

SOURCE WATER ASSESSMENT SUMMARY BROCHURE

ALDERWOOD WATER DEVELOPMENT COMPANY PWS # 4100304

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 Alderwood Water Development Company'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 Alderwood Water Development Company'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 ALDERWOOD WATER DEVELOPMENT COMPANY'S DRINKING WATER PROTECTION AREA?

The drinking water for Alderwood Water Development Company (Alderwood) is supplied by an intake on Woahink Lake. This public water system serves approximately 35 citizens. The intake is located in the Woahink River/Siltcoos River/Tahkenitch Lake Frontal Watershed in the Siltcoos Sub-Basin of the Northern Oregon Coastal Basin. The geographic area providing water to Alderwood's intake (the drinking water protection area) includes approximately 1.18 miles of streams and 75.8 acres of lakes. The protection area encompasses a total area of 6.7 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 ALDERWOOD'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 Woahink Lake and managed forestlands. The potential contaminant sources identified in the watershed include clear-cut forests, two nurseries, grazing animals, a park maintenance facility, trucking company, wrecking yard, gas station, ATV repair shop, septic tank maintenance company, areas of high density housing, substation, two motels, two RV Parks, lake recreation, an ATV Park, a State Park, and one transportation corridor. 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 twenty-three (23) potential contaminant sources were identified in Alderwood Water Development Company's drinking water protection area. Ten (10) these are located in the sensitive areas and nine (9) are high- to moderate-risk sources within "sensitive areas". The sensitive areas within the Alderwood Water Development Company drinking water protection area include areas with 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 Alderwood Water Development Company community to develop a voluntary Drinking Water Protection Plan.

NEED MORE INFORMATION?




Alderwood Water Development Company'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 Alderwood Water Development Company staff if you would like additional information these Source Water Assessment results.

Source Water Assessment Results

Alderwood Water Development's Drinking Water Protection Area with Sensitive Areas and Potential Contamination Sources

PWS 4100304

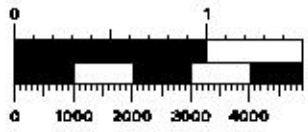
-  Drinking Water Protection Area
-  Drinking Water Intake - Surface Water
-  Sensitive Areas

-  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.



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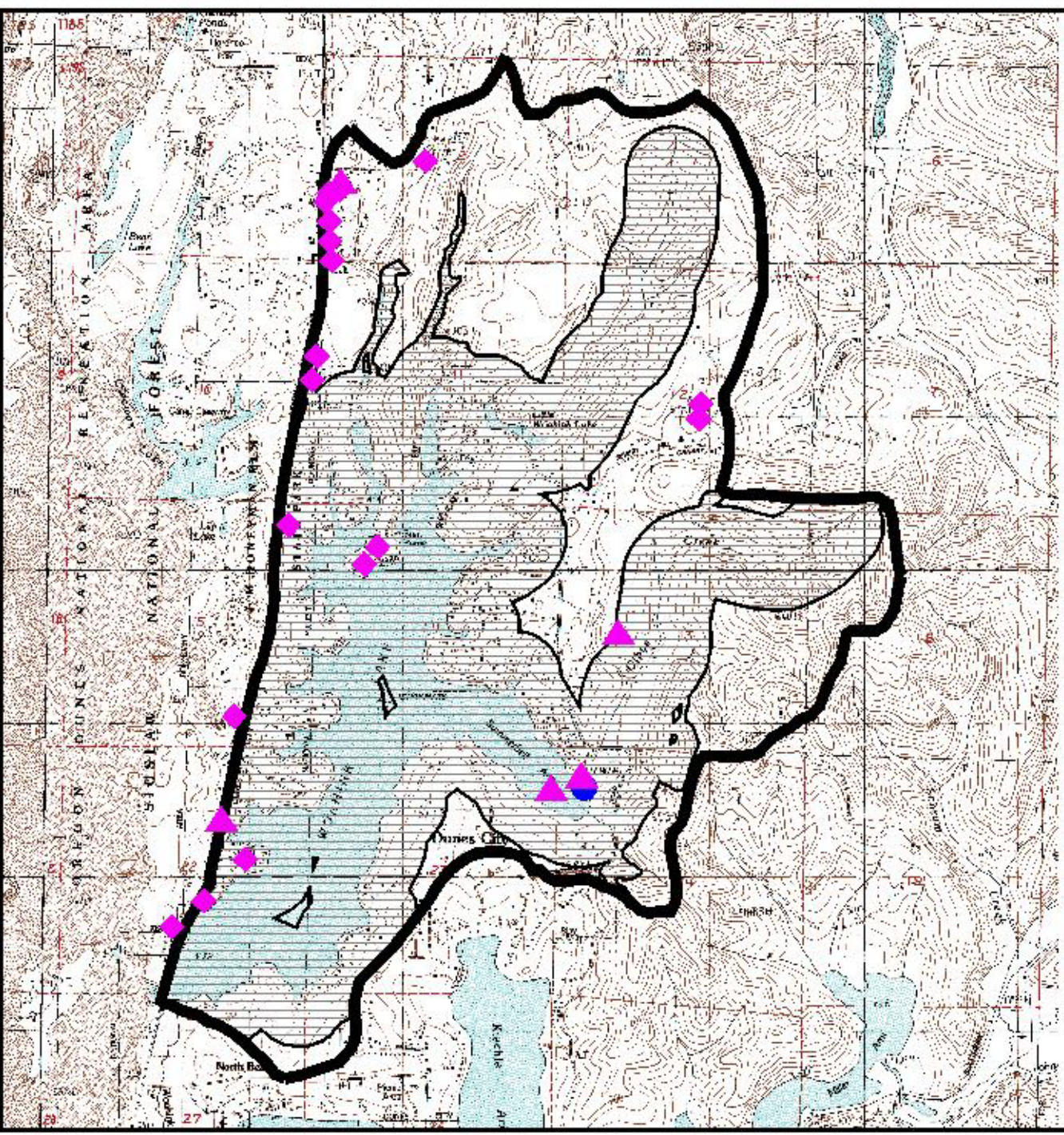


TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT SOURCES

PWS# 4100304 ALDERWOOD WATER DEVELOPMENT CO

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	Transportation - Freeways/State Highways/Other Heavy Use Roads	Highway 101	Runs north/south on west side of DWPA	Florence	Field-Observation	Within sensitive	Higher	Vehicle use increases the risk for leaks or spills of fuel & other haz. materials. Road building, maintenance & use can increase erosion/slope failure causing turbidity. Over-application or improper handling of pesticides/fertilizers may impact water.	
2	Parks	Honeyman State Park	Northwest of intake	Florence	Database (2) Field-Observation	Within sensitive	Moderate	Over-application or improper handling of pesticides/fertilizers may impact drinking water. Excessive irrigation may cause transport of contaminants through runoff. Heavy use along edge of waterbody may contribute to erosion, causing turbidity.	
3	Other -Park Maintenance	Honeyman State Park Maintenance Facility	Northwest of intake	Florence	Database (2) Field-Observation	Within sensitive	Moderate	Spills, leaks, or improper handling of chemicals and other materials during transportation, use, storage, and disposal may impact the drinking water supply.	
	UST - Status Unknown						Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	
4	Other --SCUBA Training Facility	Future Park Development	Northwest of intake	Florence	Interview	Within sensitive	Lower	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	According to contact there are future plans to create SCUBA certification facilities at Honeyman State Park.

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).

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5	Wells/Abandoned Wells	High Density Housing	Throughout DWPA	Florence	Field-Observation Interview	Within sensitive	Moderate	Improperly installed or maintained wells and abandoned wells may provide a direct conduit for contamination to groundwater and drinking water source.	Large concentration of homes found north of intake.
	Housing - High Density (> 1 House/0.5 acres)						Moderate	Improper use, storage, and disposal of household chemicals may impact the drinking water supply. Stormwater run-off or infiltration may carry contaminants to drinking water supply.	Large concentration of homes found north of intake.
	Septic Systems - High Density (> 1 system/acre)						Moderate	If not properly sited, designed, installed, and maintained, septic systems can impact drinking water. Cumulative effects of multiple systems in an area may impact drinking water supply.	Large concentration of homes found north of intake.
6	Junk/Scrap/Salvage Yards	Siuslaw Auto Towing	Northwest of intake	Florence	Database (2) Field-Observation	Outside sensitive areas.	Higher	Spills, leaks, or improper handling of automotive chemicals, batteries, and other waste materials during storage and disposal may impact the drinking water	
7	UST - Status Unknown	Gary Fioglio Trucking	Northwest of intake	Florence	Database (2) Field-Observation	Outside sensitive areas.	Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	Unknown operations - needs verification.
	Fleet/Trucking/Bus Terminals						Moderate	Spills, leaks, or improper handling of fuels, grease, solvents, and other materials from vehicle service, fueling, and parking areas may impact the drinking water	Unknown operations - needs verification.

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8	UST - Upgraded/Registered - Active	Texaco K-G One Stop Market	Northwest of intake	Florence	Database (2) Field-Observation	Outside sensitive areas.	Lower	Spills or improper handling during tank filling or product distribution may impact the drinking water supply.	Three upgraded tanks, five decommissioned tanks. USTs are reported as upgraded - PWS should verify all USTs were upgraded.
	Automobiles - Gas Stations						Moderate	Spills, leaks, or improper handling of fuels and other materials during transportation, transfer, and storage may impact the drinking water supply.	Three upgraded tanks, five decommissioned tanks. USTs are reported as upgraded - PWS should verify all USTs were upgraded.
9	Crops - Irrigated (inc. orchards, vineyards, nurseries,	Honeyman Village Nursery	Northwest of intake	Florence	Database (2) Field-Observation	Outside sensitive areas.	Higher	Over-application or improper handling of pesticides/fertilizers may impact drinking water. Excessive irrigation may transport contaminants or sediments to groundwater/surface water through runoff. Drip-irrigated crops are considered to be a low risk.	
10	Other --ATV Repair Shop	Oregon Sandrail	Northwest of intake	Florence	Field-Observation	Outside sensitive areas.	Moderate	Spills, leaks, or improper handling of chemicals and other materials during transportation, use, storage, and disposal may impact the drinking water supply.	

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11	Housing - High Density (> 1 House/0.5 acres)	Big Spruce Mobile Home Park	Off of Grand Street	Florence	Field-Observation	Outside sensitive areas.	Moderate	Improper use, storage, and disposal of household chemicals may impact the drinking water supply. Stormwater run-off or infiltration may carry contaminants to drinking water supply.	
	Moderate						If not properly sited, designed, installed, and maintained, septic systems can impact drinking water.		
12	Other -Septic Maintenance Company	Wally's Septic Tank Pumping	South of wells	Florence	Database (2) Field-Observation	Outside sensitive areas.	Moderate	Spills, leaks, or improper handling of chemicals and other materials during transportation, use, storage, and disposal may impact the drinking water supply.	PCS location based on regulatory database search - needs verification. Site is beyond public access, no visual observation - needs verification.
13	Crops - Irrigated (inc. orchards, vineyards, nurseries,	Larel Bay	Northwest of intake	Florence	Field-Observation	Outside sensitive areas.	Higher	Over-application or improper handling of pesticides/fertilizers may impact drinking water. Excessive irrigation may transport contaminants or sediments to groundwater/surface water through runoff. Drip-irrigated crops are considered to be a low risk.	Site is beyond public access, no visual observation - needs verification.

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14	UST - Decommissioned/Inactive	Keith Brown Service	Southwest of wells	Florence	Database (2) Field-Observation	Outside sensitive areas.	Lower	Historic spills or leaks may impact the drinking water supply.	At one point site was a gas station. All UST have been removed.
	Automobiles - Repair Shops						Moderate	Spills, leaks, or improper handling of automotive fluids, solvents, and repair materials during transportation, use, storage and disposal may impact the drinking water supply.	At one point site was a gas station. All UST have been removed.
	Junk/Scrap/Salvage Yards						Higher	Spills, leaks, or improper handling of automotive chemicals, batteries, and other waste materials during storage and disposal may impact the drinking water	At one point site was a gas station. All UST have been removed.
15	Other -Motel	Ocean Breeze Motel	Southwest of wells	Florence	Field-Observation	Outside sensitive areas.	Lower	The impacts to this potential contaminant source will be addressed during the enhanced inventory.	Currently for sale. Unsure if in operation.
16	Other --Motel	Wohink Suites	Southwest of intake	Florence	Database (2) Field-Observation	Within sensitive	Moderate	The impacts to this potential contaminant source will be addressed during the enhanced inventory.	May be owned by S & J Investments.
17	Septic Systems - High Density (> 1 system/acre)	Lakeshore RV Park	Southwest of intake	Florence	Field-Observation	Within sensitive	Moderate	If not properly sited, designed, installed, and maintained, septic systems can impact drinking water. Cumulative effects of multiple systems in an area may impact drinking water supply.	
	Campgrounds/RV Parks						Moderate	Leaks or spills of automotive fluids or improperly managed septic systems and wastewater disposal may impact drinking water supply. Heavy usage along edge of waterbody may contribute to erosion, causing turbidity.	

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18	Other --ATV Recreation Area	Sand Dunes Frontier	Northwest of intake	Florence	Database (2) Field-Observation	Outside sensitive areas.	Moderate	Spills, leaks, or improper handling of chemicals and other materials during transportation, use, storage, and disposal may impact the drinking water supply.	
	UST - Status Unknown						Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	
19	Large Capacity Septic Systems (serves > 20 people) - Class V UICs	Wohink Lake RV Resort	Southwest of intake	Florence	Database (2) Field-Observation	Within sensitive	Moderate	If not properly sited, designed, installed, and maintained, septic systems can impact drinking water.	
	Campgrounds/RV Parks						Moderate	Leaks or spills of automotive fluids or improperly managed septic systems and wastewater disposal may impact drinking water supply. Heavy usage along edge of waterbody may contribute to erosion, causing turbidity.	
20	Utility Stations - Maintenance Transformer	Substation	Northeast of intake	Florence	Field-Observation	Outside sensitive areas.	Higher	Spills, leaks, or improper handling of chemicals and other materials including PCBs during transportation, use, storage and disposal may impact the drinking water	

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21	Grazing Animals (> 5 large animals or equivalent/acre)	Grazing Animals	Northeast of intake	Florence	Field-Observation	Outside sensitive areas.	Higher	Improper storage and management of animal wastes may impact drinking water supply. Concentrated livestock may contribute to erosion and sedimentation of surface water bodies.	Four horses and stables observed.
	Crops - Nonirrigated (inc. Christmas trees, grains, grass seed, pasture)						Lower	Over-application or improper handling of pesticides/fertilizers may impact drinking water. Some agricultural practices may result in excess sediments discharging to surface waters, but non-irrigated crops are generally considered to be a low risk.	Four horses and stables observed.
22	Managed Forest Land - Clearcut Harvest (< 35 yrs.)	Clear Cuts	Northeast of intake	Florence		Within sensitive	Higher	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.	Very little forest management within DWPA. Aerial photos were used to locate clear cut
23	Other -Marinas and boat recreation on lake	Wohink Lake-Recreation	Throughout DWPA	Florence	Field-Observation Interview	Within sensitive	Moderate	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	

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