

**LAKE MEAD WATER QUALITY FORUM**  
**January 26, 2010**  
**Meeting Summary**

**I. Introductions – Forum members and participating audience members introduced themselves.**

**II. Status Reports:**

**1. Perchlorate Update - (NDEP – Las Vegas)**

**The following perchlorate update was discussed by Todd Croft, NDEP, Las Vegas.**

**LV Wash:**

The perchlorate mass loading passing Northshore Road for over the last two years has been shown to range between ~55 to ~90 lbs/day (October 2007 – October 2009). The perchlorate loading for last quarter (October 2009) was ~60 lbs/day. This is approximately 90 % reduction from pre-remediation values.

The Southern Nevada Water Authority (SNWA) is preparing to construct additional erosion control structures (Weirs) within the LV Wash. The NDEP has prepared a draft NPDES permit to manage discharges from construction dewatering for the Lower Narrows and Homestead Weirs. The BWPC and SNWA are addressing comments received during the public comment period which closed on January 20, 2010. Construction dewatering will be limited to the winter season (~December through May) when Lake Mead is fully mixed. Monitoring is planned within the LV Wash, Lake Mead, and below Hoover Dam to help adjust the dewatering amount and season so the additional perchlorate load can be mixed with the least observable increase in perchlorate concentrations within Lake Mead and the Lower Colorado River.

In response to a question asked by Mr. Tom Porta regarding modeling conducted by the SNWA to support the permit, Mr. Croft indicated that:

1. the modeling established that downstream (Whitsett) concentrations of perchlorate should not increase by more than one ppb if the discharge is kept to less than 80 lbs/day and the discharge is kept to a winter season when the lake is fully mixed (destratified); and
2. The resultant perchlorate concentration in Lower Colorado River water is projected to be lower than applicable State standards.

**Willow Beach:**

The perchlorate concentrations measured at Willow Beach in the Colorado River system continue to remain at or less than 2 ppb since December 2008 and have been measured at < 4 parts per billion (ppb) since June 2004. The perchlorate concentration at Willow Beach last quarter (December 2009) was 2 ppb.

### **Colorado River:**

MWD has reported perchlorate concentrations < 2.0 ppb for all samples collected between July 2008 and October 2009. The perchlorate concentration at Whitsett sampling point last quarter (October 2009) was 1.1 ppb.

### **Tronox LLC (formerly Kerr-McGee):**

The Fluidized Bed Reactor (FBR) perchlorate treatment system continues to operate. Temporary shut-downs of the Athens Road (Galleria Road) Well Field continue to occur due to the construction activities by the COH for the Wastewater Reclamation Facility.

Perchlorate removal rates for the Tronox remediation system now are typically reported between approximately 1,500 and 2,000 lbs per day. Tronox reported ~ 1,556 lbs/day removal rate for December 2009.

Cumulative removal of perchlorate from the environment through December 31, 2009 totals approximately 3,016 tons. This is divided as follows:

- 408 tons from the seep area;
- 974 tons from Athens Road; and
- 1,634 tons from the on-site system.

### **AMPAC:**

AMPAC has completed the installation of a groundwater injection trench at the re-injection well field near Las Vegas Wash. The injection trench is to augment AMPAC's re-injection well field because of repeated fouling of the re-injection wells. Additional groundwater monitoring wells have been installed and tracer testing will be conducted, in part, to evaluate the possible need for additional monitoring wells.

The ISB perchlorate treatment system is currently operating at approximately 225 gpm with a mass loading of approximately 45 – 50 pounds per day.

AMPAC is continuing modeling efforts in the area south of Warm Springs. The model will be used to help determine remediation options closer to the source area.

### **Nationally:**

There is no new information regarding the National discussion on perchlorate. In September 2009, NDEP along with other entities, provided EPA with supplemental comments at their request. There are no new developments to report on this topic.

## **2. Quagga Mussels (NDOW)**

An NDOW speaker was not available for discussion on quagga mussels.

## **3. Selenium Subcommittee**

Eric Orsak, of Fish and Wildlife (FWS) stated that as of the last meeting on January 6<sup>th</sup>, that he and Peggy Roefer of SNWA, have volunteered to chair the Subcommittee. During the last Subcommittee meeting Kathy Sertic elected to step down after a few years of serving on the Subcommittee. Mr. Orsak mentioned they had drafted a mission statement and there were some focus areas discussed. The areas of focus are monitoring, regulations, research and prevention. If anyone would like to take a look at the draft they can contact Mr. Orsak.

Mr. Orsak discussed some recent regulatory developments. There were several tributaries in the Wash recently listed under the 303(d) list as impaired waters. There is uncertainty as to what actions might be taken over the next few years to address the tributary concerns. Mr. Orsak mentioned there has been some speculation that the EPA may present their new draft regarding tissue criterion. Mr. Orsak stated they have not yet selected a date for the next Subcommittee meeting. Since EPA might be presenting a draft for tissue criterion in February, the meeting might have to be scheduled on short-notice and if not, then it will be scheduled for some time in March.

Doug Merkler as a member of the Selenium Subcommittee mentioned appreciation to Kathy Sertic for all of her hard work and contribution to the Subcommittee over the years. Mr. Tom Porta further commented that she took over after he stepped down and commended her also.

## **4. Las Vegas Wash Coordination Committee (SNWA)**

Mr. Seth Shanahan began discussions on updates first by reporting on the topic of stabilization. He mentioned that the CIP for the next few years was recently approved. A total of \$36 million dollars has been dedicated for the construction of several weirs and to design others. The project currently stands with 12 weirs completed and two weirs still under construction. The Lower Narrows and Homestead weirs have been particularly challenging due to dewatering and perchlorate along the Las Vegas Wash. The construction engineers are only able to work on the project during certain short periods of time (December through May). This time factor has become a challenge for the engineers. It is difficult to correlate construction schedules within that timeline.

Mr. Shanahan also stated that the good part about the stabilization program is that while the program is funded by Federal and State grants, there has been some speculation that the program might be fully funded partly because bids have been coming in low due to the economy.

The Bio-Assessment Report which includes data collected 2003-2007 should be available for review very soon. The next meeting for the Research Study Team will be on April 7<sup>th</sup>. They are hoping that the Team has a report ready for the Bio-Assessment results by that time.

The SNWA has taken on some new water quality projects. Dry weather water quality monitoring continues with some added groundwater/dewatering monitoring projects and a new mitigation pond monitoring project.

The DRI had completed a wetland characterization report which will be out for review soon.

Bird species monitoring has continued and no new species have been found. Endangered bird surveys will be completed in 2010. The Bureau of Reclamation's mammal and aquatic bird monitoring projects are still ongoing.

More than 260 acres have been re-vegetated for compliance and grant requirements. Mr. Orsak also stated that 120 acres were planted by volunteers.

Mr. Orsak mentioned an amazing archeological discovery of an old milk house that had been excavated down the Wash. This milk house is going to be re-constructed at the Clark County Museum.

The next meeting will be on April 27, 2010 after the Forum and afterward there will be a tour of the Wash and Lake Mead.

## **5. SCOP Update (CWC)**

Mr. Jim Devlin stated that after the December 15<sup>th</sup> Board meeting the CWC Board took action to suspend the construction of SCOP for a minimum of two years. Mr. Devlin stated he would not be surprised if that time was not extended further out. In the meantime, the city and county managers and the general manager of the CWC have had meetings to discuss the future of the CWC without a large project like SCOP. There have already been two meetings and another one scheduled in the afternoon.

## **III. Presentations**

1. "1956 - 2009 Data Summary, Las Vegas Wash, Las Vegas Bay and Lake Mead"  
Douglas D. Drury, Ph.D.  
Director of Water Quality, Research and Technical Services  
Clark County Water Reclamation District

Presentations are available on the NDEP website at [ndep.nv.gov/forum](http://ndep.nv.gov/forum)

#### **IV. Other Items**

#### **V. Next Forum Meeting**

The next Lake Mead Water Quality Forum meeting is scheduled for April 27, 2010.

#### **VI. Adjourn**

The meeting was adjourned at 12:12 pm