

Water Resources Review Committee

2011 Report to Legislative Council

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Committee Charge

The Water Resources Review Committee was created to contribute to and monitor the conservation, use, development, and financing of Colorado's water resources for the general welfare of the state (Section 37-98-102, C.R.S.). The committee is authorized to review and propose legislation in furtherance of its purposes. In conducting its review, the committee is required to consult with experts in the field of water conservation, quality, use, finance, and development. The committee was authorized to meet eight times in 2011, including two times outside of the interim period, and to take two field trips in connection with its mandate.

Committee Activities

The committee met eight times and took one tour during the 2011 interim. During the 2011 interim, the committee met with a broad range of water users and government officials, including local water providers, state water rights administrators, water quality regulators, state water planners, water project developers, and concerned citizens. The committee received briefings on major water issues affecting the state including planning for future water needs, funding needs for state water agencies and water projects, regulation of groundwater use, implementation of new water laws, and other issues.

Committee tours. In June, the committee toured for two days in the Colorado River Basin in western Colorado and visited water storage and distribution facilities, irrigation projects, hydropower plants, a natural gas operation, and other sites. This tour was organized by the Colorado Foundation for Water Education. In August, the committee attended the Colorado Water Congress summer convention in Steamboat Springs, where it held a public meeting to discuss a variety of topics including the water replacement requirements for Denver Basin wells, the regulation of water imported into Colorado, and interstate water compact compliance. The committee also toured a coal mine and attended presentations about water and energy development, water infrastructure financing, ongoing water supply studies, and other water management issues.

Water quality. The committee considered several issues affecting water quality in the state, including the regulation of water treatment facilities, drug disposal in water, and nutrient water quality regulations. Current law requires a drinking water treatment facility that stores, treats, or processes solid wastes originating at the facility to get a certificate of designation from the local municipality or board of county commissioners. These facilities are regulated by both the Solid and Hazardous Waste Commission and the Water Quality Control Commission in the Colorado Department of Public Health and Environment (CDPHE). The committee heard from representatives of the state's water treatment facilities who discussed the regulatory framework for waste impoundments at drinking water treatment facilities. They explained the need for clarification of the terms "drinking water treatment facilities" and "solid waste disposal site and facility," and the need to clarify the drinking water treatment facilities that are subject to a requirement to prepare and administer certificates of designation. In response to the concerns expressed by the municipal water providers, the committee recommends Bill A, which exempts waste impoundment facilities from the requirement to get a certificate of designation.

The committee also discussed the issue of household drug disposal and the water quality impacts associated with flushing medications down toilets. According to CDPHE, pharmaceutical waste primarily comes from pharmaceuticals that expire or otherwise become unuseable while on the pharmacy shelf and from unused pharmaceuticals that are distributed to patients. The Pharmaceutical Research and Manufacturers of America estimates that on an annual basis, 4.3 million pounds of prescribed medications go unused by consumers in U.S. households and by patients in long-term care facilities. Based on population, this equates to approximately 70,000 pounds of unused medications that are produced annually in Colorado. In a 2009 survey of Colorado residents conducted by the CDPHE, almost half of respondents said that they disposed of their expired or unused medications in the trash or flushed the medication down the toilet, and 10 percent took the medication to a medicine collection point. The committee heard from pharmaceutical representatives as well as CDPHE and heard testimony about existing drug take-back and disposal programs. The committee considered, but did not recommend, a bill concerning incentives to minimize the disposal of medications in water.

High levels of nitrogen and phosphorus in waters can produce harmful algal blooms. These blooms can produce "dead zones" in water bodies where dissolved oxygen levels are so low that most aquatic life cannot survive, a condition referred to as hypoxia. Factors that contribute to nitrogen and phosphorus pollution include overuse of fertilizer, runoff from cropland and developed areas, and overflow of septic systems. The U.S. Environmental Protection Agency (EPA) has been encouraging states to develop numeric nutrient criteria for nitrogen and phosphorus since 1998. Numeric criteria establish specific limitations on nitrogen and phosphorus concentrations in water bodies. In response to the EPA, the Water Quality Control Division in CDPHE has been developing numeric nutrient criteria for nitrogen and phosphorus for several years and has a rule-making hearing scheduled to adopt proposed nutrient regulations in March 2012. The committee heard presentations on the proposed regulations and how other states in the West are addressing nutrient water quality from the Water Quality Control Division and Legislative Council Staff. The Colorado Water Resource and Power Development Authority also presented to the committee its draft cost-benefit study of the proposed nutrient regulations. The final report will be available in November 2011.

Regulation of water use. The committee heard testimony from industry representatives that, when applied to permitted mining operations, Colorado's salvaged water rule will result in a windfall to downstream water users and the creation of unreasonable long-term expectations. The salvaged water rule, as articulated in Colorado judicial decisions, holds that water historically evaporated from the ground surface and consumed by plants cannot be the basis of a new water right. This salvaged water is therefore, under the rule, likely to be subject to augmentation requirements unless the General Assembly authorizes an exception. Under current law, unlined gravel pits and on-stream reservoirs are not required to replace water salvaged from preexisting vegetation. These current exceptions are not required to augment salvaged water because they are not motivated to disturb vegetation to obtain water rights (rather, land disturbance is a consequence of the activity itself) and, in the case of permitted gravel mining, are required to reclaim the site with vegetation as mining is completed. The committee recommends Bill B, which creates an additional exception for the salvaged water rule for all permitted mining operations.

Ground water pumped in the Denver Basin includes certain bedrock aquifers classified as "not nontributary" by state statute. Beginning July 2012, current statute dictates that augmentation plans will be based on "actual aquifer conditions," though no modeling tools to effectively implement this change are currently available and none will be available as of July 2012. The committee recommends Bill C to delay the implementation of this statutory change, providing until July 2015 for the development of an appropriate modeling tool.

During the course of its interim schedule, the committee was also briefed on other topics concerning the regulation of water use. These additional topics included rising ground water in the lower South Platte Basin, regulation of produced water (at oil and gas wells), and the regulation of water imported into Colorado from other states.

Funding for water projects and state water agencies. The State Engineer and the budget officer for the Division of Water Resources in the Department of Natural Resources informed the committee that current statutory restrictions on six of its cash funds inhibit efficient use of resources. Strategic consolidation of these cash funds would allow the Division of Water Resources to schedule facility inspections, for example, without cumbersome accounting requirements. The committee recommends Bill D, which consolidates cash funds in the Division of Water Resources to a single fund capable of effective management.

The committee discussed the various transfers that have been made from accounts in the Severance Tax Trust fund into the General Fund from sources that otherwise would have been available for water infrastructure projects, including transfers from the Perpetual Base Account of the Severance Tax Trust Fund, the Colorado Water Conservation Board Construction Fund, the Operational Account of the Severance Tax Trust Fund, the Local Government Severance Tax Fund, and the Local Government Mineral Impact Fund. The committee discussed the need for funding for water storage and infrastructure projects in order to accommodate Colorado's population, which is projected to nearly double by 2050. The committee recommends Resolution A, which calls for the protection of severance tax revenue that supports water projects.

The committee also heard testimony from the director of the Colorado Water Resources and Power Development Authority concerning the availability of loans for hydropower retrofits and other "microhydro" projects. Approximately 1,000 to 2,000 megawatts of potential hydropower is awaiting development in such projects throughout the state.

Water supply entities. The committee heard testimony from public water supply entities concerning proposed water supply projects, including the Southern Delivery System that will provide water to Colorado Springs and the Northern Integrated Supply project that will supply communities in northeastern Colorado. It also heard testimony about the role of mutual ditch and reservoir companies in providing water to farmers and other water users. These companies are special purpose nonprofit corporations formed to finance and maintain water distribution infrastructure, such as ditches and reservoirs, and to administer the distribution of water to stockholders. Stock in a mutual company represents water rights. Stockholders receive delivery from the water diverted by the company in proportion to their stockholding in the company. The committee heard testimony about the current requirement concerning the reissuance of lost share certificates and how it may unnecessarily delay water transactions involving mutual ditch companies. The committee recommends Bill E, which eases the process for the reissuance of a lost share certificate of a mutual ditch company.

Water efficiency and water reuse. The Interbasin Compact Committee (IBCC) was established by state law in 2005 to facilitate negotiations among Colorado's river basins and to address statewide water issues. The committee heard testimony from the IBCC about how increased water use efficiency may help reduce the need for additional water supplies. The IBCC and Denver Water, Colorado's largest municipal water provider, recommended that the committee adopt legislation to impose a statewide water efficiency standard for new toilets sold in Colorado. Federal law currently sets the maximum water usage for toilets at 1.6 gallons per flush (gpf) and for urinals at 1.0 gpf. The committee considered, but did not recommend, legislation that would have prohibited toilets sold in Colorado from using more than 1.28 gpf and urinals from using more

than 0.5 gpf after January 1, 2016.

Most water in Colorado may only be used once. Any water that is not consumed by the beneficial use must be allowed to return to the stream system for use by other water rights. The committee considered, but did not recommend, legislation that would have required the Colorado Water Quality Control Commission to adopt a regulation establishing reuse standards for certain wastewater, called "graywater," that is collected within a residential, commercial, or industrial building. It also would have specified that if the graywater is applied only to uses that are allowed by the water sources' well permits and water rights, the use of the graywater is deemed to be consistent with the well permits and water rights and deemed to not cause injury to other water users.

Committee Recommendations

As a result of committee discussion, the committee recommends five bills and a resolution for consideration in the 2012 legislative session.

Bill A — Exempt Drinking Water Certification Designation. Bill A exempts water treatment facilities that store, treat, or process certain solid wastes from being required to get a certificate of designation from the local municipality or board of county commissioners. The bill allows these facilities to dispose of their own solid wastes on the facility's property in compliance with the rules of the Solid and Hazardous Waste Commission for waste impoundments and solid waste disposal.

Bill B — Establish Mines Water Replacement Requirement. Bill B specifies that, for all permitted mining operations, there will be no requirement to replace the amount of historic natural depletion to the waters of the state attributable to preexisting natural evapotranspiration.

Bill C — Postpone Repeal Denver Basin Aquifers. Current law, scheduled to repeal on July 1, 2012, requires wells that pump from certain Denver Basin bedrock aquifers to replace actual out-of-priority depletions and specifies that the replacement obligation for all Denver Basin aquifers continues after pumping stops to compensate for depletions. Effective July 1, 2012, wells that pump from these aquifers would be required to replace actual stream depletions to the extent necessary to prevent any injurious effect on other water rights based on actual aquifer conditions, and replacement after pumping would cease for all Denver Basin aquifers unless required to compensate for injurious depletions. There is currently no modeling tool available to calculate depletions according to actual aquifer conditions. Draft Bill C postpones the repeal of the current law until July 1, 2015.

Bill D — Consolidate Division of Water Resources Funds. Draft Bill D consolidates several funds administered by the Division of Water Resources into a newly created Water Resources Cash Fund.

Bill E — Reissue Lost Mutual Ditch Share Certificate. If a person loses a mutual ditch share certificate, the person may file with the mutual ditch company a request to reissue the certificate, but current law requires the company to wait for three years before issuing a replacement. Draft Bill E will eliminate the three-year waiting period and specifies that a person who is named in the books of the company as a lienholder on the lost certificate is also entitled to file a request for reissuance of a lost certificate.

Resolution A — Use Severance Tax Water Infrastructure. Resolution A directs the General Assembly to avoid future diversions of water infrastructure revenues for budget balancing purposes and instead to direct these revenues to protect and develop Colorado's water resources according to existing statute.