From: Coony, Mike@Waterboards Sent: 2/20/2018 3:29:09 PM To: Wu, Eric@Waterboards, Raftery, Peter@Waterboards cc: 'Cass, Jehiel@Waterboards (jehiel.cass@waterboards.ca.gov)', Copeland, Patrice@Waterboards, Tucker, Robert@Waterboards Subject: Lahontan Water Board Acceptance of Los Angeles County Local Agency Management Program

Eric Wu, Senior Engineer Los Angeles Regional Water Quality Control Board 320 W. 4th Street, Suite 200 Los Angeles, CA 90013 Eric.Wu@waterboards.ca.gov <mailto:Wu@waterboards.ca.gov>

Lahontan Water Board Acceptance of Los Angeles County Local Agency Management Program

Reference: Email, 2/6/18, Scott Abbott, Los Angeles County, to Mike Coony et al, Resubmission of Draft Local Agency Management Program (LAMP).

Eric,

The Lahontan Water Board accepts the Los Angeles County LAMP that Los Angeles County sent in the referenced email.

This acceptance is based on the following facts.

- 1. Los Angeles County submitted their draft LAMP on May 13, 2016.
- 2. Lahontan Water Board staff sent a LAMP comment letter to the Los Angeles Water Board on January 12, 2017.
- 3. Los Angeles Water Board staff sent Los Angeles County's comment response document to the Lahontan Water Board on November 28, 2017.
- 4. Lahontan Water Board staff reviewed the County's response and finds the responses are adequate.
- 5. Upon request of Los Angeles County, Lahontan Water Board staff provided clarification on a few specific LAMP elements. This occurred in January and February 2018.

If you have any questions, please contact Mike Coony, 760-241-7353 (<u>Mike.Coony@waterboards.ca.gov</u>), or myself at 760-241-2434 <u>Jehiel.Cass@waterboards.ca.gov</u>).

Jehiel Cass, P.E., Senior Engineer Lahontan Regional Water Quality Control Board 15095 Amargosa Road Building 2, Suite 210 Victorville, CA 92394

----- Reply Separator -----

From: Scott Abbott Sent: 2/6/2018 2:28:38 PM

To: Coony, Mike@Waterboards, Copeland, Patrice@Waterboards, Wu, Eric@Waterboards, Kim, Woonhoe@Waterboards, Raftery, Peter@Waterboards, Wu, Tong@Waterboards, Cass, Jehiel@Waterboards

cc: Jacqueline Taylor, Michelle Tsiebos, Vincent Gallegos

Subject: RE: SUBMISSION OF THE REVISED LAMP DRAFT

All,

LA County is resubmitting its LAMP with 1 change. We are adopting the Tier 1 standard that allows a conventional OWTS for percolation rates between 1 MPI but less than 5 MPI with a depth to groundwater of at least 20 feet.

We believe that this change will reduce the number of advanced treatment systems required for fast percolation rates.

Thank you for accommodating this update.

Scott Abbott, REHS, MPA Manager, Environmental Protection Branch (626) 430-5216

<u>Attachments</u> LA LAMP 2-6-18 Draft.pdf LA LAMP 2-6-18 Draft.docx

LA County's responses to Lahontan Water Board's comments.

I. LOS ANGELES COUNTY RESPONSE TO LAHONTAN WATER BOARD LETTER DATED JANUARY 12, 2017

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD	LOS ANGELES COUNTY RESPONSE
<u>1. LAMP in general</u> . The LAMP is the County's program to regulate onsite wastewater treatment systems (OWTS) within the County's jurisdiction. Therefore, Lahontan Regional Water Quality Control Board (Lahontan Water Board) staff requests that the LAMP include the entire County program, which includes codes, technical guides, and ordinances.	The County can provide a draft of the proposed LAMP Ordinance along with the LAMP and Professional guide. The Ordinance will be finalized based on the approved LAMP by the Water Board. This has not been required by the Los Angeles Regional Water Quality Control Board (LA Water Board). The County of Los Angeles requests the LA Water Board to discuss with the Lahontan Water Board about this recommendation.
2. Tier 1 Density. The County proposes Tier 1 densities for their LAMP (Table E-1, Table 2-5). However, the County does not state the effective date for the densities. Lahontan Water Board staff requests that the County provide the effective date of the Tier 1 densities.	The County is revising its requirements for new subdivisions under the LAMP. Whereas the County originally proposed adopting the State OWTS Policy Tier 1 density requirements for new subdivisions, the County is proposing to require the use of NOWTS for new sub-divisions not meeting Tier 1 density requirements. The effective date of the LAMP will be the date it is adopted by the County Board of Supervisors. The County hopes to have LAMP approval prior to the current MOU's expiration date on May 13, 2018.
 <u>3. Density criteria for existing parcels</u>. While the County selects Tier 1 densities for new subdivisions, the County does not define density criteria for existing platted parcels in the Lahontan region portion of the County. Lahontan Water Board staff density comments and recommendations are the following: a) Lahontan Water Board staff requests the County evaluate adding density criteria for existing parcels in the Lahontan region. For the Lahontan region, Water Board staff requests the County to consider using the existing Memorandum of Understanding (MOU) criteria. These criteria generally allow two (2) equivalent dwelling units (EDU) per acre. 	The County agrees to keep the Lahontan Water Board's density limitation of two EDU per existing parcel in areas under the jurisdiction of the Lahontan Water Board.

b) The EDU flow value in the Lahontan MOU is 250 gallons per day (gal/day). This value is used in proposed LAMP section 1.1.2. However, in proposed LAMP Appendix B, section B-3, the County selects a value of 200 gpd (gal/day) per EDU. For consistency purposes, Lahontan Water Board staff requests the County select 250 gal/day consistent with the Water Quality Control Plan for the Lahontan Region (Basin Plan).	The County agrees to use 250 gal/day as we stated in our LAMP section 1.1.2.
c) The County has been referring proposed OWTS to the Water Board for design approval when the density is less than ½ acre per EDU; the current criterion allowed under the MOU. This process is not stated in the proposed LAMP. Lahontan Water Board staff requests that the County state whether they will continue this referral process under the LAMP, and specify the process. All referrals must come from the County staff and not individual dischargers.	The County proposes to regulate projects under the Lahontan Water Board's area of jurisdiction exceeding the maximum density of 1 EDU per half acre for existing parcels. The County proposes to require the use of a NOWTS for those parcels. Likewise, the County shall not refer to the Lahontan Water Board applications for new subdivisions not meeting the Tier 1 density requirements (LAMP Table 2-4). Instead, the County shall require the use of a NOWTS for those parcels. If the County refers an applicant to the Lahontan Water Board for any given circumstances, the County shall send a referral to Lahontan Water Board via an amail requiret to review the project. The process will be added to the
	LAMP.
d) Lahontan Water Board exemptions. Up to the effective date of the OWTS Policy, the Lahontan Water Board or its Executive Officer could issue exemptions to the Lahontan MOU density criteria. On the effective date of the Policy, exemption considerations were replaced with a conditional waiver of waste discharge requirements (OWTS Policy §12.0), and the Lahontan Water Board staff may no longer issue exemptions to the MOU density criteria. Instead, all onsite system referrals will result in regulation under waste discharge requirements, unless the County identifies a regulatory process in the LAMP for these project proposals.	The County proposes to require the use of an NOWTS in situations where existing density limits cannot be met. As indicated in response 3c, our proposal is to require the use of a NOWTS when existing density limits are unable to be met.
4. Non-conventional treatment OWTS. The County presents	LA County proposes to allow Aerobic Treatment Units, packaged plant

proposed LAMP section 3.5; inspection, monitoring, maintenance and reporting requirement in proposed LAMP section 4.1; and additional design and operation details in Appendix A.6. Non-conventional systems include both non- conventional treatment and non-conventional subsurface disposal systems. a) Lahontan Water Board staff requests that the County define the types of OWTS that are within their scope of coverage (OWTS Policy 9.2). A breakdown structure showing the names and relationships among common conventional and non- conventional OWTS is presented in Enclosure 1.	non-conventional treatment units. The County proposes to allow pressurized disposal systems, pressurized drip dispersal systems, and mound systems as non-conventional subsurface disposal systems. A disinfection system must be installed on all non-conventional treatment units unless the installation is only to comply with requirements for a nitrogen impaired water body. LA County has provided a revised Enclosure 1 describing the hierarchy of non- conventional treatment systems under the LAMP.
b) Lahontan Water Board staff requests the County state if they will include package treatment plants in their scope of coverage. Like aerobic treatment units (ATU}, a package plant uses supplied air to stabilize the organic content of sewage. However, an ATU is a single tank inserted after the septic tank and before the subsurface disposal system. A package plant, in contrast, is a complete fabricated wastewater treatment plant that typically uses activated sludge technology. The principal parts are an aeration tank, clarifier, and activated sludge recycle pumps.	The County does not wish to limit the use of developing technology which is why individual technologies such as ATUs and Packaged Treatment Plants using activated sludge are not specified in the LAMP. The County believes that any new technology that obtains NSF 245 certification for nitrogen reduction should be eligible for use in LA County. If the treatment technology is unable to meet pathogen reduction goals specified in the LAMP, the system must be capable of having a disinfection unit installed that meets pathogen reduction goals.
c) The State Water Resources Control Board (State Water Board) conditional waiver of waste discharge requirements applies only to OWTS within the LAMP scope of coverage. For OWTS outside the LAMP scope of coverage, Lahontan Water Board staff requests that the County include text in the LAMP that directs the owner to submit a report of waste discharge, obtain waste discharge requirements from the Lahontan Water Board, and pay fees for OWTS discharges.	The County shall add a statement to the LAMP indicating that OWTS outside the scope of the LAMP are required to obtain a submit a report of waste discharge, obtain waste discharge requirements, and pay appropriate fee to the appropriate Regional Water Board.
d) Table 4-1 of proposed LAMP section 4.1 states that non- conventional OWTS operation requires the County to issue an annual public health permit and perform an annual inspection. While the County may have this authority in its ordinances to perform this function, past discussions with the County on	LA County was in the process of adopting a county ordinance for NOWTS permitting when the State Water Board adopted the OWTS Policy. After discussions with the Los Angeles Water Board it was decided not to pursue the county ordinance until the LAMP was submitted. As a result, the County

specific projects indicate that the County has not funded this program. Lahontan Water Board requests that the County reconsider this decision, as OWTS Policy §9.4.6 requires monitoring and inspections for non-conventional treatment OWTS. Preferably, the County funds this program.	has lacked appropriate enforcement methods and fee recovery methods for NOWTS. The County is proposing in its LAMP implementation ordinance to require an annual public health permit for NOWTS, which will provide funding for the inspection and monitoring activities. The proposed ordinance will also require annual inspections of NOWTS by a third party Qualified Professional with provision of the report to the County. The County shall modify Table 4-1 to show the change.
e) Lahontan Water Board staff requests the County explain why a public health permit lasts only one year. Since the purpose of these permits is to authorize OWTS waste discharges, this public health permit should last indefinitely to keep discharge authorization current and reduce program administrative costs, and allowing annual fees to fund the performance oversight program.	According to Title 8 of the Los Angeles County Code, all Public Health Permits are valid from the date of payment until the end of the current Fiscal Year (June 30th). The Public Health Permit must be paid each year to remain valid. The system operation requirements are not reviewed or changed on an annual basis.
f) State Water Code §13360 prohibits the Water Board to approve the siting and design of any OWTS. Nevertheless, Lahontan Water Board staff will, upon local agency request and resources allowing, review the siting and design of OWTS and provide recommendations to the County. Lahontan Water Board staff requests that the County provide revised referral procedures that are consistent with Water Code §13360.	The County will revise its referral procedure to refer property owners to the Water Board to obtain a WDR, if the owner's proposed systems do not meet LAMP requirements. The referral shall state that after issuance of a Waste Discharge Requirement by the Water Board, the applicant shall return to the DPH for the approval of the proposed sitting and design. The LA County Health Officer will evaluate all WDRs approved by the Regional Water Boards for compliance with the Plumbing Code. The County may contact the Water Board to consult upon siting and design of a system regarding a proposal that meets the criteria of the LAMP.
g) The County specifies OWTS discharge numerical limitation in proposed LAMP section 3.5 and A-6. These limitations are 30 mg/L for biochemical oxygen demand, 30 mg/L for total suspended solids, 50% total nitrogen removal based on influent total Kjeldahl nitrogen measurement, and a pH range of 6 to 9. Lahontan Water Board staff recommendations on these limitations are the following:	TSS and BOD are a 30-day average as required by NSF 245 certification.

i. The County should specify a period for compliance. Lahontan Water Board staff suggests a 30-day average for biochemical oxygen demand (BOD) and total suspended solids (TSS), because this is consistent with the Federal secondary standards	
ii. To measure total nitrogen percent removal, the OWTS owner must sample both the influent and the effluent. Except for package plants, influent sampling of OWTS is difficult. In lieu of a percent removal limitation, Lahontan Water Board staff will accept an estimated influent total nitrogen value of 40 mg/L, requiring a total nitrogen limitation of 20 mg/L.	Los Angeles County appreciates that the Lahontan Water Board's acknowledges the difficulty in obtaining influent samples from many types of OWTS with supplemental treatment. Los Angeles County believes that the value of 40 mg/l for influent total nitrogen is too low. In the USEPA Onsite Wastewater Treatment Systems Manual (2002), the range of total nitrogen is 26 - 75 mg/L and the USEPA Design Manual for Onsite Wastewater Treatment and Dispersal Systems (1980) lists an average nitrogen value of combined wastewater as 63 mg/L. LA County reviewed the evaluation reports of six NSF certified supplemental treatment systems. The average nitrogen content of the influent during the studies was between 38 mg/L and 52 mg/L, with only one system having a total nitrogen content below 40 mg/L. The County requests that the average nitrogen level be established at 50 mg/L rather than 40 mg/L.
 iii. A 50 percent reduction of influent total Kjeldahl nitrogen (TKN) is not adequate because it does not account for the oxidation of TKN to nitrate in the treatment process. Lahontan Water Board staff requests the County revise the effluent limitation to reflect the sum of TKN and nitrate. 	The County agrees that the nitrogen content of effluent should be measured as total Nitrogen (TKN plus Nitrate) and not total Kjeldahl Nitrogen (TKN) only as stated in the LAMP and Professional Guide. The County only proposes to use TKN for influent testing since nitrate content of sewage is minimal.
iv. With a 50 percent reduction in total nitrogen, the average effluent concentration is 20 mg/L. To be protective of groundwater quality, the OWTS owner will need to remove 75 percent nitrogen to achieve 10 mg/L total nitrogen. Lahontan Water Board will consider allowing subsurface drip irrigation of plants to provide this additional nitrogen removal.	The Los Angeles Water Board has accepted Los Angeles County's proposal of a 50% reduction in total nitrogen which can be verified through the system meeting the requirements of NSF 245. Therefore, the County of Los Angeles requests the Los Angeles Water Board to discuss with the Lahontan Water Board its requiring a total nitrogen content of 10 mg/L.
	Los Angeles County believes the 10 mg/L requirement is inconsistent with the State Water Quality Control Board Order WQ2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems. Attachment 1 of the Order identifies the conditions under which nitrogen limitations may be required and if required whether they should be 50% total

reduction or 10 mg/L maximum. According to Attachment 1, the first step is determining whether the flow rate is in excess of 20,000 gpd. If a system is under 20,000 gpd a nitrogen effluent limit is not required. Since all systems delegated to County under the LAMP are under 10,000 gpd, no nitrogen effluent limit should be required.
In preparing its LAMP, Los Angeles County considered the requirements in Section 9.1 of the State OWTS Policy and determined that supplemental treatment would be required when a property owner wished to install a new OWTS utilizing seepage pits or install an OWTS in an area with a fast percolation rate, high groundwater or fractured bedrock. In these cases, the supplemental treatment system is used to provide the wastewater treatment that would normally be provided by percolation through the soil layer. According to the USEPA Onsite Wastewater Treatment Systems Manual (2002) a soil column typically removes 10 – 20% of the nitrogen. Since the supplemental treatment system is taking the place of the place of the soil column, the 50% reduction of nitrogen exceeds the typical nitrogen reduction which occurs in soil and should therefore be adequate.
The proposal allowing the irrigation of plants to provide the additional 25% nitrogen removal would have an impact Los Angeles County's LAMP that is not identified in the Lahontan Water Board's letter. By requiring a standard of 10 mg/L total nitrogen, the use of seepage pits or other conventional dispersal systems with supplemental treatment at new construction would be an unacceptable practice since drip irrigation of plants would not be occurring and the additional nitrogen would not be removed. The Los Angeles Water Board has accepted the use of conventional dispersal systems with supplemental treatment at new construction of not be occurring and the additional nitrogen would not be removed. The Los Angeles Water Board has accepted the use of conventional dispersal systems with supplemental treatment. The Los Angeles Water Board has indicated in its comments that it is accepting of the use of seepage pits at new construction of a limited size without the use of supplemental treatment.
Los Angeles County requests that the Los Angeles Water Board work cooperatively with the Lahontan Water Board to resolve this conflict.

v. Lahontan Water Board staff requests that the County provide a list of public health permits for OWTS located in the Lahontan Regional. Lahontan Water Board staff requests reporting of parcel number, discharge monitoring results, completed inspection reports, permit issuance date, and permit expiration date.	The County does not issue Public Health Permits for OWTS and NOWTS at this time. The County issues approvals to install the systems to the County and contracted Building and Safety divisions. The County can provide a list of prior approvals for OWTS and NOWTS. In addition, the County has monitoring data for NOWTS that have been installed and the homes are occupied. When the County has adopted the LAMP and the ordinance to require Public Health Permits, the County will provide the requested information for all new and existing NOWTS: discharge monitoring results, completed inspection reports, permit issuance date, and permit expiration date.
5. Tier 2 Considerations. Lahontan Water Board staff requests that the County describe how they meet each OWTS Policy §9.2 considerations in the LAMP. Some considerations are required and others are optional. For each required consideration, Lahontan Water Board staff requests the County give a justification for any "no" answer. Please see also separate comment on consideration of OWTS Policy §9.2.8, salt/nutrient management plans.	The County believes it has met the OWTS Policy requirements for section 9.2, and that a description has been provided for each item as required. The County asks the Los Angeles Regional Water Board to discuss this issue with the Lahontan Water Board.
 <u>6. Salt/Nutrient Management Plan (SNMP).</u> a) OWTS Policy §9.2.8 requires the County to consider development or implementation of, and coordination with, regional SNMP. The proposed LAMP states in Sec 4.8 that the County will "contribute to the planning efforts providing data and input regarding OWTS." Lahontan Water Board staff requests that the County also consider receiving data from the SNMP stakeholders to help with their assessment on groundwater recharge conditions. 	The County will contact the SNMP stakeholders to determine if their data can help with the elaboration of the WQA.
b) The SNMP for the Antelope Valley portion of the County is complete, and it can be accessed at: http://www.avwaterplan.org. Lahontan Water Board staff requests that the County recognize the completion of this SNMP in their LAMP.	The County will recognize the completion of this SNMP in its LAMP.
7. Water Quality Assessment Program (WQAP). For the Lahontan portion of the County, Lahontan Water Board staff	The County contacted USGS for the cost estimate and feasibility of using the UZ model in the Antelope Valley. The USGS has indicated that a study for the

suggests a focused WQAP with collaboration with other	Antelope Valley may require two years to complete and cost approximately
agencies.	\$250,000. LA County believes this is beyond the scope of what is required in
a) Focused program	Section 9.3.2 of the State OWTS Policy.
The need for assessing the groundwater recharge of OWTS	
nitrate discharges in the Lahontan region was presented at the	The County intends to comply with Section 9.3.2 of the State OWTS Policy,
Lahontan Water Board OWTS workshop on September 15,	which requires monitoring data for nitrates and pathogens and may include
2016. OWTS discharges will eventually recharge underlying	other data available from other sources. LA County will work with internal
aquifers, even where the density is limited to a minimum of	and external partners to obtain the data needed.
two (2) edu per acre. Of significance are clustered, higher	
density non-sewered areas of Antelope Acres, Quartz Hill, Lake	
Los Angeles, Sun Village, Pearblossom, Juniper Hills, Littlerock,	
and Leona Valley.	
Recently John A. Izbicki, USGS, published 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 the Colorado River Basin Region 3.	
One of the findings in this paper is that OWTS nitrate	
discharges reached groundwater in ½ the time from areas of	
high density OWTS than in areas with lower density.	
LICCE has offered use of the LIZ model for other erest that	
by a similar climate and goalagy as Yussa Valley. Labortan	
Mater Reard staff discussed use of the USCS with Los Apgeles	
County staff in November 2016 for the portion of the County	
in the Labortan Region Labortan Water Roard staff would	
accent a WOAD proposal to use this model or a similar model	
to assess the occurrence of groundwater recharge from OWTS	
discharges in the higher density areas. Labortan Water Board	
staff suggests that this computer modeling be conducted in	
conjunction with the 5-Year WOAP report and periodically	
thereafter when comparing the computer model results to	
other collected groundwater data as a result of land	
development and growth patterns. The scope and cost of	

model use is dependent upon the nature of work proposed. The USGS contact person for use of the model is Claudia	
Faunt, Program Manager, 619-225-6142 ccfaunt@usgs.gov.	
b) Collaboration Lahontan Water Board staff has discussed the use of the UZ model with Kern County. Lahontan Water Board staff recommends that Los Angeles County consider collaboration with Kern County and or other local agencies in the Antelope Valley to provide optimal use of the UZ model, or some other model, that may be used for Los Angeles County cumulative impact assessments for existing subdivided areas.	The County has contacted Kern County about the possibility of collaboration. As indicated in the response above, LA County believes requiring a study using the UZ model is beyond the scope of the State OWTS policy. However, LA County may consider the UZ model if collaboration with another County will reduce the costs of the study.
 <u>8. Cumulative Impact Assessments.</u> The County's process for conducting a cumulative impact assessment is presented in proposed LAMP section 3.1. The proposed LAMP states that these assessments are "for new OWTS installations." Lahontan Water Board staff requests that these assessments include existing and future OWTS because they also contribute to OWTS discharges that will eventually recharge groundwater. Lahontan Water Board staff requests that the cumulative impact assessment results be reported in the County's 5-year WQAP evaluation. 	In Section 3.1 the LAMP indicates that LA County will consider cumulative impact assessments when evaluating the siting of new OWTS. The County WQAP will include data available from cumulative impact assessments as indicated in Section B-3 of the LAMP.
<u>9. LAMP effective date.</u> Lahontan Water Board staff requests that the LAMP have an effective date. The Basin Plan MOUs expire on the LAMP effective date, or May 13, 2018, whichever occurs first.	The LAMP effective date will thirty days from the date it is adopted by the County Board of Supervisors or May 13, 2018, whichever occurs first. LA County is striving to meet the May 13, 2018, deadline. However, in order to have the LAMP and its enforcing ordinance effective May 13, 2018, the LAMP must be approved 30 days in advance and begin the submission process to the Board of Supervisors 90 days prior to the hearing date. Unexpected delays in the review of the LAMP may prevent the County from meeting the May 13, 2018 deadline.
<u>10. Periodic LAMP revisions.</u> The County proposes to revise	In addition to needing to comply with the LAMP, the County must also comply
the LAMP and Technical Guide approximately every 3 years,	with the California Plumbing Code. The Plumbing Code is on a three-year
submit the revisions to the Water Board, and receive Water	cycle and the County must update its Professional Guide whenever changes

Board approval. The process for revisions in the OWTS Policy	are made to the Plumbing Code that affect the Professional Guide. The
is that the local agency identifies LAMP changes in the 5-Year	County will update the Professional Guide every 3 years as needed and will
WQAP assessment report (OWTS Policy §9.3.3). Lahontan	update the LAMP every five years as part of the WQAP.
Water Board staff requests that the County submit LAMP	
revisions as required under OWTS Policy §9.3.3. LAMP	
revisions submitted in this manner may not require Water	
Board action.	

II. LOS ANGELES COUNTY RESPONSE TO LAHONTAN WATER BOARD LETTER DATED OCTOBER 2, 2017

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD	LOS ANGELES COUNTY
1. OWTS Density (LAMP, page 62)	Please see LA County response to January 12, 2017 comment 3.a.
Staff requests that Los Angeles County incorporate into the	
County's LAMP for Antelope Valley some measure of density	
criteria for existing sub-divided parcels. Including the existing	
Lahontan Basin Plan requirements for density is acceptable.	
The current Lahontan Water Board Basin Plan's OWTS criteria	
specify minimum parcel sizes based on density. Suggested	
language consistent with the Lahontan Basin Plan criteria that	
could be incorporated into the LAMP is presented in Enclosure	
2.	
As currently written, the LAMP proposes to apply Tier 1 density criteria to any parcel of record on or after the LAMP approval date. This allows the County to approve OWTS for any parcel size, and for any OWTS flow up to 10,000 gal/day, for parcels of record before the LAMP approval date.	
Alternatively, the County may propose another acceptable	
method to limit OWTS density on existing parcels of record in	
order to protect underlying groundwater from OWTS impacts.	
2. Supplemental Treatment System Issues (LAMP, page 90)	Please see LA County response to January 12, 2017 comment 3.c.
a) The LAMP should be modified to include criteria regarding	
when, or if, a Supplemental Treatment System (STS) is required	

to stabilize effluent and reduce nitrogen applicable to approved	
STS in the Antelope Valley portion of the Lahontan Region	
within Los Angeles County.	
b) The LAMP should be modified to require wastewater	Please see LA County response to January 12, 2017 comment 3.a.
stabilization and nutrient removal criteria for proposed projects	
that require STS. The draft LAMP's numerical criteria for STS	
performance, particularly BOD, suspended solids, and total	
nitrogen concentrations, only apply to Tier 3, impaired water	
bodies; Antelope Valley has no impaired water bodies for	
pathogens and nutrients. Lahontan Water Board staff are	
concerned with increasing nitrogen concentrations within the	
groundwater basins of the Antelope Valley.	
c) Staff requests that STS be required to achieve an effluent	Please see LA County response to January 12, 2017 comment 4.g. iv.
limitation of 30 milligrams per liter (mg/L) for BOD and total	
suspended solids and a requirement for achieving 50% total	
nitrogen removal (LAMP, page 90), and sampling both influent	
and effluent to establish compliance. As an alternative, the	
LAMP could require a maximum total nitrogen effluent	
limitation of 10 mg/L. This would ensure degradation of	
groundwater is limited to levels that remain protective of	
future drinking water uses.	
d) Staff requests that the County provide assurance in the	Please see LA County response to January 12, 2017 comment 4.d.
LAMP demonstrating effectiveness of their program in the 5-	
year Water Quality Assessment Program reports. This would	
include review of STS monitoring data, evidence of compliance	
inspection reports, and record of any enforcement actions	
taken for non-compliance. Assurance is needed because the	
County has stated verbally to us that they have not consistently	
reviewed compliance monitoring reports nor conducted	
inspections. Thus, the effectiveness of County's OWTS	
performance to protect groundwater quality appears limited.	
3. Need for Groundwater Monitoring Network (LAMP, page	Please see LA County response to January 12, 2017 comment 3.a, 3.c and 7.c.
<u>107)</u>	

a) The nutrient loading to groundwater from future OWTS	
discharges in the Antelope Valley is unknown but needs to be	
considered and discussed in the LAMP. Future OWTS	
discharges are expected to be significant as growth and	
development continues. The largest organic and nutrient	
wastewater contributor to groundwater in the Antelope Valley	
is from current OWTS discharges. In contrast, the two large Los	
Angeles County cities of Lancaster and Palmdale have sewer	
collection systems, treatment plants, reuse wastewater for	
agriculture with water applied at agronomic rates; and have	
lined storage ponds to contain winter flow. We have noticed	
that projects in the Antelope Valley with OWTS are being	
installed at an increasing rate, further contributing to degrading	
groundwater quality. Without proper planning, enforcement,	
and water quality assessment, future growth relying upon	
OWTS may adversely affect future and existing water supplies.	
b) To help reduce overall costs, the County should commit to	Please see LA County response to January 12, 2017 comment 7.b.
active participation in collaboration with others for obtaining	
available data. Though the County proposes collaborating with	
existing stakeholders to obtain and utilize existing data when	
preparing the 5-year Water Quality Assessment Program	
reports, the County has not indicated if it will actively	
participate in establishing a groundwater monitoring well	
network to evaluate groundwater impacts in the Antelope	
Valley.	
c) The County should include in the LAMP anticipation of future	Please see LA County response to January 12, 2017 comment 7.b.
monitoring needs and agree to consider collaborating with	
other stakeholders to evaluate and establish a future	
groundwater monitoring well network to assess groundwater	
impacts from OWTS and agree to consider a cost-sharing	
mechanism to develop and maintain such a network (LAMP,	
page 107). This effort would facilitate the recent Antelope	
Valley Adjudicated Groundwater Basin stipulation that requires	
ostablishing a monitoring wall notwork	

d) In contrast, the Mojave Water Agency, as Water Master of	Please see LA County response to January 12, 2017 comment 7.b.
the adjudicated Mojave groundwater basin, has developed a	
groundwater monitoring network that appears to satisfy not	
only Water Master needs, but may also satisfy San Bernardino	
County LAMP requirements to implement a Water Quality	
Assessment Program. We expect a similar groundwater	
monitoring network will be established in the future for the	
Antelope Valley.	

Revised Enclosure 1

NOWTS TYPE HIERARCHY

