

AN INTRODUCTION TO: Instream Flows and Instream Flow Rules

Contact

Dave Christensen
(360) 407-6647
Dave.christensen@ecy.wa.gov

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Healthy stream flows are a vital part of our natural environment and community water supplies. In addition to providing habitat for fish and wildlife, stream flows contribute to the scenic and aesthetic qualities of natural settings and help support recreation, stock watering, and other uses of water.

The Department of Ecology is required by state law to keep enough water in streams to protect and preserve these instream resources and uses. To do this, we set flow levels in administrative rules; the specific stream flow levels are called “instream flows.” Once instream flow levels are established in a rule, they serve as a water right for the stream and the resources that depend on it.

- Instream flows are not set at a single level for the entire year. To address the needs of different types and life stages of fish, and because streams have natural seasonal variations, instream flows are set at different levels at different times of the year.

Instream flow rules do not affect pre-existing, or senior, water rights; rather, they protect the river from future withdrawals. Instream flow rules also address other water management provisions for a watershed including closing certain water bodies to new appropriations, establishing mitigation requirements, and determining future water availability.

- Instream flows have a priority date like any other water right; the priority date is the effective date of the rule.
- Once an instream flow is established, Ecology may not issue water rights that would impair the instream flow level.
- Setting instream flows does not put water in streams, but prevents further water from being removed.

How are instream flow levels determined?

Fish biologists conduct technical studies and review current science to determine preferred flows for fish habitat; they then combine this information with historic stream flow records to set instream flow levels.

- Ecology and the Washington Department of Fish and Wildlife use federally-developed scientific models to determine preferred flows for fish. These models have been widely used since the 1970s and are accepted as the standard methodology.
- In 1993, the Washington State Supreme Court affirmed that Ecology uses the correct methods for setting instream flows.

Are instream flows all about protecting fish? What about people?

Instream flows are designed to protect instream resources, including fish, by ensuring that they have adequate water flows. In addition, instream



In state law:

Different laws calling for protection of stream flows use the terms “base flow,” “minimum instream flow,” or “minimum water flows or levels.” Ecology uses the term “instream flows” to refer to all of these.



Legal authority for setting instream flow rules:

- Construction projects in state waters (RCW 77.57.020)
- Water code (RCW 90.03.247)
- Minimum water flows and levels (RCW 90.22)
- Water resources act of 1971 (90.54 RCW, particularly section 020)
- Watershed planning (RCW 90.82.080)

flows play a critical role in maintaining groundwater levels and water levels for other surface water bodies, such as wetlands, lakes, and ponds, on which people rely for their water supply.

- Adequate stream flows also support recreational activities and scenic and aesthetic values for Washington State.
- Setting instream flow levels adequate for fish generally supports other instream resources and values, such as water quality and habitat for other animals.
- Adopting instream flow rules helps Ecology determine whether there is enough water for additional out-of-stream uses to support local communities in managing their current and future water needs.

Why are instream flows sometimes higher than the flow in the stream?

State law is clear that instream flows must protect and preserve fish and other instream resources over the long term. Instream flows reflect levels that are beneficial for fish *when those flow levels are present*. Natural stream flow on any given day can vary greatly from year to year, sometimes by a factor of ten. Our state’s native fish species need the extra boost they get from “good water years” to sustain healthy fish populations and get them through low water years. Ecology sets instream flows at levels that are met frequently enough to benefit fish populations.

If instream flows were set at a low level that was always achievable:

- Ecology would be obligated to issue new water rights to applicants. The new water rights issued would lower the flows present in the stream.
- Eventually, enough water rights would be issued that average stream flows would fall; drought-like conditions that were once rare would become the norm. Changes in water availability from year to year caused by weather would prevent the new lower instream flow level from being met every year.
- With the lower average stream flow, the “hit” to the fish population in low water years would not be offset by boosts to the populations in the good water years. Long term, fish populations would likely drop as stream flow and available habitat are reduced, which could lead to the eventual elimination of fish from that river.

Thus, even with lower instream flow levels, water would still not be available for future domestic uses and fish populations would suffer.

If instream flows are not being met (i.e., the stream flow in the river is below the regulated instream flow level), it does not mean that the instream flow level is set too high, or that the stream is immediately degraded. Rather, it is an indicator that surplus water may be limited, or unavailable, for new water rights if fish and instream resources are to be fully protected.

How can I learn more?

Please visit our website at:

<http://www.ecy.wa.gov/programs/wr/instream-flows/isfhtm.html>

- The website has a 6 minute video that provides a nice overview.