

Setting and protecting flows in the Spokane River

The Department of Ecology (Ecology) is proposing to adopt a water management rule for the Spokane River, from the Idaho border to Lake Spokane. The rule would apply to new uses of surface and groundwater within the Washington portion of the Spokane Valley Rathdrum Prairie Aquifer. The rule would lay down a structure to protect stream flows while still allowing for new growth through the development of existing water rights.

One important component of the rule would be to establish flow levels (“instream flows”) for the Spokane River. This rule would not include Hangman Creek, or the Little Spokane River which already has an instream flow rule. Refer to the map on the last page.

We are fortunate to have a healthy aquifer in the Spokane-Coeur d’Alene region which supplies plenty of groundwater for our population. But you may not know that this groundwater also supplies water to the Spokane River – and that river runs very nearly dry in some spots during the summer on the Washington side of the Idaho border.

Low summer flows are part of the natural cycle. Climate change is expected to lower our snow pack, reducing our water supply. Add in our rapidly growing population and the close connection between our aquifer and our river – and it’s clear that demands on water and pressure on river flows will just increase.

Timing of water availability is key

In late winter and spring, when water demands are low, water is most abundant. There is lots of water from rain, along with snowmelt from the mountains, flowing into the aquifer and then into the river. In summer and fall, surface water is limited and aquifer use is high. The river is most dependent at this time on the aquifer for flows.

Your representatives in the Legislature recognized many years ago that our precious water supply needs protection, to help ensure enough water to sustain people and the environment over the long-term. The Legislature assigned Ecology the job of protecting and preserving sufficient water in streams for “instream resources” as well as for “out-of-stream” uses to meet human domestic needs.

WHY IT MATTERS

Stream flows matter to us all: people, businesses, fish and the environment -- and our Legislators. They decided flows should be protected and gave the job to the Department of Ecology to establish flow levels that will protect streams and instream resources.

A water management rule for the Spokane River is expected to be proposed in 2013. This publication focuses on the proposed flows the rule would establish for the Spokane River (“instream flows”).

Definitions

Adjudication: a way to legally confirm and quantify existing water rights in court, eliminating uncertainty about water rights.

Aquifer: underground geological water system that stores and/or transmits ground water to wells, springs and streams.

Instream flow: a regulatory flow threshold used by Ecology to determine whether there is sufficient water for new out-of-stream uses.

Instream resources: the resources that depend on adequate amounts of water in our streams, such as fish, wildlife, recreational activities and water quality.

Stream flow: the amount of water flowing down a river or stream at a given time.

Instream flows: an important water management tool

Setting instream flows is one important tool for managing water. An instream flow is a water right for the river, protecting instream values much like rights given to individuals, farms and municipalities.

How could setting instream flows affect me?

Once adopted in rule, instream flows are established water rights intended to prevent further degradation of the river by **future** (junior) withdrawals. Instream flows also protect existing (senior) water rights.

Here's what an instream flow rule *does not* do:

- Does not require that water be put in streams to increase stream flow.
- Does not guarantee water will be in the stream to meet instream flow levels.
- Does not impact senior water rights.

There would be no fees or requirements that local businesses, individuals or cities would have to pay or meet. The rule would not impose any regulatory changes on existing water uses.

State law is clear that instream flows must be set at levels that protect and preserve fish and instream resources *over the long term*. Instream flows reflect levels that would be beneficial to fish if those flows were present in the stream. They are not the lowest amount of water that has occurred in the stream according to stream flow records.

Since the instream flow levels may sometimes be higher than what is actually in the stream, water rights granted after the rule is adopted would be *interruptible*. That means when actual stream flows drop below the instream flow, that new use would be curtailed to protect the flow and senior rights.

The Spokane region is served by existing water suppliers with adequate senior water rights to meet future demand. If you are or can be served by municipal or other group water suppliers, the rule would not affect you.

Why is now the time to develop an instream flow rule?

Many studies have been completed on Spokane River stream flows and the aquifer, and recommended instream flow levels have been developed. These flow levels are based on scientific analysis which takes into consideration many elements, including:

- existing flow levels
- channel shape
- water velocity
- side channels
- fish biology
- usable stream habitat area (living space for fish).

Instream flow studies measure how fish habitat changes with the amount of stream flow. Since fish are often the most sensitive species affected by stream flow, flows that protect their needs presumably protect

other instream uses. Recommendations from fish biologists plus the future water needs of people are considered when rules are developed.

Additional studies and reports help inform rule development

Since 2005, Ecology has been collaborating with a broad variety of interests on the management of water resources in the region. Water quality permitting, watershed planning, water resource studies and hydropower dam relicensing processes have allowed stakeholders to develop a common understanding of water resource issues as well as an open dialogue about shared management.

Several detailed reports and studies have been completed. These are being used to support setting instream flows and the need for other water management strategies to help ensure water availability in the future. Studies and reports include:

- Spokane River Total Maximum Daily Load studies for dissolved oxygen (2010).
- Spokane River fish spawning study required by Avista's dam relicensing (2010 and ongoing).
- Spokane River Redband trout population study (2007 and ongoing).
- Spokane Valley-Rathdrum Prairie Aquifer study (2007).
- Spokane region watershed plans (2005-2009).

Interstate water management

The Spokane Valley-Rathdrum Prairie Aquifer and the Spokane River are shared between Idaho and Washington. Although both states have tools and authorities to manage water resources in a way that benefits our community as a whole, those tools are separate and distinct. Management tools in one state have no legal standing in the other.

Both states share the goal of managing water in ways that sustain people and the environment over the long-term. Adjudication is underway in Idaho. Elsewhere in Idaho, lake levels for Lake Coeur d'Alene have been established, and instream flows have been set for a segment of the Spokane River in Idaho. In Washington, setting instream flows for the Spokane River is supported by state law, and helps complete our preliminary work toward a future adjudication. On its own, the instream flow rule allows Ecology to better manage water rights on our portion of this shared resource.

Win-win: the rule would protect both our economy and the environment

Instream flows are designed to protect instream resources, including fish, wildlife, hydropower, recreation and water quality. These uses all need adequate stream flows. Without adequate water flowing in the river, our quality of life would suffer, including our local economy.

Instream flows and other water management strategies would help protect fish habitat and population. The Spokane River is home to both trout and whitefish populations that need protection.

Redband trout are our most prized game-fish and native to the area. They thrive in clean, cool, low gradient streams such as the Spokane River. As with other trout, they feed on insects, crustaceans and

forage fish. They spawn in late April through mid-June depending on water temperatures and levels. Their habitat is most threatened during spring spawning and summer low flows.

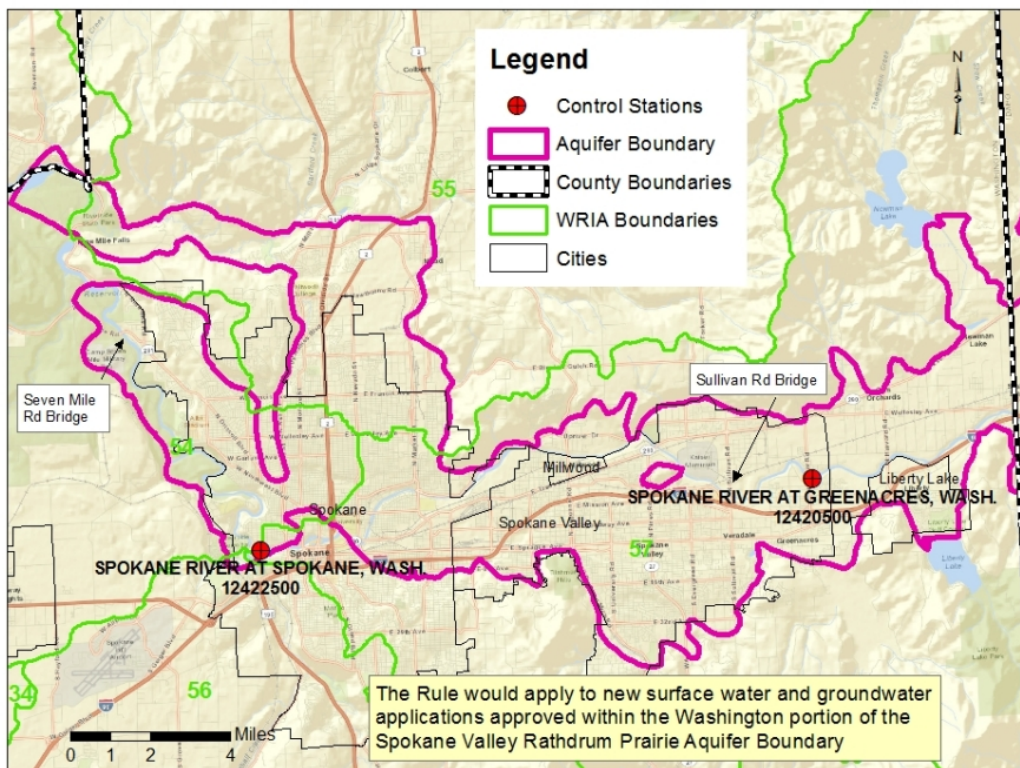
Mountain whitefish are one of the most widely distributed salmonid fish of western North America, including the Spokane River. Whitefish are an important subsistence fish in the region.

Setting instream flows and careful water management for the Spokane River would help ensure clean, flowing water available for fish and wildlife, and for ourselves, our children, and our community -- today and into the future.

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