

The Nevada County Board of Supervisors sitting as the County Sanitation District Board
950 Maidu Lane
Nevada City, CA 95959

RE: Environmental Impact of Proposed Cascade Shores Community Leach Field Project

Dear Supervisors:

The Cascades Shores Alliance for Land Safety (CSALS) is a citizens group of Cascade Shores residents formed to communicate our united concerns regarding the proposed Cascade Shores leach field project. We are formally requesting the Board of Supervisors work with the State Water Board to prepare an Environmental Impact Report (EIR) on this project prior to proceeding.

During the original CEQA process in 2013 the current site of the proposed leach field had been deemed inappropriate for sewage disposal by the County's own Initial Study/Mitigated Negative Declaration. Additionally, a landslide occurred in February 2017 on the County-owned land resulting in an evacuation of the neighborhood and the complete loss of 2 homes and damage to a 3rd home. Several lawsuits are currently pending by the affected homeowners.

The 2017 landslide event resulted in tension cracks and a major landslide within 400 hundred feet of the very site of the proposed leach field, making it even less feasible for this kind of project than originally concluded in the County's 2013 Initial Study/Mitigated Negative Declaration. It must be emphasized that water saturated soil conditions were the root cause of this recent landslide activity. CSALS is concerned that if the proposed leach field is installed and 10,000+ gallons of leachate are injected, on a daily basis, into the already unstable land, it will result in an increased probability of more landslides. There are homes less than 500 feet from the proposed leach field. This is a significant safety concern, in addition to the potential for loss and damage to our homes. Continuing to move forward on this project places the County at further risk for significant liability.

If there was ever a situation that calls for a supplemental EIR under the State CEQA Guidelines Section 15162, this is the case. 15162(a)(2) requires a subsequent or supplemental EIR when: "2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or the Initial Study/Mitigated Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effect." The 2017 landslide that occurred within 400 feet of the current site now planned for the leach field clearly is a substantial change in circumstances that must be evaluated.

Based on the following studies and the results of an independent soil sample study that CSALS commissioned, we feel it is of utmost importance that additional questions are asked about this project. In particular, given the significant change in circumstance, both the State and County under CEQA are required to develop a supplemental environmental document to address the significant environmental and safety hazards posed by this project.

CSALS has undertaken the following steps that substantiate our request that the County uphold its responsibility to ensure the safety of the residents of Cascade Shores.

1. Obtained and reviewed the [Cascade Shores Community Leach Field Project Proposal](#) from 2013 (Initial Study/Mitigated Negative Declaration) submitted by the County of Nevada to the State Water Board.

- A. Under the geologic hazard section of the proposal, the section on potential for landslides asserts there is a "less than significant impact" for the potential of "landslide, lateral spreading, subsidence, liquefaction or collapse." (pg. 36). This conclusion was reached notwithstanding the fact that the County had a wealth of information as a result of a previous 2005 landslide on the adjoining County-owned property that severely damaged the Cascade Shores

Waste Water Treatment Plant. The February 2017 landslide event offers irrefutable evidence that there is now a clear potential of “landslide, lateral spreading, subsidence, liquefaction or collapse.”

Attached is a Light Detection and Ranging (LIDAR) map used for mapping and monitoring natural hazards in areas of complex topography. This reconnaissance map was developed by Holdredge & Kull, the County's Geotech consultant on the leach field project. The red border shows the boundaries for the 40-acre parcel acquired by the County for the leach field project. The lavender boundaries demarcate the proposed site of the leach field. The specific areas in which recent landslides occurred are identified throughout the County property as indicated by the symbols on the map. It is important to note that the site of the proposed leach field is less than 400 feet from a recent massive landslide location complete with "standing water" indicated on the Holdredge and Kull map at the cliff face of Gas Canyon along the southern boundary line of the County's property.

There can be little doubt that there is now a significant new condition as a result of the 2017 Cascade Shores landslide. The potential for landslides has clearly been confirmed.

B. The same Nevada County Negative Declaration in 2013 concluded that Alternate Location 2 (the site currently identified for the proposed leach field) “is not suitable for sewage disposal” (6d. page 37 of 64). The explanation given for ruling out Location 2 was excessive groundwater. The County has now advised us that they are proposing to locate the leach field in the area they had previously found unsuitable. CSALS is asking why this project is proceeding despite the County's own report asserting that Alternate Location 2 is not suitable?

Section 15162(a)(1) sets forth additional grounds when a subsequent EIR is required as follows:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;**

This project fits squarely into this requirement. Here the Negative Declaration adopted by the County found Location 2 unsuitable as the site for the project. Now the County has reversed that decision, probably due to the landslide—a new significant environmental effect. Consequently the project has been substantially changed, requiring a new environmental review under CEQA. This only makes sense as the previous Negative Declaration informed the public that the project would be located at Site No 1. To try to use that same environmental document for the site it found unsuitable would be to have misled the public as to the expected site and environmental impacts. Furthermore, because it ruled out Site No. 2, the 2013 Negative Declaration did not adequately examine the potential impacts of that site - impacts which our analysis indicates are extremely serious.

2. CSALS has obtained and reviewed the Holdredge & Kull report: “Landslide Observations, Monitoring, Conclusions and Recommendations”, dated March 16, 2017 which was commissioned by the County to assess the damage done to the County property by the February 2017 Cascade Shores landslide. Below are key conclusions from this report (pg.4):

- Conclusion #2: “the existing slope is a relic of hydraulic mining, and should be considered over steepened and unstable.”
- Conclusion #3: “The recent slope movement represents a large rotational failure within unstable, upper lone material triggered by continuously saturated conditions, as well as overburden pressure”.
- Conclusion #4: “Continued heavy rain could cause a large scale catastrophic slope failure similar to the slope failure that was observed at the Waste Water Treatment Plant (WWTP) in 2005.”

3. CSALS independently commissioned the attached study in July 2018 based on soil samples obtained from the area of the proposed leach field location. Dr. J. Reed Glasmann who specializes in Clay Mineralogy and Soil Forensics conducted X-Ray Diffraction (XRD) analyses of the soil samples.

Based on these samples Dr. Glasmann finds that:

“Abnormal soil saturation due to concentration of effluent above impermeable soil layers may increase the potential for landslide reactivation by raising soil water pore pressure and reducing soil strength. Reactivation of slump block movement in the area of the proposed leach field would likely cascade to adjacent upslope residential areas, as toe support is removed and gravity continues to move unstable terrain to lower elevation. Such reactivation would pose substantial risks to property owners and could lead to costly litigation.”

The soil sample analyzed by Dr. Glasmann is the same expansive smectite clay type identified in 2009 by the State Geology Board in the Geologic Hazard Notice communicated to Building departments in the Sierra Foothills, a copy of which is attached.

The Board of Supervisors has the responsibility to the citizens of Cascade Shores to protect their property from harm that is likely to result from locating the leach field in this dangerous location. It has a responsibility to taxpayers to assure that the Clean Water funds provided to Nevada County are prudently spent. Finally, Board of Supervisors also has the duty to comply with the law—in this case CEQA and “assure an apprehensive citizenry through a public process that the environmental risks have been minimized.”

CSALS formally requests the Board of Supervisors work with the State Water Board to conduct a new Environmental Impact Report on this project before it proceeds. In light of the information we have provided, to continue to move forward on this project without an EIR is irresponsible, both fiscally and environmentally.

We hope the Board of Supervisors will act in the best interest of the residents of Cascade Shores. We ask that the Board acting as the Sanitation District Board schedule a business item to discuss this issue at your next available meeting and notify us reasonably in advance of the date it is scheduled so that the citizens of Cascade Shores can communicate directly to you our deep concerns about this project as currently planned and the Board can take appropriate action.

Cascades Shores Alliance for Land Safety (CSALS)

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