WESTCAS news

September 2007

MISSION

Sustainable water quality and quantity in the Arid West

VISION

To be:

- The premier, grass-roots organization for providers of water, wastewater and reclaimed water services in the Arid West.
- A responsive coalition on behalf of our members and their customers.
- A reliable source of information about water quality issues to our members and the public.
- An advocate for environmentally sound managemnt of water resources and the protection of public health.
- A contributor to policy, regulations, science, legislation, and appropriations on Arid West water quality isuses.

GOALS

Goal 1:
Advocate laws, regulations, standards, and policies that provide for environmentally sound, science-based protection and wise use of water resources in unique Arid West ecosystems.

Goal 2:
Actively champion federal funding for water quality and quantity issues, programs, and infrastructure in the Arid West states.

Goal 3:
Ensure WESTCAS remains effective as the Voice of Water Quality in the Arid West.

WESTCAS FALL 2007 CONFERENCE TO COVER TIMELY TOPICS

By Robert Hollander

Fall is rapidly approaching, although the recent record high temperatures in the Phoenix area may not indicate that. However, the Fall Conference scheduled for October 31-November 2 at the Renaissance Scottsdale in Scottsdale, Arizona, is scheduled to present a host of very timely topics.

Attendees will be updated on continuing investigations into chromium VI in California groundwater. There will be a presentation on the Colorado River Settlement and a presentation and discussion on Clean Water Act Jurisdiction in the wake of the Supreme Court decision in the *Rapanos v. United States* case. A summary of the case and discussion of subsequent implementation guidance from the U.S. Environmental Protection Agency and the Army Corps of Engineers is planned to be covered. Municipal Separate Storm Sewer System (MS4) will be discussed by EPA, Region IX. There will be a discussion on the development of federal nutrient criteria and state nutrient standards and the potential impacts to members. There will be a presentation on Pima County's Regional Optimization Master Plan one of Pima County's most ambitious projects to date to address the need for capacity expansion and treatment enhancements.

In addition to presentations and panel discussions, there will be workshops of the Federal Legislative, Policy, Regulatory and Outreach Committees. It is in the committees that WESTCAS work truly gets done. The Federal Legislative Committee will cover current congressional efforts to redefine "waters of the United States." The Regulatory Committee has a number of task forces and task groups developing regulatory comments, white papers and policy recommendations on a number of water quality issues that impact water and wastewater utilities throughout the arid west.

Finally, the City of Scottsdale is planning a tour of their newest state-of-the-art drinking water treatment plant.

Stimulating discussion on timely and important topics to our industry and region is guaranteed and the weather should be ideal. Plan to attend the WESTCAS Fall 2007 Conference. More information and registration materials are available on the WESTCAS website at www.westcas.org.

WATER QUALITY STANDARDS ISSUES – EFFLUENT MODIFIED AND EFFLUENT RESTORED WATERS

By Rex Hunt

In November 2006, a workshop was held in Las Vegas, Nevada sponsored by the Environmental Protection Agency (EPA) to discuss EPA's proposed guidance on water quality standards (WQS) for effluent-modified and effluent-restored waters [also known as effluent dependent waters (EDeW)]. The workshop was the latest of a series of stakeholder meetings and workshops that have been held on the subject. This might be old news. However, despite the EPA's stated plan to move forward quickly with guidance on EDeW, based on the results of the stakeholder meetings, we are still awaiting word from the agency. Therefore, the issues discussed at the meeting continue to be important, and of particular concern to WESTCAS members. The decisions of the EPA on how to deal with EDeW will have far-reaching impact on the arid states.

Just prior to the November 2006 meeting, the EPA published a document entitled "EPA Strawman Positions – Water Quality Standards Issues – Effluent-Modified Waters and Effluent-Restored Waters"

(Strawman). The document was touted as a draft guidance document on EDeW.

The concepts and positions posed in the Strawman are extraordinarily complicated. Many of the stakeholders in the meeting have dealt with EDeW for years and have thought deeply about how to handle "use" as it is laid out in the CWA. That the stakeholder group struggled for two days in November over what the Strawman should become and still reached no consensus is evidence of the complexity of this subject.

One of the most difficult issues concerns how "use" is applied to streams, whether the streams be EDeW or not. In most cases, "use" is determined by downstream conditions (i.e., conditions below a discharge). For perennial streams with substantial natural flow, the addition of a discharge may change physical/chemical conditions in the stream incrementally. For a stream with very low natural flow, the addition of a discharge can completely change the biological, chemical, and hydrological character of the stream. Therefore, the approach to determining use by looking at downstream conditions is more problematic for EDeW. By focusing on downstream conditions, use is subject to changing flow regimes as the discharge is increased, decreased, or eliminated.

In addition, the CWA does not specifically address EDeW. Therefore, regulatory issues associated with "use" quickly become stumbling blocks when considering discharges to EDeW. With this backdrop of regulatory conundrum, the EPA is now considering how to address EDeW.

The issues being considered in this process are of significant importance to arid west states. The vast majority of streams in the arid west states are EDeW. In Arizona, for example, less than four percent of all streams are perennial. The stakeholders in these states are rightly very concerned with the outcome of EPA's policy on the subject.

The issues are very important to Texas as well. Even though Texas has more perennial streams, there are still many ephemeral streams (called intermittent in Texas) located particularly in the western portions of the State. Furthermore, issues associated with effluent dominated streams (a distinction is drawn between effluent dominated and effluent dependent streams) were not addressed, but will necessarily be impacted by this process.

At the conclusion of the meeting in November, EPA representatives offered a timetable for completing the process by Spring 2007. That time passed with no decision. An EPA representative recently indicated that middle level management in EPA would be considering staff recommendations soon and then sending their recommendations to the top of the agency for decision. A decision on guidance could be made by the time the October WESTCAS meeting is held. Updates on this important topic will be provided.

INFRASTRUCTURE IN AMERICA

The recent bridge collapse in Minneapolis has focused us, once again, on the Nation's public infrastructure. It is aging at a rate that is outpacing efforts to properly maintain it. We see the dramatic results in places like Minneapolis. But examples of water, wastewater, and transportation infrastructure challenges can be found throughout the country.

The EPA actively encourages addressing existing water and wastewater infrastructure needs by utilizing sustainable practices that will reduce the potential gap between funding needs and spending. The EPA's "Sustainable Infrastructure Initiative" provides guidance in changing how the nation views, values, manages, and invests in its water infrastructure. EPA believes that utilities can operate in a more sustainable manner through: 1) better management practices; 2) efficient water use; 3) full-cost pricing of water; and 4) a watershed approach to protection (generally referred to as the four pillars of sustainable infrastructure).

The EPA's inspiring words, however, will not solve the problem. The rescue of the nation's infrastructure requires money – and a lot of it. Congress may be taking a step toward making at least some of that money available. Senators Christopher Dodd (D-Connecticut) and Chuck Hagel (R-Nebraska) have proposed legislation that would establish a National Infrastructure Bank to help finance "capacity-building infrastructure projects of substantial regional and national significance." Publicly-owned mass transit systems, housing properties, roads, bridges, drinking water systems, and wastewater systems would be the focus of the bank.

This legislation, currently known as the Dodd-Hagel National Infrastructure Bank Act of 2007, has only recently been introduced. Already, it has gained support from a number of prominent engineering and construction organizations. At this time, a timetable for consideration by Congress is not available.

WESTCAS members have closely watched and long supported various National and State efforts to make infrastructure financing legislation a reality. The new proposed legislation will continue to be evaluated by WESTCAS as it works its way through Congress. Additional details will be made available as they become known.

2007 FALL MEETING
OCTOBER 31 - NOVEMBER 2, 2007
RENAISSANCE SCOTTSDALE
SCOTTSDALE, ARIZONA

THE FUTURE OF PCBs IN NEW MEXICO NPDES PERMITS

By Kelly Collins

New Mexico completed its last Triennial Review in July 2005. As required by federal regulation, the Water Quality Control Commission (WQCC) submitted revised Water Quality Standards and supporting documentation to EPA on July 7, 2005. EPA completed its review on December 29, 2006. The new Water Quality Standards include a revised numeric criteria for PCBs to protect human health of 0.00064 micrograms per Liter. Only one analytical method is available to measure PCBs at that level: Method 1668 Revision A ("Congener Method"). This analytical method is not currently approved by EPA under 40 CRF Part 136, although NewMexico has requested that EPA approve it for nationwide use. An analysis using this method costs about $2000, if you can find an analytical lab that is capable of doing this analysis.

The New Mexico Environment Department (NMED), as part of its NPDES Permit certification requirements, is requiring analysis of PCBs by the congener method for NPDES permitted discharges at two facilities in New Mexico. In a letter from NMED to EPA, NMED states that:

- "NMED may require a more stringent method when necessary to protect water quality standards of New Mexico".
- "This human health criterion was adopted by the WQCC, and as such is an 'appropriate requirement of State law". The Congener method is the only method that can assure compliance with the human health criterion. Without the Congener Method, NMED can not assure that NPDES permits will comply with requirements of State law with the policy of Section 101(a)(3) of the Clean Water Act that toxic pollutants shall not be discharged in toxic amounts."
- NMED conditioned its certification to include the congener method to assure compliance with the human health criteria, which ….. the State found necessary to meet the requirements of Subsection 124.53(e)(1).

It seems clear from these statements that as NPDES permits come up for renewal in New Mexico, such a requirement could be added to the certification conditions for each permit. The cost, in terms of monitoring, would be significant to New Mexico dischargers. Treatment options to remove PCBs are limited and they have not been tested for removal below the 0.00064 microgram per Liter level.

While the PCB criterion adopted by New Mexico is the national EPA's ambient water quality criterion for the protection of human health, as a basis of comparison the EPA standard for PCBs in drinking water is 0.5 micrograms per Liter. The FDA has set residue limits for PCBs in foods: 0.2 micrograms per Liter in infant foods, 1.5 micrograms per Liter in milk, 2 micrograms per Liter in fish and shellfish, and 3 micrograms per Liter in poultry and red meat.

TOTAL MAXIMUM DAILY LOAD DEVELOPMENTS

By Rex Hunt

If you have long been in the water quality business awhile you know, at least generally, the concept of the Total Maximum Daily Load (TMDL). The Clean Water Act (CWA) requires that the nation's waters not meeting current water quality standards be listed as "impaired" and that action be taken to reduce/remove the water quality impairment. The standard approach to this challenge taken by the Environmental Protection Agency (USEPA) has been the development of the TMDL. A TMDL is a calculation of the maximum amount of a pollutant that can be released into a water body. Based on the TMDL, the allowable pollutant load discharged to the water body is allocated among point sources and nonpoint sources in the watershed. Once allowable pollutant loads have been allocated, an Implementation Plan is prepared to address the TMDL and eliminate the impairment.

Since 1995, the EPA has approved almost 25,000 TMDLs identifying a wide range of water quality impairments. However, this is a fraction of the total number of TMDLs that need to be completed. Earlier this year, the EPA published a survey of the effort to identify and address water quality impairments nationwide. A few facts from that survey follow:

- A total of 38,658 water bodies have been identified as being water quality impaired at the time of the survey.
- Many of these water bodies have had multiple impairments identified, so that a total of 63,620 impairments have been identified. Some 25,000 of these impairments have had a TMDL completed.
- The top five pollutant impairments for which TMDLs have been completed make up over two-thirds of the total number of TMDLs. These are: metals (other than mercury) – 20.80% of the total reported impairments; pathogens – 20.25%; nutrients – 12.47%; sediment – 9.40%; oxygen depletion – 5.53%.

How do TMDLs affect those whose responsibilities are to assure adequate water supply for the arid west? In coming issues of the newsletter, we hope to provide some focus to this important continuing development in water quality. We will examine issues related to how TMDLs are developed, potential alternatives to TMDLs for impaired water bodies, and the means by which Implementation Plans for TMDLs can be developed. We also invite your input and experience in the form of articles that relate the varying experience of the membership with TMDLs. Stay tuned.