

Instream Flow

Clearing the Air on Water Part Two

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An Inside Look at the Game and Fish Department's Instream Flow Program and Plans for its Future

Good fishin' starts with a plan.
Some plans can be as simple as choosing to fish the Middle Fork, Powder or the upper Laramie River.
Or they can be on a larger scale.
Which streams should we keep enough water in so our kids can fish in the future like we do today?
How much water will it take to do the job?
What can we do to make sure that happens?

Planning is a necessary part of wildlife management and it's hard, sometimes thankless, work. Plans let us know what we're going to do tomorrow and give us a measuring stick on how we're doing. And sometimes, we spend years working on a plan, talking to thousands of people, collecting stacks of data and following formal instructions, only to have our plan rejected. But still, things seldom happen without one.

Conducting instream flow work also requires a plan. To do that, we first thought we'd look back at where we've been and how well we have been doing. We were fortunate to have a book on the subject to guide us, *Instream Flows for Riverine Resource Stewardship*, which was authored by 16 instream flow experts from the U.S. and Canada. Not surprisingly, the book pointed out that good instream flow programs are judged by more than just their ability to keep a little water in the creek. Their performance is a function of three main elements—science, public involvement and laws. Respectively, these elements identify what we should do, want to do and can do.

The scientific component tells biologists what they should do from a technical basis to maintain or restore healthy stream fisheries. People (including scientists) have high expectations for what science can produce, but the reality is that science is often an imprecise business. If it weren't, we'd know when the drought was going to end and oil drillers would never have dry holes. Fortunately, we know much more today about a lot of things, including instream flow, than we did just a few years back—and we're figuring out more every day.

Public involvement is your opportunity to learn and tell us what you want us to do. This component never has been lacking when it comes to instream flow. We hear lots of different voices. They're all important, as we need to direct our limited resources to the most important fisheries and provide fishery benefits that fulfill the intent of the law.

Although different sectors of the public may want a certain condition or the science may beg for a particular flow, it's the law and associated policies that dictate the terms of what actually can be accomplished. Water lawyers grow rich arguing over the meaning of different laws, the intent of laws and even

the meaning of words within laws. Water law, and instream flow, is seldom as simple or rational as it seems.

The bottom line is that it's not just the law, or what people want, or what the science says is needed. This business depends on the continuous integration of science, the public and the law, which leads to the question of what we found when we did a self-exam of our program: There is much room for improvement in almost every aspect.

Science has changed a lot during the past 17 years in terms of our ability to quantify what we should be doing to maintain or improve our fisheries. When our law was passed, the available science was limited to identifying flows to maintain fish survival, growth and spawning. Today's technology shows that maintaining a fishery is more than protecting the lowest flow that'll keep fish alive. For example, we need enough water to clean sediments from gravel and sustain healthy riparian communities. We also need to maintain good water quality, and have enough flow at the right times of year for fish to move up and downstream—and to side channels or floodplains if those are important to the fishery. The science is very clear that if we don't consider these factors and others, some stream channels will become narrower and shallower, which will cause a change in the species and number of fish that live there. Over time (decades), the fishing you experience on those streams will change right along with the habitat.

Knowing what people want us to do never has been more important. In fact, if it weren't for public involvement and the initiative that led to our present instream flow law in 1986, you probably wouldn't have the law that's on the books today. The legislatively required hearing for each filing has been a good way to make sure proposed filings don't harm other water interests—and to date, not a single filing has been found to cause any harm. However, hearings are designed to gather input, not provide the kind of education many folks need. The state needs to continue seeking ways to provide education to sportsmen, ranchers, municipalities, basin advisory groups, watershed committees and others with an interest in water use and management. We've addressed part of that need by writing the Program Review and Five-Year Plan, giving talks to various groups and we've just launched a Web page to share information on the studies and filings we've done.

The law that tells us what we can do to maintain or improve fisheries isn't perfect, either. It was a good start in 1986, but it isn't flexible enough to address all of the various kinds of instream flow needs that are out there. For example, when the law was passed, it was interpreted as a way to reserve only minimum flows to maintain fish survival. As a consequence, there is no legal opportunity to acquire water rights for higher amounts to maintain long-term habitat health where studies show it is necessary. In addition, it's not presently possible for private landowners or municipalities with existing water rights to temporarily change the use of those rights to keep water in designated stream channels to create or improve fisheries.

Instream flow isn't a simple business. But the more that people understand the process, the less time we'll spend arguing and the better job we'll do ensuring that Wyoming is still known for its world-class stream fisheries far into the future. Having a plan to encourage that dialogue and understanding probably is a good place to start.



Good fishing starts with a plan.

WGFD

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The Instream Flow Five-Year Plan

The instream flow program review is partly an educational tool to help people understand the complexities of instream flow. But it also was written for us—to help us plan for the future and do a better job of maintaining and restoring our rich fishery heritage. The Five-Year Plan we recently completed lists a lot of things that need to be done, but some of the more important ones are listed here.

Working to maintain healthy populations of our native fishes (as well as to keep them from being listed as threatened or endangered) comes at the top of the list of what we will be working on for the extended future. Maintaining aquatic habitat starts with water. We spent the previous dozen years or so working with Colorado River and Bear River cutthroat trout in southern and southwestern Wyoming. Lately we've been working on filings for Yellowstone cutthroat trout in the Greybull River drainage in the northwestern corner of the state. According to our plan, we'll stay in this part of the state for the foreseeable future. All of our recent filings have targeted stream segments on public land and this pattern will continue.

Protecting instream flow in streams like the Wood River near Meeteetsee

is an important way for the state to prevent native Yellowstone cutthroat trout from being listed as threatened or endangered.

Public interest in instream flow never has been higher. If that interest involves changing an existing water right to instream flow, interested parties must have our agency act on their behalf to effect the change. We'll continue filling that role when it's appropriate to do so.

In addition to the work we do for others, the Five-Year Plan also points out the need for us to work with wildlife biologists and habitat managers to evaluate the status and options for using water rights on our many wildlife habitat management units (WHMAs) and trout hatcheries. Each WHMA and hatchery exists for a unique purpose, and the water rights associated with each offer their own set of needs and opportunities to manage wildlife habitat. Those uses range from irrigating to produce forage for big game, to developing wetlands, to sometimes changing the use to instream flow. With over 650 commission-owned water rights to manage, this work represents a potentially monumental challenge.

There's no question that instream flow in Wyoming is complex and controversial. But in spite of everything else, instream flow boils down to the simple fact that it's really all about working together to have healthy ecosystems, healthy economies, and better fishing for anglers today as well as those who

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Municipalities or private individuals who want to change the use of an existing water right to instream flow must engage the Game and Fish to act on their behalf, such as we did for the town of Pinedale on Pine Creek, above.