WESTCAS

2012 Fall Conference
October 10-12, 2012

State Reports

"The Voice of Water Quality in the Arid West"

WESTCAS STATE REPORT

STATE: Arizona

NAME OF PRESENTER: Jim Kudlinski, State Coordinator

DATE: October 2012

KEY WATER ACTIVITIES INVOLVING STATE LEGISLATURE, STATE AGENCIES, FEDERAL AGENCIES:

ADEQ's Revised Construction General Permit (CGP) 2013

On September 11th and 13th, ADEQ held two additional stakeholder meetings to discuss the permit's draft Fact Sheet and address any final comments or concerns regarding the Permit. ADEQ intends to Public Notice the CGP during the October and issue the replacement permit in February 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.

Copies of the Fact sheet and Permit are available at: http://www.azdeq.gov/environ/water/permits/cgp.html

ADEQ's NEW General Discharge Permits

On July 20th, ADEQ issued the new *Infrequent Discharger General Permit*. The permit allows eligible WWTP operators (design flow < 20MGD) to discharge on an infrequent basis (no more than two times per calendar year with a duration of no more than 14 consecutive days and at least 30 days between each discharge event) to waters of the U.S.

During the Public Notice period only two organizations submitted comments. The Sierra Club, Grand Canyon Chapter, submitted 21 separate comments largely challenging the legal basis of issuing the general permit. Salt River Project submitted 1 comment seeking clarification on WET testing requirements and the types of receiving waters requiring testing.
A copy of the general permit can be obtained at: http://www.azdeq.gov/environ/water/permits/gen.html#id

On July 20th ADEQ also issued the *Minor (<1 MGD) Domestic Wastewater Discharge General Permit.* Only 1 comment was submitted during the Public Notice period.

A copy of the general permit can be obtained at: http://www.azdeq.gov/environ/water/permits/gen.html#md

ADEQ is still intends to develop a *Groundwater Remediation System General Permit* and *Riparian Habitat Restoration General Permit*. ADEQ now plans to initiate the stakeholder participation process sometime in early 2013.

ADEQ Public Notices New Implementation Procedures

On September 5th, Public Noticed the draft *Implementation Procedures for the Narrative Biocriteria Standard,* which describes the methodology to be used when collecting and analyzing data for comparison to the narrative standards [AAC R18-11-108(E) and R18-11-108.01]; and the draft *Implementation Procedures for the Narrative Bottom Deposits Standard* which describes the methodology to be used when collecting and analyzing data for comparison to the narrative standards [AAC R18-11-108.02].

ADEQ first Public Noticed the Implementation Procedures in 2008, but never finalized them. Since changed were made to the draft Implementation Procedures over four years ago, ADEQ is providing the public another opportunity to comment prior to formally adopting the two documents. Comments must be received by November 5th to be considered part of the final decision.

The draft documents are available at: http://www.azdeq.gov/environ/water/standards/index.html

ADEQ Public Notices Gila River Suspended Sediment Concentration TMDL

The Gila River Suspended Sediment Concentration (SSC) TMDLs and response to public comments were published in the *Arizona Administrative Register* on Friday, September 28, 2012. The 45-day Public Notice period will end on November 13, 2012.

The public notice can be viewed or downloaded from
http://www.azsos.gov/public_services/Register/2012/39/pubinfo.pdf

The complete draft TMDL document can be viewed or downloaded from
http://www.azdeq.gov/environ/water/assessment/download/gila_tmdl.pdf

NEWS EVENTS SINCE LAST CONFERENCE:

ADEQ Sues IBWC over Discharges

In early September, ADEQ's lawsuit against the International Boundary and Water Commission (IBWC) wastewater treatment plant was moved from state to federal court in Tucson. In their lawsuit, ADEQ claims that IBWC has not responded to 2 separate Notices of Violation to correct deficiencies that are allowing excess concentrations of cadmium, cyanide, ammonia and nitrogen to be discharged from their plant to a wash that ultimately drains to the Santa Cruz River. IBWC's plant treats raw sewage from Nogales, Arizona, and untreated industrial waste that is discharged from industries located south of the border in Nogales, Sonora, Mexico. ADEQ claims the untreated waste drains northward across the U.S. border where a series of pipes collects the waste and conveys it to the IBWC plant which is not equipped to treat industrial wastes. ADEQ's lawsuit also claims IBWC is not operating a pretreatment program to ensure industrial chemicals are not entering their collection system. In a separate filing, ADEQ claims the City of Nogales, which co-owns the treatment plant, should be jointly held responsible for correcting violations at the IBWC plant.

Additional information is available at: http://www.azdeq.gov/function/news/2012/download/052512_2.pdf

Navajo Generating Station: An Environmental Compromise

By Bob Talbot, Manager, Navajo Generating Station
Lake Powell Chronicle, September 26, 2012

With talk around town often speculating about the possible shut down of the Navajo Generating Station, let's consider the history of how and why it came to be built here.

In 1963, the federal government began to consider ways to power huge pumps to send Colorado River water to central and southern Arizona through the proposed 336-mile Central Arizona Project. By 1966, construction of the Glen Canyon Dam was ending and the population of the new city of Page began to wither from a high of about 10,000 to 1,000.

The Bureau of Reclamation planned to add two additional hydroelectric dams on the Colorado River to produce power for CAP pumps to deliver Arizona's share of water for agricultural purposes and to replenish depleted groundwater near Phoenix and Tucson.

One of the proposed dams was to be in Marble Canyon. River runners can still see remnants of its boreholes in the canyon walls today. The other dam would be down river at Bridge Canyon.

But the idea of new dams was met with great opposition and concern about flooding the Grand Canyon. Other options were needed.

It was former Interior Secretary Stewart Udall who is credited with recommending that the two proposed "book-end" dams be replaced with a coal-fired power plant located on the Navajo Nation.

Udall and many others saw NGS as an environmental compromise to preserve the Grand Canyon. He believed it would create a new market for a vast reserve of Black Mesa coal, the Navajo Nation's most plentiful resource, and put thousands of Navajos to work building and then operating the power plant in one of the most isolated and economically depressed areas of the huge reservation.

Additionally, water needed for cooling would be available from Lake Powell, a town site to support the plant's construction was already here, and power transmission facilities were available and could be interconnected.

What would become The Navajo Project would provide the Navajo government with the financial wherewithal far into the future to fund services to its people and enhance its sovereignty. On May 6, 1969, the then-Navajo Tribal Council supported the development of NGS by a vote of 46-0.

From its inception, NGS was created and continues to be operated in a culture of environmental stewardship. Of the plant's original $650 million construction cost, $200 million was for a range of environmental controls, including state of the art dust abatement, water conservation technology, an electric train to transport coal from the Kayenta Mine silos to NGS, and electrostatic precipitators that remove 99.5 percent of fly ash from stack emissions.

Then, in the 1990s to address Clean Air Act amendments that protected visibility in the Grand Canyon, NGS worked with the Grand Canyon Trust and the Environmental Defense Fund to forge The Navajo Visibility Agreement that was signed by President George H. Bush. This agreement is still considered a model of voluntary cooperation among the federal government, environmental groups and the energy industry to protect the Grand Canyon.

Because of that commitment, NGS owners invested another $420 million to add SO2 “scrubbers” onto each of the plant’s three units. The scrubbers remove 95 percent of sulfur dioxide from plant emissions. In conjunction with the plant’s use of low-sulfur coal, NGS is a top performer in its class for reducing SO2 emissions.

Most recently, between 2009 and 2011, the NGS owners voluntarily invested $46 million in a technology called Low-NOx Burners and Separated Overfire Air. This technology reduces nitrogen oxides emissions, or NOx, by 40 percent.

The EPA is now considering whether to require additional retrofit technology at NGS as part of its Regional Haze Rule to further reduce NOx by another 40 percent. If EPA requires the most stringent controls under consideration, the price tag could top more than $1.1 billion, and the owners might be required to invest before the site lease and coal supply agreements are extended beyond 2019.

I hope the EPA will acknowledge our history of emission reduction efforts, and give us the time and flexibility we now need before having to spend significant capital.

Environmental protection remains a top priority for the NGS owners. Our culture of environmental stewardship remains strong. Our record shows that we have always been willing to invest in environmental protection. I hope the EPA’s proposal will allow us to continue this record well into the future.

WESTCAS STATE REPORT

STATE: California

NAME OF PRESENTER: Jolene Walsh for Sara Toyoda, State Coordinator

DATE: October, 2012

Precipitation

The California water year is considered to be from October 1st to September 30th. The 2011-12 Water Year closed September 30, and this year will be recorded as the first "dry" year since the 2007-09 drought. However, there was generally good statewide reservoir and groundwater basin storage thanks to the previous wet year, and 65% of requested allocations from the State Water Project were delivered.
Sacramento River Region unimpaired runoff observed through August 31, 2012 was about 11.5 million acre-feet (MAF), which is about 64 percent of average. For comparison, on August 31, 2011, the observed Sacramento River Region unimpaired runoff through that date was about 24.8 MAF, or about 139 percent of average. On August 31, the San Joaquin 5-Station Precipitation Index Water Year total was 24.9 inches, which is about 62 percent of the seasonal average to date and 61 percent of an average water year (40.8 inches). Overall, California's average precipitation is dependent on a relatively small number of storms between November and March.

Department of Water Resources

The California Water Plan is the state framework for water resources. It is updated every 5 years and the next update is due 2013. The Department of Water Resources is currently working on this next update. A wide range of stakeholder input is assessed during the update and the idea is to produce a water plan that meets California Water Code requirements, guides state investments in innovation and infrastructure, and advances integrated water management and sustainable outcomes.
The major notable change in this update is a first-of-a-kind finance plan said to identify critical priorities for State investment in integrated water management activities.

Regulations

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 (µg/L). The PHG will contribute to CDPH's development of a primary drinking water standard (maximum contaminant level, MCL) that is specific for chromium-6.
This draft MCL still seems to be on track for some time in 2013.

Bay Delta Conservation Plan Update (BDCP)

The Sacramento-San Joaquin Delta is a vital link in California's water system. Five rivers flow into the delta and these rivers plus their tributaries carry about half of the state's total annual runoff. Water diversions directly from the delta supply drinking water for 25 million people. It is the largest estuary on the west coast and it supports agriculture, industry, recreation and wildlife. Competing water use, aging infrastructure and environmental issues have been a chronic problem for the Delta. 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. The new intake

facilities would be located on the north side of the Delta. Current diversion facilities are on the south delta and this causes some problems with the natural flow of the river. The new north side facility would be the primary diversion point with the south used only when necessary for maintenance or emergency. The north side of the delta provides safety from sea-level rise, earthquakes, and Delta levee collapse. It would consist of three pumping plants capable of divert up to 9,000 cfs, state of the art fish screens, and two tunnels to carry the water 35 miles to existing pumping plants in the south Delta. These tunnels would be operated by gravity. Cost is estimated at $16.3 billion over 50 years including conservation programs, habitat restoration, facilities and operation and maintenance costs. DWR is working on the draft environmental documents for the update and these are due out for public comment this year.

Legislation

Ninth Circuit Court ruling
NRDC v. County of Los Angeles

This is an NPDES ruling and the main points involved in this case are:

1. Where is the point of compliance
   The issue here is that the court ruled that the lined portion of the channel was both an MS4 and discharge point. Passed the lined portion of the channel could be considered a point of compliance. Part of the confusion is that the water in the lined portion of the channel is the same as where the channel goes natural so without discharge or addition of water at that point, how can it be a compliance point. And if a compliance point can be an area without discharge or addition of water, where does the compliance point end? When is it no longer the responsibility of the MS4. The California Supreme Court has agreed to hear the case.

2. Receiving Water Limitations language.
   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, "If a discharge is found to cause or contribute to an exceedance of water quality standards, the Permittee will submit a report to the regional board within 30 days which describes BMP implementation." 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 there is no safe harbor from 3rd party enforcement action leaving MS4 operators to fend off legal action while trying to correct the problem. Also, storm events are unpredictable and many exceedances are not in control of the permitee. On November 20th, the State Water Resources Control Board will hold a stake holder meeting to discuss receiving water limitation language.

Draft Intended Use Plan 2013

Draft Intended Use Plan for the Clean Water State Revolving Fund for Federal Fiscal Year 2013 is released and the comment deadline is October 24, 2012. In the draft it states that the most recent *Clean Watersheds Needs Survey in 2008* shows that California needs an estimated $30.0 billion for wastewater treatment and collection, wastewater recycling, non-point source pollution elimination, and storm water pollution prevention over the next 20 years. This includes an estimated $24.4 billion to update aging infrastructure.

Salt and Nutrient

The state Recycled Water Policy calls for Salt and Nutrient Plans to be developed for each basin. Regional Boards adopt them as basin plan amendments. These plans are due by May 2014 and must be updated every five years. Only one major region has completed a plan so far. These plans overlap somewhat with the Irrigated Lands Regulatory Program making agriculture and municipal water folks both strong stakeholders in the development process.

Water Challenges/Local Environmental Issues

Funding
Supply and Conservation
Revenue
Affordability to customers

Funding is an interesting topic these days. In the Delta Plan it states that state and federal governments are committed to the "user pay" principle when considering funding although other funding sources will also be used. This funding principle has its merits and a place when considering funding for future water supplies. But consider the financial state of many water companies at this time. Demand is down through economics and conservation. When demand is down water revenues are down. The need to optimize water supplies has never been more important. But In some cases reduced revenues are made much worse because of tiered rate systems and other conservation mechanisms. But for some water companies these issues are forcing rate increases just to keep up with operations and maintenance without considering any planning for capital improvement. For infrastructure expansion and improvement the rates would have to increase significantly more. What about water affordability? This convergence of a need for new water supplies, maintaining current water supplies and need for conservation balanced with affordable water is unprecedented. It is most definitely a problem for the arid west. We need state and federal agencies to understand this predicament as they move forward with funding ideas and mechanisms.

WESTCAS STATE REPORT

STATE: Colorado

NAME OF PRESENTER: Mike Eytel, WESTCAS Colorado Director

DATE: October, 2012

Water Supply and Drought

As of September 30th, roughly half of the USGS stream gages in the Upper Colorado River Basin (UCRB) recorded normal (25 –75th percentile) or above normal 7-day average stream flows. About 35% percent of the gages in the basin are recording much below normal or low (i.e. lowest on record) stream flows. Accumulated volumes for this time of year Is a better indicator of how runoff has been affected by dry condition. The April – July2012 unregulated volume for inflow into Lake Powell was 2.06 maf (29% of average). Making 2012 the third driest on record since the construction of Lake Powell. Currently Lake Powell is 76' from full or 58% of capacity. Inflow forecast for the remainder of 2012 estimates yearly inflow will 5.00 maf (46% of average).

Overall reservoir storage in the Colorado River Basin has increased by over 8 maf since the beginning of water year 2005 and this is a significant improvement over the drought conditions during water years 2000 through 2004. On October 1, 2004, the beginning of water year 2005, the total reservoir storage in the Colorado River Basin was 29.84 maf (50.2% of capacity). On October 1, 2011, the beginning of water year 2012, the total reservoir storage in the Colorado River Basin was 38.66 maf (64.8% of capacity). As of September 11, 2012 the total reservoir storage in the Colorado River Basin was 34.46 maf (57.7% of capacity). [1]

Most of the UCRB and the rest of Colorado has experienced warmer than average temperatures for the last few months. For this past growing season, reference evapotranspiration (ET) rates were higher than average across western Colorado. Thus more available water was being lost to the atmosphere than normal due to the increased temperatures. Statewide drought conditions persist with over half of the state still under extreme or exceptional drought conditions.[2] Let's hope 2013 is more like 2011 than 2012?

State Activities

Colorado Department of Public Health (CDPHE) – Water Quality Control Commission (WQCC) - Water Quality Control Division (WQCD)

Regulation #31 Basic Standards for Surface Water and Regulation #41 Basic Standards for Groundwater

The WQCC in August 2012 adopted Statewide Standards for Interim Organic Pollutants for surface and groundwater – Regulation #31 Basic Standards for Surface Water and Regulation #41 Basic Standards for Ground Water. In an effort to keep groundwater and surface water organic chemical standards consistent the WQCC considered both regulations in the same rulemaking hearing. The new and revised standards are being adopted as "interim standards." These "interim standards" go into effect on 1/31/13 and will remain in effect until alternative permanent standards or site-specific standards are adopted by the WQCC.

[1] United States Bureau of Reclamation – Glen Canyon/Lake Powell Current Status – 9/27/12.
[2] NIDIS Weekly Climate, Water and Drought Assessment Summary, October 2, 2012.

The WQCC has recently put out a public notice for consideration and adoption of revisions to current **temporary modifications** of water quality standards which expire on or before December 31, 2014. The rulemaking hearing is scheduled for December 2012. There are multiple segments in various basins statewide which currently have temporary modifications. There are a number of proposals being put forward by the regulated community.

The WQCD has begun work on the 2014 303(d) Listing Methodology. The WQCD is considering nutrient narrative assessment, revising the Aquatic Life assessment, Category 4c, refining Hg fish tissue language, iron and aluminum pre-filtration methods, and refinement of sediment language in regard to WQCC Policy 98-1.

Legislative

The Water Resources Review Committee Interim Committee bills:

"Bill 4" would provide incentives and protections for "conserved water." Conserved water is defined as savings of historical beneficial consumptive use and precludes savings from removal of phreatophytes. This Bill would allow for a change of use of the conserved water if certain requirements are met, including preservation of historical return flows.

"Bill 5" would prohibit a landowner from making certain requirements as a condition of granting a right-of-way or special use permit to a water right owner for necessary conveyance of the water from the point of diversion to place of beneficial use. This bill is targeted at the US Forest Service and its recent guideline requiring ski areas to re-title private water rights in the name of the federal government.

"Bill 7" would establish a process and a rebuttable presumption of non-injury for technical corrections to points of diversions that are recorded in error in decrees.

"Bill 8" is a return of a resolution which warns of the impacts to water development resulting from diversion of severance tax and federal mineral leasing revenues away from the Colorado Water Conservation Board and Department of Local Affairs.

Bill 9 would create a mechanism to determine the amount of acreage allowable for an irrigation decree if the water right was decreed before 1937 and is silent on the intended irrigated acreage. The maximum allowable acreage would be the amount actually irrigated during the first 50 years of water application.

"Bill 11" would repeat this year's "graywater use" bill. This bill would direct rulemaking allowing a "second use" of water captured from sinks, bathtubs, showers, and washing machines.

Local Infrastructure Ballot Initiative

The City of Rifle is the fifth largest city in Western Colorado with a population of approximately 10,000. Rifle is a fast growing community in the heart of oil & gas exploration and development. In order to address residents concerns with water quality and quantity, the City is currently designing a new water treatment facility. The new plant will feature Membrane Filtration, Granulated Activated Carbon and Reverse Osmosis. The cost for the new plant and the improved water quality is estimated to be $25 million. The City has been working with the Colorado Department of Public Health and Environment (CDPHE) to take advantage of the historic low interest rates and CDPHE, through their Drinking Water Revolving Fund, has agreed to loan the City's Water Utility the needed funds at the very low rate of 2.25%. However, to pay this amount back over a 20 year period will require substantial water rate increases. The City has already planned a three phase approach to water rate increases which will increase rates 48 – 80 %over 5 years. Phase I increases will be 56% and Phase II will raise rates another 34%.

The Rifle City Council in an attempt to keep water rates essentially flat has proposed Ballot Question 2A which will impose a 0.75 percent sales tax increase that will go directly to pay the debt service on the water treatment plant. This tax could generate enough money to pay as much as 70% of the debt service. The tax will expire as soon as bonds are paid. If 2A passes the city would eliminate phase II 2013 rate increases. Ballot Question 2A is an interesting approach to the ongoing infrastructure funding dilemma which essentially spreads the costs onto visitors and will reduce the amount owed by the citizens.

Federal Activities

DEPARTMENT OF THE INTERIOR - Bureau of Reclamation Notice of Intent to Prepare an Environmental Impact Statement and Announcement of Public Scoping Meetings for Continued Operation of the Paradox Valley Unit, Montrose County, CO

Background

The Paradox Valley Unit is located along the Dolores River in the Paradox Valley in Montrose County, Colorado, about ten miles east of the Colorado-Utah state line. The Dolores River is a major tributary to the Colorado River. Groundwater in the Paradox Valley is highly saline. Saline concentrations in this area have been measured in excess of 250,000 milligrams per liter; by far one of the most concentrated sources in the Colorado River Basin. Groundwater then surfaces into the Dolores River. Studies show that the Dolores River accumulated more than 205,000 tons of salt annually before the Paradox Valley Unit began operation. The Paradox Valley Unit presently consists of a brine collection well field, brine surface treatment facility, brine injection facility, a 16,000-foot injection well, and associated roads, pipelines, and electrical facilities. Unit operations have been adjusted over time to address increased seismic activity and injection pressures. Under normal operations, the Paradox Valley Unit averages injection of about nine to ten million gallons of brine per month. The Unit currently controls about 110,000 tons of salt per year that would have entered the Dolores River and, in turn, degraded the water quality of the main stem of the Colorado River.

Proposed Action

The proposed action is to identify, evaluate, and implement brine disposal alternatives to replace or supplement Brine Injection Well No. 1 which was built in 1988 and has a projected remaining useful life of three to five years, under current operations, provided that acceptable seismicity levels and well integrity are maintained. Need for Action The Bureau of Reclamation's Paradox Valley Unit is one of the most effective salinity control projects in the Colorado River Basin and provides about ten percent of the total salinity control in the Colorado River at Imperial Dam. Because the existing brine injection well is nearing the end of its useful life, another well or alternative brine disposal mechanism is needed for continued enhancement and protection of the quality of water available in the Colorado River for use in the United States and the Republic of Mexico, and to enable the United States to comply with its obligations under the agreement with Mexico of August 30, 1973.[3]

[3] Federal Register – Vol. 77, No. 175, pp 55497-55498. September 10, 2012

WESTCAS STATE REPORT

STATE: New Mexico

NAME OF PRESENTER: Charlie Nylander for Joshua Rosenblatt, State Coordinator

DATE: October, 2012

Principle Topics in the State of New Mexico

New Mexico continues to deal with multiple issues surrounding Total Maximum Daily Loads (TMDLs). Since the WESTCAS Annual Conference in June 2012 some key developments are emerging at the policy levels between the State and the Federal government and between interstate agencies, i.e. the Office of the State Engineer and New Mexico Environment Department. A large pilot study continues in the Middle Rio Grande. With two consecutive years of the lowest state-wide precipitation rates in New Mexico's history, the Lower Rio Grande is not even "wadeable" so where does that leave the TMDL regulations?

The Municipal League's Environmental Quality Association (EQA) meeting was held in Las Cruces in September in conjunction with the annual League Conference. As mentioned during the Annual WESTCAS Conference, the New Mexico State Report described the trend for a new integration dialog on water quantity and quality. The Scott Verhines, State Engineer, Estevan Lopez, Director of the Interstate Stream Commission, and Jim Davis, NMED Resource Protection Bureau Chief each gave presentations to the group. The state engineer openly asked for input from the group and said that the updating of the State Water Plan was scheduled for review and updating and was asked to what extent the quality vs. quantity issues would be worked out. The EQA asked that the State Water Plan define the policy issues on water quantity allocation, diversion, and use on water quality in the State's surface waters.

The persistent decade-long drought, (Climate Change or not), continues to be a good motivator in keeping local water issues and federalism of water resources as lively discussions. This was highly visible in the recent New Mexico Water Resource And Research Institute (WRRI) Conference entitled "Hard Choices – Adapting Policy and Management to Water Scarcity". Senator Tom Udall hosted the introduction and a panel of 5 former State Engineers, as they explored and responded to questions. One common takeaway was the need for improved administrative tools for farmers to transfer wet water deliveries or "bank" them without losing them. Commissioner Mike Connor, U.S. Bureau of Reclamation spoke at the conference, and later submitted an Op Ed to the Las Cruces Sun News calling for halts to litigation. Emphasizing creative well informed factual discussions between water resource specialists, researchers, and stakeholders, Mr. Conner advocated a new source of effective and sustainable strategies and emerging policies, not a score card of wins and losses from judges. The simultaneous live webcasting of the conference was recorded and sessions can be viewed on-line at the WRRI website: http://2012.wrri.nmsu.edu/webcast . The WESTCAS membership may find many parallels and applicable strategies discussed.

As an example regarding federalism and litigation, the following information was sent to Hicks and Ray. A case in New Mexico has been evolving regarding the interpretation of just where the dividing line is between surface water and ground water in upper geological formations. The case turns on whose water use was impacting whose water resource regarding a management plan in the southern part of the New Mexico. The federal government is not approving of the way the State was protecting "waters of the US" to include "project water in the ground" in a case with Chevron and was not seeking fines but instead just taking over future management of the State's water rights as damages. The federal government didn't win, but the shot across the bow for the arid states and implications regarding the potential for federal government take-over of state waters were clearly present.

Municipal Nutrient Issue

The Environmental Quality Association/NMED Nutrients Task Force was initiated to address the problem of very low nutrient effluent limits for discharges in impaired water quality segments. This problem could impact Raton, Tucumcari, Chama, Angel Fire, Springer, Cimarron, Taos, Las Vegas, and Santa Fe. The impact is not just a "potential", it already happened in the City of Ruidoso and Ruidoso Downs, where $38 million was spent on a wastewater treatment plant to meet effluent limits which were developed using the eco-region approach.

The "eco-region-aquatic life use threshold values" for nitrogen and phosphorus are developed based on the lowest 50 percentile of all the data from an ecoregion. There are five (5) eco-regions in New Mexico, so they are fairly expansive areas. Generally the lowest 50 percentile numbers come from the headwaters of streams in a region and represent pristine water quality. The load allocations in the nutrient TMDLs use the same "eco-region- aquatic life use threshold values". When this protocol was applied in the Canadian River Basin, the waste load allocations applied to both Tucumcari and Raton were so low that they are not technically achievable, as recognized by NMED in this statement: "*Even though the limits of wastewater treatment technology preclude the attainment of the target concentrations defined in this TMDL (TP of 0.03 mg/L and TN of 0.45 mg/L)…".* (Response to Public Comments, TMDL for the Canadian River Watershed – Part 2, September 30, 2011).

Task Force Charter

The charter of the Nutrients Task Force is:

> The New Mexico Nutrient TMDL Work Group acknowledges that nutrients exist in all waters of the State but that excessive levels lead to impairment of designated uses. It is the goal of this Work Group that New Mexico adopt nutrient TMDLs that recognize the threshold concentrations necessary to be protective of designated uses while developing approaches for implementation of the waste load allocations that are technologically achievable and are neither over- nor under-protective. The Work Group will evaluate alternative approaches to the implementation of TMDL waste load allocations for municipal point-source discharges that are scientifically based, environmentally sound, and consider the existing facility design, facility age and local economic factors.

Status

Our progress to date is:

- Developed a common understanding of NMED's approach and the EPA's role in the processes
- Evaluated the approaches taken by other states to this same issue. In particular, Colorado and Montana have developed variance procedures that allow for technology-based discharge limitations to give the municipalities time to upgrade WWTP to meet the standards.
- Recognized that without primacy for issuing NPDES Permits, NMED is limited in what New Mexico can do with respect to effluent limitations and variances
- Begun formulating an approach that involves adding "variance" or "exception" type language to the Water Quality Management Plan that would provide for time (10-20 years) to plan for and construct WWTP that can meet limits or to demonstrate the level of nutrients in a discharge that would be protective of water quality (replace eco-region numbers with site specific numbers). EPA has indicated they are willing to accept such a change.

WESTCAS STATE REPORT

STATE: Texas

NAME OF PRESENTER: Wayne Owen **for** Peggy Glass, Ph.D.

DATE: October, 2012

From a water standpoint, Texas remains focused on water quantity and water quality issues. It is such a foregone conclusion that the Republicans will carry Texas that, except for news from other states, one would not know it is election season. There are no hotly debated election issues since there are no political candidates trying to find a signature issue.

WATER QUANTITY

Most of Texas has been blessed with rain this year (unlike the Midwest), which has eased the severe drought the state endured last year. However, the drought has not totally broken. Last year at this time 90% of the state was classified as being in Extreme or Exceptional drought. This year only 24% of the state falls in these categories, but most of the state is in some level of drought. In addition, in many areas of the state, water supply reservoir levels remain very low. The rains that have eased conditions with respect to soil moisture have not generated enough runoff to re-fill the reservoirs.

WATER QUALITY

There continue to be many areas related to water quality management where there are significant on-going discussions between the Texas Commission on Environmental Quality (TCEQ) and Region 6 of the Environmental Protection Agency (EPA). These areas include permit limits for Whole Effluent Toxicity (WET), pH, and dissolved minerals [total dissolved solids (TDS), chloride and sulfate] and the federalized permit of the San Jacinto River Authority. In addition, substantial portions of the Surface Water Quality Standards and associated implementation procedures that were adopted by TCEQ and submitted to EPA in 2012 remain unapproved.

Whole Effluent Toxicity

Discussions continue between permittees, TCEQ, and EPA regarding how to address WET in wastewater treatment plant effluent discharge permits. Agreement still has not been reached regarding what constitutes Reasonable Potential so that a WET limit in a permit is warranted. In addition, discussions continue regarding how a permit limit should be structured in those cases where such a limit is imposed.

Reasonable Potential

TCEQ has structured a screening process that determines Reasonable Potential based on the number of test failures in a 5-year period, the timing of those failures, and the magnitude of the failures. The general effect of the screening is that a single failure does not trigger a permit limit, but three or four failures usually do. EPA is not accepting this approach and continues to direct the state to establish permit limits for one or two failures in a five-year period.

Permit Endpoint

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, they are changing to a 25% Inhibition Concentration (IC_{25}) as the test endpoint. Permit language is currently being revised to implement this change. TCEQ do not expect EPA to object to the change.

Median Permit Limit

Texas permittees have requested TCEQ to change the form of the WET permit limit. At the present time, every single test failure is a permit violation after a limit is established in a permit. Given both the statistical limitations of the 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. TCEQ has begun to try to develop language based on this concept. It is unknown whether EPA Region 6 can be persuaded to accept the concept. However, there are other states that use this type of approach.

pH

Historically, TCEQ (and EPA Region 6) has put technology-based pH limits in discharge permits. The limits have been 6.0-9.0. During the past year, EPA has been directing TCEQ to impose pH limits in permits that are the same as the pH water quality standard for the receiving stream for the discharge.

These proposed limits present problems for a number of municipal permittees in Texas. Quite a few waterbodies have a water quality standard with a lower pH limit of 6.5. Almost all domestic wastewater treatment plants in Texas have permits that limit the ammonia concentration in the effluent, which requires the plants to have a nitrification treatment process. Nitrification consumes alkalinity, which decreases the pH. Therefore, these plants periodically have effluent with a pH between 6.0 and 6.5. The pH limit applies to each measured value; so, these periodic occurrences of pH below 6.5 will be permit violations for those plants that discharge to receiving waters with a lower pH standard of 6.5.

TCEQ understands the problem and concurs with the permittees that, accept in unusual cases, there is no expectation that a discharge with a 6.0 pH will be detrimental to the receiving stream. They have proposed a screening approach that takes into consideration the dilution and buffer capacity of the receiving waters as a basis for determining if a 6.5 permit limit is needed to assure compliance with water quality standards. To date, EPA has refused to accept this approach.

Total Dissolved Solids, Chloride, and Sulfate

TCEQ has set the water quality standards for TDS, chloride, and sulfate based on the concentrations that have historically been observed. Subsequently, due to drought, use of home water softeners, industrial discharges, and the general processes associated with converting a water supply to a domestic wastewater, a number of permittees have effluents that are not compliant with the water quality standards of their receiving waters. There is frequently not a practical way to address this issue. The only treatment for these substances is a membrane process such as reverse osmosis (RO). However, RO produces a waste stream in relatively high volume that is much higher in .TDS, chloride, and sulfate concentrations than the wastewater it was used to treat. There is frequently no way to dispose of this waste stream. TCEQ is still seeking ways to address this issue.

SAN JACINTO RIVER AUTHORITY FEDERALIZED PERMIT

Following is an update on the status of the Texas permit that was federalized by EPA Region 6. The permit was federalized when the permittees requested, and TCEQ issued, a permit without a WET limit, even though EPA directed the state to include the limit. The permittee appealed the WET limit that was included in the NPDES permit that was subsequently issued by EPA. The appeal was heard by the Environmental Appeals Board. The Board concluded that EPA had not shown that the permit provisions were consistent with the Texas water quality standards and remanded the permit to Region 6. Region 6 was to, if appropriate, demonstrate that the provisions were consistent. The WET provisions of the permit were stayed until such a demonstration could be made. Region 6 has taken no action regarding the permit since the remand. The permit is about to expire, and the San Jacinto River Authority has filed an application to renew the NPDES permit. EPA has taken no action on the application. They have, however, indicated to TCEQ that they think it appropriate for the state to resume responsibility for the permit. EPA has not identified a process by which this would be accomplished. Neither has EPA given any indication whether they would expect the permit that would subsequently be issued by the state to include a WET limit.