SOURCE WATER ASSESSMENT SUMMARY BROCHURE

BAKER CITY
PWS # 4100073

WHAT IS A SOURCE WATER ASSESSMENT?

The Source Water Assessment was recently completed by the Department of Environmental Quality (DEQ) and the Oregon Department of Human Services (DHS) to identify the surface areas (and/or subsurface areas) that supply water to Baker City's public water system intake and to inventory the potential contaminant sources that may impact the water supply.

WHY WAS IT COMPLETED?

The Source Water Assessment was completed to provide information so that Baker City's public water system staff/operator, consumers, and community citizens can begin developing strategies to protect the source of their drinking water, and to minimize future public expenditures for drinking water treatment. The assessment was prepared under the requirements and guidelines of the Federal Safe Drinking Water Act (SDWA).

WHAT AREAS ARE INCLUDED IN BAKER CITY'S DRINKING WATER PROTECTION AREA?

Baker City's public water system draws water from seven surface water intakes in the Elkhorn Mountains (Goodrich Creek, Elk Creek, Salmon Creek, Little Salmon Creek, Mill Creek, Little Mill Creek, and Little Marble Creek); a groundwater well; and a groundwater spring. This Assessment addresses only the surface water component of the drinking water supply. This public water system serves approximately 9880 citizens. The source of this surface water is within the Powder Subbasin of the Middle Snake-Powder Basin. The geographic area providing water to Baker City's intakes (the drinking water protection area) includes a cumulative total of approximately 11.9 stream miles and encompasses a total area of 10.4 square miles. The boundaries of the Drinking Water Protection Area are illustrated on the figure attached to this summary.

WHAT ARE THE POTENTIAL SOURCES OF CONTAMINATION TO BAKER CITY'S PUBLIC DRINKING WATER SUPPLY?

The primary intent of this inventory was to identify and locate significant potential sources of contaminants of concern. The delineated drinking water protection area for the surface water sources is primarily dominated by forestry land uses. Timber harvest areas and an upstream dam were identified as potential sources of contamination within the surface water portion Baker City's drinking water protection area. This provides a quick look at the existing potential sources of contamination that could, if improperly managed or released, impact the water quality in the watershed.

WHAT ARE THE RISKS FOR OUR SYSTEM?

A total of three potential contaminant sources were identified in Baker City's drinking water protection area. All of these are located in the sensitive areas and are high- to moderate-risk sources within "sensitive areas". The sensitive areas within the Baker City drinking water protection area include areas with high soil permeability, high soil erosion potential, high runoff potential and areas within 1000' from the river/streams. The sensitive areas are those where the potential contamination sources, if present, have a greater potential to impact the water supply. The information in this assessment provides a basis for prioritizing areas in and around our community that are most vulnerable to potential impacts and can be used by the Baker City community to develop a voluntary Drinking Water Protection Plan.

NEED MORE INFORMATION?

Baker City's Source Water Assessment Report provides additional details on the methodology and results of this assessment. The full report is available for review at:

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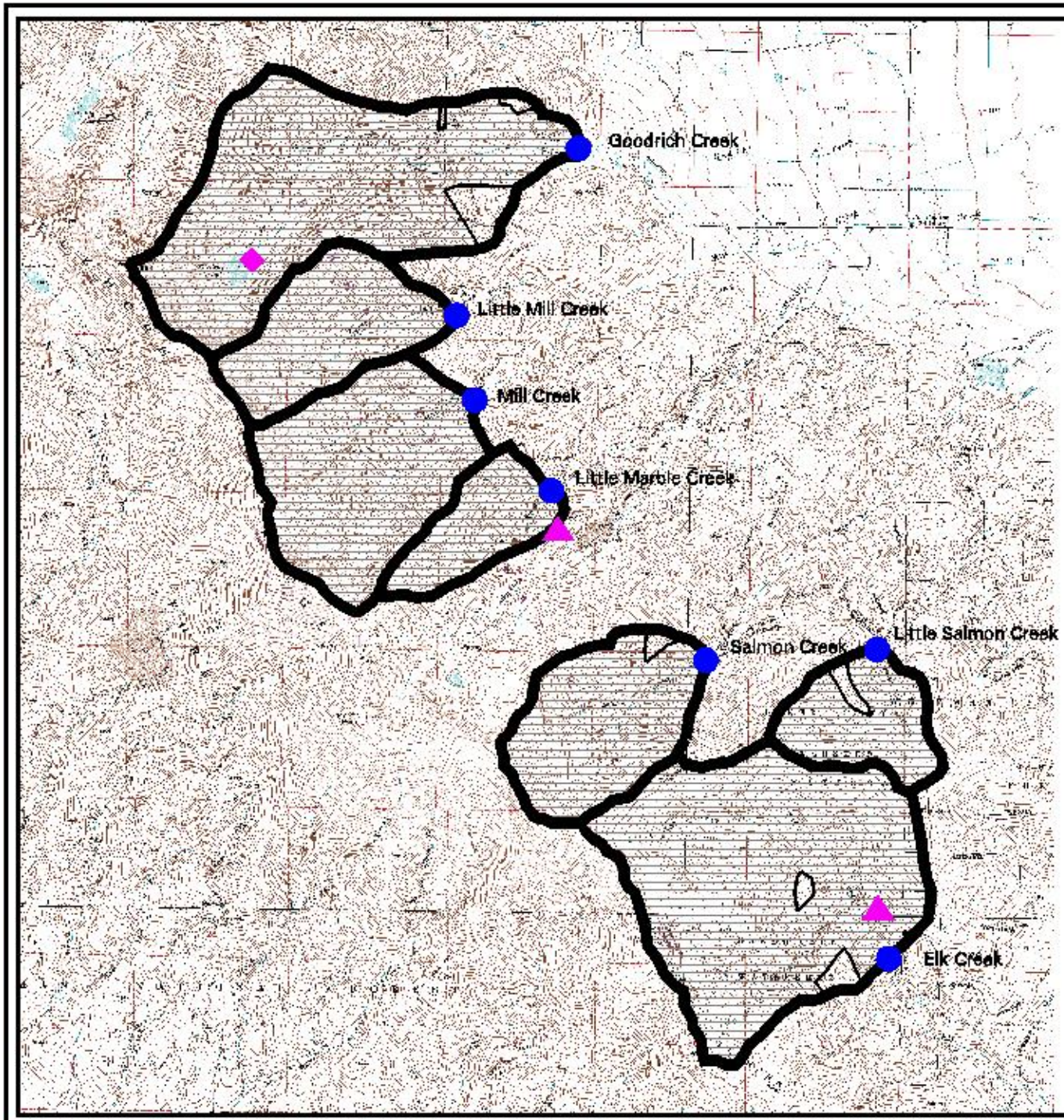
Contact the Baker City staff if you would like additional information on these Source Water Assessment results.



Source Water Assessment Results

Baker City's Drinking Water Protection Area with Sensitive Areas and Potential Contamination Sources

PWS 4100073

Drinking Water Protection Area

Drinking Water Intake - Surface Water

Sensitive Areas

Area Feature (see Note 2)

Point Feature (see Note 2)

Notes on Potential Contaminant Sources

Note 1: Sites and areas noted in this Figure are potential sources of contamination to the drinking water identified by Oregon drinking water protection staff. Environmental contamination is not likely to occur when contaminants are used and managed properly.

Note 2: Feature identification markers correspond to the potential contaminant source numbers in the SWA Report. The area features represent the approximate area where the land use or activity occurs and is marked at the point closest to the intake. The point features represent the approximate point where the land use or activity occurs.

Kilometers 0 1 2

Miles 0 1

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Oregon Department of Environmental Quality GIS

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT SOURCES

PWS# 4100073 BAKER CITY

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
1	Upstream Reservoirs/Dams	Goodrich Dam	Headwaters of Goodrich Creek	Baker City	Field-Observation	Within sensitive area. for GOODRICH CRK INTAKE	Moderate	During major storm events, reservoirs may contribute to prolonged turbidity for downstream intakes for drinking water. Construction, fluctuating water levels, and heavy waterside use can increase erosion and turbidity in reservoir/drinking water source.	Baker City Watersheds are closed to public access, with the xception of Marble Creek Road. Thinning and brush piling for fire suppression occur throughout Baker City Watersheds. The main landowner is Wallowa-Whitman National Forest.
2	Managed Forest Land - Partial Harvest (< 10 yrs.)	Timber Harvest	Elk Creek Watershed	Baker	Interview	Within sensitive area. for ELK CREEK INTAKE	Higher	Cutting and yarding of trees may contribute to increased erosion, resulting in turbidity and chemical changes (ex: nitrates) in drinking water supply. Over-application or improper handling of pesticides or fertilizers may impact drinking water source.	PWS contact indicates a limited amount of helicopter logging occurs in the watershed. The area is closed to public access.

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100073 BAKER CITY

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
3	Managed Forest Land - Partial Harvest (< 10 yrs.)	Timber Harvest	Marble Creek Watershed	Baker	Interview	Zone 1 for MARBLE SPRINGS	Moderate	Cutting and yarding of trees may contribute to increased erosion, resulting in turbidity and chemical changes (ex: nitrates) in drinking water supply. Over-application or improper handling of pesticides or fertilizers may impact drinking water source.	PWS contact indicates a limited amount of helicopter logging ccurs in the watershed.
	Managed Forest Land - Partial Harvest (< 10 yrs.)						Higher	Cutting and yarding of trees may contribute to increased erosion, resulting in turbidity and chemical changes (ex: nitrates) in drinking water supply. Over-application or improper handling of pesticides or fertilizers may impact drinking water source.	PWS contact indicates a limited amount of helicopter logging occurs in the watershed.
	Managed Forest Land - Partial Harvest (< 10 yrs.)					Within sensitive area. for Little Marble Creek	Higher	Cutting and yarding of trees may contribute to increased erosion, resulting in turbidity and chemical changes (ex: nitrates) in drinking water supply. Over-application or improper handling of pesticides or fertilizers may impact drinking water source.	PWS contact indicates a limited amount of helicopter logging occurs in the watershed.
	Managed Forest Land - Partial Harvest (< 10 yrs.)						Moderate	Cutting and yarding of trees may contribute to increased erosion, resulting in turbidity and chemical changes (ex: nitrates) in drinking water supply. Over-application or improper handling of pesticides or fertilizers may impact drinking water source.	PWS contact indicates a limited amount of helicopter logging occurs in the watershed.

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