

Water Quality Control Commission
WATER AND WASTEWATER INFRASTRUCTURE
Issue Summary
March 11, 2009

Clean and safe water is critical for human and ecosystem health. With the aging of the State's infrastructure, wastewater treatment and drinking water facilities face a significant challenge to sustain and advance their achievements in protecting public health and the environment. At its November 2008 meeting, the Water Quality Control Commission (Commission) held a hearing and approved the 2009 project eligibility lists, which document Colorado's wastewater treatment infrastructure needs in excess of \$1.96 billion and \$1.18 billion in drinking water needs. Several factors contribute to Colorado's infrastructure challenges.

Aging Infrastructure

Many of Colorado's communities have water distribution/transmission and wastewater collection lines that are beyond their designed life. The Water Quality Control Division (Division) has issued numerous "boil or bottled water advisories" due to the failure of water lines and the associated threats to public health.

Radionuclides

See the Safe Drinking Water Issue Summary for a description of the challenges of compliance with radionuclide Maximum Contaminant Levels (MCLs). State funding cuts have contributed to these challenges. The State's Small Community Drinking Water and Wastewater Grants, when funded, have benefited small communities by providing grant funds to assist with planning, design and capital construction project costs related to eliminating or avoiding health risks. The Small Community Drinking Water State Grant program is the only state funding source available for privately-owned not-for-profit community water systems. The State Grant fund received \$3 million in funding in FY 2006 (the only year the programs received funding since 2001).

Ammonia Standards

The Commission has established new ammonia standards for protection of aquatic life and public health based on EPA's requirements. These standards will apply to most domestic wastewater treatment systems that discharge to warm waters – e.g., most eastern plains communities. The ammonia in these wastewater discharges come from human waste. Many small communities with lagoon treatment facilities will not be able to meet these new standards without new treatment facilities. There is an increase in demand on funds for wastewater treatment improvement projects to comply with these new standards.

Pilot project to help drinking water utilities

Membrane treatment removes approximately 98 percent of contaminants from raw water and is a powerful option for drinking water utilities. However, this treatment results in a concentrated waste stream of contaminants that do not flow through the membrane. Options for environmentally acceptable disposal of "concentrate" from membrane treatment systems are limited, particularly in urban areas or where the nearby stream is listed as impaired for one or more contaminants. The best option for concentrate disposal is zero liquid discharge (ZLD) but there is little information on its use for drinking water treatment systems in Colorado. The Division is currently working with stakeholders on a pilot project to develop additional information on ZLD.

American Recovery and Reinvestment Act

The "American Recovery and Reinvestment Act" aka Stimulus funding was signed by the President on February 17, 2009. Stimulus funding will be made available for water and wastewater infrastructure projects through the Department's existing Water Pollution Control Revolving (WPCRF) and Drinking Water Revolving Fund (DWRF) programs. Based on the latest EPA allocation information Colorado will

receive \$31.2 million for wastewater projects and \$34.3 million for drinking water projects. Funding may be made available in the form of zero interest loans and/or loan forgiveness.

In addition to the stimulus funding Colorado anticipates receiving the same level of WPCRF and DWRP funding as last year. If the final stimulus and annual DWRP and WPCRF allocations are awarded at the proposed levels it is anticipated that Colorado will have over \$71.6 million (WPCRF) and \$66.9 million (DWRP) in loan capacity for 2009*. The Division is currently working with communities on the 2009 project eligibility lists to identify projects that are "shovel ready."

*The projected loan capacity for 2009 is based on: Current WPCRF and DWRP fund balances (previous appropriations and loan repayments), 2009 loan repayments (paid in September 2009), 2009 Annual Appropriations of \$5.4 million (WPCRF) and \$14.3 million (DWRP) and Economic Recovery/Stimulus funding of \$31.2 million (WPCRF) and \$34.3 million (DWRP).