

# **ANTELOPE VALLEY SALT/NUTRIENT MANAGEMENT PLAN STAKEHOLDER MEETING MINUTES**

**October 16, 2013**

**Location: Palmdale Water District**

**11:00 a.m. – 12:00 p.m.**

**Attendees:** Tim Chen (LACWD), Erika De Hollan (LACSD), Brian Dietrick (RMC), Virginia Fowler (LACFCD), Aracely Jaramillo (LACWD), Bob Large (Lake Town Council), Yvonne Malikowski (Lake LA Park Association), Brenda Ponton (RMC Water), Jose Saez (LACSD Consultant), Christopher Vidal (PWD), Jamshed Yazdani (Lancaster), Jan Zimmerman (Regional Board)

## **RWOCB/DWR Updates**

No Regional Board updates.

## **Regional Board Teleconference**

A teleconference between the Lahontan Region Water Quality Control Board (Regional Board), LACWD and LACSD was held on October 15, 2013, primarily to discuss water quality objectives (WQO). Our initial understanding of the Regional Board's comments was that we needed to establish variable numerical WQOs for each sub-basin based on the baseline water quality and the most restrictive beneficial use standards. In this scenario, sub-basins with TDS concentrations less than 500 mg/L would have a WQO of 500 mg/L and sub-basins with concentrations less than 1000 mg/L would have a WQO of 1000 mg/L.

During the teleconference, we agreed that the SNMP did not need to establish numerical WQOs for each sub-basin. The Water Quality Control Plan for the Lahontan Region (Basin Plan) has a narrative WQO: "Ground waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards." Drinking water standards will be used to establish a "water quality goal" for contaminants. The water quality goal(s) would be used to calculate assimilative capacity. Terminology will need to be clearly explained in the SNMP. The TDS water quality goal, for example, would be based on the below three part drinking water standard:

- Recommended SMCL of 500 mg/L
- Upper SMCL of 1000 mg/L
- Short Term SMCL of 1500 mg/L.

In determining the assimilative capacity for sub-basins with baseline TDS concentrations less than 500 mg/L, 500 mg/L would be used as the water quality goal. The 500 mg/L recommended level is not a strict standard that cannot be exceeded, it is considered the first line of defense. Similarly, sub-basins with baseline concentrations less than 1000 mg/L would have a goal of 1000 mg/L. There were concerns that these goals and associated assimilative capacities would limit beneficial recharge projects in areas with good water quality such as the Lancaster sub-basin. However, initial iterations of the salt balance model show minimal water quality change and show that water quality goal

exceedances are not expected within the planning period. In addition, projects that exceed/threaten sub-basin goals may still be approved with an anti-degradation analysis demonstrating that socio-economic benefits exceed the water quality impacts. The draft final SNMP is due to the Regional Board by May 14, 2014. The SNMP presentation will be scheduled after the plan is reviewed. Mr. Mike Plaziak (Regional Board) is consulting with the State Board's legal counsel to determine CEQA requirements, if any.

### **Salt Balance Update**

There are no major updates since the previous meeting. In the previous meeting, Jose Saez reviewed the Public Works salt balance model and confirmed the results. The model can be improved upon, with elements such as return flow, imported water, SNMP projects, or change in aquifer storage, that can be added as necessary or as information becomes available.

The judge in the Antelope Valley adjudication case identified 110,000 acre-ft/year as the safe yield. This is equal to the return flows and natural recharge combined. The return flows and the natural recharge will be estimated in the SNMP.

A concern was raised regarding some of the salt balance assumptions related to salt and nutrient mixing. The salt balance model is simplified and assumes 100% of the salts/nutrients reach the groundwater aquifer and instantaneous mixing of the salts/nutrients in the aquifer. These were very conservative assumptions. Return flows can take days, months and even years to reach the groundwater aquifer. In addition, it's reasonable to assume that some of the salts/nutrients are absorbed by the plants and trapped in the soil.

Instead of assuming 100% of salts reach the aquifer, Jose suggested making a reasonable assumption for salts and nutrients that are incorporated into plants or stay trapped in the soil to recognize well run agricultural or recycled water operations.

### **Other Comments/Discussion**

If the SNMP includes a master anti-degradation analysis for projects, it would streamline Regional Board approval for those projects. However, a CEQA document may be required. As stated previously, Mr. Plaziak will inform the SNMP stakeholders about the CEQA requirements. Projects not mentioned in the SNMP would have to do their own antidegradation analysis or may trigger an update to the SNMP.

The IRWMP will be finalized by the end of the year. There was a discussion about whether a draft version of the SNMP should be included in the IRWMP as an appendix at that time since the final SNMP will not be available by the end of the year. We need to coordinate with the IRWMP consultant (Brian Dietrick, RMC) or the IRWMP stakeholder group to determine how to proceed and if our options are restricted in any way by the grant funding. A suggested option is to include a placeholder in the IRWMP update for the public review period and provide a complete draft prior to approval of the IRWMP update by the respective boards. Another option is to provide a brief SNMP description to include as part of the IRWMP and have the SNMP as a stand-alone plan.

GAMA and USGS well information will be combined to create a more complete water quality representation of the groundwater basin. Future monitoring wells will be chosen based on water quality availability on the GAMA database and its location relative to SNMP projects. Some sub-basins have little or no well data to accurately characterize the water quality. However, most of these sub-basins do not have identified projects in them. Any agency or group proposing new projects in the future in these sub-basins will have to determine the background water quality and update the SNMP.

### **Antelope Valley Crops**

Antelope Valley crop information was found from LA County Annual Crop Reports and Kern County Annual Pesticide Use Reports. The following crops are grown in the region:

- Alfalfa, hay & other grains
- Apples
- Cherries
- Nectarines
- Peaches
- Pears
- Plums
- Grapes
- Watermelons
- Squash
- Pumpkins
- Onions
- Carrots
- Potatoes
- Misc. vegetables

Chloride has an AGR beneficial use standard of 106 mg/L. This chloride standard comes from a UN Report, titled “Water Quality for Agriculture,” and is specifically intended for avocados, which are sensitive to high concentrations of chloride. Avocados are not commercially grown in the Antelope Valley and are not expected to be grown in the future. The only chloride sensitive crop grown in the region are grapes which, depending on the variety, have a chloride tolerance ranging from below 237.5 mg/L to below 957.2 mg/L. The specific type(s) of grape grown in the region is unknown. The low tolerance level (237.5 mg/L), however, is comparable to the recommended drinking water standard. That said, the chloride water quality goal will be based on the below three-part drinking water standard:

- Recommended SMCL of 250 mg/L
- Upper SMCL of 500 mg/L
- Short Term SMCL of 600 mg/L.

The UN Report is to be used as guidelines only. It does not necessarily mean you cannot use water exceeding the standards listed. A lot depends on how the agricultural site is irrigated and managed. A crop list is also available on the Antelope Valley IRWMP. The list, however, includes broader crop categories.

### **Upcoming Activities**

The next SNMP stakeholder meeting is scheduled for November 20 at the City of Palmdale’s Lilac Room.