

# city of san luis obispo

879 Morro Street • San Luis Obispo, CA 93401

March 23, 2011

Mr. Roger Briggs, Executive Officer  
Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA. 934021

**SUBJECT: City of San Luis Obispo Summary of San Luis Obispo Creek MUN  
Use Dedeignation for May 5, 2011, Regional Board Agenda**

Dear Roger:

Thank you for meeting with me a couple of weeks ago and getting back to me so quickly with answers to my questions. I really appreciate the opportunity to provide you factual information that, in my opinion, supports Regional Board direction to agendize the consideration of dedesignating San Luis Obispo Creek for MUN.

Along with the report, we've included attachments that should assist the Board in its decision making. Please let me know if you need more information or if I need to clarify anything in our summary report. David Hix, my deputy director, is also available. You can reach either of us at 805.781.7015.

This is an incredibly important issue to the citizens of San Luis Obispo and I appreciate your willingness to seek Regional Board direction on the appropriate next steps.

Sincerely,

Carrie Mattingly  
Utilities Director



## **SUMMARY OF SAN LUIS OBISPO CREEK MUN USE DEDESIGNATION**

The Basin Plan defines the MUN use as “[u]ses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.” The significant available information, as discussed below, supports a finding that the MUN use as it is currently defined in the Basin Plan is not an existing or attainable use in San Luis Obispo Creek from the point of the City of San Luis Obispo’s Water Reclamation Facility discharge to the Pacific Ocean. The removal of the MUN use in San Luis Obispo Creek would be consistent with dedesignations of MUN for Old Alamo Creek (CVRWQCB, 2005) and Owens Lake (LRWQCB, 2005), which were adopted by the respective regional water boards and State Water Resources Control Board (SWRCB) and approved by the California Office of Administrative Law (OAL) and the United States Environmental protection Agency (USEPA).

The dedesignation of MUN in San Luis Obispo Creek would be consistent with State and Federal anti-degradation policies since it would not result in a reduction of water quality. The dedesignation would not allow for an increase in the discharge of pollutants, and removal of the use does not preclude redesignation in the future, if appropriate.

The following summarizes the basis of the City’s request of the Regional Board to direct Regional Board staff to prepare a proposed Basin Plan Amendment for the dedesignation of the MUN use for San Luis Obispo Creek.

### **Background**

The San Luis Obispo Creek watershed drains approximately 85 square miles of central San Luis Obispo County southwestward to the Pacific Ocean (Figure 1). The watershed is bounded to the northeast by the coastal range and to the southwest by the Pacific Ocean. The headwaters drain an equal mixture of private lands and protected public lands. The central and lower parts of the watershed cover agricultural and residential lands drained by San Luis Obispo, Prefumo, Froom, and Davenport creeks. The principle waterbody in the watershed is San Luis Obispo Creek, traveling 27 miles from the headwaters to Avila Bay. Land use in the watershed is composed of agriculture (8%), residential/urban (14%), and open space (78%). Open space is largely made up of public lands in the headwaters, but also private lands in the lower watershed. The residential and mixed urban areas of the watershed are found mostly in the City of San Luis Obispo (City) (2000 population 44,174) and Avila Beach (population 8,514).

The City of San Luis Obispo discharges tertiary treated wastewater to San Luis Obispo Creek. Upstream of the City’s Water Reclamation Facility (WRF) outfall, groundwater discharges from shallow surface aquifers provide intermittent base flow into San Luis Obispo Creek. Stream flow in the upper portion of the watershed is minimal, except during and immediately after rainfall, and is dry much of the year. Downstream of the WRF discharge, WRF effluent comprises between 9% (during the wettest month of a wet year) and 95% (during the driest month of a dry year) of San Luis Obispo Creek flows.

The City and several other agencies, including the California Department of Fish and Game (DFG) and National Marine Fisheries Service, conducted studies for San Luis Obispo creek

examining habitat and abundance of Steelhead Salmon, which are considered “threatened” under federal regulations. The results of these studies led to the dedication of a minimum discharge of 2.5 cubic feet per second (cfs) of WRF effluent to San Luis Obispo Creek for in-stream beneficial uses. The minimum discharge of 2.5 cfs was dedicated in recognition that 1) San Luis Obispo Creek is effluent-dependent, 2) effluent water quality is suitable for in-stream beneficial uses, and 3) WRF effluent is a necessity for supporting habitat for the threatened Steelhead Salmon.

Further, the City, in conjunction with other organizations, maintains conservation easements along the Creek and is seeking additional easements. These easements are intended to protect habitat by limiting development. The City has also funded habitat restoration efforts in SLO Creek and its tributaries. Additionally, two major upgrades to the WRF have been completed over the past thirty years leading to improved water quality in the creek and supporting the resurgent Steelhead Salmon population. These upgrades, however, did not address nitrate-nitrogen levels in the effluent. San Luis Obispo Creek was listed as impaired pursuant to Clean Water Act Section 303(d) because nitrate-nitrogen levels exceed the MUN nitrate water quality objectives (i.e., drinking water standards). The Regional Board’s Nitrate-Nitrogen TMDL for San Luis Obispo Creek was approved by the EPA on January 10, 2007.

According to federal law, the future NPDES/Waste Discharge Permit for the City’s WRF must include water quality-based effluent limits to implement the TMDL allocations for nitrate and must also include limits consistent with water quality standards for all beneficial uses. The WRF’s current permit has been administratively extended to allow for discussions related to the MUN designation to be completed. The City has greatly appreciated the time to work collaboratively with Regional Board staff on these challenging issues.

Due to concerns related to the appropriateness of the MUN beneficial use designation of San Luis Obispo Creek, City staff conducted an evaluation, pursuant to federal and state regulations, to determine whether the MUN use exists in the creek downstream of the WRF and, if not, whether MUN is attainable. Accordingly, the City developed and submitted a Preliminary Draft Use Attainability Analysis (UAA) report to Regional Board staff in December 2005. Based on comments from Regional Board staff, the Preliminary Draft UAA was revised and a Draft UAA report was submitted in September 2006.

### **Results of City’s Evaluation and Subsequent Activities**

The results of the Draft UAA included the following key findings:

- Surveys sent to property owners adjacent to the creek found that SLO Creek has not been used nor is it being used as an MUN source.
- Based on letters from the California Department of Public Health (CDPH)<sup>1</sup> and San Luis Obispo County Health Agency, SLO Creek is not an appropriate source of domestic drinking water supply. The CDPH letter to the City (attached) states:

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<sup>1</sup> The California Department of Public Health was previously named the California Department of Health Services. It is referred to as CDPH throughout this memorandum.

*“Currently, the surface water in the SLO Creek is not used for domestic purposes. Based on the evaluation contained in the attachment to your letter, the high percentage of wastewater effluent in the surface water source would not be an appropriate source of domestic drinking water supply even if the water met the chemical drinking water standards.”*

Similarly, the letter from the San Luis Obispo County Health Agency (attached) states:

*“The county agrees with this statement and would not approve using water withdrawn from San Luis Obispo Creek as a source of drinking water for any system that would be under our jurisdiction. This same restriction would apply to any well considered to be withdrawing GWUDI<sup>2</sup> of San Luis Obispo Creek. The San Luis Obispo County Public Health Department issues permits for all wells to be drilled in the county; a well location so close to SLO Creek that it would contact GWUDI would not be approved.”*

- To address CDPH and County Health Agency concerns, WRF effluent would need to be removed from the Creek. The removal of effluent is not a viable option because a minimum discharge of 2.5 cfs has been dedicated for the protection of instream habitat uses to protect habitat for the threatened Steelhead Salmon.
- Removal of the effluent would cause more environmental damage than maintaining the discharge.

Subsequent to the submittal of the Draft UAA, the City met with USEPA and Regional Board staff in October 2006 to discuss these findings. Based on a general consensus to move forward, next steps were discussed as well. To that end, on December 4, 2006, Regional Board and City staff worked together to conduct a California Environmental Quality Act (CEQA) scoping meeting related to the dedesignation of San Luis Obispo Creek.

Since then the City has continued to work collaboratively with Regional Board staff to evaluate key issues and develop additional information to further evaluate the appropriateness of the MUN dedesignation. The additional information further supports the conclusions of the Draft UAA that the MUN use does not exist, is not attainable, and there are no viable alternatives to addressing concerns related to the attainability of the MUN use pursuant to federal and state regulations. In March 2009, Regional Board staff informed the City of its conclusion that “based on the information provided, the Clean Water Act does not preclude dedesignation of the Creek itself for MUN.” (Letter from Roger Briggs, Executive Officer, to Carrie Mattingly, Director of Utilities, March 16, 2009.) The City then requested the Regional Board move forward with the appropriate basin planning to remove the MUN use from San Luis Obispo Creek downstream of the WRF.

The removal of the MUN use in San Luis Obispo Creek would be consistent with other dedesignations conducted in the state. For example, the Regional Board dedesignated the SHELL beneficial use in the Watsonville Slough (March 2006), San Lorenzo River Estuary (May 2009), and the Soquel Lagoon (May 2009).

Dedesignations for MUN have occurred in other waterbodies throughout the state (e.g., Owens

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<sup>2</sup> GWUDI – Groundwater Under the Direct Influence in summary is considered any water beneath the surface of the ground with water characteristics which closely correlate to climatological or surface water conditions.

Lake approved by USEPA in April 2006, Old Alamo Creek approved by USEPA in 2006, and Sulphur Creek approved by USEPA in September 2009). In recognition of the potential challenges related to preparing documentation to support a dedesignation, the City is committed to providing resources to support Regional Board staff with the basin planning process. As was the case with the aforementioned dedesignations, removal of the MUN use does not result in the removal of objectives or criteria intended to be protective of other uses. The Basin Plan contains anti-degradation requirements that disallow a discharge to increase pollutants and further degrade water quality.

In summary, the only manner to actually attain the MUN use would require complete removal of WRF effluent from San Luis Obispo Creek; however, this is not possible as the City has committed to discharge effluent to protect habitat for the threatened Steelhead Salmon. Given that the use is not attainable and tens of millions of dollars are necessary to meet nitrate effluent limits, the City's residents would in effect be funding the treatment of water that can never be used for its intended purpose. In contrast, the implications of removing the MUN use are as follows:

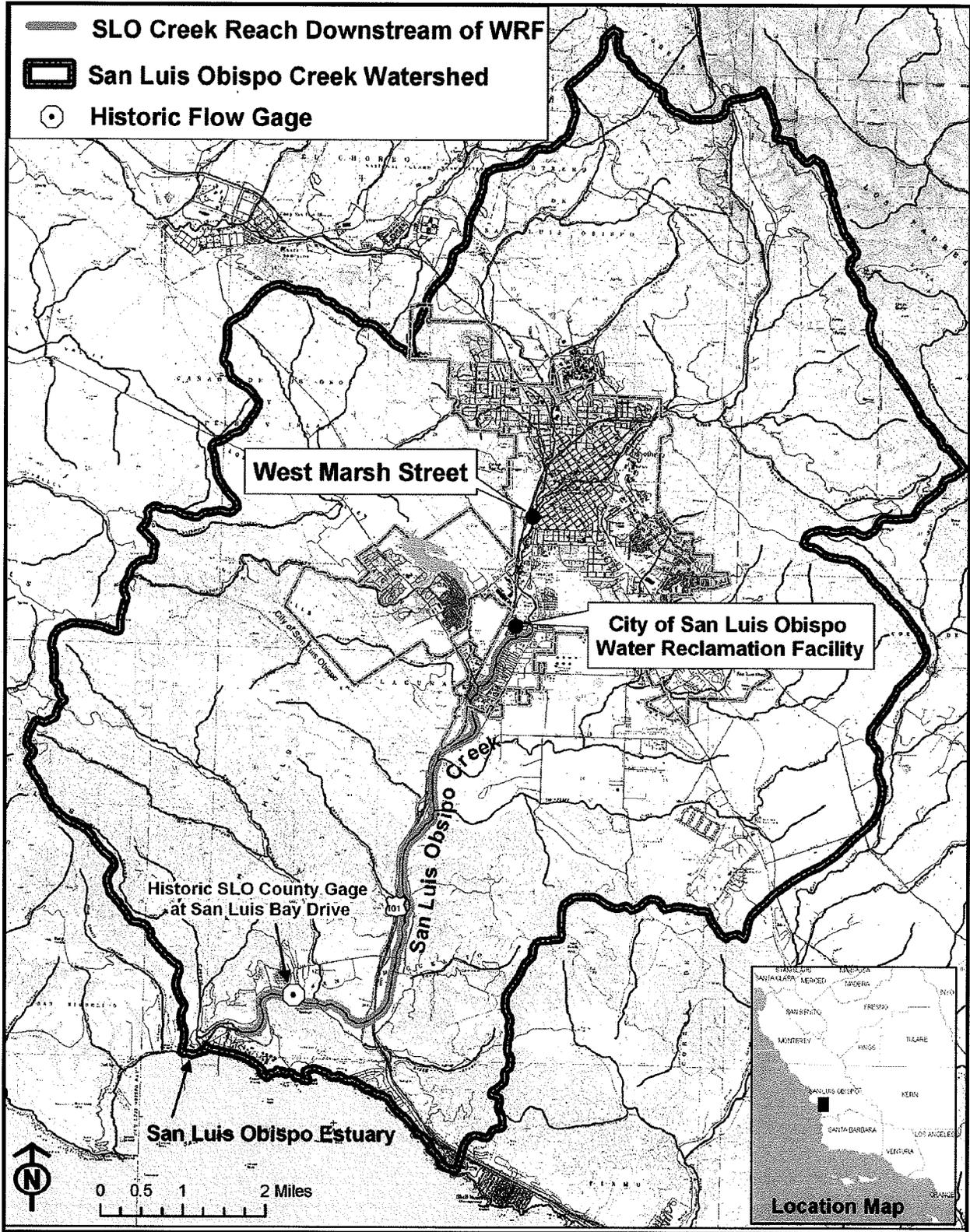
- Flows from the WRF and nitrate-N concentrations remain relatively unchanged.
- Flows to maintain instream habitat are continued.
- Concentrations of nitrate-N in groundwater wells continue to be significantly below drinking water standards.

Additionally, the Regional Board maintains the authority to continue to incorporate narrative and numeric objectives into permits to address impairments to the existing and attainable designated beneficial uses of San Luis Obispo Creek.

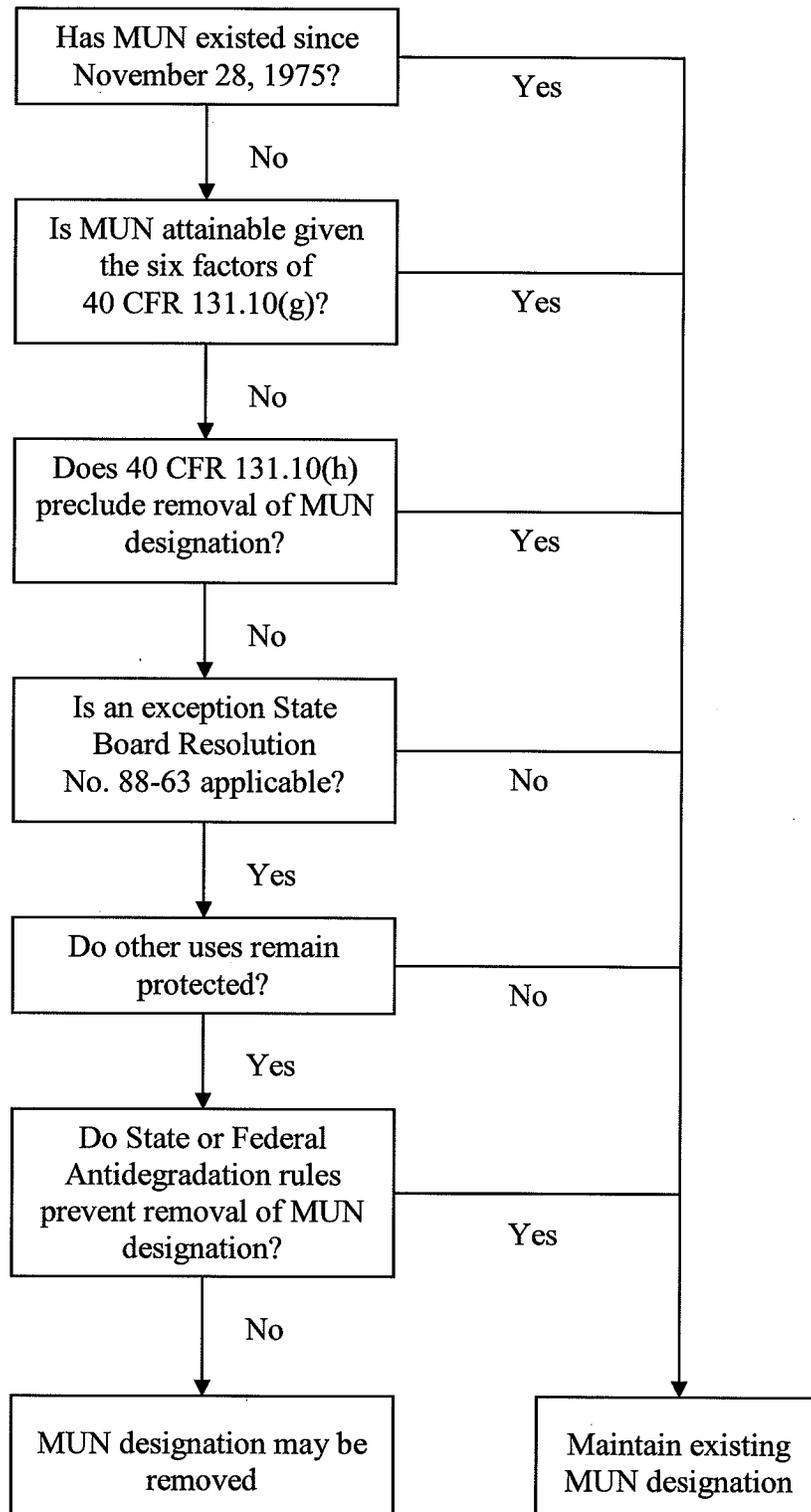
### **City's Request**

In closing, we ask that the Regional Board consider the unique conditions of San Luis Obispo Creek and the implications of maintaining the MUN use designation when making a determination on whether to move forward with the dedesignation process. Specifically, we request as follows:

- Direct Regional Board staff to work with the City to prepare a proposed Basin Plan Amendment and all associated documents that would dedesignate MUN from San Luis Obispo Creek.
- Direct Regional Board staff to bring back to the Regional Board the proposed Basin Plan Amendment for future consideration.



**Figure 1. San Luis Obispo Creek Watershed**



**Figure 2. Flow Diagram for a MUN Use Attainability Analysis**



California  
Department of  
Health Services

**SANDRA SHEWRY**  
Director

State of California—Health and Human Services Agency  
**Department of Health Services**



**ARNOLD SCHWARZENEGGER**  
Governor

**June 1, 2006**

**John Moss, Utilities Director**  
**City of San Luis Obispo**  
**25 Prado Road**  
**San Luis Obispo, CA 93401**

**Dear Mr. Moss**

The California Department of Health Services has reviewed your letter dated May 17, 2006 concerning the use of surface water in the San Luis Obispo Creek as a domestic supply of water. Currently, the surface water in the SLO Creek is not used for domestic purposes. Based on the evaluation contained in the attachment to your letter, the high percentage of wastewater effluent in the surface water source would not be an appropriate source of domestic drinking water supply even if the water met the chemical drinking water standards.

The CDHS does regulate ground water sources near the SLO creek downstream of the wastewater treatment plant. These wells currently meet drinking water standards.

If you have any questions, please call this office at (805) 566-1326.

Sincerely,

Kurt Souza, P.E., Chief  
Southern California Section  
CDHS-DWFOB

Cc: SLO County EHD  
Chris Rose, RWQCB

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# SAN LUIS OBISPO COUNTY HEALTH AGENCY

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August 30, 2010

David Hix  
City of San Luis Obispo  
Wastewater Division Manager  
879 Morro Street  
San Luis Obispo, CA 93401

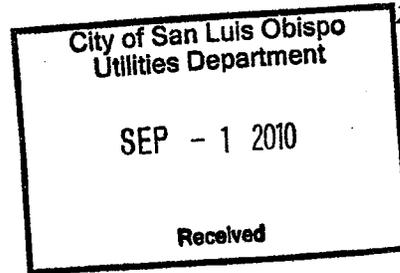
RE: Use of San Luis Obispo Creek as a Source of Drinking Water

Dear Mr. Hix:

In your letter of June 29, 2010 you asked for the opinion of the County Health Department as to whether the use of the water in San Luis Obispo Creek downstream of the Water Reclamation Facility (WRF) could be permitted as a source of municipal drinking water. You also asked if wells withdrawing groundwater under the direct influence (GWUDI) of San Luis Obispo Creek downstream of the WRF could be used as a source of drinking water. The answer to both of these questions is "no".

Based on the data you included in your letter, San Luis Obispo Creek is an effluent dominated stream for at least eight months of the year. As District Engineer Kurt Souza of the state Drinking Water Program stated in his letter of June 1, 2006 "the high percentage of wastewater effluent in the surface water source [San Luis Obispo Creek] would not be an appropriate source of domestic drinking water supply even if the water met the chemical drinking water standards." The county agrees with this statement and would not approve the using water withdrawn from San Luis Obispo Creek as a source of drinking water for any system that would be under our jurisdiction. This same restriction would apply to any well considered to be withdrawing GWUDI of San Luis Obispo Creek. The San Luis Obispo County Public Health Department issues permits for all wells proposed to be drilled in the county; a well location so close to SLO Creek that it would contact GWUDI would not be approved.

The basic problem with water from this creek is that its quality (and therefore its usefulness as a source of drinking water) is highly dependent on the WRF operating flawlessly on a continuous basis. Such a treatment standard would be virtually impossible to maintain. Even if the creek water met all applicable drinking water standards and California Toxic Rule criteria (as determined by a



*Public Health Department*

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*Jeff Hamm*  
Health Agency Director

*Penny Borenstein, M.D., M.P.H.*  
Health Officer

series of rigorous laboratory tests), there can be no certainty that a disruption of the treatment plant process would not release harmful pollutants into the stream.

Thank you for the opportunity to comment on this proposed use of the water in San Luis Obispo Creek. If you have any questions or need any additional information please contact me at my office (805) 788-2049.

Sincerely,

A handwritten signature in cursive script that reads "Bradley Prior".

Bradley Prior, REHS  
Environmental Health Specialist III

Cc: Kurt Souza, District Engineer  
California Dept. of Public Health  
Drinking Water Program  
1180 Eugenia Place  
Carpenteria, CA 93013

