

From: Cass, Jehiel@Waterboards  
Sent: 1/24/2017 2:55:51 PM  
To: Phillippe, Jason (Jason.Phillippe@dph.sbcounty.gov)  
cc: Beeson, Susan@Waterboards, Gaslan, Milasol@Waterboards, Serra, Mary@Waterboards, Wylie, Doug@Waterboards, Copeland, Patrice@Waterboards, Kemper, Lauri@Waterboards, Coony, Mike@Waterboards, Joshua Dugas (Joshua.Dugas@dph.sbcounty.gov), Ballesteros, Jessica, corwin.porter@dph.sbcounty.gov, Almond, Diana (Diana.Almond@dph.sbcounty.gov)  
Subject: San Bernardino County LAMP Meeting

Hi Jason – We look forward to meeting with San Bernardino County staff at 1300 on 26 Jan 17 in your office to discuss the December 2016 Local Agency Management Program (LAMP).

Francis Coony won't attend as he had another commitment, but prepared the attached summary we can use for an agenda.

From Victorville, please expect Lauri Kemper, Assistant Executive Officer, Patrice Copeland, Senior Geologist, and myself.

Regards – Jay

Jehiel (Jay) Cass, P.E.  
Senior Water Resources Control Engineer  
Lahontan Water Board  
15095 Amargosa Rd., Bldg. 2, Ste 210, Victorville CA 92392  
(760) 241-2434  
jehiel.cass@waterboards.ca.gov

Attachments  
InfNote42754SbCoLamp.lk.docx

## Informal Note

January 20, 2017

(LAMP) SAN BERNARDINO COUNTY

**To:** Jehiel Cass  
[jehiel.cass@waterboards.ca.gov](mailto:jehiel.cass@waterboards.ca.gov)

**From:** Francis Coony  
[mike.coony@waterboards.ca.gov](mailto:mike.coony@waterboards.ca.gov)

### **Subject: Recommendations from Review of Final Proposed San Bernardino County LAMP**

San Bernardino County (County) submitted a revised proposed Local Agency Management Program (LAMP) to the Lahontan Water Board on December 22, 2016. The submission was in response to Lahontan Water Board staff comments of November 21, 2016.

Of the four (4) Lahontan Water Board staff comments in the November 21, 2016 letter, the County proposes to implement two (2) of the four (4) comments. This is explained in the table later in this note.

I recommend we continue discussions with San Bernardino County regarding potential ways to resolve outstanding issues, including obtaining concurrence from Colorado River Basin Water Board staff and Santa Ana River Water Board staff.

The focus of the January 26, 2017 meeting is to resolve any outstanding comments among the regional boards. This should allow enough time County Board of Supervisors approval and then the Lahontan Water Board approval at the planned July 2017 Lahontan Board meeting in Bishop or September in Apple Valley.

From the table in this note and answer to your December 22, 2016 questions, the list of remaining Lahontan Water Board staff issues are the following:

- How can the County engage other agencies and districts, including other County departments, in resuming groundwater monitoring in Wrightwood?
- How will the County coordinate with other local agencies that do a Water Quality Assessment Program (WQAP) (Apple Valley, Hesperia, Barstow, Adelanto)? Will the County be amenable to working with others such as USGS to utilize computer vadose model tools to assess impact? What is the County's commitment to the WQAP in terms of timing for development and implementation?
- How will the County complete a WQAP for areas where other agencies are not involved, such as Phelan?
- Why is the County selecting the LAMP effective date as the date for distinguishing between existing and new subdivisions, when the Policy prescribes May 13, 2013 as the date for Tier 1?

- For annual reports, will County submit initial well sampling data in EDF format for inclusion into Geotracker?
- What are Colorado River Basin Regional Board staff and Santa Ana River Regional Board staff outstanding issues?
- What is the process to obtain concurrence from Colorado River Basin Regional Board and Santa Ana River Regional Board?
- Is a ½ acre minimum lot size for new development actually protective of groundwater

The above list of issues could be formed as agenda items for the upcoming meeting of January 26, 2017.

Below is more detailed information regarding review of the revised proposed LAMP (hereafter referred to a LAMP).

A. A table showing how the revised proposed San Bernardino County LAMP responded to Lahontan Water Board staff comments of November 21, 2016.

B. Answer to questions from Lahontan Water Board staff.

These items are presented as follows.

A. Table

In the table, Rb6 is Region 6 and Sb Co is San Bernardino County

No	Item	Description
1	Rb6 recommendation	Work with Crestline Sanitation District (SD) and Lake Arrowhead Community Services District (CSD) to utilize surface water quality data collected by them.
	Rb6 recommendation justification	Crestline SD and Lake Arrowhead CSD perform surface water sampling areas in areas that remain on Onsite Wastewater Treatment System (OWTS). These OWTS are allowed under an exemption to the Lahontan Basin Plan prohibition on account of the high cost of extending public sewers to these areas. This surface water sampling is conducted to determine if existing OWTS are degrading water quality from pathogens and nutrients. Lahontan Regional Board staff does not expect you to collect and analyze samples. Instead, Lahontan Regional Board staff suggests you obtain the data from Crestline SD and Lake Arrowhead CSD and evaluate it for pathogen and

		nutrient trends.
	Sb Co response	<p>Chapter 8, section <i>Pathogen and Nitrogen Monitoring</i></p> <p>In an effort to distinguish water quality degradation which is attributable to OWTS, and water quality degradation which does not have a relation to OWTS, DEHS will monitor and collect water quality data for pathogens and nitrogen from the following available sources:</p> <ul style="list-style-type: none"> <li>• Alternative treatment systems.</li> <li>• Water quality sample data received from: <ul style="list-style-type: none"> <li>o County agencies which have National Pollutant Discharge Elimination System (NPDES) permits (i.e., San Bernardino County Flood Control), and</li> <li>o Various water agencies [i.e., Mojave Water Agency (MWA)].</li> <li>o <a href="#">Crestline Sanitation District</a></li> <li>o <a href="#">Lake Arrowhead CSD</a></li> </ul> </li> </ul>
	Rb6 review for adequacy	Response implements Lahontan Regional Board staff recommendation.
2	Rb6 recommendation	Resume data collection, groundwater monitoring, and reporting at Wrightwood.
	Rb6 recommendation justification	<p>Up until 2012, County Service Area (CSA) 56 Wrightwood collected quarterly samples from a down gradient monitoring well, analyzed the samples for constituents including pathogens and nutrients, and reported the results to the Lahontan Regional Board. The CSA also collected data on issued construction permits for onsite systems in Wrightwood. The CSA collected and reported the data under Lahontan Regional Board Order 76-38 and Revised Monitoring and Reporting Program Revised June 24, 1982. Lahontan Regional Board rescinded the Order in 2013 because there was no treatment facility associated with the Order.</p> <p>Wrightwood is an area of concern on account of failing OWTS and surfacing of groundwater during years of high precipitation<sup>1</sup>. Resumption of sampling and reporting in the WQAP will help identify conditions associated with OWTS discharges. The information will also aid in the timing for implementing a sewage collection and treatment system to serve part or all of the Wrightwood community. This is particularly needed as the county moves towards establishing a community</p>

		services district (CSD) with authority to conduct sewer system planning. Please note that the CSA may fund and perform the work at no expense to County Environmental Health Services.
	Sb Co response	Lahontan Regional Board staff found no revisions or response to the recommendation.
	Rb6 review for adequacy	Response does not meet Lahontan Regional Board staff recommendation. This needs to be a topic of discussion, as there should be no expense to the county environmental health staff; CSA 56 or the new CSD could implement and pay for this program as they did in the past.
3	Rb6 recommendation	Assess the cumulative effect of OWTS nitrate discharges in high density areas of San Bernardino County in the Lahontan Region
	Rb6 recommendation justification	The need for assessing the cumulative effect of OWTS nitrate discharges in San Bernardino County was presented at the Lahontan Regional Board OWTS workshop on September 15, 2016. OWTS discharges will eventually recharge underlying aquifers, even where the density is limited to a minimum of 2 equivalent dwelling units per acre. The high density areas in San Bernardino County within the Lahontan Region are Phelan, North Barstow, and along the Mojave River.
	Sb Co response	In Chapter 8, under section “Establishing Water Quality Baseline Levels, San Bernardino states the following:  Note: Once the baseline is established, the sample data from new permitted wells, and random samples of existing wells, will be used to maintain a reliable OWTS water quality assessment. <u>DEHS will support agencies in their cumulative impact assessments for non-sewered areas.</u>
	Rb6 review for adequacy	Lahontan Regional Board staff needs to ask the County’s plan to perform assessments in areas where there are no other agencies involved in designing or approving OWTS. An example is Phelan.
4	Rb6 recommendation	Support Adelanto, Hesperia, and Apple Valley’s WQAP in their cumulative impact assessments for non-sewered areas adjacent to their jurisdictional boundaries.
	Rb6 recommendation justification	Lastly, Lahontan Regional Board staff comments on the Adelanto, Hesperia, and Apple Valley LAMP expressed the need for assessing the cumulative

		<p>impact of OWTS in 1) existing non-sewered areas within these municipalities and 2) existing and planned development in areas adjacent to the municipal jurisdictional boundaries. Lahontan Regional Board staff encourages that your WQAP include support where necessary in these communities.</p> <p>Recently John A. Izbicki, USGS, published<sup>2</sup> a paper describing the use of an Unsaturated Zone (UZ) computer model to predict the storage and mobilization of OWTS nitrate for Yucca Valley community within Colorado River Basin Regional Board. One of the findings in this paper is that OWTS nitrate discharges reached groundwater in ½ the time from areas of high density OWTS. USGS has offered use of the UZ model for other areas that have similar climate and geology as Yucca Valley. Lahontan Regional Board would accept a WQAP proposal to use this model or a similar model in assessing the cumulative impact to aquifers in high OWTS density areas. We suggest that this computer modeling be conducted in conjunction with the 5-Year WQAP report and periodically thereafter when comparing the computer model results to other collected groundwater data as a result of land development and growth patterns. We have asked USGS to provide logistical information on how you can engage their services. We will provide this information when it becomes available.</p>
	Sb Co response	<p>In Chapter 8, under section “Establishing Water Quality Baseline Levels, San Bernardino states the following:</p> <p>Note: Once the baseline is established, the sample data from new permitted wells, and random samples of existing wells, will be used to maintain a reliable OWTS water quality assessment. <u>DEHS will support agencies in their cumulative impact assessments for non-sewered areas.</u></p>
	Rb6 review for adequacy	<p>While the County offers support, Lahontan Regional Board staff needs to ask <u>how</u> the County will provide support.</p>

## B. Answer to Questions

Note: P = Page number in the revised proposed LAMP.

From: Cass, Jehiel@Waterboards  
Sent: Thursday, December 22, 2016 5:38 PM  
To: Coony, Mike@Waterboards  
Subject: FW: San Bernardino County LAMP

I have the following questions, not necessarily comments.

1.0 P9 – Does the OWTS policy prohibit seepage pits, cesspools, or both

Answers:

Cesspools are not allowed:

6.0 Coverage for Properly Operating Existing OWTS

6.1 Existing OWTS are automatically covered by Tier 0 and the herein included waiver of waste discharge requirements if they meet the following requirements:

6.1.6 do not consist of a cesspool as a means of wastewater disposal.

Seepage pits are allowed in a LAMP.

... a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments (Structure of Policy)

As examples, a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments. (Tier 2 – Local Agency OWTS Management Program)

However, new seepage pits are restricted with no LAMP

8.1.6 Dispersal systems shall be a leachfield, designed using not more than 4 square-feet of infiltrative area per linear foot of trench as the infiltrative surface, and with trench width no wider than 3 feet. Seepage pits and other dispersal systems may only be authorized for repairs where siting limitations require a variance. (8.0 Minimum OWTS Design and Construction Standards)

2.0 P21 - Does this say that there must be ½ acre minimum for an OWTS regardless of when the lot was subdivided?

Answer: The criteria is different than the Basin Plan in that the LAMP allows any size lot in subdivisions approved before the effective date of the LAMP. The density criterion for new subdivisions is similar to Tier 1; the only difference is Tier 1 density criterion took effect on May 13, 2013 whereas the proposed LAMP density criterion takes effect on the LAMP effective date. I think we should ask the County, in the planned January 26, 2017 meeting, if they would be willing to use May 13, 2013 as the date for new subdivisions.

3.0 P32 – For the mountain prohibition areas, shouldn't this reference to the two Exemption WDRs we have, which conditionally allows the County to approve OWTS?

Answer: Yes, see page 31.

4.0 P40 – Are you aware of any predetermined performance requirement we have for supplemental systems?

Answer: Yes. The exemption letter for the Ranchero development stated that the ATU would remove 50% nitrogen reduction (from 40 mg/L to 20 mg/L).

5.0 P41 – Why is preliminary WB approval needed for supplemental systems if the County is approving?

Answer: It might be because REHS are not engineers. I recall that we were told that REHS do not have expertise in wastewater treatment systems at the Thursday November 15 2012 round table meeting in Riverside, California.

6.0 P42 – Just be aware ATS will only reduce total N 50%.

Answer: Yes, this is stated on page 42.

7.0 P56 – If the County requires initial well sampling – shouldn't that data be uploaded to GAMA?

Answer: Good catch. It is required under OWTS Policy 9.3.3, as follows:

Submit an annual report by February 1 to the applicable Regional Water Board ... all groundwater monitoring data generated by the local agency shall be submitted in EDF format for inclusion into Geotracker.

We should ask for their commitment at the upcoming January 26, 2017 meeting. Please note that this is a Policy requirement, regardless of the text in a LAMP.

8.0 P60

8.1 How will the assessment be done?

Answer: I think the WQAP scope across the state is still largely undefined, and thus will be a continuing interactive process between local agencies and regional boards.

8.2 How will the County coordinate with other local agencies that do WQAP (Apple Valley, Hesperia, Barstow, Adelanto)

Answer: On Page 59, under the section Establishing Water Quality Baseline Levels, the following text is added: “DEHS will support agencies in their cumulative impact assessments for non-sewered areas.” Obviously, “how” is not defined. I address the “how” in the 4<sup>th</sup> item in the table near the beginning of this note.

8.3 Will the County be amenable to working with others to utilize computer vadose model tools to assess impact?

Answer: At the beginning of this note, I present a recommendation on how we would bring about County involvement in working with other agencies on groundwater WQAP.

9.0 PA20, PA28 – Will this criteria remain in effect?

Answer: I think you are referring density/minimum lot size requirements, which are presented from page 21 to page 23. The answer to this question is covered under question 2.0.

Please note that on Page 22 that the County has revised the LAMP such that OWTS flow rate per acre is 250 gallons per day, and not 300 gallons per day as for the Colorado River Basin Regional Board and the Santa Ana River Regional Board.

10.0 PA61, PA62 – need a legend – does not do much as-is!

Answer: Page 61 is the County organizational chart and page 62 is a blank page. The County discusses the relationship of County departments in the administration of OWTS on Page 11 and 12 of the LAMP, and refers the reader to “Page 61 for the County Organizational Chart.”

11.0 How/when do we obtain concurrence from other regional boards?

Answer: The OWTS Policy §4.3.1 states that if a designated regional board approves a LAMP “over the written objection of an affected regional water board”, the affect regional board may submit the dispute under OWTS Policy §5.3. Therefore, only verbal concurrence is needed.

R/ Jay

----- Reply separator -----

From: Phillippe, Jason [mailto:Jason.Phillippe@dph.sbcounty.gov]  
Sent: Thursday, December 22, 2016 4:14 PM