

# COLORADO

LEGISLATIVE COUNCIL

Committee on

Water

Legislative Council
Research Publication No. 357

November 1990

## COLORADO LEGISLATIVE COUNCIL RECOMMENDATIONS FOR 1990

## **COMMITTEE ON WATER**

Legislative Council
Report to the
Colorado General Assembly

Research Publication No. 357 November 1990

#### COLORADO GENERAL ASSEMBLY

OFFICERS

Rep. Chris Paulson
Chairman

Sen. Ted L. Strickland
Vice Chairman

STAFF
Charles S. Brown
Director
David Hite
Deputy Director
Stan Elofson
Assistant Director



#### LEGISLATIVE COUNCIL

ROOM 029 STATE CAPITOL DENVER, COLORADO 80203-1784 (303) 866-3521 **MEMBERS** 

Sen. Wayne Allard
Sen. Brian McCauley
Sen. Harold McCormick
Sen. Ray Powers
Sen. Larry Trujillo
Sen. Jeffrey Wells
Rep. Chuck Berry
Rep. Carl "Bev" Bledsoe
Rep. Matt Jones
Rep. Paul Schauer
Rep. Carol Taylor-Little
Rep. Ruth Wright

To Members of the Fifty-Eighth Colorado General Assembly:

Submitted herewith is the final report of the Committee on Water. The committee was appointed by the Legislative Council pursuant to House Joint Resolution 1033, 1990 session.

At its meeting on October 15, the Legislative Council reviewed this report. A motion to forward four bills, with favorable recommendation, to the Fifty-Eighth General Assembly was approved.

Respectfully Submitted,

/s/ Representative Chris Paulson Chairman Colorado Legislative Council

## **TABLE OF CONTENTS**

i de la companya de	Page
ETTER OF TRANSMITTAL	. iii
ABLE OF CONTENTS	. v
IST OF BILLS	. vii
OMMITTEE ON WATER	
Members of the Committee  Committee Charge  Committee Activities  Committee Recommendations	. 3 . 4
IAJOR ISSUES CONSIDERED BY COMMITTEE	_
Instream Flow Rights	. 7 . 8
Interstate Water Compacts	
Water Quality Control	. 10
Proposed Water Projects	. 12
Wetlands	. 12
Endangered Species Act	. 13
Other Issues	. 13
PPENDIX A	. 15
ILLS 1 THROUGH 4	. 29

## **LIST OF BILLS**

		Page
Bill 1	Concerning the Instream Flow Program of the Colorado Water Conservation Board	29
Bill 2	Concerning the Mitigation of Adverse Environmental and Economic Effects Resulting from the Removal of Water from Geographic Areas	35
Bill 3	Concerning Authorization of Expenditures from the Colorado. Water Conservation Board Construction Fund, and Relating to Activities of the Colorado Water Conservation Board in Connection Therewith	39
Bill 4	Concerning the Creation of the Water Resources Legislation Review Committee	43

#### LEGISLATIVE COUNCIL

#### **COMMITTEE ON WATER**

#### **Members of the Committee**

Senator Tilman Bishop,
Chairman
Representative Pat Grant,
Vice Chairman
Senator Harold McCormick
Senator Bob Pastore

Representative Faye Fleming Representative Bill Jerke Representative Matt Jones Representative Margy Masson Representative Jeannie Reeser

#### **Legislative Council Staff**

Larry Thompson
Principal Analyst I

Susan Liddle Senior Research Assistant

## Office of Legislative Legal Services

Bart Miller Senior Staff Attorney

Mike Genoways Staff Attorney

## Committee on water

#### **Committee Charge**

House Joint Resolution 90-1033 provides that the interim study on water include, but not necessarily be limited to, the following areas and issues:

- 1. conservation of the state's water resources, including ground water resources, and protection of Colorado's compact entitlements;
- 2. potential means to simplify the lengthy state, local government, and federal review processes for issuing permits for the construction of a water resource project;
- 3. potential means of managing and mitigating the effects of removing water from one portion of the state to another so that appropriation and diversion of water for beneficial use within the natural basins will not be impaired or increased in cost;
- 4. minimum stream flow issues, particularly as these are impacted by our current drought conditions;
- 5. wetlands issues:
- 6. briefings on pending litigation involving Colorado's interstate water compact agreements;
- 7. leasing of water;
- 8. approaches to maintaining the natural environment and water quality in conjunction with the development of the state's water resources; and
- 9. monitoring and, if necessary, making recommendations to members of the General Assembly and administration on the impact of drought conditions throughout the state.

#### **Committee Activities**

The committee addressed the following major issues:

- study of the consequences of converting conditional water rights to instream flow rights;
- review of federal and state legislation concerning water quality control;
- survey of water use efficiency/conservation programs in a number of Colorado municipalities;
- review of water projects (i.e., the Union Park Project and Fremont Fort Reservoir);
- the improvement of water resources management in Colorado and the feasibility of a state water planning process;
- consideration of state policy options regarding wetlands;
- consideration of the federal Endangered Species Act and its impact on the State of Colorado; and
- briefings on interstate compact agreements and litigation relating thereto.

#### I. Committee Recommendations

As a result of the committee's activities, the following bills are recommended to the Colorado General Assembly.

## Concerning the Instream Flow Program of the Colorado Water Conservation Board -- Bill 1

Testimony to the committee indicated the need for a clarification of the instream flow statute. Concern was expressed whether conditional water rights can be converted to instream flow rights by the Colorado Water Conservation Board (CWCB). The bill amends the instream flow statute by stating that the term "water, water rights, or interests in water" refers to perfected water rights and not conditional water rights.

Bill 1 authorizes the CWCB to file and maintain a statement of opposition with respect to junior storage water rights if these rights were to be used to inundate a portion of a stream on which the board holds a minimum stream flow water right. The conditions under which the board may file a statement of opposition are the following:

- the board has promulgated rules defining the criteria for filing and maintaining such a statement of opposition;
- rules promulgated by the board are prospective from the date of their adoption and are not applied to applications for decrees for storage water rights filed before the effective date of the board's rules; and
- the statement of opposition relates to a minimum stream flow water right acquired by the board on or after July 1, 1991.

All of the above circumstances must exist for the board to file and maintain a statement of opposition.

# Concerning the Mitigation of Adverse Environmental and Economic Effects Resulting from the Removal of Water from Geographic Areas -- Bill 2

Committee members and others expressed concern about the adverse environmental and economic effects that may result from the removal of water from previously irrigated land. Changing a point of diversion and thus removing water from irrigated farm land produces a host of negative effects, such as soil erosion, spreading of noxious weeds, and the loss of assessed property valuation. One area that may be particularly damaged is the "Fertile Triangle" northeast of Denver. An estimated

60,000 to 140,000 acres of farmland in that area are at risk of being dried up as a result of water sales to metropolitan areas.

Bill 2 requires any party applying for a change in a water right which will cause water to be removed from an irrigated area to submit to the water court an assessment of the environmental and economic consequences of changing such a right. The environmental assessment is to include, but not be limited to, an evaluation of any adverse changes which may occur in the soil, geography, and habitat of a given area. The economic assessment is to include, but not be limited to, the loss in assessed valuation of land after water is removed, and the effect thereof on county and other local government services such as police protection, fire protection, and public schools. The party must also file a plan for mitigating any adverse environmental and economic effects of the removal of water from irrigated land.

Water courts are required to approve or disapprove the plan for mitigation submitted by the petitioners and, if approved, are to incorporate such plan into the order adjudicating the change of water right. The court is directed to make the implementation of such a plan a condition of the order granting the change in water right.

# Concerning Authorization of Expenditures from the Colorado Water Conservation Board Construction Fund, and Relating to the Activities of the Colorado Water Conservation Board in Connection Therewith -- Bill 3

Bill 3 authorizes financial assistance loans for water resource projects from the Colorado Water Conservation Board Construction Fund. This fund provides low interest loans after projects have been authorized by the Colorado General Assembly. These loans are for projects which increase the beneficial consumptive use of Colorado's compact entitled waters or for projects which repair and rehabilitate existing water storage and delivery systems. These water resource projects are reviewed and recommended by the CWCB and submitted to the General Assembly in January of each year.

## Concerning the Creation of the Water Resources Legislation Review Committee -- Bill 4

Pursuant to Bill 4, an eleven-member water resources legislative review committee is created for overseeing the conservation, use, and development of water resources in Colorado. It was the consensus of the members of the interim water committee that many issues addressed in this report require continued study and monitoring. This statutorily created committee is required to meet annually to review all water resources legislation and may consult with experts in the field of water conservation,

use, and development. An annual report of the findings and recommendations of the committee is required by February 1 of each year.

### II. Major Issues Considered by the Committee

## **Conversion of Conditional Water Rights to Instream Flow Rights**

A considerable amount of testimony was provided concerning the issue of whether conditional water rights can be converted to instream flow rights. Section 37-92-103 (6), C.R.S., states that a "conditional water right" means

...a right to perfect a water right with a certain priority upon the completion with reasonable diligence of the appropriation upon which such water right is to be based.

Representatives of the Northern Colorado Water Conservancy District (NCWCD) suggested that, if the current instream flow law were litigated, the Colorado Supreme Court would hold that conditional water rights cannot be changed to instream flow use by the Colorado Water Conservation Board. Arguments presented in support of the that contention included:

- The General Assembly has required that in order to obtain a conditional decree the applicant must have a definite plan to divert, store, or otherwise capture, possess, and control a specific quantity of waters of the state.
- The General Assembly has provided that in order to obtain a conditional decree an appropriator must show that the project can and will be built.
- Reasonable diligence in putting water to beneficial use must be demonstrated periodically in order to keep the conditional decree in effect.
- Colorado's water statutes are designed to encourage actual application to a beneficial use at an early time for the purpose for which the appropriation was originally made.

NCWCD representatives suggested that rather than waiting for a final court decision, there should be a clarification of the instream flow law (Section 37-92-102, C.R.S.).

The following possible consequences of allowing conditional rights to be changed to instream flow rights by the Colorado Water Conservation Board were noted by the NCWCD:

- entities may receive a financial or tax benefit by selling, leasing, or donating a conditional water right they no longer intend to use for original project purposes;
- the CWCB will be able to "leapfrog" the priority system to obtain a senior instream flow right;
- the amount of the senior instream flow right could be the entire amount of the conditional decree and could command the full amount of the conditionally decreed right to the detriment of the junior water right;
- the CWCB could obtain some of the best rights on the state's rivers; and
- new speculation in water rights will occur.

A representative of the CWCB and other interested persons indicated that the board has the legal authority under existing statutes to change a conditional decree to instream purposes and that additional legislation is not necessary. Section 37-92-102 (3) allows the Colorado Water Conservation Board

... exclusive authority, on behalf of the people of the state of Colorado, to appropriate in a manner consistent with sections 5 and 6 of article XVI of the state constitution, such waters of natural streams and lakes as the board determines may be required for minimum stream flows or for natural surface water levels or volumes for natural lakes to preserve the natural environment to a reasonable degree.

Testimony was given that the CWCB does consider the impact to upstream developers when conditional water rights are changed to absolute instream flow water rights. The CWCB has been careful not to undertake the conversion of a conditional water right to instream use if it would upset existing water uses or would unduly curtail water development activities in any river basin.

Recommendation. The committee recommends Bill 1 which would amend the instream flow statute by stating that the terms "water, water rights, or interests in water" refer to perfected water rights and not conditional water rights.

## Litigation Involving Colorado's Interstate Water Compacts

The committee heard testimony concerning the <u>Kansas v Colorado</u> lawsuit from representatives of the Attorney General's Office, the Colorado Water Conservation Board, the State Engineer's Office, and special counsel retained for this case. Kansas has alleged that Colorado has violated the Arkansas River Compact in the following manner:

- improper diversion of water to the Trinidad Reservoir;
- post-compact well development in Colorado which has diverted Kansas' water entitlements; and
- the operation of Pueblo Reservoir and the Winter Storage Program which is further depleting the Arkansas River of Kansas' entitlements.

In addition, Kansas has claimed \$100 million in damages caused by Colorado interests and has stated that more than 1.2 million acre feet of water has been taken from Kansas for the period 1950-1985. Colorado has countered that extensive well drilling by Kansas has depleted Arkansas River flows and that Kansas has diverted water for storage without compact administration approval.

The trial commenced in September 1990 in Pasadena, California. The trial may not be concluded until February 1, 1991.

A representative of the Attorney General's Office provided an update on the Nebraska v Wyoming lawsuit. In October 1986, Nebraska filed a petition in the United States Supreme Court which alleged that Wyoming was violating a 1953 decree which equitably apportioned the water of the North Platte River and its tributaries among Colorado, Wyoming, and Nebraska. Although Nebraska's petition was directed solely against Wyoming, the state of Colorado, as a party to that earlier proceeding, is a party to the present action.

In March 1987, the Platte River Whooping Crane Critical Habitat Maintenance Trust and the National Audubon Society moved to intervene in the Nebraska v Wyoming case to require Wyoming to deliver North Platte River minimum flows at the Wyoming-Nebraska state line for migratory bird habitat in eastern Nebraska. At that time, the states of Colorado, Nebraska, and Wyoming joined together in opposing intervention. Of concern to Colorado at this time are matters that are referred to as "below Tri-State Dam issues." Tri-State Dam is located on the North Platte River just downstream of the Nebraska-Wyoming state line. There is uncertainty over whether Nebraska will be successful in raising claims to water below Tri-State Dam for threatened and endangered species in the Big Bend reach of the Platte River.

Discovery and depositions in this litigation are on-going. Testimony indicated that Colorado should monitor negotiations concerning some of the issues involved in the litigation and ensure that Nebraska does not attempt to diminish Colorado's water apportionment.

#### **Water Conservation**

Testimony was given regarding water conservation measures currently in effect from representatives of the Colorado River Water Conservation District; the Northern Colorado Water Conservancy District; and the cities of Aurora and Denver. Committee members expressed interest in examining additional water conservation efforts which have been implemented in municipalities throughout the state. A survey of water use efficiency/conservation programs was sent to 22 municipalities, of which, 17 responded (see Appendix A for detailed results of this survey).

Two bills were proposed to address water conservation issues. The first bill, proposed by Colorado Trout Unlimited, would have established the "Urban Water Use Efficiency Act of 1991" and would have required cities and municipalities to develop water saving programs. The second proposal, suggested by a member of the committee, would have authorized and encouraged water conservancy districts and water conservation districts to develop and implement programs to assist in efficient water use.

<u>Recommendation</u>. The committee voted to not recommend water conservation legislation at this time. Several members of the committee stated that they may individually consider the introduction of legislation that addresses water conservation in the 1991 session.

## **Water Quality Control**

Representatives of the Water Quality Control Commission (WQCC) provided a briefing on a variety of water quality issues including:

- toxics standards;
- biomonitoring;
- individual control strategies for toxic pollutants;
- a review of the stormwater management program; and
- Colorado's drinking water program.

Toxic water pollutants. The Director of the Water Quality Control Division (WQCD) within the Department of Health discussed Colorado's efforts relating to the control of toxic water pollutants. States are required to develop "individual control strategies" for those water segments that do not meet water quality standards due to point source discharges of listed toxic pollutants. Control strategies must include the following information:

- a list of those waters within the state which cannot reasonably be expected to attain or maintain water quality standards due to toxic pollutants;
- a list of all navigable waters in the state which are not expected to meet standards due to discharge of toxic pollutants from point sources;
- a determination of the specific point sources impairing the water quality for each segment of the navigable waters included on the above list and the amount of such toxic pollutant discharged by each source; and
- an individual control strategy for each segment which will reduce the discharge
  of toxic pollutants from point sources identified by the state through limitations on effluents to achieve the applicable water quality standard as soon as
  possible, but not later than three years after the date of the establishment of
  such strategy.

Each state develops numerical water quality standards for inorganics (metals) and organics (pesticides, solvents). The United States Environmental Protection Agency (EPA) is monitoring state compliance with Section 303(c)(2)(B) (toxic requirements) of the Clean Water Act and will promulgate federal standards for toxics for any state which has not achieved full compliance with this section. Colorado is one of the states listed which has yet to achieve full compliance and will be subject to the federal regulations if it fails to adopt appropriate numeric criteria for the priority toxic pollutants prior to publication of a federal rule, which is expected later this year.

Stormwater permitting program. Congress has mandated that the EPA develop regulations to protect lakes, rivers, and streams from pollution caused by urban stormwater runoff. These regulations will create a major impact on the state, municipalities, and industries which fall under their purview. The permitting process is complicated and costly because of the monitoring and analysis requirements. The new regulations will require the control of pollution in stormwater and in other point source runoff from stormwater (e.g. streets, construction and industrial sites, parks). Each entity will be required to apply for a permit and submit a compliance plan.

<u>Drinking water regulations</u>. Representatives of the Drinking Water Program, Water Quality Control Division, discussed the impacts of the new EPA drinking water regulations. The EPA has increased the number of chemicals that are required to be tested in drinking water samples. The state must be in compliance with the federal regulations by June 1993.

<u>Recommendation</u>. Testimony concerning water quality control was presented for information purposes only. No legislation is recommended at this time, but continued monitoring of these issues is essential.

#### **Proposed Water Projects**

Briefings were provided concerning two proposed Colorado water projects. The proposed Fremont Fort Reservoir would be located on the Palmer Divide in the canyon that contains the headwaters of West Bijou Creek. The site is near the junction of Douglas, El Paso and Elbert county lines. Testimony indicated that this reservoir, with its calculated total storage and conveyance capacity of approximately 1.8 million acre feet, could easily serve the water storage needs of the Arkansas River Basin as well as the South Platte River Basin. The proposed reservoir would be built under the auspices of the Colorado Water Resources and Power Development Authority created pursuant to Article 95, Title 37, C.R.S.

The Union Park Project, located in Gunnison County, was proposed to the committee as a lower cost alternative to the Two Forks Dam. The capacity of the Union Park Project would be approximately one million acre feet with an annual average diversion of 60,000 acre feet to the Denver metropolitan area. Comments in support of the Union Park Project indicated that it could provide supplemental water for the river basins and wetlands of both the Eastern and Western Slopes during droughts when local economies are endangered. In addition, it could reduce the loss of surplus Gunnison Basin water entitlements to down river states as a result of the transmountain diversion of much needed water to the Upper Colorado River Basin.

Representatives of POWER (People Opposing Water Export Raids) voiced their opposition to the Union Park Project based on what they perceived to be the speculative nature of the project and very serious environmental and economic impacts on the Gunnison Basin. It was also noted that other alternatives to the Union Park proposal exist including conservation and water sharing within the Denver metropolitan area. If transmountain diversion is necessary, the Colorado Aqueduct Return Project was recommended as an alternative.

## **State Policy Options Regarding Wetlands**

Representatives of the Department of Natural Resources (DNR) commented on state policy options regarding wetlands. DNR is commencing a study of wetlands which will include an examination of the following topics:

- existing wetlands inventory efforts including the need for and feasibility of acquiring additional information about wetlands in Colorado;
- existing federal, Colorado, and non-profit programs;
- experience in Colorado under the various regulatory and land management programs; and

• the effectiveness and adaptability to Colorado's needs of other states' wetlands experiences.

The study will be conducted in-house and in coordination with other interested state agencies (e.g., the Departments of Agriculture, Health and Highways). It is expected that the wetlands study will be completed by June 1991. The findings and recommendations in that report will be presented at that time to the appropriate interim committee.

#### **Endangered Species Act**

Several individuals testified concerning the federal Endangered Species Act (ESA) and its impact on the state of Colorado. The purpose of the act is to provide a means to conserve the ecosystems upon which endangered and threatened species depend and a program for the conservation of such species. The U.S. Fish and Wildlife Service is responsible for publishing a list of all threatened and endangered species. Twenty-three species that occur in Colorado have been listed as threatened or endangered under the ESA. These include one mammal, six birds, four fish, eleven plants and one insect. The four fish are the Colorado squawfish, humpback chub, bonytail chub, and greenback cutthroat trout.

An update was given on the recovery implementation programs for endangered fish species in the Upper Colorado River Basin and Platte River Basin. The purpose of such programs is to protect and recover species to a point of no longer needing protection under the act. The focus of the programs is in the following general areas:

- the acquisition of water rights and protection of stream flows;
- research into the life history and habitat needs of the endangered fish;
- propagation and stocking of fish; and
- development of an information and education program to promote a more positive image of the endangered fish, to prevent the taking of the endangered fish by fishermen, and to promote support for the recovery programs.

<u>Recommendation</u>. The committee makes no recommendations regarding the federal Endangered Species Act.

#### Other Issues Considered

<u>Revision of reasonable diligence requirements</u>. The committee considered a bill which would have required the CWCB, on behalf of the people of the state, to obtain conditional water rights in water stored in reservoirs which are listed in the inventory

required by section 37-60-115 (4) (a), C.R.S., and which may be constructed at some future date. The bill would have provided that such water rights not be subject to reasonable diligence requirements so long as such conditional water rights are not assigned to any entity. Upon the assignment of such rights, reasonable diligence requirements would apply.

<u>Recommendation</u>. The committee voted not to consider this proposal as one of its four bills.

State water planning. The need for a state water planning process that would involve all water users, resource managers, and policy makers was discussed. Because of regional and interjurisdictional conflict regarding the diversion of water to the Denver metropolitan area, additional efforts are needed to facilitate coordination and give a voice to competing water users. A bill was considered to require the implementation of a consolidated state water planning process to solve basin-specific water management issues in an effective and efficient manner.

<u>Recommendation</u>. The committee voted not to consider this proposal as one of its four bills.

#### **APPENDIX A**

This survey updates a 1988 survey conducted by Legislative Council staff. For the purposes of this survey, a letter was sent to 22 municipalities requesting a response about any water use efficiency/conservation programs in existence in the municipality. Of the 22 surveys sent, 17 municipalities responded. Information about water conservation programs in Denver and Aurora was obtained at a meeting of the 1990 Water Interim Committee, therefore surveys were not sent, although information on their conservation programs is summarized below. Copies of all survey responses are available in the Legislative Council Office. Summaries of the conservation programs are provided below.

<b>MUNICIPALITY</b>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Arvada	Yes	95,861

- 1) Metering. All water customers in Arvada are metered.
- 2) Plumbing Fixtures. Any person who voluntarily installs an ultra-low volume (ULV) toilet in a building that is connected to the City of Arvada water system on or after January 1, 1990, is entitled to an \$80.00 rebate from the city. Effective January 1, 1991, ULV toilets are required to be installed in all new construction and upon remodeling of existing facilities.
- 3) Rates. In 1990, an ordinance was adopted which establishes a phased-in rate structure to take effect in 1991 which will increase block water rates (with the second block rate set at 25 percent greater than the first block rate). It is proposed to reduce the volume of water in the first block from 50,000 gallons bi-monthly to 30,000 gallons bi-monthly over a five-year period. These changes in the water rates are intended to encourage and reward conservation year round.
- 4) Water Audit. At the request of the homeowner, a free water audit is conducted. The main purpose of the audit is to identify water wasting areas and install retrofit conservation devices such as low-flow plumbing fixtures.
- 5) Water Conservation Master Plan. This water conservation master plan sets forth the goals and policies regarding Arvada's water conservation program. It establishes an operating framework within which the program can operate.

MUNICIPALITY
PROGRAMS
Yes/No

Aurora
POPULATION
232,400

#### **Program Description**

- 1) Metering. Aurora is 100 percent metered, and since 1984, individual townhouses have been metered at the time of construction.
- 2) <u>Public Education</u>. Presentations on water conservation are given to school groups as well as community organizations. Curriculum which relates to water conservation has been developed for the 4th and 5th grades, and brochures and literature are developed for the public.
- 3) <u>Xeriscape</u>. Seminars are held annually, and brochures and literature have been developed to educate the public.
- 4) <u>Landscape Ordinance</u>. There are lawn size restrictions based on the size of the lot, and soil preparation is required.
- 5) <u>Plumbing</u>. A code established in 1977 requires low-flow plumbing fixtures in all construction.
- 6) <u>Irrigation Management</u>. Water from detention ponds is used to irrigate three city parks, and wells are used to irrigate 2 city golf courses.
- 7) <u>Leak Detection</u>. Since the program was implemented in 1987, 138 leaks have been located and repaired.

MUNICIPALITY
PROGRAMS
Yes/No

Boulder
POPULATION
83,800

- 1) Metering. Since 1965, the City of Boulder and its outside city service area have been fully metered.
- 2) <u>Block Rate Structure</u>. In January 1988, water conservation pricing went into effect for all Boulder water customers. The increasing block rate structure was established to more equitably distribute the costs for providing peak demand services to high water use customers. This structure allows the city to discourage water waste and abuse by charging people based on the amount of water they use.

- 3) <u>Public Education</u>. Boulder actively participates in educating residents about water conservation measures. This includes information about xeriscaping, retrofitting with low-flow plumbing devices, and general water conservation methods.
- 4) <u>Xeriscape</u>. The City of Boulder offers several free xeriscape gardening seminars each spring. Seminar topics include how to build and maintain a xeriscape garden, how to convert lawn areas to xeriscape, alternative turfs, native plants, irrigation systems, and appropriate mulching.
- 5) <u>Central Irrigation</u>. The Boulder Parks Department and the Utilities Division will be developing a centrally-controlled computerized irrigation system. It is estimated that 50 percent of Boulder's parks will be on-line by the end of the summer of 1990. Irrigation schedules are adjusted to allow maximum turf quality with minimal water.
- 6) <u>Landscape Specifications</u>. In 1990, about 100 square feet of medians will be upgraded with trees and shrubs to be drip irrigated. The City of Boulder has also assured the use of xeriscaping principles in its landscape specifications.
- 7) Energy and Resource Conservation Option Points. This program requires that all new dwelling units for which a building permit is needed, score a minimum of 20 points from the Energy and Resource Conservation List. These include:
- aerators and flow reducing showerheads with reduction to no more than 2.5 gallons per minute = 1 point
- hot water pipe insulation of R-4 or better = 1 point
- efficient appliances = 1 point for any two appliances
- toilets with 3.1-3.5 gallons per flush = 1 point
- toilets with 2.1-3.0 gallons per flush = 2 points
- xeriscape landscaping = 1 point for two xeriscape techniques, 2 points for three, 3 points for four, and 4 points for five
- recycling facility = 2 points
- retrofit of existing building to meet current City Building Code = 2 points

MUNICIPALITY	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Broomfield	Yes	25.000

#### **Program Description**

- 1) Ordinances. City ordinances require low-flow plumbing fixtures for all new homes, and prohibit the waste of city treated water.
- 2) Public Education. For several years, Broomfield has participated in "Drinking Water Week" to promote water awareness and conservation. Presentations are given in schools to emphasize water awareness, and the city encourages voluntary participation in the Denver Water Department's circle, square, and diamond lawn watering calendar each summer by publishing the schedule locally.
- 3) <u>Landscape</u>. Approximately 10 acres of city lawns are irrigated with non-potable reuse water. The parks department utilizes night-time watering as well as xeriscaping of all new street medians. On an experimental basis, 14 acres of city park was recently retrofitted with moisture sensing devices which will interrupt the normal watering schedule if soil moisture is too high.

<b>MUNICIPALITY</b>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Colorado Springs	Yes	413,497

- 1) Metering. The City of Colorado Springs has been fully metered for several decades.
- 2) <u>Uniform Rate Structure</u>. A uniform rate structure is utilized which encourages conservation by not providing discounts for large water users.
- 3) <u>Water System Control Center</u>. A computerized monitoring and control system indicates unusual pressure fluctuations and water use consumption which can reveal system leaks or other malfunctions.
- 4) <u>Pressure Regulation</u>. Installation of water regulators is mandatory on domestic service water lines to limit pressures to 50 psi.
- 5) <u>Leak Detection</u>. A sophisticated leak detection system was begun in 1986. Since then, a total of 212 miles of water mains have been surveyed.

- 6) Wastewater Reuse. A wastewater reuse program started in 1961 provides treated wastewater for the irrigation of golf courses, park lands, cemeteries, and campus areas. Direct wastewater reuse saved Colorado Springs approximately 4,700 acre feet of treated water supply in 1989.
- 7) <u>Xeriscape</u>. A xeriscape demonstration garden was installed at the Water Control Facility to provide a living display of plant types that can be successfully incorporated into landscaping alternatives.
- 8) Zero-Discharge. Zero-discharge water recovery facilities have been installed at the R.D. Nixon and Martin Drake electric power generating plants.
- 9) <u>Public Education</u>. An active education program encourages conservation through use of pamphlets, brochures, and films. Presentations are given at meetings and schools.

<b>MUNICIPALITY</b>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Denver	Yes	491,396

- 1) Metering. Metering becomes mandatory effective January 1, 1991.
- 2) <u>Leak Detection</u>. The entire system is checked every four years.
- 3) <u>Public Education</u>. Presentations are made to school groups and community organizations. Information about water conservation is also distributed by means of advertising on the radio and message boards on RTD busses.
- 4) Rates. Residential rates converted to increasing block rates on April 1, 1990.
- 5) <u>Landscaping</u>. Xeriscape seminars are well attended and interest in the programs is increasing. Daily ET rates are publicized.
- 6) <u>Irrigation Management</u>. The Denver Parks and Recreation Department received a grant to install a computerized central control system for 10 parks. Denver Water Department properties are also being retrofit with xeriscape.
- 7) Rebates. Since January 1, 1990, \$80 rebates have been paid to over 1,050 customers who have installed ultra low-volume (ULV) toilets.

MUNICIPALITY
PROGRAMS
Yes/No

Durango
Yes
12,633

#### **Program Description**

- 1) Metering. Since 1980, all residential and non-residential properties have been metered.
- 2) <u>Leak Detection</u>. Property owners are required to repair leaks in water service lines. In 1988, the City purchased leak detection equipment, and currently has a comprehensive program to pinpoint waterline leaks. Every two years all water mains are surveyed.
- 3) <u>Public Awareness</u>. A water shortage management plan allows for varying degrees of voluntary and mandatory restrictions on water use.

MUNICIPALITY	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Fort Collins	Yes	78,000

- 1) Prohibition of Wasting Water. Under a city ordinance, it is unlawful to waste water in any way. Two warnings precede the issuance of a ticket.
- 2) <u>Water Restriction/Rationing</u>. In the event of a drought or water shortage, the City Council -- upon recommendation of the Water Board -- is empowered to place further restrictions on the use of city water.
- 3) <u>Water-saving Plumbing Fixtures</u>. Water-saving toilets, showerheads, and kitchen and bathroom faucets are required for all new construction and replacement.
- 4) Metering. Fort Collins has required the installation of meters for all commercial units, all services outside the city limits, and to all multi-family residential units. All others have the option of installing a meter. A new state law requires meters for all new residential construction as of July, 1990.
- 5) <u>Public Education</u>. Fort Collins has had a water conservation public education program since 1977. Public education efforts include: educational literature; presentations to various groups; articles and interviews in local newspapers and radio stations; publicized lawn watering data; tours of the Xeriscape Demonstration Garden; and enforcement of ordinances.

- 6) <u>Xeriscape</u>. A xeriscape demonstration garden was installed in front of City Hall in 1986. Tours of the garden and workshops on xeriscape are provided as part of the public education program.
- 7) Reuse. There is an agreement between the city, the Platte River Power Authority, and Water Supply and Storage (a local irrigation company) to reuse 4200 acre-feet of sewage effluent at the Rawhide Power Plant (a local coal-fired electrical generation plant) in exchange for additional supplies.
- 8) <u>Leak Detection</u>. The leak detection program utilizes sonar leak detection equipment. The goal is to cover the entire distribution network every two years.
- 9) Research Projects. A water rate study, drought study, and water demands options study have been completed in the last several years.

<u>MUNICIPALITY</u>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Grand Junction	Yes	28,144

- 1) Metering. Grand Junction has universal metering for residences and parks.
- 2) Intergovernmental Agreements. The Cities of Grand Junction and Clifton have agreed to share water treatment plant capacities in order to allow the City to deliver water to Clifton in the winter and for Clifton to deliver water to the City in the summer. It is estimated that this effort over the 25 years of the agreement will amount to a savings of over \$13,000,000 to both entities.
- 3) Rate Structure. The City has a declining block rate structure. According to Bill McCurry, Mayor, due to the current rate levels, the incentive for higher water use is low.
- 4) <u>Leak Detection</u>. Grand Junction has a long term program of water line replacements which have significantly reduced the number of water breaks in the system.

MUNICIPALITY

**PROGRAMS** 

**POPULATION** 

Yes/No

Greeley Yes

60,449

- 1) Metering. The metering program, initiated in 1983, is a flat rate to meter conversion program with a projected duration of 15 years. Of the original 8,600 flat rate accounts, the city has converted 3,945 accounts to metering in 7.5 years.
- 2) Sprinkler Ordinance. In 1983, an ordinance governing lawn watering was adopted. The ordinance requires that beginning May 1 and ending October 1 of each year, water customers water lawns and gardens on alternating days except between the hours of 1:00 p.m. and 5:00 p.m. Fines are associated with violations of the ordinance.
- 3) <u>Xeriscape</u>. The city's wastewater treatment plant, which was completed in 1986, was landscaped using xeriscape principles. A xeriscape demonstration project was jointly undertaken in 1989 by the city's Wildlife Committee of the Parks and Recreation Department and the University of Northern Colorado. The project will demonstrate different levels of watering using several types of landscaping and plants that do well with the different levels of irrigation.
- 4) <u>Wastewater Reuse</u>. A small portion of wastewater effluent is used to irrigate the lanscaping at the wastewater treatment plant.
- 5) Public Information/Education. Information is dispersed by means of presentations to schools, tours of the wastewater treatment plant in Greeley and the water treatment facility in Loveland, and press releases encouraging compliance with lawn watering restrictions. In 1989, information on conservation was published in a "Neighborhood Guide" which is put out by the departments of Community Services and Public Information.
- 6) <u>Drought Study</u>. In 1991, the Greeley Water Division will begin a drought study which will take approximately two years to complete. The goal of the study is to identify water shortages that might be experienced in a sustained drought.
- 7) <u>Lysimeter Program</u>. Since 1987 the Water Division has had a lysimeter program to monitor the consumptive use of residential lawn watering.

**MUNICIPALITY** 

**PROGRAMS** 

**POPULATION** 

Yes/No

Lakewood

Yes

130,000

#### **Program Description**

The City of Lakewood receives most of its water from the Denver Water Department and therefore participates in many of the same conservation activities as Denver (see Denver). Some other measures Lakewood has taken are:

- computer controlled irrigation systems in city parks;
- xeriscaping with low water use plants in roadway and park landscaping projects; and
- buying nonpotable ditch water for irrigation of parks.

**MUNICIPALITY** 

**PROGRAMS** 

**POPULATION** 

Yes/No

Lamar

Yes

9.000

#### Program Description

A 1989 Lamar city ordinance concerns restrictions on the use of water from the water system. Voluntary conservation efforts and restrictions consist of asking users to restrict usage of water for lawn and irrigation purposes based on the address of the user. Lamar has not been required to implement the mandatory use restrictions. However, voluntary use restrictions were effectively utilized during the summer of 1989.

<u>MUNICIPALITY</u>	<u>PROGRAMS</u>	<b>POPULATION</b>
	Yes/No	
Littleton	Yes	31,297

## Program Description

The City of Littleton has a total service contract with the Denver Water Board. Consequently, they are involved in all the conservation programs currently sponsored by the Denver Water Department (see Denver). As a contract distributor, all water customers in Littleton are metered.

**MUNICIPALITY** 

**PROGRAMS** 

**POPULATION** 

Yes/No Yes

Loveland

38,000

- 1) Metering. In 1981, water meters were installed for all of Loveland's water customers. Since then, average annual water usage has been 20 percent lower. Loveland also has an on-going meter testing and replacement program.
- 2) Price Restructuring. Water rates were restructured in 1980 to reflect the cost of service. A water bill has a fixed base charge and a volume or consumption charge.
- 3) Public Education. Public education methods include:
- newsletter to customers:
- homeowners information packet;
- presentations to schools and organizations;
- tours of treatment plant;
- materials for water use unit in schools; and
- displays at community events.
- 4) Evapotranspiration Program (ET). Loveland participates in the ET program with the Northern Colorado Water Conservancy District. ET rates are published daily.
- 5) <u>Leak Detection Program</u>. A leak detection study of transmission and distribution mains is currently being conducted with additional detection equipment to be purchased in 1991.
- 6) Ordinances. Ordinances include the prohibition of wasting water, the requirement of low-flow devices for new development; and offering a credit for low-flow plumbing retrofits and xeriscaping.
- 7) <u>Xeriscaping</u>. Loveland promotes xeriscaping and a demonstration garden is in the design phase.

MUNICIPALITY
PROGRAMS
Yes/No
Northglenn
Yes
30,421

#### **Program Description**

1) Rate Structure. The city utilizes a two tiered rate structure. For residential customers, the rate is \$2.12 per 1000 gallons up to 12,000 gallons. Above 12,000 gallons the rate is \$2.42 per 1000 gallons.

- 2) Meter Replacement. The city has been replacing water meters within the city since 1983 to improve the accuracy and accounting of all water usage.
- 3) <u>Xeriscape</u>. Xeriscape classes are offered at the Northglenn Recreation Center to promote water conservation.

<b>MUNICIPALITY</b>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	•
Pueblo	Yes	105,185

- 1) Metering. The City has been fully metered since 1958. This includes all city buildings, water works offices, all city parks, highway rights-of-way and golf courses.
- 2) Rate Structure. The Board of Water Works employs a uniform rate structure which encourages water conservation by not providing discounts for large water users.
- 3) <u>Plumbing Fixtures</u>. A city-wide ordinance sets low-flow plumbing fixture standards for all new construction, remodeling, or replacements. The ordinance has been in effect for approximately five years.
- 4) <u>Irrigation Monitoring</u>. The Parks Department utilizes an irrigation monitoring system for all parks which are irrigated. A centrally located weather station and the irrigation systems in each of the large parks, are tied into a central computer. This computer measures rainfall, temperature, and humidity, and computes an ET rate.
- 5) <u>Leak Detection</u>. A full-time employee of the Board provides professional leak detection services to Board crews, city residents, and small neighboring water treatment systems with no program in place.

- 6) Wastewater Reuse. This program allows for the Board to exchange the return flow from its transmountain water rights back into the Pueblo Reservoir for later diversion into the water treatment plant. It is estimated that this program will generate an additional 17,000 acre feet of water for use in the city. Use of non-potable water for irrigation of city golf courses and other large irrigated areas is currently being studied.
- 7) <u>Public Education/Information</u>. This program emphasizes conservation through the use of pamphlets, brochures and films. Presentations are given to various organizations around the city.

<b>MUNICIPALITY</b>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Sterling	Yes	11,676

#### **Program Description**

The City of Sterling presently does not have a formal water conservation or use efficiency program. However, the city has, in the past several years, converted many of the larger parks to automatic sprinkler systems in order to time the irrigation of these areas to cut down on the evaporative losses during watering. The City of Sterling has also been selective in the species of grasses and types of landscape which are put into new or redeveloped parks to minimize the water demand.

Joseph Kiolbasa, Director of Public Works for the City of Sterling, stated in his response to the survey that water efficiency/ conservation programs may not be as applicable to rural communities like Sterling. Since most of the water supply comes from wells, little or no treatment of the water is necessary. Conservation does not have the same financial impact on rural areas as the urban areas.

<b>MUNICIPALITY</b>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Thornton	Yes	60,000

- 1) <u>Public Education</u>. Thornton primarily encourages efficiency in water use by its citizens through education programs. These programs include:
- a newsletter with articles related to water conservation;
- presentations to community service organizations and public schools;
- an annual symposium at which national and regional experts and political figures are invited to address selected water related topics; and

- an annually sponsored "National Drinking Water Week" with associated activities and tours of the water treatment plant.
- 2) <u>Plumbing</u>. The City of Thornton enforces the use of low-flow plumbing fixtures.
- 3) Water Rates. Current rates charged encourage water conservation among all water users in the city.
- 4) Metering. Thornton is 100 percent metered. Since 1984, all structurally independent buildings are required to have a separate water meter.
- 5) <u>Irrigation Management</u>. The Thornton Parkway (at the I-25 interchange only), Grange Creek Park, and Hunters Glenn Park are irrigated from raw lake water. The new Thornton golf course will be designed to utilize treated wastewater. Parks irrigation is set on an automated clock system.
- 6) <u>Leak Detection</u>. No formal program to accomplish this has been implemented.
- 7) Ordinances. A 1977 ordinance provides for proper water use and imposes mandatory watering days and hours in the event of a drought.

<b>MUNICIPALITY</b>	<b>PROGRAMS</b>	<b>POPULATION</b>
	Yes/No	
Wheat Ridge	No	30,293

#### Comments

According to Michael Smith, City Administrator, Wheat Ridge does not supply any of its own water, therefore they do not have a formal water efficiency/conservation program. The city does support the concept of conservation and has made efforts to encourage local xeriscape programs through the distribution of brochures. Wheat Ridge also uses low-water plant material in the parks and alternatives to bluegrass turf.

#### BILL 1

#### A BILL FOR AN ACT

- 1 CONCERNING THE INSTREAM FLOW PROGRAM OF THE COLORADO WATER
- 2 CONSERVATION BOARD.

#### Bill Summary

(Note: This summary applies to this bill as introduced and does not necessarily reflect any amendments which may be subsequently adopted.)

Amends the instream flow law to clarify that the term "water, water rights, or interests in water" refers to perfected water rights and not conditional water rights. Authorizes the Colorado water conservation board to file and maintain a statement of opposition with respect to junior storage water rights which could inundate a portion of a stream on which the board holds a minimum stream flow water right. Specifies the conditions under which the board may file such statements of opposition.

- 3 Be it enacted by the General Assembly of the State of Colorado:
- 4 SECTION 1. The introductory portion to 37-92-102 (3),
- 5 Colorado Revised Statutes, 1990 Repl. Vol., is amended, and
- 6 the said 37-92-102 is further amended BY THE ADDITION OF A NEW
- 7 SUBSECTION, to read:
- 8 37-92-102. Legislative declaration. (3) Further

recognizing the need to correlate the activities of mankind 1 2 with some reasonable preservation of the natural environment. 3 the Colorado water conservation board is hereby vested with the exclusive authority, on behalf of the people of the state 4 5 of Colorado, to appropriate in a manner consistent with 6 sections 5 and 6 of article XVI of the state constitution. 7 such waters of natural streams and lakes as the board 8 determines may be required for minimum stream flows or for 9 natural surface water levels or volumes for natural lakes to 10 preserve the natural environment to a reasonable degree. 11 the adjudication of water rights pursuant to this article and 12 other applicable law, no other person or entity shall be 13 granted a decree adjudicating a right to water or interests in 14 water for instream flows in a stream channel between specific 15 points, or for natural surface water levels or volumes for 16 natural lakes, for any purpose whatsoever. The board also may 17 acquire, by grant, purchase, bequest, devise, lease, exchange, 18 or other contractual agreement, from or with any person, 19 including any governmental entity, such water, water rights, 20 or interests in water FROM A PERFECTED WATER RIGHT as the 21 board determines may be required for minimum stream flows or 22 for natural surface water levels or volumes for natural lakes 23 to preserve the natural environment to a reasonable degree. At 24 the request of any person, including any governmental entity, 25 the board shall determine in a timely manner, not to exceed 26 one hundred twenty days unless further time is granted by the

1 requesting person or entity, what terms and conditions it will 2 accept in a contract or agreement for the acquisition by it 3 from such person or governmental entity of water, water 4 rights, or interests in water FROM A PERFECTED WATER RIGHT to 5 be held by the board for minimum stream flows to preserve the 6 natural environment to a reasonable degree. Any contract or 7 agreement executed between the board and any person or 8 governmental entity which provides water, water rights, or 9 interests in water FROM A PERFECTED WATER RIGHT to the board 10 shall be enforceable by either party thereto as a water matter 11 under this article, according to the terms of the contract or 12 agreement. The board may initiate such applications as it 13 determines are necessary or desirable for utilizing water, 14 water rights, or interests in water FROM A PERFECTED WATER 15 RIGHT appropriated, acquired, or held by the board, including 16 applications for changes of water rights, exchanges, or 17 augmentation plans. THE TERM "WATER, WATER RIGHTS, INTERESTS IN WATER FROM A PERFECTED WATER RIGHT" REFERS TO AN 18 19 APPROPRIATION WHICH HAS RESULTED IN APPLICATION OF WATER TO A BENEFICIAL USE OTHER THAN FOR INSTREAM FLOW OR MINIMUM LAKE 20 21 LEVEL PURPOSES. Prior to the initiation of any 22 appropriation or acquisition, the board shall request 23 recommendations from the division of wildlife and the division 24 of parks and outdoor recreation. The board also shall request 25 recommendations from the United States department of 26 agriculture and the United States department of the interior.

- 1 Nothing in this article shall be construed as authorizing any
- 2 state agency to acquire water by eminent domain or to deprive
- 3 the people of the state of Colorado of the beneficial use of
- 4 those waters available by law and interstate compact. Any
- 5 appropriation made pursuant to this subsection (3) shall be
- 6 subject to the following principles and limitations:
- 7 (4) (a) The Colorado water conservation board may file
- 8 and maintain a statement of opposition with respect to an
- 9 application for a junior storage water right which could
- 10 inundate any portion of a stream segment whereon the board
- 11 holds a senior minimum stream flow water right, if all of the
- 12 following circumstances exist:
- 13 (I) The board has promulgated rules pursuant to section
- 14 24-4-103, C.R.S., defining the criteria for filing and
- 15 maintaining such a statement of opposition;
- 16 (II) Such rules promulgated by the board are prospective
- 17 from the date of their adoption and are not applied to
- 18 applications for decrees for storage water rights filed before
- 19 the effective date of the board's rules:
- 20 (III) The statement of opposition relates to minimum
- 21 stream flow water rights appropriated or acquired by the board
- 22 on or after July 1, 1991.
- 23 (b) With respect to applications for storage water
- 24 rights filed prior to the effective date of the rules, the
- 25 board may file and maintain a statement of opposition to
- obtain in the decree a provision that, when the board places a

- 1 call relying on its minimum stream flow water right, the
- 2 amount of water required to satisfy the board's right in
- 3 priority shall be bypassed through the reservoir and released
- 4 into the stream.
- 5 SECTION 2. <u>Safety clause</u>. The general assembly hereby
- 6 finds, determines, and declares that this act is necessary
- 7 for the immediate preservation of the public peace, health,
- 8 and safety.

#### BILL 2

#### A BILL FOR AN ACT

- 1 CONCERNING THE MITIGATION OF ADVERSE ENVIRONMENTAL AND
- 2 ECONOMIC EFFECTS RESULTING FROM THE REMOVAL OF WATER FROM
- 3 GEOGRAPHIC AREAS.

#### Bill Summary

(Note: This summary applies to this bill as introduced and does not necessarily reflect any amendments which may be subsequently adopted.)

Declares that adverse environmental and economic effects may result from the dewatering of irrigated land and that it is beneficial to the citizens of the state to require the assessment and mitigation of such environmental and economic effects as part of the process to change a water right in such a way as to cause the removal of water from a geographic area.

Requires any party applying for a change in a water right which will cause water to be removed from an area to submit to the water court an assessment of the environmental and economic effects of changing such a water right. Requires that such parties also submit to the water court a plan for mitigating the adverse environmental and economic effects of such removal of water. Requires the water court to approve the mitigation plan as part of any order granting the change in a water right and requires that such plan be incorporated into the order. Requires that the implementation of the plan be a condition of the order adjudicating the change in any such water right.

- 1 Be it enacted by the General Assembly of the State of Colorado:
- 2 SECTION 1. 37-92-305, Colorado Revised Statutes, 1990
- 3 Repl. Vol., is amended BY THE ADDITION OF A NEW SUBSECTION to
- 4 read:
- 5 37-92-305. Standards with respect to rulings of the
- 6 referee and decisions of the water judge. (4.5) (a) The
- 7 general assembly hereby finds, determines, and declares that
- 8 adverse environmental and economic effects may result from the
- 9 dewatering of irrigated land. The general assembly further
- 10 finds, determines, and declares that it is beneficial to the
- 11 citizens of the state to require the assessment and mitigation
- 12 of any environmental and economic harm resulting from the
- 13 removal of water from any area of the state as part of the
- process to change a water right in such a way as to cause the
- dewatering of any geographic area.
- 16 (b) (I) Any party applying for a change in a water right
- 17 which will cause water to be removed from any irrigated area
- 18 shall submit to the water court an assessment of the
- 19 environmental and economic consequences of changing such a
- 20 right. The assessment of the environmental consequences of
- 21 changing a water right required by this subsection (4.5) shall
- 22 include, but not be limited to, an evaluation of any adverse
- changes which may occur in the soil, geography, and habitat of
- 24 a given area if water is removed. The assessment of the
- 25 economic consequences of changing a water right required by
- 26 this subsection (4.5) shall include, but not be limited to,

- 1 the loss in assessed valuation of land after water is removed
- 2 and the effect of such loss on county and other local
- 3 government services such as police protection, fire
- 4 protection, and public schools.
- 5 (II) Any party applying for a change in a water right
- 6 which will cause water to be removed from any irrigated area
- 7 who submits environmental and economic assessments as required
- 8 by subparagraph (I) of this paragraph (b) shall also file with
- 9 the water court a plan for mitigating any adverse
- 10 environmental and economic effects of the removal of water
- 11 from such irrigated land.
- 12 (c) Prior to granting any change in a water right which
- 13 results in the removal of water from irrigated land, the water
- 14 court shall approve a plan which it finds will mitigate any
- environmental and economic effects of such removal, and such
- 16 plan shall be incorporated into the order adjudicating the
- 17 change of water right. The implementation of such plan shall
- 18 be a condition of any order granting a change in a water right
- 19 that results in the removal of water from irrigated land.
- 20 SECTION 2. Safety clause. The general assembly hereby
- 21 finds, determines, and declares that this act is necessary
- 22 for the immediate preservation of the public peace, health,
- 23 and safety.

#### BILL 3

#### A BILL FOR AN ACT

- 1 CONCERNING AUTHORIZATION OF EXPENDITURES FROM THE COLORADO
- 2 WATER CONSERVATION BOARD CONSTRUCTION FUND, AND RELATING
- 3 TO THE ACTIVITIES OF THE COLORADO WATER CONSERVATION
- 4 BOARD IN CONNECTION THEREWITH.

#### Bill Summary

(Note: This summary applies to this bill as introduced and does not necessarily reflect any amendments which may be subsequently adopted.)

Approves water resources projects for financial assistance loans from the Colorado water conservation board construction fund.

- 5 Be it enacted by the General Assembly of the State of Colorado:
- 6 SECTION 1. Project authorization. (1) Pursuant to
- 7 section 37-60-122 (1) (b), Colorado Revised Statutes, the
- 8 Colorado water conservation board is hereby authorized to loan
- 9 moneys to enable the construction of the following water
- 10 resources projects:

1	1		Repayment	
2		Board	Period	Total
3	Priority Project Name	Loan	(yrs.)	Repayment

- (2) The Colorado water conservation board may make loans for the construction of the projects specified in subsection (1) of this section from such moneys as are, or may hereafter become, available to the Colorado water conservation board construction fund. Said loans shall be in the amounts listed in subsection (1) of this section plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in constructions costs as indicated by the engineering cost indices applicable to the types of construction required for each project or as may be justified by reason of changes in the plans for a project if those changes are required by final engineering drawings and specifications or by federal, state, or local governmental requirements.
  - (3) Contracts entered into by the Colorado water conservation board pursuant to section 37-60-119 (2), Colorado Revised Statutes, for loans to enable the construction of the projects specified in subsection (1) of this section shall be subject to the repayment periods and total repayments set

- 1 forth therein; except that the total repayment for a project
- 2 shall be adjusted to reflect any changes in the amount loaned
- 3 by reason of subsection (2) of this section. Pursuant to
- 4 section 37-60-120 (1), Colorado Revised Statutes, the board
- 5 shall require terms and conditions in such contracts as will
- 6 insure repayment of funds made available by it. The board
- 7 shall not disperse any moneys for any loan authorized by
- 8 subsection (1) of this section unless and until it is
- 9 satisfied, in its sole discretion, that the recipient of any
- 10 such loan will be able to make repayment pursuant to the terms
- and conditions established by the board and by subsection (1)
- 12 of this act.
- 13 SECTION 2. Safety clause. The general assembly hereby
- 14 finds, determines, and declares that this act is necessary
- 15 for the immediate preservation of the public peace, health,
- 16 and safety.

#### BILL 4

#### A BILL FOR AN ACT

- 1 CONCERNING THE CREATION OF THE WATER RESOURCES LEGISLATION
- 2 REVIEW COMMITTEE.

#### Bill Summary

(Note: This summary applies to this bill as introduced and does not necessarily reflect any amendments which may be subsequently adopted.)

Creates the water resources legislation review committee and sets forth the purpose for the creation of such committee. Specifies the membership of the committee. Requires that the committee meet annually.

- 3 Be it enacted by the General Assembly of the State of Colorado:
- 4 SECTION 1. Title 37, Colorado Revised Statutes, 1990
- 5 Repl. Vol., is amended BY THE ADDITION OF A NEW ARTICLE to
- 6 read:
- 7 ARTICLE 98
- 8 Water Resources Legislation Review Committee
- 9 37-98-101. Legislative declaration. The general assembly
- 10 declares that the purpose of this article is to provide a

forum through which the general assembly shall, on a continual 1 2 and regular basis, review the administration and monitoring of Colorado's water resources. The general assembly recognizes 3 its mandate to vigorously protect and defend Colorado's finite 4 supply of water and declares that protection of Colorado's 5 water resources is critical to its economic and social 6 well-being and is a matter of statewide concern. The general 7 8 assembly further recognizes the need to ensure that water 9 issues receive sufficient legislative scrutiny and public 10 input; to maximize the benefit derived from Colorado's surface 11 water and groundwater resources; to evaluate the present and 12 future water needs of the state: to ensure effective water 13 rights administration; to protect water quality and water 14 quantity; and to ensure that Colorado's interstate water 15 compact agreements are met and, in relation thereto, that 16 Colorado's water resources are protected against unwarranted 17 claims.

37-98-102. Creation of water resources legislation review committee. (1) For the purpose of contributing to and monitoring the conservation, use, and development of the water resources of Colorado for the general welfare of its inhabitants, there is hereby created the water resources legislation review committee. The committee shall meet at the call of the chairman at least once annually and as often as deemed necessary to review and to propose water resources legislation and matters relating thereto. In connection with

18

19

20

21

22

23

24

25

26

- 1 such review, the committee may consult with experts in the
- 2 field of water conservation, use, and development. The
- 3 department of natural resources, the state engineer, and the
- 4 attorney general, together with the members and staff of the
- 5 Colorado water conservation board, the irrigation district
- 6 commission, and the Colorado water resources and power
- 7 development authority, shall cooperate with the committee and
- 8 with any persons assisting the committee in pursuing its
- 9 responsibilities pursuant to this section. Further, the
- 10 committee may utilize the legislative council staff to assist
- its members in researching any matters.
- 12 (2) The committee shall be comprised of eleven members
- 13 to be selected as follows:
- 14 (a) Three members of the senate appointed by the
- 15 president of the senate, no more than two of whom shall be
- 16 from the same political party;
- 17 (b) Three members of the house of representatives
- 18 appointed by the speaker of the house of representatives, no
- 19 more than two of whom shall be from the same political party;
- 20 (c) Three members appointed by the governor, subject to
- 21 confirmation by the senate, from such water advisory groups as
- 22 the governor shall select, which members shall be determined
- 23 by him to adequately represent the entire state. No more than
- 24 two of such members shall be from the same political party or
- 25 from the same water division, as such divisions are designated
- in section 37-92-201, and at least one of such members shall

- be from that part of the state west of the continental divide;
- 2 (d) The state engineer, who shall serve as a nonvoting
- 3 ex officio member; and
- 4 (e) The director of the Colorado water conservation
- 5 board, who shall serve as a nonvoting ex officio member.
- 6 (3) The term of office of each member of the committee
- 7 shall be two years.
- 8 (4) Members of the committee shall serve without
- 9 compensation; except that members of the general assembly
- 10 serving on the committee shall receive the sum specified in
- section 2-2-307 (9) (a), C.R.S., for attendance at meetings of
- 12 the committee when the general assembly is in recess for more
- 13 than three days or is not in session. All other members of
- 14 the committee shall be reimbursed for all necessary expenses
- incurred in the performance of their duties. In addition, the
- 16 members of the committee appointed by the governor pursuant to
- 17 paragraph (c) of subsection (2) of this section shall receive
- 18 fifty dollars per diem for each day spent in attendance at
- 19 meetings of the committee.
- 20 37-98-103. Annual report bill limitation deadlines
- 21 for introduction. (1) On or before February 1 of each year.
- 22 the committee shall prepare and submit to the general assembly
- 23 an annual report which shall contain its findings and
- 24 recommendations for the previous year.
- 25 (2) Each member of the senate or house of
- 26 representatives serving on the committee may introduce two

- 1 bills per regular session recommended by the committee, which
- 2 bills shall be in addition to, and not in lieu of, the number
- 3 of bills allowed an individual member of either house for any
- 4 one year. Any such bills recommended by the committee shall
- 5 be exempt from the initial and final deadlines for
- 6 introduction of bills in the senate and house of
- 7 representatives.
- 8 SECTION 2. No appropriation. The general assembly has
- 9 determined that this act can be implemented within existing
- 10 appropriations, and therefore no separate appropriation of
- 11 state moneys is necessary to carry out the purposes of this
- 12 act.
- 13 SECTION 3. Safety clause. The general assembly hereby
- 14 finds, determines, and declares that this act is necessary
- 15 for the immediate preservation of the public peace, health,
- 16 and safety.