



Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

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Richard W. Booth
Senior Engineering Geologist
Chief, TMDL/Basin Planning Unit
Lahontan Water Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Dear Mr. Booth,

Thank you for the opportunity to provide comments on the list of priority projects for the 2015 Triennial Review of the Lahontan Basin Plan. We also appreciate the extension of the comment deadline to October 2, 2015. On behalf of the Victor Valley Wastewater Reclamation Authority, we have reviewed the project list and offer the following comments on a few of the projects:

- Site Specific Objectives for a reach of the Mojave River – The proposed project is to “Establish Site Specific Objectives for groundwater in the Mojave River Flood Plan Aquifer and surface water in the perennial reach of the Mojave River downstream of Victor Valley Wastewater Reclamation Authority (VWVRA) to Silver Lakes (Helendale).” As noted further on in the description, VWVRA agrees that surface water quality objectives at Barstow may not be applicable to the reach of the Mojave River into which VWVRA discharges because of the unusual hydrology and ephemeral nature of the river in this area. As this project moves forward, we urge you to utilize the substantial data set and beneficial use assessment that was generated as part of the Mojave River Characterization Study (MRCS) that was conducted by VWVRA and approved by the Lahontan Regional Board in 2010. The MRCS was conducted as a Supplemental Environmental Project (Order Nos. R6V-2006-0055, R6V-2008-0036). The conclusions of this study determined that there were no exceedances of nitrate objectives in the river and that exceedances of salts objectives observed at only one of the monitoring location were unrelated to VWVRA’s effluent. Included in the MRCS was the finding that neither MUN nor AGR were current uses of the Mojave River in the study area. GWR, however, is a current beneficial use. In addition, VWVRA has studied the impacts of its discharges to local groundwater extensively. In general, the impact of VWVRA’s discharge to local groundwater has been positive. VWVRA has provided substantial data to show that nitrogen and TDS levels in the downgradient groundwater is below water quality objectives and has improved as a result of treatment plant upgrades. With this in mind, VWVRA would be happy to support efforts to develop site specific objectives for the reach of the Mojave River downstream of VWVRA to Silver Lakes that considers the condition of the receiving water under current operation of VWVRA’s facilities.
- Region-wide approach to TDS objectives for surface water -The description of the proposed project states that “Site specific TDS objectives for surface water were

developed based on limited samples and protect/maintain high quality water but are typically more stringent than needed to protect beneficial uses. VVWRA agrees that TDS objectives are often more stringent than needed for surface water. The Mojave River is a good example of this, where as noted above, MUN and AGR are not current uses of the reach of the Mojave River downstream from the VVWRA discharge. Therefore, as is the case for VVWRA, TDS effluent limits based on the recommended MCL of 500 mg/L may be overly protective. It should also be noted that water quality objectives for TDS are based on a secondary MCL that is associated with aesthetics rather than human health concerns. Surface water objectives that are established based on the protection of the groundwater basin may make more sense but in this case objectives should be set with the recognition that impacts should be set based on the point of use (e.g., potable wells) rather than based on the point of discharge. With this in mind, VVWRA would support an option where TDS objectives are based on the results of the SNMP that was developed by the Mojave Water Agency and its partners and is scheduled for approval by the Regional Board in 2015.

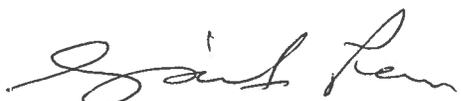
- Biological Indicators – This project is currently described to “Develop narrative and/or numeric biological objectives (i.e., biocriteria) to protect the biological integrity of the Region’s surface waters.” The description goes on to say that it may be determined that it is necessary to expand the applicability of the Basin Plan’s current narrative objective for non-degradation of aquatic communities which only applies to wetlands. If it is decided to expand this to other surface waters, VVWRA urges the Board to consider available information on beneficial uses including the Beneficial Use Assessment that was conducted for the MRCS. In addition, VVWRA would recommend that the Regional Board align this process closely with the Statewide Biological Integrity Assessment effort that has been underway since 2010 particularly with respect to the use of the California Stream Condition Index (CSCI) that is also mentioned in the proposed project description.
- Compliance language pertaining to monthly means - The proposed revisions would change water quality objectives expressed as “means of monthly means” to annual means and define minimum sample numbers and sampling frequencies for determining compliance with objectives. VVWRA is supportive of any modification that results in water quality and beneficial use assessments being based on data that is truly representative of receiving water conditions and, therefore, would support this effort.
- Biological beneficial use for the Mojave River – The proposed project is to “Add the Biological Use (BIOL) for specific reaches of the Mojave River with remaining viable habitat, specifically from Bear Valley Road to Helendale.” Again, to the extent that it is applicable, VVWRA would recommend that the results of the MRCS Beneficial Use Assessment be used in this effort. Under this project, the presence of aquatic species, waterfowl and wildlife were evaluated for the Mojave River.
- Biotic Ligand Model for copper – The proposed project would be to “Incorporate the USEPA national criteria for copper into water quality standards program using the Biotic Ligand Model.” Current copper water quality criteria are a function of hardness. However, the hardness based criteria may be under protective at low pH and overprotective at higher dissolved organic carbon. The Biotic Ligand Model (BLM) provides a mechanistic framework for the established effects of copper speciation by addressing the relative bioavailability of different copper species. The BLM

accounts for important inorganic and organic ligand interactions of copper while also considering competitive interactions that influence binding of copper at the site of toxicity. The BLM's ability to incorporate metal speciation reactions and organism interactions allows prediction of metal effect levels to a variety of organisms over a wide range of water quality conditions. Application of the BLM has the potential to substantially reduce the need for site-specific modifications, such as Water Effect Ratio, to account for site-specific chemistry influences on metal toxicity. VVWRA believes the use of the BLM may provide more representative copper water quality standards for the Mojave River.

- Revision pentachlorophenol water quality objective –The proposed project would be to “The USEPA recommends a revision of water quality objectives for pentachlorophenol (PCPs), where appropriate. The USEPA believes existing objectives are not sufficiently protective of early life stages of salmonids.” With respect to the applicability of this proposed revision to the Mojave River, the MRCS Beneficial Use Assessment reported no observation of migratory aquatic species in the study area. VVWRA believes, therefore, that it is unlikely that this revision to the water quality objective is applicable to the Mojave River.
- VVWRA would also like to proposal that a project to reevaluate the COLD beneficial use designation for the Mojave River from the Upper Narrows to Helendale. This use was evaluated as part of the MRCS Beneficial Use Assessment and it was determined to be uncertain as to whether the Mojave River in that reach can support cold weather ecosystems. None of the species known to live in the Mojave River are known to specifically require cold water habitats. During the winter, the temperatures in the Mojave River would likely be considered cold. However, during the summer months, the temperatures rise by as much as 10 °C in the shallow Mojave River.

Thank you for the opportunity to review and comment on the proposed project list. Please, feel free to contact me should you have any questions regarding our comments.

Sincerely,



for
Logan Olds
General Manager