
GWMA Municipal Supply Report

Last Updated Monday, 10 December 2012

Summary Report: Current Conditions and Predicted Future Conditions, October 2012 - 25 Municipalities

The purpose of this report is to review basic information and issues associated with current groundwater supply conditions for 25 municipalities located within the four-county area of the Columbia Basin Ground Water Management Area (GWMA) of Adams, Franklin, Grant and Lincoln Counties.

The review report is based on GWMA data and information developed during previous projects, information collected from the public works and/or other municipal personnel of each of the 25 municipalities, data available from the Washington State Department of Health (WSDOH), and data and information published or compiled by others, including the Washington State Department of Ecology (Ecology).

Topics covered in this Municipal Groundwater Supply - Summary Report include summaries of:

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Current well capacity and projected future demand well construction

Groundwater supply sources, including aquifer identification.

Water levels in municipal supply wells.

Groundwater geochemistry and age.

Potential future water supply options.

Groundwater geochemistry and age.

Potential future water supply.

This groundwater supply evaluation takes a look at predictions for future groundwater conditions which have been developed using GWMA's Groundwater Flow Model for the Columbia River Basalt Aquifer System.

In the summary report, GWMA has compiled each of these factors to illustrate our basic conclusions. In many of these summaries, GWMA identifies one or more risk factors that signify potential concerns about future water production for specific the well conditions of 25 municipalities and their wells. GWMA has identified multiple risk factors because we found that the incomplete nature of existing municipal well data within the GWMA results in an incomplete picture of well and aquifer performance. Given that, use of multiple risk factors allowed us to more completely scrutinize hydrogeologic

conditions for GWMA municipalities than would have otherwise been the case if we focused on one factor. These risk factors include:

- Future projected water demands.

- Pumping test drawdown in excess of 100 ft.
- Historical and model predicted water level declines.
- Predicted potential static and/or dynamic water levels in 2060 that are greater than 700 below ground surface.
- Groundwater geochemical data that indicates wells area pumping fossil groundwater that shows little to no evidence of modern recharge.

The municipalities summarized in this report include Almira, Creston, Davenport, Harrington, Reardan, Ritzville, Sprague, Wilbur, and Wilson Creek located in the northern and northeastern portions of the GWMA; in the central and eastern GWMA the municipalities included are Connell, Hatton, Kahlotus, Lind, Mesa, Moses Lake, Odessa, Othello, Warden, and Washtucna; and, in the northwestern portion of the GWMA, the municipalities included are Ephrata, George, Quincy, and Soap Lake. Finally, in the southwestern GWMA two municipalities were evaluated, Royal City and Mattawa. [click here to read the full Summary Report](#)

Report by Individual Municipality: [Municipal Groundwater Supply Report](#)

The GWMA Municipal Groundwater Supply Review: Current Conditions and Predicted Future Conditions - Summary Report-October 2012 (above) has been separated into individual municipality reports and has been made available by clicking on each municipality listed below.

The individual municipal report provides basic information and issues associated with current groundwater supply conditions related to each of the 25 municipalities, including water demand, supply, and level, and includes water sources for each individual municipality.

To view individual municipal report click on the individual municipality listed below

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- City of Connell
 - City of Davenport
 - City of George
 - City of Harrington
 - City of Kahlotus
 - City of Mattawa
 - City of Mesa
 - City of Moses Lake
 - City of Othello
 - City of Quincy
 - City of Ritzville
 - City of Royal City
 - City of Soap Lake
 - City of Sprague
 - City of Soap Lake
 - City of Warden
 - Town of Almira
 - Town of Hatton
 - Town of Lind
 - Town of Odessa
 - Town of Reardan
 - Town of Washtucna
 - Town of Wilbur
 - Town of Wilson Creek

A complete copy of the summary report and/or the individual municipal reports will be made available on DVD by contacting the GWMA Project Office at 509.488.3409 or gwma@cbgwma.org

