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Via Electronic Mail

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**RE: Objections to “Seigler Springs North” commercial cannabis cultivation, UP 21-17,
IS 21-18.**

Honorable Lake County Supervisors,

I write on behalf of our client, the Adidam Holy Domains and its Mountain Of Attention Sanctuary, to raise a number of important objections to the proposed cannabis cultivation permit. The Mountain Of Attention Sanctuary is a nonprofit religious retreat and nature sanctuary encompassing approximately 1,000 acres in the Seigler Springs area of southern Lake County. The Sanctuary is located within a Very High Fire Hazard Severity Zone and contains forests, springs, groundwater resources, wildlife habitat, and other sensitive environmental resources that are directly adjacent to the proposed project. As discussed, below, the proposed project’s adverse

effects to forests, hydrology, wildlife, wildfire evacuation, land use, and noise, all compel a denial of the proposed project based on the environmental analysis provided to you today. These comments are supported by independent technical reports prepared by licensed and qualified professionals, which are incorporated by reference and submitted concurrently.

I. Purpose and Requirements of CEQA and a Mitigated Negative Declaration

Prior to approving any discretionary project, an agency must disclose, avoid, and mitigate a project's potentially significant direct, indirect, and cumulative environmental effects. (*See, e.g.,* CEQA Guidelines §§ 15002(f), 15021(a).)¹ If a project “may cause a significant effect on the environment,” the lead agency must prepare an environmental impact report (EIR). (*Id.*, § 15063.) A lead agency may prepare a negative declaration (ND), with or without mitigation measures, if impacts are insignificant. (Guidelines § 15070; *see Friends of College of San Mateo Gardens v. San Mateo County Community College Dist.* (2017) 11 Cal.App.5th 596, 604 [“*San Mateo Gardens II*”].) If substantial evidence supports a fair argument that the project may have one or more significant effects, a mitigated negative declaration is not allowed, and an EIR must be prepared. (CEQA Guidelines § 15064.) “The fair argument standard establishes a low threshold.” (*Consolidated Irrigation Dist. v. City of Selma* (2012) 204 Cal.App.4th 187, 207.) “Factual statements by members of the public may constitute substantial evidence supporting a fair argument of potential significant impact.” (*League to Save Lake Tahoe v. County of Placer* (2022) 75 Cal.App.5th 63, 96.)

An initial study that is materially deficient is insufficient to support a negative declaration. (*See Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180, 197.) The initial study must include an accurate description of the proposed project, its location, and identification of the environmental setting. (Guidelines §§ 15063(d), 15125; *Taxpayers for Accountable Sch. Bond Spending v. San Diego Unified Sch. Dist.* (2013) 215 Cal.App.4th 1013, 1037, 1047; *Communities*

¹ The “Guidelines” are 14 Cal. Code Regs. §§ 15000–15387.

for a Better Env't v. South Coast Air Quality Management Dist. (2010) 48 Cal.4th 310, 320.) The initial study must make all required impact determinations based on the evidence disclosed in the record. (Guidelines § 15063(d)(3); *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1347.)

II. The IS/MND Fails to Disclose Potentially Significant Impacts to Forestry Resources.

A Timberland Conversion Permit (“TCP”) must be required for the project, but the IS/MND fails to adequately disclose the existing conditions, project impacts, or regulatory requirements for the necessary TCP. The California Forest Practice Act and Forest Practice Rules set forth requirements for timberland-capability determinations, commercial species criteria, and TCP under PRC §4621 and 14 CCR §§895.1, 1100, and 1104.1. These requirements apply broadly to TPZ and to potential-timberland parcels in Lake County. The IS/MND contains no timberland-capability determination, no evaluation of commercial species under 14 CCR §895.1, and no reference to the Forest Practice Act or PRC §4621.

The IS/MND (at 12) incorrectly concludes that the proposed project would not result in the loss of forest land or conversion of forest land to a non-forest use. In fact, the IS/MND (at 14) contradicts itself, and also asserts that “The Project site is currently zoned “TPZ”, Timber Preserve and contains forest lands and timberland.” The oak mitigation plan similarly describes that “The proposed cannabis cultivation development will be established in areas of the project property with established low elevation Ponderosa pine (*Pinus ponderosa*) and black oak (*Quercus kelloggii*) forests.” The IS/MND (at 14) erroneously concludes, “However, none of the “TPZ”-zoned lots have any history of timber production, and it is not likely that the applicant will pursue timber production on the subject lots.” The IS/MND’s conclusion that the site would never be used for timber production is not only wholly speculative, it also fails to apply the correct legal standard.

The IS/MND bases its analysis on the California Department of Conversion Farmland Mapping and Monitoring Program which apparently maps the project parcels as ‘Other Lands’.

Instead, the assessment must be based on site-specific observations. (*See, Ebbetts Pass Forest Watch v. Cal. Dep't of Forestry & Fire Prot.*, (2008) 43 Cal. 4th 936, 956 “sole reliance on . . . its regulatory program . . . is inadequate to address environmental concerns under CEQA. DFA is responsible for analyzing the environmental impacts of proposed” projects].)

The applicant’s own consulting report and biological assessment indicates that commercial species including black oak, ponderosa pine, douglas fir, and sugar pine are all present throughout the site. The Forest Practice Act defines timberland as land that 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.” Under 14 CCR § 895.1, commercial species for the Northern Forest District are divided into Group A and Group B, including species that are now growing naturally, or have grown naturally in the recorded past. Certain hardwoods and other species, including California black oak, Oregon white oak, tanoak, Pacific madrone, California laurel, gray pine, and western juniper, likely qualify as commercial species.

This includes not only existing tree stands, but also the native vegetation to the majority of the project site that was burned by the Valley Fire. Without question, the occurrence of wildland fires does NOT remove land from timberland projections. On the contrary, Cal Fire also requires timber harvesting and conversion permits when removing burned trees from a property. (Compare, 14 CCR § 1038(g)[exempting some post-fire harvesting from permitting].)

Under the Forest Practice Act, timber operations include the cutting or removal of timber or other solid wood forest products from timberlands for commercial purposes, and the definition of commercial purposes is broader than simply selling logs. It includes cutting or removing trees or other forest products during conversion of timberlands to non-timber uses subject to PRC § 4621, including production of other agricultural crops. The Forest Practice Rules define timberland conversion as transforming timberland to a non-timber-growing use through timber operations where future timber harvests will be prevented or made infeasible because of land occupancy or activities on the land. (14 CCR § 1104.1.) A Timberland Conversion Permit is required when

timberland is to be devoted to uses other than growing timber, unless an exemption applies. (PRC § 4621; 14 CCR §§ 1104.1, 1104.2.) The proposed project would convert timberland, already zoned TPZ, to a non-timber use, thus requiring a Timberland Conversion Permit from Cal Fire.

Finally, the loss of timberland must be considered on a cumulative basis, given multiple pending and recent projects of the same nature. (PRC § 21083(b); Guidelines §§ 15064(h)(1), 15065(a)(3); *San Joaquin Raptor/Wildlife Rescue Ctr. v. County of Stanislaus* (1996) 42 Cal.App.4th 608, 622.)

III. The IS/MND Fails to Disclose Potentially Significant Effects to Groundwater Supply.

The IS/MND and the accompanying Hydrology Report fail to accurately quantify the project water demand, and to accurately assess the project's effects to the aquifer. The analyses also fail to account for the potentially significant effects of approving multiple new and intensified cannabis operations in this immediate vicinity, such as the Pasta Farms project.

As set forth more fully in the accompanying memorandum prepared by two independent Certified Hydrogeologists at Geosyntec (Exhibit A, incorporated herein by reference), the methodologies used by the Hydrology Report are not consistent with widely accepted scientific publications showing that production rates during initial short-term testing of wells completed in fractured rock commonly are not sustainable in the long-term and are notorious for decreases with time. The short-term tests are also insufficient to determine impacts to neighboring groundwater users and groundwater-dependent environmental resources.

The inaccuracies and uncertainties in the supply analysis are only compounded by the inadequate assessment of aquifer formation and groundwater supply. The oak mitigation plan (at 2) provides that "228 oaks will be protected and irrigated each year for seven years," but later (at 4) states that "[t]he landowner will plant and protect a total of 327 oak trees for seven years to ensure successful establishment." The oak mitigation plan anticipates that each tree will require approximately 15 gallons of water per week (at Table 2), resulting in approximately 14,000-20,000

gallons of water (depending on whether 228 or 327 oaks are maintained) of water per month to support the oak mitigation project. The Hydrology Report (at 3), however, fails to account for this increased water demand, which will constitute an approximate 5-10% increase in water use compared to projected operational demand ranges.

The IS/MND and Hydrology Report principally rely on the premise that the project could not have any significant effect to groundwater resources because its water demand is lower than the supposed “recharge rate” for the property. This is flawed in several respects. First, the estimated groundwater recharge rate of 22.3 acre feet per year during drought years is highly suspect. That figure is further questionable given that the applicant’s soil study (Biological Assessment at 3.1) repeatedly states that “[s]urface runoff is rapid.” Second, the overall rationale begs the question: if the existing recharge rate is going unused, where has all of the surplus recharge water gone for the preceding decades or centuries? The IS/MND does not answer this question, but that water loss from the project demands is simply unaccounted for.

Importantly, following the prior approval of the Pasta Farms cannabis operation, the artesian well exists on the Mountain of Attention Sanctuary property, just below the proposed Seigler Springs North project, went dry for the first time. The ancestors of the local Pomo Native Americans lived here for five thousand years, and this water flowed without interruption and multiple droughts for about 50 years, but went dry in the drought of 2022-2023 after Pasta Farms began operations. The well head had to be removed, and a deeper well dug. Another neighbor reported their well and a pond going dry as well. The IS/MND and Hydrology Reports fail to consider these adjacent landowner concerns.

The proposed drought mitigation measures are also inadequate to prevent adverse impacts during drought. The IS/MND (at 40, emphasis added) states that:

during times of drought emergencies or water scarcity the project *may* implement the following additional measures as needed or appropriate to the site in order to reduce water use and ensure both the success and decreased impacts to surrounding areas:

- Cover the soil and driplines with removable plastic covers or similar to reduce evaporation
- Irrigate only in the early morning hours or before sunset
- Cover plants with shaded meshes during peak summer heat to reduce plant water needs
- Use a growing medium that retains water in a way to conserve water and aid plant growth. Organic soil ingredients like peat moss, coco coir, compost and other substances like perlite and vermiculite retain water and provide a good environment for cannabis to grow.

First, these measures appear to be nonbinding, and therefore cannot be relied on to reduce potentially significant effects. (*Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 444 [mitigation must be enforceable]; CEQA Guidelines, § 15126.4, subd. (a)(2) [mitigation must be fully enforceable].) Second, there is no feasible reason why these limited measures could not or should not be implemented from the outset. Finally, there is no quantitative reason to conclude that these measures would avoid adverse effects to water supplies, as there is no effort to quantify the water savings they could offer.

Finally, numerous existing and approved cannabis cultivation projects lie within the surrounding area, and the record does not adequately evaluate the cumulative effects of groundwater extraction from these pending projects on shared groundwater resources. Substantial evidence provided in the Pasta Farms project application (see Geosyntec, Exhibit A) supports a fair argument that the project may have a cumulatively considerable impact to groundwater supplies.

In conclusion, the IS/MND and Hydrology Report are inadequate in several respects, and the proposed project should not be approved as presented.

IV. The IS/MND Fails to Analyze or Avoid Significant Effects to Wildfire Evacuation.

As set forth more fully in the accompanying memorandum prepared by Fire Marshal Duncan Gamlen (attached here to as Exhibit B, fully incorporated by reference), the proposed project threatens to exacerbate dangerous wildfire evacuation conditions within the County. The proposed project relies upon an existing rural roadway network constructed circa 1880 with minor modification since. The emergency response and evacuation route include dangerous features such

as a blind curves with limited sight distance, and multiple choke points. Adding any regular vehicle traffic and emergency response demands to this already dangerous situation requires analysis and avoidance under CEQA. Importantly, the IS/MND identifies no project-specific evacuation analysis and no operational analysis demonstrating how simultaneous civilian evacuation and emergency responder ingress would function during a wildfire.

The scope of impacts required to be reviewed pursuant to CEQA includes health and safety impacts, including, *inter alia*, “any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected, [including] impacts of locating development in areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas).” (14 Cal. Code Regs., § 15126.2.) There is manifestly a “fair argument” that the addition of heavy truck traffic may have significant adverse impacts to emergency response and evacuation in the event of a wildfire. (*See, League to Save Lake Tahoe v. County of Placer* (2022) 75 Cal.App.5th 63.) Respondent’s failure to analyze these effects, therefore, violates CEQA. (*Laurel Heights Improvement Assn., supra*, 47 Cal.3d at 396; *Visalia Retail, LP, supra*, 20 Cal.App.5th at 13; *Protect the Historic Amador Waterways, supra*, 116 Cal.App.4th at 1109.)

The IS/MND (at 51) states that the proposed project “[t]he project will not further impair an adopted emergency response plan or evacuation plan,” but fails to describe what any such plans are, nor how the project would or would not be consistent. Illustrative here is *Save North Petaluma River & Wetlands v. City of Petaluma* (2022) 86 Cal.App.5th 207. There, while evaluating the possible fire or flood impacts associated with a project adopted by the City of Petaluma, the city used the same significance threshold found at Appendix G of the CEQA guidelines used by Respondent here. (*Id.* at 226-227 [asking if the Project would... “[i]mpair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.”]) The court concluded that the EIR’s analysis of the emergency response and/or evacuation impacts was sufficient, because it:

identified the relevant provisions in the City’s emergency response plan and took into account specific information about the Project site and the actual threat of flood or fire at

the site...This was sufficient to demonstrate the analytic route from specific underlying evidence to the ultimate conclusion.

(*Id.* at 230 [citing *Laurel Heights Improvement Assn.*, *supra*, 47 Cal.3d 376, 404] [emphasis added].) By contrast, the IS/MND here nowhere identifies what emergency response or evacuation plans are at issue.

V. The IS/MND Fails to Legally Assess Wildlife Protection.

The IS/MND discussion (at 19) of special status species is woefully inadequate. This was based on a “field survey” that “*did not specify whether any sensitive species were observed* during the four site visits made” (emphasis added). Instead, the applicant’s Biological Assessment (at 34) simply notes that seven special status species “have a potential to be present on the property.” The assessment asserts that only the obscure bumble bee, yellow-legged frog and/or western pond turtle downstream from the project area have the potential to be directly harmed by the project, based on the flawed rationale that “Other sensitive species listed above depend primarily on woodland, forest, and grassland habitats. Woodland and forest habitat would not be impacted by this project.” This, of course, is flatly contradicted by the project activities described throughout the record, that “[t]he proposed cannabis cultivation development will be established in areas of the project property with established low elevation Ponderosa pine (*Pinus ponderosa*) and black oak (*Quercus kelloggii*) forests.”

To reduce impacts to less than significant levels, mitigation measure BIO-3 (at 19) provides:

To mitigate potential impacts to obscure bumble bee, foothill yellow-legged frog, and western pond turtle, . . . Pesticide use should not occur during periods when winds may transport spray to adjacent areas.

This mitigation measure is unduly vague, lacks project-specific guidance, is unenforceable, and impermissible. (CEQA Guidelines, §§ 15002, subd. (a)(3), 15126.4, subd. (a)(1)(B).) This approach is analogous to the situation in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296. “By deferring environmental assessment to a future date, the conditions run counter to that policy of CEQA which requires environmental review at the earliest feasible stage

in the planning process.” (*Id.* at p. 307, 314 [fair argument test met when agency relied on undeveloped plan to find no potential impacts].) Deferred mitigation is unlawful if the success or failure of that mitigation depends on management plans that are not disclosed in the CEQA review and the success or failure of those plans is not considered in the IS/MND. (*See, Communities, supra*, 184 Cal.App.4th at 92 [approval of changes to an oil refiner were unlawful where mitigation measures to address greenhouse gases were untested and unquantified with respect to the effective reduction of gases].) By contrast deferring some mitigation details is lawful where an agency imposes a specific quantitative threshold it must meet and imposes *mandatory* mitigation measures to meet those thresholds or standards. (*See, East Oakland Stadium Alliance v. City of Oakland* (2023) 89 Cal.App.5th 1226, 1256-1258 [considering a mitigation measure to address greenhouse gases] [*East Oakland*].)

The IS/MND fails to provide any information regarding what wind speeds in some areas may be sufficient to carry pesticide drift to sensitive areas, nor any indication of how the project operator would measure wind speeds or report pesticide use during substantial winds.

Similarly, BIO-4 provides that “Coverage under the National Pollutant Discharge Elimination System (NPDES), General Permit for Storm Water Discharges associated with a Construction Activity (General Permit) and a Storm Water Pollution Prevention Plan (SWPPP) *may* be required,” (emphasis added) providing no analysis of what impacts such permits would be required to mitigate, nor any consideration of what impacts would occur if the permits are *not* required.

VI. The IS/MND Fails to Legally Describe the Project and its Potentially Significant Land Use Conflicts.

Finally, as set forth more fully in the comments of attorney Robert R. Riggs (Exhibit C, fully incorporated by reference), the IS/MND project description is inaccurate regarding ranch access to Highway 29, and the poor conditions of numerous roadways that would service the project. Further, the project lacks property rights required to access the proposed operations, which could

result in necessary project changes not considered here. Finally, the project would conflict with the County's designation of a commercial cannabis exclusion area. Lake County Zoning Ord. Art. 27(at)(1)(v) provides that "commercial cannabis cultivation is prohibited" in the Commercial Cannabis Cultivation Exclusion Areas (the "Exclusion Areas"). The Project Site and the proposed "Cannabis Production Area" are located within the Exclusion Areas subject to Art. 27. Allowing commercial cannabis cultivation to take place on parcels located within the Exclusion Area contradicts the plain intention of the ordinance and would also be impossible to monitor or police.

The proposed project should not be approved on these bases as well.

VII. Conclusion.

Taken together, these deficiencies and the accompanying expert reports demonstrate a consistent pattern. Independent experts in forestry, hydrogeology, wildfire, and land use each conclude that the administrative record does not contain sufficient information to support the findings required under CEQA. At a minimum, this constitutes substantial evidence supporting a fair argument that the project may result in significant environmental impacts requiring preparation of an Environmental Impact Report rather than adoption of the proposed Mitigated Negative Declaration.

Respectfully,



Jason R. Flanders

AQUA TERRA AERIS LAW GROUP

Counsel for the Adidam Holy Domains and
Mountain Of Attention Sanctuary

EXHIBIT A

EXECUTIVE SUMMARY

Resubmission of Independent Hydrogeologic Reviews

Proposed Water Supply

Seigler Springs North LLC/ Forest Ellie MUP PL-26-115 (UP 21-17)

This hydrogeological review was originally prepared for the June 11, 2026, Lake County Planning Commission hearing and is being resubmitted as part of the administrative record for the appeal before the Lake County Board of Supervisors.

The report is resubmitted without revision to its technical findings. It remains relevant because several hydrogeological issues identified in the review were not addressed in the Initial Study/Mitigated Negative Declaration or resolved during the Planning Commission proceedings, including:

- Effects on the Sanctuary's potable water wells;
- The downhill well on APN 115-015-02;
- The Seigler Springs geothermal system;
- Cumulative groundwater impacts;
- Wildfire-related changes to infiltration and groundwater recharge;
- Grading and soil compaction effects;
- Impervious surface impacts; and
- Long-term water reliability for sensitive receptors.

These issues remain relevant to the Board's consideration of whether the environmental record contains substantial evidence supporting the groundwater-related findings required for project approval.

Independent Hydrogeologists' Principal Findings

- **Lake County Ordinance 3106 has not been satisfied because the groundwater analysis uses an inappropriate hydrogeologic model.**
- **The methods used to calculate well yield, groundwater storage, and groundwater recharge are each concluded to be incorrect.**
- **The current record does not provide sufficient evidence to demonstrate a sustainable long-term groundwater supply.**

This Executive Summary accompanies the independent hydrogeologic reviews prepared by **Joe Turner, PG, CHG**, and **Gordon Thrupp, Ph.D., PG, CHG**, California Certified Hydrogeologists with Geosyntec Consultants. Together, these reports identify fundamental technical deficiencies in the applicant's groundwater analysis and conclude that the existing administrative record does **not** provide sufficient hydrogeologic evidence to support the required findings for project approval.

Key Professional Findings

1. The applicant's hydrogeologic analysis is fundamentally unreliable.

Mr. Turner concludes that the applicant's Hydrology Report does **not provide the information required by Lake County Ordinance 3106** because it evaluates a fractured volcanic rock aquifer using assumptions appropriate for porous alluvial soils. He further concludes that the report relies upon calculations and assumptions that are inconsistent with the hydrogeologic conditions that actually exist beneath the site.

2. Three critical calculations are incorrect.

After reviewing the applicant's analysis, Mr. Turner reaches three direct conclusions:

- The method used to estimate **well yield is incorrect.**
- The method used to calculate **groundwater storage is incorrect.**
- The method used to calculate **groundwater recharge is incorrect.**

Because these calculations form the foundation of the applicant's claim that sufficient groundwater exists, these conclusions call into question the reliability of the entire groundwater analysis.

3. Short-term pump testing does not establish a sustainable water supply.

Both reviewers conclude that the project well has only demonstrated short-term production. The available testing does not establish that the well can sustainably supply the project over the long term, particularly within a fractured volcanic rock aquifer where declining production over time is well documented.

4. Published experience demonstrates the risk of declining well production.

Mr. Turner cites California Department of Water Resources information documenting irrigation wells completed in Holocene volcanic formations whose yields declined by **up to 80 percent after four years of production**. This example illustrates why long-term performance cannot be predicted from short-duration pump tests in fractured volcanic rock.

5. Important environmental questions remain unresolved.

Dr. Thrupp concludes that the current record does not adequately demonstrate:

- long-term groundwater sustainability;
- impacts to neighboring wells;
- cumulative groundwater extraction;
- impacts to groundwater-dependent ecosystems; or
- impacts to connected surface-water resources.

He further concludes that groundwater monitoring documents problems after they occur but does not prevent or mitigate those impacts.

Professional Conclusion

Although prepared independently, both Certified Hydrogeologists reach the same overall conclusion:

The current administrative record does not contain sufficient hydrogeologic evidence to demonstrate a sustainable groundwater supply or to support the groundwater-related findings required for project approval.

Accordingly, both reviewers conclude that additional hydrogeologic investigation and analysis should be completed before the project is approved.

Lake County Planning Commission
c/o Community Development Department
Planning Division
Lakeport, CA 95453
Transmitted by email: planningcounter@lakecountyca.gov
PlanningCommission@lakecountyca.gov
Trish.Turner@lakecountyca.gov

Subject: Comments on Staff Report Dated June 11, 2026, and Lack of Demonstration of a Sustainable Water Supply, Major Use Permit PL-26-115, Seigler Springs North, Proposed Cannabis Cultivation Operation

Dear Planning Commissioners:

I am a Senior Consultant Hydrogeologist with Geosyntec Consultants based in the Oakland, California Office. I have a BS in Geology and a PhD in Earth Sciences and am a registered professional geologist and certified hydrogeologist in California. I have worked as a consulting hydrogeologist for over thirty years. My resume is provided as **Attachment A** to document my qualifications as an expert to review and comment on estimates of sustainable production of groundwater.

I have been engaged by the Divine Avataraic Holy Domains of Adidam Ruchiradam (Adidam Holy Domains) to review documents related to the proposed water supply for the Proposed Seigler Springs North Cannabis Cultivation Operation. Following a summary below, this letter provides some excerpts from the Staff Report and my comments based on my review, experience, and expertise.

SUMMARY

The proposed sole source of water for the project is groundwater from a well completed in fractured volcanic rock (the project well). A few hours of testing document that project well can produce the design flow rate of water for the project in the short term. But the evidence before the Commission does not include any long-term production or testing data, which in my opinion is necessary to support the findings regarding sustainable groundwater supply, potential impacts to the environment and neighboring water resources, fire protection, and associated CEQA compliance.

Insert Document File Name

An abundance of long-term operational data and scientific publications establish that production rates during initial short-term testing of wells completed in fractured rock commonly are not sustainable in the long-term and are notorious for decreases with time. This well-established fact is succinctly documented and explained by a two-page 2004 informational flyer published by the Washington State Groundwater Association *to educate the public and its membership on the proper protection and use of ground water resources*. This publication is cited in a footnote below¹ and is provided as **Attachment B** to this document.

The following section presents some specific excerpts from the Report to the Planning Commission dated June 11, 2026 (Staff Report) and my comments on each. Many of the issues discussed in this letter were previously addressed in a letter dated May 8, 2024, that presents a review by Joe Turner, a colleague at Geosyntec, who also is California Certified Hydrogeologist. Joe's letter is provided as **Attachment C** to this letter.

COMMENTS ON EXERPTS FROM THE STAFF REPORT

Water Supply & Use (Project Summary) – page 6 of Staff Report with highlighting added

“According to the Hydrology Report and Drought Management Plan (Attachment 6), the Well Completion Report was completed in June 2024 and demonstrated that the project's projected water demand of 4.9 acre-feet per year uses a small portion of the site's recharge, which ranges from 22.3 acre-feet in drought years to 30.1 acre-feet during regular rainfall years. The analysis shows that the aquifer stays balanced even during drought years. Well data was collected for other off-site wells; the nearest well is located approximately 320 feet northwest of the project site and the next nearest off-site well is approximately 1,200 feet away. Given the low density of existing wells in the vicinity and the project's requirement for water monitoring and drought management, there is sufficient water to meet the demand without impacting the surrounding area.”

GT Comments 1: The evidence before the Commission is insufficient to support the conclusion that the proposed project's groundwater supply is sustainable or that the aquifer remains balanced. The estimated recharge values reported on behalf of the applicant have not been validated and in my opinion are based on flawed assumptions.

The testing documented by the Well Completion Report dated February 1, 2022 and the Well Test Report dated June 24, 2024, demonstrates only that the well was tested twice, and for only 2 and 6 hours, respectively. These short-term tests do not establish the long-

¹ F. Michael Krautkramer, Robinson, Noble & Saltbush, Inc., 2004, Fractured-rock Wells in the Pacific Northwest foothills: Not your average water source, *Washington State Ground Water Association Informational flyer*, which is included as Attachment B to this letter.

term sustainable yield of the fractured bedrock groundwater source in which the project well is completed.

The groundwater source is within fractures in volcanic bedrock hundreds of feet below the ground surface. The source of recharge is likely from locations at higher elevations hundreds or thousands of feet from the Site where the bedrock fracture system is closer to the ground surface. Much of the recharge likely takes decades or even centuries to reach the well at the site. A small portion of precipitation at the site that percolates into the ground at the Site would take many decades to reach groundwater hundreds of feet below.

The claim that nearby wells will not be impacted is also unsupported by long-term monitoring data. The absence of such data creates uncertainty regarding potential impacts to neighboring groundwater users and groundwater-dependent environmental resources.

Tree Removal and Mitigation (Project Summary) page 7 of Staff Report, second bullet

“The project proposes the removal of 76 mature black oak trees, as well as the removal of several dead and downed trees that will need to be removed for safety. Additionally, 228 black oak saplings will be planted, cared for, and protected for seven years, in areas surrounding the proposed cultivation operation, to mitigate for the black oak trees lost as a result of project/site development.”

***GT Comments 2:** I suggest that the proposed mitigation should require ongoing monitoring, irrigation, annual reporting, and replacement planting for any saplings that fail to survive. In addition, the record should clarify whether the projected annual water demand includes irrigation necessary to establish and maintain the mitigation plantings.*

REQUIRED FINDINGS page 12 of Staff Report, selected excerpts with highlighting added

1. “That the establishment, maintenance, or operation of the use applied for will not under the circumstances of the particular case, be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use, or be detrimental to property and improvements in the neighborhood or the general welfare of the County.”

***GT Comments 3:** Because the long-term sustainable yield of the project well has not been adequately tested, estimated or demonstrated, the Commission lacks sufficient evidence to conclude that operation of the project will not adversely affect neighboring*

groundwater resources and/or groundwater-dependent environmental resources. Accordingly, the evidence is insufficient to support Required Finding No. 1..

4. “There are adequate public or private services, including but not limited to **fire protection, water supply,** sewage disposal, and police protection to serve the project. Is consistent with the General Plan, Area Plan, and Zoning Ordinance”

***GT Comments 4:** The project relies upon a single groundwater well as its sole source of water. Because the long-term sustainable yield of that well has not been tested or demonstrated, adequate water supply for the project and fire protection have not been documented.*

*The Site Context Section of Final Staff Report (pg 4) states that the “**project parcels are within Very High and Moderate Fire Severity Zones.**” But Item 12 on page 1 of the CEQA Check List dated June 30, 2023 states that the Fire Hazard Severity Zone: California State Responsibility Area (CAL FIRE) [is] **Very High Risk**”.*

*Why this apparent discrepancy in reported fire risk zoning? But regardless, **is the allocation of a single 5,000-gallon water tank sufficient for potential fire suppression needs?***

8. “The Project was adequately analyzed under CEQA, and all impacts associated with the project can be mitigated to a less than significant level.”

***GT Comments 5:** For multiple reasons, some of which are discussed above, in my opinion, for compliance with CEQA (1) the viability of the proposed project and potential impacts need further analysis and (2) additional conditional mitigation measures are needed to reasonably achieve a less than significant level of potential impacts.*

ADDITIONAL DISCUSSION

Water supply for proposed project would rely entirely on groundwater produced from a well that taps fractured volcanic rock to a depth of 440 feet. Potential groundwater yields from fractured-rock aquifers are inherently difficult to evaluate because groundwater is within complex fracture networks that typically occupy a small fraction of the rock. In contrast, alluvial aquifers and some sedimentary rocks typically have more uniform porosity and permeability, and groundwater occupies a much large portion of the aquifer.

Yields of wells completed in fractured rock are (1) difficult to estimate, (2) typically require long-term testing and monitoring to establish reasonable estimates of sustainable yield, and (3) commonly decline over time as groundwater levels respond to prolonged pumping, due much slower recharge to fractures compared to drainage of fractures by pumping, and drought conditions.

For these reasons, short-term testing is not a valid method to reliably estimate the long-term yield from the project well to meet the project water demand. Moreover, some of the calculations presented, which support that the proposed water supply is sufficient include technically flawed assumptions, as was also previously addressed in detail in the by Joe Turner (Geosyntec, May 8, 2024).

The uncertainty regarding groundwater availability, potential impacts to neighboring wells, groundwater-dependent ecosystems raises substantial questions that have not been adequately resolved. In addition, the Staff Report identifies numerous existing and approved cannabis cultivation projects within the surrounding area. The record does not adequately evaluate the cumulative effects of groundwater extraction from these projects on shared groundwater resources.

The project site is located within the Seigler Canyon Creek watershed, which is part of the Clear Lake watershed. Seigler Canyon Creek has historically provided habitat for the Clear Lake Hitch (*Lavinia exilicauda chi*), which is a threatened, large minnow endemic to Clear Lake in Lake County, California. These fish are known as "chi" to the local Pomo Tribes and spawn in tributaries to Clear Lake during spring. However, they face high extinction risk in part due to degradation of tributary riparian habitat due to decreases in springs and stream flows. These fish were listed as threatened in California in 2014, were proposed in 2025 for listing and protection by the federal Endangered Species Act.

A state-listed threatened species whose decline has been associated, in part, with Any conclusion that groundwater extraction associated with the project will have no effect on groundwater-dependent ecosystems or connected surface-water resources should therefore be supported by substantial evidence.

The Staff Report places significant reliance on water monitoring and drought management measures. However, monitoring is not mitigation. Monitoring may document groundwater depletion after it occurs, but it neither prevents depletion from occurring, nor restores flows if does occur. The record does not demonstrate that adequate mitigation measures are in place, in the event that impacts occur to groundwater resources and stream flows.

CONCLUSIONS

In conclusion, the evidence before the Commission is insufficient to demonstrate (1) an adequate sustainable source of groundwater to meet the project demands, and (2) to support the Required Finding No. 8 that all potential impacts associated with the project can be mitigated to a less-than-significant level. At a minimum, the unresolved questions regarding sustainability of the proposed groundwater supply, potential cumulative impacts on groundwater resources and groundwater-dependent ecosystems justify the necessity of additional credible evidence, analysis, and review in accordance with the CEQA before potential approval of the project.

Respectfully,



Gordon Thrupp, PhD, PG, CHG

Attachments:

- A. Resume for Gordon Thrupp, PhD, PG, CHG
- B. Washington State Ground Water Association Informational Flyer: Fractured-rock Wells in the Pacific Northwest Foothills: Not your average water source
- C. May 8, 2024, Review by Joe Turner, PG, CHG (Geosyntec) of the May 19, 2023 Hydrology Report and Drought Management Plan by Northpoint

Copies by email to:

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Alexander Powell, CFO Adidam Holy Domains, apowell@holydomains.org
Malgorzata Zuk, Attorney, mzuk@katzoffriggs.com
Robert Riggs, Partner, rriggs@katzoffriggs.com
Joe Turner, Senior Consultant Hydrogeologist, JTurner@Geosyntec.com



Attachment A

GORDON THRUPP, PhD, PG, CHG

**hydrogeology and geology
aquifer testing and groundwater modeling
sustainable development of groundwater resources
site characterization and remedial design
litigation support**

EDUCATION

PhD, Earth Sciences, University of California, Santa Cruz, 1987
BS, Geology, Stanford University, Stanford, California, 1980

REGISTRATIONS AND CERTIFICATIONS

Professional Geologist (PG), California, Number 5849
Certified Hydrogeologist, California, Number 541
Registered Geologist, Arizona, Number 58233

CAREER SUMMARY

Gordon Thrupp, PhD, has over 30 years of experience as a consulting hydrogeologist. He is an expert in quantitative analysis of flow of groundwater and soil gas. For numerous projects, he has conducted hydrogeologic evaluations and developed groundwater flow models as tools for assessing water resources and engineering design alternatives, designed wells and hydraulic testing programs, and evaluated aquifer-testing and stream flow data. Gordon's areas of expertise include evaluation of sustainable yield of groundwater resources, investigation of the potential for contaminant migration, and conceptual design of remediation alternatives for soil and groundwater. Examples of Gordon's experience follow with focus on evaluation of sustainable production of groundwater from bedrock wells, testifying at public hearings and legal proceedings.

Neutral Expert for Evaluation and Mediation of Influence of Pumping from Bedrock Wells on Spring Flows, San Diego County, California. Gordon was engaged as a neutral expert to advise a judge in arbitration proceedings regarding claims that pumping from bedrock wells completed in the Elsinore Fault Zone interfered with spring flows in a nearby canyon to which one party has water rights. He reviewed hydrogeology, historical data, aquifer tests of wells, and expert reports prepared for each party. Gordon specified aquifer testing and monitoring procedures and analyzed the data. He attended hearings, was deposed, and specified an interim solution that entailed delivery of a portion of the water pumped from the wells to the party with rights to the spring flows that was based on the impact to the springs demonstrated by the testing.

Water Supply Sustainable Yield Assessment at a Proposed Subdivision, San Luis Obispo County, California. Gordon was engaged by SWCA Environmental Consultants to conduct a third-party review for San Luis Obispo County of an assessment of sustainable yield for the Laetitia Agricultural Cluster Subdivision—a proposed development totaling 1,800 acres with 102 1-acre residential lots. Groundwater pumped from four wells completed in fractured bedrock was proposed as the sole water supply for the project. Gordon evaluated hydrogeology, lithologic logs, well construction, production data, and hydrographs; analyzed three phases of pumping tests to estimate sustainable groundwater pumping capacities; and determined that previous estimates of production potential of the wells based on short-term tests were unrealistically high. In addition, Gordon evaluated potential influence of groundwater pumping on the base flow of an adjacent creek. For a more sustainable water supply with reduced impact on the local riparian corridor ecosystem, he recommended curtailment of pumping from July through November for a well with connection to the base flow of a creek. Gordon presented the findings at several public hearings.

Review and Testimony of Modeling of Slant Well Subsurface Intakes at Proposed Desalination Facility, Monterey Regional Water Authority, Monterey Peninsula Water Supply Project, Monterey, California. Gordon reviewed hydrogeology and groundwater modeling of slant well subsurface intakes as documented in draft environmental impact reports for the proposed Monterey Peninsula Water Supply Project. He also prepared rebuttal testimony and was cross-examined during legal proceedings before the California Public Utilities Commission related to the project.

Feasibility Study of Water Wells to Replace Canal Diversions for Irrigation Water, Pacific Gas and Electric Company (PG&E), Butte County, California. On behalf of PG&E and in collaboration with the Butte County Department of Water and Resource Conservation, Gordon evaluated the feasibility of new groundwater wells to replace irrigation water supplied by diversions from a canal originally used for hydroelectric power. The scope of work included characterizing diversions from the canal; estimating the likely yield of wells in the project vicinity and the number of wells required to replace water diverted from the canal; and evaluating the feasibility, including costs, to install wells. The hydrogeology and well yield analysis included review of Department of Water Resources (DWR) well completion reports for 131 wells and hydraulic properties assigned to the Butte Basin Groundwater Model. Gordon developed a probabilistic assessment of well production potential based on the existing production data. Based on the hydrogeologic setting and typical water well yields in the vicinity, Gordon determined that wells are likely not feasible for replacing the water diverted from the canal.

Groundwater Resources Evaluation at the El Toro Area, Monterey County, California. Gordon directed an evaluation of groundwater resources. Tasks included compilation, review, and evaluation of existing geologic and hydrologic data, including available information for over 100

water wells. The objective was to evaluate groundwater resource capacity, and as appropriate recommend revisions to the extent of zoning that restricts development.

Groundwater Production Capacity and Impact Study, Confidential Client, Briones Hills, California. Gordon evaluated groundwater production capacity of fractured bedrock for a proposed development in the Briones Hills Agricultural Preserve. He reviewed an aquifer testing analysis that was done in support of the proposed development. The aquifer testing analysis was technically flawed and did not support that the new well could sustain the design flow rate for the proposed project. Gordon advocated that the aquifer test should not be used in support of a mitigated negative declaration for environmental impact.

Water Resource Capacity Study, San Luis Obispo County, Nipomo Mesa, California. Gordon conducted a groundwater resource capacity evaluation of the Nipomo Mesa area for San Luis Obispo County Departments of Planning and Public Works. The project included reviewing DWR reports, consultant's reports, and regional groundwater models; compiling hydrogeologic data for the area; variable-density flow modeling with SEAWAT to evaluate sea water intrusion for a range of pumping rates; and making recommendations to San Luis Obispo County that were used to determine appropriate limits on growth rates and development on Nipomo Mesa. Gordon presented his findings at public hearings.

Water Supply Feasibility Study and Preliminary Engineering Report, Josephine County, Oregon. In the Illinois Valley, domestic wells were the sole source of drinking water for the town of Kerby. Historically, water in an irrigation ditch provided recharge to shallow alluvial aquifers and sustained the production from many of the domestic wells, but many wells dried up when diversion from the Illinois River to the ditch was stopped. Water quality was a serious health concern where separation distances between septic systems and wells was inadequate. Gordon evaluated alternatives for a community drinking water supply, including a system of community wells, a reservoir in a local drainage, diversion from the Illinois River, and connection to a municipal system at the adjacent City of Cave Junction. He prepared preliminary design and cost estimates for each alternative. Connection to the Cave Junction Municipal Water System was recommended as the most reliable and cost-effective solution.

Review of Groundwater Modeling of Sea Water Intrusion, Confidential Client, Monterey County, California. Gordon provided technical modeling expertise supporting litigation regarding seawater intrusion into aquifers caused by groundwater pumping. He evaluated the design of a proprietary variable-density groundwater flow and transport model that was developed to predict seawater intrusion into aquifers because of proposed increases in the development of groundwater supply along the coastal margin in the Monterey Bay Area.

Review of Hydrogeologic Report and Well Testing, Minor Subdivision, Carmel Valley Highlands, Gordon provided third-party review of aquifer testing and estimated production capacity of a well in fractured bedrock in the Carmel Hills that was proposed as the sole water supply for a proposed development.

Aquifer Pumping Test and Groundwater Production Assessment, City of Poway, Poway, California. Gordon directed a pumping test to assess the potential yield of a groundwater well completed in bedrock and evaluation of the groundwater quality and production capacity of the well for irrigation of a public park. Gordon recommended an operation schedule and maximum drawdown to prevent dewatering of the water bearing fractures.

Bedrock Irrigation Well Feasibility Study, Tamalpais Valley Community Service District, Marin County, California. Gordon conducted a feasibility study of installing wells at community facilities to provide irrigation water. He compiled and reviewed geologic data, including 70 well logs, and evaluated irrigation water needs and costs for well installation. Based on geologic information and statistical analyses of well production data, Gordon determined that the probability was greater than 75% that a single well installed to a depth of approximately 200 feet in Tam Valley would produce enough water of adequate quality to meet the irrigation needs at community facilities.

Fate and Transport Evaluation of Infiltrated Wastewater in Groundwater, Confidential Client, Klamath Falls, Oregon. Dr. Thrupp compiled and evaluated hydrogeologic data in the vicinity of wetlands and ponds to which wastewater is discharged near the Klamath River. He developed a three-dimensional groundwater flow model with MODFLOW and MODPATH to evaluate the fate and transport of the infiltrated effluent. Calculations with the groundwater model indicated that a negligible portion of the infiltrated discharges to the Klamath River and the vast majority that is not removed by evapotranspiration flows downward with groundwater and beneath the river due to a regional pumping at depth.

Feasibility Evaluation of Subsurface Seawater Intakes at Proposed Desalination Facilities, Poseidon Water and West Basin Water District, Huntington Beach and El Segundo, California. Gordon directed compilation and evaluation of geologic, hydrogeologic, geotechnical, and offshore geophysical data for the San Pedro and Santa Monica shelves and coastal margins near proposed desalination facilities, which require seawater intake rates of 127 million gallons per day (MGD) and at least 40 MGD, respectively. Gordon directed development of MODFLOW groundwater flow models as tools to evaluate the feasibility and likely number of wells required to achieve the design intake rate for options including a series of vertical beach wells and slant wells, radial collector wells, and horizontal wells extending beneath the coastal margin. The models were also used to evaluate potential for pumping from the subsurface intakes to lower the water table near coastal margin and draw water from inland aquifers. Gordon also directed

evaluations of alternate sites for subsurface intakes along the coastline of Santa Monica Bay and Orange County in accordance with the California Ocean Plan, and presented at public hearings.

Basin Evaluation and Water Supply Feasibility Study, Soquel Creek Water District, California. Gordon evaluated alternatives to enhance the water supply in the Soquel Creek Water District. Alternatives included additional groundwater pumping, enhancement of recharge, a shared County desalinization plant, diversion from Soquel Creek or exchange of water with an adjacent district, and groundwater banking with aquifer storage and recovery (ASR) wells. The project was part of an environmental impact study for a required California Environmental Quality Act (CEQA) process involving several consulting firms and agencies. In 2017, Gordon was a member of an independent advisory panel convened by the National Water Research Institute (NWRI) for the District's PURE Water Soquel Groundwater Replenishment Project.

Water Supply Assessments, other Technical Studies and Peer-Review for Environmental Impact Reports for Proposed Projects, Several CEQA Projects, Clients include Consulting Firms, Municipalities, and Developers.

Construction Dewatering Modeling for Sub-Grade Parking Garage, Sares Regis, Belmont, California. Gordon reviewed local geology, boring logs, and groundwater monitoring data and developed analytical and numerical dewatering models. The models were calibrated to influx to a test pit to estimate construction groundwater inflow during excavation into fractured bedrock for a mixed commercial and residential development. In addition to estimating flows during construction dewatering, the model was used to estimate long-term groundwater influx rates into a sub-grade drainage system for the garage for design and permitting.

Evaluation of Reservoir Seepage, Confidential Client, Escondido, California. Gordon developed a three-dimensional numerical model to simulate groundwater seepage from a proposed reservoir for storage of recycled water in a bedrock excavation at Harmony Grove Village. The model served as a tool to estimate and compare seepage rates into bedrock from the reservoir with different liner options. The design of the model was based on regional hydrogeology, site-specific hydrogeology and topography, and previous groundwater modeling in the vicinity. The model was also used to evaluate potential flow influence of leakage from the reservoir on Escondido Creek.

Modeling of Influx of Groundwater and Surface Water at the Aromas Quarry, Graniterock, San Benito County, California. Gordon directed the development models to evaluate flux of groundwater and stormwater into a large quarry in granitic rock. Geosyntec also conducted bench-scale testing of both anaerobic and aerobic degradation of benzene in water and sediment samples from the bottom of the quarry, which is associated with naturally-occurring petroleum hydrocarbon deposits near the quarry. The modeling and analyses provided evaluation of the rate

of influx of groundwater and petroleum hydrocarbons with increasing depth of the quarry, potential impact on the adjacent river, water balance for the final pit, and the long-term water level in the quarry and concentration of benzene in the water. The long-term hydrologic condition and potential concentration of benzene and other hydrocarbons in the water in the pit are important components for development of a reclamation plan required for regulatory permitting.

Evaluation of Failed Construction Dewatering, Confidential Client, San Diego, California. For a construction dewatering project, Gordon developed a calibrated numerical groundwater model using MODFLOW for litigation support of changed conditions of permeability. The model also served as a useful tool to design a successful dewatering approach after the initial dewatering effort failed.

Groundwater Influx Management for Open-Pit Mines, Multiple Projects, Multiple Clients, Australia. For three open-pit coal-mines in New South Wales, and two in Queensland, Gordon evaluated hydrogeology, conducted aquifer testing, and developed calibrated regional finite-element groundwater flow models as tools for mine dewatering design. The models were used to help design advance dewatering alternatives and to assess possible impacts on a nearby major river of a mine in the Hunter Valley.

Hydrogeologic Evaluation for Proposed Gold Mining Activities, Confidential Client, Northern Territory, Australia. Gordon performed hydrogeologic evaluations for an environmental impact assessment of proposed gold mining activities at Coronation Hill in Kakadu Park, a world heritage site. He developed a numerical model of groundwater flow through fractured bedrock to assess the possible impact on a nearby river and feasibility of a water supply well for ore processing. Gordon assessed the potential for cyanide in a tailings pond to reach the river.

Litigation Support and Expert Review of Concrete Degradation Model, Confidential Project and Client, Confidential Location. Gordon reviewed a numerical model that simulated solute advection, diffusion, and chemical reaction in concrete. The model was intended to predict future degradation of concrete. Gordon's expert declaration challenging the reliability of the model helped eliminate the model as litigation evidence.

PROFESSIONAL EXPERIENCE

Geosyntec Consultants, San Francisco, California, 2005–Present
S.S. Papadopoulos & Associates, 2000–2005
Geomatrix Consultants, Inc., 1992–2000
Mackie Martin & Associates, Sydney, Australia, 1990–1992
Macquarie University, Sydney, Australia, 1990

Macquarie University/CSIRO, Sydney, Australia, 1987–1990
University of California, Santa Cruz, California, 1980–1987
Texas Testing Laboratories, San Antonio, Texas, 1980
Conoco, Inc., Falls City, Texas, 1979–1980
Stanford University, Stanford, California, 1978
United States Geological Survey, Menlo Park, California, 1977–1979

AFFILIATIONS

National Groundwater Association
Groundwater Resources Association of California
Association of California Water Agencies
California Water and Environmental Modeling Forum

REPRESENTATIVE PUBLICATIONS

Gordon has published several articles in major journals or books and over 25 abstracts in proceedings for professional conferences. A selection follows:

- 25-01 Thrupp, G., J. Lottig, 2025 (*in press*). “Air injection barrier to mitigate migration of soil vapor with chlorinated volatile compounds away from an industrial waste landfill”, Proceedings, *Sardinia 2025: 20th International Landfill Symposium*, CISA, Cagliari, Italy.
- 18-01 McAlary, T., J. Gallinatti, G. Thrupp, W. Wertz, D. Mali, and H. Dawson. 2018. “Fluid Flow Model for Predicting the Intrusion Rate of Subsurface Contaminant Vapors into Buildings.” *Environmental Science and Technology*. vol. 52, issue 15, pp. 8438-8445.
- 16-01 Thrupp, G., J. Chambon, and M. Kavanaugh. 2016. “Site-Specific Hydrogeologic Investigation and Groundwater Modeling to Evaluate Feasibility of Subsurface Intakes for Ocean Water Desalination.” *Abstract for Poster Presentation at University of California, Davis State of Science and Policy Workshop: Weathering Change: The Impact of Climate and the Sustainable Groundwater Management Act on California’s Water*. 4-5 April.
- 11-01 Suchomel, E., M. Verwiël, and G. Thrupp. 2011. “A New Method for Calculating Waste Acceptance Criteria for Soil and Landfill.” Proceedings, *Sardinia 2011: 13th International Waste Management and Landfill Symposium*, eds., R. Cossu et al., CISA, Cagliari, Italy.
- 10-01 McAlary, T., P.J. Nicholson, L.K. Yik, D.M Bertrand, and G. Thrupp. 2010. “High Purge Volume Sampling—A New Paradigm for Sub-slab Gas Monitoring.” *Ground Water Monitoring and Remediation*, vol. 30, issue 2, pp. 73-85.

- 10-02 Nicholson, P., D. Bertrand, T. McAlary, and G. Thrupp. 2020. High purge volume tests for managing variability in sub-slab soil gas. Air and Waste Management Association–Vapor Intrusion. Vol 2. January.
- 08-01 Pearson, A., B. Janke, G. Thrupp, G. Criollo, and H. Franklin. 2008. “Spatial Analysis of Groundwater Resources in El Toro, Monterey County.” *AWRA 2008 Spring Specialty Conference–GIS and Water Resources V*, San Mateo, California. Abstract and poster. 17-19 March.
- 08-02 Thrupp, G., J. Fortuna, H. Franklin, and P. Kwiek. 2008. “Evaluation of Groundwater Resources for Sustainable Development, El Toro Planning Area, Monterey County, California.” Abstract accepted for *AWRA 2008 Annual Water Resources Conference*, New Orleans. November.
- 07-01 Morel, D., M. Verwiel, G. Thrupp, and W. Fowler. 2007. “Study of Basalt Dikes Influence on Groundwater Flow, Waimanalo Gulch Sanitary Landfill, Oahu, Hawaii.” Proceedings, *Sardinia 2007: Eleventh International Waste Management and Landfilling Symposium*, eds. R. Cossu, L. Diaz, R. Stegmann, CISA, Cagliari, Italy.
- 05-01 Thrupp, G., and J. Oster. 2005. “Beware of Limitations of Jacob Methods for Aquifer Analyses.” *California Water & Environmental Modeling Forum (CWEMF) Annual Meeting*, Monterey (Asilomar), California. March. Abstract and poster.
- 04-01 Thrupp, G., and C. Neville. 2004. “Modeling Tidal Dilution of Groundwater Discharging to Surface Water.” *California Water & Environmental Modeling Forum (CWEMF) Annual Meeting*, Monterey (Asilomar), California. February. Abstract and poster.
- 02-01 Neville, C., G. Thrupp, and M. Riley. 2002. “Modeling Tidal Dilution of Groundwater Discharging to San Francisco Bay.” *Geological Society of America Cordilleran Section Meeting*, Corvallis, Oregon, Abstracts with Programs, vol. 34, no. 5, pp. A-111. May.
- 01-01 Verwiel, M., G. Thrupp, S. Purdy, and S. Rogers. 2001. “Landfill Expansion Beneath the Water Table in Central Arizona.” Proceedings, *Sardinia 2001: Eighth International Waste Management and Landfill Symposium*, eds. T.H. Chirstensen, R. Cossu, R. Stegmann, CISA, Cagliari, Italy, vol. 4, pp. 77-86.
- 99-01 Thrupp, G., J. Lamborn, and T. Delfino. 1999. “Landfill Gas Generation Rates Estimated from Pressure Rebound in Extraction Systems.” Proceedings, *Sardinia 99: Seventh International Landfill Symposium*, eds. T.H. Chirstensen, R. Cossu, R. Stegmann, CISA, Cagliari, Italy, vol. 3, pp. 449-456.

- 98-01 Thrupp, G., J. Baker, and J. Gallinatti. 1998. "Leakage Controls Radius of Influence of Landfill Gas Extraction Wells." *Proceedings, the 20th International Madison Waste Conference*, pp. 363-372.
- 96-01 Thrupp, G., J. Gallinatti, and K. Johnson. 1996. "Tools to Improve Models for Design and Assessment of Soil Vapor Extraction Systems." *Subsurface Fluid-Flow Modeling*, ASTM STP 1288, eds. J.D. Ritchey and J.O. Rumbaugh, American Society for Testing and Materials, Philadelphia, pp. 268-285.
- 94-01 Thrupp, G., L. Edwards, K.A. Johnson. 1994. "Tracer Experiments to Investigate Soil Gas Flow Associated with Soil Vapor Extraction." *EOS, American Geophysical Union Transactions*, vol. 75, no. 44, pp. 276.
- 94-02 Thrupp, G., and L. Edwards. 1994. "Implementation of Soil Gas Tracer to Assess and Optimize the Performance of Soil Vapor Extraction Systems." *Groundwater*, vol. 32, pp. 859-860.
- 94-03 Thrupp, G., and D. Wuthrich. 1994. "Earthquake-Induced Water Level Fluctuation Recorded in Chino Basin Wells." *EOS, American Geophysical Union Transactions*, vol. 75, pp. 103-104.
- 93-01 Gallinatti, J., G. Thrupp, and D. Wuthrich. 1993. "Horizontal to Vertical Anisotropy of Hydraulic Conductivity in an Alluvial Fan Aquifer." *EOS, American Geophysical Union Transactions*, vol. 74, pp. 273-274.

Attachment B



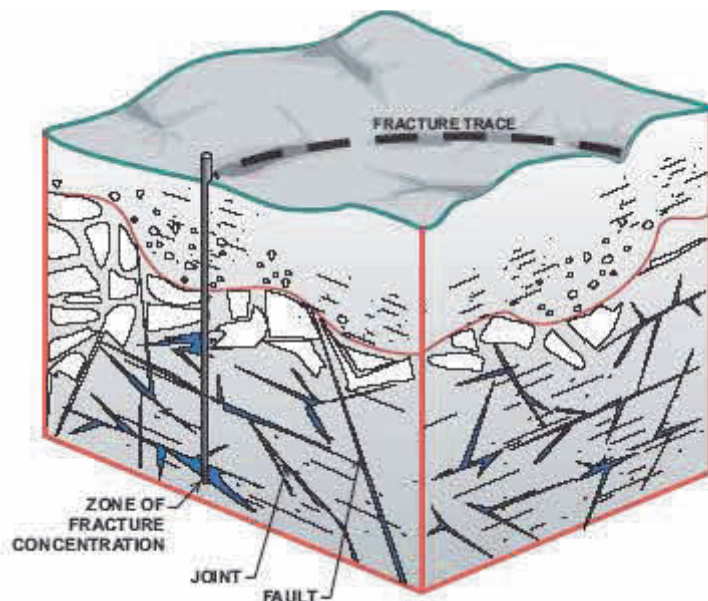
Fractured-rock Wells in the Pacific Northwest foothills: Not your average water source

By: F. Michael Krautkramer, Robinson, Noble & Saltbush, Inc.

Very generally, there are three different geologic settings that support water wells in the Pacific Northwest. The most common setting is unconsolidated sediments laid down by glaciers and rivers (or other erosional processes). While the aquifers formed in these sediments can vary, this setting is clearly the most successful in providing ground water. The next major setting, mostly found east of the

Cascade Mountains, is the regionally extensive basalts like those of the Columbia Plateau. Wells completed in the basalts (or more accurately between the basalt flows) can also be highly variable, but the current understanding of the geometry and hydrogeology of the basalt layers provides some certainty to water development projects. The final geologic setting is much more enigmatic: the fractured-rock groundwater environment of the mountain foothills (particularly the Coast Ranges or Cascades). While wells completed in fractured rock are invaluable in many areas as a source for domestic wells, and occasionally serve as a reliable source for higher production, they tend to be less predictable and less reliable than other wells. The reason lies in the fundamental difference in the way fractures-rock aquifers transmit water.

The ability to transmit water (permeability) in an unconsolidated aquifer is a result of the interstitial spaces (pore spaces) between each individual clast of sediment and the degree to which these spaces are connected to one another. As such, there is a significant amount of open area through which water can flow (typically 10% to 30%). What is more, these characteristics are usually found consistently over a significant lateral extent. Similar characteristics can be found in some rock settings, such as sandstone, where significant amounts of water can flow through the spaces inherent in those types of rock. In hydrogeology, this is called the “primary permeability” of the material.



In a fractured-rock environment, such as found in the foothills of the Cascades and the Coast Ranges (and below the sediment cover elsewhere in the Pacific Northwest), the primary permeability is extremely low. Almost no water at all can pass through the rock itself, so water can only be transmitted through cracks and fractures that result from the folding and faulting of the rock over time. Fractures create “secondary” permeability. Aquifers which rely on secondary permeability generally have much lower capacity to transmit water.

This lower capacity results from both a smaller amount of open space (the size of the fracture) and a smaller lateral extent of the aquifer (fracture zones are not consistent throughout the rock), as

compared to the primary permeability found in sediments. As a consequence, many rock wells are limited in the amount of water that they can reliably produce in the long term. Typically, these wells can have an apparent production during short-term testing that is higher than the actual amount that can be supported by the surrounding fracture-rock aquifer. As a result, the incidence of “well failure” is much higher in fractured rock wells than in other settings.

As if the poor ability to transmit water isn't enough, such settings also usually have difficulty collecting and storing water to transmit. In fractured-rock environments, an appreciably lower percentage of the precipitation over the area ends up getting into the groundwater system. This means that a smaller volume of water is available annually throughout the region served by an aquifer. This concept is known as the aquifer water budget. When more water is being removed through the wells in a region than is recharged from the precipitation (and other sources), the water levels in the wells of that region fall through time. If this is a chronic problem, eventually some or all of the wells become unable to produce water at the rate necessary to meet their demand.

Between the production constraints imposed by permeability issues in fractured-rock and the inherent water budget issues, caution must be used in the use of fractured-rock wells. Monitoring of the water levels and production of a rock well is essential, as is being aware of the regional-level changes (such as: is it a low water year? are neighboring wells experiencing similar patterns of change?). It is easy to be fooled into thinking a fractured-rock well will have a sustainable level of water production based on the initial (short-term) testing. Since these aquifer systems are unique, predicting a long-term production rate takes more care and often cannot be determined just from the testing done when the well is completed. Clearly, when dealing with this type of rock well, forewarned is forearmed—more than one vacation dream property has lost its value when the well gave out. Whether operating a water system or a single well for a home in the hills, keeping records of water levels and production will provide key information in defining a sustainable yield for fracture-rock wells.

The *Washington State Ground Water Association* is dedicated to technical and professional leadership in the advancement of the drilling and ground water industry. The Association produces these informational flyers to educate the public and its membership on the proper protection and use of ground water resources. The Association can be contacted at: (360) 757-1551 or online at www.wsgwa.org

Robinson, Noble & Saltbush, Inc. is a geologic and environmental consulting firm specializing in environmental property assessments and the development and protection of groundwater resources. The company has supported the well-drilling industry for over 20 years as a Technical Division member of the Washington State Ground Water Association. The author may be contacted at: (253) 475-7711 or by email at mkrautkramer@robinson-noble.com

Attachment C



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8 May 2024

Malgorzata Zuk
Attorney at Law
Katzoff & Riggs LLP
9779 Broadmoor Way
Kelseyville, CA 95451

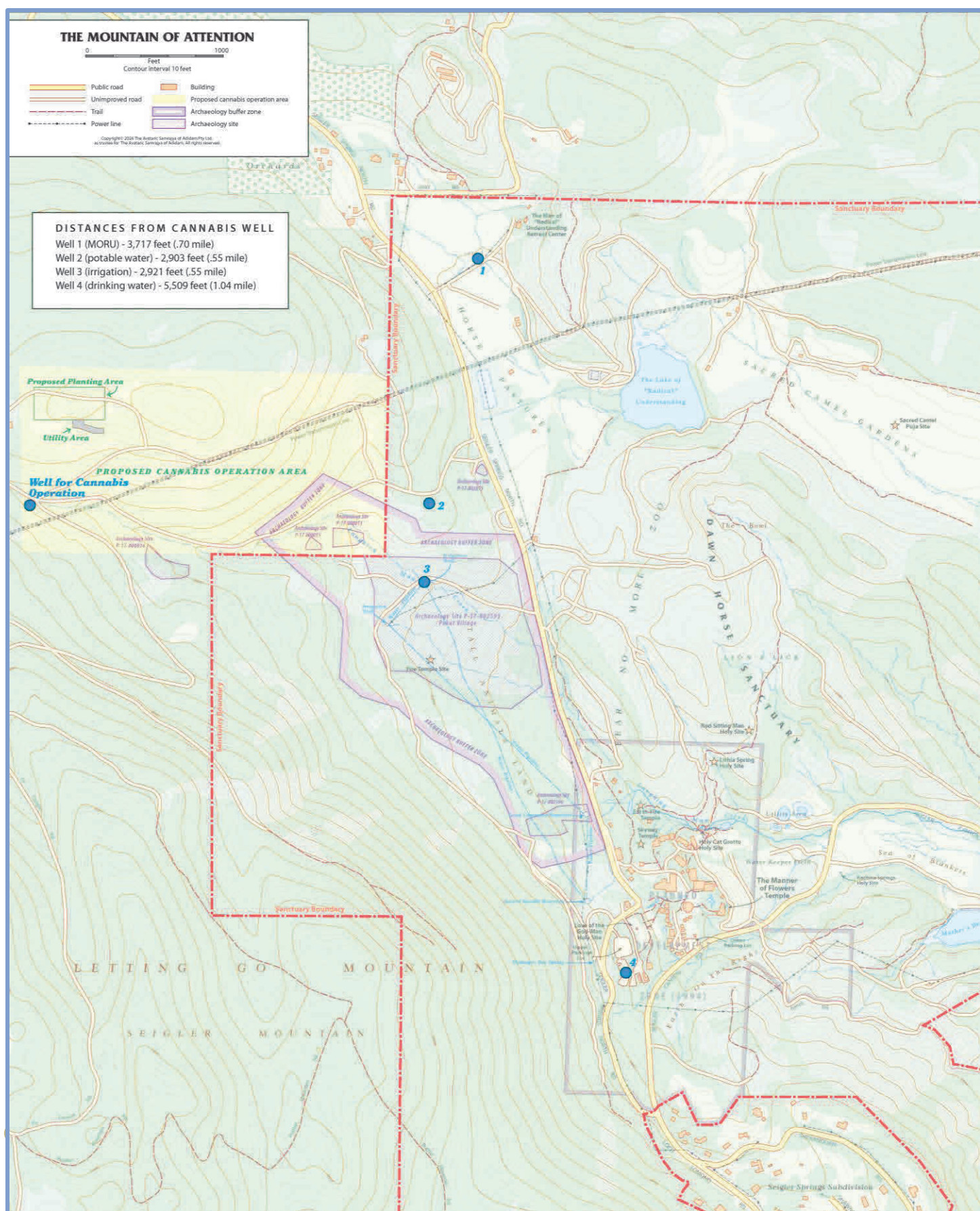
Subject: Review of May 19, 2023, Hydrology Report and Drought Management Plan – UP 21-17, Seigler Springs North Cultivation Project

Dear Ms. Zuk:

As requested, this letter provides my review of the May 19, 2023, Hydrology Report and Drought Management Plan of the Seigler Springs North Cultivation Project (Report) located in Kelseyville California prepared by Northpoint Consulting Group, Inc. (Northpoint). The scope of work developed for this project is based on the approved Service Order 1 dated April 28, 2024. As outlined in Service Order 1, the primary purpose of this review is to assess whether the May 19, 2023, Report adequately addresses potential impacts to existing groundwater wells and surface waters at the adjacent Mountain of Attention property from the proposed project that includes operation of a groundwater supply well for cannabis operations. Figure 1, provided by the Adidam Holy Domains, shows the location of the proposed cannabis operations including supply well, plus the location of the Mountain of Attention property and their four existing groundwater wells.

OVERVIEW

On June 30, 2023, Lake County published an Initial Study/Mitigated Negative Declaration (IS/MND) regarding a Major Use Permit for commercial cannabis cultivation located 11615 and 11625 Seigler Springs North Road, Kelseyville California [Lake County Planning Department (LCPD), 2024]. Figure 1 shows the location of the proposed project along with an adjacent facility referred to as the Mountain of Attention. On January 26, 2024, the LCPD (2024) issued a revised IS/MND due to mistakes regarding the number of mature healthy oaks to be removed and the amount of water usage for the project. The proposed amount of water usage in the revised IS/MND is 6.6 to 7.8 acre-feet per year.



As part of the IS/MND, Lake County Ordinance 3106 states that all projects that require a CEQA analysis of water use include a Hydrology Report and Drought Management Plan that provides the following information:

- Approximate amount of water available for the project's identified water source
- Approximate recharge rate for the project's identified water source
- Cumulative impact of water-use to surrounding areas due to project
- Plan to show how the applicant will reduce water use during a declared drought emergency, to ensure both success and decreased impacts to the surrounding areas.

The Northpoint May 19, 2023, report was intended to provide this information.

As indicated in the Northpoint Report, the proposed well is completed within a Quaternary volcanic aquifer where water occurs primarily in fractures, joints, and weathering zones. The Northpoint Report further states that groundwater production in these aquifers vary according to factors such as the density, size, and interconnections of fractures and joints in the local of the well.

The well log provided for the project's proposed well (Attachment 1) indicates the screen interval is from 340 feet below ground surface (bgs) to 440 feet bgs within black volcanic rock. This well log also indicates that during drilling water was first encountered at 380 feet bgs with static water recorded at 360 feet bgs indicating the aquifer is confined (aquifer that is under pressure due to overlying low permeability material). Review of California's Sustainable Groundwater Management Act Data Viewer (<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>) provided three well logs completed since the year 2000 that also recorded first encountered water and static water levels for wells completed in the volcanic aquifer and supported the interpretation of a confined aquifer (Attachment 1). Figure 2 shows the location of these wells and the proposed project well and Table 1 summarizes the information provided on the well logs.

Table 1. Summary of Well Information for Project Well and Nearby Wells (See Figure 2).

Well I.D.	Date Completed	Screen Interval (Feet BGS)	Aquifer Material	First Water Feet BGS	Static Water Feet BGS	Difference Feet	Estimated Yield GPM
Project Well	2/1/2022	340 to 440	Black Volcanic Rock	380	360	20	40
950538	11/30/2011	262 to 342	Hard Broken Volcanics	240	189	51	26
1089145	5/10/2007	326 to 346	Black Volcanic Rock	325	279	46	40
1093128	3/16/2006	115 to 155	Purple/Brown Rock	80	36	44	100



Figure 2. Location of wells with reported first encountered water and static water levels.

Using published data, the Northpoint report uses an estimate 6 gallons per day (gpd) per plant and 3,000 gpd per acre of canopy. The total estimated irrigation water demand per development phase per the Northpoint report is as follows:

- Cultivated area – 4 acres.
- Average daily water use – 12,000 gpd
- Annual use assuming 180-days per year – 2,160,000 gallons or 6.6 acre-feet per year (AFY).

Using the numbers above, the average pumping rate during the cultivation period is about 8.3 gallons per minute (gpm). The reported yield of the project well is 40 gpm based on a 2-hour pump

test conducted during drilling of the well in 2022 (Table 1 and Attachment 1). Drawdown during this test was not recorded. For operations, the Northpoint report indicates that a solar pump capable of about 8 gpm will be used.

The estimated storage of the underlying aquifer was calculated by Northpoint multiplying the aquifer area (estimated from map unit prepared by Hearn et al., 1995) by the aquifer thickness (estimated by difference between average well depth in volcanic unit and measured static water level) multiplied by an assumed specific yield. Table 2 provides the numbers used.

Table 2. Values used by Northpoint to calculate estimated groundwater storage within aquifer.

Aquifer Area (Acres)	Average Depth of Wells (Feet BGS)	Average Depth Static Water Level (Feet BGS)	Average Aquifer Thickness (Feet)	Specific Yield (unitless)
640	314	202	112	0.07

Using these numbers, the estimated aquifer storage is 5,250 acre-feet.

Estimated recharge to the volcanic aquifer was calculated based on annual precipitation, runoff, and evapotranspiration. Using this method an annual recharge between 22.3 AFY to 30.1 AFY was calculated for the 84.56 acre proposed project area.

Cumulative impacts of water use to surrounding areas due to the project were addressed in the Northpoint report by stating: “Due to the distance from the nearest well, recharge estimates which substantially exceed the water use for the proposed project, the high productivity of groundwater wells drilled in local volcanic rock units, and the maximum pumping rate of 8.0 gpm, the proposed project is unlikely to have a significant cumulative impact on surrounding wells.”

COMMENTS

Specific comments to the May 19, 2023, Northpoint report are provided below. First it should be pointed out that the report was not stamped by a qualified California Professional Engineer or Geologist as is required when providing geologic interpretations. In general, this report does not provide the information required by Lake County Ordinance 3106 due to overall estimates of water availability, recharge, and cumulative impacts to surrounding areas using calculations and assumptions consistent with a porous media such as unconsolidated sands instead of the fractured rock system that exists beneath the site. Not recognizing the unique properties of a fractured rock

system in the area could result in significant impacts to the underlying aquifer and other water users in the area. For example, in the High Valley Basin (Basin Number 5-16) located to the north of Clear Lake, California Department of Water Resources (DWR, 2004) indicates that after four years of production using irrigation wells in Holocene Volcanics, well yields were reduced by up to 80 percent over a 4-year period.

Specific Comments

1. The estimated water use may be low.

The Northpoint report projects a water use of 6.6 to 7.8 AFY assuming about 500 plants per acre. However, in a report prepared by the Konocti Consulting Group (2024, Attachment 2), they state that a more realistic number of plants per acre would be 2,000. Using this value along with the numbers provided by Northpoint, the assessment should include the range of water use from 6.6 AFY to 31.2 AFY. Using the higher value of 31.2 AFY, the daily pumping rate for 180 days would be about 39 gpm, the approximate reported calculated yield of the well, 40 gpm (see comment #2 regarding calculation of yield). The hydrology report should evaluate the project using this range of water use.

2. The method used to estimate the yield of the proposed well is incorrect.

The estimated yield of 40 gpm for the proposed well was calculated based on a 2-hour pump test conducted during installation. As noted above, the well is completed within a fractured rock system that can have initial flows of higher value but within a short amount of time can be significantly reduced. The sustainable yield for a fractured bedrock well also has to take into account the drainage of fractures and amount of time to recharge the fractures.

As outlined in California Code of Regulations, Title 22, Section 64554(g)(2), to determine sustained yield of a well drilled in a fractured system two pump tests methods can be used: a 72-hour test and a 10-day test. For each of these tests, if the well has not recovered within a length of time not exceeding the duration of the pumping time of the pumping test (72 hours or 10 days), to within two feet of the static water level measured at the beginning of the well capacity test or to a minimum of ninety-five percent of the total drawdown measured during the test, whichever is more stringent, the well capacity cannot be determined using the proposed pump discharge rate. If the pump test meets these requirements, then 25 percent of the pumping rate would be the representative well capacity for a 72-hour test and 50 percent of the pumping rate for a 10-day test. Although these methods are required for drinking water wells by the State

Water Resources Control Board, Division of Drinking Water, Santa Rosa (Attachment 3), to ensure the proposed project well will not drain fractures within the aquifer system, a similar test should be conducted to establish the appropriate well capacity.

3. The method used to calculate aquifer storage is incorrect.

As discussed above, the aquifer storage was calculated by multiplying the area of volcanic rock unit (640 acres) by the thickness of the aquifer (calculated based on difference between static water levels and well depths) by the specific yield (approximate open spaces for water in rock unit estimated at 0.07). First, even if this was a porous media such as a sand unit, the calculation is wrong. As shown in Table 1, the aquifer system is confined, and the reported static water levels represent a pressure head that is above the aquifer system. As such, the actual aquifer thickness is at least 20 to 51 feet smaller than the 112 feet calculated for the project. Secondly, the specific yield within a porous media approximately represents the effective porosity of the material or open space that water can move through. Within a fractured rock system, this value is based on the nature of the fracture (e.g. open, closed, filled) and connection with other fractures and is almost certainly not the 0.07 value used for the calculation. In fractured rock systems as occurs at the site, only a small number of fractures may be filled with water.

To assess the amount of fractures that contain water, a test hole should be completed, and an acoustic televiewer (to assess number and orientation of fractures) and heat pulse flow meter conducted to assess which fractures transmit water. An example of both these methods are shown in Figures 3 (acoustic/optical televiewer) and 4 (heat pulse televiewer). As seen in these figures, although many fractures may be present, only a small amount are producing water. At the site these measurements were taken near Quincy California, recognition of these features was critical in protecting a supply well for a small hotel.

Based on the information provided above, the actual groundwater storage within the aquifer beneath the proposed project is significantly less than reported and possibly orders of magnitude lower. If this information is not assessed, significant impacts could occur through the drying up of fractures as is discussed further in Comments 4 and 5.

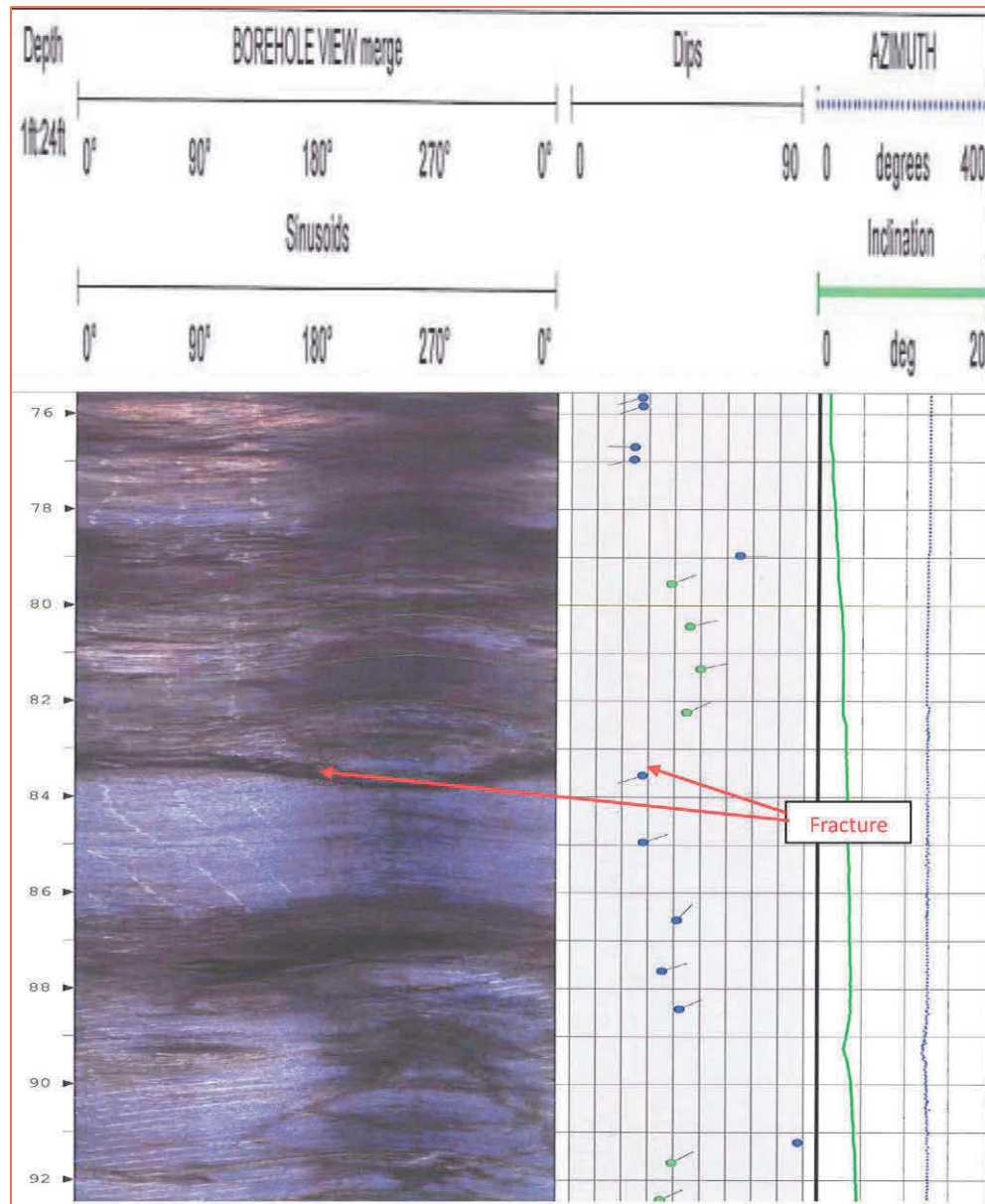


Figure 3. Example of optical televiewer. Blue symbols represent fractures and indicates their dip (angle from horizontal), and the green symbols represent foliations within the rock system and their orientation. The green line to the far left shows the direction the fracture or foliation is trending (compass direction).

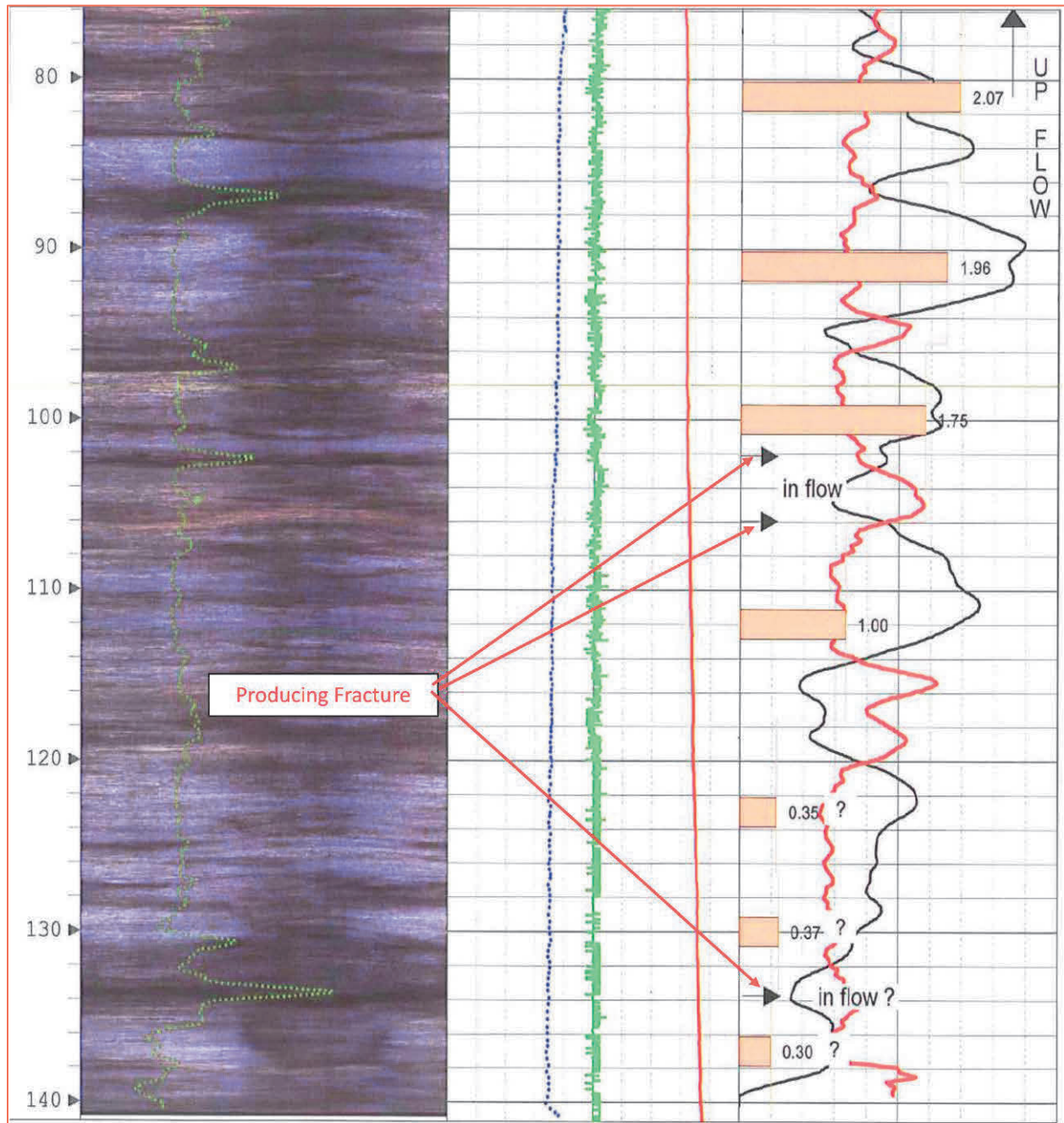


Figure 4. Example of heat pulse flow meter showing which fractures produce water.

4. The method used to calculate aquifer recharge is incorrect.

Aquifer recharge was calculated by assuming that a portion of precipitation at the surface would migrate down to aquifer system. As discussed above, the aquifer system is a confined system and waters from the surface would have to migrate down through the over 300 feet of low permeability rock overlying the aquifer system. In addition, recharge water needs to be at locations where the open fractures are that are connected to the overall aquifer system. The recharge system for this unit is most likely miles away from the project site.

The appropriate way to estimate recharge to aquifer is through the pumping tests discussed under Comment 2. Through this test if water levels do not recover to the starting water levels before the pump test, then there is poor connection between fractures that would recharge the area in which case water levels would decline every time the pump is turned on resulting in continued drying of individual fractures. For the same reasons discussed above for Comment 3, the actual recharge to the aquifer beneath the proposed project is significantly less than reported.

5. An adequate assessment of cumulative impacts to other water uses in the area was not provided.

To provide an accurate assessment of cumulative impacts to the surrounding area, first the orientation and dip of the producing fractures must be known. This information can be obtained by use of the optical televiwer and heat pulse flow meter discussed for Comment 3. For example, if the producing fractures trend towards the northeast or southeast, then pumping on the proposed project well could have significant impact to the existing wells at the Mountain of Attention property.

In addition, until assessments are made on what the actual well capacity and aquifer recharge values are, operation of this well could dry out fractures in the area also resulting in significant impacts to nearby groundwater wells. Anecdotal information already suggests that fractures may be drying out and not being recharged. Attachment 4 provides two reports from adjacent properties. The first report is a summary of operations of four existing wells at the Mountain of Attention (Figure 1). As indicated in this report, pumping conducted years ago on a specific well (date not specified), supplied 80 gpm, 24-hours a day, 7-days a week. For a test conducted in July 2021, this well only supplied water at 80 gpm 6-hours a day before the well went dry. The well did recharge so that it could be pumped the next day. The second report is a memo from Timothy Toye, a local real estate broker, who indicates knowledge of two wells in the area that

have dried up. Both of these reports strongly suggest that the system is being over pumped and not allowing recharge to occur.

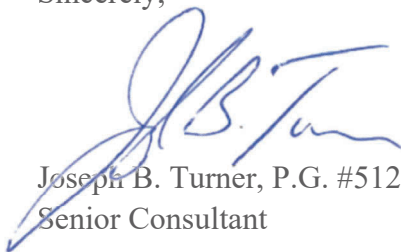
The report also did not assess the presence of springs in the area that could be sourced from this aquifer system. A map showing where springs are located and study to assess potential impacts to these features needs to be completed and if impacts affect surface water flows. In addition, the geologic map provided in the Northpoint report indicates there are faults in the area including one that goes through the project area. The impact on water movement from these faults should be assessed for this project.

OoO

In summary, the Northpoint report does not provide the information necessary to adequately assess if there will be significant impacts to the groundwater system from completion of this project. If the additional information stated above is not collected, then there is reasonable potential that the groundwater system will continue to be depleted throughout the area. This additional information is also needed to develop an appropriate Drought Management Plan as required by Lake County Ordinance 3106.

We appreciate the opportunity to work with you on this project. Please feel free to contact me if you have any questions or require additional detail.

Sincerely,



Joseph B. Turner, P.G. #5125, CHg #454
Senior Consultant



Attachment 1 – Well Logs

Attachment 2 – 2024 Konocti Consulting Group Report

Attachment 3 – State Water Resources Control Board Fracture Bedrock Capacity Testing

Attachment 4 – Anecdotal Well Reports

Attachment 1

Well Logs

File Original with DWR

State of California Well Completion Report

Page 1 of 1

Owner's Well Number 1

Date Work Began 1-20-21

Date Work Ended 2-1-22

Local Permit Agency LAKE County Environmental Health

Permit Number WE-5743

Permit Date 10-9-21

DWR Use Only - Do Not Fill In	
State Well Number	See Number
Latitude	Longitude
APN/USDA/Other	

Geologic Log		
Orientation	☒ Vertical	☐ Horizontal
Drilling Method	Air Rotary	
Depth from Surface	Feet to Feet	Description
0	20	Red & Tan clay
20	60	Volcanic Ash & Red Volcanic Rock
60	240	Volcanic Ash & Black Volcanic Rock
240	440	Black Volcanic Rock

Well Owner	
Name	Seigler Springs Holding LLC
Mailing Address	637 Windham St. STE 204
City	San Rafael
State	CA Zip 94901

Well Location	
Address	11615 Seigler Springs N. Rd
City	Kelseyville
County	Lake
Latitude	39° 07' 03" N Longitude 123° 03' 03" W
Datum	Dec. Lat.
APN Book	115 Page 007
Parcel	03
Township	Range
Section	

Location Sketch	Activity
(Sketch must be drawn for each well or printed)	☒ New Well
North	☐ Modification/Repair
	☐ Deepen
	☐ Other
	☒ Destroy
	Describe procedures and methods under "DRAINAGE"
	Planned Uses
	☒ Water Supply
	☒ Domestic ☐ Public
	☒ Irrigation ☐ Industrial
	☐ Cathodic Protection
	☐ Dewatering
	☐ Heat Exchange
	☐ Injection
	☐ Monitoring
	☐ Remediation
	☐ Sparging
	☐ Test Well
	☐ Vapor Extraction
	☐ Other

Water Level and Yield of Completed Well	
Depth to first water	380 (Feet below surface)
Depth to Static	
Water Level	360 (Feet) Date Measured 2-1-22
Estimated Yield	40 (GPM) Test Type A-1.1T
Test Length	2 HRS (Hours) Total Drawdown (Feet)
*May not be representative of a well's long term yield.	

Casings				Annular Material			
Depth from Surface	Borehole Diameter	Type	Material	Well Thickness	Outside Diameter	Screen Type	Slot Size
Feet ± Feet	(Inches)			(Inches)	(Inches)		If Any (Inches)
0	380	9"	F480	PVC	1/4	4.5	Blank
380	440	9"	F480	PVC	1/4	4.5	Perf
							0.32

Attachments		Certification Statement	
☐ Geologic Log		I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief	
☐ Well Construction Diagram		Name	Will Kerson Well Drilling
☐ Geophysical Log(s)		Address	P.O. Box 6954 Kelseyville CA 95451
☐ Soil/Water Chemical Analyses		Signed	[Signature]
☐ Other		Date Signed	2-1-22
		CST Licensed Water Well Constructor	1009053
			CST License Number

ORIGINAL
File with DWR

MAR - 5 2012

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 0950538

DWR USE ONLY — DO NOT FILL IN

12N 08W 13

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Page ___ of ___

Owner's Well No. _____

Date Work Began 11-15-11, Ended 12-1-11

Local Permit Agency Health Dept.

Permit No. WE 4274 Permit Date 11-4-11

GEOLOGIC LOG

ORIENTATION () ☒ VERTICAL _____ HORIZONTAL _____ ANGLE _____ (SPECIFY)

DRILLING METHOD air rotary FLUID Bentonite

DESCRIPTION mud

Describe material, grain size, color, etc.

DEPTH FROM SURFACE	Ft.	to	Ft.	DESCRIPTION
0	30			Brown Vol. Ash
30	285			Broken Basalt
285	330			White Ash w/ small Rocks
330	342			Hard Broken mixed Colored Volcanics

WELL LOCATION

Address 11200 Piener Drive

City Kelseyville

County Lake

APN Book 115 Page 004 Parcel 07

Township 12N Range 8W Section 13

Lat _____ N Long _____ W

LOCATION SKETCH NORTH

150' N. of 1st Power Pole

WEST EAST

ACTIVITY ()

☒ NEW WELL

MODIFICATION/REPAIR

_____ Deepen

_____ Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES ()

WATER SUPPLY

☒ Domestic _____ Public

_____ Irrigation _____ Industrial

MONITORING _____

TEST WELL _____

CATHODIC PROTECTION _____

HEAT EXCHANGE _____

DIRECT PUSH _____

INJECTION _____

VAPOR EXTRACTION _____

SPARGING _____

REMEDIATION _____

OTHER (SPECIFY) _____

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

TOTAL DEPTH OF BORING 345 (Feet)

TOTAL DEPTH OF COMPLETED WELL 342 (Feet)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 240 (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 189 (Ft.) & DATE MEASURED 11-30-11

ESTIMATED YIELD 26 (GPM) & TEST TYPE air lift

TEST LENGTH 10 (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

* May not be representative of a well's long-term yield.

DEPTH FROM SURFACE			BORE-HOLE DIA. (Inches)	CASING (S)					DEPTH FROM SURFACE			ANNULAR MATERIAL			
				TYPE ()				MATERIAL / GRADE				INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE
Ft.	to	Ft.		BLANK	SCREEN	CON- DUCTOR	FILL PIPE		CE- MENT ()	BEN- TONITE ()	FILL ()				FILTER PACK (TYPE/SIZE)
0	20	9	X				PVC	4 1/2	160						
20	262	7	X				"	"	1						
262	342	7		X			"	"	200	.032				3/8 Pea Gravel	

ATTACHMENTS ()

_____ Geologic Log

_____ Well Construction Diagram

_____ Geophysical Log(s)

_____ Soil/Water Chemical Analyses

_____ Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Larry Herman Drilling

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS PO Box 1152 Lower Lake Ca 95457

CITY STATE ZIP

Signed Larry Herman

DATE SIGNED 12-14-11 465071

C-57 LICENSED WATER WELL CONTRACTOR C-57 LICENSE NUMBER

ORIGINAL
File with DWR

Page ____ of ____

Owner's Well No. _____

Date Work Began 5/11/07, Ended 5/11/07

Local Permit Agency Lake County Environmental Health

Permit No. WE3803

Permit Date 12/21/06

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **1089145**

DWR USE ONLY — DO NOT FILL IN

12N/08W/13

STATE WELL NO./STATION NO.

LATITUDE

LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION ()

☒ VERTICAL
DRILLING METHOD Rotary

HORIZONTAL

ANGLE

(SPECIFY)

FLUID

DESCRIPTION

Describe material, grain size, color, etc.

DEPTH FROM SURFACE

Ft. to Ft.

0 3
3 12
12 40
40 280
280 290
290 360

Red soil
Red clay
Tan clay
Gray and Purple and White
Soft Broken Vol. Rock
Black Vol. Rock and Blue Clay
Black Vol. Rock Broken

WELL LOCATION

Address 11435 Sigler Springs North

City Kelseyville

County Lake

APN Book 115 Page 007 Parcel 01

Township 12N Range 08W Section 13

Lat. _____ N Long. _____ W

DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

NORTH

ACTIVITY ()

☒ NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES ()

WATER SUPPLY

☒ Domestic ☐ Public

☐ Irrigation ☐ Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY)

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 325 (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 379 (Ft.) & DATE MEASURED 5/10/07

ESTIMATED YIELD 40+ (GPM) & TEST TYPE Air Lift

TEST LENGTH 1/2 (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

* May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING 360 (Feet)

TOTAL DEPTH OF COMPLETED WELL 346 (Feet)

DEPTH FROM SURFACE			BORE-HOLE DIA. (Inches)	CASING (S)						DEPTH FROM SURFACE			ANNULAR MATERIAL				
				TYPE ()				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)				GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE		
Ft.	to	Ft.	BLANK	SCREEN	CON- DUCTOR	FILL PIPE									Ft.	to	Ft.
0	40		K				PVC F480	4 1/2	SDR26		0	20		K			
40	326		K				PVC F480	4 1/2	SDR26		20	22			K		
326	346			K			PVC F480	4 1/2	SDR26	.032	22	346					Per Gravel

ATTACHMENTS ()

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analyses
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Dan Mc Mullen Well Drilling

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 1487 Old Long Valley Rd. Charles Oaks CA 95423

CITY Charles Oaks STATE CA ZIP 95423

Signed Dan L. Muller DATE SIGNED 5/11/07 C-57 LICENSE NUMBER 533152

C-57 LICENSED WATER WELL CONTRACTOR

DATE SIGNED

C-57 LICENSE NUMBER

ORIGINAL
File with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 1093128

DWR USE ONLY — DO NOT FILL IN

12N/08W/13

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Page ___ of ___

Owner's Well No. _____

Date Work Began 3-13-07, Ended 3-16-07

Local Permit Agency Healds Dept.

Permit No. WE-3828 Permit Date 2-8-07

GEOLOGIC LOG

ORIENTATION (✓) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE _____ (SPECIFY)
DRILLING METHOD mud Rotary FLUID _____

DEPTH FROM SURFACE		DESCRIPTION
Ft.	to Ft.	
0	100	Rock Gray
100	140	purple/brown Rock
140	160	Rock with Clay

Describe material, grain size, color, etc.

WELL LOCATION
Address 11135 Siegler Springs Rd

City Kelseyville Ca 95451

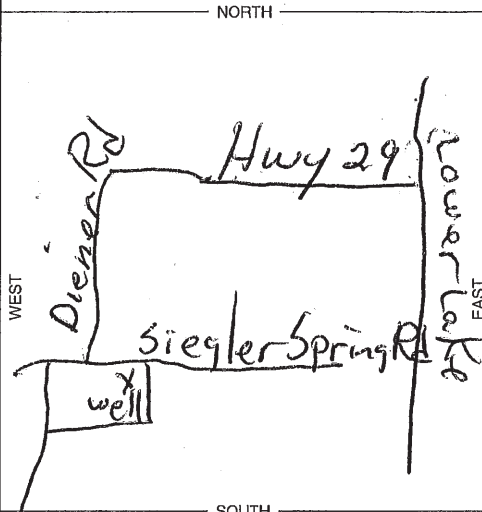
County Lake

APN Book 115 Page 006 Parcel 02

Township 12N Range 8W Section 13

Lat _____ Deg. _____ Min. _____ Sec. _____ N Long. _____ Deg. _____ Min. _____ Sec. _____ W

LOCATION SKETCH



ACTIVITY (✓)

☒ NEW WELL

MODIFICATION/REPAIR
☐ Deepen
☐ Other (Specify) _____

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES (✓)
WATER SUPPLY
☒ Domestic ☐ Public
☐ Irrigation ☐ Industrial

MONITORING _____
TEST WELL _____
CATHODIC PROTECTION _____
HEAT EXCHANGE _____
DIRECT PUSH _____
INJECTION _____
VAPOR EXTRACTION _____
SPARGING _____
REMEDIATION _____
OTHER (SPECIFY) _____

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 80 (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 36 (Ft.) & DATE MEASURED 3-16-06
ESTIMATED YIELD 100 (GPM) & TEST TYPE Air Lift
TEST LENGTH 2 (Hrs.) TOTAL DRAWDOWN _____ (Ft.)
* May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING 160 (Feet)
TOTAL DEPTH OF COMPLETED WELL 160 (Feet)

DEPTH FROM SURFACE		BORE-HOLE DIA. (Inches)	CASING (S)					DEPTH FROM SURFACE		ANNULAR MATERIAL				
Ft.	to Ft.		TYPE (≤)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE			
			BLANK	SCREEN	CON-DUCTOR	FILL PIPE					CE-MENT (≤)	BEN-TONITE (≤)	FILL (≤)	FILTER PACK (TYPE/SIZE)
0	115	7 3/8	X				PVC	4 1/2"	160					
115	155	7 3/8		X			PVC	4 1/2"	200	.030				
155	160	7 3/8	X				PVC	4 1/2"	160					

DEPTH FROM SURFACE		ANNULAR MATERIAL			
Ft.	to Ft.	TYPE			
		CE-MENT (≤)	BEN-TONITE (≤)	FILL (≤)	FILTER PACK (TYPE/SIZE)
0	20	✓			
20	160		5/16	pea	Gravel

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analyses
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Larry Herman Drilling
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS P.O. Box 1152 Lower Lake Ca 95451
CITY STATE ZIP
Signed Larry Herman 3-21-07 465071
C-57 LICENSED WATER WELL CONTRACTOR DATE SIGNED C-57 LICENSE NUMBER

EXHIBIT B

EXECUTIVE SUMMARY

This report presents my professional assessment of wildfire preparedness, emergency access, and emergency evacuation associated with the proposed Seigler Springs North Major Use Permit (PL-26-115/IS 21-18). It is submitted in my capacity as Fire Marshal for Mountain of Attention Sanctuary, a 1,000-acre nonprofit retreat located within the Seigler Springs area of southern Lake County. My assessment is based on a review of the project documents, field observations, applicable fire protection standards, and my experience with wildfire preparedness and emergency planning in this community.

The proposed project is located within a **Very High Fire Hazard Severity Zone**, where wildfire is a foreseeable and recurring condition. While the environmental documents address several important fire protection measures—including defensible space, emergency water supply, and compliance with applicable fire regulations—those measures primarily address protection of structures rather than the movement of people during a wildfire evacuation.

In particular, I did not identify analysis addressing cumulative evacuation demand, project-specific evacuation planning, operational roadway performance during wildfire conditions, or coordination of project evacuation with neighboring communities and responding agencies. These issues are fundamental to protecting human life and are distinct from measures intended primarily to protect structures.

In my professional opinion, the current administrative record does not provide sufficient information for the Board to make informed findings regarding wildfire evacuation and public safety. The record does not adequately evaluate cumulative evacuation demand, operational roadway performance during a wildfire, or the interaction between civilian evacuation and emergency responder access. Without that information, it is not possible to fully assess the project's foreseeable life-safety impacts.

I respectfully recommend that the Board **not make final findings regarding wildfire impacts based on the current record**. Instead, the Board should require a project-specific evacuation analysis evaluating cumulative evacuation demand, emergency responder access, and roadway performance under wildfire conditions, with review by a licensed transportation engineer or the South Lake County Fire Protection District, before determining whether the project can be approved in a manner consistent with public safety.

BOARD MEMBERS WITH LIMITED TIME:

Please review the Executive Summary and the photographs on Pages 6-10 illustrating representative roadway conditions discussed in this assessment.

Duncan Gamlen
Fire Marshal
Mountain of Attention Sanctuary
Lake County, California

Submitted to:

Lake County Board of Supervisors

July 31, 2026

Fire Marshal's Assessment of Wildfire Preparedness, Emergency Access, and Evacuation

1. PURPOSE OF THIS ASSESSMENT

The purpose of this assessment is to provide the Lake County Board of Supervisors with my professional evaluation of wildfire, fire protection, emergency access, and evacuation issues associated with the proposed Seigler Springs North Major Use Permit (PL-26-115/IS 21-18).

This assessment is based upon my review of the project documents, applicable fire protection standards, personal field observations, and my experience as Fire Marshal for the Mountain of Attention Sanctuary. It is intended to assist the Board in determining whether the current administrative record provides sufficient information to support informed findings regarding public safety.

My review is limited to wildfire preparedness, emergency access, fire suppression, and evacuation. Groundwater, forestry, biological resources, land use, and legal issues are addressed separately by qualified professionals retained for those purposes.

2. QUALIFICATIONS

I currently serve as the legally designated Fire Marshal for the Mountain of Attention Sanctuary, a 1,000-acre nonprofit meditation retreat located within the Seigler Springs area of southern Lake County. My responsibilities include wildfire preparedness, fire prevention, emergency planning, defensible space, fire suppression planning, emergency communications, and coordination with local fire protection agencies.

Relevant qualifications include:

- Fire Marshal, Mountain of Attention Sanctuary
- California Wildland Firefighter (Firefighter II)

- FEMA Incident Command System (ICS-100 and ICS-700)
- Emergency Medical Responder (EMR)
- FCC General Class Amateur Radio Operator
- Fire Technology Student, Santa Rosa Junior College Public Safety Training Center

In addition to my professional responsibilities, I have longstanding familiarity with the Seigler Springs area and the roadway system serving the proposed project. That familiarity includes wildfire preparedness, emergency planning, and participation in wildfire suppression activities within this community since 1979. I currently reside on Seigler Springs North Road.

3. SCOPE OF REVIEW

This assessment is based upon my review of the following materials:

Major Use Permit (PL-26-115/IS 21-18)

- Staff Report
- Draft Initial Study and CEQA documentation
- Wildfire section of the Initial Study
- Project site plans
- Property Management Plan
- Conditions of Approval
- Oak Mitigation Plan
- Applicable California Fire Code provisions
- California Public Resources Code Sections 4290 and 4291
- Historical wildfire information
- Personal field observations of the project area and primary access routes

My evaluation focuses on whether the project documents adequately address wildfire preparedness, emergency access, and public evacuation from the perspective of fire protection and life safety.

4. PROJECT SETTING

The proposed Seigler Springs North project is located within a designated **Very High Fire Hazard Severity Zone (VHFHSZ)** in the wildland-urban interface (WUI) of southern Lake County. This landscape is characterized by steep terrain, dense vegetation, prolonged summer drought, and a documented history of significant wildfires

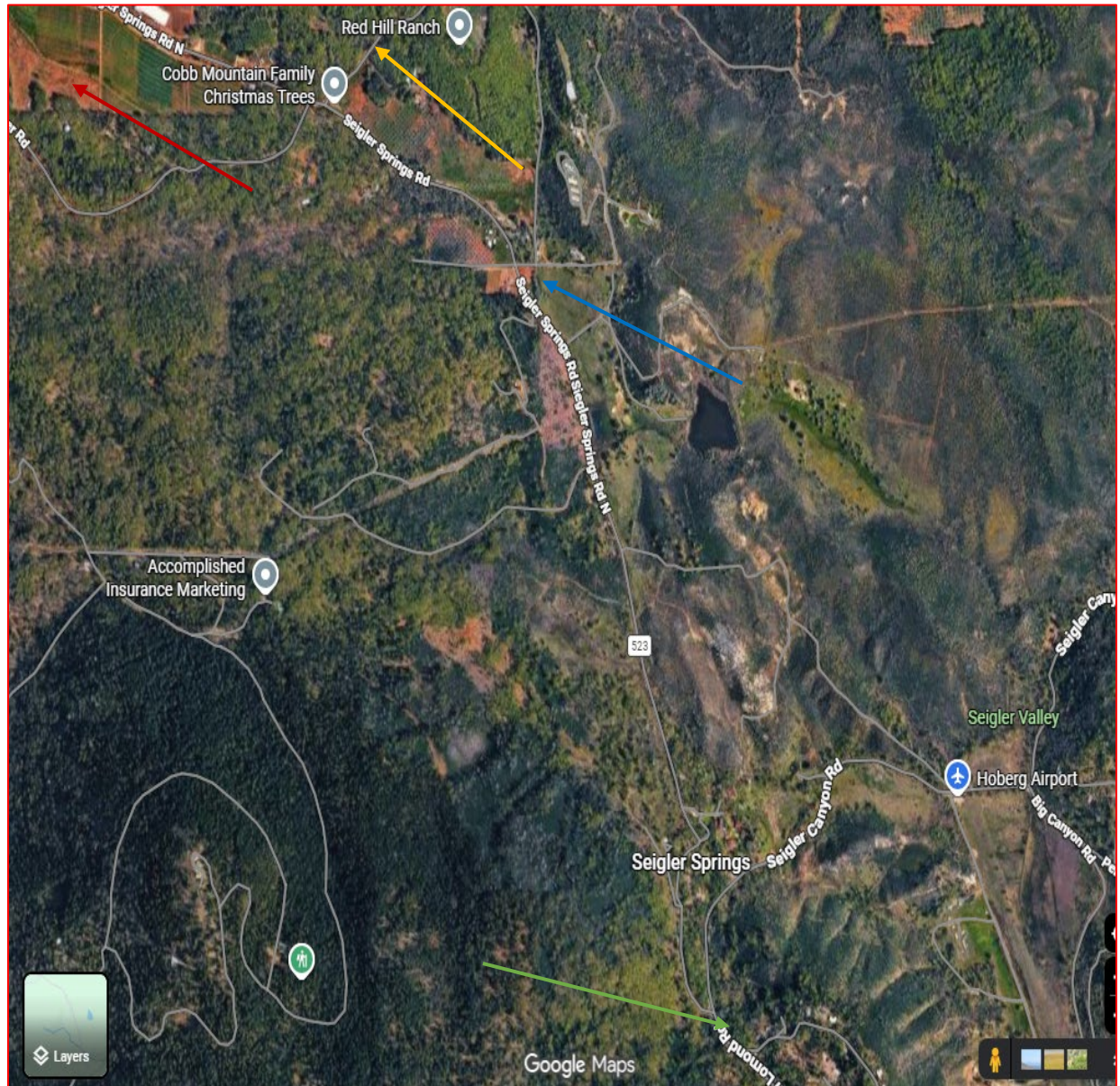
Access to the project is provided primarily by Seigler Springs North Road and connecting rural roadways, including Diener Road. The proposed project access from Seigler Springs North Road relies upon an easement whose validity is disputed in separate legal submissions included in the administrative record. This assessment expresses no opinion regarding those legal issues and considers only the wildfire and emergency access implications of the proposed access configuration. These roads serve existing residences, agricultural operations, the Mountain of Attention Sanctuary, the Shenandoah subdivision, utility providers, emergency responders, and other properties located within this portion of the county.

Unlike urban transportation systems that provide multiple evacuation options, this area depends upon a limited rural road network. During a wildfire emergency, these roads must simultaneously accommodate evacuating residents, project employees, visitors, retreatants, emergency responders, utility crews, and mutual aid resources.

The purpose of this assessment is not to predict whether another wildfire will occur. Wildfire is an established and recurring characteristic of this landscape. **Rather, this assessment evaluates whether the current administrative record contains sufficient information for the Board of Supervisors to determine that public safety has been adequately considered** should a wildfire occur during the operational life of the project.

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Figure 4-1 – Regional context and primary evacuation corridor.



1 Regional context from Google Maps Red arrow = Pasta Farms; Blue arrow = Mountain of Attention northern border; Green arrow = Shenandoah subdivision; Orange arrow = Diener Road

5. LOCAL WILDFIRE CONTEXT

Southern Lake County has experienced repeated significant wildfires over the past several decades. Fires affecting the Seigler Springs area include the 1970 Seigler Fire, the 1979 Seigler Canyon Fire, and the 2015 Valley Fire.

The Valley Fire alone destroyed approximately 2,000 homes and other structures, becoming one of the most destructive wildfires in California history. More importantly, it fundamentally changed how residents, emergency responders, and public agencies evaluate wildfire preparedness and community evacuation.

California's recent wildfire experience has demonstrated that wildfire planning must extend beyond protecting individual structures. Modern wildfire planning recognizes that protecting human life depends upon effective emergency evacuation, coordinated emergency response, and transportation systems capable of functioning under rapidly changing conditions.

Accordingly, wildfire should be considered a foreseeable planning condition for this project rather than an extraordinary event.

6. EMERGENCY ACCESS

The proposed project relies upon the existing rural roadway network serving the Seigler Springs area. These roads were constructed circa 1880 with minor modification since to support dispersed residential and agricultural uses and now provide access for residents, businesses, nonprofit organizations, emergency responders, and visitors.

Figure 6-1 – Beginning of Seigler Springs North Road.



Intersection of Seigler Canyon Road and SSN 120 degree

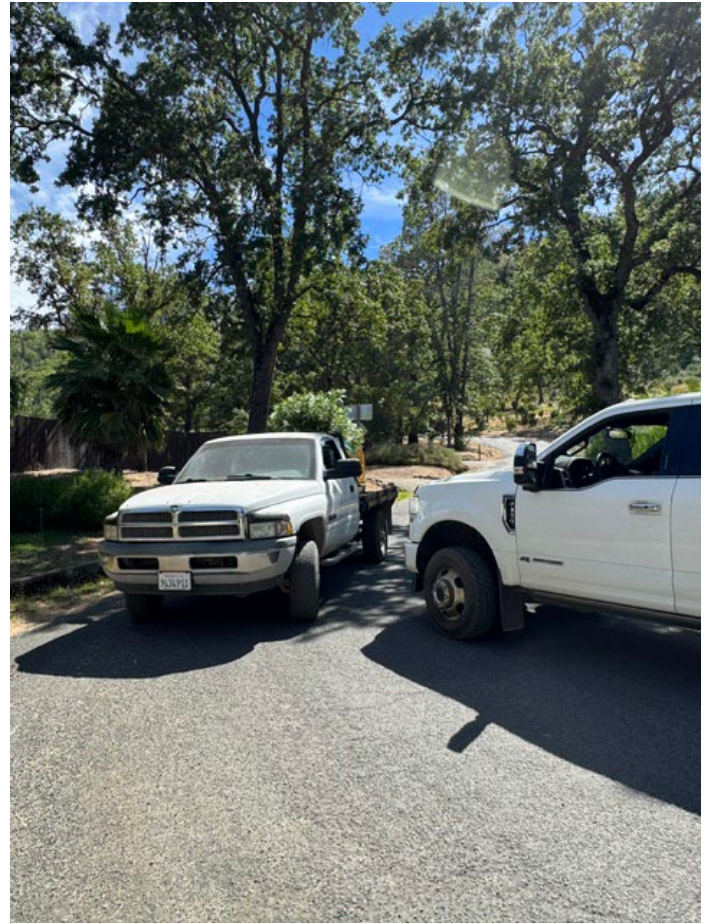
Field observations identified several roadway characteristics relevant to emergency response, including:

Figure 6-2 – Blind curve with limited sight distance and choke point.



Limited sight distance occurs at several locations along Seigler Springs North Road, reducing the ability of opposing traffic to observe approaching vehicles during emergency operations.

Figure 6-3 – 90-degree turn affecting opposing traffic. Major choke point



Representative 90-degree turn illustrating roadway geometry and vehicle maneuvering characteristics.

Figure 6-4 Roadway width in nonpaved section inadequate. Another choke point.



Representative roadway width along the unpaved section of Seigler Springs North Road.

Figure 6-5 – Transition to unpaved roadway



- Seasonal dust conditions reduce visibility.
- Limited opportunities for opposing traffic to pass.

Under normal traffic conditions these characteristics are manageable. During a wildfire emergency, however, they may affect the movement of evacuating civilians and responding emergency apparatus operating simultaneously.

Wildland fire response differs from routine emergency operations. Fire engines, water tenders, bulldozers, ambulances, law enforcement vehicles, utility crews, and mutual aid resources frequently enter an area while residents, employees, and visitors are attempting to evacuate. This simultaneous movement creates operational challenges that are not encountered during routine emergencies.

California Public Resources Code Sections 4290 and 4291 establish important minimum standards for emergency access and wildfire preparedness. Compliance with these standards substantially improves firefighter access and structural survivability. However, compliance with minimum roadway design standards does not necessarily demonstrate that emergency evacuation has been adequately evaluated under realistic wildfire conditions.

7. EMERGENCY EVACUATION

Life Safety

The primary objective of every wildfire response is the protection of human life. Modern wildfire planning recognizes that while structures can often be rebuilt, the loss of life cannot. Consequently, emergency planning must evaluate not only how structures will be protected, but also how people will safely evacuate when wildfire threatens a community.

Unlike urban areas with multiple transportation options, the Seigler Springs area depends upon a limited rural road network. During a wildfire, these roads must simultaneously accommodate evacuating residents, project employees, visitors, emergency responders, utility crews, and mutual aid resources.

Successful evacuation depends upon maintaining traffic flow in both directions while allowing emergency responders to reach the incident. This operational challenge cannot be evaluated solely by roadway design standards or average daily traffic volumes.

Cumulative Evacuation Considerations

Emergency evacuation within the project area should be evaluated as a cumulative event rather than on a project-by-project basis. During a significant wildfire, the following groups would likely depend upon the same roadway system:

- Permanent and seasonal residents.
- Project employees and contractors.
- Agricultural workers.
- Visitors unfamiliar with the area.
- Mountain of Attention Sanctuary staff and guests.
- Residents of the Shenandoah subdivision.
- Individuals evacuating horses and livestock.
- Emergency responders.
- Utility crews.
- Mutual aid resources.

These populations would not evacuate independently. They would rely upon the same transportation network over approximately the same period of time, creating operational demands that differ substantially from normal traffic conditions.

Figure 7-1

Residents

|

Employees

|

Visitors

|

Sanctuary

|

Shenandoah

|

Horse Trailers

|
Emergency Vehicles

|
Utility Crews

|
Mutual Aid

↓
Same Road

Operational Considerations

Wildfire evacuation presents challenges not encountered during routine emergencies. Residents are attempting to leave while fire engines, water tenders, ambulances, law enforcement officers, and other emergency resources are attempting to enter.

Smoke, dust, reduced visibility, disabled vehicles, animal trailers, and changing fire conditions further complicate these operations. Every additional vehicle introduced into the roadway system increases the complexity of safely managing simultaneous ingress and egress.

For this reason, emergency access and evacuation should be considered components of the same life-safety system rather than independent subjects.

Assessment

Based upon my review of the environmental documents, I did not identify a project-specific evaluation of cumulative evacuation demand or an operational analysis demonstrating how the existing roadway network would function during simultaneous civilian evacuation and emergency response.

In my professional opinion, emergency evacuation represents one of the most important public safety considerations associated with this project and merits additional analysis before final project approval.

8. ASSESSMENT OF THE WILDFIRE ANALYSIS

The environmental documents appropriately recognize that the project is located within a Very High Fire Hazard Severity Zone and identify wildfire as a potentially significant environmental

issue. The documents also discuss defensible space, emergency water supply, roadway standards, and compliance with applicable fire regulations.

These measures represent important components of wildfire preparedness and should remain integral elements of the project.

However, from a fire protection perspective, these measures primarily address protection of the project itself rather than the operational challenges associated with community evacuation.

My review did not identify analysis addressing:

- Project-specific evacuation planning.
- Cumulative evacuation demand.
- Simultaneous emergency responder ingress and civilian egress.
- Operational performance of the roadway system during wildfire conditions.
- Effects of smoke, dust, reduced visibility, or disabled vehicles on evacuation.
- Coordination of project evacuation with surrounding communities.

The Initial Study concludes that wildfire impacts would be less than significant based upon compliance with applicable fire regulations and the limited number of project employees. Those considerations are relevant. However, in my professional opinion, they do not fully evaluate how the existing transportation network would function during a rapidly developing wildfire requiring simultaneous evacuation and emergency response.

Protecting structures and protecting people are related but distinct public safety objectives. While compliance with applicable fire regulations improves structural survivability, emergency evacuation requires evaluation of operational conditions affecting the movement of people under emergency circumstances.

Accordingly, I believe additional evacuation analysis would strengthen the administrative record and assist the Board in evaluating the project's public safety impacts.

9. PROFESSIONAL FINDINGS

Based upon my review of the project documents, applicable fire protection standards, field observations, and professional experience, I make the following findings:

Finding 1

The proposed project is located within a Very High Fire Hazard Severity Zone where wildfire is a foreseeable and recurring environmental condition.

Finding 2

The project area has experienced multiple significant wildfires, demonstrating that emergency evacuation is a realistic planning consideration rather than a speculative event.

Finding 3

Emergency access to the project and surrounding communities depends upon a limited rural roadway network with operational characteristics that should be considered during wildfire evacuation.

Finding 4

The proposed project will introduce additional commercial activity and associated vehicle trips into an area already dependent upon a limited rural roadway system.

Finding 5

Emergency evacuation should be evaluated cumulatively because residents, neighboring developments, project employees, visitors, emergency responders, and mutual aid resources would all rely upon the same roadway network during a significant wildfire.

Finding 6

The environmental documents appropriately address many important fire protection measures, including defensible space, emergency water supply, and compliance with applicable fire regulations.

Finding 7

Based upon my review of the Seigler Springs North application, I find no project-specific evaluation of cumulative evacuation demand or operational roadway performance during simultaneous evacuation and emergency response.

Finding 8

Based upon my review, the current administrative record does not provide sufficient information to evaluate cumulative evacuation demand or operational roadway performance during a wildfire emergency. In my professional opinion, the Board would benefit from a project-specific evacuation analysis, reviewed by a licensed traffic engineer or the South Lake County Fire Protection District, before making final findings regarding wildfire impacts.

10. CONCLUSIONS

Wildfire is an inherent characteristic of the Seigler Springs landscape and should be considered a foreseeable planning condition throughout the operational life of the proposed project.

The project documents demonstrate substantial attention to fire protection through defensible space, emergency water supply, roadway standards, and compliance with applicable fire regulations. These measures contribute significantly to wildfire preparedness and should remain important components of the project. **However, please note that a Cal Fire Type 3 engine can pump 500 gallons per minute. For perspective, a single 5,000-gallon water supply may be rapidly depleted during structural or vegetation firefighting operations. Also there are no specifications for providing employee firefighting equipment and training.**

The Initial Study concludes that wildfire impacts would be less than significant based upon compliance with applicable fire regulations and the limited number of project employees. Those considerations are relevant. However, in my professional opinion, they do not provide sufficient information to evaluate how the existing transportation network would function during a rapidly developing wildfire requiring simultaneous civilian evacuation and emergency response.

Based upon my review, the current administrative record does not contain sufficient information for the Board to fully evaluate cumulative evacuation demand, operational roadway performance, or coordination of project evacuation with surrounding communities and responding agencies. These issues are central to the protection of public safety in a Very High Fire Hazard Severity Zone.

Accordingly, I respectfully recommend that, before making final findings regarding wildfire impacts, the Board direct the preparation of a project-specific evacuation analysis addressing these issues and that the analysis be reviewed by a licensed traffic engineer or the **South Lake County Fire Protection District**, as the local fire protection agency with primary responsibility for emergency response and evacuation planning within the project area. Such a review would provide the Board with a more complete factual basis upon which to make informed findings regarding public safety.

11. RECOMMENDATIONS

To further support informed public safety findings, I respectfully recommend consideration of the following:

1. Prepare a project-specific emergency evacuation analysis evaluating project employees, residents, visitors, emergency responders, and neighboring communities.
2. Evaluate cumulative evacuation demand associated with existing and foreseeable development utilizing the same roadway system.
3. Assess operational roadway performance during simultaneous civilian evacuation and emergency responder ingress.
4. Coordinate project emergency planning with CAL FIRE, the South Lake County Fire Protection District, the Lake County Sheriff's Office, and other responding agencies.
5. Develop a written Wildfire Emergency Operations Plan addressing employee notification, fire mitigation equipment and training, evacuation procedures, emergency communications, accountability, and prepared in coordination with the South Lake County Fire Protection District.
6. Provide annual wildfire preparedness and evacuation training for project personnel.
7. Continue evaluating feasible measures that improve emergency access and reduce evacuation conflicts where practical.

EXHIBIT C

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July 31, 2026

VIA ELECTRONIC SUBMISSION

Lake County Planning Commission
c/o Community Development Department
County of Lake
255 North Forbes Street
Lakeport, CA 95453
Tel: (707) 263-2221
Email: trish.turner@lakecountyca.gov

Re: Opposition to Proposed Approval of UP 21-17 and IS 21-18
Project: Seigler Springs North, Use Permit 21-17, Initial Study 21-18
Project Location: 11615 and 11625 Seigler Springs North Road, Kelseyville

Dear Planning Commissioners:

This comment in opposition to the Seigler Springs North Project (the "Project"), Use Permit 21-17 ("UP"), and Initial Study 21-18 ("IS") is submitted on behalf of The Divine Avataric Holy Domains of Adidam Ruchiradam ("Holy Domains"), a California nonprofit religious organization recognized as a church. Holy Domains opposes the Project because, among other reasons, the Project Site lacks legal or adequate access and is located within the Commercial Cannabis Cultivation Exclusion Areas, the impact of the Project on water wells used by Holy Domains and its water needs were not analyzed, and the IS does not comply with CEQA because it is based on inaccurate and incomplete information.

This letter restates the arguments presented in a public comment submitted on behalf of Holy Domains on October 25, 2023 and presents additional reasons for opposing the Project.

Discussion

A. UP 21-17 Must Be Denied Because The Project Lacks Any Legal Or Adequate Access.

The proposed Project Site is located at 11615 and 11625 Seigler Springs North Road, Kelseyville, CA 95451 (the "Project Site"). Among other properties in the direct vicinity of the Project Site, Holy Domains owns two properties adjoining the Project Site that are located at 11635 Seigler Springs North Road (APN 115-007-07) (the "11635 Property") and 11715 Seigler Springs North (APN 115-015-03) (the "11715 Property") as part of its religious sanctuary. The Applicant proposes to access the Project Site over the

11635 Property, that is owned by Holy Domains. The Applicant is not authorized to use the 11635 Property as access for the Project and has no right or entitlement to do so.

1. The Description And Analysis Of Access To The Project Site Is Remarkably Deficient.

The Project Description, Property Management Plan, IS and Staff Report are remarkably vague, ambiguous and deficient in the discussion of the access to the Project Site. The Project Description dated April 13, 2021 submitted by the Applicant states “[t]here is a fairly non-descript dirt driveway on the left...This is the project driveway access that passes through the adjoining land not owned by the applicant located at 11635 Seigler Springs Road.” (Project Description Pg. 4.) To address the requirement that the Project Site have sufficient access, the Project Description provides “[t]he subject site is located on the west side of Highway 29 and it is accessed from two existing driveways.” (Project Description Pg. 9.) The Project Description proceeds to analyze the adequacy of Highway 29 as the access for the Project. The Project Site is not located on Highway 29 and Highway 29 is not used to access the Project. The Property Management Plan states “[e]xisting ranch roads will be used to access the cultivation compound.” (Property Management Plan Sec. 2.0.) Section 12.2 of the Property Management Plan then states that the “cultivation operation is accessed by a private gravel road.” Section 13.4.4 of the Property Management Plan then states that the “access road system” is “well designed” and the access roads “are typically armored with gravel or roadbase.” This is untrue. Per the Project Description, the proposed access over the 11635 Property is a “non-descript dirt driveway,” not a gravel or “armored” well-designed road. The proposed access is in fact an unimproved dirt path, in a state of disrepair, which is not adequate for a project of this nature.

The IS prepared by the Community Development Department (“CDD”) is similarly deficient. IS Section IX(f) states that “[a]ccess to the Project site is from Seigler Springs North Road, which is in compliance with California Public Resources Code §4290.” As discussed above, this is incorrect. The IS then states that emergency access will be provided via “Walnut Road and connecting roadways.” However, this purported access is not reflected anywhere in the Project application, site plans, or any of its supporting materials. Moreover, there does not appear to be a “Walnut Road” in the vicinity of the Project Site. IS Section XVII(a) entitled “Roadway Analysis” then provides that “[v]ehicles traveling to the site will use Seigler Springs North Road to access the driveway.” This “analysis” is again inaccurate and entirely insufficient for a project of this nature and size. The Project Site does not front Seigler Springs North or any county-maintained roads. The Major Use Permit Findings for Approval of the Staff Report at Item 3 purport to find that the “access” to the Project Site is “adequate” because there is allegedly a “private driveway, which is accessed from Seigler Springs North Road.” No further discussion or analysis of access is provided.

2. The Applicant Has No Right To Access The Project Site Via The 11635 Property.

Holy Domains first raised the issue of access for the Project with CDD in a telephone call on September 6, 2023. During that call, CDD told Holy Domains that the Applicant submitted a letter from an individual

named “Prather” authorizing access over and use of the 11635 Property for the cannabis Project. In response, CDD was told that the owner of the 11635 Property is Holy Domains, that the organization opposes the Project, and objects to any use of, or access over, the 11635 Property for the Project. Enclosed with this letter is a true copy of a letter that purports to be from Danny Prather as “owner of 11635 Seigler Sprigs North Road, parcel number 115-007-070” (the “Prather Letter”) dated May 25, 2021 that CDD provided to Holy Domains. [Tab 1.] After learning that Mr. Prather does not own the 11635 Property, and therefore cannot authorize access over the property, the position changed in this regard. In an email dated September 8, 2023, CDD for the first time took the position that “there is a recorded easement (the “Alleged Easement”) on 115-007-07 that was recorded October 29, 1993, that gives ingress and egress access easement rights to 115-007-03, 115-007-06, and 115-015-01.” A copy of the Alleged Easement is included as Attachment 9 to the Staff Report.

It should be noted that the Alleged Easement is not discussed in the Project Application or any of its supporting materials. As far as Holy Domains is aware and informed, the Applicant has never itself asserted the Alleged Easement as an instrument granting it access rights over the 11635 Property. The Applicant had never contacted Holy Domains about the Project or discussed use of property owned by Holy Domains for the Project. According to CDD, the Applicant instead claimed that the Prather Letter authorized it to use the 11635 Property as access for the Project. Holy Domains addressed, among other issues with the Project, the Prather Letter and the Alleged Easement in an email to CDD dated September 13, 2023, a true copy of which is enclosed herewith and fully incorporated herein by reference. [Tab 2.] The September 13 email outlined that the Alleged Easement is invalid and a legal nullity because, similar to the Prather Letter, it was granted by an individual who did not own the 11635 Property. CDD did not respond to the September 13 email.

Holy Domains is the owner of the 11635 Property by virtue of the Grant Deed recorded on October 30, 2017 as Document No. 2017014447, a true copy of which is enclosed herewith. [Tab 3.] The legal description for the 11635 Property included in said Grant Deed makes no mention of the Alleged Easement or any other right of way over the 11635 Property in favor of the Project Site parcels. The Applicant acquired the 11615 and 11625 properties (i.e., the Project Site) by virtue of a Grant Deed recorded on October 20, 2020 as Document No. 2020013413, a true copy is enclosed herewith. [Tab 4.] The legal description for the 11615 and 11625 properties included in said Grant Deed also makes no mention of the Alleged Easement or any other right of way over the 11635 Property. The respective vesting deeds for the properties do not reference the Alleged Easement because, as outlined below, that instrument is invalid and a legal nullity. Supporting this conclusion is the fact that the Applicant submitted the Prather Letter in support of the Project, not the Alleged Easement. Thus, it appears that the Applicant is aware that the Alleged Easement is an invalid instrument.

The Alleged Easement is invalid and a legal nullity because it was not granted by a person who owned the 11635 Property at the time the instrument was executed or recorded. A review of the recorded title history for the 11635 Property establishes as follows: The Alleged Easement was signed by James Phillip Gerace on October 22, 1993. On January 12, 1993, James Phillip Gerace conveyed his right, title and interest in the 11635 Property to Lucille O. Gerace by Document No. 93-000613 that was recorded that

same day. Then on March 29, 1993, James Phillip Gerace again conveyed all right, title, or interest of his in the 11635 Property to Lucille O. Gerace by Document No. 93-006002, that was recorded on April 2, 1993. Then on February 4, 1994, which is after the date of the Alleged Easement, Lucille O. Gerace conveyed her right, title and interest in the 11635 Property to James Phillip Gerace by Document No. 94-002388 that was recorded the same day. True copies of the above referenced Deeds are enclosed herewith collectively as Tab 5. The Alleged Easement was signed by James Phillip Gerace on October 22, 1993, at a time when Lucille Gerace, not James Phillip Gerace, owned the 11635 Property. Therefore, the Alleged Easement is invalid and unenforceable against Holy Domains or any owner of the 11635 Property. This is why the Alleged Easement is not referenced in the vesting deeds or legal descriptions for the respective properties. Therefore, the Project Site has no legal access and UP 21-17 must be denied.

In an email dated October 20, 2023, CDD stated, “we do not have the authority to question its [the Alleged Easement’s] validity.” Similarly, during the public hearing before the Planning Commission held on October 26, 2023, Counsel for the County stated that the Office of County Counsel “is not in a position to be able to determine whether or not an easement is legally valid. Whether or not it’s a valid easement is a private issue that the dominant and subservient tenants, the owners of those, would have to have the court determine whether it was legally valid.” This has not happened. In fact, nothing has changed since October 26, 2023, regarding the invalidity of the Alleged Easement. Therefore, there is still no legally valid access to the project site through the property of Holy Domains. During the hearing, the Applicant, though its attorney, made an important admission, “the easement on its face is invalid.” The common law rule of “after-acquired title,” referred to by counsel, does not necessarily apply to the Alleged Easement. After-acquired title is based on the doctrine of estoppel or justifiable and reasonable reliance. It usually applies only when a property has been improved or developed in reliance on the easement. That has not happened here. The Project site is an unimproved, vacant lot. Furthermore the case cited by the Applicant’s counsel, *Noronha v. Stewart* (1988) 199 Cal. App. 3d 485, was decided in 1988. There has been a lot more case law since then that has chipped away at the common law doctrine of after-acquired title. More recent case law finds that where a new owner of the property did not know about the easement; for example, the easement was not in their title report, the easement may not apply, and Holy Domains would not be bound by it. Because the analysis involves an equitable doctrine, it requires the decision-maker to balance the hardships: who is going to have the hardship here? It is a highly evidentiary analysis that starts with the finding that the Alleged Easement is invalid on its face. The Applicant certainly has the opportunity to ask the court to make a determination whether equitable estoppel applies in this situation, but so far the Applicant has not done so. Therefore, the Project Site has no legal access and UP 21-17 must be denied.

B. UP 21-17 Must Be Denied Because The Project Site Is Located In the Commercial Cannabis Cultivation Exclusion Area.

Lake County Zoning Ord. Art. 27(at)(1)(v) provides that “commercial cannabis cultivation is prohibited” in the Commercial Cannabis Cultivation Exclusion Areas (the “Exclusion Areas”). The Project Site and the proposed “Cannabis Production Area” are located within the Exclusion Areas subject to Art. 27. *{Gosia fills in a citation to the exclusion for church-conducted activities for children. Holy Domains*

conducts retreats for children and families in the immediate vicinity of the Project Site. During retreats, children walk and play near the Project Site}. Moreover, the only published policy of the County of Lake concerning the application of the Exclusion Area provides “If any Portion of a Parcel is Intersected by the Exclusion Zone the Entire Parcel is Excluded.” [See Tab 8.]

The terms “cannabis cultivation area,” “cannabis cultivation site,” and “cannabis canopy” are not defined or used in Art. 27 pertaining to the application of the Exclusion Area, and therefore, those terms have no application to this analysis. Instead, Art. 27 broadly prohibits “cannabis cultivation” in any Exclusion Area. Art. 68 defines “cannabis cultivation” as “any activity involving the germinating, cloning, seed production, planting, growing, and harvesting of cannabis plants and the on-site drying, curing, grading, or trimming of cannabis plants.” The Art. 68 definition of cannabis cultivation is intentionally broad and encompasses any activities involving cannabis or its production. Allowing commercial cannabis cultivation to take place on parcels located within the Exclusion Area contradicts the plain intention of the ordinance and would also be impossible to monitor or police. This slippery slope cannot be permitted to occur. The County of Lake and Code Enforcement do not have the resources or ability to police the boundaries of the Exclusion Areas within individual parcels being used for cannabis cultivation. CDD should also be required to take a formal position on the application of the Exclusion Area to the Project and explain why its published written policy set forth in this letter above should be disregarded. UP 21-17 must be denied because the Project Site is located within the Exclusion Area.

C. The Project Description is Inadequate Under CEQA.

The purpose of an initial study is to determine whether a project may have a significant impact on the environment. (14 CCR § 15063.) The initial study must describe and analyze all phases of the project, implementation and operation. (14 CCR § 15063(a)(1).) A complete and accurate project description is a necessary first step in any evaluation of the potential environmental impacts of a project. (*City of Redlands v. County of San Bernadino* (2002) 96 Cal.App.4th 398,406.)

The Project Description forming the basis for IS 21-17 is inadequate under CEQA because, as discussed above, it is replete with inaccurate, incomplete, and inapplicable information. An accurate and complete project description is critical to any review of the Project. In sum, the Project Description provided by the Applicant cannot support the finding of an MND because it fails to accurately describe the project as a whole.

Opposition to UP 21-17 and IS 21-18
July 31, 2026
Page 6

Conclusion

Thank you for your attention to this comment and consideration of the concerns of Holy Domains regarding the Project. Please direct any question, communications, or other information concerning the subject matter of this letter to: Holy Domains, c/o Robert Riggs, Esq., Katzoff & Riggs LLP, 9779 Broadmoor Way, Kelseyville, CA 95451, or by email to rriggs@katzoffriggs.com.

Sincerely,

Robert R. Riggs, Esq.

RRR:krl

encls.