

LAKE MEAD WATER QUALITY FORUM
July 15, 2009
Meeting Summary

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

II. Status Reports:

1. Perchlorate Update – Shannon Harbour (NDEP – Las Vegas)

Ms. Shannon Harbour reported the following updates for perchlorate:

LV Wash:

- The perchlorate mass loading passing Northshore Road for over the last year has been shown to range between ~50 to ~70 lbs/day (April 2008 – April 2009) The average perchlorate loading for last quarter was ~60 lbs/day.
- This is approximately 90% reduction from pre-remediation values when the mass loading at Northshore Road was approximately 900 to 1,000 lbs/day.

Willow Beach:

- The perchlorate concentrations measured at Willow Beach in the Colorado River system continue to remain approximately 2 ppb and have been measured at < 4 parts per billion (ppb) since June 2004.

Colorado River:

- MWD has reported perchlorate concentrations <2.5 ppd for all samples collected between October 2005 and April 2009.

Tronox LLC (formerly Kerr-McGee):

- The Fluidized Bed Reactor (FBR) perchlorate treatment system continues to operate. Perchlorate concentrations in the treated water discharge are routinely < 18 ppb.
- Perchlorate removal rates for the Tronox remediation system now are typically reported between approximately 1,500 and 2,000 lbs per day. Tronox reported ~ 1,550 lbs/day removal rate for December 2008.
- Removal of perchlorate from the environment through December 31, 2008:
 - ~2,873 tons total: 404 tons from the seep area
 - 916 tons from Athens Road
 - 1,553 tons from the on-site system

AMPAC:

- NDEP (BCA and BWPC) have been meeting with AMPAC to discuss system optimization including the installation of an injection trench within the current re-injection well field. Currently in permitting process.
- AMPAC continuing modeling efforts in the area south of Warm Springs. Model will be used to help determine remediation options closer to the source area.
- In-situ system averaging a mass reduction rate of ~39lbs/day.

Nationally:

- In January 2009, EPA released an Interim Drinking Water Health Advisory for Perchlorate of 15 ppb. EPA is seeking the advice of the National Academy of Science before making a final determination on perchlorate.
- The NDEP will continue to use the Provisional Action Level of 18 ppb for the foreseeable future.

Peggy Roefer of SNWA reported the drinking water perchlorate levels were 1.6 micrograms per liter.

Tom Porta stated it has been mentioned in the media that Tronox is filing for bankruptcy. NDEP has been in contact with Tronox and their contractors and they have assured NDEP that the bio treatment plant will remain in operation. There has been a separate account set aside in order to keep the facility running. NDEP has been closely monitoring the situation. A law firm has been hired to handle the Tronox bankruptcy specifically, (not through the A.G.'s office) and if there are any changes NDEP will be notified. There has been nothing to show that the facility is going to be shut down. If something did happen there is funding available for an interim period to help keep the facility running but there are no problems at this point. Information on any new developments will be mentioned at future forums.

2. Quagga Mussels (NDOW)

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

3. Selenium Subcommittee

Kathy Sertic stated that she did not have an update at this time. She mentioned there was a Selenium Subcommittee Meeting scheduled after the Forum.

4. Las Vegas Wash Coordination Committee

Mr. Seth Shanahan reported on the following:

The last meeting for the LVWCC was held on April 28, 2009. At the meeting they discussed activities from the study teams, Clark County Wetlands Park and the Clean Water Coalition.

The following are presentations received: The LVVWAC Regional Water Quality Plan, Water Supply Risk on the Colorado River and Potential Changes in Lake Mead Water Quality (as a result of climate change) were presented at the meeting. The 2008 Year End Report was also received and is available on lvwash.org.

The DU Wetlands No. 2 Weir was nearing completion as the 12th weir installed on the Las Vegas Wash.

Hydrologic and biologic monitoring continues with grant funding provided by the U.S. Bureau of Reclamation. Two wetland monitoring projects will be completed this summer with reports prepared thereafter. No threatened and endangered bird species were detected in 2009 surveys.

The LVVWAC's last meeting was held on June 9, 2009. Topics discussed included the development of Annual Operating Plans (AOP) by the regional agencies. The AOP's are due for completion in December.

The next LVWCC meeting will be held on July 28th and next LVVWAC meeting will be held on September 9th.

5. SCOP Update:

Lynn Orphan of the CWC announced that they have completed the Selenium Management Plan on time. The deadline was June 12th. It was mailed to Parks Service on June 11th. It was a great group effort by all of the agencies involved statewide and in the Las Vegas Valley. Ms. Orphan stated she wanted to present the Plan to the Selenium Subcommittee after the Forum. The draft for the Plan is also available as a PDF file.

In the Boulder Basin Adaptive Management Plan, items of concern have been identified. The CWC continues to do monitoring and modeling in Lake Mead and is participating in the LVVWAC's regional plan that Seth Shanahan mentioned. They are also working on the annual operations plan.

The SCOP project itself has seen changes and conditions due to slowing growth in the valley and the effects of the economy which has interfered with funding for projects. The CWC board has asked staff to pause and evaluate the need and timing for SCOP. The effluent pipeline needs to be installed into Lake Mead as soon as originally planned. However, the CWC are taking a pause for further evaluation. They are gathering a technical review team that will include dischargers, SNWA and other parties to assist with technical input and review. The team will also look at regulatory and financial aspects. The Board gave CWC 6 months to get more information gathered but it could take longer. Ms. Orphan assured that the CWC will keep everyone involved and informed.

III. Presentations

1. *Water supply risk on the Colorado River: can management mitigate?*
Summary of a presentation by Kenneth Nowak to the Las Vegas Wash Coordination Committee on April, 28, 2009—
Seth Shanahan, Southern Nevada Water Authority

2. *Quagga Mussels*
Interagency Monitoring and Assessment Program
Shawn Gerstenberger, Ph.D., Associate Professor, Chair, Department of Environmental and Occupational Health, University of Nevada Las Vegas
David Wong, Ph.D., Research Assistant Professor, Department of Environmental and Occupational Health, University of Nevada Las Vegas
National Park Service Management Activities
Emily Lehman, National Park Service

3. *Nevada Infrastructure for Climate Change Science, Education and Outreach*
Thomas Piechota, Ph.D., P.E., Assistant Professor, Department of Civil and Environmental Engineering, University of Nevada Las Vegas

These presentations are available on the NDEP website at ndep.nv.gov/forum

IV. Other Issues

V. Next Forum Meeting

The next Lake Mead Water Quality Forum meeting is scheduled for October 14, 2009.

VI. Adjourn

The meeting was adjourned at 12:12 pm