

Oregon Department of Environmental Quality

Drinking Water Assessment for the Curry Water Quality Management Area January 2023

Overview

- Public drinking water systems in the Curry Agricultural Water Quality Management Area utilize groundwater and surface water sources to serve approximately 16,148 persons regularly.
- Recent alerts for *E. coli* bacteria exist for 14 Water Systems with 12 MCL violations. 25 systems have recent alerts for Total Coliform bacteria with no violations
- No water systems have alerts for elevated nitrate concentrations.
- 14 of 199 private domestic wells sample results in the area have elevated (≥ 3 mg/L) nitrate concentrations.

Water Use

47 public water systems obtain domestic drinking water from groundwater and surface water sources in the Curry Agricultural Water Quality Management Area (**Map 1**). Drinking water is an important beneficial use under the federal Clean Water Act. When CWA standards are met in source waters, a drinking water treatment plant using standard technology can generate water meeting the Safe Drinking Water Act maximum contaminant levels (MCLs). There are 11 Community public water systems in the plan area using groundwater or/and surface water wells to serve approximately 13,292 people on a regular basis, in addition to visitors at recreation sites. There are two Non-Transient, Non-Community workplace or school public water systems using groundwater, serving 196 persons regularly. The remaining 34 public water systems are Transient Non-Community systems and Non-Public (also called Oregon Very Small systems or OVS), state-regulated systems with an estimated service population of 2,660. See **Table 1** below for a list of public water systems, their classifications, sources and activity status, and populations served.

Agricultural land uses (e.g. grass seed, row crops, livestock, cranberries, orchards, and nurseries) are present near many of the public water system wells in the area (**Maps 2 - 4**).

Bacteria

12 public water systems in the management area have recent alerts (last 10 years) for detections of *E. coli* bacteria. There are recent MCL violations at Port of Gold Beach – Huntley Park Campground, OPRD Cape Blanco State Park, Agness RV Park, Whaleshead Beach RV Park, Sea Crest Motel, Salmon

Translation or other formats

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Run Golf Course, USFS Lobster Creek Campground, Old Sheep Ranch Water Association, Rainbow Rock Village Mobile Home Park, OPRD Humbug Mountain Camp, Paradise Lodge, and Curry County Park Lobster Creek. 25 public water systems have recent alerts for Total Coliform and no violations. Bacteria contamination can be related to human wastewater (sewer and onsite systems like septic) and animal and cropland agriculture.

Nitrates

Nitrate alerts are generated when nitrate exceeds 5 mg/L, and the drinking water MCL for nitrates is 10 mg/L. No public water systems in the management area have recent nitrate alerts or violations.

Of the soils assessed in the management area, most have high nitrate leaching potential, according to the National Cooperative Soil Survey, based on slope, precipitation, and land use (**Map 2**). Nitrate from fertilizers and septic systems can readily penetrate to the aquifers used for drinking water when leaching potential is high, and bacteria removal through soil filtration can be less effective in sandy soils.

Oregon Health Authority rated some of the public water system wells in the Ag WQMA for contaminant susceptibility for land use impacts to drinking water sources based on Source Water Assessments, aquifer characteristics, and well locations and construction. The majority of evaluated public water system wells rate as high or medium susceptibility. The nitrate and other contamination issues described above and the ready movement of nitrogen into aquifers in the area verify this susceptibility. Measures to reduce leachable nitrate in soils would reduce risk to groundwater sources of drinking water.

DEQ only addresses drinking water issues identified for public water systems. A query of Oregon Water Resources' water rights database for private domestic points of diversion (using a threshold of 0.005 cfs for domestic surface water rights that are household use only, not irrigation) identified 252 private domestic water rights in the Curry WQMA. There are also numerous private groundwater wells for domestic use. The Domestic Well Testing Act database (real estate transaction testing data) for 1989-2019 indicates 14 results are $\geq 3 \text{ mg/L}$, 9 results are $\geq 5 \text{ mg/L}$, 2 results are 7mg/L, and 1 is $\geq 10 \text{ mg/L}$ out of 199 total results included in the database.

Other Contaminants

There are recent alerts (2022, 2021) for lead, copper, sodium, total haloacetic acids (HAA5), and total trihalomethanes (TTHM) at several public water systems. HAA5 and TTHM are disinfection byproducts that form when chlorine compounds that are used to disinfect water react with other naturally occurring chemicals in the water.

Drinking Water Protection staff are happy to provide additional details, maps, and recommendations upon request.

Contact

For more information, please contact the <u>Drinking Water Protection Program</u> or send an email to <u>drinkingwater.protection@deq.oregon.gov</u>.

Non-discrimination statement

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Table 1. Public Water Systems in the Curry Ag WQMA

Note: Table 1 does not include public water systems that purchase drinking water from these water systems but does include the population served by wholesale customers in the Total Population. **Bold text indicates PWSs w/ recent** *E. coli* **alerts.**

Drinking Water System Pop. **PWS ID Public Water System Name** Source Type **Surface Water Systems** 4100466 Langlois Water District Floras Creek С 220 С Port Orford 954 4100670 Hubbard Creek С 4101059 Gold Beach **Roque River** 3,000 **Rainbow Rock Service Association** Unnamed Creek С 80 4101361 **Groundwater Systems** 4100465 Bandon/Port Orford KOA 1 well NC 61 At Rivers Edge RV Resort INACTIVE (1 well) NC 220 4101408 4190869 Port of Gold Beach-Huntley Park CG 1 well NC 75 **OPRD Cape Blanco State Park** 1 well NC 248 4191017 **OPRD Loeb State Park** 1 well 132 4191019 NC **OPRD** Arizona Beach State Park INACTIVE (1 well) NC 133 4191194 Agness RV Park/Cougar Lane Ldg NC 223 4191198 1 well 4191201 Humbug Mtn Restaurant/Lodge INACTIVE (1 well) NC 25 NC 100 4191215 Singing Springs Lodge & Cafe 1 well 4192693 **USFS Winchuck Campground** INACTIVE (1 spring) NC 30 NC 32 4192697 **USFS Illahe Campground** INACTIVE (1 well) 87 4192704 USFS Quosatana Campground 1 well NC 100 4194092 OPRD Humbug Mtn State Park INACTIVE (1 well) NC NC 74 4194366 Lucky Lodge Trailer Park 1 well 4194398 Elk River Campground 1 well С 64 3 GWUDI intakes Whaleshead Beach RV Park С 108 4194489 Curry Co Parks - Boice Cope Park 1 well NC 36 4194742 Sea Crest Motel 1 well NC 38 4194934 4195070 Circle L Ranch Campground INACTIVE (1 well) 48 NC 60 BLM Edson Creek CG 1 well NC 4195115 4195127 Salmon Run Golf Course 1 well NC 100 4195158 USFS Ludlum Campground INACTIVE (1 well) NC 30 NC 4195161 **USFS Foster Bar CG** 1 well 87 4195191 Arizona Beach Lodge & RV Park INACTIVE (1 well) NC 26 4195318 Anglers RV Village INACTIVE (1 well) NC 84 4195331 **USFS Lobster Creek CG** 1 well NC 36 4195114 **BLM Sixes River CG** INACTIVE (1 well) NC 40 4105860 **Old Sheep Ranch Water Assoc** 1 well С 56 4191211 Pacific High School SD 2J 1 well NTNC 150 Agness School INACTIVE (1 well) NP 4105603 10 Nesika Beach-Ophir Water District 1 well С 1500 4100329 INACTIVE (1 well) OVS 34 4101365 Anglers Trailer Village 4101201 Saunders Creek HOC 1 well С 75 4194824 Cape Ferrelo SDA School INACTIVE (1 well) NP 9

PWS ID	Public Water System Name	Drinking Water Source	System Type	Pop.
4101062	Rainbow Rock Village MHP	2 GWUDI intakes	С	115
4191213	Upper Chetco Elem SD 23	INACTIVE (1 well)	NTNC	46
4100149	City of Brookings	1 well	С	7120
4192694	USFS Little Redwood CG	INACTIVE (1 spring)	NC	48
4191018	OPRD Humbug Mtn Camp	1 well	NC	200
4191207	Paradise Lodge	1 well	NC	100
4191209	Curry Co Pks Lobster Creek	1 well	NC	30
4194366	Lucky Lodge Trailer Park	1 well	NC	74
4191196	Cedar Bend Golf Association	1 well	NC	30

System Type:

C - "Community Water System (C)" means a public water system that has 15 or more service connections used by year-round residents, or that regularly serves 25 or more year-round residents.

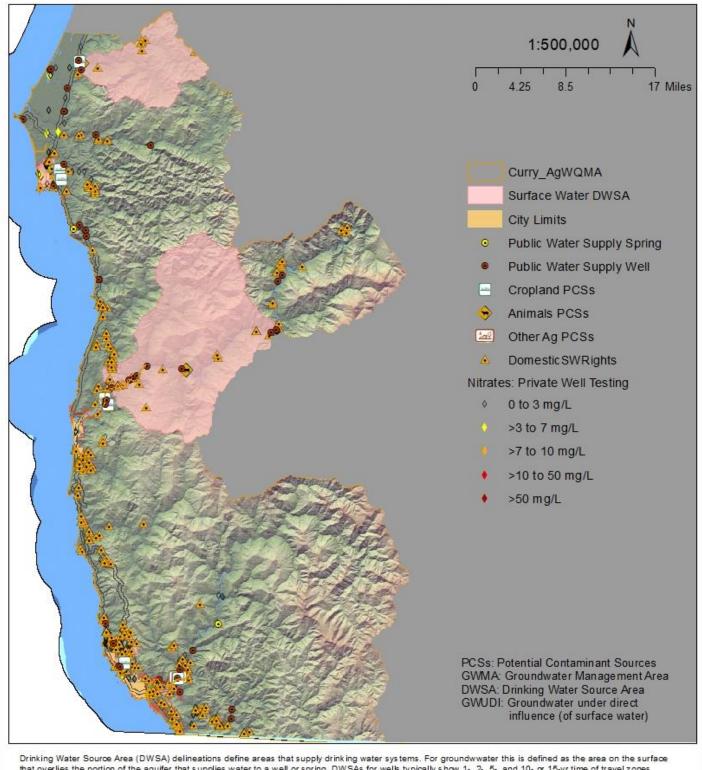
NTNC - "Non-Transient Non-Community Water System (NTNC)" means a public water system that is not a Community Water System and that regularly serves at least 25 of the same persons over 6 months per year.

NC - "Transient Non-Community Water System (NC)" means a public water system that serves a transient population of 25 or more persons.

NP or OVS - "State Regulated Water System (NP)" means a public water system, which serves 4 to 14 service connections or serves 10 to 24 people. Monitoring requirements for these systems are the same as those for Transient Non-Community water systems. This designation was recently changed to OVS for Oregon Very Small systems. Both designations are still used.

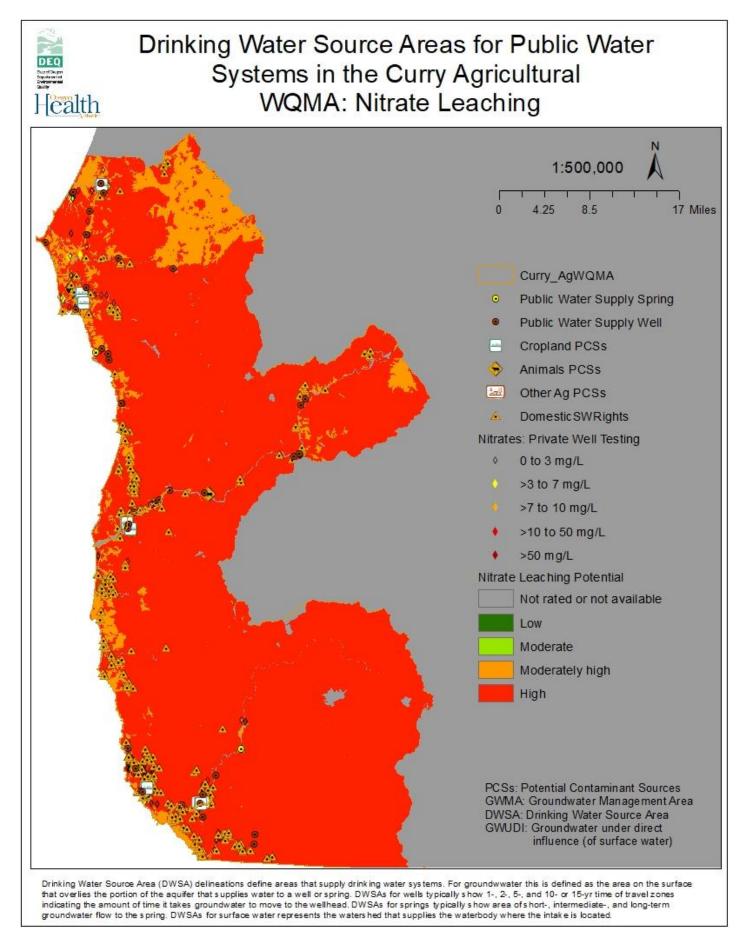


Drinking Water Source Areas for Public Water Systems in the Curry Agricultural Water Quality Management Area

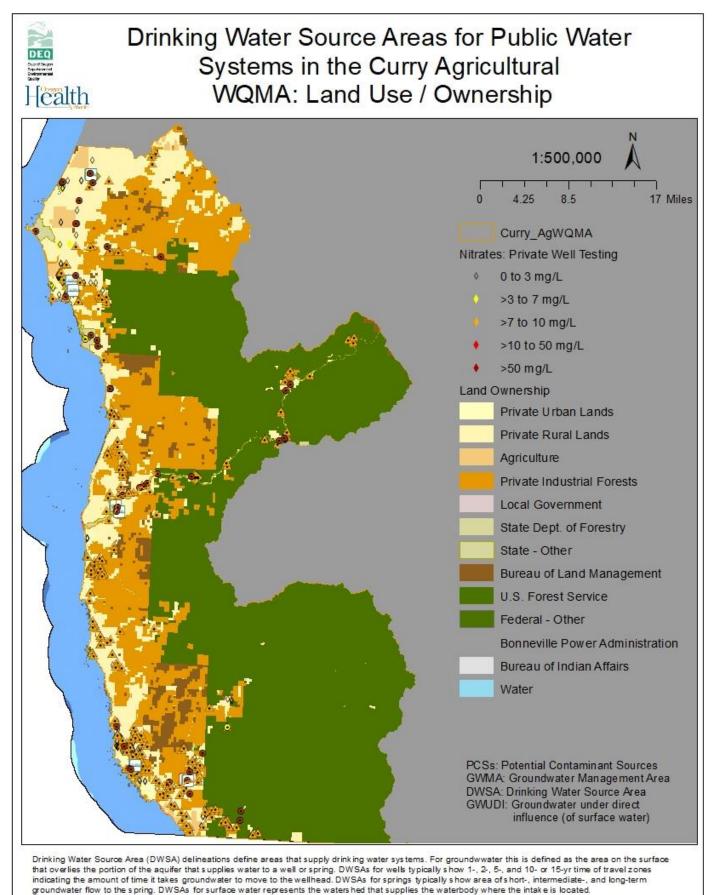


Drinking Water Source Area (DWSA) delineations define areas that supply drinking water systems. For groundwater this is defined as the area on the surface that overlies the portion of the aquifer that supplies water to a well or spring. DWSAs for wells typically show 1-, 2-, 5-, and 10- or 15-yr time of travel zones indicating the amount of time it takes groundwater to move to the wellhead. DWSAs for springs typically show area of short-, intermediate-, and long-term groundwater flow to the spring. DWSAs for surface water represents the waters hed that supplies the waterbody where the intake is located.

Map 1: Drinking Water Source Area for Public Water Systems in the Curry Agricultural Water Quality Management Area

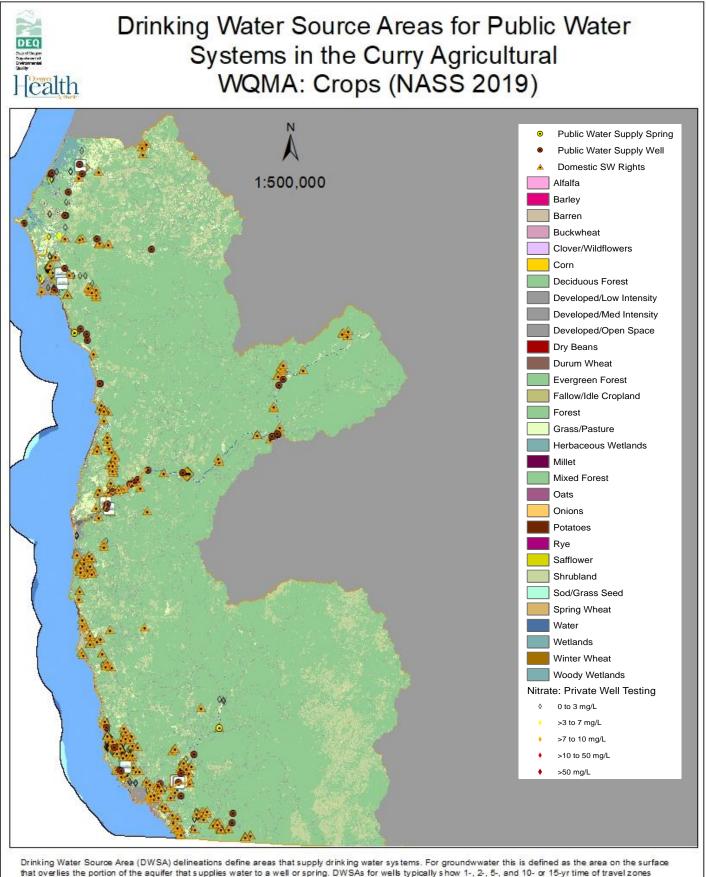


Map 2: Drinking Water Source Area for Public Water Systems in the Curry Agricultural Water Quality Management Area, Nitrate Leaching



Map 3: Drinking Water Source Area for Public Water Systems in the Curry Agricultural Water Quality

Management Area, Land Use/Land Ownership



that overlies the portion of the aquifer that supplies water to a well or spring. DWSAs for wells typically show 1-, 2-, 5-, and 10- or 15-yr time of travel zones indicating the amount of time it takes groundwater to move to the wellhead. DWSAs for springs typically show area of short-, intermediate-, and long-term groundwater flow to the spring. DWSAs for surface water represents the watershed that supplies the waterbody where the intake is located.

Map 4: Drinking Water Source Area for Public Water Systems in the Curry Agricultural Water Quality Management Area, Crops