

**WESTCAS**  
**2013 Annual Conference**  
**June 26-28, 2013**

*“The Intersection of Water  
and Economics”*

**State Reports**



*“The Voice of Water Quality in the Arid West”*

## WESTCAS STATE REPORT

**STATE:** Arizona

**NAME OF PRESENTER:** Jim Kudlinski, Salt River Project

**DATE:** June 2013

### **ADEQ's Compliance & Enforcement Workshop**

During the week of January 21, 2013, ADEQ hosted an invitation only 5-day workshop with stakeholders that represented most of Arizona's major industry segments, i.e., electric power generation, mining, municipal utilities, semi-conductor manufacturing, etc. (Note: Jeremy Mikus, WESTCAS Board Member and City of Tempe representative participated in the workshop). The purpose of the workshop was to openly discuss and identify ways to streamline and improve workflow processes between ADEQ and the regulated community.

By the conclusion of the workshop, participants identified the following action items for future development:

- Establishing better partnerships between industry and ADEQ.
- Improving compliance assistance and outreach.
- Improving training/education of ADEQ staff.
- Establishing clear compliance benchmarks/expectations.
- Conducting compliance and enforcement actions that focus on legitimate environmental and human health risks.
- Providing better communication from ADEQ (written and verbal).
- Reducing turnaround times for inspection reports and enforcement documents (NOCs / NOV's). In-field issuance of reports and NOCs whenever possible.
- Quickly resolving non-compliance findings.
- Streamlining the enforcement processes (Consent and Compliance Orders).

ADEQ is currently in the process of developing timelines and working on items that will have the largest impact on the regulated community.

### **EPA issues Navajo Generating Station BART Decision**

The Environmental Protection Agency (EPA) public noticed their Best Available Retrofit Technology (BART) proposal for the Navajo Generating Station (NGS) on February 6, 2013.

NGS is a coal-fired power plant located on the Navajo Nation Indian Reservation, just east of Page, Arizona, approximately 135 miles north of Flagstaff, Arizona. The three 750 MW units at NGS were constructed from 1974 to 1976. At a capacity of 2250 MW, NGS is the largest coal-fired power plant in the western United States. NGS is jointly owned by the U.S. Bureau of Reclamation, Salt River Project, Los Angeles Department of Water and Power, Arizona Public Service, Nevada Power, and Tucson Electric Power.

Federal participation in NGS was authorized in the Colorado River Basin Project Act of 1968 as a preferred alternative to building hydroelectric dams in the Grand Canyon for providing power to the Central Arizona Project. The Central Arizona Project (CAP) is a 336-mile water distribution system that delivers about 1.5 million acre-feet (AF) per year of Colorado River water from Lake Havasu in western Arizona to non-tribal agricultural water users in central Arizona, Indian tribes located in Arizona, and municipal water users in Maricopa, Pinal, and Pima counties. CAP water is used to meet the terms of a number of Indian water rights settlements in central Arizona and to reduce groundwater usage in the region. Electricity from NGS powers the pumps that move CAP water to its users along the distribution system.

NGS is located near many national parks and wilderness areas. Congress mandated heightened visibility protection for these areas in designating them as mandatory Class I Federal areas. Eleven Class I areas are located within 300 km of NGS: Arches National Park (NP), Bryce Canyon NP, Canyon Lands NP, Capitol Reef NP, Grand Canyon NP, Mazatzal Wilderness Area (WA), Mesa Verde NP, Petrified Forest NP, Pine Mountain WA, Sycamore Canyon WA, and Zion NP.

EPA's BART proposal requires additional emission control technology to be installed at NGS for the purpose of improving visibility in the nearby national parks and wilderness areas. If EPA ultimately decides that the most stringent control technology under consideration needs to be installed, i.e., selective catalytic reduction (SCR), NGS owners may be required to invest over \$1.1 billion.

In addition to the BART proposal, the site lease with the Navajo Nation, and the grants of rights-of-way for the plant, railroad, transmission and water lines, will begin expiring in 2019. A lease extension and renewals of the rights-of-way are needed before the owners can commit to investing over \$1.1 billion in additional emission control equipment.

EPA's BART proposal was published in the Federal Register on February 6, 2013, beginning the 90-day public comment period. The deadline for submitting comments on was extended an additional 90 days to Aug. 5, 2013.

What's at stake if the plant shuts down?

- **The Central Arizona Water Conservation District (CAWCD), which operates the Central Arizona Project (CAP), is the single largest end user of power in Arizona. NGS provides more than 90% of the energy used by CAWCD to move water from the Colorado River across Arizona. CAWCD's share of NGS power not used for pumping is sold by the agency to help Arizona repay the costs of constructing the CAP, and to fund Indian water rights settlements in Central Arizona. An EPA requirement to install costly additional emission controls could result in significant increases in water rates, and jeopardize Indian water rights settlements.**
- NGS, along with the Kayenta mine that provides coal to the plant, is a major contributor to the economy of the Navajo Nation, the Hopi Tribe, the city of Page, Coconino County, and the state of Arizona. NGS employs more than 520 people, more than 85% of whom are Navajo. The Kayenta Mine, which supplies coal to NGS, has more than 400 employees, most of whom are Native American. This accounts for about 1,000 direct jobs between the two facilities.
- Payments to the Hopi Tribe represent 88% of the non-federal tribal budget, according to statements made by Hopi leaders to the EPA in March 2010. This income directly impacts every aspect of Hopi life, including the education of Hopi young people, health and social service programs, infrastructure and many other essential tribal programs.
- NGS also provides substantial broader economic benefits to the state of Arizona as a whole. In a recent study, Arizona State University estimated that NGS and the Kayenta Mine will generate for more than \$20 billion for the state of Arizona between 2011 and 2044, and contribute to more than 3,000 jobs each year. ASU just completed another study to identify the economic benefits that NGS and the mine would provide specifically to the Navajo Nation. That study found that NGS and the mine will contribute \$13 billion to the Navajo Nation economy between 2020 and 2044.

- The overhaul outage budget at NGS for 2010 exceeded \$60 million and employed more than 1,000 temporary workers employed by SRP and 50 contractors. This maintenance activity contributes significantly to the local economy during the tourism off-season.

### **ADEQ Reissues the Construction General Permit 2013**

On May 29, 2013, ADEQ reissued the Arizona Pollutant Discharge Elimination System (AZPDES) Construction General Permit. The effective date was June 3, 2013.

Two new options will allow operators to submit a Notice of Termination (NOT) without meeting the permit's "final stabilization" requirements.

One option allows site operators that have retention capacity that meets or exceeds the 100 year/2 hour storm event to submit a Notice of Termination (NOT) without having to meet the final stabilization requirements.

The other options allows site operators to submit a NOT without meeting final stabilization requirements if they can demonstrate that the site's post-construction stormwater flows are equal to or less in volume and pollutant loads than pre-construction flows.

Operators choosing to use either option will have to submit documentation (calculations) to ADEQ from an Arizona registered professional engineer, geologist or landscape architect with the NOT.

The Fact sheet and Permit are available at: <http://www.azdeq.gov/environ/water/permits/cgp.html>

### **STORM holds MS4/MSGP Permittee Compliance Assistance Workshop**

On June 18, 2013, STORM held a compliance assistance workshop for local MSGP permittees. The workshop was promoted as a "...stormwater meeting run by permittees for permittees to network, provide presentations and answer questions." Workshop topics included: enforcement, audits, ADEQ's new 2013 construction general permit, low impact development and the watershed approach to treatment.

Those invited to attend included AZDPES MS4 coordinators, public works managers, water quality managers, environmental and construction managers and inspectors, and those interested in AZDPES municipal compliance.

STORM (STormwater Outreach for Regional Municipalities) is an Arizona-based coalition of 22 municipal Phase I & II MS4 permittees.

## WESTCAS STATE REPORT

**STATE:** California

**NAME OF PRESENTER:** Sara Toyoda

**DATE:** June, 2013

### **Precipitation**

The California water year is considered to be from October 1st to September 30<sup>th</sup>. Last water year was recorded as a dry year. This year the January-May period was the driest on record (since 1920) for all regions of the Sierra. Dry conditions prompted the California Department of Water Resources to lower its estimated State Water Project deliveries this year to 35 percent of contractors' requests. On May 1, snowmelt and lack of snowfall had been so prevalent that nearly 90 snow courses were bare and the statewide snow water content was about 15 percent of average. However, supplies for most areas of the state are expected to be sufficient for the coming summer months because there was an early wet start to the water year that resulted in generally good reservoir storage in most of the state's major reservoirs. Governor Brown recently issued an Executive Order to streamline approvals for voluntary water transfers to assist California's agricultural industry cope with the record dry conditions (Water Conditions, 2013).

### **Regulations**

#### Chromium 6

In July 2013, California is set to announce the state's maximum contaminate level (MCL) for chromium 6. On July 27, 2011, the Office of Environmental Health Hazard Assessment (OEHHA) established a public health goal (PHG) for chromium-6 (hexavalent chromium) of 0.02 micrograms per liter ( $\mu\text{g/L}$ ). The California Department of Public Health (CDPH) is required by California law to set an MCL for hexavalent chromium and to set the MCL as close to the PHG as possible, taking into account technical feasibility (e.g., detectability and treatment) and costs. Once CDPH announces the draft MCL, it will go through a process through the Office of Administrative Law and there will be opportunity for public comment (California Department of Public Health, 2012).

#### Fracking

California has released the state's first regulations for hydraulic fracturing or "fracking," the practice of freeing oil and gas from rock formations by injecting chemicals under high pressure into the ground. Fracking can create jobs and natural gas as an energy source produces less greenhouse gases than coal. However, there are concerns that the chemicals can create environmental and public health issues. Companies in California have used fracking techniques since at least the 1960s but recently there has been a massive expansion of the practice. Environmental groups have responded that the proposed rules are too weak (Rogers, 2012). At this time, no California fracking legislation has become law.

#### State Revolving Funds

California was declared out of compliance with the federal Safe Drinking Water Act because of \$455 million in state revolving funds that has not been spent. The program is administered on behalf of the EPA by the California Department of Public Health. The problem is not unique to California, but the scope is larger in California than elsewhere (Weiser, 2013).

## **Legislative**

### **Water Bond**

A California Water bond for 11.14 billion dollars is scheduled for the November 2014 ballot. This bond was originally set to go to vote in 2010. New polls from the California Institute of Public Policy show weak support mostly due to the high amount of the bond. However, the U.S. EPA has released a report indicating that California will need 44.5 billion dollars through 2030 for infrastructure needs and the country as whole will need 384 billion over the next 20 years. Most water system needs are not directly related to violations of the Safe Drinking Water Act regulations. Most needs are ongoing investments that systems must make to continue delivering safe drinking water to their customers (United State Environmental Protection Agency, 2013).

### **Water Rights**

The Agua Caliente Band of Cahuilla Indians filed a lawsuit in federal court against two water agencies in the Coachella Valley. The lawsuit seeks to assert rights to groundwater beneath the reservation and accuses the water agencies of mismanaging the groundwater supplies. This is not necessarily new news as court cases over water are waged all across California and the West (James, 2013). But as California moves into a second dry/drought year, expect to see more problems associated with limited water supplies.

### **NPDES - Receiving Water Limitations language.**

California NPDES permits currently have 2 clauses for receiving water limitations, "Permittee discharges shall not cause or contribute to violation of Water Quality Standards." Then there is a separate clause which establishes the iterative process. It was the 9th Circuit Court's opinion that the first line shall be enforced separately from the second. All of the current draft state-wide Permits have this stand-alone provision which separates the iterative process from the, "do not cause exceedances," language. As separate language, MS4 operators are left open to legal action. There has been some movement to clarify the language but currently no resolution has been found. NPDES permits continue to be adopted with the current language including the San Diego Permit. However, MS4 permittees continue to push for alternative solutions.

### **Bay Delta Conservation Plan Update (BDCP)**

The Sacramento-San Joaquin Delta is a vital link in California's water system. Water diversions directly from the delta supply drinking water for 25 million people. The Bay Delta Conservation Plan Update is a 50 year ecosystem-based plan as opposed to the species by species approach used in Delta Planning before. The plan includes biological goals, habitat restoration and new conveyance facilities (Bay Delta Conservation Plan, 2013). The current plan would mean 37 miles of conveyance tunnels under the delta and a cost of approximately 24.5 billion over 50 years. The plan does not increase water supply but makes the supply more reliable (Ball, 2013). The State of California and the Obama Administration have agreed to a formal deadline of October 1, 2013, for the release of the draft Bay Delta Conservation Plan and accompanying environmental documents for public review and comment (Bay Delta Conservation Plan, 2013).

## **Water Challenges/Local Environmental Issues**

### **Drought Funding**

There is a long list of topics that can be covered under this section. But at this time drought and funding seem most prominent. Last year was a dry year for California and this year may be one of the driest. Managing water supplies under drought conditions are difficult enough but the conditions also intensify associated problems such as water rights and wildfires. These types of issues continue to be at the forefront of California water issues. This report references astronomical numbers in terms of how much money is estimated to be needed in for managing reliable water supplies. How to fund these projects has always been a critical issue. As California moves forward into a second dry year this issue only becomes more important.

- Water Conditions*. (2013, June 6). Retrieved June 7, 2013, from Department of Water Resources:  
<http://www.water.ca.gov/waterconditions/>
- Ball, A. (2013, June 1). *Bay Delta Conservation Plan: System of tunnels, levee reconstruction best approach to protecting state, Silicon Valley water supply*. Retrieved from Mercury News:  
[http://www.mercurynews.com/opinion/ci\\_23363402/bay-delta-conservation-plan-system-tunnels-levee-reconstruction](http://www.mercurynews.com/opinion/ci_23363402/bay-delta-conservation-plan-system-tunnels-levee-reconstruction)
- Bay Delta Conservation Plan. (2013). *Home*. Retrieved from Bay Delta Conservation Plan:  
<http://baydeltaconservationplan.com/Home.aspx>
- California Department of Public Health. (2012, July 9). *Chromium-6 in drinking water: MCL update*. Retrieved from California Department of Public Health:  
<http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chromium6.aspx>
- James, I. (2013, May 19). *Lawsuit claims agencies put water supply at risk*. Retrieved from The Desert Sun:  
<http://www.mydesert.com/article/20130518/NEWS07/305180046/Lawsuit-claims-agencies-put-water-supply-risk>
- Rogers, P. (2012, December 19). *California releases first-ever fracking regulations*. Retrieved from MercuryNews.com: [http://www.mercurynews.com/science/ci\\_22219233/california-releases-first-ever-fracking-regulations](http://www.mercurynews.com/science/ci_22219233/california-releases-first-ever-fracking-regulations)
- United State Environmental Protection Agency. (2013). *Drinking Water Infrastructure Needs Survey and Assessment*. Washington, D.C. : Office of Water.
- Weiser, M. (2013, April 20). *EPA slams California for not spending clean-water funds*. Retrieved May 5, 2013, from The Sacramento Bee: [http://www.sacbee.com/2013/04/20/5357172/epa-slams-california-for-not-spending.html#mi\\_rss=Environmentl](http://www.sacbee.com/2013/04/20/5357172/epa-slams-california-for-not-spending.html#mi_rss=Environmentl)

## WESTCAS STATE REPORT

**STATE:** Colorado

**NAME OF PRESENTER:** Mike Eytel

**DATE:** June 2013

On May 14th Governor Hickenlooper signed an **Executive Order D 2013-005** directing the Colorado Water Conservation Board (CWCB) to “commence work on the Colorado Water Plan.”

The CWCB is tasked to align various state water projects, studies, funding, and other efforts in a cohesive plan that reflects the state’s water values. A Draft Colorado Water Plan due December 2014 and Final Colorado Water Plan due December 2015.

Reasons for the plan:

- Addressing the increasing gap between our water supply and our water demand.
- Streamlining the processes associated with water projects.
- Aligning water policy with our water values.

The lists of “water values” highlighted by the plan are:

- The importance of an economy supported by cities, agriculture, as well as the “robust skiing, recreation, and tourism industry.”
- Efficient and effective water infrastructure promoting smart land use.
- A strong environment that includes healthy watersheds, river and streams, and wildlife.

The Colorado Water Plan will build on the work already done by The Interbasin Compact Committee (IBCC) and individual basin roundtables. The IBCC was established by the [Colorado Water for the 21st Century Act](#) to facilitate conversations among Colorado’s river basins and to address statewide water issues. [A 27-member committee](#), the IBCC encourages dialogue on water, broadens the range of stakeholders actively participating in the state’s water decisions and creates a locally driven process where the decision-making power rests with those living in the state’s river basins. Nine separate basin roundtables also were established by the Act for each of the state’s eight major river basins and the Denver metropolitan area. These basin roundtables facilitate discussions on water issues and encourage locally driven collaborative solutions. The broad-based, collaborative nature of this process is reflected in the roundtable membership.<sup>1</sup>

The plan will also include policy focusing on both water quantity and quality. These two topics have typically been thought of separately in the planning process. The CWCB is directed to align the state’s role in water project permitting by coordinating with numerous local, state, and federal agencies in order to streamline the approval and regulatory process regarding water projects.<sup>2</sup>

2013 has been a busy year in the legislative and regulatory worlds so far in Colorado. The following are some of the more notable bills, regulatory changes, Water Quality Forum revisions, and hydrology updates:

### **HB13-1044 CONCERNING THE AUTHORIZATION OF THE USE OF GRAYWATER**

This bill defines “gray water” as that portion of wastewater that, before being treated or combined with other wastewater, is collected from fixtures within residential, commercial, or industrial buildings or institutional facilities

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<sup>1</sup> Colorado Water Conservation Board. Interbasin Compact Committee and Basin Roundtables  
<http://cwcb.state.co.us/about-us/about-the-ibcc-brts/Pages/main.aspx>

<sup>2</sup> **Executive** Order D 2013-005; <http://www.colorado.gov/cs/Satellite/GovHickenlooper/CBON/1251616203275>



for the purpose of being put to beneficial uses authorized by the Water Quality Control Commission (CWQC). Prior to this bill's approval Colorado statutes did not recognize or authorize gray water use. The bill directs the WQCC to develop statewide standards for gray water systems and lets cities and towns decide whether to approve them.<sup>3</sup> While clearly not a panacea for water supply, this bill provides much needed flexibility for communities to plan and conserve their future water supplies.

### **HB-13-1191 Nutrient Grant Fund & Regulation #55 Water Quality Improvement Fund**

During the 2013 legislative session the General Assembly created a new program under HB-13-1191 entitled the Nutrient Grant Fund. HB-13-1191 requires the WQCC to promulgate rules necessary to administer the program as an amendment to Regulation #55, the Water Quality Improvement Fund. There are four subsections for administering the program; entity eligibility, project eligibility, project prioritization, and funding allocation and awarding process. Funds can be used for projects to plan, design, construct, or improve a wastewater treatment works in order to comply with the effluent limits of Regulation #85. The State approved \$15 million from the General Fund for this grant program. Statewide needs far exceed available funding. There are 46 entities considered high priority for the funding. Applicants need to provide a minimum of twenty percent (20%) match to show commitment. The timeline for funding is short; submittals are due by July 3, 2013 with project completion in three years.<sup>4</sup>

### **Regulation #31 – The Basic Standards and Methodologies for Surface Water**

In September 2012 the WQCC approved granting discharger specific variances to water standards with a delayed effective date of October 1, 2013. At this time the WQCC is developing implementation guidance and plans to adopt language prior to the delayed effective date.

Granting this type of variance approval is dependent on two tests to determine the need for the variance. An applicant for a variance must satisfy both of the following criteria.

1. Tests to determine the need for a variance.
  - A. Limits of technology: Demonstrating that attaining water quality standards is not feasible with current technology.
  - B. Economics: Demonstration that attaining water quality standards will cause substantial and widespread social and economic impacts in the area where the discharge is located.
  - C. Other Consequences: Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place.
2. Demonstration that the conditions for granting a temporary modification are not met; or, if those conditions are met, determination by the WQCC that granting a variance under this subsection is preferable as a matter of policy.<sup>5</sup>

At this time the EPA has not taken any formal action on the new and revised provisions relate to discharger-specific variance most likely due to the delayed effective date.

### **Arkansas River Basin Triennial Review – Regulation #32**

On June 10, 2013 the Colorado Water Quality Control Commission will consider adoption of Site-specific copper (Cu) criteria for a portion of Fountain Creek based on EPA's water quality criteria for Cu using the Biotic Ligand Model (BLM) rather than the usual hardness method. Fixed Monitoring Benchmarks (FMB) for Cu are derived from a probability-based method that incorporates time variability in the BLM-predicted instantaneous water quality criteria (IWQC) as compared to measured in stream Cu concentrations. The term "FMB" is used because it is a

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<sup>3</sup> House Bill 13-1044;

[http://www.leg.state.co.us/clics/clics2013a/csl.nsf/fsbillcont/7A5BB9369AB7D2F787257AEE005725A9?Open&file=1044\\_01.pdf](http://www.leg.state.co.us/clics/clics2013a/csl.nsf/fsbillcont/7A5BB9369AB7D2F787257AEE005725A9?Open&file=1044_01.pdf)

<sup>4</sup> Water Quality Improvement Fund, Regulation #55.

<sup>5</sup> The Basic Standards and Methodologies for Surface Water, Regulation #31(5 CCR 1002-31).

benchmark that can be used to evaluate compliance with water quality criteria at the specific allowed excursion frequency set by these criteria (i.e., no more than one excursion every three years). In this case utilizing the BLM shifted the Cu chronic standard from 10 to 17 ug/l causing the discharger to move from periodic to noncompliance. This standard is a first for Colorado and quite possibly the first in the nation. One can easily see the BLM is both a promise of less stringent and more stringent standards.<sup>6</sup>

### **House Bill 13-1293 – Creation of a position for Climate Change Matters**

On May 28, 2013 Governor Hickenlooper signed House Bill 13-1293 directing the Governor to create a position within the Executive Branch which the position must include the term “Climate Change” in its title. The position has minimum outlined duties in relation to climate change including specific policy recommendations which address climate change and reduces greenhouse gas emissions. The position will be responsible for creation of climate action plan and provide an annual report.<sup>7</sup> The job description is loosely described but at least the state is willing to engage the conversation.

### **Water Quality Forum Process Revisions**

The **Colorado Water Quality Forum (CWQF)** was created in 1992 to provide an opportunity for an ongoing informal dialogue among diverse parties representing a broad spectrum of stakeholder interests in water quality management. Participants include water suppliers, industrial and municipal dischargers, environmental groups, and federal, state, and local governmental agencies.

The mission of the Water Quality Forum is “to achieve solutions to Colorado water quality issues through communication and understanding, balancing use and protection of the resource”. One of the principal tools used by the Forum to accomplish this mission is multiple stakeholder “work groups” established to address specific priority issues or topics. At its 2012 retreat, CWQF held a discussion regarding concerns the forum work group process is not working well and that revisions to the work group guidelines should be considered. A small group of Forum members agreed to meet to develop suggestions for change that could improve the process (Guidelines Group). Out of its initial meetings, the Guidelines Group identified several areas that could be considered for future change. These areas included:

- Identify concerns (e.g., availability of technology to provide required treatment) of work group participants that might constrain the process and identify where there may be flexibility.
- Identify ways to encourage fuller participation in the work group process by affected parties (e.g., regulators, municipalities, industry, agriculture, the conservation community). Identify how the Forum can help with this. The goal is to have all parties work within the work group process first before seeking relief from other parties (e.g., the legislature or the governor’s office).
- Work together in partnership to set priorities for Colorado’s water quality management program. This would include regulatory and policy initiatives.
- Use of a neutral facilitator to moderate contentious work group issues as needed.
- Use poster boards and reminders to facilitate professional conduct at work group meetings.

The Guidelines Group identified two core issues that should be addressed to improve the success of the Forum and the work group process:

- 1) Stakeholders not fully committing to working together as partners,
- 2) Need more effective communication (e.g., active listening and more time for discussion) during the work group process, and clarify the role of the Forum and the roles of the various Forum members.

This would represent a significant change to current Forum practice and would take substantial time and effort. However, the core issues of Forum members working together as partners and improving communication must be maintained in order to ensure an effective and sustainable path forward for developing and implementing solutions to protect Colorado’s precious water resources. The CWQF is probably one of the most active and diverse

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<sup>6</sup> Proposed Revisions to Classifications and Numeric Standards for the Arkansas River Basin, Regulation #32(5 CCR 1002-32).

<sup>7</sup> House Bill 13-1293, signed 5/28/2013.

stakeholder groups in existence and from time to time it is advantageous to take a step back and review the process and make revisions when necessary.<sup>8</sup>

## **Hydrology Update**

February was very dry and conditions did not improve in March. Precipitation in March was much below average over the entire Colorado River Basin. The exceptions to this were the headwaters of the Yampa and the Colorado River. Seasonal October-March precipitation in the water supply producing areas is generally 70-85 percent of average. A wet April and May brought seasonal (October-May) precipitation values to near or above average in the Colorado River headwaters.<sup>9</sup> Total reservoir storage in the Colorado River Basin has increased from 29.8 maf (50% of capacity) at the beginning of 2005 to 31.8 maf (52 % of capacity) as of June 9, 2013. Conditions in both 2012 and 2013 have been significantly drier than average and given observed inflows and current forecasts; the projected end of water year 2013 total reservoir storage is approximately 29.4 maf (49% of capacity). Based on observed inflows and current forecasts, water year 2013 unregulated inflow to Lake Powell is expected to be 4.76 maf (44% of average), which would be the second below-average year in a row.<sup>10</sup> The following graphic depicts overall seasonal precipitation throughout the entire Colorado River Basin from October 2012 – May 2013.

(See illustration on separate handout)

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<sup>8</sup> Colorado Water Quality Forum. <http://colowqforum.org/bi-monthly-meetings-current.html>

<sup>9</sup> Colorado Basin River Forecast Center April 1 and June 1 2013 Water Supply Forecasts. <http://www.cbrfc.noaa.gov/wsuf/wsuf.php>

<sup>10</sup> United States Bureau of Reclamation Lake Powell Current Status. <http://www.usbr.gov/uc/water/crsp/cs/gcd.html>

## WESTCAS STATE REPORT

**STATE:** Nevada

**NAME OF PRESENTER:** Bruce Johnson

**DATE:** June, 2013

### Water Quality Issues in Nevada

1. EPA 303D Listing. EPA recently published its list of contaminants in Nevada for which water quality standards are being exceeded. EPA identified Mercury. On the other hand the State of Nevada did not think mercury should be listed. This is reflection of disagreements between EPA and NDEP. Mercury is probably tied to mining.
2. Storm Water. The Truckee River is being modeled for nutrients and, in particular, the impact of storm water on nutrients in the River. In the future there will probably be more emphasis on controlling storm water as a means of controlling nutrients, particularly phosphorous.
3. Lake Mead. There are concerns about the continuing drop in elevation of the lake and the impact that will have on water quality in the Lake. As the Lake level drops, Lake Mead will be less of a sink for phosphorous and more phosphorous may be passed on to down-stream users. Downstream users are concerned that increased phosphorous in their storage reservoirs could produce algae growth and resultant taste and odor issues. Also with SNWA's completion of the 3<sup>rd</sup> intake tunnel, the Lake can be drawn down to lower levels without impacting drinking water quality. There is concern that this will allow USBR to operate the Lake at lower levels in order to meet downstream demands and creates a level of uncertainty with discharges as to possible impacts on water quality standards that might be required in the Las Vegas Wash.
4. Emerging Contaminants. State of Nevada will not address this issue unless required by Federal Regulations, but CCWRD is constructing a 30 mgd membrane and ozone facility which will be placed into operation later this year. The operation of this facility will provide long term data, which will demonstrate the effectiveness of membranes and ozone in reducing EDCs.
5. Disinfection. Both CCWRD and COH are conducting studies to see if they can get additional removal credits from membranes and UV. This will reduce the amount of ozone or chlorine that might be required, thus reducing cost.

## WESTCAS STATE REPORT

**STATE:** New Mexico

**NAME OF PRESENTER:** Joshua Rosenblatt

**DATE:** June, 2013

Well the Rio Grande from Elephant Butte south to Texas stayed completely dried up. The Lower Rio Grande Project has now hit the lowest levels and deliveries since 1906. WET testing has now been replaced by beach combing, ATV's, and 3 on 3 Beach volleyball competitions sponsored by Coppertone, Panama Jack, and Bacardi Rum in what used to be the Rio Grande. – Just Kidding about the sponsorships. The WET testing for some reason continues along this portion of the “river” where no aquatic habitat existed now for 10 months out of the year.

**Speaking of WET tests:** The Las Cruces Utilities did have a non-lethal violation that was considered a permit violation and resulted in resampling and increased frequency. I know a survey was taken of the WESTCAS membership on this matter and I would like an update on where that issue currently stands or if it has been incorporated into larger more sweeping loading and receiving stream issues? Additionally, when the re-sampling required of the failed test overlapped the next frequency testing we were advised that we couldn't use the same sample for satisfaction of both requirements. Did the test of the receiving waters or that of the dilution suddenly stop being representative based on what the data was being applied to?

**Reclaimed water:** Expanded use of reclaimed water is rising. These permits are being issued by the New Mexico Environment Department Ground Water Bureau. While my experience has been positive other facilities have encountered inconsistencies in permit requirements. Here is a case of an adopted reclaimed water guidance document subject to individual staff interpretations preparing permit guidelines. The regulatory defense is that the guidance provides staff with the flexibility to write permits appropriate to the facility and the end users site and application. The current challenge is there has been a volume of staff roll changes, retirements, and new hires at NMED resulting in a return to square one for projects not yet finalized in permitting or in other longer term dialog or understandings that are suddenly lost in the turnover. This applies to all the issues.

**Triennial Review Issues:** New Mexico is undergoing the triennial review process. Of primary concern is the classification of the contact usage determination as primary or secondary as this determination influences discharge loadings on receiving waters from both WWTP permits and Municipal Stormwater quality standards. State proposal is to adopt EPA's recent recommendation for Statistical Threshold Value instead of Single Sample Maximum. Further options or recommendations?

**Nutrients:** New nutrients requirements have already negatively impacted two NM community treatment plants in the Village of Ruidoso and the City of Ruidoso Downs. Our own Ms. Kelly Collins reported that \$38M was spent on a new WWTP which was issued effluent limits not technically achievable. It is forecasted that many of the northern NM communities will find themselves subjected to new low nutrient limits as their receiving waters are determined to be nutrient “impaired”. The NM Municipal League did create within the Environmental Quality Association subcommittee a Nutrient Task Force working with NMED to address the problem while maintaining the intent of the nutrient standards. The committee resolution advanced by the Task Force is to develop site specific standards that do establish reasonable attainable TMDL standards that are neither over-nor under-protective. Alternative criteria continue to be explored and advanced.

## WESTCAS STATE REPORT

**STATE:** Texas

**NAME OF PRESENTER:** Wayne Owen for Dr. Peggy Glass

**DATE:** June, 2013

Texas continues to work to address water quantity and water quality issues. The 2013 regular legislative session just wrapped up. A major topic during the session was the creation of a loan fund to facilitate the implementation of the State Water Plan. Following are summaries of the current status of water supplies in Texas, the actions of the legislature, developments related to the quality of surface waters, and the status of the permit that was federalized because the State did not include permit limits for Whole Effluent Toxicity (WET).

### **WATER QUANTITY**

Drought conditions have eased in much of Texas. However, the Panhandle area of Texas is still in extreme drought, and reservoirs in some river basins are still very low. The reservoirs in the Colorado River Basin are at 29% of total capacity, and the reservoirs in the Nueces River Basin are at 36% of total capacity.

### **STATE FUNDING FOR WATER PROJECTS**

The State of Texas has an ongoing planning program to identify potential future water supply shortages and to develop strategies to address those shortages. The Texas Water Plan is updated every 5 years by regional water planning groups that represent the various stakeholders in their respective regions. The program is funded through the Texas Water Development Board, which oversees the process and compiles the results into a single plan for the state. Texas is projected to experience significant water shortages in the future, if additional supplies are not made available, and it will require substantial investments to construct the facilities needed to provide those supplies.

During the just-completed session, the Texas Legislature approved the creation of a \$2 billion loan fund for projects related to water supply and conservation that are needed to implement the Texas Water Plan. The money for this program can be provided from a reserve fund commonly referred to as the "Rainy Day Fund". However, the Legislature is requiring that, before the money can be transferred from the Rainy Day Fund to the loan fund for water projects, the transfer must be approved by the voters.

### **WATER QUALITY**

Very little has changed with respect to the Texas Surface Water Quality Standards during the past several months. In addition, the Texas Commission on Environmental Quality (TCEQ) and Region 6 of the Environmental Protection Agency (EPA) continue to discuss how Reasonable Potential will be determined and how permit limits will be written for WET.

#### **Texas Surface Water Quality Standards**

Region 6 of the EPA has not taken any additional action to approve or disapprove the revisions to the Texas Surface Water Quality Standards that were adopted in 2010 and 2012. The TCEQ has now begun another round of revisions to the standards.

### **Whole Effluent Toxicity**

Historically, TCEQ has used the No Observed Effect Concentration (NOEC) as the endpoint to determine whether a test passes or fails. At the request of the permittees, TCEQ is proposing to change to a 25% Inhibition Concentration (IC<sub>25</sub>) as the test endpoint. The permittees and TCEQ have developed mutually agreeable permit language that would implement this change. A draft permit will be submitted to EPA in the near future that incorporates the change. TCEQ does not expect EPA to object.

For those permittees that are determined to have Reasonable Potential, EPA is strongly urging TCEQ to implement WET limits in permits wherein every single test failure, including a sublethal test failure, is a permit violation. Given both the statistical limitations of the WET test and the demonstrated variability of the response of the test organisms, a limit based on a single test result is not conclusive evidence of the presence of a toxic effect; and, if the test failure is sublethal, there is no expectation of adverse in-stream impacts.

Permittees have requested TCEQ to establish a permit limit based on the median of multiple test results. More test results would be considered for sublethal failures than for lethal failures. The permittees and TCEQ have developed mutually acceptable permit language based on this concept. A draft permit containing this approach to a WET limit will be submitted to EPA in the near future. It is unknown whether EPA can be persuaded to accept the concept. However, there are other states that use, or have used, median permit limits.

### **SAN JACINTO RIVER AUTHORITY FEDERALIZED PERMIT**

When this permit came up for renewal, EPA returned jurisdiction over the permit to the TCEQ. EPA took the position that the action to federalize the permit expired when the permit expired. TCEQ is now processing a TPDES permit for this facility. Based on a finding by TCEQ that the infrequent test failures are attributable to the ionic composition of the groundwater that is the water supply for the community served by the plant, the TPDES permit can be issued without a WET limit. It is not known at this time what position EPA will take when the TPDES permit is submitted for review without a WET limit.