties annually to ensure compliance. ▪ **Vegetation Management for fire risk reduction.** A Vegetation Management Plan (VMP) shall be prepared and updated annually by a qualified wildfire expert to organize and monitor active landscape management strategies as outlined in the WPP. The VMP shall include livestock grazing throughout the undeveloped rural landscapes as well as certain resort, residential, and vineyard landscapes and manual removal of dead, dying, or invasive vegetation through mowing, trimming, cutting, and brush removal. Ongoing vegetation management shall be conducted in accordance the VMP. ▪ **HOA funding for annual vegetation and defensible space management.** The HOA shall provide annual funding for implementation of the VMP, including vegetation management and defensible space upkeep. ▪ **Strategically placed fire breaks and resort edge defensible space.** One-hundred-foot wide shaded fuel breaks shall be established and maintained at select vulnerable areas of the project boundary as indicated in the WPP. The fire break along the northern property boundary shall be installed prior to occupancy of structures north of Butts Canyon Road, and the fire break along the southern property boundary shall be installed prior to the occupancy of structures south of Butts Canyon Road. ▪ **Roadside reduced fuel zone (40 ft on either side of road beyond 10ft hardscape shoulder).** All roadways shall be bordered on each side by a 50-foot fuel reduction zone, including to the extent that the topography feasibly permits, an area of approximately 10 feet on each side of the roadways improved with hardscape within the total 50-foot fuel reduction zone. Prior to issuance of the first certificate of occupancy for a structure within each subdivision under each final map, the full roadway fire break network for that subdivision shall have been completed. ▪ **Restrictions on Debris Burning**. The project CC&Rs will include strict prohibitions against burning of yard waste, cleared vegetation and other forms of debris. No open fires will be permitted.			

	Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
	▪ **Parking restricted on primary access roads.** Signs shall be installed along project roadways to restrict parking and enforced by the HOA. ▪ **Opt-out alert and communication system.** All residents, visitors, and employees will be enrolled in an opt-out phone-based communication system, such as Nixle, to receive emergency notifications. This system will supplement the site-wide emergency siren system to ensure that everyone is alerted of important emergency information and updates.			
4.11	**Tribal Cultural Resources**			
TCR-1	**Phase 1 TCR Avoidance Strategies** Mitigation Measure 3.5-1 shall be implemented to avoid all identified tribal cultural resource sites during project construction, development, and operation activities. A buffer of 50 feet shall be established around the perimeter of each tribal cultural site and a semi-permanent fence shall be erected that will remain in place throughout construction. The fence shall be installed with a qualified archaeologist and tribal monitor in attendance, and shall determine the established buffer for the location. The buffer can be reduced or modified to accommodate sensitive environmental conditions, based on the assessment of the qualified archaeologist and tribal monitor or cultural advisor (see Mitigation Measure TCR-2). If construction will encroach closer than 50 feet, a qualified archaeological and tribal monitor shall be retained to monitor those activities. Should tribal cultural resources be uncovered within the buffer, all construction in the immediate area shall halt until the find can be assessed for NRHP/CRHR eligibility in accordance with current professional standards using minimization measures and the provisions of the Unanticipated Discoveries Plan developed in compliance with Mitigation Measure TCR-2.	The applicant shall implement surveys, avoidance and monitoring as described in Mitigation Measure 3.5-1. The applicant shall include all of these requirements in construction contracts. (Use Permit COA)	Applicant	County
TCR-2	**Unanticipated Discoveries Plan and Construction Monitoring** 1) Tribal Cultural Advisor: Prior to initial ground disturbance, the Applicant shall retain a project Tribal Cultural Advisor designated by the Middletown Rancheria (Tribe), to direct all mitigation measures related to tribal cultural resources as defined by Public Resources Code 21074(a). 2) Unanticipated Discoveries Plan: Prior to project construction, a qualified professional archaeologist shall be retained to prepare an Unanticipated	The applicant shall implement monitoring and other actions as described in Mitigation Measure TCR-2. The applicant shall include all of these requirements in	Applicant	County

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
Discoveries Plan in consultation with Middletown Rancheria, or to update an existing Unanticipated Discoveries Plan supplied by the Tribe. At a minimum, the Unanticipated Discoveries Plan shall include: ▪ Minimization of impact strategies to be agreed upon by the archaeological monitor and tribal monitor or tribal cultural advisor. Minimization measures mean: ○ Avoidance. Priority shall first be given to leaving cultural resources in place and avoidance of any further unnecessary disturbance. The highest priority is to avoid disturbance to cultural resources. All cultural resources shall be left in situ, that is, in place, in the same position in which they were discovered and shall not be removed from the discovery site until arrangements are made for reburial or transfer in accordance with the below. If leaving the resources in situ is not possible, temporary housing at a secured storage location at the discovery site mutually agreed upon by the archaeological and tribal monitor may be considered. ○ Reburial. In situations where avoidance is not feasible, priority shall next be given to immediately reburying the cultural resources in the same location as found, only deeper. In the event that the cultural resources cannot be re- buried in the same location, only deeper, then priority shall next be given to immediately re- burying the cultural resources in an appropriate location within 100 feet of their original discovery in an area that shall not be subject to future subsurface disturbances. If for any reason immediate reburial in place, only deeper, or in an appropriate location within 100 feet of the original discovery is not feasible, then cultural resources may be re-buried in an appropriate location as determined by the Tribal Cultural Advisor in an area that shall not be subject to future subsurface disturbances. ○ Transfer. In the event that avoidance and reburial above described is not feasible, cultural resources may be removed and transferred to a location designated by the Middletown Rancheria. ○ Laboratory studies, scientific analysis, curation, or video recording shall only be permitted if required to assess CRHR eligibility, or if such strategies are the only means available to mitigate impacts to CRHR eligible resources. Prior to conducting any such studies, the tribal	construction contracts. (Use Permit COA)		

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
cultural advisor must be consulted. The archaeologist may draw the cultural resources for mapping purposes; however, no electronic means of recording the cultural resources shall be permitted without prior consultation with the Middletown Rancheria. ▪ Description of field or laboratory methods to be used to investigate Unanticipated Discoveries (also applicable to known resources that will be impacted by project construction), to include types of excavation units, screening methods, and sample collection, as appropriate; ▪ A list of permitted in-field analyses or laboratories to be used for specific analyses, as appropriate; ▪ Provisions for reburial or transfer of recovered materials, developed in consultation with Middletown Rancheria. ▪ Measures for documentation of results, including forwarding results to the NWIC as appropriate; ▪ A Burial Treatment plan, provided by the Tribe, shall be followed if Native American remains are discovered during construction; ▪ Maps (provided in pdf and shapefiles to the construction contractor, Applicant, and County) of areas that have not been included in a previous archaeological survey; ▪ Maps of known resource locations (provided in pdf and shapefiles) shall be included in any construction documents that include identification of archaeological monitoring areas, identification of sites where pre-construction archaeological testing or archaeological and tribal monitoring during construction is required, identification of appropriate buffer zones for individual site protection during construction, cease work requirements, unanticipated finds reporting requirements; ▪ Assessment criteria to determine NRHP/CRHR eligibility; and ▪ A no-collections policy will be instituted for the Proposed Project, except where a site-specific treatment plan or the Unanticipated Discoveries Plan developed in consultation with the Tribe, calls for collection of a sample of artifacts or materials and analysis. Should any cultural resources, such as wells, foundations, or debris, or unusual amounts of bone, stone or shell, artifacts, burned or baked soils, or charcoal be encountered during ground-disturbing activities, work shall cease within 100 feet of the discovery and the Construction Contractor, Applicant, and Middletown Rancheria shall be notified immediately. The Applicant shall retain a qualified			

Mitigation Measure	Implementation and Timing	Responsible for Implementing	Responsibility for Monitoring
professional archaeologist to assess the find in consultation with the Tribal Cultural Advisor. The Tribe must have an opportunity to inspect and determine the nature of the resource and the best course of action for avoidance, protection and/or treatment of tribal cultural resources to the extent permitted by law, should the find consist of prehistoric or historic-era materials related to Native American occupation or use of the vicinity. If the find appears to be eligible for listing on the NRHP or CRHR, or is determined to be a tribal cultural resource by the Middletown Rancheria, then the provisions of the Unanticipated Discoveries Plan shall be adhered to, which will include consultation with Middletown Rancheria for tribal cultural resources. If the find consists of historic-era materials unrelated to the Native American community, the archaeologist shall determine its significance in compliance with NHPA and CEQA criteria. If adverse effects to a cultural resource cannot be avoided, the Minimization Measures described under the requirements for the Unanticipated Discovery Plan shall be implemented to the extent feasible. 3) Construction Monitoring: Consistent with Mitigation Measure 3.5-2, all ground disturbing activities shall be monitored by qualified tribal monitor(s). Ground disturbing activities occurring in conjunction with the Project include, but are not limited to, surveys, testing, concrete pilings, debris removal, rescrapes, punch lists, erosion control (mulching, waddles, hydroseeding, etc.), pot-holing or auguring, boring, grading, trenching, foundation work, excavations, and ground disturbance involving the moving of dirt or rocks with heavy equipment or hand tools within the Project area. Qualified tribal monitor(s) are defined as qualified individual(s) who have experience with identification, collection, and treatment of tribal cultural resources of value to the Tribe. Such individuals will include those who: a. Possess the desired knowledge, skills, abilities, and experience established by the Native American Heritage Commission (NAHC) through the NAHC's Guidelines for Native American Monitors/Consultants (2005) (https://nahc.ca.gov/wp-content/uploads/2019/04/SB-18-Tribal-Consultation-Guidelines.pdf); OR b. Members of culturally affiliated tribe(s) who: i. Are culturally affiliated with the project area, as determined by the NAHC; and ii. Have been vetted by tribal officials of the Culturally Affiliated Tribes as having the desired knowledge, skills, abilities, and experience established by the Culturally Affiliated Tribes.			

Table 5-2: Project Commitments

	Project Design Features	Timing and Implementation	Implementing Party	Monitoring Party
1	**Construction Project Design Features.** **The project applicant will implement the following construction equipment features for equipment operating at the Project Site, as well as the following construction protocols. These features and protocols would be included in applicable bid documents, and successful contractor(s) must demonstrate the ability to supply such equipment and comply with such protocols. Construction features would include thefollowing:**			
1.1	A portion of the construction workers will stay in temporary on-site housing during construction to reduce traffic and minimize greenhouse gas contribution throughout all stages of construction. Even with accommodations on-site, employee shuttles will be available to move the contractors throughout the site, also reducing the traffic on Butts Canyon Road and any commuter traffic.	Construction only	Project Applicant	Lake County
1.2	Any person entering the site will be required to pick up the emergency handout pamphlet, available at all the entrances. This pamphlet is co-authored by ranch management & CalFire personnel to ensure accurate emergency contact information, ember or spark suppression, and a Ranch Map. This plan shall be laminated, in color, and updated as necessary to include the most recent road layout in conjunction with site development.	At all times.	Project Applicant	Lake County
1.3	All construction, contractors, and resort vehicles on the Ranch shall be required to be equipped with a shovel, fire extinguisher, and water in the event any small fire is sparked, all vehicles and personnel will have the immediate ability to act.	At all times.	Project Applicant	Lake County
1.4	Educational training programs will be in place for all construction employees on fire prevention and safety.	Prior to construction.	Project Applicant, Construction Management	Lake County
1.5	A full-time qualified Fire professional will be hired to advise on all on-site activities, future planning, and site maintenance activities.	Prior to Construction.	Project Applicant.	Lake County
2	**Operations Project Design Features.** **The project applicant will implement the following operational equipment requirements and operation protocols for equipment operating at the Project Site. These features would be included in applicable bid documents, and successful contractor(s) must demonstrate the ability to supply such equipment and comply with such protocols. Operation features would include the following:**			

	Project Design Features	Timing and Implementation	Implementing Party	Monitoring Party
2.1	The Project includes an on-site Emergency Response Center, which shall be designed to CalFire Standards. This emergency response center will house a helipad that is for essential services and emergency use only and will be built as the very first phase. All helipads will be built to accommodate larger, firefighting helicopters and will provided a fire- rated water source (hydrant or fire pump) to allow for refilling. The South Lake County Fire Protection District (SLCFPD) would provide fire protection and fire suppression services to the Guenoc Valley Site and would staff the on-site emergency response and fire center, which will ultimately become SLCFPD Station #61. The applicant shall pay SLCFPD on an annual basis, the amount determined by SLCFPD to be necessary in order to staff and equip the center. Approximately 500 square feet of the emergency response and fire center would be dedicated to the Lake County Sheriff's Office for emergency response and law enforcement services.	At time of first occupancy.	Project Applicant.	CalFire & Community Development Department.
~~2.2~~	[Deleted and Moved to **Mitigation Measure 3.16-1** in **Table 5-1**] ~~An emergency response notification system, similar to Nixle text message Alerts, shall be established for any guest, resident, or employee as a "non opt-out" notification system. This expands the early warning system to personal devices for easy and universal accessibility.~~	~~At time of first occupancy~~	~~Project Applicant~~	~~CalFire & Community Development Department.~~
2.3	As part of the project intent to increase early warning systems for the Guenoc Valley and surrounding landscapes, a high definition fire camera shall be placed at the highest topography or within key areas of the Project. This will be utilized by CalFire or any private Fire Security team.	At time of first occupancy	Project Applicant	CalFire & Community Development Department.
2.4	An Emergency Evacuation Plan shall be provided to all residents, guests, and employees that identifies and describes emergency meeting areas, routes for safe egress, and protocol for fire safety. The plan shall be prepared consistent with the contents and information provided in the South Lake County Emergency Plan, and shall be provided to all guests that enter the property and posted within guest rooms. In addition, signage shall be installed for emergency meeting areas. The Wildfire Evacuation Plan must be prepared in cooperation with and approved by CalFire, the South Lake County Fire Protection District and the Lake County Sheriff Department.	At time of first occupancy	Project Applicant	Community Development Department, CalFire, South Lake County Fire Protection District and Lake County Sheriff Department

	Project Design Features	Timing and Implementation	Implementing Party	Monitoring Party
2.5	Establish a separate Road Network plan for Emergency Personnel Ingress & Egress that notes the roads dedicated only for emergency access occasions during interim construction and development.	Prior to Construction. Ongoing.	Project Applicant	Community Development Department, CalFire, South Lake County Fire Protection District and Lake County Sheriff Department
~~2.6~~	[Deleted and superseded by **Mitigation Measure 3.16-1** in **Table 5-1**] ~~On-site grazing practices shall be relied on throughout the site as a tool for vegetation management.~~	~~Ongoing.~~	~~Project Applicant.~~	~~CalFire & Community Development Department.~~
2.7	Security Patrol. The project will maintain 24 hour security patrols, which will aid in early identification of fire events.	At time of occupancy.	Project Applicant.	HOA
2.10	Recycling and reuse of all wastewater generated by commercial and resort uses, and most wastewater generated by residential uses. Recycled water must account for approximately 25% of the outdoor water supply.	At time of occupancy	Project Applicant	Community Development Department
2.11	The use of drought tolerant native vegetation in landscaping	At time of occupancy. Ongoing.	Project Applicant.	Community Development Department
2.12	Electric fleet for the resort commercial uses (no less than 75 percent)	At time of occupancy. Ongoing.	Project Applicant.	Community Development Department
3	**Project Design Features** **The project applicant would implement the following project design features. These features would be included in applicable construction or building application documents. Many of these features are detailed within the Guenoc Valley District Zoning Ordinance and/or the Guenoc Valley District Design Guidelines. Design features would include the following:**			

	Project Design Features	Timing and Implementation	Implementing Party	Monitoring Party
3.1	All occupiable buildings shall be equipped with exterior fire suppression systems, Class A- rated roofs with non-combustible covering, fire-resistant eaves, non-combustible vents and leaf guards, fire-resistant material for exposed foundations, and fire-resistant decks. Exterior windows and doors should be multi-paned with a tempered layer and non-combustible. Fencing should be non-combustible and at least 5 feet from structures. Exterior fire suppression systems shall be fully autonomous in the event power is cut/shut off, allowing the activation to be fully operational at all times without intervention or activation.	At time of Building Permit.	Project Applicant, Architects	Community Development Department, Plan Check.
3.2	All roads within the Guenoc Valley District shall be two-way roads that comply with State slope and width requirements.	Vegetation Maintenance beings at time of first Occupancy of that road. Road and street standards shall be proven at time of grading permit.	Project Applicant, Civil Engineers, Construction & Site Manager	Community Development Department, Office of Public Works.
3.3	All residential parcels, regardless of the size of the parcel, shall be restricted to the predetermined buildable envelope, as described in the Design Guidelines. The building envelope shall be 1.5 acres, unless the residential parcel is within oak woodland, in which case the buildable envelope shall be no greater than 1 acre. Additional, residential development shall only occur if further environmental review is conducted and any additional impacts are mitigated per the direction of the Oak Mitigation Plan and EIR.	At time of building permit.	Project Applicant, Architects & Landscape Designers	Community Development Department
3.4	The Site shall maintain on-site irrigated vineyards, as described within the Wildfire Mitigation Plan, to create and maintain irrigated buffers to act as fire breaks throughout the site. In the event the vineyards are removed an irrigated fire break will continue.	Review at time of final map.	Project Applicant,	Community Development Department
3.5	The Project will clear and maintain 50-foot vegetation management on either side of the roads within the Guenoc Valley for a total fire break of 125 ~~100~~-feet, creating a roadway network that provides safe egress and access in the event of an emergency. Additionally, property boundary shaded fuel ~~fire~~ breaks shall be installed, as depicted on Figure 2-6 ~~10~~ of the PREIR ~~FEIR~~.	At final occupancy of each structure, applicable fire breaks along roadways providing access to that structure shall be installed. At the time of the recording of the last final map for each of the five subdivision groups	Project Applicant.	Community Development Department

	Project Design Features	Timing and Implementation	Implementing Party	Monitoring Party
		(Bohn Ridge Subdivision, Equestrian Subdivision, Maha Farms Subdivision, and Denniston Golf Estates Subdivision~~, and Trout Flat Subdivision~~), the full roadway fire break network shall be completed within that subdivision.		
3.6	Evacuation route signage shall meet all of the CalFire requirements and be included throughout the Guenoc Valley site. Specific signage shall be placed at emergency vehicle access roads, for emergency personnel ~~personal~~ only. Signage should indicate ingress/egress.	At time of first occupancy. Ongoing	Project Applicant.	Community Development Department
3.7	A Fire siren shall be placed within the Project Site that shall work in conjunction with the multiple early warning systems.	At time of first occupancy.	Project Applicant.	Community Development Department
3.8	Interior Fire alarm systems shall be connected to the Project security systems.	At time of Building Permit.	Project Applicant.	Community Development Department
3.9	Joint trench design will include a hard-wired communication system for all residences.	At time of Grading Permit.	Project Applicant.	Community Development Department
3.10	Each resident or guest unit will communicate with the security system when occupied for emergency evacuation communication purposes.	At time of occupancy.	Project Applicant.	HOA
3.11	The Project will establish 50 workforce housing units at the Middletown Housing Site, or 35 workforce housing units at the Guenoc Valley Site, or both.	At time of first occupancy of resort uses.	Project Applicant.	Community Development Department

	Project Design Features	Timing and Implementation	Implementing Party	Monitoring Party
3.14	Installation of 300 electric vehicle charging stations as part of Phase 1.	At time of occupancy of resort uses. The percentage of stations installed must be equal to the percentage of resort units (hotel and resort residential) developed.	Project Applicant.	Community Development Department
3.16	Providing on-site refuse collection bins for recyclable waste, compostable waste, and standard waste, in addition to on-sire Compost and Recycling Centers	At time of first occupancy. Ongoing.	Project Applicant.	Community Development Department
3.17	Site-wide lighting design shall preserve nighttime dark skies by minimizing the use of outdoor lighting. Lighting fixtures shall utilize energy-efficient lamps and motion-sensing lighting systems to minimize unnecessary nighttime lighting.	At time of first occupancy. Ongoing.	Project Applicant.	Community Development Department
3.18	Existing overhead PG&E infrastructure will be placed underground and all new electrical ~~and propane~~ infrastructure will be installed via trenching and underground.	At the time of the recording of the last final map for each of the five subdivision groups (Bohn Ridge Subdivision, Equestrian Subdivision, Maha Farms Subdivision, and Denniston Golf Estates Subdivision~~, and Trout Flat Subdivision~~), the full electrical network serving that subdivision within the project site boundaries shall be relocated underground or shall be installed where site conditions permit.	Project Applicant.	Community Development Department

Table 5-3: Settlement Agreement Commitments

	Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
A)	**Wildfire-Related Project Modifications and Measures**			
i.	The Recreational and Camping Area depicted on Exhibit B-3 [of the Settlement Agreement; **Appendix C**] will be reserved only for recreational and camping uses. Open fires shall be strictly prohibited. *Note, the Camping Area has been voluntarily removed from Phase I.*	At all times. Shall be included in SPD.	Project Applicant	Lake County
ii.	The area consisting of the twenty-five building sites depicted on Exhibit B-1 [of the Settlement Agreement; **Appendix C**] will not be developed, and the associated parcels shall be removed from any and all maps. Those residential units may be relocated to the area depicted on Exhibit B-2 [of the Settlement Agreement; **Appendix C**].	Applicant shall include in updated Tentative Subdivision Maps	Project Applicant	Lake County
iii.	The areas consisting of the thirty-nine building sites depicted on Exhibit C-1 [of the Settlement Agreement; **Appendix C**] will not be developed for residential use, and the associated parcels shall be removed from any and all maps. Those residential units may be relocated to the area depicted in Exhibit C-2 [of the Settlement Agreement; **Appendix C**].	Applicant shall include in updated Tentative Subdivision Maps	Project Applicant	Lake County
iv.	As indicated on the Roadway Plan attached as Exhibit D [of the Settlement Agreement; **Appendix C**], no dead-end, non-looped road segment may exceed one mile in length.	Applicant shall include in updated Tentative Subdivision Maps	Project Applicant	Lake County
v.	To the extent that the topography feasibly permits, an area of approximately 10 feet on each side of the roadways will be improved with hardscape, as depicted on Exhibit E [of the Settlement Agreement; **Appendix C**].	Applicant shall include in Updated Wildfire Prevention Plan (WPP)	Project Applicant.	Lake County
vi.	The Guenoc Valley Project Homeowners Association ("HOA") will be required by its by-laws to contract with a wildfire expert for the duration of the Project. The costs of retaining that service provider will be paid by the HOA, and will be covered as part of HOA dues. The HOA shall consult with the wildfire expert in its implementation of wildfire prevention measures, including those identified in the Wildfire Prevention Plan. The HOA shall send to the Attorney General's Office a copy of the by-laws within thirty (30) calendar days of adoption by the HOA.	Applicant shall include in Updated WPP and in the CC&Rs and is the responsibility of the HOA. (TM COA)	Project Applicant	Lake County
vii.	The Project's Emergency Response Center will have on-site at least one individual with wildfire expertise related to evacuation and emergency access. The costs of retaining that individual or individuals will be paid by the HOA, which will be covered	Applicant shall include in Updated WPP and in the CC&Rs and is the	Project Applicant.	Lake County

	Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
	with HOA dues. After thirty (30) years from the date on which the HOA is established, the HOA may stop implementing and sunset this obligation upon a majority vote of the HOA membership and subsequent notice to the State of such vote.	responsibility of the HOA. (TM COA)		
viii.	The Applicant shall pay to the Lake County Fire Protection District ("LCFPD"), on an annual basis, the amount determined by LCFPD to be necessary in order to staff and equip the Emergency Response Center for fire services, including wildfire response.	Ongoing	Project Applicant	South Lake County FPD
B)	**GHG Emissions Reduction Measures**			
1	*Residential Land Uses*			
	a. The Applicant shall install photovoltaic ("PV") systems on all residential land use structures within the Project site where site parameters and constraints allow for adequate on-site rooftop and other on-site spaces (such as ground-mounted panels or panels on carports or other surfaces) to comply with Section 110.10(a) of the California Building Energy Efficiency Standards. The minimum electrical generation capacity of the PV Systems shall be equal to or greater than the projected energy needs, collectively, of all residential land use structures that the PV systems will serve. The Applicant shall inform residents, at the time of initial sale or at the time of subsequent sale of each residential land use structure, through placement of a requirement in the Covenants, Conditions and Restrictions ("CC&Rs") that will govern the HOA for each residential land use structure, that the Applicant is responsible for the repair and maintenance of each PV system, or any cleaner or technologically superior system of greater efficacy that is installed, for at least thirty (30) years from the date of initial installation.	At time of first occupancy. Applicant shall include in CC&Rs and is the responsibility of the HOA. (TM COA)	Project Applicant	Lake County
	b. The Applicant shall install battery energy storage systems for all residential land use structures and shall design the battery energy storage systems to store the energy produced by the PV systems during daylight hours and discharge that stored energy during evening and nighttime hours, and sized to maximize self-generation and minimize electricity exports to the grid, with an efficiency of at least 80 percent (80%). The Applicant shall design and install the battery energy storage systems to provide energy savings benefits found in Section 150.1 of the California Building Energy Efficiency Standards for thirty (30) years from the date of initial installation.	At time of first occupancy.	Project Applicant	Lake County

	Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
	c. All PV systems and battery energy storage systems shall be installed and operated consistent with all applicable state laws, regulations and local ordinances, including building codes.	Construction	Project Applicant and Construction Contractor	Lake County
	d. The Applicant shall install one fully operable Level 2 or higher-capacity Electric Vehicle Supply Equipment ("EVSE") of at least 240 volts in an appropriate location at each residential land use structure within the Project site. The Applicant shall inform residents, at the time of initial sale or at the time of subsequent sale of each residential land use structure, through placement of a requirement in the CC&Rs that will govern the HOA for each residential land use structure, that the Applicant is responsible for the repair and maintenance of each EVSE, or any cleaner or technologically superior system of greater efficacy that is installed, for at least thirty (30) years from the date of initial installation.	At time of first occupancy. Applicant shall include in CC&Rs and is the responsibility of the HOA. (TM COA)	Project Applicant	Lake County
	e. The Applicant shall prohibit the use and extension of all natural gas infrastructure within the Project site. Specifically, the Project shall include in the CC&Rs and/or other enforceable obligations a prohibition on the installation or operation of natural gas infrastructure within the Project site for residential land use structures. Pre-existing natural gas infrastructure at the Project site, if any, shall be capped or removed.	Applicant shall include in Updated Wildfire Prevention Plan (WPP)	Project Applicant.	Lake County
	f. The Applicant shall require that all appliances in residential land uses (including water heaters, space conditioning systems, and cooking stoves), operate on energy sources other than natural gas. Appliances, other than those used for stovetop cooking, shall operate on electricity.	Applicant shall include in Updated Wildfire Prevention Plan (WPP)	Project Applicant.	Lake County
	g. The Applicant shall install high-efficiency, variable capacity heat pumps at all residential land use structures that comply, at a minimum, with the 2022 edition of Title 24, California Code of Regulations, Part 6 and that will provide energy for space and water heating appliances and clothes drying.	Construction	Project Applicant and Construction Contractor	Lake County
2	*Non-Residential Land Uses*			

Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
a. The Applicant shall ensure that on-site generation of renewable energy is sufficient to produce electricity to supply energy for all nonresidential land use structures. To comply with this requirement, the Applicant shall install any combination of the following: 1. PV systems coupled with battery energy storage systems A. PV systems on non-residential land use structures within the Project site (including parking structures) where site parameters and constraints allow for adequate on-site rooftop and other on-site spaces (such as ground-mounted panels or panels on carports or other surfaces) to comply with Section 110.10(a) of the California Building Energy Efficiency Standards. The Applicant shall inform purchasers or tenants, at the time of initial sale or lease or at the time of subsequent sale or lease of each non-residential land use structure, through placement of a requirement in the CC&Rs that will govern the HOA for each non-residential land use structure, that the Applicant is responsible for the repair and maintenance of each PV system, or any cleaner or technologically superior system of greater efficacy that is installed, for at least thirty (30) years from the date of initial installation. B. Battery energy storage systems for all nonresidential land use structures and shall design the battery energy storage systems to store the energy produced by the PV systems during daylight hours and discharge that stored energy during evening and nighttime hours, and sized to maximize self-generation and minimize electricity exports to the grid, with an efficiency of at least 80 percent (80%). The Applicant shall design and install the battery energy storage systems to provide energy savings benefits for thirty (30) years from the date of initial installation. C. All non-residential structures shall comply with the applicable prescriptive requirements for PV and battery energy storage systems sizing specified by the 2022 edition of Title 24, California Code of Regulations, Part 6, section 141.10, effective January 1, 2023, including any subsequently enacted revisions. D. All PV systems and battery energy storage systems shall be installed and operated consistent with all applicable state laws, regulations and local ordinances, including building codes. 2. On-site solar farms	At time of occupancy. Ongoing.	Project Applicant.	Lake County

Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
A. On-site solar farms to reduce the Project's GHG emissions. The solar farms, in combination with any other on-site PV systems installed to serve the Project's non-residential land uses, shall have the capacity to generate an amount of renewable energy that is equivalent to, or exceeds, 5,500,000 kWh per year, which is the estimated electricity consumption for those land uses as described in the EIR. The Applicant shall site the solar farms in areas served by existing roads to the extent possible and in a manner that minimizes harm to biological resources and wildfire ignition risk.			
b. For the non-residential land uses of the Project, the Applicant shall install at least 300 fully-operable, publicly-accessible4 Level 2 or higher-capacity Electrical Vehicle Charging Stations ("EVCS") of at least 240 volts with at least two ports per charger and 20 fully operable publicly-accessible Level 3 EVCS/Fast Chargers. The Applicant shall ensure that the EVCS are preferential parking spaces for electric vehicles ("EVs") that comply with Tier 2 of Section A5.105.8.1 and Tier 2 of Section A5.106.5.3 of the California Green Building Standards and strategically located to maximize availability. The dedicated EVs spaces shall be in preferential locations, but shall not be located in a way that prevents compliance with requirements in the California Vehicle Code regarding parking spaces for disabled persons or disabled veterans. All publicly-accessible Level 2 and Level 3 EVCS shall be marked with signage indicating that improperly parked vehicles blocking access to the EV charging will be towed. Further, the Applicant shall inform purchasers or tenants, at the time of initial sale or lease, or at the time of subsequent sale or lease, of each non-residential land use structure, through placement of a requirement in the CC&Rs that will govern the HOA for each nonresidential land use structure, that the Applicant is responsible for the repair and maintenance of each EVSC, or any cleaner or technologically superior system of greater efficacy that is installed, for at least thirty (30) years from the date of initial installation.	At time of first occupancy. Applicant shall include in CC&Rs and is the responsibility of the HOA. (TM COA)	Project Applicant	Lake County
c. Except as set forth below, the Applicant shall prohibit the use and extension of all natural gas infrastructure within the Project site for all non-residential land use structures. Specifically, the Project shall include in the CC&Rs and/or other enforceable obligations a prohibition on the installation or operation of natural gas infrastructure within the Project site for non-residential land use structures. Except as set forth below, any preexisting natural gas infrastructure shall be capped or removed, and outdoor fires and the use of natural gas-fueled appliances shall be prohibited within, the Project site.	Applicant shall include in Updated Wildfire Prevention Plan (WPP)	Project Applicant	Lake County

	Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
	d. Except as set forth below, the Applicant shall require that nonresidential land use structures are all-electric, except where it is infeasible for a building to comply with the applicable building codes if it is all-electric. Further, the Applicant shall require that all non-residential land use structures are constructed to accommodate electric appliances exclusively, including water heaters, space conditioning systems, clothes drying and cooktops. 1. The Applicant shall be permitted to install, and operate, natural gas-fueled or propane-cooktops in restaurant kitchens. 2. The Applicant shall be permitted to install, and operate, natural gas-fueled or propane-fire pits in the outdoor patio areas of restaurants.	Applicant shall include in Updated Wildfire Prevention Plan (WPP)	Project Applicant.	Lake County
	e. The Applicant shall install high-efficiency, variable capacity heat pumps at all non-residential land use structures that comply, at a minimum, with the 2022 edition of Title 24, California Code of Regulations, Part 6 and that will provide energy for space and water heating appliances and clothes drying.	Construction	Project Applicant and Construction Contractor	Lake County
3	*Off-Site GHG Emissions Reduction Measures*			
	a. The Applicant's Obligation to Purchase GHG Offset Credits. The Applicant shall, for thirty (30) years from the date of issuance of the initial occupancy permit for the Project, annually purchase and retire voluntary market GHG Offset Credits listed with, and verified by, a CARB-approved Registry. Such credits shall be purchased annually in an amount sufficient to offset the Project's actual GHG emissions in each year. The current estimate is that 14,865 credits will be required annually for that purpose, and the Applicant will make an annual purchase in that amount by the issuance of the initial occupancy permit for Phase 1 of the Project. Future events or developments may affect the availability and utility of the GHG Offset Credits, and the Project's actual GHG emissions. These factors may support an adjustment to the amount of GHG Offset Credits that the Applicant is required to purchase under this Subsection. The Applicant may seek the State's consent in the future to an adjustment of this requirement, and the State will consider such request in good faith. Any adjustment to the amount of GHG Offset Credits to be purchased by the Applicant shall be consistent with CEQA.	At time of initial occupancy. Ongoing.	Project Applicant.	Community Development Department and Attorney General

Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
b. Performance Standards 1. The Applicant shall ensure that all GHG Offset Credits purchased to comply with this Agreement: A. Are purchased for GHG Emissions Offsets with the following geographic priorities: (1) offsets within the County; (2) offsets within the State of California, only if in-county offsets are unavailable; (3) offsets within the United States, only if in-state offsets are unavailable; and (4) international offsets only if in-nation offsets are unavailable. B. Represent past reduction or sequestration of GHG emissions that is not otherwise required. (Cal. Code Regs., tit. 14, § 15126.4, subd. (c)(3).) C. Are "Real," "Additional," "Quantifiable," "Permanent," and "Verifiable," as those terms are defined in California Code of Regulations, title 17, section 95802, subdivision (a). D. Comply with the "additionality requirements" for Offset Projects set forth in California Code of Regulations, title 17, section 95973, subdivision (a)(2). E. Comply with the Verification of GHG Emissions Reductions requirements for Offset Projects set forth in in California Code of Regulations, title 17, section 95977. F. Given a unique serial or tracking number to ensure there is no duplication or double counting. 2. The Applicant shall not rely upon any GHG Offset Credit purchased to comply with this Agreement for any other project or to satisfy any other contractual obligation.	At time of initial occupancy. Ongoing.	Project Applicant.	Community Development Department and Attorney General
4 *Compliance Protocols*			
a. The Applicant shall ensure that all GHG Offset Credits purchased to comply with this Agreement are purchased for GHG Emissions Offsets that comply with an applicable Offset Compliance Protocol from a CARB-approved Offset Registry that satisfies all of the CARB Offset Protocol standards in California Code of Regulations, title 17, section 95972, or any new standards that may become applicable to CARB Offset Protocols during the thirty (30) years starting from date of issuance of the initial occupancy permit for the Project.	At time of initial occupancy. Ongoing.	Project Applicant.	Community Development Department and Attorney General
5 *Monitoring, Reporting, and Recordkeeping*			

Required Project Modifications	Timing and Implementation	Implementing Party	Monitoring Party
a. The Applicant shall select and retain at least one independent, third-party expert on GHG mitigation and offsets to review the documentation provided by the Applicant relating to, among other data, construction- and operation-related emissions, and provide analysis and recommendations to the County, providing the State with a copy of same for information purposes, on whether the Applicant has complied with the off-site GHG emissions reduction measures set forth in this Agreement. The Applicant's selection of each expert, who shall not be a current or former employee or agent of the Applicant, shall be subject to the approval of the Attorney General's Office, which shall not be unreasonably withheld. The Applicant shall retain the expert(s) and fund the activities of the expert(s) starting from the issuance of the first site development permit or the first building permit, whichever occurs earliest, through thirty (30) years after an expert is retained.	Start with issuance of first building or site development permit, whichever occurs earliest.	Project Applicant.	Lake County
b. Each year, the expert(s) retained by the Applicant shall prepare a report and make specific findings as to whether the Applicant has met the requirements set forth in Sections 1(b)(i)–(iii) of this Agreement.	Ongoing.	Project Applicant.	Lake County
c. The Applicant shall provide the expert report and findings to the County and the Attorney General's Office on an annual basis. The Applicant shall also, upon request by the County or the Attorney General's Office, make available within a reasonable time all evidence upon which the expert relied to make such findings.	Ongoing.	Project Applicant.	Lake County and Attorney General

Section 6 | Report Preparation

Lead Agency – County of Lake

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Fehr and Peers

Community Wildfire Planning Center

Wildfire Risk Analysis Consultants

Berkeley Disaster Lab, College of Engineering

Willow Labs

Wildland Resilience Management

Digital Mapping Solutions

Technical Consultants

Biological and Aquatic Resources	WRA, Inc. Environmental Consultants
Civil Engineering	Sherwood Engineers
Cultural Resources	Montrose Tom Origer & Associates
Traffic	Steve Abrams & Associates

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Section 8 | Acronyms

A ..... Agriculture zoning
AB ..... Assembly Bill
AES ..... Analytical Environmental Services
afy ..... acre-feet per year
amsl ..... above mean sea level
APE ..... Area of Potential Effects
APN ..... Assessor's Parcel Number
AVMT ..... Average Vehicle Miles Traveled
BAAQMD ..... Bay Area Air Quality Management District
BASMAA ..... Bay Area Stormwater Management Agencies Association
BCM ..... Basin Characterization Model
BI ..... Beneficial Impact
BMP ..... best management practice
BRA ..... Biological Resource Assessment
CA ..... Camping Area
CAAQS ..... California Ambient Air Quality Standards
CalEEMod ..... California Emissions Estimator Model
CALGreen ..... California Green Building Standards
CAL FIRE ..... California Department of Forestry and Fire Protection
CAP ..... criteria air pollutant
CAPCOA ..... California Air Pollution Control Officers Association
CARB ..... California Air Resources Board
CBC ..... California Building Code
CBD ..... Center for Biological Diversity
CCR ..... California Code of Regulations
CC&R ..... Covenants, Conditions, and Restrictions
CDC ..... California Department of Conservation
CDFW ..... California Department of Fish and Wildlife
CEC ..... California Energy Commission
CESA ..... California Endangered Species Act
CEQA ..... California Environmental Quality Act
CFP ..... California Fully Protected Species
CH_4 ..... methane
CHP ..... California Highway Patrol
CLERC ..... Clear Lake Environmental Research Center
CMVSTAFF ..... California Motor Vehicle Stock Travel and Fuel Forecast
CNPS ..... California Native Plant Society
CO ..... carbon monoxide

CO_2 ..... carbon dioxide
CO_2e ..... carbon dioxide equivalent
CRHR ..... California Register of Historical Resources
CTC ..... California Transportation Commission
CWA ..... Clean Water Act
CWPP..... Community Wildfire Protection Plan
DF ..... Design Feature
DMP..... Drought Management Plan
DWR ..... Department of Water Resources
EIR ..... Environmental Impact Report
EOP..... Emergency Operations Plan
ETE..... evacuation time estimate
EV ..... electric vehicle
EVCS ..... electric vehicle charging station
EVSE ..... electric vehicle supply equipment
FC ..... Federal Candidate Status
FE..... Federally Listed Endangered Species
FEMA..... Federal Emergency Management Agency
FESA..... Federal Endangered Species Act
FHSZ ..... Fire Hazard Severity Zone
FHWA ..... Federal Highway Administration
FIRM ..... Flood Insurance Rate Map
FMMP..... Farmland Mapping and Monitoring Program 4
FS..... Farmstead
FT..... Federally Listed Threatened Species
GHG..... greenhouse gas
gpm ..... gallons per minute
GVD ..... Guenoc Valley District
GWP ..... global warming potential
HAP..... hazardous air pollutant
HCM ..... Highway Capacity Manual
HFC..... hydrofluorocarbon
HOA..... homeowner's association
HVAC ..... heating, ventilation, and air conditioning
kWh..... kilowatt-hours
LAMM..... Lake County Area-Wide Microsimulation Model
LAPC ..... Lake Area Planning Council
LCAB ..... Lake County Air Basin
LCAQMD..... Lake County Air Quality Management District
LCSO ..... Lake County Sheriff's Office
LHMP..... Local Hazard Mitigation Plan
LID ..... low impact design

LOS ..... level of service
LSR..... Local Streets and Roads
LTS..... Less than significant
M2B..... Mayacamas to Berryessa Connectivity Network
MM..... Mitigation Measure
MMRP ..... Mitigation Monitoring and Reporting Program
MT ..... metric ton
MW ..... megawatt
N/A ..... Not Applicable
N_2O ..... nitrous oxide
NAAQS..... National Ambient Air Quality Standards
NFIP ..... National Flood Insurance Program
NFPA..... National Fire Protection Association
NI ..... No Impact
NOA ..... Naturally Occurring Asbestos
NOAA..... National Oceanic and Atmospheric Administration
NOx ..... nitrogen oxides
NPDES..... National Pollutant Discharge Elimination System
NRCS..... Natural Resources Conservation Service
NRHP ..... National Register of Historic Places
NWIC ..... Northwest Information Center
NWPR ..... Navigable Waters Protection Rule
O_3..... ozone
OAG ..... Office of the Attorney General
OAH ..... Office of Administrative Hearings
OEHHA..... Office of Environmental Health Hazard Assessment
OES ..... Office of Emergency Services
OPR..... Office of Planning and Research
OSPP ..... Open Space Preservation Plan
Pb ..... Lead
PFC ..... perfluorocarbon
PM ..... particulate matter
POU ..... Place of Use
PRC ..... Public Resources Code
PREIR ..... Partially Revised EIR
PS..... Potentially significant
PV ..... photovoltaic
PWERP..... post wildfire emergency response plan
QSP ..... Qualified SWPPP Practitioner
RH..... Red Hills
RHNA ..... Regional Housing Needs Allocations
RL..... Rural Lands zoning

ROG ..... reactive organic gas
RR ..... Rural Residential zoning
RTP ..... Regional Transportation Plan
RWQCB..... Regional Water Quality Control Board
S..... Significant
SB ..... Senate Bill
SC ..... California State Listed Candidate Species
SE..... California State Listed Endangered Species
SF_6 ..... sulfur hexafluoride
SFBAAB..... San Francisco Bay Area Air Basin
SHS ..... State Highway System
SLCFPD ..... South Lake County Fire Protection District 4
SO_2..... sulfur dioxide
SO_x..... sulfur oxide
SPD ..... Specific Plan of Development
SR ..... State Route
SRA ..... State Responsibility Area
SSC..... California Species of Special Concern
ST..... California State Listed Threatened Species
SU ..... Significant and unavoidable
SWPPP..... Stormwater Pollution Prevention Plan
SWRCB..... State Water Resources Control Board
TAC ..... toxic air contaminant
TCP ..... traditional cultural property
TCR ..... Tribal cultural resource
TDM..... Transportation Demand Management
TIA ..... Traffic Impact Assessment
TMDL..... Total Maximum Daily Load
UCMP ..... University of California Museum of Paleontology
UP..... use permit
USACE..... U.S. Army Corp of Engineers
USEPA..... U.S. Environmental Protection Agency
USFWS..... U.S. Fish and Wildlife Service
USGS..... U.S. Geological Survey
VMT..... vehicle miles traveled
WCIRP..... Wine Country Interregional Partnership
WPP..... Wildfire Prevention Plan
WRP..... water reclamation plant
WSA..... Water Supply Assessment
WUI ..... Wildfire Urban Interface

Appendix A

Trial Court Decisions

Appendix A-1

Trial Court Ruling and Order

FILED
SUPERIOR COURT
COUNTY OF LAKE
JAN 04 2022
BY Krista D LeVier Yolanda Blum
Deputy Clerk

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LAKE

CENTER FOR BIOLOGICAL DIVERSITY,

Petitioner,

PEOPLE OF THE STATE OF CALIFORNIA, EX. REL, ATTORNEY GENERAL ROB BONTA,

Petitioner-Intervenor,

v.

COUNTY OF LAKE, BOARD OF SUPERVISORS OF THE COUNTY OF LAKE; and DOES 1 through 20,

Respondents.

LOTUSLAND INVESTMENT HOLDINGS, INC.; and DOES 21 through 40,

Real Parties in Interest.

Case No. CV421152

RULING AND ORDER ON PETITIONS FOR WRIT OF MANDATE

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SCANNED

Ruling

I. Introduction.

The Court's obligation in this case is to answer the following questions:

1. Was there substantial evidence to support the County's decision?
2. Did the County fail to proceed in the manner required by law?

(Pub. Res. Code §§ 21168, 21168.5.)

In answering the first question, the Court "must indulge all reasonable inferences from the evidence that would support the agency's determinations and resolve all conflicts in the evidence in favor of the agency's decision." (*Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 117.) "A court may not set aside an agency's approval of an EIR [Environmental Impact Report] on the ground that an opposite conclusion would have been equally or more reasonable." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 393.)

In answering the second question, the Court must determine if the County substantially complied with the procedural requirements of the California Environmental Quality Act (CEQA). (Practice Under the California Environmental Quality Act (2d ed. Cal CEB) § 23.35.) While a court may find noncompliance with CEQA requirements to be a prejudicial abuse of discretion, there is no presumption that such an error is prejudicial. (Pub. Res. Code § 21005(b).) In determining whether a failure to comply with CEQA is prejudicial, a court does not determine whether a different outcome would have resulted. (Pub. Res. Code § 21005(a).)

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II. Wildfire Risk.

A. Compression of Mitigation Measures Into the Project.

When an EIR incorporates mitigation measures into the project description, then concludes that the project has no significant impact, the failure to separately identify significant impacts and analyze the mitigation measures violates CEQA. (*Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645.) This is because by doing so, an EIR "precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences." (*Id.* at p. 658.)

Lotus v. Department of Transportation, supra, involved a highway construction project through an old growth redwood forest. A portion of the construction was planned to occur within the structural root zone of a number of trees. The EIR described measures that "have been incorporated into the project to avoid and minimize impacts as well as to mitigate expected impacts." (*Id.* at p. 650.) Those measures included restorative planting and replanting, invasive plant removal, and use of an arborist and specialized equipment. In the EIR, the agency concluded that "[n]o significant environmental effects are expected as a result of this project with the implementation of the stated special construction techniques." (*Id.* at p. 651.)

In concluding that the EIR violated CEQA by compressing the analysis of impacts and mitigation measures into a single issue, the Court of Appeal explained:

> The EIR fails to indicate which or even how many protected redwoods will be impacted beyond the tolerances specified in the handbook and, by failing to indicate any significant impacts, fails to make the necessary evaluation and findings concerning the mitigation measures that are proposed. Absent a determination regarding the significance of the impacts to the root systems of the old growth redwood trees, it is impossible to determine whether mitigation

> measures are required or to evaluate whether other more effective measures than those proposed should be considered. Should Caltrans determine that a specific tree or group of trees will be significantly impacted by proposed roadwork, that finding would trigger the need to consider a range of specifically targeted mitigation measures, including analysis of whether the project itself could be modified to lessen the impact.

(*Id.* at p. 656.)

In that case, the measures contained within the project were designed to mitigate the impacts to the health of the trees caused by the construction. The measures at issue were "plainly mitigation measures and not part of the project itself." (*Id.* at p. 656, fn. 8.) The failure to classify those measures as mitigation measures prevented those reviewing the EIR from determining the significance of the impact the construction would have on the health of the trees. (*Id.* at pp. 656-658.)

In the instant case, Petitioners[1] argue certain design elements included in the Wildfire Prevention Plan (WPP), including those relating to relating to vegetation management and firebreaks, were misclassified as part of the Project rather than mitigation measures. Although certain actions such as vegetation management and maintenance of the firebreaks will continue well after the Project is built, those components of the WPP are properly classified as part of the Project itself. This is because those measures, unlike the measures in *Lotus v. Department of Transportation, supra,* are not designed to rectify the impacts to the environment caused by the Project. None of the challenged design elements are meant to repair, rehabilitate or restore the impacted environment. Instead, they are part of the design of the Project meant to avoid

[1] Petitioners includes Intervenor/Petitioner unless otherwise stated.

impacts to the environment in the first place. Accordingly, the Court concludes all of the components of the WPP, including vegetation management and maintenance of the firebreaks, are not mitigation measures improperly misclassified as Project components. Instead, they are part of the Project itself.

B. Adequacy of Analysis of Wildfire Risk.

Petitioners find fault with the EIR's analysis of the wildfire risk and the methodology used to analyze that risk. Although the analysis could have been more thorough and better methodologies could have been used, "challenges to the scope of an EIR's analysis, the methodology used, or the reliability or accuracy of the data underlying an analysis, must be rejected unless the agency's reasons for proceeding as it did are clearly inadequate or unsupported." (*Chico Advocates for a Responsible Economy v. City of Chico* (2019) 40 Cal.App.5th 839, 851.) The EIR's analysis of the Project's impacts on wildfire risk was extensive and specific to both the Project and its location. Without rehashing the evidence contained in the record, the Court concludes substantial evidence supports the County's findings regarding the Project's impact on wildfire risks, with one exception which will be discussed in the following section.

C. Impacts on Emergency Evacuation Routes.

In its briefing, Real Party differentiated project evacuation routes from community or area-wide evacuation routes. The Court agrees that analysis of the Project's evacuation routes are a "reverse CEQA" issue and need not be addressed in the EIR. The Project's impacts to community evacuation routes, however, must be analyzed in the EIR.

In *California Building Industry Assoc. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, at issue was an agency's thresholds of significance for certain air pollutants which required project proponents to evaluate how existing air pollution would affect individuals within the proposed project. The Supreme Court concluded, "CEQA generally does not require an analysis of how existing environmental conditions will impact a projects future users or residents." (*Id.* at p. 386.) CEQA does, however, require an analysis of a "project's potentially significant *exacerbating* effects on existing environmental hazards – effects that arise because the project brings 'development and people into the area affected.'" (*Id.* at p. 388; italics in original.) The Supreme Court explained an "EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas)." (*Ibid.*)

Newton Preservation Society v. County of El Dorado (2021) 65 Cal.App.5th 771, involved a bridge construction project where project opponents, many of whom were residents, alleged the project would have a significant impact on evacuation. The Court of Appeal held the evidence presented in that case did not "support a fair argument that the project may have a significant impact on the environment or may exacerbate existing environmental hazards." (*Id.* at p. 792.) The court determined the comments offered in opposition to the project "lacked factual foundation and failed to contradict the conclusions by agencies with expertise in wildfire evacuations with *specific* facts calling into question the underlying assumptions of their opinions as it pertained to the project's potential environmental impacts." (*Id.* at p. 791, italics in original.)

Real Party is correct that analysis of community evacuation is not required unless the project might exacerbate existing environmental hazards. (Real Party in Interest Lotusland Investment Holding, Inc.'s Supplemental Brief Re: Evacuation filed November 19, 2021, (Real Party's Supplemental Brief), p. 7:7-9.). Here, unlike the case in *Newton, supra,* there is evidence that the Project might exacerbate existing environmental hazards. As pointed out by Petitioners Center for Biological Diversity (CBD) and California Native Plant Society (CNPS), a significant number of wildfire related deaths in California occur during attempts to evacuate. (Petitioners' Opening Brief filed June 15, 2021, pp, 19:26-20:4.) The hazards of a wildfire are certainly exacerbated if community residents are unable to evacuate safely due to congested evacuation routes. It is estimated that the Project will bring 4,070 residents to the area. (AR 6612.) This is a significant population increase when considering the Project is located in Lake County Census Tracts 12 and 13 which had an estimated combined population of 10,163 in 2017. (AR 6608.) If a wildfire occurs, the Project's residents will need to evacuate. These people will likely compete with residents in the surrounding area for safe evacuation routes. The additional people competing for the same limited routes can cause congestion and delay in evacuation, resulting in increased wildfire related deaths. This is undoubtedly a situation where the Project, by bringing a significant number of people into the area, may significantly exacerbate existing environmental hazards; specifically, wildfires and their associated risks. Therefore, this is an issue that is required to be addressed under CEQA.

The County concluded the impacts to existing emergency evacuation plans would be less than significant. (AR 6746.) The evidence supporting this conclusion are

comprised primarily of opinions from traffic engineers and fire and law enforcement personnel. (Real Party's Supplemental Brief, p. 8:2-8; AR 42594-42595; 53739-53740.) Those opinions were not based on any identifiable facts.

There are two problems with this evidence. First, this evidence primarily addresses the issue of whether the Project's residents could safely leave the Project in the event of a wildfire. This evidence does not focus on the issue that is required to be addressed by CEQA; whether evacuation of the residents in the nearby area would be affected by the evacuation of the Project's residents during a wildfire.

Second, this evidence cannot be considered substantial evidence. Substantial evidence includes "expert opinion supported by facts." (14 CCR §15384(b).) Unsubstantiated opinion does not constitute substantial evidence. (14 CCR §15384(a).) The conclusion reached by the County as it relates to emergency evacuation plans is based on unsubstantiated expert opinions. This evidence is legally insufficient to qualify as substantial evidence under CEQA.

Because the County's findings regarding community emergency evacuation routes are not supported by substantial evidence, the EIR does not comply with CEQA.

III. Carbon Credit Program[2].

Petitioners argue the carbon credit program is ineffective as a mitigation measure because it does not include sufficient safeguards to ensure offsets are real, permanent, verifiable and enforceable. (*Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 506-507.)

[2] The carbon credit program was discussed by the parties under the broader topic of climate impacts and GHG mitigation measures. Also discussed was the transportation demand management plan (TDM). The Court concludes

Here, the carbon credit program was added through an errata to the Final EIR after the public comment period had closed. The County explained:

> Also we added a mitigation requiring the purchase of greenhouse gas carbon credits to offset the project's remaining greenhouse gas emissions that are above and beyond the stated threshholds in the EIR. However, the EIR's conclusion of a significant, unavoidable greenhouse gas impact would not change, given the limited supply of carbon offsets and the uncertainty regarding the availability of offset credits throughout the life of the project.

(AR42599.)

Given the timing of the addition of this measure to the EIR and the comments made by the County, unlike the mitigation measure in *Golden Door Properties, LLC, v. County of San Diego, supra,* the carbon credit program here was not a mitigation measure that the County relied upon in making any findings contained in the EIR. In fact, the County described the modifications to the mitigation measures contained in the Errata, which included the addition of the carbon credit program, to be minor and insignificant. (AR 7193.) To the extent this measure did not comply with CEQA, the Court determines it does not constitute prejudicial error because inclusion of the measure did not "deprive[ ] the public and decision makers of substantial relevant information about the Project's likely adverse impacts." (*Neighbors for Smart Rail v. Exposition Metro Line Constr. Auth.* (2013) 57 Cal.4th 439, 463.)

IV. Water Supply.

Petitioners CBD and CNPS take issue with on an off-site groundwater well located within the Collayami Valley Groundwater Basin. Groundwater from on-site wells and surface water sources are expected to supply all of the projects water demands.

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the TDM substantially complies with CEQA. (cf. *City of Hayward v. Trustees of California State University* (2015) 242 Cal.App.4th 833, 854-855.)

(AR6554-6556.) The off-site well would provide non-potable water if required. (AR 6689.) The County determined because of the characteristics of the basin, the potential impacts of drawing water from the well could not be determined. (AR 6558.) The County therefore imposed mitigation measure 3.9-3 which requires the applicant to provide to the County an analysis that defines a safe yield as specified in the measure. It also requires the applicant to submit annual monitoring reports and provide quarterly data for the first five years of use. (AR 6575.) It further mandates the development of a groundwater management plan should the reports show an impact to groundwater levels. (*Id.*) The County found any potential impact would be mitigated to less than substantial when considering this measure. The County's findings regarding the well are supported by substantial evidence. This mitigation measure complies with CEQA.

V. Special Status Plants.

Two appendices attached to the EIR[3] provide an in depth analysis and disclosure of special status plants. The County's findings relating to the special status plants are supported by substantial evidence. Which specific plants will be impacted cannot be determined because the exact location of the buildings on the site has not been determined. Mitigation measure MM 3.4-3 is designed to accommodate the uncertainty of the impacts on the plants. It requires pre-construction botanical surveys be conducted by a qualified biologist. If avoidance of a special-status plant is not feasible, compensatory planting or transplanting shall occur. Those plants would be subject to monitoring to ensure success of the plants[4]. (AR 6387-6388.) This mitigation measure complies with

[3] The appendices are labeled as BRA1 (AR2489-2926) and BRA2 (AR2927-3403).

[4] These requirements also apply to initial vegetation clearing along proposed roadways. (AR 6387.)

CEQA. (cf. *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 943.)

VI. Project Alternatives.

"The wisdom of approving [a] project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law . . . simply requires that those decisions be informed, and therefore balanced." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 576.) "'[F]easibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417.)

Petitioners contend the County's finding of infeasibility of Alternative C was not supported by substantial evidence. With respect to Alternative C, the County concluded, "[G]iven that the Reduced Intensity Alternative would result in significantly fewer economic benefits, the County finds that the Reduced Intensity Alternative does not warrant approval in lieu of the Proposed Project." Economic benefits are key goals of the project. The stated project objectives included economic growth, expanding high-end hospitality and construction employment opportunities, and increasing revenues for the County. (AR 6769.) Alternative C would restrict the overall luxury market resort and residential community appeal; reduce revenues and workforce; and reduce marketability to investors, buyers and consumers in the high-end luxury resort market. (AR 53789-

53791.) The evidence supports the conclusion that Alternative C would result in fewer economic benefits to the County.[5]

Intervenor suggests the County should have considered alternative locations closer to a transit stop because GHG emissions would have been reduced in such a location.[6] The Project consists of high-end residential, resort, and recreational facilities. It is speculative to conclude consumers of the project will travel from out of the area by public transit.

"It is [the petitioner]'s burden to demonstrate inadequacy of the EIR. [A petitioner] must therefore show the agency failed to satisfy its burden of identifying and analyzing one or more potentially feasible alternatives. [A petitioner] may not simply claim the agency failed to present an adequate range of alternatives and then sit back and force the agency to prove it wrong." *Mount Shasta Bioregional Ecology Center v. County of Siskiyou* (2012) 210 Cal.App.4th 184, 199.) Here, Intervenor "make[s] no attempt to show how such an alternative would have met most of the goals of the Project, would have been potentially feasible under the circumstances, or would have reduced overall environmental impacts of the Project." (*Ibid.*)

The County properly considered and rejected potential alternatives.

VII. Recirculation of the EIR.

Recirculation of an EIR is not required when the changes merely clarify, amplify

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[5] Intervenor's position is that Alternative C was found infeasible based on the applicant's expectation of reduced revenues. (Intervenor People of the State of California's Opening Brief filed June 15, 2021 (People's Opening Brief), p. 35:4-6.) This interpretation is not supported by the language of the EIR as a whole. It is the economic benefits to the County, not the applicant. that was the driving force behind the County rejecting Alternative C.

[6] People's Opening Brief, pp. 32:22-33:1.

or make insignificant modifications to an EIR. (*Laurel Heights Improvement Association v. Regents of University of California* (*Laurel Heights II*) (1993) 6 Cal.4th 1112, 1130.) The County found the Errata contained minor edits and clarifications which did not constitute significant new information that deprived the public of a meaningful opportunity to comment upon a substantial impact resulting from the Project or a mitigation measure. (AR 7193.) This determination is required to be upheld if supported by substantial evidence. (*Laurel Heights II, supra,* at p. 1135.) Reasonable doubts are to be resolved in favor of the agency's decision. (*Ibid.*)

The EIR's analysis of the Project's impacts on wildfire risk was extensive. The County's finding that the EIR did not include any information that showed a substantial increase in the severity of the wildfire related impacts is supported by substantial evidence.

The Errata did add an additional mitigation measure regarding the purchase of GHG carbon credits. Recirculation is required only if a new mitigation measure is not adopted. (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 Cal.App.4th 316, 330.) The mitigation measure in the Errata was adopted.

Based on the County's findings that the Errata contained only clarifications, amplifications and insignificant modifications to the EIR, recirculation of the EIR was not required.

VIII. Other Issues Raised by Petitioners Not Specifically Discussed.

Due to time constraints, the Court has not discussed each and every issue raised by Petitioners. The Court focused on those issues which it considered to be of primary importance in helping the parties to understand the reasons for the Court's ruling. As to

all other issues raised by Petitioners not specifically discussed herein, the Court has determined all findings made by the County were supported by substantial evidence and the County otherwise substantially complied with the requirements of CEQA.

IX. Timeliness of Intervenor's Claims.

A subsequent pleading may relate back to the original pleading for statute of limitation purposes if it (1) rests on the same general facts as the original; (2) involves the same injury; and (3) refers to the same instrumentality. (*Norgart v. Upjohn Co.* (1999) 21 Cal.4th 383, 408.)

The timeliness of Intervenor's petition is moot as to all claims denied by the Court. As discussed above, the Court has concluded the EIR was deficient because the County's findings regarding community emergency evacuation routes are not supported by substantial evidence. This issue was addressed by causes of action in the Petitions filed by CBD and CNPS. Therefore, the claim related to this issue was timely filed pursuant to the relation-back doctrine.

X. Conclusion.

Because the County's findings regarding community emergency evacuation routes are not supported by substantial evidence, the EIR does not comply with CEQA. Had the findings regarding emergency evacuation routes been supported by substantial evidence, the Court would have concluded the EIR complied with CEQA and therefore denied each of the Petitions.

Order

The Court orders as follows:

1. Respondent's and Real Party in Interest's Joint Motion to Augment the

Administrative Record filed August 17, 2021, is granted. Exhibits A and B attached to the Declaration of Charmaine G. Yu in Support of Respondent's and Real Party in Interest's Joint Motion to Augment the Administrative Record are hereby added to the administrative record in this action.[7]

2. The People's Request for Judicial Notice in Support of Opening Brief filed June 15, 2021, is granted. The Court takes judicial notice of Exhibits 1 and 2 attached to the Declaration of Andrew R. Contreiras.

3. The Objection to the Declaration of Van Bustic Regarding E-Mail Communication in the Record filed October 15, 2021, is sustained.

4. A judgment will issue granting a peremptory writ of mandate ordering Respondent County of Lake to set aside its (a) certification of the final EIR, (b) findings relating to impacts to an adopted emergency evacuation plan, and (c) approval of the Project.

5. Intervenor/Petitioner People of the State of California is directed to prepare a form of judgment and peremptory writ of mandate.

6. The issues of costs and attorney fees are reserved.

Date: January 4, 2022

J. David Markham
Judge of the Superior Court

[7] Prior to the trial in this matter, a number of motions were filed by the parties. The Court ruled on those motions prior to commencement of the trial. At the request of counsel, orders relating to those motions are contained herein.

Center for Biological Diversity vs. County of Lake et al CV421152

PROOF OF SERVICE

I am a Deputy Clerk of the Superior Court of California, County of Lake. I am over the age of 18 and not a party to the action to which this document is attached.

January 4, 2022- On this date, I mailed a true copy of the attached document to the person(s) whose name(s) are set forth below by placing said copy in a sealed envelope addressed to each of said person(s), at the address set forth below, which envelope was then sealed and postage fully prepaid, and deposited in the mail at Lakeport, California to be delivered by United States mail.

Peter Broderick-Center for Biological Diviersity
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Nicole Johnson & Anita Grant – by courhouse mailbox

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Krista D. LeVier, Court Clerk By:

Dated: January 4, 2022

BY 43
Yolanda Blum
Deputy Court Clerk

Appendix A-2

Judgment and Writ of Mandate

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FILED
SUPERIOR COURT
COUNTY OF LAKE
FEB 25 2022
Krista D. LeVier
BY _____ Deputy Clerk

Exempt From Fees Pursuant to Government Code § 6103.

FEB 16 2022

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LAKE

CENTER FOR BIOLOGICAL DIVERSITY, **Petitioner,** **v.** **COUNTY OF LAKE, BOARD OF SUPERVISORS OF THE COUNTY OF LAKE, AND DOES 1-20,** **Respondents.**	Case No. CV421152 Consolidated with Case No.: CV 421193 ~~[PROPOSED]~~ **JUDGMENT IN CASE NO. CV421152** Dept: 2 Judge: Hon. J. David Markham Trial Dates: October 29, and November 3, 2021 Lead Action (CV-421152) Filed: August 20, 2020 Action (CV-421193) Filed: September 2, 2020
LOTUSLAND INVESTMENT HOLDINGS, INC., AND DOES 21-40, **Real Parties in Interest.**	
PEOPLE OF THE STATE OF CALIFORNIA EX REL. ROB BONTA, ATTORNEY GENERAL **Intervenor/Petitioner**	

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Attorneys for California Native Plant Society

Petitioner Center for Biological Diversity challenged the July 20, 2020 decision of Respondents County of Lake and the Lake County Board of Supervisors (collectively, "County") to approve the Guenoc Valley Mixed-Use Planned Development Project ("Project") proposed by Real Party in Interest Lotusland Investment Holdings, Inc. ("Real Party") and to certify an Environmental Impact Report ("EIR") for the Project and adopt findings. The case was consolidated with a similar petition filed by the California Native Plant Society (collectively, with the Center for Biological Diversity, "Petitioners") for all purposes except entry of judgment. The People of the State of California, ex rel. Attorney General Rob Bonta ("Intervenor") were granted leave to intervene in the consolidated cases before briefing and trial.

The hearing on the merits was held on October 29, 2021 and November 3, 2021 before the Honorable J. David Markham in Department 2 of the Lake County Superior Court. Peter J. Broderick of the Center for Biological Diversity and Rebecca L. Davis and Brian B. Flynn of Lozeau Drury LLP appeared on behalf of Petitioners. Nicole Rinke, Andrew R. Contreiras, and Shannon Clark of the Office of the Attorney General appeared on behalf of Intervenor. Anita Grant and Nicole D. Johnson of the County of Lake and Arthur F. Coon of Miller Starr Regalia appeared on behalf of the County. Jonathan R. Bass and Charmaine Yu of Coblentz Patch Duffy & Bass LLP appeared on behalf of Real Party.

The Court, having reviewed the record of proceedings in this matter, the briefs and papers submitted by counsel, and the arguments of counsel; and the matter having been submitted for decision,

IT IS ORDERED AND ADJUDGED THAT:

1. For the reasons set forth in this Court's Ruling and Order on Petitions for Writ of Mandate dated January 4, 2022, attached as Exhibit A and incorporated by reference, Judgment is hereby entered granting in part, and denying in part, the Petition for Writ of Mandate, as set forth in more detail in the incorporated Ruling and Order.
2. The Lake County Superior Court issues the peremptory writ of mandate attached as Exhibit B, ordering the County to:

a. Set aside its certification of the EIR;

b. Set aside and vacate its findings relating to impacts to community evacuation or an adopted emergency evacuation plan;

c. Set aside and vacate all approvals adopted in connection with the County's approval of the Project and certification of the EIR, including Amendment to the Lake County General Plan (GPAP 18-01) for the Guenoc Valley Mixed Use Commercial Development; Amendment to the Lake County General Plan Amendment (GPAP 18-01) for the Guenoc Valley Mixed Use Commercial Development; Amendment to General Plan Policy LU 6.12 of Chapter 3, Section 3.9 (Economic Development) of the Lake County General Plan; Zoning Ordinance Text Amendment (AM 18-04); Ordinance No. 3095 Establishing Regulations and Development Standards for the Guenoc Valley Zoning District or "GVD District"; Sectional District Zoning Map No. 3.7(b) 1.401; Sectional District Zoning Map No. 3.7(b) 1.402; General Plan of Development (GPD 18-01); Major Use Permit (UP 18-49); Tentative Subdivision Map (SD 18-01); Development Agreement (DA 18-01); Tentative Subdivision Map (SD 20-01); and Major Use Permit (UP 20-02).

d. Should Real Party choose to proceed with pursuing reapproval of the Project, prior to any reapproval of the Project, the County shall take such specific action as may be necessary to bring its EIR and findings as they relate to the issue of community emergency evacuation routes into compliance with this Court's Ruling and Order and CEQA, and upon any reapproval the County shall return to this Court to show the action it has taken and seek this Court's determination that it has complied with the Writ.

3. The Court reserves jurisdiction over any timely claim for an award of costs and attorneys' fees.

4. The Court retains jurisdiction over the County's proceedings with respect to the

Project, pursuant to Public Resources Code section 21168.9(b) and all applicable law, to ensure compliance with the peremptory writ issued pursuant to this Judgment and CEQA.

DATED: 2/25/2022

David Markham

Hon. J. David Markham
Judge of the Lake County Superior Court

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FILED
SUPERIOR COURT
COUNTY OF LAKE
FEB 25 2022
Krista D. LaDoux
BY _____ Deputy Clerk

Exempt From Fees Pursuant to Government Code § 6103.

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LAKE

CENTER FOR BIOLOGICAL DIVERSITY,

Petitioner,

v.

COUNTY OF LAKE, BOARD OF SUPERVISORS OF THE COUNTY OF LAKE, AND DOES 1-20,

Respondents.

LOTUSLAND INVESTMENT HOLDINGS, INC., AND DOES 21-40,

Real Parties in Interest.

PEOPLE OF THE STATE OF CALIFORNIA EX REL. ROB BONTA, ATTORNEY GENERAL

Intervenor/Petitioner

Case No. CV421152

Consolidated with Case No.: CV 421193

~~[PROPOSED]~~ PEREMPTORY WRIT OF MANDATE

Dept: 2
Judge: Hon. J. David Markham
Trial Dates: October 29, and November 3, 2021

Lead Action (CV-421152) Filed: August 20, 2020
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Attorneys for California Native Plant Society

TO RESPONDENTS COUNTY OF LAKE AND THE LAKE COUNTY BOARD OF SUPERVISORS:

This action challenges the July 21, 2020 decision of Respondents County of Lake and the Lake County Board of Supervisors (collectively, "Respondents") to approve the Guenoc Valley Mixed-Use Planned Development Project ("Project") proposed by Real Party in Interest Lotusland Investment Holdings, Inc. ("Real Party") and to certify an Environmental Impact Report ("EIR") for the Project and adopt findings. The Court having entered Judgment in this proceeding directing that a Peremptory Writ of Mandate issue under the seal of this Court,

HEREBY COMMANDS Respondents, on receipt of this writ, to:

1. Set aside the certification of the EIR within 60 days.
2. Set aside and vacate, within 60 days, the findings relating to impacts to community evacuation or an adopted emergency evacuation plan.
3. Set aside and vacate, within 60 days, the County approvals adopted in connection with the Respondent's certification of the EIR, including Amendment to the Lake County General Plan (GPAP 18-01) for the Guenoc Valley Mixed Use Commercial Development; Amendment to the Lake County General Plan Amendment (GPAP 18-01) for the Guenoc Valley Mixed Use Commercial Development; Amendment to General Plan Policy LU 6.12 of Chapter 3, Section 3.9 (Economic Development) of the Lake County General Plan; Zoning Ordinance Text Amendment (AM 18-04); Ordinance No. 3095 Establishing Regulations and Development Standards for the Guenoc Valley Zoning District or "GVD District"; Sectional District Zoning Map No. 3.7(b) 1.401; Sectional District Zoning Map No. 3.7(b) 1.402; General Plan of Development (GPD 18-01); Major Use Permit (UP 18-49); Tentative Subdivision Map (SD 18-01); Development Agreement (DA 18-01); Tentative Subdivision Map (SD 20-01); and Major Use Permit (UP 20-02).

4. File and serve an initial return to the Writ no later than 75 days after service of this Writ specifying the actions taken as of that date to comply with the terms of this peremptory writ of mandate, as well as the general substance and estimated timing of any future actions contemplated to be taken by County, in any further County proceedings regarding the Project, to comply with this Court's Judgment, Writ, and CEQA.

5. The Court shall retain jurisdiction over these proceedings pursuant to Public Resources Code section 21168.9(b), until the Court determines that Respondent has adequately complied with this Peremptory Writ of Mandate and CEQA. Should the Real Party choose to seek the County's reconsideration and approval of the Project, the County shall conduct such administrative proceedings in a manner consistent with this Court's Judgment and Writ, and this Court shall retain continuing jurisdiction over any such further proceedings before the County on the Project and its related environmental review and findings under CEQA, under all applicable law. Should the County determine to reapprove the Project, then following its action it shall return to this Court to seek a determination that it has complied with this Court's Judgment and Writ.

THE FOREGOING PEREMPTORY WRIT OF MANDATE ISSUES IMMEDIATELY.

IT IS SO ORDERED.

J. David Markham

DATED: 2/25/2022

Hon. J. David Markham
Judge of the Lake County Superior Court

Appendix B

First Appellate Court Decision

Court of Appeal, First Appellate District
Charles D. Johnson, Clerk/Executive Officer
Electronically FILED on 10/23/2024 by C. Hoo, Deputy Clerk

Filed 10.23.24

CERTIFIED FOR PARTIAL PUBLICATION*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FIRST APPELLATE DISTRICT

DIVISION FOUR

PEOPLE OF THE STATE OF CALIFORNIA EX REL. ROB BONTA, ATTORNEY GENERAL et al., Petitioners and Appellants, v. COUNTY OF LAKE, Respondent; LOTUSLAND INVESTMENT HOLDINGS, INC., et al., Real Parties in Interest.	A165677 (Lake County Super. Ct. Nos. CV421152, CV421193)

Petitioners Center for Biological Diversity and California Native Plant Society challenged Respondents County of Lake and the Lake County Board of Supervisors' (collectively, the County) approval of the Guenoc Valley Mixed-Use Planned Development Project (project) proposed by Real Party in Interest Lotusland I6nvestment Holdings, Inc. (Lotusland) and certification of a final environmental impact report (FEIR) for the project adopting its findings. Petitioners argued the FEIR did not properly analyze and/or mitigate the project's impacts on evacuation routes, wildfire risk, greenhouse

* Pursuant to California Rules of Court, rules 8.1100 and 8.1110, sections IV, V, and VII of this opinion are certified for publication.

gases, and water use. They further argued that the County failed to properly consider project alternatives and failed to recirculate the FEIR for public review after adding significant new information.

The trial court held that the County's findings regarding the impacts on the existing community's emergency evacuation routes were not supported by substantial evidence, and thus the FEIR did not comply with California Environmental Quality Act (CEQA). It otherwise rejected Petitioners' other challenges, which they appealed. We too reject these other challenges to the FEIR, but we agree that its conclusory discussion of the project's potential impact of exacerbating wildfire ignitions fails to provide meaningful information for the environmental assessment required by CEQA. Because the FEIR is invalid in part, a new environmental impact report (EIR) must be prepared, mooting Petitioners' request that the FEIR be recirculated.

BACKGROUND

Lotusland proposed the project, a luxury resort consisting of residential estate villas, hotel units, and related infrastructure, on 16,000 acres in an unincorporated and largely undeveloped area of Lake County known as the Guenoc Valley Ranch.

Having been designated the "lead agency" for purposes of approving the project under Public Resources Code, section 21067,[1] the County first published a draft environmental impact report (DEIR). The DEIR offered the public insight into the County's evaluation of the project's environmental impacts, the County's proffered mitigation measures, and alternatives to the proposed project.

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[1] All further statutory references are to CEQA provisions as codified in Public Resources Code sections 21000–21177 unless otherwise indicated. Where applicable, the CEQA guidelines (Cal. Code Regs., tit. 14, §§ 15000–15387) are denoted as "Guidelines."

Public comment letters alleged several deficiencies in the DEIR's analysis. The County published its responses to the public comments along with the FEIR in June 2020.

Petitioners and the Attorney General, on behalf of the People, submitted further comment letters maintaining that the FEIR fails to resolve many of the DEIR's issues. Most relevant here, public comment letters challenged the adequacy of disclosure and mitigation regarding Impacts 3.16-2 (exacerbating wildfire risks), 3.7-1 (generating greenhouse gas emissions), 3.9-2 (decreasing groundwater supplies), as well as the rejection of an environmentally superior alternative.

Of note, Petitioners averred the "FEIR remains deficient because it fails to acknowledge or adequately analyze the increased risk of wildfire that results from development and increasing the intensity of use in undeveloped areas subject to wildfire." While acknowledging the FEIR's wildfire prevention plan (Wildfire Plan) may reduce Impact 3.16-2, Petitioners criticized the FEIR for failing to disclose "the Project's potential to increase wildfire ignitions *as compared to existing conditions on the Project site*," particularly " 'how adding new residents will affect the potential for wildfires to start.' "

Petitioners also argued the FEIR's analysis of the project's greenhouse gas (GHG) emissions failed to correct deficiencies identified in comments to the DEIR. They applauded the inclusion "for the first time in the FEIR an administrative draft Transportation Demand Management plan" but nonetheless argued it fell short of CEQA's standards for mitigation measures and was improperly deferred. Petitioners also urged the County to "consider the use of legally adequate carbon offset program to offset the Project's unmitigated GHG emissions."

Beyond addressing their complaints in a revised FEIR, Petitioners requested that the County recirculate it.

At Lotusland's request, the Board continued its hearing. The County then published an errata to the FEIR and a supplemental report addressing the latest public comments. The errata acknowledges that "[d]evelopment of the Guenoc Valley Site would introduce additional wildfire risk factors as compared to existing conditions," including by an "increase in vehicular traffic" and an "increase [in] the number of inhabitants . . . thereby increasing the risk of wildfire due to human-caused ignitions." It also explains that the Wildfire Plan is a project commitment and "would ensure that features are incorporated into the [project] such that wildfire risks are not exacerbated." But the errata does not purport to amend the Wildfire Plan, which was last edited on June 1, 2020. However, certain fire prevention design features are included in the FEIR's Mitigation Monitoring and Reporting Plan, and the errata states the Wildfire Plan is "a component of the Proposed Project."[2]

This did not, however, assuage Petitioners' or the Attorney General's concerns. Regarding the increased wildfire risk, for example, the Attorney General noted the errata "fails to provide the required Project-specific

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[2] On July 17, 2020, Lotusland's attorney sent the County a letter (Philippakis Letter) addressing several of the comment letters' concerns. The Philippakis Letter explained that, because Lotusland "voluntarily offered at the outset to mitigate any risks of wildfire it had identified," the FEIR's "analysis largely analyzed the voluntary design features" instead of "identifying risks that need to be mitigated." Although it conceded that "humans are the main cause of fire ignitions," the letter claimed the "[p]roject design features make the risks . . . inapplicable." But due to concerns raised by the Attorney General that the Wildfire Plan's "measures were discretionary," the letter assured the County that it could enforce the commitments incorporated into the Mitigation Monitoring and Reporting Plan.

analysis of increased wildfire risk" as opposed to a "general summary of wildfire research on the effects of new development on wildfires." Accordingly, the Attorney General and Petitioners sought further revisions to the FEIR and "sufficient time . . . to review and understand the wildfire risks associated with the Project."

The County did not further revise the FEIR or recirculate it after releasing the errata. Instead, on July 21, 2020 — less than a week after publishing the errata — the Board held its hearing as scheduled, at which it certified the FEIR, approved the project, and adopted the County's Findings and Facts in Support of Findings and Statement of Overriding Considerations (Findings and Statement of Overriding Considerations).

Petitioners filed writ petitions alleging the project's approval violated CEQA.[3] The petitions allege that the FEIR fails to properly disclose, analyze, or mitigate the project's wildfire and community safety impacts, greenhouse gas emissions, offsite water use, and alternatives to the project.

The trial court ruled that the FEIR violates CEQA by failing to consider the project's impact on the community's ability to evacuate from a wildfire. But it rejected Petitioners' other contentions. The court entered final judgment and issued a writ directing the County to set aside the project approvals, vacate the associated findings, and de-certify the FEIR. Petitioners appealed.[4]

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[3] The People, represented by the Attorney General's Office, successfully moved to intervene in the action filed by the Center for Biological Diversity. The People's petition raised substantially similar issues. Months later, the trial court ordered the Petitioners' actions consolidated.

[4] The Attorney General filed a notice of appeal before reaching a settlement with Lotusland, and the appeal was dismissed. It is unclear from the briefing and the materials submitted why the AG voluntarily had its appeal dismissed.

DISCUSSION

I. CEQA

The Legislature has declared that it is the policy of the state that the procedures required by CEQA "are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects." (§ 21002.) In an effort to achieve these goals, CEQA requires the preparation of an Environmental Impact Statement (EIR), the purpose of which "is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." (§ 21002.1.)

The EIR should include, among other things, a detailed statement setting forth "[a]ll significant effects on the environment of the proposed project" and "[m]itigation measures proposed to minimize significant effects on the environment." (§ 21100, subd. (b)(1); see also Guidelines, § 15126 ["Significant Environmental Effects of the Proposed Project" and "The Mitigation Measures Proposed to Minimize the Significant Effects" shall be discussed "preferably in separate sections or paragraphs of the EIR"].)

"For each significant effect, the EIR must identify specific mitigation measures; where several potential mitigation measures are available, each should be discussed separately, and the reasons for choosing one over the others should be stated." (*Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1027 (*Sacramento Old City Assn.*).) If the EIR identifies significant environmental effects, the public agency may approve the project only if it makes one or more of the following findings:
"(a) . . . [¶] (1) Changes or alterations have been required in, or incorporated

into, the project which mitigate or avoid the significant effects on the environment . . . . [¶] (3) Specific economic, legal, social, technological or other considerations . . . make infeasible the mitigation measures or [project] alternatives identified in the environmental impact report." (§ 21081; see also *Sacramento Old City Assn., supra*, 229 Cal.App.3d at p. 1034.) These findings must be made for each identified significant effect "accompanied by a brief explanation of the rationale for each finding." (Guidelines, § 15091.)

However, "in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof." (§ 21002.)

II. Mandamus Standard of Review

As in other mandamus cases, we review the "agency's action, not the trial court's decision; in that sense appellate judicial review under CEQA is de novo." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 427 (*Vineyard*).) In reviewing an agency's compliance with CEQA, we review the administrative record for prejudicial abuse of discretion. (§ 21168.5.) Such abuse occurs "if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence." (*Ibid.*; *Vineyard*, *supra*, 40 Cal.4th at p. 426.)

We approach procedural and factual issues under two different standards of review. (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 512 (*Sierra Club*).) "[W]e determine de novo whether the agency has employed the correct procedures, 'scrupulously enforc[ing] all legislatively mandated CEQA requirements,' " but "we accord greater deference to the agency's substantive factual conclusions." (*Ibid.*) Mixed questions of law and

fact are "generally subject to independent review," but a more deferential standard may be warranted in circumstances where factual questions predominate. (*Id.*, at p. 516.)

"Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." (§ 21082.2, subd. (c); Guidelines, § 15384, subd. (a) ["substantial evidence" is "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached"].) "In determining whether substantial evidence supports a finding, the court may not reconsider or reevaluate the evidence presented to the administrative agency. (Pub. Resources Code, § 21168.) All conflicts in the evidence and any reasonable doubts must be resolved in favor of the agency's findings and decision." (*Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167, 1177.)

III. Substantial Evidence Shows Wildfire Plan and Biological Resources Analyses Are Reconcilable

We first address Petitioners' contention that the FEIR fails to reconcile its Wildfire Plan and its protection for biological resources. We reject the argument.[5]

The Wildfire Plan includes animal grazing and manual vegetation removal. It provides a map showing where "grazing and manual vegetation removal" will occur. Studies also located all special status plants observed across approximately 11,550 acres — about half of the total project

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[5] We observe that Petitioners bore their burden of showing this specific issue was raised by the Attorney General and thus exhausted the administrative remedies on this issue. (§ 21177, subd. (a); *Maintain Our Desert Environment v. Town of Apple Valley* (2004) 124 Cal.App.4th 430, 439.)

site — and estimated the protected species' total acreage territory and number of individuals.

Based on this information, the FEIR concludes that "[g]iven the scattered distribution of special-status plants on the [project] Site, and the existing and ongoing grazing activities, inclusion of grazing activities for the use of vegetative fuel reduction to reduce fire hazard would not result in long-term adverse impacts to special-status plants. This impact is therefore considered less than significant." Given the extensive studies and evidence supporting the County's conclusion, we do not reconsider it. (*Save North Petaluma River and Wetlands v. City of Petaluma* (2022) 86 Cal.App.5th 207, 216.)

Petitioners' reliance on *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655, in which the challenged EIR disclosed an increase in mining production that was "entirely inconsistent with the assurances elsewhere that there would be no increase in production" is unavailing. The County's mitigation measure to counter the impacts of vegetation clearing (MM 3.4-18) is not incompatible with the Wildfire Plan. As the FEIR explains, most sensitive habitats do not require any vegetation removal under the Wildfire Plan. Where that is not the case, MM 3.4-18 manages, and in some cases bars, the use of heavier equipment and grazing to clear vegetation. There is no irreconcilable inconsistency undermining the FEIR as an information document. (Cf. *San Joaquin Raptor Rescue Center*, at pp. 654–657.)

IV. FEIR Did Not Adequately Analyze Wildfire Risk

While we do not pass upon the correctness of the FEIR's determination that the project's purported design features sufficiently alleviate the potential impact of human-caused wildfires, the FEIR fails to sufficiently inform the

public of this risk. (See *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392 (*Laurel Heights*).) Specifically, the errata's belated mention of the project's potential to increase wildfire risks does not adequately disclose the increased risks relative to the baseline existing conditions.

A. Governing Standards

An EIR is " 'an informational document' " central to "CEQA's fundamental goal that the public be fully informed as to the environmental consequences of action by their public officials." (*Laurel Heights*, *supra*, 47 Cal.3d at pp. 391, 404.) Consequently, an EIR "shall" set forth "[a]ll significant effects on the environment of the proposed project" and "[m]itigation measures proposed to minimize significant effects on the environment." (§ 21100, subd. (b).)[6] "[S]ignificant effect" is defined as "a substantial, or potentially substantial, adverse change in the environment." (§§ 21100, subd. (d), 21068.) CEQA requires these analyses to be distinct. (§ 21100, subd. (b); see also *Sacramento Old City Assn.*, *supra*, 229 Cal.App.3d at p. 1027.) " 'To facilitate CEQA's informational role, the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions.' " (*Laurel Heights*, at p. 404.) In short, "there must be a disclosure of the 'analytic route the . . . agency traveled from evidence to action.' "

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[6] Mitigation measures are "feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment." (Guidelines, § 15041, subd. (a).) The Guidelines define "mitigation" to include "avoiding the impact altogether by not taking a certain action," "[m]inimizing impacts by limiting the degree or magnitude of the action," "[r]ectifying the impact by repairing, rehabilitating, or restoring the impacted environment," "[r]educing or eliminating the impact over time by preservation and maintenance operations," and "[c]ompensating for the impact by replacing or providing substitute resources." (Guidelines, § 15370, subds. (a)–(e).)

(*Ibid.*)

An agency's inadequate or conclusory discussion of a potentially substantial adverse change in the environment deprives the public of information necessary for informed self-government and constitutes a prejudicial abuse of discretion. (*Sierra Club*, *supra*, 6 Cal.5th at pp. 512–514; § 21168.5.) On review, we defer to the agency's factual finding, including which methodologies best identify and analyze significant environmental impacts. (*Sierra Club*, at p. 516.) But we independently review "whether the EIR includes enough detail ' " 'to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.' " ' " (*Ibid.*)

B. FEIR Insufficiently Disclosed Project's Potential Adverse Effects of Increased Wildfire Risks

The errata to the FEIR discloses, under Impact 3.16-2 regarding exacerbating wildfire risks, that "[d]evelopment of the [project site] would introduce additional wildfire risk factors as compared to existing conditions." Specifically, the errata outlines — in a single paragraph — that increased human habitation in a wildlife-urban interface increases the fire risk from "arson, children playing with fire, and debris-burning"; that increased vehicular traffic increases fire risk from "sparks, catalytic converters, and discarding of cigarettes"; and that "[t]he introduction of residences within the site would create a wildland-urban interface" that increases the general potential for human-ignited wildfires. These factors, it explains, "expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire." The errata further states that "wildfires tend to cause more damage" to low density developments. And the County's staff report, released following the errata's publication, states "[t]he Final EIR acknowledges that wildfire risk from development of the Proposed

Project would be potentially significant" and "would result in impacts associated with increased risk of wildfire ignition."

The need for the FEIR's disclosure of the potentially substantial adverse risk of human-caused wildfire is uncontroversial given the context. (See *League to Save Lake Tahoe Mountain v. County of Placer* (2022) 75 Cal.App.5th 63, 136 ["Developing new homes and stores in a very high fire hazard area risks exacerbating the hazard . . . ."]; *California Building Industry Assoc. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 385 ["EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., . . . , wildfire risk areas)"]; see Guidelines, § 15126.2, subd. (a).)[7]

Initially, the errata's information came too late. (*Sierra Watch v. County of Placer* (2021) 69 Cal.App.5th 86, 103 (*Sierra Watch*).) "CEQA requires agencies to discuss a project's potentially significant impacts in the draft EIR and final EIR. (CEQA Guidelines, § 15120, subd. (c); see also *id.*, §§ 15125, 15126.2.)" (*Ibid.*) And an agency cannot "make up for the lack of analysis in the EIR" through post-EIR analysis. (*Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 131 (*Save Our Peninsula Committee*) [errata not "subjected to the same ' "critical evaluation that occurs in the draft stage" ' "].) Otherwise, the public would be denied the " ' opportunity to test, assess, and evaluate the [newly revealed information] and make an informed judgment as to the validity of

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[7] We note that disclosures in the County's initial study — which promises "[p]otential impacts related to wildfire will be addressed in the Wildfire section of the EIR" — does not suffice. (*Sierra Club*, *supra*, 6 Cal.5th at p. 520 ["The relevant informational document here is the EIR"].) Moreover, in tension with the errata, the revised FEIR still asserts that "the prospect of growth, by itself, does not create an adverse effect on the environment."

the conclusions to be drawn therefrom.' " (*Id.*, at p. 131.) The same holds true for the letter from Lotusland's attorney, Katherine Philippakis, presented to the public the day before the Board hearing to approve the Project, and her oral testimony at the hearing in support of the Project. Neither the letter nor the testimony was made part of the FEIR, and therefore, cannot be said to have remedied the FEIR's insufficiencies. (See *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 88 (*Communities*) ([rejecting project proponent's post-EIR expert letter as "too little, and certainly too late, to satisfy CEQA's requirements" because "[i]t is the adequacy of the EIR with which [courts] are concerned, not the propriety of the subsequent decision to approve the Project"].)

It is fundamental to the purpose of CEQA that the public obtain a full understanding of the environmental impacts of a project from a single source relevant informational document — that being the EIR. (Cf. Guidelines § 15150, subd. (b) ["Where part of another document is incorporated by reference, such other document shall be made available to the public for inspection"]; *Sierra Club*, *supra*, 6 Cal.5th at pp. 520 ["The relevant informational document here is the EIR"].) This allows for easy access to the relevant information and direct accountability for the agency when dealing with large volumes of documents and material. Material not contained in the EIR cannot be expected to be considered; and therefore, cannot be relied upon to support an adequate EIR. (*Laurel Heights*, *supra*, 47 Cal.3d at p. 405 [" ' "Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report" ' "].) This also

ensures the public is fully informed of the environmental risks posed by the proposed project.

The FEIR in this case did not contain the information in the errata nor the Philippakis letter or Board presentation, as such, it came too late and may not be considered when evaluating the sufficiency of the FEIR.

Moreover, even if its discussion of the project's potentially significant impacts on wildfire risks did not come too late, the errata's passing disclosure is insufficient to comply with CEQA. "[T]he adequacy of an EIR's discussion of environmental impacts is an issue distinct from the extent to which the agency is correct in its determination whether the impacts are significant." (*Sierra Club*, *supra*, 6 Cal.5th at p. 514; cf. *Laurel Heights*, *supra*, 47 Cal.3d at pp. 403–404 ["Even if the Regents are correct in their conclusion that there are no feasible alternatives . . . , the EIR is nonetheless defective" because the "treatment of alternatives was cursory at best"].) An EIR's analysis must "provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences." (Guidelines, § 15151.) The instant FEIR does not perform this function.

Specifically, the FEIR fails to reasonably describe the "additional wildfire risk factors as compared to existing conditions" that the project would "introduce" to the area. Instead, the errata points to several sources of "human-caused ignitions" — i.e., arson, debris-burning, vehicle sparks, and discarding of cigarettes — and then cites a general study finding that "increased fire education, a decline in smoking, and modern vehicles . . . have reduced the impacts of anthropogenic causes of wildfire ignitions [other than by powerlines] in recent times." It concerns us that the County did not appear to "use its best efforts to find out and disclose all that it reasonably can" about the project's impact on these risk factors. (Guidelines, § 15144.)

The errata in no way explains the extent to which bringing in over 4,000 new residents to the largely undeveloped project site increases the risk of human-caused wildfire over the existing baseline risk. For example, given the general decline in human-caused wildfires, how many such ignitions occur per 1,000 people in a wildland-urban interface, and how much has that rate reduced as wildfire safety and education has increased? And how many wildfires ignite per 1,000,000 miles driven by vehicles with and by vehicles without catalytic converters, and how has the mix of vehicles on public roads affected those statistics over time?[8]

The current discussion prevents decision-making and the public from adequately evaluating the merits of the Wildfire Plan. (Guidelines, § 15151; *Sierra Club*, *supra*, 6 Cal.5th at p. 514 ["adequate description of adverse environmental effects is necessary to inform the critical discussion of mitigation measures and project alternatives"].) Despite imposing no revisions to the Wildfire Plan, the errata affirms the FEIR's original conclusion that the project "would not exacerbate the risk of wildfire from existing levels *with implementation of the Wildfire Prevention Plan*." As the FEIR currently stands, there is no way to connect the dots between the "additional wildfire risk factors," which the errata concedes exist, and the Wildfire Plan's prevention strategies, which the errata does not update.

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[8] Of course, we do not require that these specific questions be answered in the FEIR. (See *Sierra Club*, *supra*, 6 Cal.5th at p. 515 ["agency has considerable discretion to decide the manner of the discussion of potentially significant effects in an EIR"].) Nor must the risk be quantified if that is not possible. (*Id.*, at p. 520 ["if it is not scientifically possible to do more than has already been done to connect air quality effects with potential human health impacts, the EIR itself must explain why, in a manner reasonably calculated to inform the public of the scope of what is and is not yet known about the Project's impacts"].) But an EIR cannot give a mere cursory mention of potential significant impacts as the FEIR does here.

The errata contains a single sentence of such analysis, asserting that the Wildfire Plan's requirement of fire breaks will "reduce the risk of wildfire ignition from sparks or discarded cigarettes along project roadways." It vaguely points to the Wildfire Plan and a general decline in human-caused wildfire ignitions as support for its conclusion that the project does not exacerbate the risk of wildfire. While the Wildfire Plan comprehensively analyzes the project site's *current* wildfire risk, it does not expound on the anthropogenic risks that the errata admits development at the project site will "introduce." No component of the FEIR, therefore, discusses this aspect of the project in detail sufficient to enable the public to discern "the 'analytic route the . . . agency traveled from evidence to action.' " (*Laurel Heights*, *supra*, 47 Cal.3d at p. 404.)

The County counters that there is no need to separately discuss the project's potential adverse effects on increased wildfire risks because the Wildfire Plan's "design features" are a "central part of the [p]roject" — not mitigation measures — that reduce Impact 3.16-2 to "less than significant." But even if the Wildfire Plan's prevention strategies are properly characterized as part of the project, the FEIR still violates CEQA.[9] The dispositive issue is whether the FEIR "obfuscates required disclosure of the

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[9] Certainly, aspects of the Wildfire Plan — such as undergrounding power lines — reflect design choices. (E.g., *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656, fn. 8 (*Lotus*) ["composition of paving" plausibly part of design].) But we observe that other components of the Wildfire Plan, such as animal grazing, "[p]running tree limbs," and "remov[ing] vegetation debris that accumulates on [rooves]," are more naturally understood as "maintenance operations" aimed at "[r]educing . . . impacts" of a project introducing people to undeveloped, fire-prone areas. (See Guidelines, § 15370, subd. (d).) We are not persuaded that making it a project objective to be a " ' "model project" of wildfire mitigation' " converts such measures into project design features.

project's environmental impacts and analysis of potential mitigation measures." (*Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 185 (*Mission Bay*); cf. *Save Our Peninsula Committee*, *supra*, 87 Cal.App.4th at pp. 130 [finding information regarding mitigation measure disclosed in errata "does not make up for the lack of analysis in the EIR"].) It plainly does.

Mission Bay is an instructive contrast. There, a construction project was defined to include a transportation management plan, which in turn incorporated a special event transit service plan (Muni TSP). (*Mission Bay*, *supra*, 6 Cal.App.5th at pp. 179–180.) The court determined the EIR was adequate because it analyzed the project's environmental impacts on vehicle traffic and transit "both with and without implementation of the Muni TSP and applie[d] the same threshold standards to determine the significance of those impacts." (*Id.*, at p. 185.) Thus, "the environmental impacts of the project on vehicle traffic and transit [were] fully disclosed in the FSEIR." (*Ibid.*) That is not so here, where the County admits that no similar analysis occurred with and without the Wildfire Plan because the project as proposed is "the only one that Lotusland seeks to build."

Again, we do not prescribe the appropriate manner of discussing the project's potentially significant effects. We do not hold that the County must analyze the project's environmental impacts on wildfire ignitions with and without the Wildfire Plan. The County retains discretion in choosing the methodologies employed for analyzing environmental impacts and mitigation measures. (*Sierra Club*, *supra*, 6 Cal.5th at pp. 516, 521.) But the FEIR must sufficiently discuss the project's potential adverse effect of human-cause ignitions and analyze in some detail how the project's design (or mitigation measures) alleviates such risks. It is not sufficient to cite a scientific study

unrelated to the project and summarily state that "increased fire education, a decline in smoking, and modern vehicles . . . have reduced the impacts of anthropogenic causes of wildfire ignitions." That may be true, but it does not inform the public how this evidence led the County to conclude that the Wildfire Plan eliminates those otherwise reduced — but still present — risks. (*Laurel Heights*, *supra*, 47 Cal.3d at p. 392.) Such a discussion is critical to the public's understanding of the efficaciousness of the Wildfire Plan.[10] Here, the County presents no industry standard modeling tools, no methodology or analysis for its conclusory findings, nor any other discussion of how the Wildfire Plan proposes to address the existing baseline conditions other than the Project design proposal itself. This is insufficient. Failure to separately identify and analyze the significant impacts of the fire risk to the Project area and its baseline existing conditions before proposing mitigation measures violates CEQA. (*Lotus*, *supra*, 223 Cal.App.4th at pp. 655–658.)

Because the FEIR must be revised to provide critical information about the increased risk of wildfire ignitions, Petitioners' claim that the County erred by refusing to recirculate the FEIR in light of the errata's " 'significant new information' " is undeniably moot. (See § 21092.1; see also Guidelines, § 15088.5, subd. (a)(1).)" (*Communities*, *supra*, 184 Cal.App.4th at p. 101.) "Because the EIR is invalid in part, a new EIR must be prepared, submitted for public review and comment, and certified in accord with CEQA procedures." (*Laurel Heights*, *supra*, 47 Cal.3d at pp. 391, 404.)

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[10] Given the FEIR's failure to identify or describe with any particularity the project's potential to increase wildfire ignitions, we do not resolve whether the FEIR's mitigation of the project's wildfire impacts is deficient.

V. FEIR's Inclusion of Carbon Credit Program Does Not Violate CEQA

Petitioners challenge the FEIR's inclusion of a carbon credit program to mitigate the project's greenhouse gas (GHG) emissions on the grounds that it is ineffective, improperly deferred, and unenforceable. We find their position meritless.

An EIR must discuss and adopt "feasible" mitigation measures that alleviate significant adverse impacts. (§ 21002; Guidelines, § 15126.4.) A mitigation measure is feasible if it is "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (§ 21061.1.) Whether a measure is feasible is a factual finding reviewed for substantial evidence. (*Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 350). Infeasible measures need not be analyzed "in any detail." (*Ibid.*)

In reaction to the FEIR's conclusion that the project's impact due to greenhouse gas (GHG) emissions would be significant even after adopting feasible mitigation measures,[11] Petitioners' comment letter urged the County to "consider the use of a legally adequate carbon offset program." But as a memorandum detailing the County's responses to public comments explains, carbon offset credits "cannot be considered feasible" as a mitigation measure because "there is a limited supply of verifiable, reliable, real carbon offsets,"

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[11] The FEIR evaluates and adopts several measures to mitigate the project's significant impact on the direct and indirect generation of GHG emissions. These include using energy efficient technology, net zero energy buildings, and renewable energy (MM 3.7-1); implementing a transportation demand management plan (MM 3.13-4 incorporated through MM 3.7-1); utilizing less polluting engines during construction (MM 3.3-1 incorporated through MM 3.7-2); and conserving oak woodland habitat and replanting oak trees (MM 3.4-16).

and "no way to sure that adequate offset credits will be available" at the time that Lotusland would need to purchase them.

Nonetheless, the errata adds a condition to the FEIR's Mitigation Monitoring and Reporting Plan requiring Lotusland to "purchase [14,865] GHG emissions credits from a [California Air Resources Board] approved registry source or project to offset the difference between the mitigated project emissions and the [relevant significance] thresholds." Meanwhile, the County's Findings and Statement of Overriding Considerations restates that "[s]pecific economic, legal, social, technological, or other considerations make infeasible additional mitigation measures or project alternatives identified in the Final EIR [regarding GHG emissions]."

Petitioners do not challenge the County's infeasibility finding. Rather, they argue that, by virtue of being in the FEIR, the carbon credit program must meet CEQA's standards for feasible mitigation measures. Indeed, Petitioners suggest that the County would have avoided any alleged defect by simply rejecting the program from the FEIR altogether.

But Petitioners cite no authority for the contention that CEQA bars considering potentially beneficial measures that agencies deem too uncertain to be feasible. (*Temple of 1001 Buddhas v. City of Fremont* (2024) 100 Cal.App.5th 456, 204 [arguments unsupported by legal authority or cogent analysis are forfeited].) And, contrary to Petitioners' contention, the program was *not* relied upon to eliminate the project's impacts. At the July 21, 2020 Board hearing, it was explained that the carbon credit program's addition would not avert the project's significant and unavoidable impact from GHG emissions "given the limited supply of carbon offsets and the uncertainty regarding the availability of offset credits throughout the life of the project." The errata does not state otherwise; it merely explains the

amount of carbon credits Lotusland would seek to purchase is the "difference between the total project emissions and the [state recognized 2030 service population] thresholds." Petitioners' reliance on *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 485 for the proposition that mitigation measures for GHG emissions must ensure that carbon credits are " 'real, additional, quantifiable, permanent, verifiable, and enforceable' " is therefore inapposite.

Moreover, Petitioners do not contend the carbon credit program will impose any adverse impacts. Thus, to the extent the addition of this program to the FEIR did not comply with CEQA, we find it does not constitute prejudicial error because its inclusion did not "deprive[] the public and decision makers of substantial relevant information about the Project's likely adverse impacts." (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 463.)

VI. Transportation Demand Management Plan Not Improperly Deferred

We reject Petitioners' arguments that proposed mitigation measure 3.13-4 — implementing a Transportation Demand Management (TDM) — is improperly deferred and inadequate.

An EIR cannot put off formulating mitigation measures (Guidelines, § 15126.4, subd. (a)(1)(B)), but it need not be exhaustive. (*San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656, 696.) A measure's specific details " 'may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review' provided that the agency" " '(1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and