

Introduction

The Butte 8-Digit Hydrologic Unit Code (HUC) watershed is comprised of 7,100 acres in Oregon. Most of the watershed lies in California. The Oregon portion of the watershed is almost evenly split between public and private ownership. There are no known farms or ranches on the privately owned land.

Trees, grass, and shrubs cover 99 percent of the part of the watershed in Oregon.

Profile Contents

[Introduction](#)

[Physical Description](#)

[Land Use Map & Precipitation Map](#)

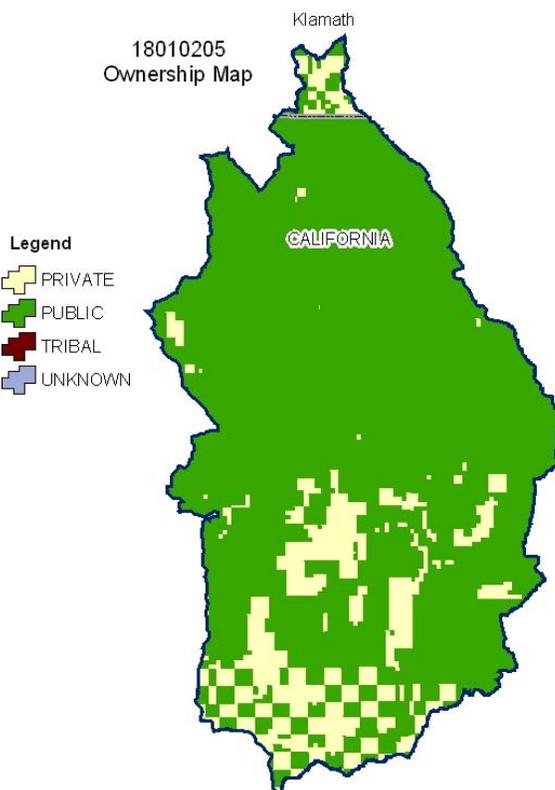
[Common Resource Area](#)

[Resource Concerns](#)

[Census and Social Data](#)

[Progress/Status](#)

[Footnotes/Bibliography](#)



Physical Description

[Back to Contents](#)

ALL NUMBERS IN THIS PROFILE ARE FOR OREGON ONLY

Land Cover/Land Use (NLCD ²)	Ownership - (2003 Draft BLM Surface Map Set ¹)						Totals	%
	Public		Private		Tribal			
	Acres	%	Acres	%	Acres	%		
Forest	3,200	44%	3,300	46%	0	0%	6,500	90%
Grain Crops	*	---	*	--	0	0%	*	---
Conservation Reserve Program Land ^a	0	0%	0	0%	0	0%	0	0%
Grass/Pasture/Hay	100	2%	300	5%	0	0%	400	6%
Orchards/Vineyards	0	0%	0	0%	0	0%	0	0%
Row Crops	0	0%	0	0%	0	0%	0	0%
Shrub/Rangelands	*	---	*	---	0	0%	200	3%
Water/Wetlands/Developed/Barren	*	---	*	---	0	0%	*	---
Oregon HUC Totals ^b	3,400	47%	3,700	53%	0	0%	7,100	100%

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

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

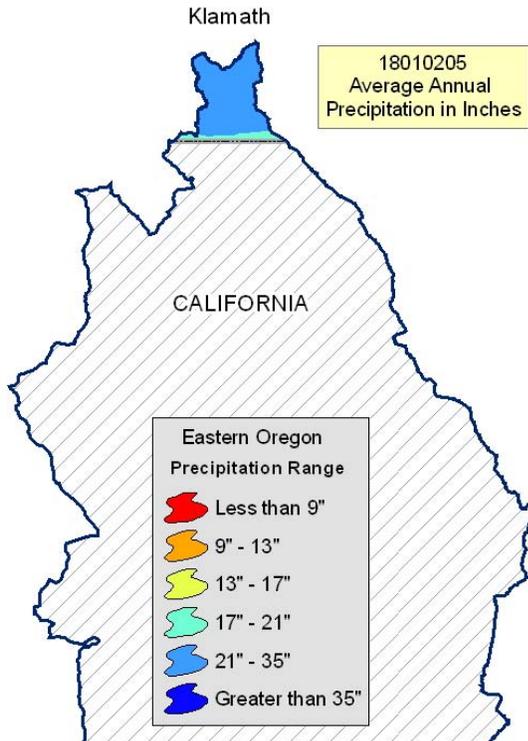
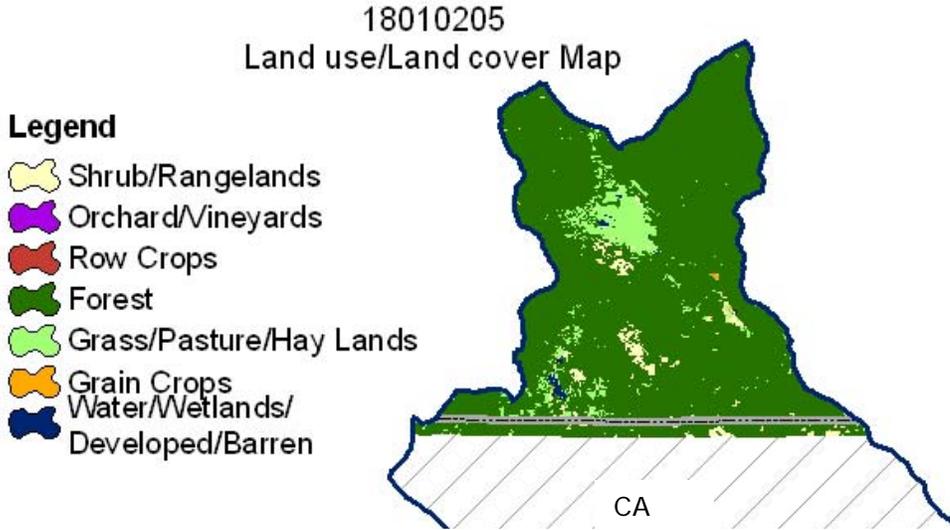
b: Totals are approximate due to rounding and small unknown acreages.

Special Considerations for This 8-Digit HUC:

- Most of this watershed is in California.
- Almost all of private forestland is under industrial ownership (NRCS, Upper Klamath Basin Rapid Subbasin Assessments, 2003).
- Private, non-industrial land in the Oregon portion of this watershed is used mainly for livestock grazing.

	Type of Land	ACRES	% of Irrigated Lands	% of HUC
Irrigated Lands (1997 NR ³ Estimates for Non-Federal Lands Only)	Cultivated Cropland	0	0%	0%
	Uncultivated Cropland	0	0%	0%
	Pastureland	0	0%	0%
	Total Irrigated Lands	0	0%	0%

(Continued on the following pages)



Common Resource Area Map

[Back to Contents](#)

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

21.3 - Klamath and Shasta Valleys and Basins - Southern Cascade Slope: This unit is characterized by forested mountains and plateaus in the western portion of the MLRA. The temperature regime is frigid, and the moisture regime is xeric. The dominant soils are those of the Pinehurst, Greystoke, Woodcock, and Royst soils. The vegetation is dominantly ponderosa pine, Douglas-fir, and some Shasta red fir. The major separation of unit 21.2 from 21.3 is near Bly Mountain. White fir is dominant on unit 21.2, and Douglas-fir is dominant on unit 21.3.

Physical Description – Continued

[Back to Contents](#)

		ACRES	ACRE-FEET			
Irrigated Adjudicated Water Rights (OWRD ⁴)	Surface	42	126			
	Well	0	0			
	Total Irrigated Adjudicated Water Rights	42	126			
Stream Flow Data	USGS 11489500 ANTELOPE CREEK, NEAR TENNANT, CA	Total Avg. Yield	25,484			
		May – Sept. Yield	13,356			
		MILES	PERCENT			
Stream Data ⁵	Total Miles – Major (100K Hydro GIS Layer)	5	---			
	303d/TMDL Listed Streams (DEQ)	---	---			
	Anadromous Fish Presence (StreamNet)	0	0%			
	Bull Trout Presence (StreamNet)	0	0%			
*Percent of Total Miles of Streams in HUC						
		ACRES	PERCENT			
Land Cover/Use ²	Forest	104	87%			
	Grain Crops	0	0%			
	Grass/Pasture/Hay	9	8%			
	Orchards/Vineyards	0	0%			
	Row Crops	0	0%			
	Shrub/Rangelands – Includes CRP Lands	4	3%			
	Water/Wetlands/Developed/Barren	3	2%			
	Total Acres of 100-foot Stream Buffers	119	---			
Land Capability Class	1 – slight limitations	0	0%			
	2 – moderate limitations	0	0%			
	3 – severe limitations	0	0%			
	4 – very severe limitations	0	0%			
	5 – no erosion hazard, but other limitations	0	0%			
	6 – severe limitations; unsuitable for cultivation; limited to pasture, range, forest	0	0%			
	7 – very severe limitations; unsuitable for cultivation; limited to grazing, forest, wildlife habitat	0	0%			
	8 – miscellaneous areas; limited to recreation, wildlife habitat, water supply	0	0%			
	Total Croplands & Pasturelands	0	0%			
Confined Animal Feeding Operations – Oregon CAFO Permit – 12/2004						
Animal Type	Dairy	Feedlot	Poultry	Swine	Mink	Other
No. of Permitted Farms	0	0	0	0	0	0
No. of Permitted Animals	0	0	0	0	0	0

Resource Concerns

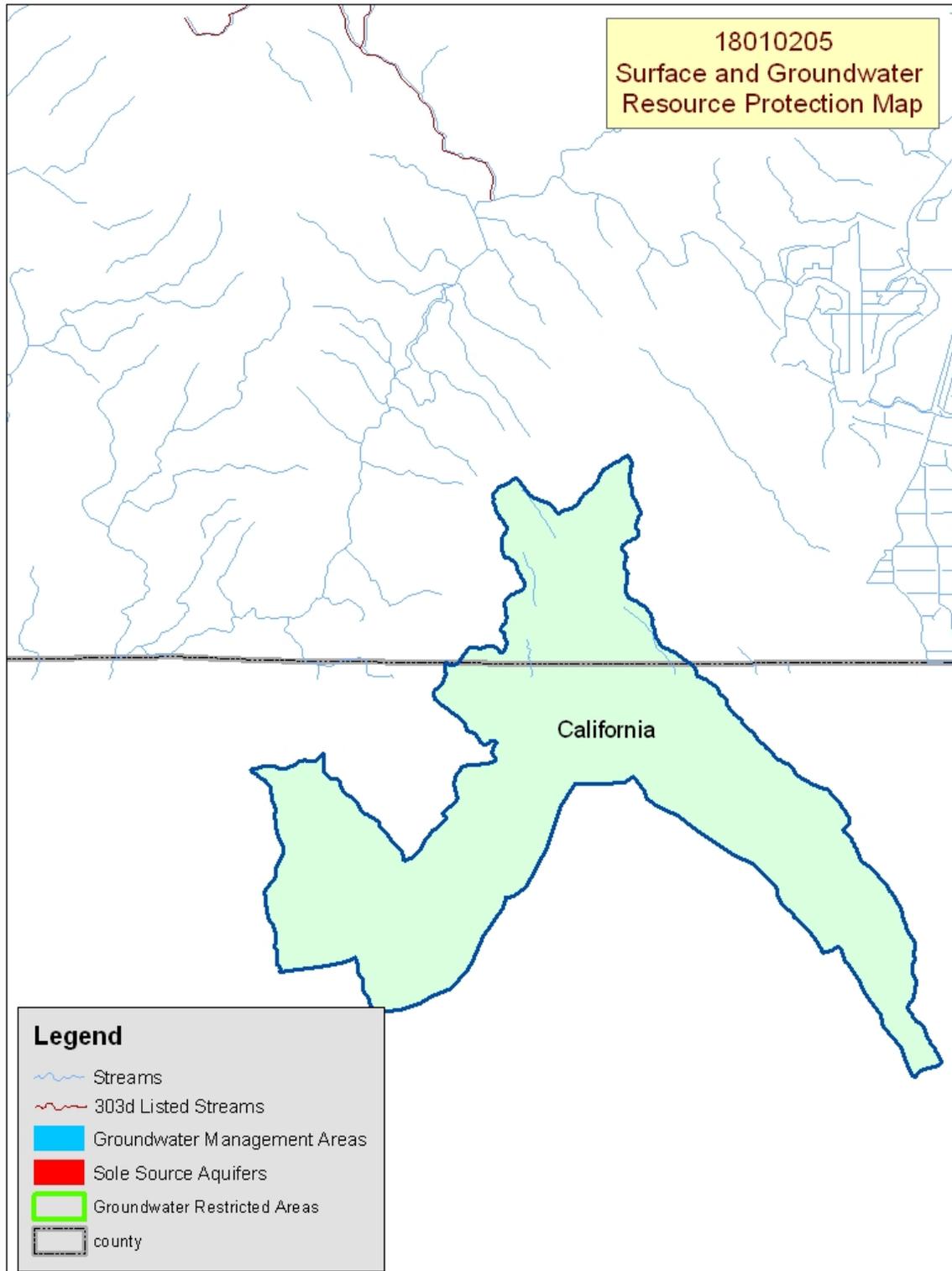
[Back to Contents](#)

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

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

Watershed Projects, Plans, Studies, and Assessments			
NRCS Watershed Projects ⁶		NRCS Watershed Plans, Studies, and Assessments ⁷	
Name	Status	Name	Status
None	None	Upper Klamath Subbasin Assessments (Butte Valley)	Completed 2004
ODEQ TMDL's ⁸		ODA Agricultural Water Quality Management Plans ⁹	
Name	Status	Name	Status
None	None	Lost River	Completed
OWEB Watershed Council ¹⁰		Watershed Council Assessments ¹¹	NWPC Subbasin Plans and Assessments ¹⁸
Klamath Watershed Council/Klamath River Watershed Working Group		None	None

(Continued on page 8)



Map Footnote [417](#)

Resource Concerns - Continued

[Back to Contents](#)

Resource Concerns/Issues by Land Use							
SWAPA +H Concerns	Specific Resource Concern/Issue	Grass/Pasture/ Hay	Grain Crops	Row Crops	Perennial Crops (Orch/Vine/ Berries)	Shrub/Range	Forest
Soil Condition	Tilth, Crusting, Infiltration, Organic Matter					X	
	Soil Compaction					X	X
Water Quantity	Water Management for Nonirrigated Land					X	X
Plant Condition	Productivity, Health, and Vigor					X	X
	Noxious and Invasive Weeds					X	X
Human, Political	High Degree of Controversy					X	X

Range & Forest

- Most range and forest units used for livestock grazing are large, which makes it difficult to implement intense grazing rotations with the available fences and watering facilities.
- Juniper encroachment and other noxious and invasive weeds reduce the health and vigor of range grasses and forbs.
- Juniper increases evapotranspiration, reducing both the availability of water for range grasses and downstream subsurface discharge to the river.

FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES ¹²	
THREATENED SPECIES	CANDIDATE SPECIES
Mammals - Canada lynx Birds – Bald eagle, Northern spotted owl Fish – Shortnose sucker, Lost River sucker, Warner sucker, Bull trout, Hutton Springs tui chub, Foskett speckled dace Plants – Applegate’s milk vetch	Mammals - Pacific fisher Birds – Yellow-billed cuckoo Amphibians and Reptiles – Columbia spotted frog, Oregon spotted frog Invertebrates - Mardon skipper butterfly
	PROPOSED SPECIES None
ESSENTIAL FISH HABITAT¹³ - None	

Census and Social Data^{/14}

[Back to Contents](#)

There are no known farmsteads in the Oregon part of the Butte subbasin; however, private grazing lands are used by ranchers from California and areas outside of the basin.

Number of Farms: 0

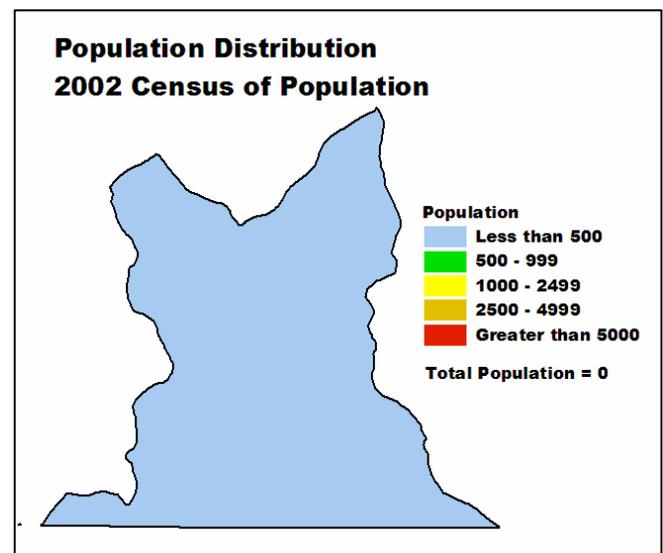
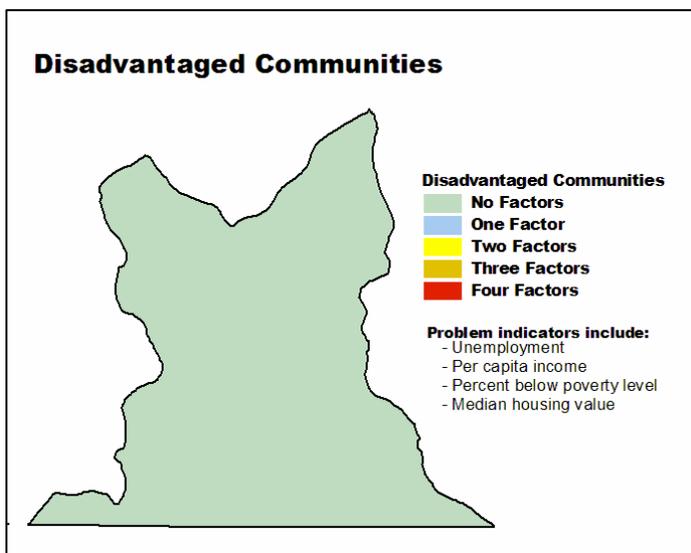
Number of Operators: 0

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

Estimated Level of Willingness and Ability to Participate in Conservation^{/15}:

Not applicable in the Oregon portion of watershed.

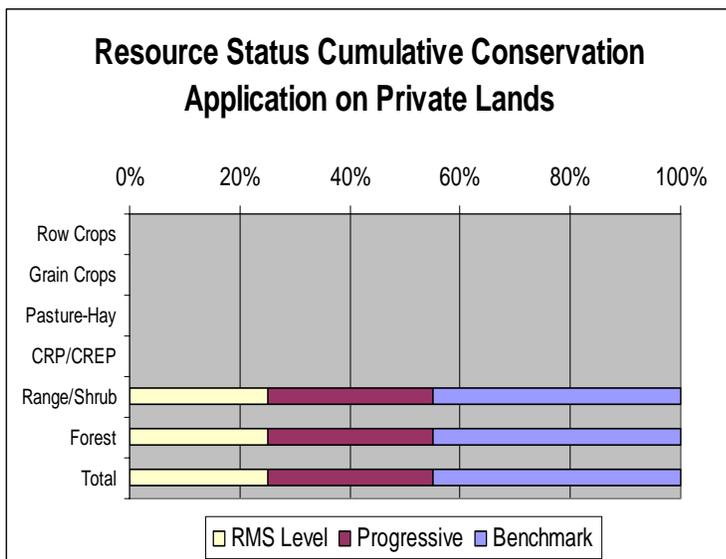
Evaluation of Social Capital^{/16}: **Not applicable in the Oregon portion of watershed.**



Progress/Status

[Back to Contents](#)

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	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	2,602	0	0	0	520	2,602
Trees and 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



Estimates are based on information received from local conservationists in the watershed.

- ❖ Progress over the last 5 years has been focused on:
 - ~ Prescribed grazing on forestland
 - ~ Erosion control
- ❖ Juniper encroachment and invasive weeds have reduced the productivity of many areas of rangeland and forestland.
- ❖ Most private, industrial forestland meets State forest practice act requirements.
- ❖ High cost and unreliable markets limit forest management activities on private, non-industrial forestland. A high percentage of this forestland is overstocked with stagnate stands that have limited value for livestock grazing, wildlife, or timber production.

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

[Back to Contents](#)

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
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

Footnotes/Bibliography Continued

[Back to Contents](#)

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.

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.
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
 - 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>.