

Get hooked on South Cottonwood Creek

An up-close look at Wyoming's instream flow water rights and what they mean to fishermen

THE SETTING

In the late 1800s railroad companies hungry for lumber for railroad ties engaged in the fairly widespread practice of setting up camps in the mountains where workers hacked ties by hand out of trees cut from what today are the national forests. The tie hack camps were located adjacent to streams where ties could be stacked in anticipation of floating them downstream to collection points along the rail line. To help the process, they'd build check dams on the streams, pile the ties into the ponded water and then blow out the check dams with dynamite to send a rushing torrent of water and logs downstream during the spring. This proved a great way to move a lot of wood in a hurry but the practice almost always had devastating effects on stream channels – scouring out pools and eliminating much of the existing fish habitat and the fish that were found there.

Ultimately the railroads found more efficient ways to move ties but the damage that was done to Wyoming's streams remained. A century later the Game and Fish Department began fixing many of those areas – restoring pools, riffles, and bank cover. In lots of places, trout populations rebounded rapidly. But in other places, like South Cottonwood Creek, results didn't quite meet expectations. Though summer habitat looked great, biologists wondered if something might be going on during the winter – a time when most anglers, and biologists, are tucked safely away in the warmth of their homes and offices. To get a better understanding of what might be going on, two graduate students were hired by the University of Wyoming to study winter habitat and trout behavior. Their work yielded some remarkable discoveries.

The students found that habitat that was readily used in the summer was often completely devoid of trout in the winter. Their work revealed that the unique conditions associated with some of the habitat improvement structures, in combination with warm springs in the bottom of the stream kept portions of the stream from freezing. This phenomenon led to the formation of slush ice that filled the pools that were used in the summer, making them totally unsuitable for any fish in the winter. Ice jams also formed that blocked the flow of the river, causing water to rise over the stream banks too. This not only flooded the riparian areas but almost dried up the stream channel for a ways below the ice jams. To survive these conditions some trout moved into beaver ponds where more stable habitat existed. Other trout moved to more stable habitat areas in the stream outside of the habitat improvement areas. This was landmark research that has caused fishery biologists in Wyoming and across the West to re-think how we manage water and habitat for trout. It's also helped us better understand how the things we and others do in a stream affect flow patterns and habitat at all times of year.

THE FISHERY

Though some parts of South Cottonwood Creek could support more trout if the habitat conditions that led to adverse icing conditions were fixed, it's still a delightful stream full of native Colorado River cutthroat trout and brook trout. Throughout the instream flow segment, the stream exhibits a rhythmic pool / riffle / run structure that is easily waded in most places. The stream bottom consists of medium sized cobbles and gravel that produce large numbers of mayflies, caddis flies and stone flies – the stuff



South Cottonwood Creek is the site of groundbreaking research on winter trout habitat that greatly influenced the way fishery biologists in Wyoming and across the West manage water and habitat for trout. The instream flow on this stream helps protect habitat for native Colorado River cutthroat trout.

fish eat. Most years there are some huge hatches of these insects throughout the summer and fall when they emerge to swarm and lay their eggs in the stream. The clean gravels also provide perfect habitat for trout to spawn in. As a result, most of the trout found here are wild fish. The stream is bordered by low-growing willows, which makes for easy fly fishing. All in all, from July 'til ice-up, South Cottonwood Creek serves up some great angling. Expect most of the cutts to range between 8 and 18 inches and the brookies to average around 8 to 10 inches with a few larger fish.

Area 4 flowing water fishery regulations apply here. That means beginning in 2010 there will be a limit of three trout per day or in possession, only one trout can exceed 16 inches, and only one cutthroat trout can exceed 12 inches. Statewide brook trout regulations also apply. Anglers may only use artificial flies and lures here.

HOW TO GET THERE

From Pinedale, go north on Highway 191 about 11 miles to the junction of Highway 189. Turn south on 189 and go 3 miles to County Road 23-117 (Rye Grass Road) and turn right (West). There is a sign at this junction that says "Bridger-Teton National Forest, South Horse, Cottonwoods." Travel west on 23-117 for about 13 miles. While on 23-117, the road turns to gravel. When it does, stay to the left. Continue to the Horse Creek road and then turn south at this junction. Continue on 23-117 for about 2 miles. Turn right (west) onto the North Cottonwood Road (there is a Forest Service sign at this junction that says "North Cottonwood and South Cottonwood"). Continue on this road until you reach the junction of North Cottonwood Road and South Cottonwood Road. Continue straight (west) on this road for about 1.5 miles to the Forest Service boundary, where the road changes to FS 10125. Turn left (south) and follow this road to where it crosses South Cottonwood Creek (about a mile).

For more information about instream flow and other instream flow segments, visit the department's web page on the subject at: <http://gf.state.wy.us/fish/instreamflow/index.asp>

The Instream Flow

Permit Number: Permit Number 741F

Priority Date: June 27, 1989

Quantity: 11.5 cubic feet per second (cfs) from November 1 through March 31. 17 cfs from April 1 through October 31.

Location and length: 2.93 miles

Land ownership: The entire segment is located on lands administered by the U.S. government (Forest Service or Bureau of Land Management).

Rationale: Colorado River cutthroat trout is a native species that has been proposed for listing as an endangered species by some environmental groups. The Fish and Wildlife Service is charged with making that determination and has ruled that the decision is not warranted at this time because populations of this fish are stable or increasing. This section of South Cottonwood Creek provides important habitat for Colorado River cutthroat trout. Maintaining or improving habitat for this species is of critical importance to the state's interest in preventing the species from becoming listed as threatened or endangered. The quantities of flow recommended at different times are based on detailed field studies that will provide adequate survival in the

winter (October through March), spawning and egg incubation habitat (April 1 through June 30), and growth (July 1 through September 30). Angling opportunities are also outstanding and the protection of at least base flows with an instream flow water right will help ensure that future anglers can enjoy the same privilege to fish here as current day anglers.

Status of the filing: A public hearing was held in Marbleton on Nov. 9, 1993. Some of the comments provided at the hearing were supportive of the filing, though others questioned how the proposed instream flow right would affect other water rights and the potential for future water development. The Board of County Commissioners and Green River Valley Cattleman's Association submitted letters opposing the water right, but neither party offered evidence of how issuance of the right would harm or otherwise affect their interests. In the absence of any finding that issuance of this water right would harm any other water right, the State Engineer issued this instream flow right on January 16, 2008. The final step in the process of securing this, or any other water right, is called adjudication. The Board of Control has not yet adjudicated this water right.