



RECREATIONAL WATER RIGHTS

by David Beaujon

Artificial whitewater parks help improve boating on the state's rivers and bring economic benefits to local communities. They also use large amounts of water and may affect Colorado's ability to address the growing water demand from its cities and other users. This issue brief describes the factors behind the growing number of artificial whitewater parks and summarizes Colorado's water law that regulates these facilities. It also describes the challenge facing public water officials as they attempt to balance the demand for recreational water rights with the need to obtain a reliable water supply for the state's growing population.

River boating's growing popularity. The popularity of river boating in Colorado and across the nation is growing rapidly. Nationally, the number of kayakers increased by 185 percent and the number of rafters increased by 36 percent between 1994 and 2001.¹ Between 1988 and 2005, the number of river boaters in Colorado who used a commercial outfitter increased by 140 percent to 504,622. Private boaters on the Arkansas River — Colorado's most popular river for boating — increased by 32 percent between 1990 and 2000. In 2005, customers of river outfitters generated an estimated \$135 million for Colorado's economy.²

Building artificial whitewater parks. Most whitewater parks are built by placing boulders or concrete structures in existing stream beds to create waves, holes, and other water features. These structures can also concentrate and deepen stream flows and enhance gradual declines in elevation to make a stream more appealing to river boaters. Most whitewater parks include walking paths, benches, and other features that attract spectators, tubers, anglers, and other nonboaters. Nonboaters using Colorado's whitewater parks often outnumber boaters. Whitewater parks can also benefit local economies. For example, Golden's whitewater park on Clear Creek cost approximately \$150,000 to build and is estimated to contribute nearly \$2 million annually to the city's economy. A whitewater park in Vail is estimated to contribute \$1.8 million annually to its local economy, and a park in Breckenridge is estimated to contribute \$1.4 million annually to its economy.³ Pueblo, Silverthorne, Avon and other Colorado communities are building or planning to build whitewater courses in hopes of achieving similar benefits.

A new water right. Under Colorado's water law, a water right is created by diverting available water from a stream and applying it to a beneficial use, such

¹U.S. Forest Service Recreation, Wilderness, Urban Forest, & Demographic Trends Research.

²Colorado River Outfitters Association.

³Stratus Consulting, Inc., prepared for Porzak, Browning, and Bushong, LLP.

as irrigation or domestic use.⁴ The earlier the date of the appropriation, the more "senior" the water right is. In 1992, the Colorado Supreme Court determined that a boat shoot owned by Fort Collins qualified for a water right. It was the first water right granted for recreational use in Colorado. Since this decision, 11 other artificial whitewater parks have been granted water rights or have water rights applications pending in court. Some artificial whitewater parks in Colorado — such as Denver's Confluence Park — do not have a water right because, in part, an adequate stream flow is available under current river management practices.

A water right for whitewater parks protects streamflows and encourages investment in costly structures. Specifically, it enables an owner to make an enforceable "call" for water during water shortages. If a call is made, water use by junior water rights must be reduced until the senior water right has been satisfied. A water right also protects owners from impacts caused by changes of other water rights, such as moving the location where water is diverted from a stream or changing the period when it is diverted.

In 2001, the General Assembly enacted a law to regulate new recreational water rights, called recreational in-channel diversions (RICD). An RICD is limited to the minimum stream flow necessary for a reasonable recreational experience. Only counties, municipalities, and certain water districts may own RICDs. The law also provides guidelines for the water court's review of RICD applications. For example, the court is required to determine whether an RICD will injure other water rights or limit Colorado's ability to consume its share of the rivers that are regulated by interstate compacts. The Colorado Water Conservation Board is required to review RICD applications and submit a written recommendation to the water court regarding the potential effect of an RICD on its environmental water rights and other factors. The law was amended in 2006 to limit RICDs to nonmotorized boating during April 1 to Labor Day

and to limit calls by RICDs that claim most of a stream's average annual flow. Since 2001, four RICDs have been granted and five RICD applications are pending in water court.

Diversions for RICDs and other water rights are measured in cubic feet per second (cfs). For example, Steamboat Springs' whitewater park is allowed to divert up to 1400 cfs from June 1 through June 15 and up to 650 cfs from June 16 through June 30. A diversion of one cfs per day would cover an acre of land with two feet of water or provide 651,702 gallons of water. All of the water diverted by a whitewater park is available to satisfy other water rights after it passes through the structure. In contrast, most other water rights deplete stream flows. For example, approximately 50 percent of the water diverted for irrigation is lost to the stream system due to plant uptake and evaporation.

Water supply challenge. Colorado's population is projected to increase by 2.8 million by 2030. According to the Statewide Water Supply Initiative, annual municipal and industrial water demand in Colorado is projected to increase by 630,000 acre-feet to 1,926,800 acre-feet.⁵ Approximately 80 percent of the projected demand will be satisfied by existing and planned water projects. However, the study estimates that there will be a shortfall of 101,900 acre-feet that needs to be developed by 2030. Public water officials face significant challenges as they attempt to obtain this supply and accommodate new RICDs. A 500 cfs RICD diverts the same amount of water consumed in one year by 500 acres of irrigated land or 12,000 people. New diversions for such purposes would be limited to the extent that they injure an RICD or other senior water rights by preventing them from receiving their full share during water shortages.

⁴Article XVI, Sections 5 and 6, Colo. Const.

⁵Colorado Water Conservation Board, November 2004