

## Lower Crab Watershed, WRIA 41

This focus sheet provides information on the availability of water for new uses in the Lower Crab 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.

The Lower Crab Watershed located in eastern Washington includes the portion of the Crab Creek between Ephrata and its confluence with the Columbia River. In addition, there are numerous tributary creeks and streams of which most are seasonal.

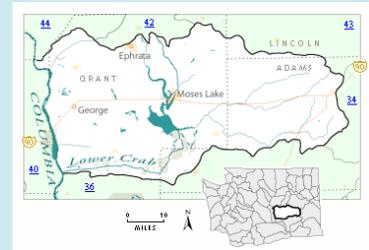
Annual precipitation ranges from 7 inches per year in the Beverly area, to somewhat over 10 inches in the higher elevations. Only a fraction of this precipitation becomes groundwater available for human and economic uses. Most of the precipitation arrives during the winter months, when water demands are the lowest. During the summer, the snowpack is gone, there is little rain, and naturally low stream flows are dependent on groundwater inflow. This means that groundwater and surface water are least available when water demands are the highest.

Much of the water in the Lower Crab Watershed has already been legally spoken for. 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 41, especially during the summer months.

The Department of Ecology (Ecology) has put together this document to describe factors that affect water availability in this watershed, and to tell you about some possible options to get the water you need.

### Factors affecting water availability

In 2004, the U.S. Bureau of Reclamation (BOR) filed notice with Ecology that the United States intends to make examinations and surveys for the utilization of the unappropriated waters of the Columbia River and its tributaries above Priest Rapids Dam (pursuant to Section 90.40.030 of the Revised Code of Washington). The withdrawal of these waters from future appropriations is currently in effect until December 23, 2014.



### Definitions/Acronyms

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

**ASGW:** Artificially stored groundwater

**BOR:** Bureau of Reclamation

**CBP:** Columbia Basin Project

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

**QBGWMS:** Quincy Basin Ground Water Management Subarea

**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.

**WRIA:** Water Resources Inventory Area; also known as a watershed or river basin. For environmental administration and planning purposes, Washington is divided up into 62 major watersheds, or WRIsAs.

All new applications for surface water and groundwater connected to surface water within WRIA 41 cannot be processed until a release from the BOR is obtained, or the withdrawal has expired. The withdrawal may be extended, and Ecology expects BOR to request an extension before the withdrawal expires.

### **Adjudications**

Crab Creek and Moses Lake is the only adjudication completed within WRIA 41. In general, most of the water in adjudicated basins has been appropriated and new appropriations are not available.

### **Groundwater**

In general, the availability of groundwater from bedrock, outside of the boundaries of the Columbia Basin Project (CBP), is very limited. These limits include climate, geology and impairment to existing rights. In addition, many areas are in decline, meaning little if any water is available for new consumptive appropriations.

The reserve of water was set aside for permit-exempt wells within the Quincy Basin Ground Water Management Subarea (QBGWMS) may be depleted and as such, future permit-exempt wells may become restricted.

### **Surface water**

The Lower Crab watershed has administrative restrictions known as Surface Water Source Limitations (SWSLs), which limit most water sources in the watershed. Groundwater connected to the surface sources is also subject to SWSL restrictions. Moses Lake and Rocky Ford Creek are fully appropriated by the BOR. These restrictions indicate that most water has been appropriated within the watershed.

The CBP is a federally authorized project with multiple purposes: irrigation, power production, flood control, municipal water supply, recreation, and fish and wildlife benefits. The CBP canal system provides water for much of the agricultural irrigation in the region. Water is imported from the Columbia River and is redistributed through canals and stored groundwater. The CBP has three distinct subareas: Quincy, Odessa and the “508-14”.

A portion of the Odessa Subarea, established under [WACs 173-128A](#) and [173-130](#), encompasses the eastern area of WRIA 41. The majority of this subarea has not been developed with imported water and is often referred to as the second half of the CBP. Groundwater levels in the Odessa Subarea aquifer are declining rapidly in many places and as a result, groundwater is not available for new uses.

A portion of the QBGWMS, established under [WACs 173-124](#) and [173-134A](#), encompasses the western area of WRIA 41. This area is characterized by both state water rights and the unique “Quincy Basin” (QB) permits for artificially stored groundwater (ASGW) from the CBP. All state water within this area has been legally appropriated. The reserve of 177,000 acre-feet of ASGW under QB permits has been appropriated or is spoken for under existing applications.

A portion of the “508-14” Subarea, established under [WAC 508-14](#), encompasses the southern area of WRIA 41. This area is characterized by both state water rights and a significant quantity of ASGW from the CBP project. It is estimated that all state water within this area has been appropriated.

## Water supply available for new uses

The Lower Crab watershed is not closed to new water uses, outside of the QBGWMS. However, water levels are declining and/or water is not legally available, so it is unlikely any water is available for new consumptive appropriation in most areas. Therefore, it is doubtful that any new consumptive water rights will be issued unless the impacts are fully mitigated.

Office of Columbia River (OCR) has submitted a filing to amend the rule for the 508-14 subarea. The intent of the filing, in part, is to allocate the ASGW within the subarea. The majority of this water will be allocated to existing applications, but some water may become available for appropriation.

Although nearly all of the water under the QB-ASGW program is currently spoken for, an application can be filed to wait in line until water becomes available. Water for new uses may become available as water is returned to the program due to reductions or cancellations of existing permitted projects.

The Lake Roosevelt Incremental Storage Release is an impoundment / reservoir of the Columbia River watershed. OCR is currently pursuing development of water supplies on Lake Roosevelt to benefit instream and out-of-stream uses through storage, conservation, and regional water management agreements. Water under this project, for new appropriations, is limited to municipal and industrial supply from the Columbia River mainstem.

The groundwater permit exemption allows certain users of small quantities of ground water (most commonly, single residential well owners) to construct wells and develop their water supplies without obtaining a water right permit from Ecology. For more information about the groundwater permit exemption, refer to [www.ecy.wa.gov/pubs/fwr92104.pdf](http://www.ecy.wa.gov/pubs/fwr92104.pdf).

The permit exemption may not be available to prospective water users in certain areas that have been closed to further appropriation because there is limited or no water available. Check with Ecology staff at the regional office for more information.

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 obtaining a new water supply include:

- Connecting to an established water supplier. This is the fastest and simplest option.
- Processing your change application with the Grant County Water Conservancy Board.
- Processing your application through the Cost Reimbursement Program. Refer to: [www.ecy.wa.gov/pubs/0511016.pdf](http://www.ecy.wa.gov/pubs/0511016.pdf).

For more information on these and other options, refer to “Alternatives for Water Right Application Processing” [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 the 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 in this document shows some of the factors that will be considered when evaluating water right permit applications. Here are some 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  
<https://fortress.wa.gov/ecy/waterresources/map/WCLSSWebMap/default.aspx>

## For more information

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

*If you need this document in a version for the visually impaired, call the Water Resources Program at 360-407-6872. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.*

