

SWCD	Acres
Wallowa	45,568



### Introduction

The Oregon portion of the Lower Snake/Asotin 8-digit Hydrologic Unit Code (HUC) subbasin is comprised of 45,500 acres. It is located in the extreme northeastern part of Oregon. The subbasin is 99 percent public lands. There are no known farms or ranches in the subbasin, and the amount of private land is very small and unaccountable. Some ranchers, however, may have grazing allotments on the public lands, and there are some within-land holdings on the public lands. Trees, grass, and shrubs cover nearly all of the part of the watershed in Oregon.

The Enterprise NRCS Service Center and Wallowa Soil and Water Conservation District provide much of the conservation assistance in the subbasin.

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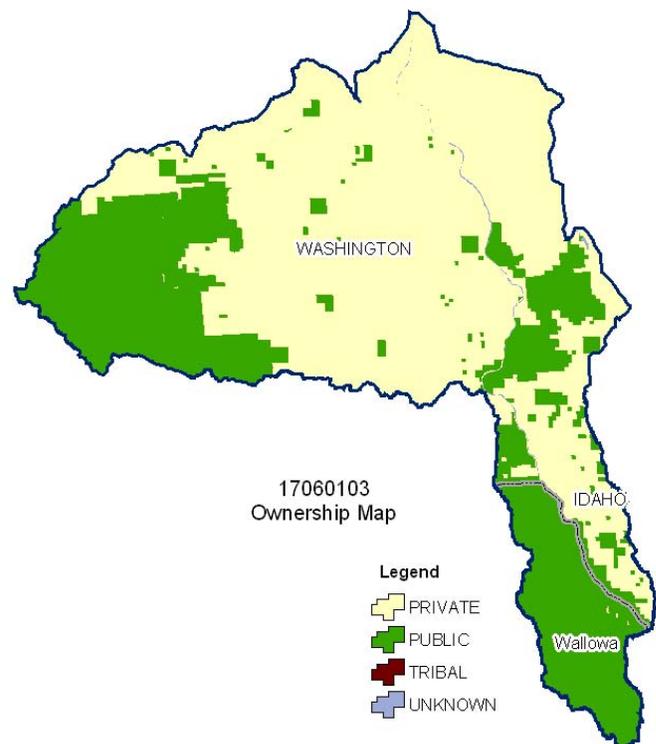
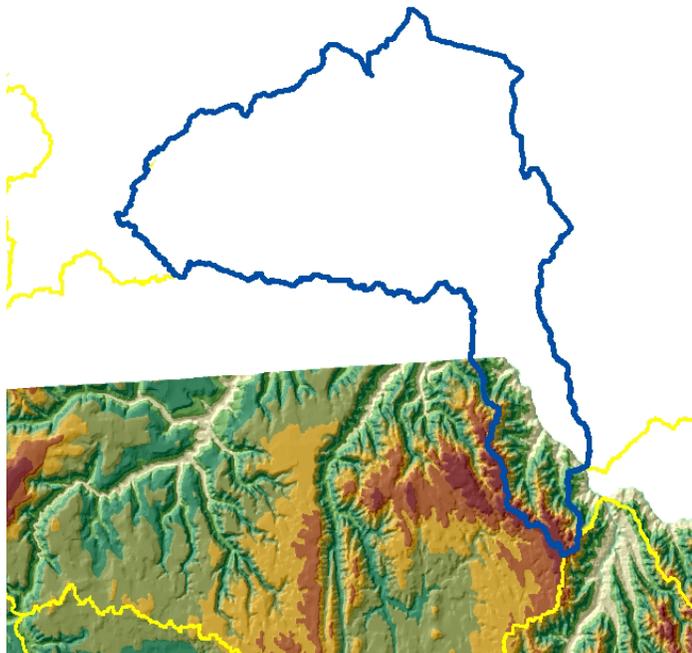
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### Relief Map



### Physical Description

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**ALL NUMBERS IN THIS PROFILE ARE FOR OREGON ONLY**

Land Cover/Land Use (NLCD <sup>2</sup> )	Ownership - (2003 Draft BLM Surface Map Set <sup>1</sup> )						Totals	%
	Public		Private		Tribal			
	Acres	%	Acres	%	Acres	%		
Forest	11,300	25%	*	---	0	0%	11,300	25%
Grain Crops	0	0%	0	0%	0	0%	0	0%
Conservation Reserve Program Land <sup>a</sup>	0	0%	0	0%	0	0%	0	0%
Grass/Pasture/Hay	11,600	26%	*	---	0	0%	11,700	26%
Orchards/Vineyards	0	0%	0	0%	0	0%	0	0%
Row Crops	0	0%	0	0%	0	0%	0	0%
Shrub/Rangelands	21,900	48%	*	---	0	0%	22,000	48%
Water/Wetlands/Developed/Barren	*	---	*	---	0	0%	*	---
<b>Oregon HUC Totals <sup>b</sup></b>	<b>44,900</b>	<b>99%</b>	<b>*</b>	<b>---</b>	<b>0</b>	<b>0%</b>	<b>45,400</b>	<b>100%</b>

\*: Less than 1 percent of total acres. See below for special considerations.

a: Estimate from Farm Service Agency records and includes CRP/CREP.

b: Totals are approximate due to rounding and small unknown acreages.

#### Special Considerations for This 8-Digit HUC:

- ❖ The Oregon portion of the watershed includes only a very small, unaccountable amount of private land.
- ❖ The private land in the Oregon portion consists primarily of small in-holdings on the public land.
- ❖ No known farms or ranches are present; however, some ranchers do have grazing allotments on the public land.

Irrigated Lands (1997 NRI <sup>3</sup> Estimates for Non-Federal Lands Only)	Type of Land	ACRES	% of Irrigated Lands	% of HUC
	Cultivated Cropland	0	0%	0%
Uncultivated Cropland	0	0%	0%	
Pastureland	0	0%	0%	
<b>Total Irrigated Lands</b>	<b>0</b>	<b>0%</b>	<b>0%</b>	

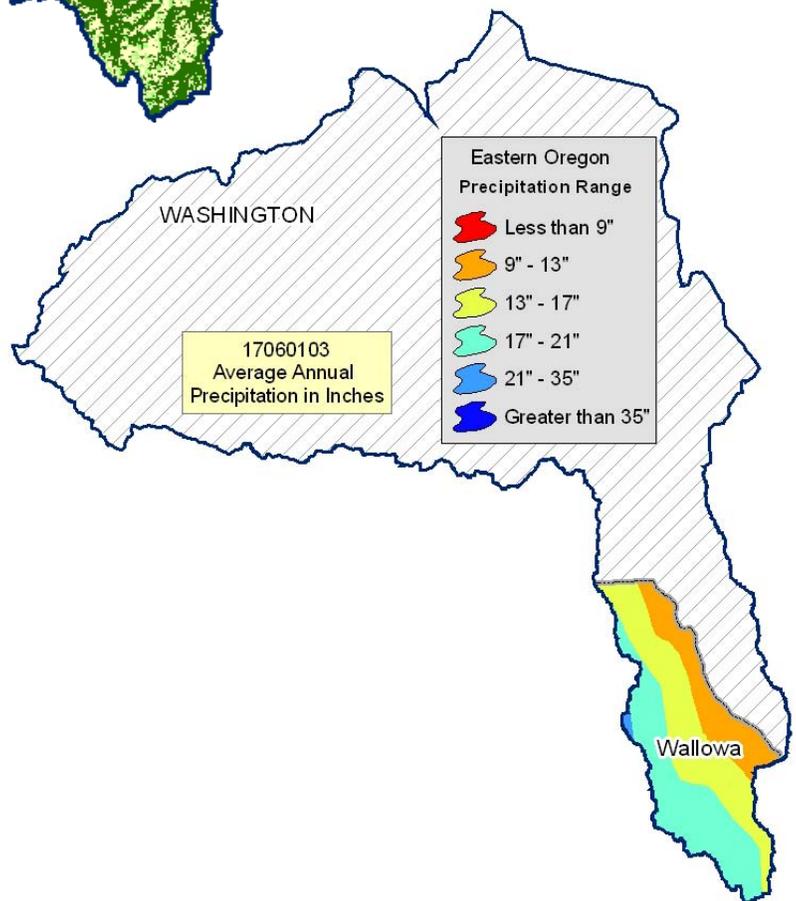
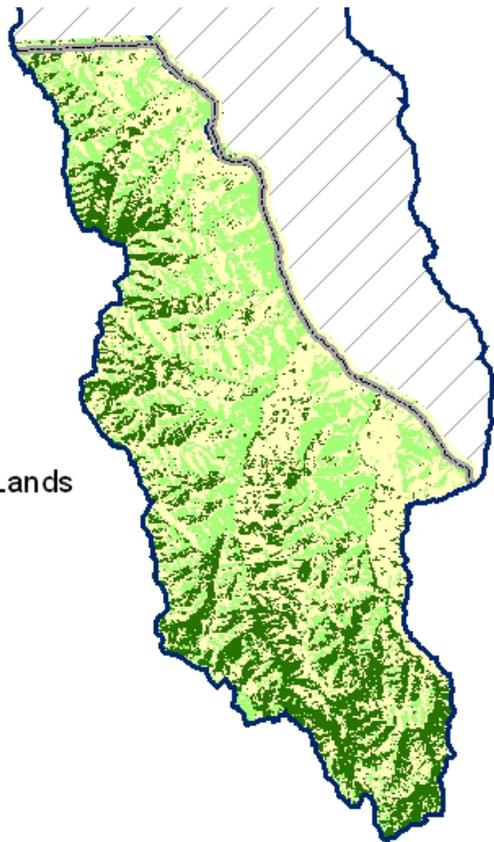
(Continued on the following pages)

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17060103  
Land use/Land cover Map

**Legend**

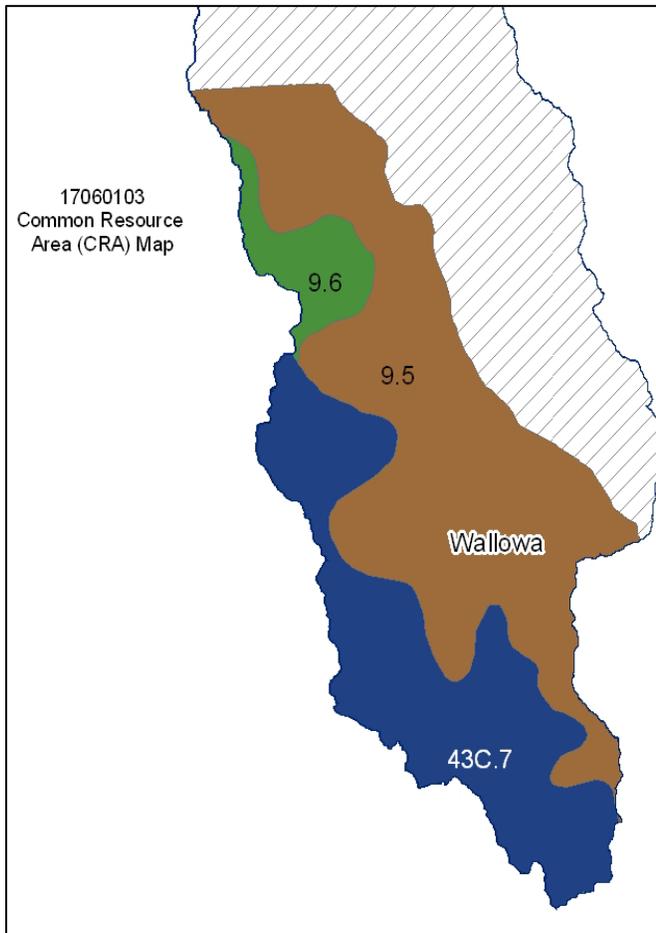
-  Shrub/Rangelands
-  Orchard/Vineyards
-  Row Crops
-  Forest
-  Grass/Pasture/Hay Lands
-  Grain Crops
-  Water/Wetlands/
-  Developed/Barren



## Common Resource Area Map

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Only the major units are described below - for descriptions of all units within the HUC, go to: <http://ice.or.nrcs.usda.gov/website/cra/viewer.htm>



**9.5 – Palouse and Nez Perce Prairies - Warm Canyons and Dissected Uplands:** This unit is characterized by deep river canyons that divide the Blue Mountains from the Rocky Mountains. The Snake, Salmon, and Grande Ronde Rivers and their tributaries have cut the Columbia Plateau to a depth of 2,000 to 5,000 feet through metasedimentary and metavolcanic rock. Because of the depth of the canyon and exposed metamorphic rock, the soils on the canyon slopes are stony and retain little moisture. The dominant soils are those of the Dixiejett and Lickskillet series. The temperature regime is mesic, and the moisture regime is xeric and aridic. The mean annual precipitation is 12 to 16 inches. Bluebunch wheatgrass, Sandberg bluegrass, and spiny greenbush are adapted to the hot, dry conditions of this unit. Land use includes grazing and recreation on National forestland and in the Hells Canyon National Recreation Area.

**9.6 – Palouse and Nez Perce Prairies - Cool Canyons and Dissected Highlands:** This unit is characterized by deeply dissected cool, moist canyonsides of the Snake River drainage. This unit is at the higher elevations, but it is adjacent to unit 9.5 and forestland above the unit. The soils typically are moderately deep and shallow to bedrock. The dominant soil that of the Snell series. The temperature regime is frigid, and the moisture regime is xeric. Precipitation is about 14 to 25 inches. Most areas are used for livestock grazing. The dominant vegetation is Idaho fescue.

**43C.7 - Blue and Seven Devils Mountains - Low Elevation Blue Mountains Forests:** This unit is a forested, uplifted basalt plateau. It is characterized by forested plateaus and highly dissected canyons that have frigid temperatures. Slopes dominantly are nearly level to rolling but are very steep in the canyons. The moisture regime is xeric or udic. The vegetation is dominantly grand fir, Douglas-fir, and ponderosa pine. The soils in this unit typically have a mantle of ash as much as 20 to 30 inches thick.

### Physical Description – Continued

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		ACRES	ACRE-FEET			
<b>Irrigated Adjudicated Water Rights</b> (OWRD <sup>4</sup> )	Surface	64	255			
	Well	0	0			
	<b>Total Irrigated Adjudicated Water Rights</b>	64	255			
<b>Stream Flow Data</b>	USGS 13334300 SNAKE RIVER, NEAR ANATONE, WA	<b>Total Avg. Yield</b>	25,541,831			
		<b>May – Sept. Yield</b>	12,450,902			
		<b>MILES</b>	<b>PERCENT</b>			
<b>Stream Data</b> <sup>5</sup>  <i>*Percent of Total Miles of Streams in HUC</i>	Total Miles – Major (100K Hydro GIS Layer)	42	---			
	303d/TMDL Listed Streams (DEQ)	0	0%			
	Anadromous Fish Presence (StreamNet)	9	21%			
	Bull Trout Presence (StreamNet)	20	48%			
		<b>ACRES</b>	<b>PERCENT</b>			
<b>Land Cover/Use</b> <sup>2</sup>  Based on a 100-foot stretch on both sides of all streams in the 100K Hydro GIS Layer	Forest	889	38%			
	Grain Crops	0	0%			
	Grass/Pasture/Hay	363	16%			
	Orchards/Vineyards	0	0%			
	Row Crops	0	0%			
	Shrub/Rangelands – Includes CRP Lands	1,024	44%			
	Water/Wetlands/Developed/Barren	40	2%			
	<b>Total Acres of 100-foot Stream Buffers</b>	<b>2,316</b>	<b>---</b>			
<b>Land Capability Class</b>  <i>(Croplands &amp; Pasturelands Only)</i> <i>(1997 NRI<sup>3</sup> Estimates for Non-Federal Lands Only)</i>	<b>1</b> – slight limitations	0	0%			
	<b>2</b> – moderate limitations	0	0%			
	<b>3</b> – severe limitations	0	0%			
	<b>4</b> – very severe limitations	0	0%			
	<b>5</b> – no erosion hazard, but other limitations	0	0%			
	<b>6</b> – severe limitations; unsuitable for cultivation; limited to pasture, range, forest	0	0%			
	<b>7</b> – very severe limitations; unsuitable for cultivation; limited to grazing, forest, wildlife habitat	0	0%			
	<b>8</b> – miscellaneous areas; limited to recreation, wildlife habitat, water supply	0	0%			
	<b>Total Croplands &amp; Pasturelands</b>	<b>0</b>	<b>0%</b>			
<b>Confined Animal Feeding Operations – Oregon CAFO Permit – 12/2004</b>						
<b>Animal Type</b>	<b>Dairy</b>	<b>Feedlot</b>	<b>Poultry</b>	<b>Swine</b>	<b>Mink</b>	<b>Other</b>
<b>No. of Permitted Farms</b>	0	0	0	0	0	0
<b>No. of Permitted Animals</b>	0	0	0	0	0	0

### Resource Concerns

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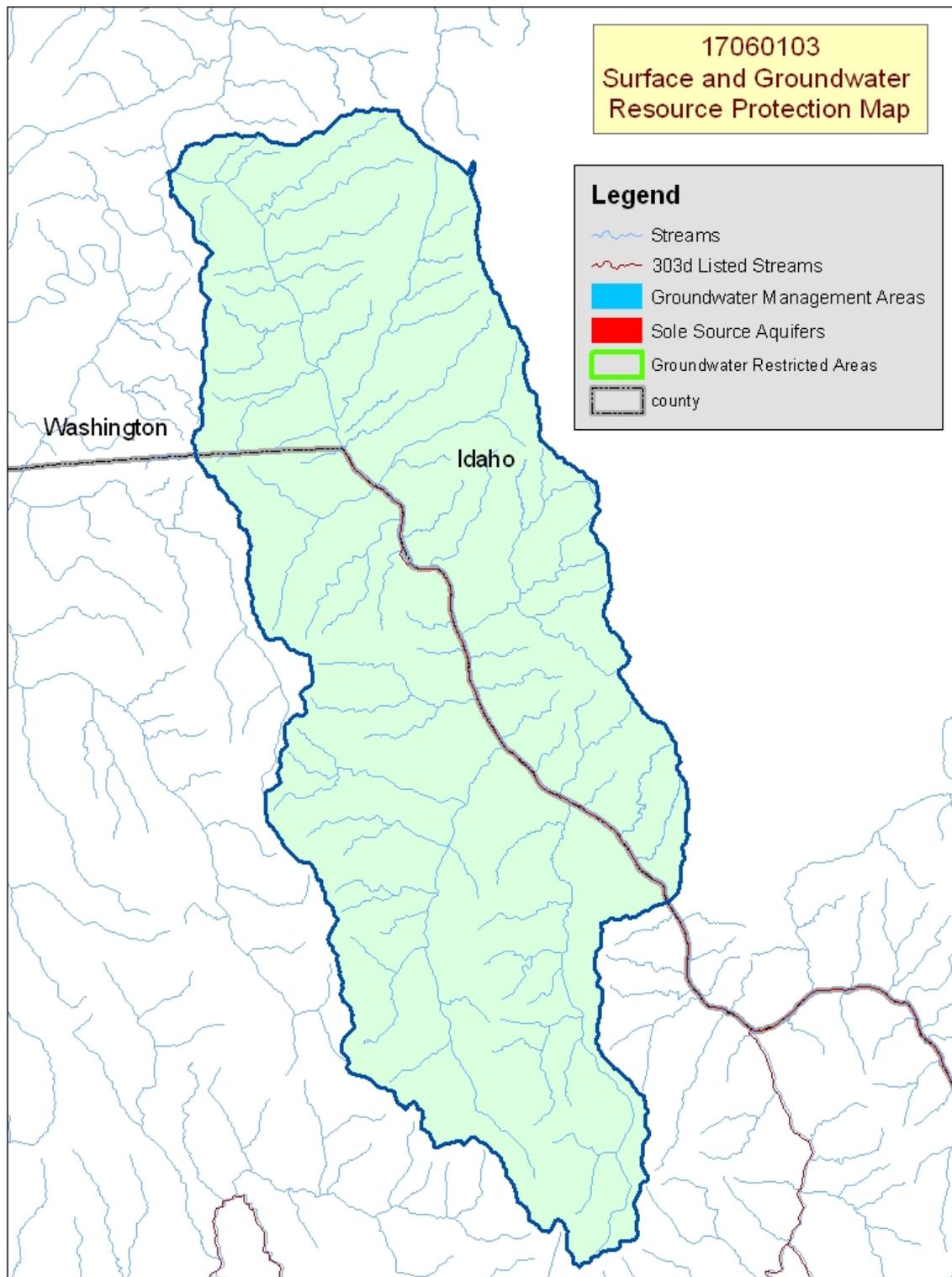
**Tons of Soil Loss by Water Erosion:** This HUC is almost entirely Federal land; thus, no NRI soil loss estimates are available. NRI estimates are available for non-Federal land only.

**303d/TMDL Listed Streams (DEQ):** Oregon Department of Environmental Quality does not list any stream reaches in the Lower Snake/Asotin subbasin as having limited water quality or needing a TMDL.

Watershed Projects, Plans, Studies, and Assessments			
NRCS Watershed Projects <sup>6</sup>		NRCS Watershed Plans, Studies, and Assessments <sup>7</sup>	
Name	Status	Name	Status
None	None	None	None
ODEQ TMDL's <sup>8</sup>		ODA Agricultural Water Quality Management Plans <sup>9</sup>	
Name	Status	Name	Status
Columbia/Snake Rivers	Draft Completed	None	None
OWEB Watershed Council <sup>10</sup>		NWPPC Subbasin Plans and Assessments <sup>18</sup>	
Grande Ronde Model Watershed	None	Snake Hells Canyon	

No resource concerns identified due to the lack of private lands in the Oregon portion of this hydrologic unit.

FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES <sup>12</sup>	
Threatened Species	Candidate Species
<b>Mammals</b> -Canada lynx <b>Birds</b> – Bald eagle <b>Fish</b> – Bull trout, Steelhead, Chinook salmon <b>Plants</b> – McFarlane's four o'clock, Spalding's catchfly	<b>Birds</b> – Yellow-billed cuckoo <b>Amphibians and Reptiles</b> – Columbia spotted frog <b>Plants</b> - Slender moonwort
<b>PROPOSED SPECIES</b> - None	
<b>ESSENTIAL FISH HABITAT<sup>13</sup></b> - Chinook	



Map Footnote [417](#)

**Census and Social Data**<sup>/14</sup>

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There are no known farms or ranches on the privately owned land in the Oregon part of the Lower Snake/Asotin subbasin. Some ranchers may have grazing allotments on the public land.

**Number of Farms: 0**

**Number of Operators: 0**

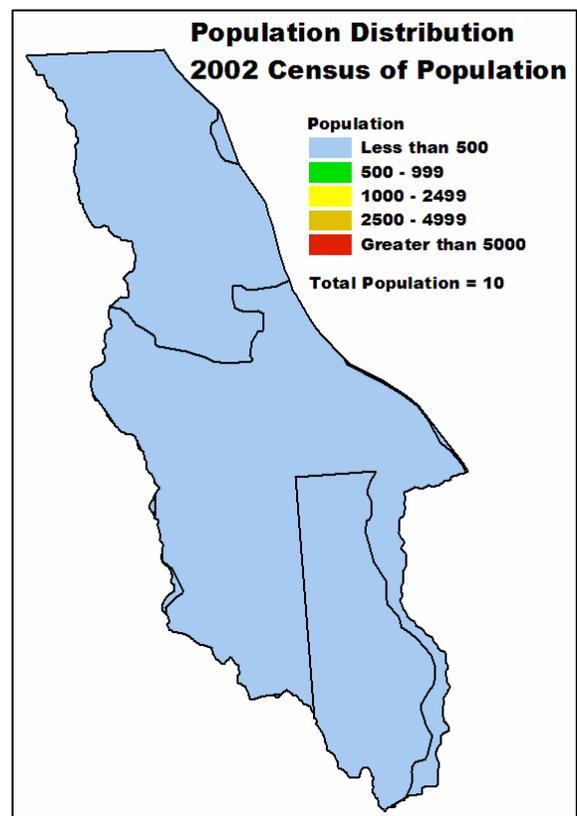
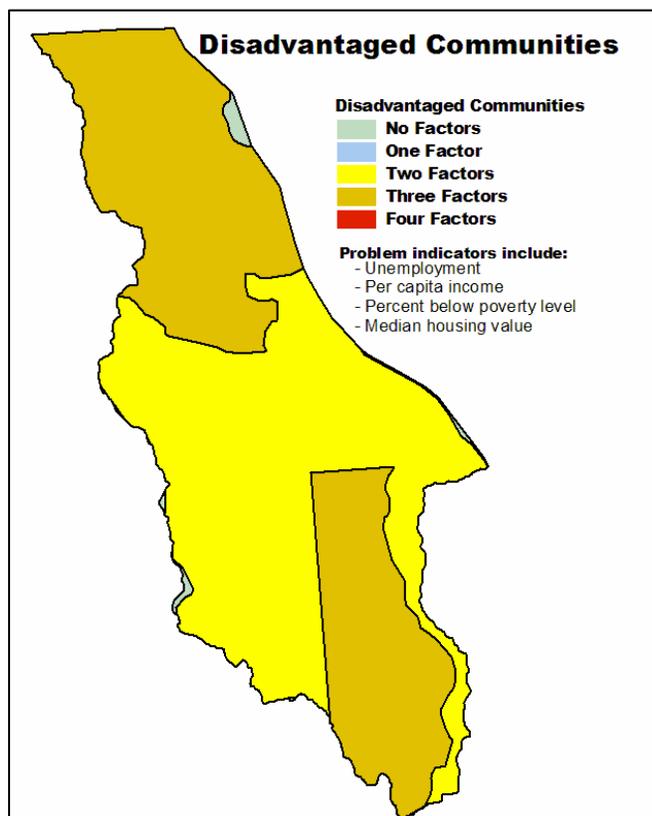
- Full-Time Operators: 0
- Part-Time Operators: 0

**Estimated Level of Willingness and Ability to Participate in Conservation**<sup>/15</sup>:

**Not applicable in the Oregon portion of the watershed.**

**Evaluation of Social Capital**<sup>/16</sup>:

**Not applicable in the Oregon portion of the watershed.**



### Progress/Status

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PRMS Data	FY99	FY00	FY01	FY02	FY03	Avg/Year	Total
Total Conservation Systems Planned (Acres)	0	0	0	0	0	0	0
Total Conservation Systems Applied (Acres)	0	0	0	0	0	0	0
Conservation Treatment (Acres)							
Waste Management (no.)	0	0	0	0	0	0	0
Buffers	0	0	0	0	0	0	0
Erosion Control	0	0	0	0	0	0	0
Irrigation Water Management	0	0	0	0	0	0	0
Nutrient Management	0	0	0	0	0	0	0
Pest Management	0	0	0	0	0	0	0
Prescribed Grazing	0	0	0	0	0	0	0
Trees & Shrubs	0	0	0	0	0	0	0
Conservation Tillage	0	0	0	0	0	0	0
Wildlife Habitat	0	0	0	0	0	0	0
Wetlands	0	0	0	0	0	0	0

No resource status recorded due to the lack of private land in the Oregon portion of this hydrologic unit.

### Lands Removed from Production through Farm Bill Programs

- ❖ Conservation Reserve Program (CRP): **None**
- ❖ Wetland Restoration Program (WRP): **None**
- ❖ Conservation Reserve Enhancement Program (CREP): **None**

### Footnotes/Bibliography

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All data is provided "as is." There are no warranties, express or implied, including the warranty of fitness for a particular purpose, accompanying this document. Use for general planning purposes only.

1. Ownership Layer – Source: The 1:24,000 scale public ownership layer is the land ownership/management for public entities, including Federal, Tribal, State, and local entities. This is a seamless, statewide Oregon Public Ownership vector layer composed of fee ownership of lands by Federal, State, Tribal, county, and city agencies. The layer is comprised of the best available data compiled at 1:24,000 scale or larger, and the line work matches GCDB boundary locations and ORMAP standards where possible. The layer is available from the State of Oregon GIS Service Center: <http://www.gis.state.or.us/data/alphalist.html>. For current ownership status, consult official records at appropriate Federal, State, and county offices. Ownership classes grouped to calculate Federal ownership vs. non-Federal ownership by the Water Resources Planning Team.
2. National Land Cover Dataset (NLCD) - Originator: U.S. Geological Survey (USGS); Publication date: 19990631; Title: Oregon Land Cover Data Set, Edition: 1; Geospatial data presentation form: Raster digital data; Publisher: U.S. Geological Survey, Sioux Falls, SD, USA; Online linkage: <http://edcwww.cr.usgs.gov/programs/lccp/nationallandcover.html>; Abstract: These data can be used in a geographic information system (GIS) for any number of purposes, such as assessing wildlife habitat, water quality, pesticide runoff, land use change, etc. The State data sets are provided with a 300-meter buffer beyond the State border to facilitate combining the State files into larger regions.
3. ESTIMATES FROM THE 1997 NRI DATABASE (REVISED DECEMBER 2000) REPLACE ALL PREVIOUS REPORTS AND ESTIMATES. Comparisons made using data published for the 1982, 1987, or 1992 NRI may produce erroneous results. This is because of changes in statistical estimation protocols and because all data collected prior to 1997 were simultaneously reviewed (edited) as 1997 NRI data were collected. All definitions are available in the glossary. In addition, this December 2000 revision of the 1997 NRI data updates information released in December 1999 and corrects a computer error discovered in March 2000. For more information: <http://www.nrcs.usda.gov/technical/NRI/>
4. Irrigated Adjudicated Water Rights – Water Rights Information System (WRIS), Oregon Water Resources Department, <http://www.wrd.state.or.us/maps/wrlexport.shtml>
5. StreamNet is a cooperative venture of the Pacific Northwest's fish and wildlife agencies and tribes and is administered by the [Pacific States Marine Fisheries Commission](#). StreamNet provided data and data services in support of the region's fish and wildlife program and other efforts to manage and restore the region's aquatic resources. Official StreamNet website: <http://www.streamnet.org/>
6. Natural Resources Conservation Service, Watershed Projects Planned and Authorized, <http://www.nrcs.usda.gov/programs/watershed/Purpose>.
7. Natural Resources Conservation Service, Watershed Plans, Studies, and Assessments completed, [http://www.nrcs.usda.gov/programs/watershed/Surveys\\_Plng.html#Watershed%20Surveys%20and%20Plan](http://www.nrcs.usda.gov/programs/watershed/Surveys_Plng.html#Watershed%20Surveys%20and%20Plan)
8. Oregon Department of Environmental Quality Total Maximum Daily Loads, <http://www.deq.state.or.us/wq/TMDLs/TMDLs.htm>
9. Oregon Department of Agriculture, Agricultural Water Quality Management Plans, [http://www.oregon.gov/ODA/NRD/water\\_agplans.shtml](http://www.oregon.gov/ODA/NRD/water_agplans.shtml)

### Footnotes/Bibliography Continued

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10. Oregon Watershed Enhancement Board, <http://oregon.gov/OWEB/WSHEDS/index.shtml>
11. Watershed Assessments completed by local watershed councils following the Oregon Watershed Assessment Manual, [http://oregon.gov/OWEB/docs/pubs/ws\\_assess\\_manual.shtml](http://oregon.gov/OWEB/docs/pubs/ws_assess_manual.shtml).
12. NRCS Field Office Technical Guide, Section II, Threatened and Endangered List.
13. Magnuson-Stevens Fishery Conservation and Management Act, Public Law 94-265. As amended through October 11, 1996.
14. Data were taken from the 2002 Agricultural Census and adjusted by percent of HUC in the county or by percent of zip code area in the HUC, depending on the level of data available. Data were also taken from the U.S. Population Census, 2000.
15. Conservation participation was estimated using NRCS Social Sciences Technical Note 1801, Guide for Estimating Participation in Conservation, 2004. Four categories of indicators were evaluated: Personal characteristics, farm structural characteristics, perceptions of conservation, and community context. Estimates are based on information received from local conservationists in the watershed.
16. Social capital is an indicator of the community's ability and willingness to work together to solve problems. A high amount of social capital helps a community to be physically healthy, socially progressive, and economically vigorous. A low amount of social capital typically results in community conflict, lack of trust and respect, and unsuccessful attempts to solve problems. The evaluation is based on NRCS Technical Report Release 4.1, March, 2002: Adding Up Social Capital: An Investment in Communities. Local conservationists provided information to measure social capital. Scores range from 0 to 76.
17. Surface and Groundwater Resource Protection Map
  - a. 2002 303d Listed Streams designated by Oregon Department of Environmental Quality and approved by the Environmental Protection Agency, Section 303d Clean Water Act, <http://www.deq.state.or.us/wq/303dlist/303dpage.htm>
  - b. Groundwater Management Areas designated by the Oregon Department of Environmental Quality, Oregon Revised Statutes – Ground Water ORS 468B.150 to ORS 468B.190, <http://www.deq.state.or.us/wq/groundwa/wqgw.htm>
  - c. Groundwater Restricted Areas designated by Oregon Water Resources Commission, Oregon Department of Water Resources, [http://egov.oregon.gov/OWRD/PUBS/aquabook\\_protections.shtml](http://egov.oregon.gov/OWRD/PUBS/aquabook_protections.shtml)
  - d. The Sole Source Aquifer (SSA) Protection Program is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974 (Public Law 93-523, 42 U.S.C. 300 et. seq), <http://www.epa.gov/safewater/ssanp.html>
18. Subbasin assessments and plans are developed by local groups (SWCDs, watershed councils, tribes, and others) as part of the Northwest Power and Conservation Council's fish and wildlife program in the Columbia River Basin. This program is funded and implemented by the Bonneville Power Administration. <http://www.nwcouncil.org/fw/subbasinplanning/Default.htm>.