

SOURCE WATER ASSESSMENT SUMMARY BROCHURE

BUELL-RED PRAIRIE WATER ASSOCIATION PWS # 4101174

WHAT IS A SOURCE WATER ASSESSMENT?

The Source Water Assessment was recently completed by the Department of Environmental Quality (DEQ) and the Oregon Health Division (OHD) to identify the surface areas (and/or subsurface areas) that supply water to Buell-Red Prairie Water Association'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 Buell-Red Prairie Water Association'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 BUELL-RED PRAIRIE WATER ASSOCIATION'S DRINKING WATER PROTECTION AREA?

Part of the drinking water for the Water Association is supplied by an intake on Gooseneck Creek. The Water Association also uses groundwater wells to supply drinking water. Source Water Assessment results for the groundwater supply will be addressed in a separate report. This public water system serves approximately 980 citizens. The intake is located in the Mill Creek/South Yamhill River Watershed in the Yamhill Sub-Basin of the Willamette Basin.

The geographic area providing water to Buell-Red Prairie Water Association's intake (the drinking water protection area) extends upstream approximately 3.8 miles in a southwesterly direction and encompasses a total area of 1.6 square miles. The boundaries of the Drinking Water Protection Area are illustrated on the figure attached to this summary. Activities and impacts in the Buell-Red Prairie Water

Association drinking water protection area have the potential to also impact downstream water users including the Cities of Sheridan and Amity that have intakes on the South Yamhill River.

WHAT ARE THE POTENTIAL SOURCES OF CONTAMINATION TO BUELL-RED PRAIRIE WATER ASSOCIATION'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 is primarily dominated by managed forest land uses. The potential contaminant sources identified within the drinking water protection area include clearcut forest lands, a rural homestead, and a landslide 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 Buell-Red Prairie Water Association's drinking water protection area. All of these are located in the sensitive areas and two are high- to moderate-risk sources within "sensitive areas". The sensitive areas within the Buell-Red Prairie Water Association 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 Buell-Red Prairie Water Association community to develop a voluntary Drinking Water Protection Plan.

NEED MORE INFORMATION?

Buell-Red Prairie Water Association's Source Water Assessment Report provides additional details on the methodology and results of this assessment. The full report is available for review at:

Contact Buell-Red Prairie Water Association's staff if you would like additional information on these Source Water Assessment results.

Source Water Assessment Results
Buell-Red Prairie Water Association's Drinking Water Protection Area with Sensitive Areas and Potential Contamination Sources
PWS 4101174

-  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 protection 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.

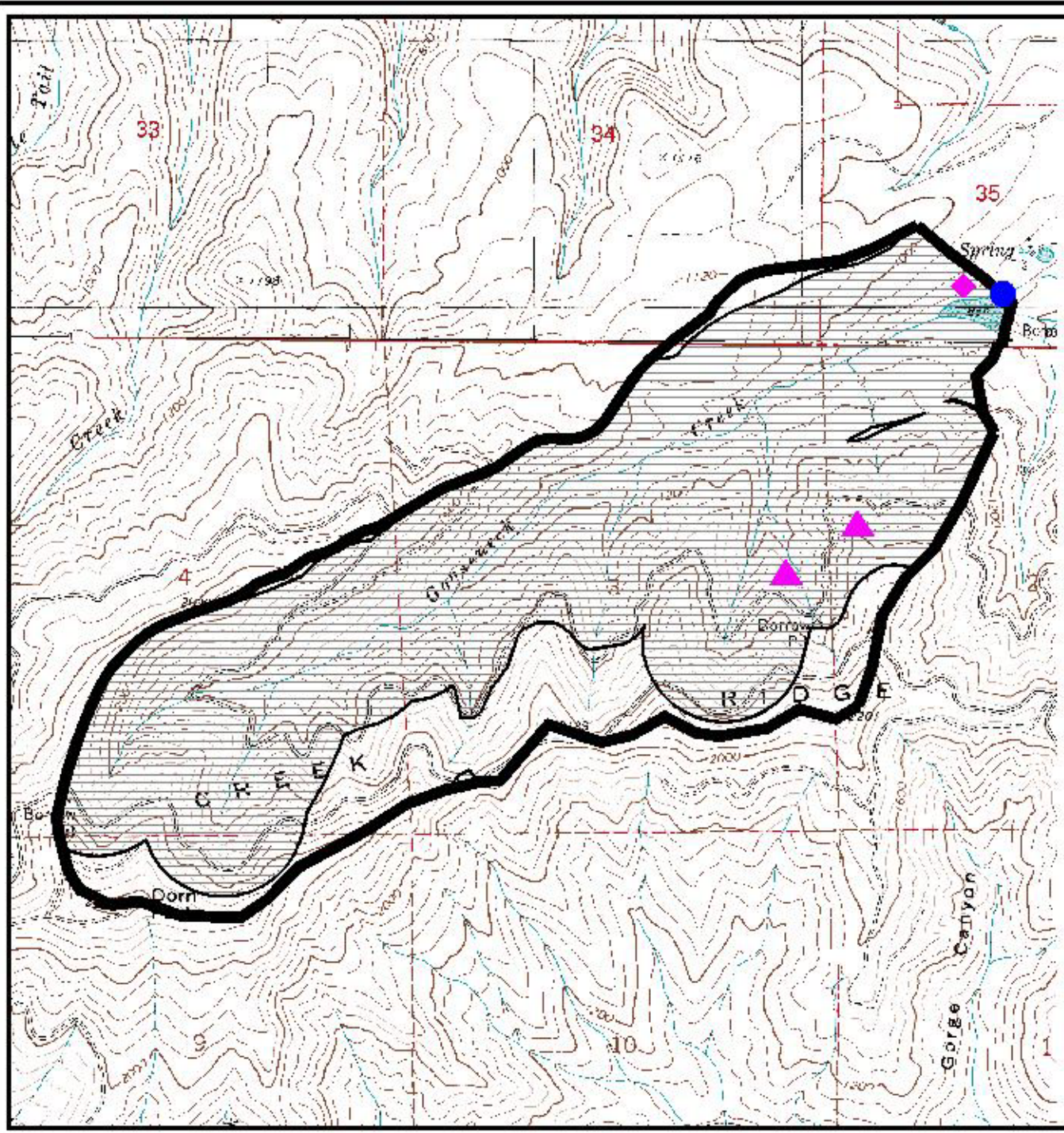
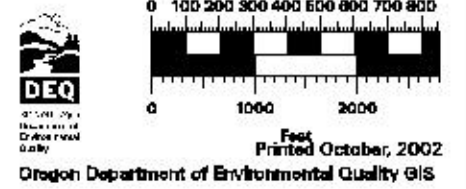


TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT SOURCES

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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	Managed Forest Land - Clearcut Harvest (< 35 yrs.)	Managed Forest Lands - Clearcuts	Throughout DWPA	Buell	Field-Observation Interview	Within sensitive area. for GOOSENEC K CREEK	Moderate	Cutting and yarding of trees may contribute to increased erosion, resulting in turbidity and chemical changes in drinking water supply. Over-application or improper handling of pesticides or fertilizers may impact drinking water source.	BLM and a private timber company own the land within the DWPA.
2	Homesteads - Rural - Septic Systems (< 1/acre)	Rural	North Shore of Lake	Buell	Field-Observation Interview	Within sensitive area. for GOOSENEC K CREEK	Lower	If not properly sited, designed, installed, and maintained, septic systems can impact drinking water. Use of drain cleaners and dumping household hazardous wastes can result in groundwater	Only one home. The drain field is reported to be up hill 100 feet away from the lake.
3	Other -- Mass Movement	Landslides	Throughout DWPA	Buell	Field-Observation Interview	Within sensitive area. for GOOSENEC K CREEK	Moderate	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	PWS said one landslide occurred 4 to 5 years ago.

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).