

WATER SUPPLY

SECTION 7

Water supply is a top priority for Douglas County residents. The County, while not a water provider, aims to assist water providers with prolonging the life of its finite Denver Basin water resources, as well as the development of renewable water resources, so that its residents have an adequate water supply today and in the future. The Denver Basin alone (a non-renewable resource) cannot sustain the population's water needs long-term (for more information on the Denver Basin see www.douglas.co.us/water). Water quality and groundwater protection policies are presented in Section 8: Environmental Quality.

Pursuant to Colorado State Statute 30-28-106(3)(a)(IV), nothing within a water supply section of a CMP "...shall be construed to supersede, abrogate, or otherwise impair the allocation of water pursuant to the state constitution or laws, the right to beneficially use water pursuant to decrees, contracts, or other water use agreements, or the operation, maintenance, repair, replacement, or use of any water facility."

The County is working closely with area water providers to develop countywide solutions to reduce dependence on Denver Basin aquifers and develop renewable sources to supplement or replace non-renewable water resources. Doing so will help the County establish a more renewable and dependable water supply.

The County's water supply standards ensure new development has adequate water resources. The water supply standards help address and evaluate the availability of water necessary to serve new developments. A component of these standards, the "Water Supply Overlay District" Map (Map 7.1) is reproduced within this Plan. It depicts the identified "water supply zones" – Pike/Rampart, Margins A and B, and the Central Basin – which represent the four major types of geologic and hydrologic conditions within the county.

Each zone has differing water supply standards to guide land use decisions (please refer to Section 18A of the Douglas County





Zoning Resolution for more information on water supply standards). Additional resources are available at the Colorado State Engineer's Office website (www.water.state.co.us).

Reducing water consumption prolongs the life of water supplies. Certain landscape patterns can minimize water consumption. For example, xeriscaping (low-water demand landscaping) is commonly used in Douglas County and other water-limited areas. Xeriscaping uses low water-use plants while providing attractive landscapes.

Similarly, certain development patterns encourage water savings. Low-impact development (LID) protects natural areas and promotes compact development, which is important for conserving water resources. In addition, researching and implementing best management practices, which include water-efficient technologies, water management planning, and education, will help prolong the life of the County's water resources.

Using water efficiently through reuse and water-saving technologies will contribute to a reliable water supply for Douglas County. Reuse may occur on a regional scale. Water providers may be able to utilize their return flows to further extend the life of their water supplies. Reuse may also occur on a smaller scale by use of rainwater capture techniques and graywater technologies. Rainwater and graywater may be used for landscape irrigation where allowable by law. In addition, water-saving technologies (i.e., low-flow fixtures) are another tool to use water efficiently and save money. Using water efficiently will help reduce the strain on the local water supply.

Long-term planning is crucial to developing a water supply that can sustain

residents today and in the future. A conjunctive-use water system is being sought by County water providers as a measure to promote a renewable and dependable water supply. By reducing dependence on Denver Basin aquifers through the use of renewable water supplies, County water providers can extend groundwater resources to meet the population's water needs.

In addition, it is important to continue supporting research and monitoring of water supplies. Understanding the County's water supplies will help in developing approaches to resolving water supply issues.

Partnerships are essential to developing a long-term water supply for Douglas County. The County facilitates partnerships between water providers and residents to obtain dependable water supplies. New and existing development is encouraged to obtain service from established water providers to take advantage of their economies of scale and efficiencies related to management of Denver Basin aquifers and renewable water. Also, County water providers relying on Denver Basin groundwater have established agreements to utilize excess return flows from water providers with renewable supplies. In addition, the County works with area water providers on water conservation planning and education. Such partnerships demonstrate a cooperative regional approach in finding a renewable and dependable water supply for Douglas County.

The South Metro Water Supply Authority (SMSWA) represents 11 water providers within the northern portion of the county, including Highlands Ranch and the municipalities of Castle Pines, Castle Rock and Parker. Its member Districts provide water and sewer

service to 80 percent of households and nonresidential users in the county. The organization is seeking to develop a balanced and sustainable water supply through: development of additional renewable water; additional storage capacity; careful management of water quality, inclusive of its reuse; and efficient conservation and use of water. SMSWA projects both significant reductions to its use of non-renewable water and increases to its development and use of renewable supplies through 2065.

Public education is a tool for prolonging the life of Douglas County's water resources. The County's website provides information on numerous water-related topics. County staff is actively engaged in attending forums and maintaining awareness of local and regional water policy and development efforts. Staff also presents this information to community members. Through the sharing of information about water, residents will be more aware of water supply issues, water conservation practices, and water-efficient technologies.

Establishing a long-term water supply is imperative. The County's future depends on a safe, reliable, and sufficient water supply.

GOAL 7-1

PROLONG THE LIFE OF WATER RESOURCES.

OBJECTIVE 7-1A

MINIMIZE WATER CONSUMPTION.

POLICY 7-1A.1

Encourage landscapes that minimize water consumption.

POLICY 7-1A.2

Support development that uses water resources wisely.

POLICY 7-1A.3

Research conservation best practices.

POLICY 7-1A.4

Encourage water providers to include and implement conservation plans and best management practices.

OBJECTIVE 7-1B

MAXIMIZE THE EFFICIENT USE OF WATER.

POLICY 7-1B.1

Encourage the reuse of water supplies.

POLICY 7-1B.2

Promote the use of techniques that capture rainwater as allowed by law.

POLICY 7-1B.3

Promote graywater technologies.

POLICY 7-1B.4

Support water-saving technologies.

OBJECTIVE 7-1C

SUPPORT LONG-TERM WATER SUPPLY PLANNING.

POLICY 7-1C.1

Encourage developments to obtain service from existing water providers.

POLICY 7-1C.2

Promote conjunctive-use water systems.

POLICY 7-1C.3

Work with water providers to explore opportunities to bring renewable water supplies to Douglas County.

POLICY 7-1C.4

Support the research and monitoring of water supplies within Douglas County.

POLICY 7-1C.5

Develop and maintain partnerships with countywide and regional water providers.

POLICY 7-1C.6

Encourage proactive, collaborative efforts in developing a long-term water supply.

OBJECTIVE 7-1D

PROMOTE PUBLIC EDUCATION AND AWARENESS ABOUT WATER.

POLICY 7-1D.1

Develop and promote public education programs on water topics.

POLICY 7-1D.2

Provide water information that is accessible and available.

POLICY 7-1D.3

Promote water conservation best practices.