

Lahontan Regional Water Quality Control Board

November 15, 2017

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Comments on Lassen County's Proposed Local Agency Management Program for Onsite Waste Treatment Systems

The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) staff reviewed the County of Lassen (County) Draft Local Agency Management Program (LAMP). The County developed the LAMP as an option to regulate onsite wastewater treatment systems (OWTS) as required by the State Water Resources Control Board (State Water Board) OWTS Policy.

Thank you for providing your LAMP and affording us an opportunity to review and provide comments. We appreciate that the County has taken the steps needed to continue the OWTS permitting program in Lassen County. We found the LAMP to contain all necessary elements and seek clarification and additional information in certain sections.

The Lahontan Water Board is acting as the Lead Water Board for approving the County LAMP, which will also affect water resources in the jurisdiction of the Central Valley Regional Water Quality Control Board (Central Valley Water Board). As Lead Water Board, the Lahontan Water Board is coordinating the review of the County's LAMP by both the Regional Water Boards and the State Water Board. The comments, below, are presented in two sections: General Comments and Specific Comments

General Comments on the draft LAMP

1. The LAMP states on page 36, under the section titled Lot Size Requirements, that the County has required (since 1981) subdivision parcels that were projected to use OWTS to have a minimum one-acre parcel size. In the LAMP, the County is proposing all new subdivision parcels must satisfy tier-one criteria. Ongoing use of OWTS, or new OWTS on existing parcels with lot sizes less than the new criteria allows, increases Water Board concerns about impacts to groundwater quality. Water Board staff understands the County is sparsely populated and there is no substantial information to indicate that groundwater has been adversely affected by OWTS to an

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unacceptable degree. However, there has been limited groundwater data collected and staff is concerned that OWTS densities in some locations may degrade water quality. Where existing densities are greater than allowed by tier-one criteria, staff requests the following additional information:

- a. What actions will be taken, and what data will be collected, to monitor changes in groundwater conditions in both the proposed and the existing housing developments? Data should be provided on an annual basis. Every fifth year both the monitoring program and all the data must be evaluated to determine if the monitoring program must change and if groundwater quality is being impacted by OWTS.
 - b. Existing OWTS that are not failing or not located near impaired surface waters (considered impaired due to OWTS) are covered by tier zero in the OWTS policy. In areas where the existing OWTS are more densely spaced than allowed by current OWTS policy criteria, identify the types of information that will be collected to substantiate discharges from existing OWTS are not adversely affecting the groundwater quality.
 - c. For communities that have OWTS more densely spaced than tier-one criteria staff requests the County identify and track the number of parcels already developed, and the number of undeveloped parcels approved for development during the last five years. This information may be provided and updated in the Water Quality Assessment Report due every five years.
2. In several instances, the draft LAMP references variances to the LAMP criteria and variances being granted. There should be a section in the LAMP describing the variance process and the administrative and technical requirements for a variance identified in the LAMP. The process description does not need to identify what will or will not be allowed (other than what cannot be authorized by the County per the LAMP policy), but does need to identify the information and preparer requirements, and the decision-making body or person (i.e., Environmental Health Department staff, County Health Director, County Board of Supervisors, etc.). The process description should also include a step for notifying the appropriate Water Board of pending variances prior to approval by the County, and provisions for reporting variances referred to the Water Boards.
 3. The Supplemental Treatment Section of the LAMP should be expanded to describe specifically what will be required under the LAMP. For example treatment standards for supplemental treatment system must be provided. (See comment E, below.)
 4. The Lahontan Water Board and the County have an existing Memorandum of Understanding (MOU) concerning OWTS that was successful in strengthening the relationship between the staff at the Water Board and County. The intent of the State Water Board's OWTS policy is the LAMP will be the sole document for managing OWTS and the MOUs should no longer be referenced. Water Board

staff recommend that the County carry any MOU provisions the County continues to support into the LAMP to ensure their continued use.

Specific Comments On Specific Sections

A. The Introduction on page 5, eighth line down, states,

“The LAMP does not include the following, which require individual waste discharge requirements or a waiver of individual waste discharge requirements issued by the RWQCB [Regional Water Quality Control Board] (see also Chapter 5, Not Allowed LAMP Items).

- Any OWTS with a projected wastewater flow of over 3500 gallon per day.”

This statement indicates the County would only regulate OWTS that discharge up to 3500 gallons per day. However, LAMP Chapter 5, page 21, contains a statement, that no system over 10,000 gallons will be allowed by the County. Please resolve these inconsistencies and clarify if the County will regulate OWTS with flow rates up to 3,500 gallons per day or up to 10,000 gallons per day. If the County wishes to regulate systems up to 10,000 gallons per day, the introduction should be modified accordingly.

B. On page 19, there is a brief description of the “Water Quality Assessment Program” (Program). The Program lists some of the various kinds of information that will be collected and provided in the report for the Program. However, one existing database is not included, which we believe should be included and used as a source of information. The State Water Board maintains that database, the Groundwater Ambient Monitoring and Assessment-secure (GAMA-secure), which is a repository of groundwater information. The Program did not describe that it would include information from GAMA-secure. Also, the County regulates some small domestic drinking water systems and any groundwater information from these systems may also be useful to include in the Program. The data from these two sources described above should be included and evaluated in Water Quality Assessment Report due every fifth year.

C. On page 20 under “Notification to Owners of Water Systems and SWRCB [State Water Board],” the LAMP indicates conditions where the County will notify the owner of the OWTS. After reading the conditions with regard to that statement, it appears that notification should be to the owner of the “water system” instead of the “OWTS.” Please review this part and either modify it or provide the County’s rationale for the current phrasing. Also under the “Notification to Owner of the Water Systems” section on page 20, Lahontan Water Board staff recommends the County specify in this section that within 72 hours of determining a failing OWTS is within 150 feet of a public water supply well, the County will notify the owner of the well, the State Water Board’s Division of Drinking Water and the OWTS owner.

- D. On page 21, under “Not Allowed or Authorized in LAMP,” item number 3 provides that an OWTS with a projected flow of over 3500 gallons per day must have a supplemental treatment system. It also provides the specification for the supplemental system, but that same specification is not provided in the section for supplemental treatment systems. Lahontan Water Board staff requests that the specification also be provided in the section for supplemental treatment systems.
- E. On page 33, under Setbacks, two additional setbacks regarding proximity to drinking water mains should be added. California Code of Regulations title 22, section 64572 (f) requires that new water mains will not be installed within 25 horizontal feet of a septic tank and leach field. To be consistent with that regulation, Lahontan Water Board staff request that the County require a minimum 25-foot horizontal setback for the placement of a new septic tank or leachfield from an existing drinking water main pipeline.
- F. On page 34, there are two notes concerning setback criteria, and these are identical to the requirements in chapter 5, item 11 in the LAMP. Lahontan Water Board staff suggests instead of the two additional notes, to replace the notes with a statement that there are additional setback requirements in chapter 5, item 11 (on page 22) for disposal fields with respect to drinking water wells and surface water intakes.
- G. On page 47, there are design criteria for alternative and supplemental OWTS. In this section, the County should provide the criteria provided earlier (see page 21), the requirements for alternative and supplemental OWTS. The following were taken from pages 21 and 22 and should be placed in a section on alternative and supplemental treatment systems or be cross-referenced to the section where they originate.
- OWTS receiving a projected flow over 3,500 gallons per day must either utilize a supplemental treatment system certified by the NSF [National Sanitation Foundation] or a third-party tester as capable of achieving 50 percent total nitrogen reduction when comparing the 30-day average influent to the 30-day average effluent; or submit an evaluation to the County EHD [Environmental Health Department] completed by a qualified professional that determines whether or not the discharge from the OWTS will adversely affect groundwater quality.
 - OWTS that cannot meet setbacks required in Chapter 5, item 13, for proximity to public water systems will need to utilize a supplemental treatment for pathogens as specified in section 10.8 of the State Water Board’s OWTS Policy.
- H. The LAMP must have an effective date or projected effective date no later than May 1, 2018.

We are providing comments we received on the draft LAMP from the Central Valley Water Board (memorandum enclosed). We hereby request by a copy of this letter for the Central Valley Water Board and the Division of Drinking Water to provide any additional input from their offices. When our comments, above, and those from the Central Valley Regional Water Board, and any other comments we receive, are addressed we will provide the County our advice concerning whether the LAMP is acceptable for staff to recommend approval to the Lahontan Water Board. After that occurs we ask that the County Board of Supervisors approve the LAMP prior to the Lahontan Water Board consideration of the LAMP.

If you have any questions or desire a meeting to discuss our comments regarding this matter please call Rob Tucker at (530) 542-5467 (robert.tucker@waterboards.ca.gov) or Alan Miller, P.E., Chief North Basin Regulatory Unit at (530) 542-5430 (alan.miller@waterboards.ca.gov).



Lauri Kemper P.E.
Assistant Executive Officer

Enclosure: Comments from Central Valley Regional Water Board, dated February 15, 2017

cc: Steve Watson, Senior Sanitary Engineer, Division of Drinking Water
Eric Rapport, Senior Engineering Geologist, Central Valley Water Board

RTT/gg/T: Comments on Lassen County LAMP
File Under: ECM

Central Valley Regional Water Quality Control Board

TO: Rob Tucker, Region 6

FROM: Eric Rapport, Region 5

DATE: 15 February 2017

SIGNATURE: original signed by

SUBJECT: REVIEW REQUEST FROM REGION 6, LASSEN COUNTY LAMP

INTRODUCTION

The State Water Resources Control Board (State Board) *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy, or Policy) in part allows Local Agencies to propose Local Agency Management Programs (LAMPs) for Regional Water Quality Control Board (Regional Board) approvals. Under OWTS Policy Tier 2, LAMPs can propose alternative local standards to those in Tier 1; however the standards should meet the same overall purpose to protect water quality and human health.

Local Agencies, largely county environmental health agencies, in some cases span multiple Regional Board jurisdictions. In these cases, Policy §4.3 and Attachment 3 designate one Regional Board to review and approve LAMPs. Policy §4.3.1 nonetheless requires Regional Boards to work cooperatively and assure adequate water quality protection in each region.

On 14 February 2017, Region 6, Designated Region, requested our staff's general opinion on a LAMP from Lassen County. The following summarizes our review of; proposed notifications, commitment to submit reports, technical adequacy to protect water quality, scope of coverage, compliance with prohibitions and setbacks, and other pertinent standards. Note that our review covers only key Policy Sections, and does not replace your complete and detailed review.

LAMP REVIEW

Proposed Notifications

Within 30 days of receiving a proposed LAMP, Policy §4.3.2 requires Designated Regions to solicit comments from Division of Drinking Water (DDW) on proposed notifications of water purveyors prior to OWTS permitting. State Board Guidance requests our focus on Policy §§3.5, 9.2.11, and 9.2.12. We presume that Region 6 has already solicited comments from DDW.

LAMP Chapters 4 and 11 do not meet minimum standards for notifications in case of failing OWTS. Policy §3.5 generally requires a Local Agency to notify public water well or water intake owners and DDW as soon as practicable, but no later than 72 hours upon discovery of a failing OWTS (Policy §§11.1 and 11.2) within setbacks in Policy §7.5.6 through 7.5.10 [sic, should be through 7.5.8]. LAMP Chapter 4, *Notifications to Owners of Water Systems and SWRCB*, page 20, should further specify a minimum setback from a public supply well for notification of 150 feet where the dispersal field does not exceed 10 feet in depth. Along with public well owners, the LAMP should further specify notification of DDW (formerly Department of Public Health), and a time limit not later than 72 hours. Chapter 11, *Failed Onsite Wastewater Treatment*

Systems (Tier 4), page 53, along with Policy §11.1 (e.g., pooling effluent) should further define septic tank failure in terms of §11.2, wastewater exfiltration to groundwater or groundwater infiltration into the tank.

LAMP Chapters 4 and 8 meet other Policy standards for notifications. Policy §9.2.11 generally requires a Local Agency to notify public water system owners of pending installation and repair permits within 1,200 feet of a surface water intake, within its drainage area catchment, and located such that it might impact water quality. LAMP Chapter 4, page 20, meets these standards. Policy §9.2.12 requires a Local Agency to propose procedures when a dispersal area would be within a horizontal setback of a public well or surface water intake, either supplemental treatments for nitrogen and pathogens (Policy §§10.9 and 10.10), or alternative siting and operational criteria. LAMP Chapter 8, *Alternative and/or Supplemental Treatment Systems (Variances)*, pages 47 to 49, meets these standards.

Commitment to Submit Reports

LAMP Chapter 4 meets Policy standards for reporting. Policy §§3.3 and 9.3.3 cover Annual, and Water Quality Assessment Reports. Policy §3.3 generally requires Local Agencies to submit annual, spreadsheet format reports on OWTS complaints, applications and registrations as part of the local septic tank cleaning program, and permits for new and replacement OWTS (see Policy §§3.3.1, 3.3.2, and 3.3.3). Annual Reports are due 1 February every year following LAMP implementation, beginning 13 May 2018. The fifth annual report should include an evaluation of the Water Quality Assessment Program (Policy §9.3.2). LAMP Chapter 4, *Data Collection, Reporting, and Notifications*, pages 19 through 20, meets Policy standards, with appropriate commitments to the required reporting schedule.

Technical Adequacy to Protect Water Quality

OWTS Policy Tier 1 provides largely prescriptive standards for siting and construction standards; key summaries are in Policy §§7.8 (Table 1), 8.1.5 (Table 2), and 8.1.7 (Tables 3 and 4), respectively; allowable OWTS densities based on average annual rainfall; minimum depths to shallowest groundwater and bottom of soil below dispersal trenches; and long term application rates based on percolation rates and soils descriptions. For Tier 2, Policy §9.1 et seq. requires Local Agencies to consider appropriate conditions to ensure that the LAMP is overall as protective of water quality and public health as Tier 1. Policy §9.3.2 describes minimum standards of a Water Quality Assessment Program. We have potential concerns about the LAMP's consideration of OWTS Policy §§9.1.1, 9.1.9, and 9.3.2.

The LAMP might not fully consider local hydrogeology, Policy §9.1.1. LAMP Chapter 3, *Steps in the Permitting Process*, page 29, Part 3, requires soil profiles to 8 feet below grade. Chapter 3, *The Plot Plan*, page 32, requires a Qualified Professional's opinion highest anticipated groundwater. We concur; nonetheless Chapter 7, *Soil and Percolation Test Requirements*, pages 36 through 37, and *Testing Procedures for Groundwater*, pages 39 through 40, have insufficient detail to assure useful site evaluation. We suggest further details on minimum requirements for soils descriptions, including, but not limited to, color (e.g., evidence of mottling), textures, and structures. Descriptions should be sufficient to support percolation testing in least permeable relevant horizons, either as an addition to Appendix 1, *Percolation Test Procedure*, or separate Technical Manual. While generally beyond our jurisdiction, we also suggest further description in Chapter 4, *Local Problem Areas*, page 17; Cady Springs,

Stones, Spaulding, Madeline Plains, Lake Forest Subdivision, Leavitt Lake, and Clear Creek. Appropriate maps of these areas might be useful.

We have potential concerns about future high OWTS densities, Policy §9.1.9. LAMP Chapter 7, *Lot Size Requirements*, page 36, allows a minimum lot size of 15,000 square feet (0.34 acres) unless Region 6 grants a waiver. This Chapter proposes average allowable OWTS densities as functions of average annual rainfall, consistent with Tier 1, Policy §7.8, Table 1. Please ensure that portions of Lassen County within Region 5's jurisdiction either follow Tier 1 standards for OWTS density, or propose overall equivalent protections of water quality.

LAMP Chapters 4 and 7 propose insufficient data for Water Quality Assessments in Region 5. Regarding Policy §9.3.2, based on several discussions with the California Conference of Directors of Environmental Health, in Region 5 a reasonable minimum data scope would be; state small community water systems, Geotracker GAMA-Secure, monitoring wells from permitted facilities, and private domestic wells – but only if a Local Agency routinely requires sampling, for example as proof of potable water or to settle a dispute between a landlord and tenant. Along with the proposed scope, LAMP Chapter 4, *Data Collection, Reporting, and Notifications*, pages 19 through 20, should include Geotracker GAMA-Secure and appropriate monitoring wells from permitted facilities. Data should be sufficient at minimum to assess representative nitrate in shallow groundwater at identified high-density OWTS areas. While beyond our jurisdiction, this might include Johnstonville; see LAMP Chapter 3, *Groundwater Quality Impacts*, page 17. LAMP Chapter 7, *Potable Water Supply*, page 35, requires proof of water supply potability testing prior to building occupancy. We concur; however, the EHD should also up-load the related laboratory analyses to Geotracker.

Scope of Coverage

LAMP Chapters 1 and 5 appear contradictory on scope of coverage. LAMP Chapter 1, *Introduction*, page 5, refers OWTS with projected wastewater flows over 3,500 gpd to Regional Boards for Waste Discharge Requirements. However, LAMP Chapter 5, *Not Allowed or Authorized in LAMP*, Part 3, page 21, requires an applicant with such a projected flow to submit a report to the EHD. These two chapters might contradict; if the LAMP refers larger flows to a Regional Board, EHD should be aware that some applicants might take issue.

Lassen County has a generally sparse population; nonetheless the proposed scope of coverage might affect future developments. While Policy §9.2 et seq. describes scope of coverage, we consider Policy §§9.2.1 through 9.2.10 generally beyond the scope of this review; our key consideration is maximum authorized projected flows; see Policy §9.4.2. A Local Agency has the prerogative to refer OWTS with projected flows less than 10,000 gpd to a Regional Board. However, in Region 5 lacking alternative we would generally refer an applicant to State Board General Order 2014-0153, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems*. Applicants, possibly accustomed to relatively simple county permits with short turn-around times and low costs, would instead submit a Report of Waste Discharge and technical report. Due to relatively low discharge volume and strength, we estimate permit processing times typically greater than 6 months, possibly greater than one year. Dependent on threat and complexity ratings, permit and annual fees would likely range about \$1,000 to \$5,000. Therefore, we strongly suggest Local Agencies to consider potential referrals of systems less than 10,000 gpd case-by-case, in consultation with staff.

Compliance with Prohibitions and Setbacks

LAMP Chapters 5 and 7 meet most Policy standards for prohibitions and setbacks. Policy §9.4 et seq. prohibits some authorizations in LAMPs, and gives minimum horizontal setbacks for new and replacement OWTS from public supply wells and surface water intakes. LAMP Chapter 5, *Not Allowed or Authorized in LAMP*, pages 21 through 23, generally meets Policy Standards. However, Part 13, pages 22 and 23, regarding supplemental treatments should refer to treatments for both nitrogen and pathogens to standards in Policy §§10.9 and 10.10 (not §10.8, an error from OWTS Policy §9.4.12). Chapter 7, *Setbacks*, page 33, should specify a setback from a dispersal system to a public well of 150 feet, if the dispersal field does not exceed 10 feet in depth, 200 feet if the dispersal system exceeds 10 feet in depth. If the dispersal system is within 600 feet of a public well and exceeds 20 feet in depth, the horizontal setback should achieve a two-year travel time for microbiological contaminants, after Policy §9.4.10.

Other Pertinent Standards

The Lassen County Board of Supervisors should adopt appropriate new codes and ordinances to support the LAMP. In some cases, County Supervisors in Region 5 have approved LAMPs and adopted the total document as an ordinance by reference. In other cases, Supervisors have opted for specific changes. We have no objections to either approach. Also note, State Board Office of Chief Counsel staff allows a delayed code implementation date, if it precedes the Policy deadline, 13 May 2018. Some County Counsels in Region 5 have expressed concern about California Government Code §251123, which generally requires implementation within 30 days of code adoption. However, §251123 also in part provides “*A county ordinance may be adopted to take operative effect more than 30 days after its passage by the board of supervisors.*” This has allayed their concerns and might expedite local approvals in Region 6.

Region 6 should ensure that Special Management Districts or Zones have sufficient resources. LAMP Chapter 3, *County Records*, page 16, in part refers to community septic tank effluent pumping (STEP) systems. This might indicate a related Homeowners’ Association (HOA) or similar Special Management District. The HOA should have financial resources, stability, legal authority, and professional qualifications to operate community OWTS.

Other

Please request Lassen County to correct the document title from “Local Area Management Plan” to Local Agency Management Program.

FINDINGS AND CONCLUSIONS

Based on the above, the subject LAMP meets most Policy standards. However, proposed notifications of failing OWTS do not meet State Board standards. Proposed data collection for Water Quality Assessment Reports does not meet Region 5 standards. Proposed setbacks have some minor deficiencies. Our Region has other potential concerns, mainly on site evaluations, minimum lot sizes, and scope of coverage. We seek to resolve these concerns, and are aware of their potential impact on your approval process. We can be available for a teleconference or meeting with the Lassen County Environmental Health Department **within the next two to three weeks.**