Colorado Water Conservation Board

Office of Water Conservation and Drought Planning



Overview

The Colorado Water Conservation Board (CWCB) was created in 1937 to conserve, develop, protect and manage Colorado's water for present and future generations. The Board is comprised of nine governor-appointed voting members representing the state's major water basins, one ex-officio voting member and five exofficio non-voting members who inform and advise the other Board Members on water issues as they relate to or impact their agencies.

In 1991, the CWCB Office of Water Conservation and Drought Planning (OWCDP) was created to lead Colorado's efforts for water conservation planning. Since that time, the OWCDP has provided technical and financial assistance to Colorado water users for conservation projects that preserve waters statewide. Additionally, the OWCDP assists communities in preparing and implementing drought mitigation plans as well as informing the public, media, and state officials of the current state drought conditions and the associated impacts.

How the OWCDP Provides Value to the State of Colorado

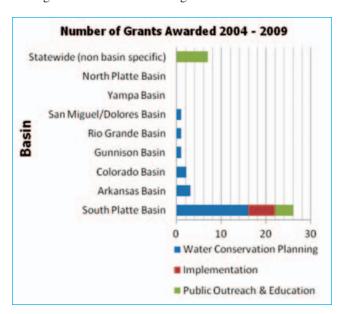
Preparedness is the key to successfully addressing the challenges of increasing drought risk and demands on water availability. The OWCDP is at the forefront of this effort, working with entities throughout the state of Colorado to plan and prepare for future water supply challenges. From 2005 to 2050, Colorado's population is projected to nearly double. Because the major driver for water use is population growth, municipal and industrial water usage is also expected to significantly increase. Conservation and drought planning will play an important role in meeting these growing future demands.

What Services Does OWCDP Provide?

Among the varied projects and duties the OWCDP staff conduct, the group focuses on the following key areas:

- Disseminating information to the public by maintaining a clearinghouse of water conservation and drought information.
- Provide technical assistance to evaluate and approve water conservation and drought mitigation plans.
- Provide leadership through the Water Availability Task Force to monitor, forecast, mitigate, and prepare for drought.
- Coordinate with multiple state and local agencies to provide information to the public.

Additionally, one of the cornerstone projects the OWCDP administers is the **Water Efficiency Grant Program.**This grant program provides financial assistance to communities, water providers and eligible entities statewide for water conservation and drought planning related activities and projects. Since 2005, the OWCDP has awarded over \$1.6 million in grants to entities in six of the eight water basins and to organizations statewide.



In all, 23 water conservation planning grants, six water implementation grants and 11 public outreach/education grants have been awarded.

The OWCDP Water Efficiency **Grant Program**

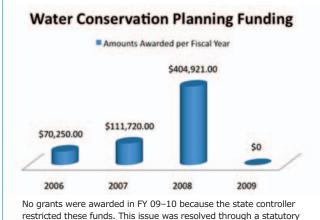
There are four eligible purposes for which entities may apply for financial assistance: Water Conservation Planning, Water Conservation Implementation Projects, Drought Mitigation Planning and Water Resource Conservation Public Education & Outreach. Water providers and eligible entities have been funded in three of the four areas of the Water Efficiency Grant Program.



Downtown Denver

Water Conservation Planning **Projects**

Across the state of Colorado, water entities turn to OWCDP to assist in water conservation planning efforts. The planning process helps the provider look at the effect of water conservation on future water supply and demand, and how it may reduce the need for new water supplies and other investments. The OWCDP offers financial assistance to water providers of all sizes, seeking to develop or update their water conservation plans. Since 2005, the OWCDP has awarded approximately \$650,000 to a total of 24 entities statewide to aid in their planning efforts. To date, 16 of those entities have completed plans. Of those completed plans, an estimated 2,900 acre feet of water has been saved from 2006 to the present, based on self determined water conservation goals.



restricted these funds. This issue was resolved through a statutory change (see § 37-60-126 C.R.S.).

"The Pagosa Area Water and Sanitation District has benefited greatly from the grant program available through the CWCB. In 2008 we utilized grant funds to revise and improve our Water Conservation Plan. Currently, the District is seeking approval of another grant for implementation. With grant assistance from CWCB we have a Plan that can be a living document, actively working to guide and monitor our conservation efforts in this community."

> -Michelle Tressler, Assistant Finance Manager Pagosa Area Water and Sanitation District

FY2008 Planning Projects

- City of Evans
- City of Salida
- Eagle River Water & Sanitation District
- Fort Collins—Loveland Water District
- Left Hand Water District
- Pagosa Area Water & Sanitation District
- Pinery Water & Wastewater District
- St. Charles Mesa Water District
- Town of Windsor
- Tri-County Water Conservancy District

FY2007 Planning Projects

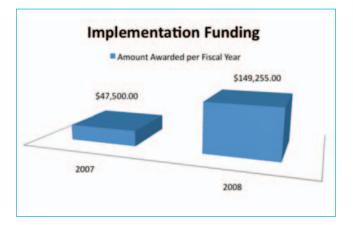
- City & County of Broomfield
- City of Brighton
- City of Lamar
- City of Longmont
- City of Northglenn
- City of Rifle
- East Larimer County Water District
- North Table Mountain Water & Sanitation District
- Town of Erie
- Town of Firestone

FY2006 Planning Projects

- Castle Pines North Metropolitan District
- City of Fort Lupton
- Town of Castle Rock

Water Conservation Implementation Projects

The Water Efficiency Grant Program offers financial assistance to water providers to aid in fulfilling their identified water conservation goals and programs. Once water conservation plans have been adopted, it is necessary to implement and achieve the goals laid out. Grant monies can be used to fund projects that demonstrate the benefits of water efficiency such as efficient irrigation systems, high efficiency clothes washers and toilet rebates, utility leak detection programs and customer indoor and outdoor water use audits.



FY2008 Implementation Projects

Water Rate Study: Town of Firestone. One of the 18 goals outlined in Firestone's Water Conservation Plan is to reduce residential water use by 4.7% and commercial use 13.4% over a 10-year period. To achieve this goal, the town received a grant from OWCDP to conduct a water conservation oriented rate structure study. This will lead to a water rate structure that will incentivize efficient water use, thereby reducing water waste.

Landscape Demonstration Garden: East Larimer County Water District. The district received grant monies to install a Xeriscape Demonstration Garden on its property to educate customers on diverse water efficient landscape designs and to further promote water conservation.

Synthetic Turf Project: Town of Castle Rock. In an effort to conserve water, Castle Rock, in partnership with the Douglas County School District (DCSD), received an OWCDP grant to install a 1.7 acre synthetic turf field at the Clear Sky Elementary School instead of an irrigated natural turf field.



The new synthetic turf field at Clear Sky Elementary School in Castle Rock. The school originally planned traditional grass fields, but by switching to synthetic turf, an estimated 1.5 million gallons (or 4.5 acre feet) of water will be saved each year.



High Efficiency Toilet Giveaway Program: City of Northglenn. Northglenn, in conjunction with Lowe's
Home Improvement, hosted a large scale high efficiency
toilet (HET) giveaway program. By replacing high volume
toilets with HETs, Northglenn expects to save 3.5 million
gallons of water annually.

FY2007 Implementation Projects

CALSENSE Irrigation: Castle Pines North (CPN)
Metro District. CPN identified the need to closely monitor their parks and open space in the District's Water
Conservation Plan. To meet this goal and their targeted water savings goal of 175 to 220 AFY by 2014, CPN is working to install a CALSENSE irrigation management system. This system allows greater central control and improved irrigation efficiencies.

"The Town of Firestone is greatly appreciative of the opportunity to have partnered with CWCB over the past several years to accomplish some very important water initiatives for our community. Thanks in part to CWCB's support, the Town was able to move forward with its first ever Water Conservation Plan and Water Conservation Rate Study. Both of these efforts have led to improved stewardship of our water resources both now and for years to come!"

 Wesley LaVanchy, Director of Operations Town of Firestone Volunteers unload toilets to be given to Northglenn residents during the city's high efficiency toilet (HET) giveaway program in 2008. The OWCDP awarded the city \$60,000 to assist in this program, which gave away 500 HETs to qualified residences.

FY2006 Implementation Projects

Holistic Approach to Sustainability Water Management in Northwest Douglas County: Castle Pines North (CPN) Metro District. This project was a study to show the potential of precipitation as a water supply. It looked at the possible water savings for new residential development from outdoor water demand management and the ability of rainwater harvesting to meet demands for different residential landscapes. Additionally, the study viewed the likely water savings from rainwater harvesting for existing developments that rely on groundwater supplies. This study led to HB09-1129, which passed during the 2009 legislative session. The bill authorized up to 10 pilot projects that will incorporate rainwater harvesting with efficient landscaping and irrigation practices at the subdivision level.

Drought Mitigation Planning Projects

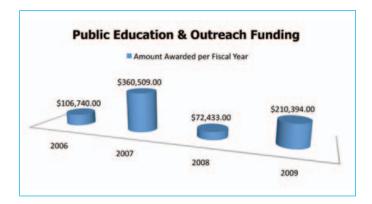
Drought is one of the most destructive of all natural hazards, yet often the least planned for. During 2002, drought adversely affected crop, livestock and tourism sectors. Financial assistance is available to communities and state or local government entities to assist them in developing drought mitigation plans. Although no grants have been awarded to date, the OWCDP continues to work with water providers throughout the state to develop local drought plans.



Dillon Reservoir, Frisco Bay Marina, during the drought of 2002.

Public Education and Outreach Projects

The OWCDP is committed to assisting entities in promoting the benefits of water resource conservation to a wide audience through public education and outreach programs. Since 2005, 11 Public Education and Outreach Grants have been awarded throughout the state.





As part of the OWCDP's educational outreach efforts, staff members Ben Wade and Taryn Hutchins-Cabibi speak with 5th grade students at the Boulder Water Festival, May 2009, on the importance of detecting and fixing toilet leaks.

FY2008 Outreach Projects

Statewide Water Conservation Best Management Practices (BMP) Guidebook: Colorado WaterWise (CWW). CWW used grant monies to develop the first comprehensive conservation BMP guidebook specific to Colorado. The BMP guidebook will assist water providers to choose the most relevant and cost effective conservation measures for their service areas. The guidebook will provide the basis for future water conservation planning in Colorado.

Project WET (Water Education for Teachers):
Colorado Watershed Network (CWN). In 2008, the
OWCDP awarded CWN to continue their assistance in the
expansion of Project WET. Since January 2007, Project
WET has trained approximately 500 teachers statewide.
The Water Education Task Force's 2008 final report stated
Project WET materials were used twice as much as any
other water education resource in Colorado.

FY2007 Outreach Projects

Landscape Water Conservation Best Management Practices (BMP): Green Industries of Colorado (GreenCO). In response to 2002 drought conditions throughout Colorado, GreenCO identified and evaluated key BMPs that use water for landscaping wisely. GreenCO's BMPs include a variety of design, installation, maintenance and grower practices relevant to the green industry and the public they service. GreenCO is a voice for 1,500 small to large wholesale, retail and agri-business member companies who contribute \$2 billion to Colorado's economy. Grant monies were provided to revamp the GreenCO BMP manual and training program with the newest, most up-to-date BMPs and the most current industry standards. Since 2004, GreenCO has trained in excess of 500 field professionals.



A xeriscape demonstration garden at the Northern Water facility in Berthoud. The state-of-the-art garden was designed to be an education resource and learning center, showcasing environmentally sound and cost-effective landscaping alternatives.

Audio Tour of Conservation Gardens: Northern Colorado Water Conservancy District (NCWCD). The NCWCD is the largest water provider in the northeastern part of the state, providing water to 33 cities and towns with a service area made up of portions of eight counties. In 2007, NCWCD developed a cell phone audio tour of their Colorado—Big Thompson Project Interpretive Area and Conservation Gardens at their Berthoud facility using grant monies.

FY2006 Outreach Projects

Outdoor Irrigation Audit Program: Center for Resource Conservation (CRC). Fifty percent of municipal water consumption is used for outside irrigation. To help reduce irrigation inefficiencies, the OWCDP funded CRC's *Slow the Flow* program. *Slow the Flow* is a program that offers landscape irrigation audits to single family and multifamily residences, and commercial businesses at no charge. The OWCDP began funding the project in FY2006. Since then, the two grants have helped establish this program with over 5,000 audits throughout 15 Front Range municipalities.

Project WET (Water Education for Teachers):
Colorado Watershed Network (CWN). Project WET is an internationally recognized water education program that promotes water stewardship through effective water education. The stated goal of Project WET is "to facilitate and promote the awareness, appreciation, knowledge and stewardship of water resources." Project WET provides training and materials for teachers to effectively teach their students about water resource conservation.

Regional Water Conservation Technical Workshops: Great Western Institute. Three separate grants were awarded in FY2006 & 2007 to conduct workshops to educate and provide technical assistance to water providers on the components of proper water conservation planning based on the CWCB Water Conservation Plan Development Guidance document. The 11 workshops held throughout Colorado provided information to the water community regarding the state of the science of water conservation and water use efficiency measures and programs. Over 380 water professionals attended the workshops.

Xeriscape DVD: Douglas County Water Resource Authority (DCWRA). The DCWRA, comprised of 19 water providers, received a grant to develop, produce and distribute a DVD focused on the benefits of Xeriscaping. The DVD was mailed to over 100,000 single family homes in Douglas County and parts of Arapahoe County. It was requested by residents across Colorado and as far away as South Carolina. The project supported the water conservation outreach efforts of the DCWRA.

"Colorado WaterWise is extremely excited to begin constructing the first comprehensive Water Conservation Best Practices Manual for Colorado. This opportunity would not have been possible without funding from the CWCB. As an organization that is built on collaborative efforts we welcome the chance to work with the CWCB, their partners and the many water providers throughout the state who will contribute to and benefit from this project."

> -Scott Winter, Co-Chair Colorado WaterWise





Office of Water Conservation and Drought Planning Mission:

Promotes water use efficiency while providing public information and technical and financial assistance to water users, communities and agencies to evaluate and update their water conservation plans and to implement water efficiency programs and projects.

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