

# Lower Spokane Watershed, WRIA 54

This focus sheet provides information on the availability of water for new uses in the Lower Spokane watershed. This information provides a starting point for potential water users in determining the best strategies for securing water for a future project or proposal in this area.

*April 2014 update: The Dept. of Ecology is developing an instream flow rule to protect the Spokane River. The rule would apply to the main stem of the Spokane River from the Idaho border to Lake Roosevelt. For more information about the rule and rule-making process, look [here](#).*

The Lower Spokane Watershed (also referred to as Water Resources Inventory Area, WRIA, 54) is located in eastern Washington. It includes a portion of the Spokane River, and its numerous tributary creeks and streams, that lie between the point where it joins with the Columbia River and the City of Spokane. The Spokane River originates in the mountains of Idaho.

The annual precipitation in the Lower Spokane Watershed ranges from 10 inches per year near to where it joins with the Columbia River, to 20 inches in the higher elevations north of the river. Only a fraction of this precipitation becomes groundwater available for human and economic uses. Most of the precipitation arrives during the winter months, when water demands are the lowest. During the summer, the snowpack is gone, there is little rain, and naturally low stream flows are dependent on groundwater. This means that groundwater and surface water are least available when water demands are the highest.

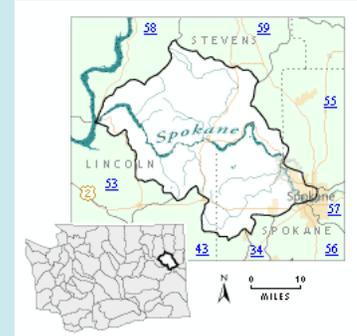
Much of the water in the Lower Spokane Watershed has already been spoken for (appropriated). Increased demands from population growth, declining groundwater levels, and impacts from climate change are adding to the challenge of finding new water supplies in WRIA 54, especially during the summer months.

## Adjudication

Chamokane Creek is a federally-administered adjudication within WRIA 54.

In general, most of the water in adjudicated basins has been appropriated and new appropriations are not available.

For the 2009-2011 biennium, Ecology received funding and legislative support to research and map water rights in the Spokane watersheds.



## Definitions

**Adjudication:** A legal process conducted through a superior court to determine the extent and validity of existing water rights.

**Appropriation (of water):** The process of legally acquiring the right to specific amounts of the public water resource for beneficial uses (as opposed to **unappropriated**, water that has not been legally acquired).

**Consumptive use:** A use of water that diminishes the amount or quality of water in the water source (as opposed to **nonconsumptive**, a use that does not reduce the water source).

**Instream flows:** Flow levels adopted into an administrative rule that create a water right for the stream to protect fish, wildlife, stock watering, recreational uses, and other instream uses and values. Typical instream flow rules now include broader water management strategies.

**Mitigation plan:** A scientifically-sound plan to offset the impacts of a proposed water use.

**Surface water source limitation (SWSL):** A recommendation from the Department of Fish and Wildlife that flows be protected to maintain fish populations. See RCW 77.57.020

## Groundwater

In general, availability of groundwater from bedrock in this watershed is very limited by climate and geology. In addition many areas are in decline, meaning little if any water is available for new consumptive appropriations.

The Spokane Valley Rathdrum Prairie (SVRP) Aquifer and the Spokane River are intimately linked. Water withdrawals from the aquifer directly affect flows in the river. The U.S. Geological Survey and the states of Washington and Idaho completed a bi-state study of the SVRP aquifer in 2007. Water availability is generally considered limited in the SVRP, due to impacts on the Spokane River. State and local governments are evaluating options to improve management of the water resources shared between Washington and Idaho.

The West Plains is a plateau southwest of the Spokane River, within the southeastern portion WRIA 54. The Columbia River Basalt Group aquifers underlying the West Plains supply water to the communities of Airway Heights, Medical Lake, Four Lakes, and Fairchild Air Force Base. Groundwater levels have significantly declined in some areas, indicating the groundwater resource is strained. Water in the West Plains is generally considered over-appropriated, so no water is available for new consumptive uses.

## Surface water

The Lower Spokane watershed has administrative restrictions known as Surface Water Source Limitations (SWSL), which limit most water sources in the watershed. Groundwater connected to the surface sources is also subject to SWSL restrictions. Often these restrictions will require that new water uses stop during low flow periods. This indicates that most water has been appropriated within the watershed. In addition, Deep Creek, Mill Canyon Creek and Spring Creek are “closed” by SWSL, meaning the water body is not available for new uses.

The WRIA 54 Planning Unit completed an instream flow study of selected reaches of the Spokane River and toe-width measurements on Deep, Coulee, Spring, and Little Chamokane creeks. A stakeholder work group was formed, in collaboration with [WRIAs 55 \(Little Spokane\) and 57 \(Middle Spokane\)](#), to develop integrated instream flow recommendations for the main stem of the Spokane River. They agreed upon control points to manage surface water and the Spokane Valley Rathdrum Prairie aquifer.

Further work was done to develop instream flow recommendations within WRIA 54 that included stream flow and fish habitat data for the mainstem Spokane River, hydrogeological studies, and water supply and demand analysis to develop final recommendations for water management. The Supreme Court ruling on the municipal water law case also answered some of the most pressing issues for water purveyors.

The Spokane Indian Reservation lands are located within WRIA 54. The Tribes are concerned about maintaining flows and fish habitat in the watershed. Ecology routinely sends water right applications and mitigation plans to them for review. Federally reserved rights are not quantified at this time and so the legal availability of water in these areas is undetermined.

## Water supply available for new uses

The Lower Spokane Watershed is not closed to new water uses. However, this watershed is considered over-appropriated, that is, all available water is legally “spoken for”. At the same time, flows on the Spokane River are declining. Therefore any new rights would be seasonal (interruptible), or the impacts of the water use would need to be fully offset (through mitigation).

The groundwater permit exemption allows certain users of small quantities of groundwater (most commonly, single residential well owners) to construct wells and develop their water supplies without obtaining a water right permit from Ecology. However, water rights developed through the permit exemption are not exempt from the water right seniority system and could be regulated during future drought periods. For more information about the groundwater permit exemption, refer to Ecology publication #F-WR-92-104; [www.ecy.wa.gov/pubs/fwr92104.pdf](http://www.ecy.wa.gov/pubs/fwr92104.pdf).

The Office of Columbia River (OCR) is aggressively pursuing water supply development opportunities throughout the Columbia Basin. You can find additional information at the OCR Web site at: [www.ecy.wa.gov/programs/wr/cwp/crwmp.html](http://www.ecy.wa.gov/programs/wr/cwp/crwmp.html).

Additional options for finding a water supply include:

- Connecting to an established water supplier. This is the fastest and simplest option.
- Processing a change application with the Spokane or Stevens County Water Conservancy Boards.
- Processing an application through the Cost Reimbursement Program. Refer to Ecology publication #05-11-016; [www.ecy.wa.gov/pubs/0511016.pdf](http://www.ecy.wa.gov/pubs/0511016.pdf). You will likely need to develop a mitigation strategy to offset any impacts the water use will have on surface waters.

For more information on these and other options, refer to “Alternatives for Water Right Application Processing”, Ecology publication #11-11-067; [www.ecy.wa.gov/pubs/1111067.pdf](http://www.ecy.wa.gov/pubs/1111067.pdf).

## **Pending water right applications in this watershed**

Washington water law is based on the “prior appropriation” system, often called “first in time, first in right.” Applications for water from the same source must be processed in the order they are received.

Ecology asks anyone who needs a water right (new, change, or transfer) to submit a pre-application consultation form and meet with us to review your water supply needs and project proposal.

- Apply for a New Water Right  
<http://www.ecy.wa.gov/programs/wr/rights/newrights.html>
- Apply to Change or Transfer a Water Right or Claim  
[http://www.ecy.wa.gov/programs/wr/rights/change\\_transfer\\_use.html](http://www.ecy.wa.gov/programs/wr/rights/change_transfer_use.html)

The map on the last page of this document shows some of the factors that will be considered when evaluating water right permit applications. Here are other information sources to assist you with your research:

- Locate and research water rights on land parcels anywhere in the state (Water Resource Explorer)  
<http://www.ecy.wa.gov/programs/wr/info/webmap.html>
- Pending Water Right Applications by County  
<http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html>
- Subscribe to a water right application RSS feed for a county or WRIA  
[http://www.ecy.wa.gov/programs/wr/rights/wr\\_app\\_rss.html](http://www.ecy.wa.gov/programs/wr/rights/wr_app_rss.html)
- WRIA map showing the total number of water right claims, certificates, permits and applications  
<http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright-wria-maps.pdf>
- Search and view well reports using a variety of search tools  
<http://apps.ecy.wa.gov/welllog/>

## **For more information**

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Water Resources Program  
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Spokane, WA 99205-1295  
509-329-3400

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