

# Irrigation Ditches and their Operation

Fact Sheet No. 6.701

Natural Resources Series | **Water**

by R. Waskom, E. Marx, D. Wolfe, and G. Wallace\*

## Water Laws and Regulations

Current western water law originated during the California gold rush in 1848. Back then miners would divert water from streams while mining for gold. Just like the claim on a mining stake, a rule was established stating that the first miner to use the water had the first right to it. After the first miner's right was established, the second miner's right was recognized, and so on. Claims left abandoned were available to others. Miners brought this system to Colorado during the gold rush of 1859. This system became known as the Doctrine of Prior Appropriation (also called the Colorado Doctrine because it first became law in Colorado with the writing of the state constitution in 1876).

Water in Colorado is still administered according to the Doctrine of Prior Appropriation. The basis of this doctrine is the concept of first-in-time, first-in-right. Water rights are established when water is put to beneficial use. The person or organization that is beneficially using the water may request the water court to officially recognize the right by decree. This judicial process is called adjudication. In Colorado, water courts have jurisdiction over all applications for decree of absolute water rights, conditional water rights, changes of use, exchanges, and augmentation plans.

A new water user can no longer appropriate water by simply going out to the stream and digging a diversion ditch. Water projects now involve a complex process of planning, permitting, and engineering to prove that unappropriated water is available for use. If the water court approves a conditional decree, the project must be carried on with due diligence

until its completion. Otherwise, the water right is forfeited. In addition to a priority date, a water right is recorded based on the location where the water will be diverted or withdrawn, the amount to be withdrawn, and the beneficial use to which it will be put.

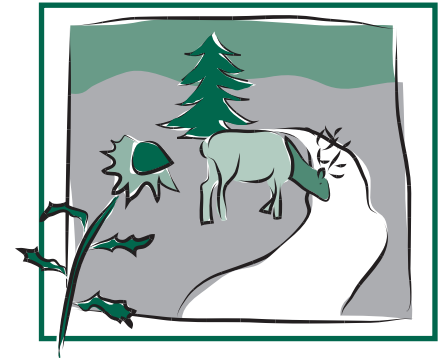
In Colorado, water rights are considered a private property right. Water rights can be sold or inherited and prices may vary according to supply and demand. The consumptively used portion of a water right may be transferred to another area or use with approval of the water court, with the stipulation that other water rights are not injured.

The value of a water right is based on its amount and availability. It is important to understand that the priority of water use is based on seniority. "Senior" water rights are the oldest and hence have first priority in times of shortage. Senior rights holders are entitled to receive all available water in their ditch or diversion before any junior water rights holders. During times of water shortage, a senior water right holder may place a "call on the river." When a call is established, any upstream junior right holder must stop diverting water until the senior user receives their full decreed entitlement. This call system is applicable to waters that are a natural part of the stream system.

## Ditch Operations

Ditch companies and associations exist to acquire water rights, develop storage, and deliver surface water to their members for irrigation and other purposes. Early on, farmers and landowners realized that the value of their property was directly related to a common system bringing water to their land. Even today, it's the water that makes land productive, stable, and aesthetically pleasing.

Ditch companies generally own and maintain ditches from their headgates to an established point where the individual



## Quick Facts

- Water rights in Colorado are considered a private property right. Water rights can be sold or inherited, and prices may vary according to supply and demand.
- Ditch companies coordinate the use, ensure proper maintenance and efficient operation of surface water irrigation systems and conveyances.
- Ditch companies have the right to enter your property to maintain the ditch and ditch banks and perform "reasonably necessary" operations.

\*R. Waskom, Colorado State University Extension water resources specialist and director, Colorado Water Institute; E. Marx, former agricultural specialist, Larimer County; D. Wolfe, Office of the State Engineer; and G. Wallace, Colorado State University professor, natural resource recreation and tourism. 12/2014



landowners or lateral ditch associations manage the smaller ditch systems. Lateral ditch associations generally have by-laws and rules of cooperation in order to keep the lateral system functioning and to avoid conflicts. Ditch associations are often the basis for a sense of community among neighbors in rural areas.

Generally, if you hold shares to water rights from a ditch that runs through your property, you will have a deeded water right that entitles you to water during the irrigation season. There are also certain responsibilities associated with these rights. Water users are often expected to attend work days, annual meetings, and even serve as the ditch captain in smaller ditch associations that cannot afford a paid ditch rider. Responsibilities also include coordinating with neighbors when you wish to run water in addition to keeping the ditches that run through your property free of obstacles. Annual maintenance costs are typically shared by association members in proportion to the number of shares held.

## Reservoirs and Water Conveyances

An extensive network of reservoirs and water conveyances has been developed in Colorado since the middle 19<sup>th</sup> century. In many cases, a system of reservoirs, pipes, and/or ditches had to be built to store and divert the water to where it could be used by farmers. The construction of water delivery systems was in many cases handled by a water district or a water company. The water users hold shares in the company that may be bought and sold. Depending on the company, shares may vary in amount of water and price. The amount of water stored and delivered to shareholders each year depends largely on the snowpack in the mountains and the amount of runoff in the spring. Annual fees are assessed to pay for the use of the facilities, their maintenance, and for the services of the ditch rider.

## Questions and Answers

Water law and irrigation ditch management in Colorado is complex. Resolving site-specific water issues often require consultation with an attorney or engineer. This fact sheet provides general guidelines on the rules and practices that govern ditch operations in Colorado. If you have an irrigation ditch on your property or if you are in the process of purchasing a property with an irrigation ditch or creek on it, the following questions may be helpful.

**Q: An irrigation ditch runs through my property but I don't use it. Am I responsible for ditch maintenance?**

**A:** No. The ditch company and water users are responsible for ditch maintenance, but you must not damage or obstruct the ditch.

**Q: Does my neighbor have the right to enter my property to access the irrigation ditch that runs through my property?**

**A:** Yes, if your neighbor uses the ditch to deliver water to his/her property, he/she has a right-of-access to enter with the equipment needed to maintain or repair the ditch. Irrigators frequently check ditches upstream to see how they are flowing, clear debris from the ditch, or adjust flows at measuring structures that may be on your land.

**Q: Does the ditch company have an easement through my property? How can I identify the width of the easement? Do I have to let them enter and tear up my property?**

**A:** Ditch rights-of-way can be owned fee simple or by easement. When owned by fee, the ditch owner holds title to the land where the ditch runs and has absolute control. The width of a ditch owned by fee is usually described in the deed.

If the ditch runs through an easement, then the ditch owner does not own the land containing the ditch, but they do have access and use rights. The ditch owner has the right to enter your property to maintain the ditch and ditch banks and perform "reasonably necessary" operations, even if that means disturbing land within the easement. The easement is as wide as is

## Deeded Water Rights

If you do not hold deeded water rights on a ditch that runs through your property, you cannot take water from the ditch in any fashion. You also must not obstruct the ditch nor deny access to the ditch owner or their representatives when they need to enter the property to perform maintenance operations. Livestock or vehicles must not cause damage to a ditch or its right-of-way.

reasonably necessary for ditch maintenance and operation. This is often determined by historic practices and is not always described in a deed.

**Q: My neighbor wants to replace the earthen ditch that crosses my property with a concrete lined ditch or a pipe. Can my neighbor make the change even if I disapprove?**

**A:** Yes. Changes that increase the efficiency of water delivery, such as installing concrete ditches or pipes, are considered reasonably necessary. The ditch owner can make these changes even if you disapprove. If they wish to move or realign the ditch, however, they must negotiate with you and receive your permission.

**Q: Can I build a fence across an irrigation ditch to contain my animals?**

**A:** As a general rule, the ditch company and water users have the right to prohibit or set conditions for fences that enter the ditch right of way or cross the ditch. Fences can hinder maintenance operations and collect trash thus clogging the ditch. You might be able to work with the ditch company for permission to build a moveable fence that can be removed during ditch maintenance.

**Q: Can I use the water in the ditch that runs through my property?**

**A:** Only if you own water rights or have leased a right to the water. The fact that the water flows through your property does not entitle you to use the water.



**Q: How do you change water from one beneficial use to another?**

**A:** You must apply for a “change of use” through the water court. A public notice is then published, allowing for a two-month public comment period regarding your request. After the comment period, the water referee will review your application. The water referee then makes a recommendation to the water court judge. If no protests are filed, the judge of the water court signs the decree with the new beneficial use. If a protest is filed, the matter may go to trial (if the parties cannot settle) before the judge makes a ruling. The water court’s ruling can be appealed to the Colorado Supreme Court. The process for a change in water right usually takes between four months and two years.

**Q: How long must a ditch remain unused before the associated water right is declared abandoned?**

**A:** A water right is considered abandoned if the water has not been put to beneficial use for an extended period of time, usually at least ten years. Non-use does not necessarily result in abandonment if the non-use is due to circumstances such as a lack of water availability due to a low priority right.

The division engineer submits a list of rights that are presumed to be abandoned to the water court. The owner of the water right is allowed a hearing in water court. The water court then makes a ruling regarding the abandonment.

If you are unsure about a ditch that runs through your property, contact the appropriate division engineer or check records at the county office to determine the status of the ditch prior to any activity that might be considered trespassing or destruction.

**Q: How do I contact the ditch company that controls the ditch through my property?**

**A:** First, try asking your neighbors for information regarding the ditch company or lateral association. If that is not possible, contact the water commissioner or your county’s planning department. Most ditches

are named and easily recognized by those living in the area. Contact information for many ditch companies can be found online at [www.watercolorado.com](http://www.watercolorado.com) or through the division engineer. Your local USDA-Natural Resources Conservation Service (NRCS) office or Colorado State University Extension office may also be able to help.

**Q: What does the ditch rider do?**

**A:** A ditch rider is hired by the ditch company to maintain the ditch and open headgates as appropriate to divert water for water deliveries in the ditch system. The ditch rider also calculates water volumes and oversees ditch operations. The ditch rider stays in close communication with the water commissioner (a.k.a. river commissioner) during the irrigation season to coordinate diversions and calls on the river. Some of the smaller mutual ditch companies use a rotating ditch captain to coordinate ditch operation and maintenance activities.

**Q: What does the water commissioner (a.k.a. river commissioner) do?**

**A:** The water commissioner operates the headgates where water is diverted from the river into ditch systems and is responsible for measuring stream flows and accounting for diversions from the river. The water commissioner reports this information to the division engineer.

**Q: Who is the Division Engineer? What does he/she do?**

**A:** A: The division engineer is responsible for administering water records, flows and diversions within a specific watershed basin. There are seven water basins and division engineers in Colorado (See sidebar.).

**Water Divisions in Colorado continued**

Yampa River River Basin  
(White River drainage also)  
Water Division 6

Physical address:  
505 Anglers Drive, Suite 101  
Phone: (970) 879-0272  
Fax: (970) 879-1070

San Juan/Dolores River Basins  
Water Division 7

160 Rockpoint Drive  
Durango, CO 81301  
Phone: (970) 247-1845  
Fax: (970) 259-0944

See [www.water.state.co.us](http://www.water.state.co.us) for more information about your water division.