



Introduction

The Pend Oreille 8-Digit Hydrologic Unit Code (HUC) subbasin contains 780,330 acres. Bonner County accounts for 81 percent of the subbasin. Nine percent of the subbasin is in Kootenai County, six percent in Boundary County, four percent in Spokane County, Washington and less than one percent in Pend Oreille County, Washington. Fifty four percent of the basin is privately owned.

Sixty-six percent of the basin is in forest. Less than one percent is cropland. With the presence of Lake Pend Oreille, 21 percent is water, wetland, developed or barren. Thirteen percent is shrubland, rangeland, grass, pasture or hayland.

Elevations range from 2,000 feet at Lake Pend Oreille to over 7,500 feet in the northern portion of the watershed.

Conservation assistance is provided through five Soil Conservation Districts which include Boundary SCD, Kootenai-Shoshone SCD, Bonner SWCD, Spokane CCD the Pend Oreille CCD, and the

Panhandle Lakes Resource Conservation and Development office.

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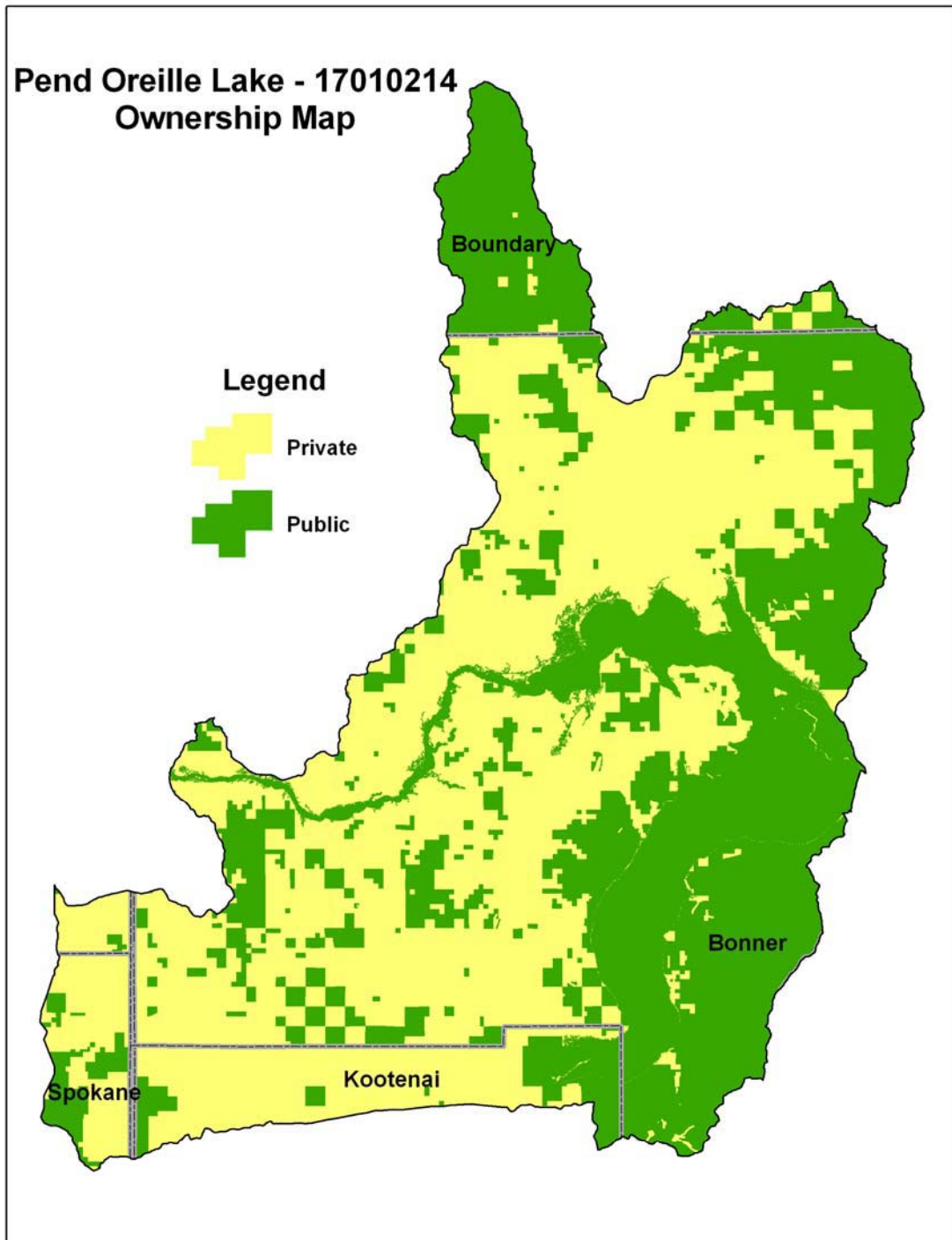
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Relief Map



General Ownership¹





Pend Oreille Lake - 17010214
8 Digit Hydrologic Unit Profile

Idaho

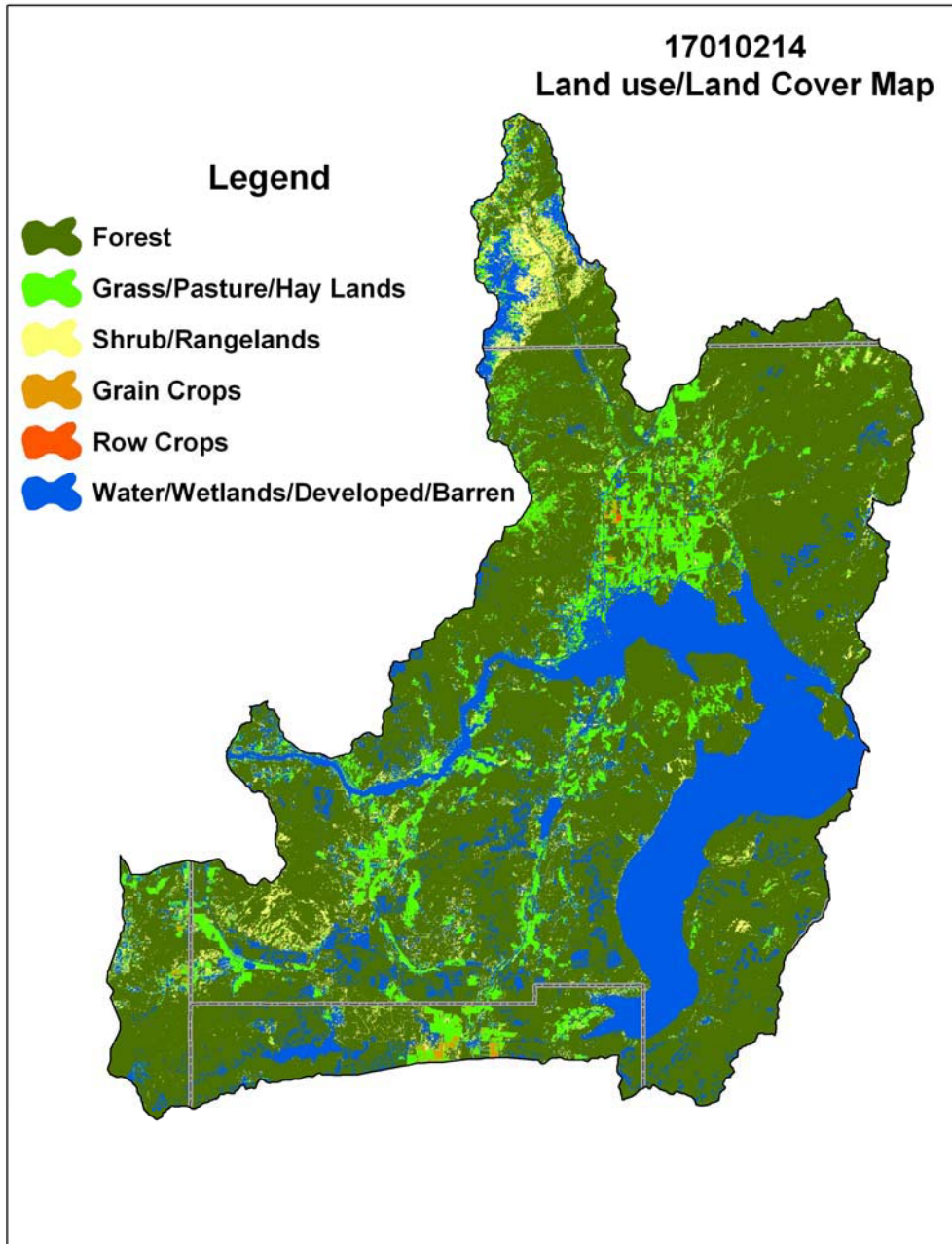
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Physical Description

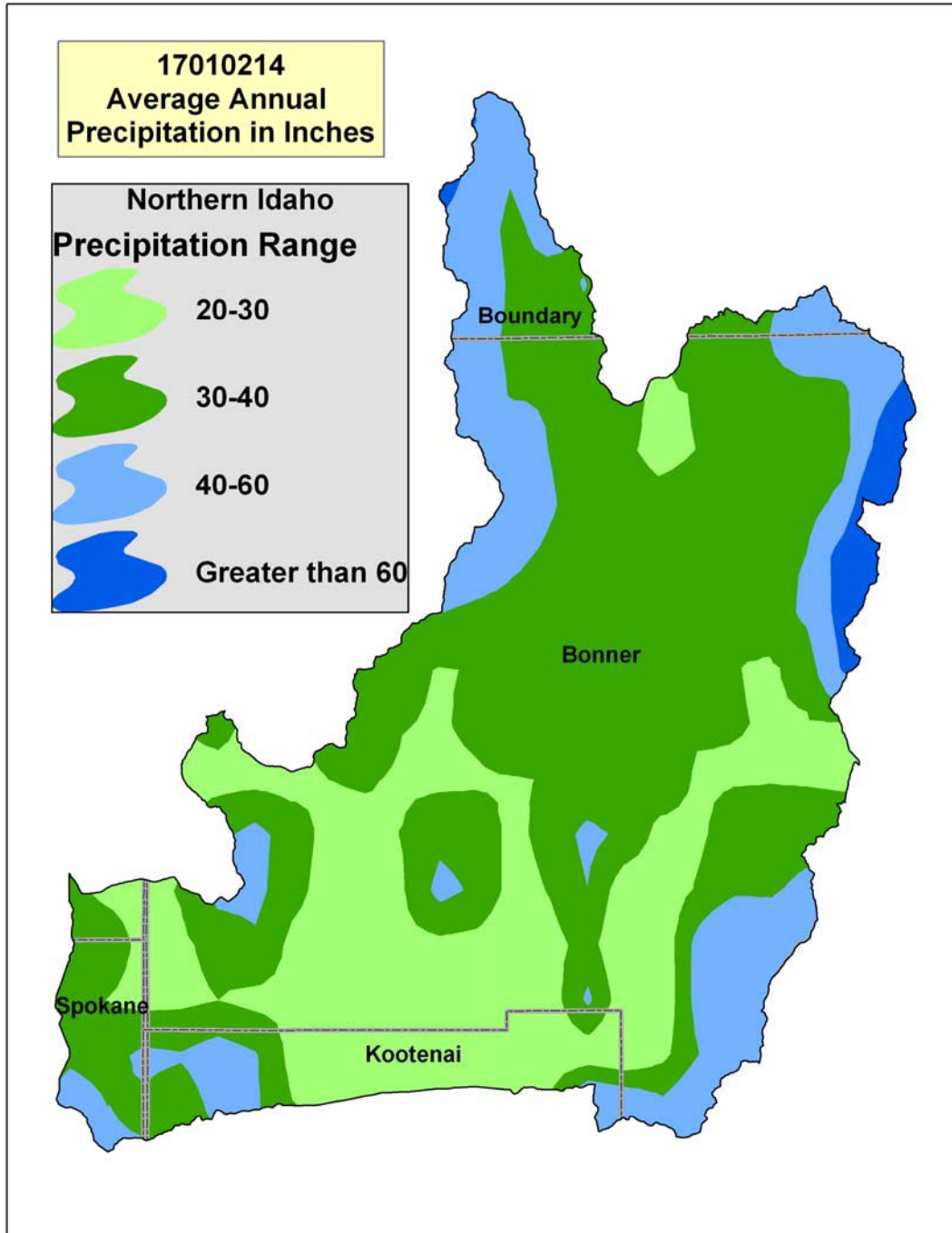
| Land Cover/ Land Use (NLCD ^{1,2}) | Ownership - (2003 Draft BLM Surface Map Set ¹) | | | | | | Totals | % of HUC |
|--|--|------------|----------------|------------|-----------------------------|-----------|-----------------|-------------|
| | Public | | Private | | Tribal | | | |
| | Acres | % | Acres | % | | % | | |
| Forest | 213,650 | 27% | 304,620 | 39% | | -- | 518,270 | 66% |
| Grain Crops | | -- | 1,520 | <1% | | -- | 1,520 | -- |
| Conservation Reserve Program (CRP) Land ³ | | -- | 720 | <1% | | | 720 | -- |
| Grass/Pasture/Hay Lands | 9,680 | 1% | 54,140 | 7% | | -- | 63,820 | 8% |
| Orchards/Vineyards/Berries | | -- | 20 | <1% | | -- | 20 | -- |
| Row Crops | | -- | 90 | <1% | | -- | 90 | -- |
| Shrub/Rangelands | 15,960 | 2% | 19,510 | 3% | | -- | 35,470 | 5% |
| Water/Wetlands/ Developed/Barren | 120,440 | 16% | 39,980 | 5% | | -- | 160,420 | 21% |
| Idaho HUC Totals | 359,730 | 46% | 420,600 | 54% | | -- | 780,330 | 100% |
| Irrigated Lands⁴ | | | | | | | | |
| | Type of Land | | ACRES | | % of Irrigated Lands | | % of HUC | |
| | Cultivated Cropland | | | | -- | | -- | |
| | Non-Cultivated Cropland * | | 200 | | 100% | | <1% | |
| | Pastureland | | | | -- | | -- | |
| | Total Irrigated Lands | | 200 | | 100% | | <1% | |

*Includes permanent hayland and horticultural cropland.

Land Use/Land Cover^{1/2}



Average Annual Precipitation¹⁵





Idaho

Pend Oreille Lake - 17010214
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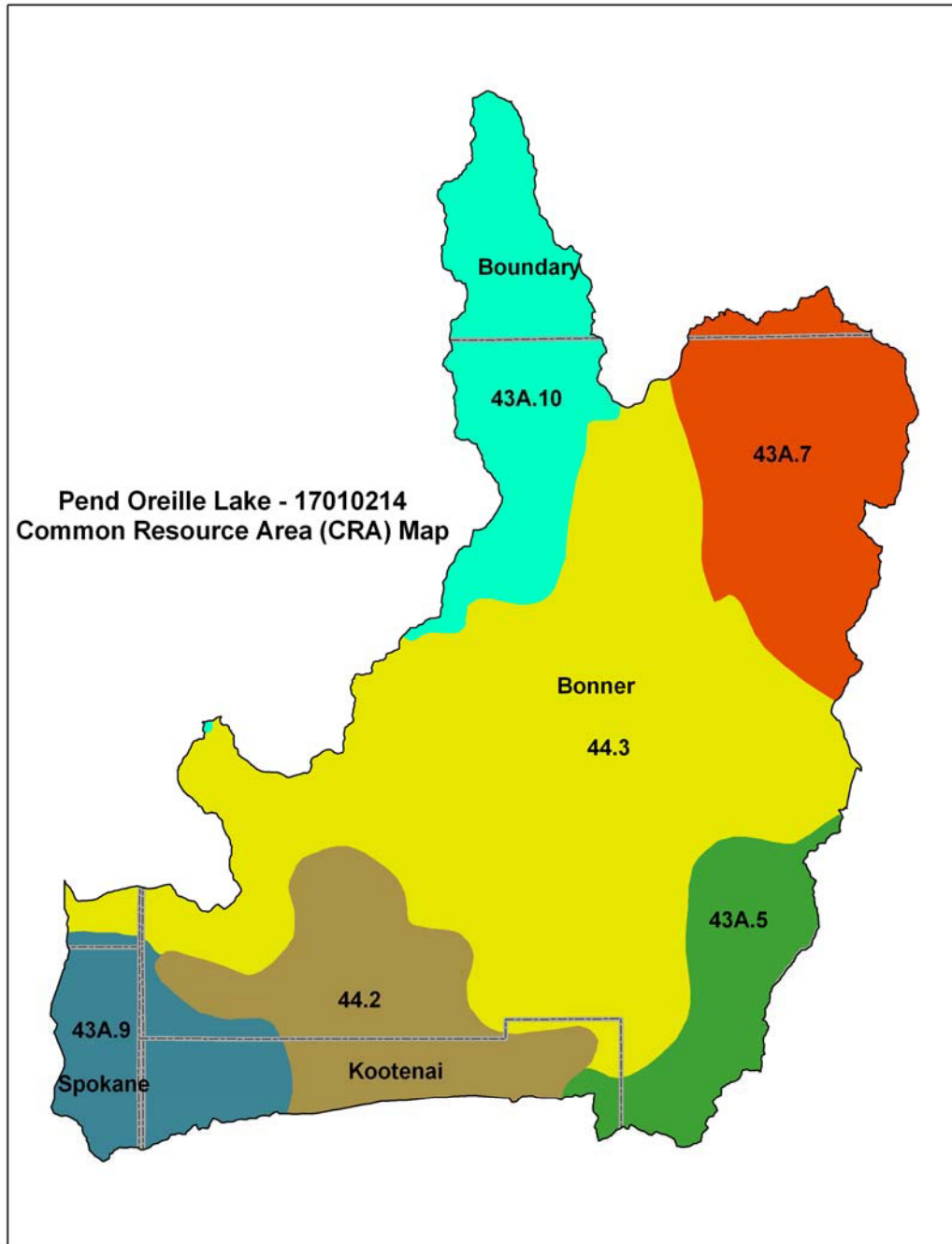
Common Resource Area Map

CRA Map - areas with a majority are listed below - for descriptions of every class within the HUC, go to: http://www.id.nrcs.usda.gov/technical/soils/cra_map_link_w_cnty.jpg

The following Common Resource Area (CRA) map delineation is defined as a geographical area where resource concerns, problems, or treatment needs are similar. It is considered a subdivision of an existing Major Land Resource Area (MLRA) map delineation or polygon. Landscape conditions, soil, climate, human considerations, and other natural resource information are used to determine the geographic boundaries of a Common Resource Area (General Manual Title 450 Subpart C 401.21).

The National Coordinated CRA Geographic Database provides:

- A consistent CRA geographic database;
- CRA geographic data compatible with other GIS data digitized from 1:250,000 scale maps, such as land use/land cover, political boundaries, Digital General Soil Map of the U.S. (updated STATSGO), and ecoregion boundaries;
- A consistent (correlated) geographic index for Conservation Management Guide Sheet information and the eFOTG;
- A geographic linkage with the national MLRA framework.



Physical Description - Continued

Common Resource Area Descriptions

43A.5 Northern Rocky Mountains--Coeur d'Alene Metasedimentary Zone: The Coeur d'Alene Metasedimentary Zone is forested and underlain by fractured quartzite and argillaceous rock. Douglas-fir, grand fir, western red cedar, western hemlock, and, at higher elevations, mountain hemlock, subalpine fir, Engelmann spruce, and whitebark pine occur. Smelter emissions have denuded some slopes. Acid drainage from mine tailings have left some streams nearly devoid of aquatic life. Massive restoration efforts are now underway.

43A.7 Northern Rocky Mountains--Purcell-Cabinet-North Bitterroot Mountains: The Purcell-Cabinet-North Bitterroot Mountains ecoregion is mantled by volcanic ash and glacial deposits and is underlain by quartzite and argillaceous rocks. Continental ice shaped its terrain but did not extend further south. Potential for natural and management-induced slope instability exists where water tables are perched in compacted tills and glacio-fluvial deposits. However, in general, slopes yield less sediment to streams after disturbance than in nearby granitic and schistic areas. Cedar-hemlock-pine forest and, at higher elevations, western spruce-fir forest occur. Birch and aspen grow on floodplains and are seral species on moist, low to mid-elevation uplands.

43A.9 Northern Rocky Mountains--Western Selkirk Maritime Forest: The mountainous Western Selkirk Maritime Forest ecoregion is more rugged than the Northern Idaho Hills and Low Relief Mountains. Douglas-fir dominates or co-dominates most forest overstories. Maritime species such as grand fir, western red cedar, and western hemlock are more common than in the rain shadow of the North Cascades in Washington's Okanogan Highland. Boreal influence is absent in contrast to the northern Selkirk Mountains.

43A.10 Northern Rocky Mountains--Selkirk Mountains: The dissected, partly glaciated Selkirk Mountains ecoregion is rugged, covered in mixed coniferous forest, and mantled by volcanic ash that increases forest productivity. Both Pacific species (grand fir, western redcedar, and western hemlock) and Rocky Mountain species (western larch, western white pine, and lodgepole pine) are common. A combination of weather patterns; high relief, and very narrow valleys, result in more summer precipitation, fog, and relative humidity at low and mid-elevations than elsewhere in northern Idaho and northeastern Washington. Boreal influence is stronger, subalpine fir-spruce forests are lower, and whitebark pine forests are more extensive than in the rest of the Northern Rockies. Boreal influence increases toward the north and some north-facing valleys have extensive peatlands. This region includes the largest contiguous old growth cedar-hemlock forest in the interior U.S., extensive peat lands, and important lynx and grizzly bear habitat. It supports the only woodland caribou herd in the conterminous U.S.. Erosion hazards can be high where road beds intercept perched water tables above subsurface compacted tills. Avalanche chutes are common.

44.2 Northern Rocky Mountain Valleys--Spokane Valley Outwash Plains: The Spokane Valley Outwash Plains ecoregion is gently rolling and includes the southern end of the Purcell Trench and the Spokane Valley. It once served as the main outlet for the Pleistocene Missoula Floods. In the northern valleys, coarse, gravelly soils developed from glacial outwash. In the southern Spokane Valley, more arable soils occur and developed from glacial lake sediment. Dry, open ponderosa pine and Douglas-fir woodlands occur.

44.3 Northern Rocky Mountain Valleys--Inland Maritime Foothills and Valleys: The Inland Maritime Foothills and Valleys ecoregion includes the wide, glaciated Pend Oreille and Priest valleys. Soils have more volcanic ash and water holding capacity than the drier Columbia, Kettle, and Sanpoil valleys of northeast Washington. Forests contain western hemlock, western red cedar, grand fir, Douglas fir, ponderosa pine, lodgepole pine, and an unusually large proportion of western larch. Birch and aspen grow on floodplains and are also common seral species on moist, low to mid-elevation uplands.

Physical Description - Continued

| | | | |
|--|--|-----------------------------|------------------|
| Irrigated Adjudicated (Legal) Water Rights^{/6)} | Surface Water | Cubic Feet per Second (CFS) | 163 |
| | Groundwater | | 51 |
| | Total Irrigated Adjudicated Water Rights | | 214 |
| | | | |
| Stream Flow Data^{/7)} | | | ACRE-FEET |
| | USGS 1239000 Clark Fork at Whitehorse Rapids, near Cabinet, Idaho, 1971-2000 | Average Annual | 16,274,533 |
| | | March-July Average | 12,163,000 |
| | | Percent of Average Annual | March - July 75% |
| | | | |
| Stream Data | | MILES | PERCENT |
| | Total Stream Miles ^{/8)} | 1,814 | |
| | Impaired (see pollutant categories) ^{/9,10)} | 555.7 | 31% |
| | Anadromous Fish Presence (Streamnet) ^{/11)} | 0 | -- |
| | Bull Trout Presence (Streamnet) ^{/11)} | 396 | 22% |
| | | | |
| Land Cover/Use^{/2)} based on a 100 ft. stretch on both sides of all streams in the 100K Hydro Layer | | ACRES | PERCENT |
| | Forest | 19,210 | 65% |
| | Grain Crops | 20 | <1% |
| | Grass/Pasture/Hay Lands | 2,550 | 9% |
| | Row Crops | 0 | 0% |
| | Shrub/Rangelands - Includes CRP Lands | 1,490 | 5% |
| | Water/Wetlands/Developed/Barren | 6,420 | 22% |
| | Total Acres of 100 ft stream buffers | 26,690 | 100% |
| | | | |
| Land Capability Class^{/4)} | I - slight limitations | 0 | |
| | II - moderate limitations | 0 | |
| | III - severe limitations | 4,000 | 7% |
| | IV - very severe limitations | 47,500 | 83% |
| | V - no erosion hazard, but other limitations | 6,000 | 10% |
| | VI - severe limitations, unsuited for cultivation, limited to pasture, range, forest | 0 | |
| | VII - very severe limitations, unsuited for cultivation, limited to grazing, forest, wildlife | 0 | |
| | VIII - misc areas have limitations, limited to recreation, wildlife, and water supply | 0 | |
| | Total Crop & Pasture Lands | 57,500 | 100% |

Physical Description – Continued

| Confined Animal Feeding Operations – Dairies/Feedlots ^{/12,13} | | | | |
|--|--------------|----------------|------------------|------------------|
| Animal Numbers | 1-300 | 300-999 | 1000-4999 | >5,000 |
| Dairy | 3 | | | |
| Feedlots | 178 | | | |

Resource Settings

Pasture: Non-irrigated riparian pastures with a growing season of 120 to 185 days. Livestock utilization is from late spring through fall and big game species are present in winter and early spring. Fencing is generally an existing practice, however there are many miles of streams without exclusion fences. Soils are deep with variable textures and wetland inclusions with slopes from 0 to 2 percent. Annual precipitation is greater than 20 inches with very dry summers. Typically these pastures are adjacent to perennial or intermittent streams. Vegetation ranges from native grass/sedge/rush complexes to improved forage species such as timothy, smooth brome, creeping meadow foxtail, orchard grass and clover. Pasture concerns include a lack of fertility, proper grazing use and noxious weeds. Wetland alterations have occurred due to ditching, and improper drainage and stream channel alteration.

Upland pastures are located above flood plains on steeper, dissected hill sides or mountain sides. Average annual precipitation is 20 to 32 inches per year. The majority of the precipitation is rain and snow from mid-November to mid-May. Summer months are hot and dry. Soil type is silt loam to gravel. Vegetation is typically introduced species, such as orchard grass and smooth brome. Native species such as bluebunch wheatgrass, Idaho fescue, pine grass, elk sedge and native shrubs and trees may be found at higher elevations along mountain sides. The majority of grazing animals are cattle, sheep, goats, lammas, alpacas and horses. Big game utilize pasture for early spring and winter grazing. Wildlife includes elk, black bear, whitetail and mule deer, and moose.

Dry Cropland: Dry cropland with conventional tillage, which may include a moldboard plow, chisel plow, disk and field cultivator. Typical rotations are 2 to 3 years and consist of winter wheat/summer fallow, winter wheat/lentils or peas. Acres of dry cropland only represents approximately 1500 acres. Precipitation is 15 to 24 inches per year. Fertilizers and pesticides are applied. Soils are typically silt loam cut over timber with slopes ranging from less than 5 to 25 percent. Wildlife includes deer, elk, moose, small game and nongame birds. Wetland alterations have occurred due to ditching, and improper drainage and stream channel alteration.

Hayland: Non-irrigated riparian hayland on 0 to 2% slopes. Growing season is 120-185 days. Soils are deep with variable textures and wetland inclusions. Annual precipitation is greater than 20 inches with very dry summer months. Typically this hayland is adjacent to perennial or intermittent streams. Fertilizers and/or pesticides are periodically applied. Vegetation ranges from grass/sedge/rush complexes to improved species like timothy, smooth brome, creeping meadow foxtail, orchard grass and clover. Big game species are present in winter and early spring. Forage harvest management is usually an existing practice.

Resource Settings - Continued

Non-irrigated upland hay is found on slopes ranging from 3-30 percent. Vegetation consists of introduced perennial grasses and legumes. Soils vary from loam to silt loams. Renovations occur every 6-10 years. Precipitation is 16 inches or greater and one cutting is common.

Conventionally tilled, surface irrigated hayland on 0-7% slopes. Precipitation is 16 inches or less per year and the growing season is approximately 100-160 days long. Acres of irrigated hayland only represents approximately 200 acres. Small grains and alfalfa hay are grown in rotation, with alfalfa typically maintained for 4 to 6 years. Grazing of crop aftermath may occur. Nutrient, pest, and/or irrigation water management may be less than desirable. Wetland alterations have occurred due to ditching, and improper drainage and stream channel alteration.

Forests and Grazed Forests: The riparian forest consists of mixed conifers and deciduous trees. The associated understory is comprised of grasses and brush species with inclusions of wetter areas. Soils are silt loams and clay loams that are shallow to deep, with low to high rock fragment content. They range from somewhat poorly to well drained. Average annual precipitation ranges from 18 - 35 inches. The forest landscape is characterized by level to nearly level landforms. Riparian grazing units typically exhibit impacts to riparian vegetation and a loss of woody species. Important wildlife species include elk, deer, moose, bear, raptors and songbirds.

Loss of white pine due to blister rust and cedar due to the lack of replanting and wildlife depredation are an increasing concern. Development is also taking up some of the better pine and cedar growing sites. Shade tolerant species such as grand fir and hemlock are increasing due to the natural pattern of succession being altered by: excluding fire, preferentially harvesting of shade intolerant species such as pines and larch and by introducing exotic plants, insects and diseases, such as white pine blister rust.

Ponderosa pine and dryer Douglas fir habitat types are found at elevations ranging from 1,800 to 4,000 feet on a variety of soil types. Annual precipitation is less than 25 inches with hot, dry summers. Slopes are less than 35%. The forest understory is dominated by ninebark/oceanspray and associated brush species. Grass and forb species are common. Livestock grazing occurs during the summer and early fall period, and overgrazing is common. Important wildlife species include elk, deer, moose, bear, raptors and songbirds.

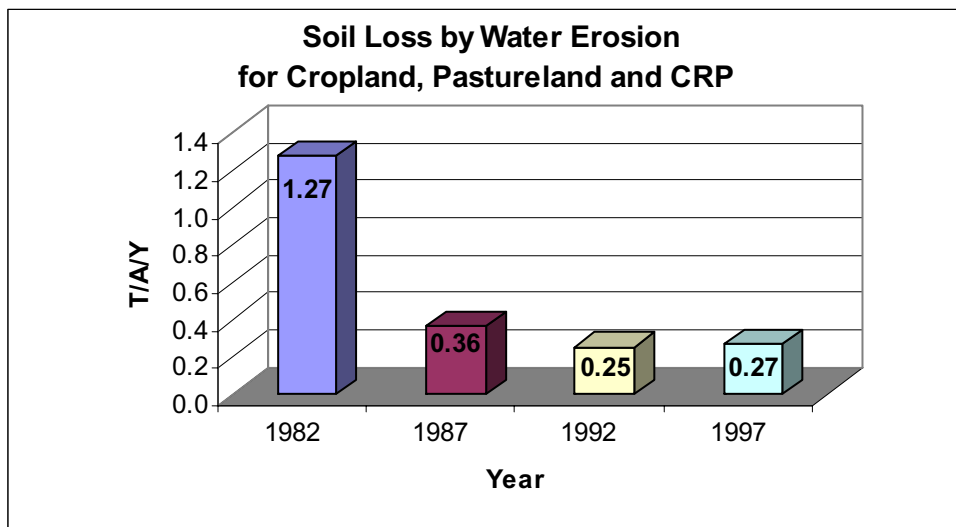
Douglas fir, Grand fir, and wetter habitat types are found at elevations greater than 4,000 feet on a variety of soil types. Slopes are greater than 35%. Annual precipitation is greater than 25 inches, most of which falls in the winter and spring. Summers are warm and relatively dry. The forest understory is dominated by forbs and scattered grass species, with associated brush species such as snowberry, willow and alder. Livestock grazing occurs during the mid-summer and early fall period, and overgrazing is common. Livestock tend to concentrate along the road corridors and riparian areas. Important wildlife species include elk, deer, moose, bear, raptors and songbirds.

Resource Concerns

Sheet and Rill Erosion:

Sheet and rill erosion by water on the sub-basin croplands, pasturelands and CRP have been essentially static since 1982. Water erosion reduction since 1982 is about 1 T/A/Y. Much of this reduction is because of the decrease in cultivated cropland and the increase of non-cultivated cropland. Cultivated cropland has been reduced from about 23,000 acres in 1982 to about 7,000 acres in 1997. Non-cultivated cropland has increased from about 14,000 acres to approximately 30,000 acres in 1997.⁴

Controlling erosion not only sustains the long-term productivity of the land, but also affects the amount of soil, pesticides, fertilizer, and other substances that move into the nation's waters.



Resource Concerns - Continued

| Impacted Water Bodies ^{/9,10} | Stream Miles | Sediment, Siltation or TSS | Nutrients | Temperature | Dissolved Oxygen | Flow Alteration | Other or Unknown |
|--|--------------|----------------------------|-----------|-------------|------------------|-----------------|------------------|
| Cocolalla Lake (PN013_0L) | --- | | x | | x | | |
| Falls Creek (PN018_02a) | --- | | x | | | | |
| Pend Oreille Lake* (PN018L_0L) | --- | | x | | | x | |
| Caribou Creek (PN045_02) | 17.0 | x | | | | | |
| Cedar Creek (PN026_02) | 9.5 | | | x | | | |
| Chloride Creek (PN024_02) | 7.1 | x | | x | | | |
| Cocolalla Creek (PN 012_02, 012_04, PN 014_03, 014_04) | 72.9 | x | | x* | | | |
| Fish Creek (PN 015_02, 015_03) | 17.7 | x | | x* | | | |
| Gold Creek (PN 023_02, 023_03, PN 021_02, 021_03) | 14.4 | x | | x | | | |
| Gold Creek (PN034_02) | 17.8 | | | x | | | x |
| Granite Creek (PN 027_02, 027_03) | 31.2 | | | x | | | |
| Grouse Creek (PN 035_02, 035_03, PN 036_02, 036_03) | 48.1 | x | | x | | | |
| Hellroaring Creek (PN044_02) | 10.9 | | | x | | | x |
| Hoodoo Creek (PN 003_03, 003_02, 003_02a) | 19.2 | x | | x | | | |
| Jeru Creek (PN043_02) | 6.3 | | | x | | | |
| Lower Pack River (PN031_04) | 19.2 | x | x | | | | |
| McCormick Creek (PN042_02) | 10.8 | | | x | | | x |
| NF Grouse Creek (PN037_02) | 17.4 | x | | x | | | |
| NF Gold Creek (PN 025_03, 025_02) | 19.4 | x | | | | | |
| Pend Oreille River (PN 002_02, 002_03, 002_08) | 64.5 | x | | x | | x | x |
| Pend Oreille River (PN 001_02, 001_08) | 13.7 | x | | x | | x | x |
| Rapid Lightning Creek (PN033_03) | 7.8 | | | x | | | x |
| Sand Creek (PN048_03) | 4.0 | | | x | | | |
| Sand Creek (PN 049_02, 049_03) | 19.4 | | | | | | x |
| Schweitzer Creek ((PN052_02) | 6.7 | x | | | | | |
| Trestle Creek (PN030_02) | 21.0 | | | x | | | |
| Trout Creek (PN032_02) | 10.1 | | | x | | | |
| Upper Pack River (PN039_04) | 3.8 | x | | x | | | |
| Upper Pack River (PN041_02) | 56.2 | | | x | | | x |
| West Gold Creek (PN022_02) | 9.6 | x | | x | | | |
| TOTAL STREAM MILES: | 555.7 | | | | | | |

*Listing includes several segments; temperature-impaired segments are bolded. Shading indicates an EPA-approved TMDL. Note: Portions of Pend Oreille Lake have not been assessed.

Pollutant sources in the watershed include hydropower, mining, timber harvest, lakeside development, industrial discharge, and agricultural land use. The majority of listed streams are temperature impaired. Elevated stream temperatures may be due to loss of riparian habitat, stream channel widening, altered flood plain and hyperheic zone hydrology, or other anthropogenic or natural sources. Flow alteration problems exist within the watershed.

Resource Concerns - Continued

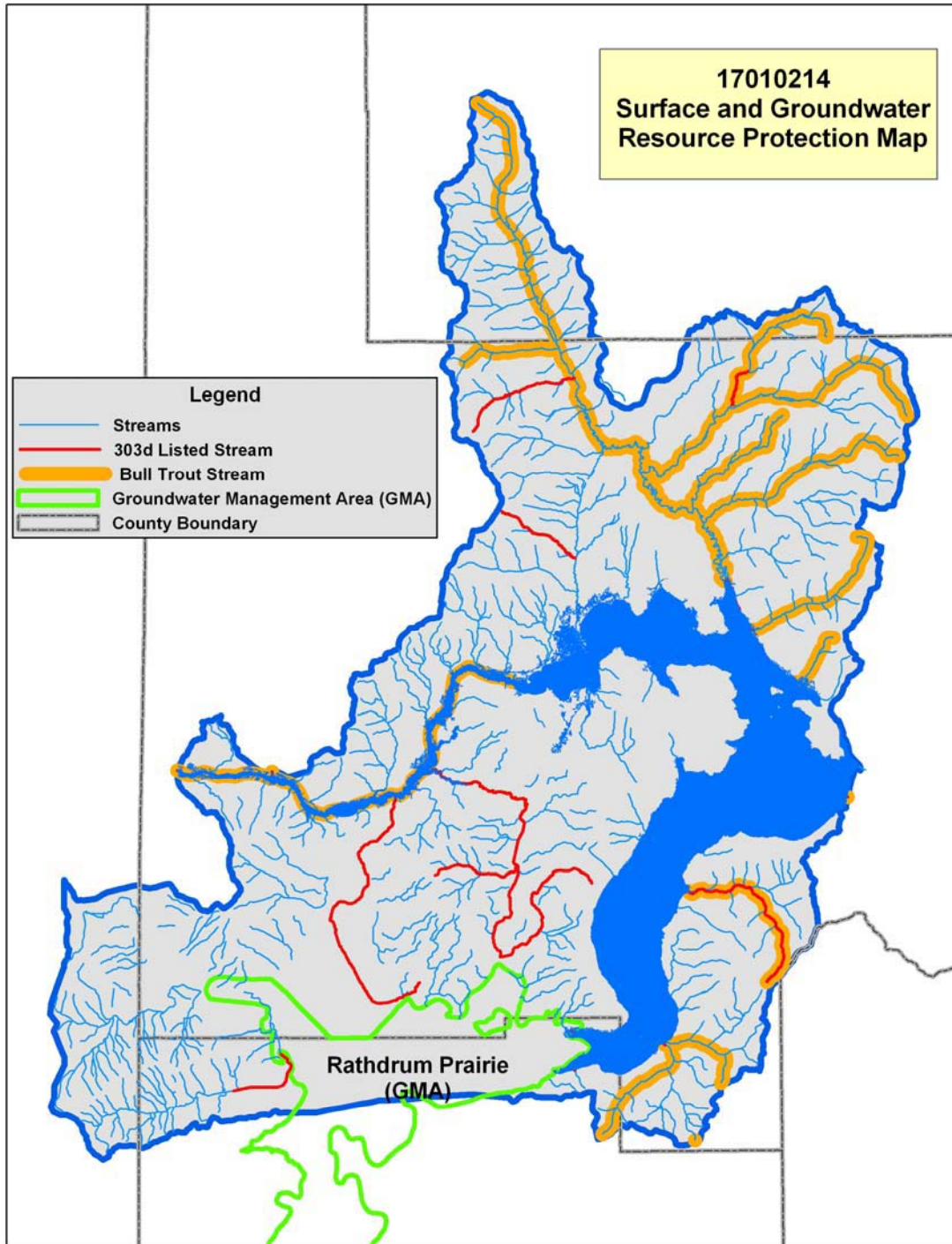
Conservation practices that can be used to address these water quality issues include erosion control, grazing management, irrigation water management, residue management, and riparian buffers.

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| Watershed Projects, Plans, Studies, and Assessments* | |
|--|---|
| Federal: | State: |
| NRCS Watershed Plans/Studies/Assessments ^{14,15} | IDEQ TMDLs ¹⁶ |
| None | Pend Oreille River Subbasin TMDL (2001) |
| | Pend Oreille Lake (nearshore) TMDL (2002) |
| NWPPC Subbasin Plans and Assessments ¹⁸ | IDEQ 319 Projects ¹⁷ |
| Intermountain Province Subbasin Plan (2004) | Pack River Watershed Sediment Reduction (2003) |
| | IDFG Assessments |
| | Bull Trout Assessment (2004) |
| | SCC Plans/Projects ¹⁹ |
| | Pend Oreille River TMDL Implementation (in progress) |
| | Pend Oreille Lake (nearshore) TMDL Implementation Plan (complete) |
| | Hoodoo and Cocolalla Creeks (in progress) |
| | Pack River (in progress) |
| | Cocolalla Lake SAWQP (1996) |
| | Pack River Stream Channel Assessment (2003) |
| | ISDA Regional Water Quality Projects ²⁰ |
| | None |
| | IDWR Comprehensive Basin Plans ²¹ |
| | None |

* Listing includes past efforts in the watershed, and on-going studies and assessments.

Surface and Groundwater Resource Protection [/22, 23, 24](#)



Resource Concerns – Continued

| Resource Concerns/ Issues by Land Use | | | | | | | | |
|---------------------------------------|--|---------|---------|-----------|-------------------------|---------------------------|-----------|---------------------------|
| SWAPA* | Specific Resource Concerns/Issues | Pasture | Hayland | Dry Crops | Surface Irrigated Crops | Sprinkler Irrigated Crops | Rangeland | Grazed or Ungrazed Forest |
| Soil Erosion | Sheet and rill | X | X | X | | | | |
| | Ephemeral or classic gully | X | X | | | | | |
| | Wind | | | | | | | |
| | Streambank | X | X | X | | | | X |
| Water Quantity | Excess surface water runoff, flooding, ponding | X | X | X | | | | |
| Water Quality, Surface | Suspended sediment | X | X | X | | | | X |
| | Nutrients, organics and pesticides | X | X | X | | | | X |
| Water Quality, Ground | Nutrients and organics | X | X | X | | | | |
| | Pesticides | X | X | X | | | | |
| Soil Condition | Organic matter depletion | X | X | X | | | | X |
| | Compaction | X | | X | | | | X |
| Plant Condition | Productivity, health and vigor | X | X | | | | | X |
| | Plants not adapted or suited | X | X | | | | | X |
| | Noxious and invasive plants | X | X | X | | | | X |
| | Wildfire hazard | | | | | | | X |
| Domestic Animals | Inadequate feed or water | X | | | | | | X |
| Fish and Wildlife | Inadequate cover/shelter | X | X | X | | | | X |
| Air Quality | Smoke and airborne soil particulate | | X | X | | | | X |

* SWAPA: - Soil, Water, Air, Plants and Animals

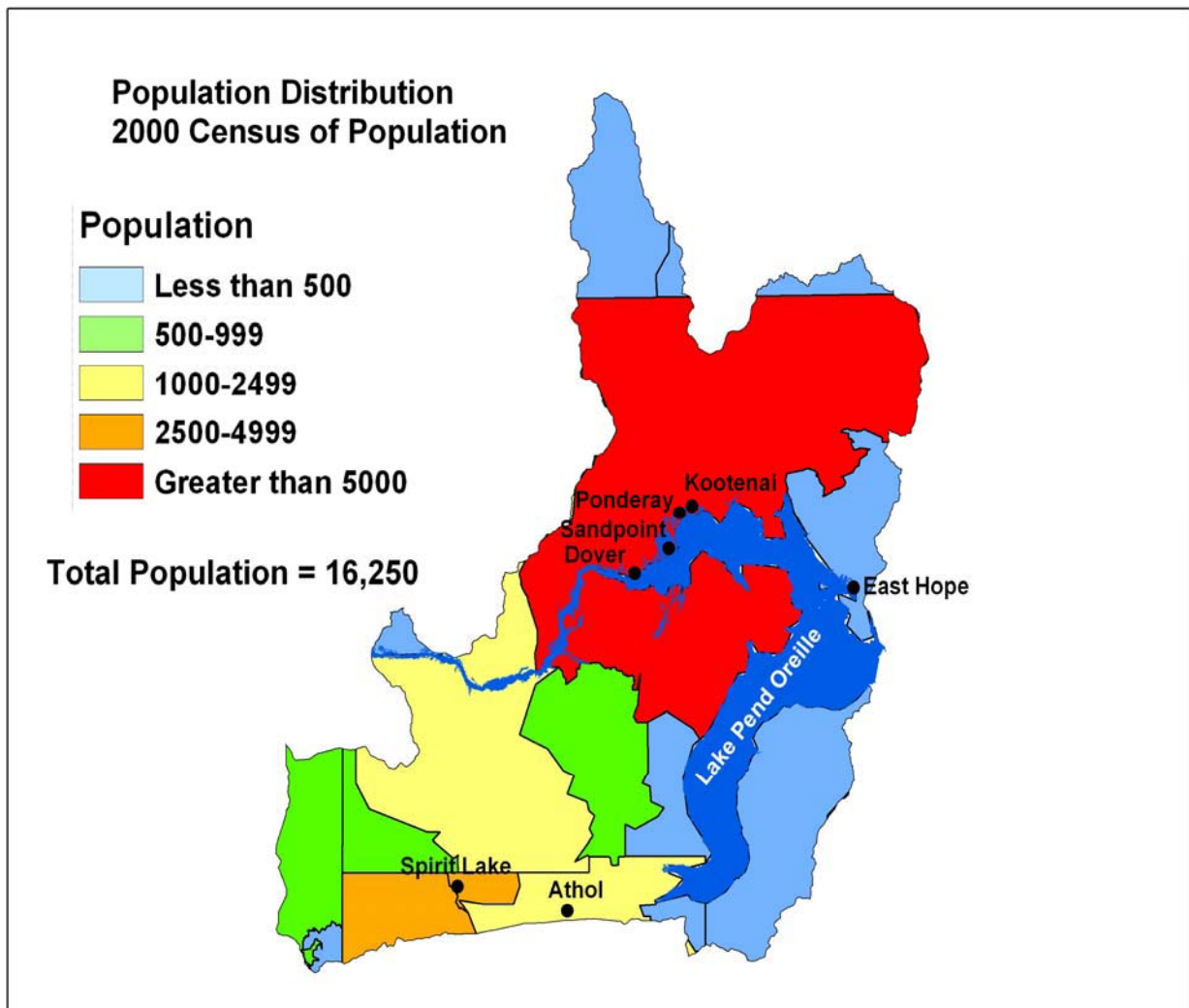
Human considerations: Implementation of conservation practices and enhancement has the potential for change in management and cost of production. Installation of practices will have an upfront cost and require maintenance. In the short run increased management may be required as new techniques are learned. Land may be taken out of production for installation of practices or conversion to other uses, such as wildlife habitat. Long term benefits should result from increased soil health, benefits to water quality and wildlife habitat. Wildfire hazard concerns exist on all land uses.

| FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES ^{/25} | |
|---|---|
| Threatened Species Mammals – Lynx, Grizzly Bear, Woodland Caribou Birds – Bald Eagle Fish – Bull Trout Invertebrates – None Plants – None | Candidate Species Fish - None Birds – None |
| | PROPOSED SPECIES None |
| ESSENTIAL FISH HABITAT – None | CRITICAL FISH HABITAT – Bull Trout (Proposed) |

Census and Social Data^{/26}

Population: 16,250 - Number of Farms: 652

| | 0-49 acres | 50-1000 acres | 1000+ acres |
|------------------------|------------|---------------|-------------|
| Number of Farms | 409 | 241 | 2 |





Pend Oreille Lake - 17010214

Idaho

8 Digit Hydrologic Unit Profile

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Census and Social Data - Continued

Fifty-two percent of farm operators are farmers by occupation. The remaining operators have off-farm jobs as their primary occupation. The majority of operators are male; women make up 23% of the total. Ninety-eight percent of all operators are white. Non-white operators are of Hispanic and American Indian background.

Farm size ranges from less than 10 acres to more than 1,000 acres with an average of 120 acres. Agricultural land in the watershed is a mix of woodland, pasture and hayland, range and cropland. Land users in the watershed utilize Soil and Water Conservation Assistance (SWCA), EQIP, Continuous CRP, WRP and other programs to implement conservation plans.

Farm size, market value of production and government payments to farmers are down over the past several years. Farm sales range from less than \$1,000 to more than \$500,000 per year. Ninety-two percent of farms reported sales of less than \$20,000 per year.

The Census of Agriculture is authorized under PL 105-113 and uses the definition of a farm as any place from which \$1,000 or more of agricultural products are produced or sold, or normally would have been sold, during the census year.

| | Average size farm | Market Value of Production (Average Farm) | Government Payments (Average Farm) |
|--------|-------------------|--|--|
| 1997 | 160 | \$12,500 | \$6,700 |
| 2002 | 120 | \$9,600 | \$5,300 |
| Change | -25.0% | -23.0% | -21.0% |

Economic Profile:

| | Watershed | Idaho | United States |
|-----------------------------|-----------|-----------|---------------|
| Population | 16,250 | | |
| Per Capita Personal Income | \$20,400 | \$24,500 | \$30,400 |
| Median Home value | \$124,500 | \$106,600 | \$119,600 |
| Percent Unemployment | 8.8% | 5.4% | 5.8% |
| Percent Below Poverty Level | 14.1% | 11.7% | 12.1% |



Idaho

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Progress/Status

| PRMS Data | FY99 | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 | Avg /Year | Total |
|--|------|------|------|------|------|------|------|-----------|-------|
| Total Conservation Systems Planned Acres | 0 | 533 | 1208 | 2455 | 386 | | | | |
| Total Conservation Systems Applied Acres | 0 | 460 | 2165 | 3501 | 801 | | | | |
| Conservation Treatment | | | | | | | | | |
| Waste Management (number) | 0 | 0 | 2 | 3 | 0 | 0 | 1 | 0.9 | 6 |
| Riparian Forest Buffers (acres) | 0 | 1 | 0 | 10 | 4 | 0 | 0 | 2.1 | 15 |
| Erosion Control (acres) | 0 | 0 | 1 | 2 | 2 | | | 1.0 | 5 |
| Irrigation Water Management (acres) | 0 | 0 | 0 | 0 | 129 | 0 | 0 | 18.4 | 129 |
| Nutrient Management (acres) | 0 | 0 | 129 | 593 | 160 | 660 | 0 | 220.3 | 1542 |
| Pest Management (acres) | 0 | 0 | 0 | 0 | 0 | 164 | 0 | 23.4 | 164 |
| Prescribed Grazing (acres) | 0 | 0 | 1290 | 1636 | 0 | 0 | 0 | 418.0 | 2926 |
| Trees & Shrubs (acres) | 0 | 20 | 16 | 8 | 34 | 14 | 1 | 13.3 | 93 |
| Residue Management` (acres) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 |
| Wildlife Habitat (acres) | 0 | 9 | 1534 | 36 | 345 | 19 | 0 | 277.6 | 1943 |
| Wetlands (acres) | 0 | 0 | 8 | 0 | 201 | 0 | 0 | 29.9 | 209 |

*Progress in the last seven years has been focused on:

- ~ prescribed grazing
- ~ wildlife habitat management
- ~ nutrient management
- ~ pre-commercial thinning

*Resource concerns that require ongoing attention:

- ~ forest management stand improvement, pre-commercial thinning and tree planting
- ~ noxious weeds
- ~ animal waste from dairy and small beef operations
- ~ livestock impacts from riparian grazing

*Resource concerns that are increasing in importance:

- ~ A growing hardwood tree nursery industry
- ~ Rural-urban interface issues
- ~ small acreage hobby farms
- ~ subdividing with a resultant change in land use
- ~ development on lakes and rivers

Lands Removed from Production through Farm Bill Programs

- Conservation Reserve Program (CRP): **720 acres**
- Wetland Reserve Program (WRP): **52 acres**

Footnotes/Bibliography

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

1. Ownership Layer – Source: This spatial data contains surface management land status (sometimes known as "ownership") and Public Land Survey System (PLSS) information for Idaho. The Bureau of Land Management (BLM) in Idaho creates and maintains these spatial data layers. The primary source of the spatial features is the BLM Geographic Coordinate Database (GCDB), which contains official survey records and corresponding geodetic control information maintained by the BLM Cadastral program. In areas where GCDB records are unavailable, the spatial features are taken from a variety of sources including the BLM Idaho Resource Base Data collection, US Geological Survey Digital Line Graphs (DLGs), and US Forest Service Cartographic Feature Files (CFFs), among others. The source of the attribute information is the BLM Master Title Plats (MTPs) and careful cooperation with other government agencies that own or manage land parcels. The layer is available from the Inside Idaho (Interactive Numeric & Spatial Information Data Engine): <http://inside.uidaho.edu> For current ownership status, consult official records at appropriate federal, state or county offices. Ownership classes grouped to calculate Public Ownership vs. Private Ownership.
2. National Land Cover Dataset (NLCD): NLCD 92 (National Land Cover Data 1992) is a 21-category land cover classification scheme that has been applied consistently over the conterminous U.S. It is based primarily on the unsupervised classification of Landsat TM (Thematic Mapper) 1992 imagery. Ancillary data sources included topography, census, agricultural statistics, soil characteristics, other land cover maps, and wetlands data. The NLCD 92 classification is provided as raster data with a spatial resolution of 30 meters. The layer is available from: <http://edcwww.cr.usgs.gov/products/landcover/nlcd.html>
Description: 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. Farm Services Agency, USDA, 2005. CRP acres from GIS (CLU) database.
4. 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 due to 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/>
5. PRISM Climate Mapping Project. Annual precipitation data. See http://www.ocs.orst.edu/prism_new.html for further information.
6. Irrigated Adjudicated Water Rights – Idaho Department of Water Resources
<http://www.idwr.idaho.gov/water/srba/mainpage/>
7. USGS Idaho Streamflows, gaging station data (<http://waterdata.usgs.gov/id/nwis/sw/>) and estimates for ungaged streams based on statistical data (<http://streamstats.usgs.gov/html/idaho.html>).
8. National Hydrology Dataset (NHD). Developed by the US Geological Survey in cooperation with U.S. Environmental Protection Agency and other state and local partners (<http://nhd.usgs.gov>).
9. IDEQ. 2002 Integrated Report (approved December 2005).
http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/integrated_report.cfm.

10. IDEQ. 2001. Clark Fork/Pend Oreille Subbasin Assessment and TMDL. http://www.deq.state.id.us/water/data_reports/surface_water/tmdls/pend_oreille_clark_fork/pend_oreille_clark_fork.cfm. IDEQ. 2002. TMDL for Nutrients for the Near Shore Waters of Pend Oreille Lake, Idaho. http://www.deq.state.id.us/water/data_reports/surface_water/tmdls/pend_oreille_lake_ns/pend_oreille_lake_ns_nutrient.cfm
11. 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/>
12. (Dairy) Idaho Department of Water Resources: http://www.idwr.state.id.us/gisdata/gis_data.htm
13. (Feedlot) Idaho State Department of Agriculture: <http://www.agri.state.id.us/> FOIA request.
14. Natural Resource Conservation Service, Watershed Projects Planned and Authorized, <http://www.nrcs.usda.gov/programs/watershed>
15. Natural Resource Conservation Service, Watershed Plans, Studies and Assessments completed, http://www.nrcs.usda.gov/programs/watershed/Surveys_Plng.html#Watershed%20Surveys%20and%20Plan
16. Idaho Department of Environmental Quality (IDEQ), Surface Water Quality: Subbasin Assessments, TMDLs, and Implementation Plans. http://www.deq.state.id.us/water/data_reports/surface_water/tmdls/sba_tmdl_master_list.cfm
17. Idaho Department of Environmental Quality, Watershed protection: Nonpoint source management (319 grant), Reports and program resources. http://www.deq.state.id.us/water/data_reports/surface_water/nps/reports.cfm
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>
19. Idaho Soil Conservation Commission (SCC), TMDL watershed implementation plans: agricultural com http://www.deq.state.id.us/water/data_reports/surface_water/nps/reports.cfm
<http://www.scc.state.id.us/PDF/Ag%20Component%20Status%20Report%20-%202004.pdf>
20. Idaho State Department of Agriculture (ISDA). Groundwater water quality regional projects. <http://www.agri.state.id.us/Categories/Environment/water/gwReports.php>
21. Idaho Department of Water Resources (IDWR). State Comprehensive Water Plans. http://www.idwr.idaho.gov/waterboard/planning/Comp_Basin_Plans.htm
22. 303d Listed Streams designated by the Idaho Department of Environmental Quality (1998) and approved by the Environmental Protection Agency, Section 303d Clean Water Act.
23. Groundwater Management Areas and Critical Groundwater Management Areas designated by the Idaho Department of Water Resources. <http://www.idwr.idaho.gov/hydrologic/projects/gwma/>
24. Nitrate Priority Areas. IDEQ has developed a list of degraded ground water areas. This list focuses on nitrate and ranks the top 25 nitrate-degraded areas (referred to as "nitrate priority areas") in the state based on the severity of the degradation, the population affected, and the trend; the rank of "1" indicates the most severely impacted area in the state. http://www.deq.state.id.us/water/prog_issues/ground_water/nitrate.cfm#ranking



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25. NRCS Field Office Technical Guide, Section II, Threatened and Endangered List and the Idaho Conservation Data Center, Idaho Department of Fish and Game
<http://fishandgame.idaho.gov/cms/tech/CDC/>
26. 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. Census, 2000 by zip code and adjusted by percent of zip code in the HUC.
http://www.nass.usda.gov/Census_of_Agriculture/Census_by_State/Idaho/index.asp



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Conservation Activities for Pasture and Hayland *

*The following Current Conditions Tables have been developed to estimate the present level of conservation installed within the HUC, based on what has been reported in the PRMS & PRS Reporting system for the Years 1999 through 2005.

| Current Conditions | Pasture & Hayland | Riparian/Wetland Potential | Total Acres |
|-----------------------------------|-------------------|----------------------------|-------------|
| Total Pasture and Hayland | 48,970 | 7,330 | 56,360 |
| Typical Management Unit/Ownership | 120 | | |
| Current Farm Bill participation | <1% | | |

Current Level of Treatment for Pasture and Hayland:

| Practices | Quantity | | Costs | | Effects | | | | Implementation | | | |
|--------------------------|----------|----------|----------------------------|---------------------------|--------------------|---------------|--------------|----|----------------|------|------|-------|
| | Unit | Quantity | Additional Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Fish Habitat | WQ | FQIP | WHIP | CRFP | Other |
| Pasture & Hayland | Ac. | 48,970 | | | -3 | -/+ | -2 | -3 | | | | |
| Prescribed Grazing (528) | Ac. | 2,636 | \$0 | \$ 13,200 | | | | | X | | | |



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Conservation Activities for Pasture/Hayland * - Continued

*The following Future Conditions Tables have been developed to estimate the future level of conservation needs and costs within the HUC, based on the Idaho Guidance Documents for the CRAs. Quantities needed are based on a limited inventory of exactly what has been previously installed and professional judgement.

| Future Conditions | | Quantity | | Costs | | Effects | | | | Implementation | | |
|---|------|----------|----------------------------|---------------------------|--------------------|---------------|---------|----|----|----------------|------|-------|
| Practices | Unit | Quantity | Additional Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQ | WHP | CRFP | Other |
| | | | Total Acres | | | | | | | | | |
| Total Pasture and Hayland | | | 48,970 | | | | | | | | | |
| Total Conversion to Riparian Pasture RMS | | | 7,330 | | | | | | | | | |
| Total Acres | | | 56,300 | | | | | | | | | |
| Project Future Level of Treatment for Pasture and Hayland: | | | | | | | | | | | | |
| Pasture & Hayland | Ac. | 48,970 | | | 3 | 2 | 3 | 3 | | | | |
| Fence (382) | Ft. | 807,840 | \$ 1,413,700 | \$ 28,300 | | | | | X | | | X |
| Nutrient Management (590) | Ac. | 48,970 | \$ 734,600 | \$ 244,900 | | | | | X | | | X |
| Pasture & Hayland Planting (512) | Ac. | 19,590 | \$ 1,959,000 | \$ 19,600 | | | | | X | | | X |
| Pest Management (595) | Ac. | 48,970 | \$ 1,469,100 | \$ 489,700 | | | | | X | | | X |
| Pipeline (516) | Ft. | 807,840 | \$ 2,181,200 | \$ 43,600 | | | | | X | | | X |
| Prescribed Grazing (528) | Ac. | 48,970 | \$ 695,000 | \$ 231,700 | | | | | X | | | X |
| Spring Development (574) | No | 153 | \$ 359,600 | \$ 1,800 | | | | | X | X | | X |
| Tree/Shrub Establishment (612) | Ac. | 2,450 | \$ 1,102,500 | \$ 11,000 | | | | | X | | | X |
| Upland Wildlife Management (645) | Ac. | 9,790 | \$ 146,900 | \$ 49,000 | | | | | X | | | X |
| Watering Facility (614) | No. | 306 | \$ 306,000 | \$ 3,100 | | | | | X | | | X |



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Conservation Activities for Pasture/Hayland - Continued

| Future Conditions - Continued | | | | | | | | | | | | |
|-----------------------------------|----------|----------|----------------------------|---------------------------|--------------------|---------------|---------|----|----------------|-----|------|-------|
| Practices | Quantity | | Costs | | Effects | | | | Implementation | | | |
| | Unit | Quantity | Additional Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Habitat | WQ | FOIP | WHP | CRFP | Other |
| Riparian Pasture & Hayland | Ac. | 7,330 | | | 3 | +1 | +3 | +3 | | | | |
| Channel Bank Vegetation (322) | Ac. | 120 | \$ 600,000 | \$ 12,000 | | | | | X | | | X |
| Channel Stabilization (584) | Ft. | 17,250 | \$ 310,500 | \$ 1,600 | | | | | X | | | X |
| Fence (382) | Ft. | 118,800 | \$ 207,900 | \$ 4,200 | | | | | X | X | | X |
| Nutrient Management (590) | Ac. | 7,330 | \$ 110,000 | \$ 36,700 | | | | | X | | | X |
| Pasture & Hayland Planting (512) | Ac. | 2,930 | \$ 293,000 | \$ 2,900 | | | | | X | | | X |
| Pest Management (595) | Ac. | 7,330 | \$ 219,900 | \$ 73,300 | | | | | X | | | X |
| Pipeline (516) | Ft. | 121,440 | \$ 327,900 | \$ 6,600 | | | | | X | | | X |
| Prescribed Grazing (528) | Ac. | 7,330 | \$ 110,000 | \$ 36,700 | | | | | X | | | X |
| Spring Development (574) | No | 23 | \$ 54,100 | \$ 300 | | | | | X | X | | X |
| Riparian Herbaceous Cover (390) | Ac. | 730 | \$ 36,500 | \$ 400 | | | | | X | X | | X |
| Riparian Forest Buffer (391) | Ac. | 360 | \$ 1,080,000 | \$ 10,800 | | | | | X | | | X |
| Streambank & Shoreline Prot (580) | Ft. | 528,000 | \$ 12,672,000 | \$ 1,267,200 | | | | | X | | | X |
| Stream Habitat Improvement (395) | Ac. | 80 | \$ 1,432,000 | \$ 28,600 | | | | | X | | | X |
| Tree/Shrub Establishment (612) | Ac. | 1,830 | \$ 823,500 | \$ 8,200 | | | | | X | | | X |
| Upland Wildlife Management (645) | Ac. | 1,460 | \$ 21,900 | \$ 7,300 | | | | | X | | | X |
| Use Exclusion (472) | Ac. | 370 | \$ 13,000 | \$ 400 | | | | | X | X | | X |
| Watering Facility (614) | No. | 45 | \$ 45,000 | \$ 500 | | | | | X | | | X |
| Wetland Wildlife Management (644) | Ac. | 1,460 | \$ 21,900 | \$ 7,300 | | | | | X | | | X |
| Total RMS Costs | | | \$ 28,746,700 | \$ 2,627,700 | | | | | | | | |



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Conservation Activities for Pasture/Hayland - Continued

| Potential RMS Effects Summary for Pasture and Hayland | | |
|---|----------------------|----------------------|
| Cost Items and Programs | Costs | O&M Costs |
| Non Farm Bill Programs (5 percent of total) | \$ 1,437,300 | \$ 131,400 |
| Potential Farm Bill Programs 95 percent of total | \$ 27,309,400 | \$2,496,300 |
| Annual Management Incentives (3 yrs - Incentive Payments) | \$ 3,529,300 | \$ 1,176,600 |
| Operator Investment (25% Cost Share) | \$ 6,827,400 | N/A |
| Federal Costs (75% Cost Share) | \$ 20,482,000 | N/A |
| Total RMS Costs | \$ 27,309,400 | \$2,627,700 |
| Estimated Level of Participation | 75% | |
| Total Acres in RMS System | 42,200 | |
| Total Annual Forage Production Benefits (AUM) | 140,900 | |
| Improves riparian habitat for ESA endangered & threatened species | | |



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Conservation Activities for Grazed and Ungrazed Forestland

| Current Conditions | | | |
|---------------------------------|--------|----------|-------------|
| | Grazed | Ungrazed | Total Acres |
| Total Private Forestland | 15,230 | 289,410 | 304,640 |
| Typical Forest Management Unit | 120 | | |
| Current Farm Bill participation | <1% | | |

| Current Level of Treatment for Forestland: | | | | | | | | | | | | |
|---|------------|----------------|-----------------|---------------------------|--------------------|---------------|---------|----|-----|----------------|------|-------|
| Forestland | Quantity | | Costs | | | Effects | | | | Implementation | | |
| | Unit | Quantity | Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Habitat | WQ | FOP | WHP | CRFP | Other |
| Practices | | | | | | | | | | | | |
| Forestland (Grazed) | Ac. | 15,230 | | | +/- | +/- | -2 | -2 | | | | |
| Prescribed Grazing (528) | Ac. | 1,580 | \$0 | \$ 7,900 | | | | | X | | | |
| Forest Stand Improvement (666) | Ac. | 18 | \$0 | - | | | | | X | | | |
| Tree and Shrub Establishment (612) | Ac. | 16 | \$0 | 100 | | | | | X | | | |
| Forestland (Ungrazed) | Ac. | 289,410 | | | | | | | | | | |
| Forest Stand Improvement (666) | Ac. | 1,840 | \$0 | 4,100 | +/- | +/- | -2 | -2 | X | | | |
| Forest Site Preparation (490) | Ac. | 10 | \$0 | - | | | | | X | | | X |
| Forest Trails and Landings (655) | Ac. | 3 | \$0 | - | | | | | X | | | X |
| Pest Management (595) | Ac. | 3 | \$0 | - | | | | | X | | | X |
| Streambank&Shoreline Protec (580) | Ft. | 900 | \$0 | 2,200 | | | | | X | | | |
| Tree and Shrub Establishment (612) | Ac. | 67 | \$0 | 300 | | | | | X | | | X |
| Upland Wildlife Management (645) | Ac. | 692 | \$0 | 3,500 | | | | | X | X | | X |
| Wetland Wildlife Management (644) | Ac. | 213 | \$0 | 1,100 | | | | | X | X | | X |



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Conservation Activities for Grazed and Ungrazed Forestland - Continued

| Forestland | Quantity | | Costs | | Effects | | | | Implementation | | | | |
|--|---------------|-----------------|-----------------|--------------------------|--------------------|---------------|---------|----|----------------|------|-----|------|-------|
| | Unit | Quantity | Investment Cost | Annual O&M and Mgt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQIP | WHIP | WRP | CRFP | Other |
| Future Conditions | Grazed | Ungrazed | Riparian | Total Acres | | | | | | | | | |
| Forestland | 15,230 | 251,790 | 37,620 | 304,640 | | | | | | | | | |
| Project Future Level of Treatment for Grazed and Ungrazed Forestland: | | | | | | | | | | | | | |
| Forestland | | | | | | | | | | | | | |
| Practices | Unit | Quantity | Investment Cost | Annual O&M and Mgt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQIP | WHIP | WRP | CRFP | Other |
| Forestland (Grazed) | Ac. | 15,230 | | | +2 | +2 | +3 | +3 | X | | | | X |
| Access Road (560) | Ft. | 15,700 | \$ 219,800 | \$ 33,000 | | | | | X | | | | X |
| Animal Trails and Walkways (575) | Ft. | 126,720 | \$ 633,600 | \$ 31,700 | | | | | X | | | | X |
| Critical Area Planting (342) | Ac. | 1,520 | \$ 722,000 | \$ 21,700 | | | | | X | | | | X |
| Fence (382) | Ft. | 250,800 | \$ 438,900 | \$ 8,800 | | | | | X | | | | X |
| Firebreak (394) | Ft. | 63,360 | \$ 122,300 | \$ 2,400 | | | | | X | | | | X |
| Forest Site Preparation (490) | Ac. | 7,620 | \$ 1,905,000 | \$ - | | | | | X | | | | X |
| Forest Stand Improvement (666) | Ac. | 7,620 | \$ 3,420,900 | \$ 17,100 | | | | | X | | | | X |
| Forest Trails and Landings (655) | Ac. | 152 | \$ 144,400 | \$ 700 | | | | | X | | | | X |
| Nutrient Management (590) | Ac. | 15,230 | \$ 228,500 | \$ 76,200 | | | | | X | | | | X |
| Pest Management (595) | Ac. | 15,230 | \$ 456,900 | \$ 152,300 | | | | | X | | | | X |
| Pipeline (516) | Ft. | 250,800 | \$ 677,200 | \$ 13,500 | | | | | X | | | | X |
| Prescribed Grazing (528) | Ac. | 15,230 | \$ 204,800 | \$ 76,200 | | | | | X | | | | X |
| Riparian Forest Buffer (391) | Ac. | 73 | \$ 219,000 | \$ 2,200 | | | | | X | | | | X |
| Spring Development (574) | No | 48 | \$ 112,800 | \$ 560 | | | | | X | X | | | X |
| Stream Habitat Improvement (395) | Ac. | 30 | \$ 537,000 | \$ 10,700 | | | | | X | | | | X |
| Streambank&Shoreline Protec (580) | Ft. | 105,600 | \$ 2,534,400 | \$ 253,400 | | | | | X | | | | X |
| Tree/Shrub Establishment (612) | Ac. | 3,810 | \$ 1,707,300 | \$ 17,100 | | | | | X | | | | X |
| Upland Wildlife Management (645) | Ac. | 3,040 | \$ 35,200 | \$ 11,700 | | | | | X | X | | | X |
| Watering Facility (614) | No. | 95 | \$ 95,000 | \$ 1,000 | | | | | X | | | | X |



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Future Conditions - Continued

| Forestland (Ungrazed) | Ac. | 251,790 | | | | +2 | +2 | +3 | +3 | | | | | | | | | | |
|-----------------------------------|------------|---------------|----------------------|----------------------|--|----|-----------|-----------|-----------|--|--|--|--|--|--|--|--|--|---|
| Access Road (560) | Ft. | 259,700 | \$ 3,635,800 | \$ 545,400 | | | | | | | | | | | | | | | X |
| Critical Area Planting (342) | Ac. | 25,179 | \$ 11,960,000 | \$ 358,800 | | | | | | | | | | | | | | | X |
| Firebreak (394) | Ft. | 1,037,520 | \$ 2,002,400 | \$ 40,000 | | | | | | | | | | | | | | | X |
| Forest Site Preparation (490) | Ac. | 125,890 | \$ 31,470,000 | \$ - | | | | | | | | | | | | | | | X |
| Forest Stand Improvement (666) | Ac. | 125,890 | \$ 55,822,500 | \$ 279,100 | | | | | | | | | | | | | | | X |
| Forest Trails and Landings (655) | Ac. | 2,520 | \$ 2,391,200 | \$ 12,000 | | | | | | | | | | | | | | | X |
| Nutrient Management (590) | Ac. | 251,790 | \$ 3,776,900 | \$ 1,259,000 | | | | | | | | | | | | | | | X |
| Pest Management (595) | Ac. | 251,790 | \$ 7,553,600 | \$ 2,517,900 | | | | | | | | | | | | | | | X |
| Riparian Forest Buffer (391) | Ac. | 1,210 | \$ 3,630,000 | \$ 36,300 | | | | | | | | | | | | | | | X |
| Stream Habitat Improvement (395) | Ac. | 505 | \$ 9,039,500 | \$ 180,800 | | | | | | | | | | | | | | | X |
| Streambank&Shoreline Protec (580) | Ft. | 1,752,960 | \$ 42,049,400 | \$ 4,204,900 | | | | | | | | | | | | | | | X |
| Tree/Shrub Establishment (612) | Ac. | 62,950 | \$ 28,297,400 | \$ 283,000 | | | | | | | | | | | | | | | X |
| Upland Wildlife Management (645) | Ac. | 50,360 | \$ 745,000 | \$ 248,300 | | | | | | | | | | | | | | | X |
| Wetland Wildlife Management (644) | No. | 1,880 | \$ 25,000 | \$ 8,300 | | | | | | | | | | | | | | | X |
| Forestland Riparian | Ac. | 37,620 | | | | | +2 | +3 | +3 | | | | | | | | | | |
| Access Road (560) | Ft. | 38,800 | \$ 543,200 | \$ 81,500 | | | | | | | | | | | | | | | X |
| Animal Trails and Walkways (575) | Ft. | 311,520 | \$ 1,557,600 | \$ 77,900 | | | | | | | | | | | | | | | X |
| Critical Area Planting (342) | Ac. | 3,760 | \$ 1,786,000 | \$ 53,600 | | | | | | | | | | | | | | | X |
| Fence (382) | Ft. | 620,400 | \$ 1,085,700 | \$ 21,700 | | | | | | | | | | | | | | | X |
| Forest Site Preparation (490) | Ac. | 18,810 | \$ 4,702,500 | \$ - | | | | | | | | | | | | | | | X |
| Forest Stand Improvement (666) | Ac. | 18,810 | \$ 8,464,500 | \$ 42,300 | | | | | | | | | | | | | | | X |
| Forest Trails and Landings (655) | Ac. | 375 | \$ 356,300 | \$ 1,800 | | | | | | | | | | | | | | | X |
| Nutrient Management (590) | Ac. | 37,620 | \$ 564,300 | \$ 188,100 | | | | | | | | | | | | | | | X |
| Pest Management (595) | Ac. | 37,620 | \$ 1,128,600 | \$ 376,200 | | | | | | | | | | | | | | | X |
| Pipeline (516) | Ft. | 620,400 | \$ 1,675,100 | \$ 33,500 | | | | | | | | | | | | | | | X |
| Prescribed Grazing (528) | Ac. | 37,620 | \$ 564,300 | \$ 188,100 | | | | | | | | | | | | | | | X |
| Riparian Forest Buffer (391) | Ac. | 175 | \$ 525,000 | \$ 5,300 | | | | | | | | | | | | | | | X |
| Spring Development (574) | No | 118 | \$ 277,300 | \$ 1,400 | | | | | | | | | | | | | | | X |
| Stream Habitat Improvement (395) | Ac. | 73 | \$ 1,306,700 | \$ 26,100 | | | | | | | | | | | | | | | X |
| Streambank&Shoreline Protec (580) | Ft. | 253,440 | \$ 6,082,600 | \$ 608,300 | | | | | | | | | | | | | | | X |
| Tree/Shrub Establishment (612) | Ac. | 9,410 | \$ 4,234,500 | \$ 42,300 | | | | | | | | | | | | | | | X |
| Upland Wildlife Management (645) | Ac. | 7,530 | \$ 113,000 | \$ 37,700 | | | | | | | | | | | | | | | X |
| Watering Facility (614) | No. | 235 | \$ 235,000 | \$ 2,400 | | | | | | | | | | | | | | | X |
| Total RMS Costs | | | \$252,015,900 | \$ 12,492,300 | | | | | | | | | | | | | | | |



Idaho

Pend Oreille Lake - 17010214
8 Digit Hydrologic Unit Profile

February 2006

Conservation Activities for Grazed and Ungrazed Forestland – Continued

| Potential RMS Effects Summary for Private Grazed and Ungrazed | | | |
|---|--|-----------------------|----------------------|
| Cost Items and Programs | | Costs | O&M Costs |
| Non Farm Bill Programs (5 percent of total) | | \$ 12,600,800 | \$ 624,600 |
| Potential Farm Bill Programs 95 percent of total | | \$ 239,415,100 | \$ 11,867,700 |
| Annual Management Incentives (3 yrs - Incentive Payments) | | \$ 15,396,100 | \$ 5,140,000 |
| Operator Investment (25% Cost Share) | | \$ 59,853,800 | N/A |
| Federal Costs (75% Cost Share) | | \$ 179,561,300 | N/A |
| Total RMS Costs | | \$ 239,415,100 | \$ 12,492,300 |
| Estimated Level of Participation | | 75% | |
| Total Acres in RMS System | | 4,600 | |
| Total Annual Forage Production Benefits (AUM) | | 152,300 | |
| Improves infiltration and storage of water in soil profile | | | |
| Improves upland wildlife habitat for elk, deer, antelope and other species | | | |
| Improves water quality by reducing erosion and sediment delivery to streams | | | |