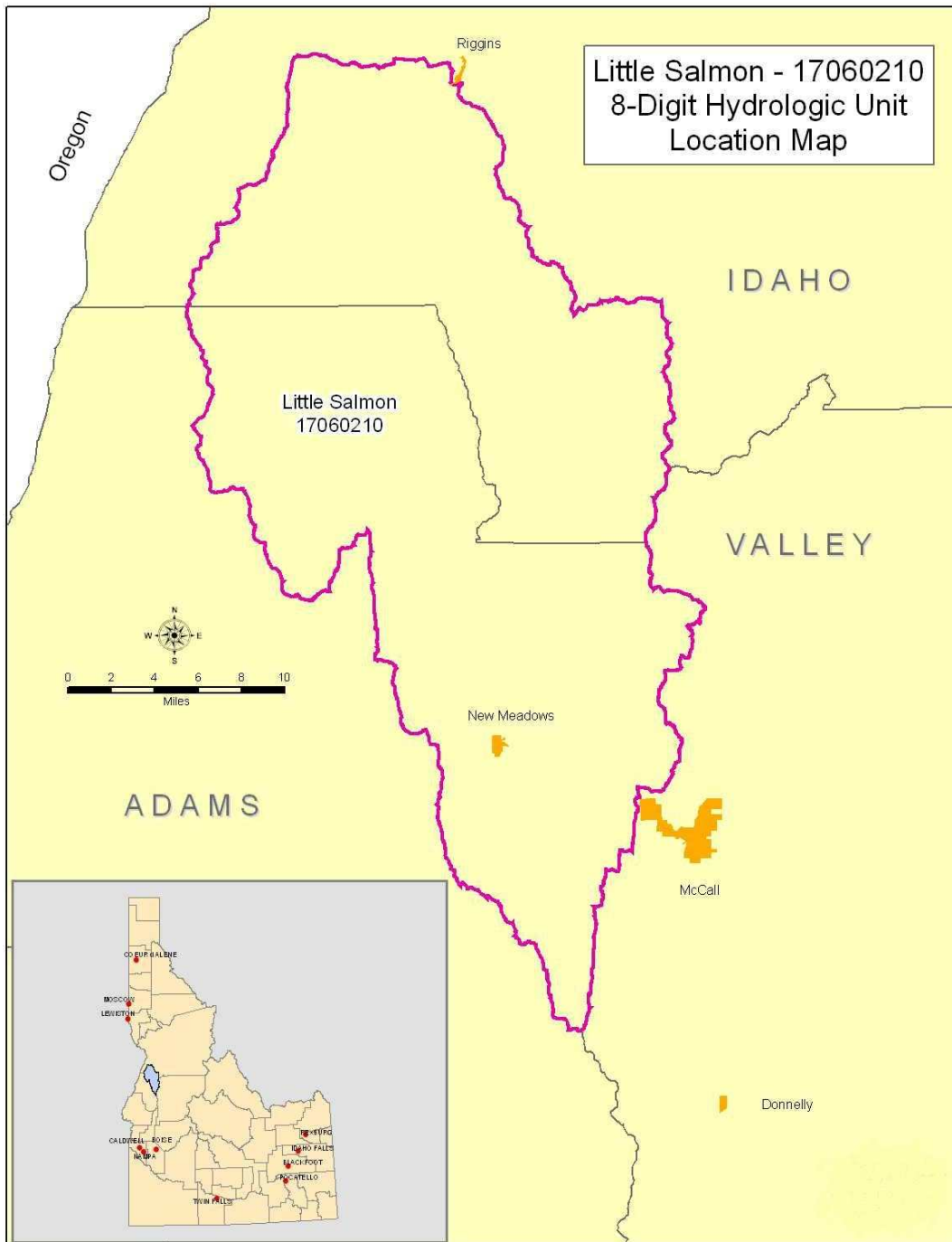


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## Introduction

The Little Salmon 8-Digit Hydrologic Unit Code (HUC) subbasin is 369,080 acres. Adams County contains fifty nine percent of the watershed; forty one percent is located in Idaho County. Sixty nine percent of the subbasin is public land; thirty one percent is privately owned. The Nez Perce tribe is reported to own a small parcel, less than five acres, near Rapid River (IWRB, 2001).

Seventy two percent of the watershed is forested, 14 percent is shrubland or rangeland, and 12 percent is grass, pasture or hayland. Less than one percent of the basin is cropland. The remaining two percent is water, wetland, developed or barren.

Elevations range from less than 1800 feet in the northern portion of the watershed, near the town of Riggins, to over 9000 feet along the the watershed's western edge. In the uplands, slopes commonly have gradients of 60% or more. The upper half of the watershed is a meadow area surrounded by forested slopes. The Little Salmon River gradient changes midway through the watershed as it flows through a steep sloped canyon for approximately five miles before the gradient flattens out as it approaches its confluence with the Salmon River near the town of Riggins (IDEQ, 2006).

Conservation assistance is provided by two Soil and Water Conservation Districts, and two Resource Conservation and Development offices.

## Profile Contents

[Introduction](#)

[Physical Description](#)

[Landuse Map & Precipitation Map](#)

[Common Resource Area](#)

[Resource Settings](#)

[Resource Concerns](#)

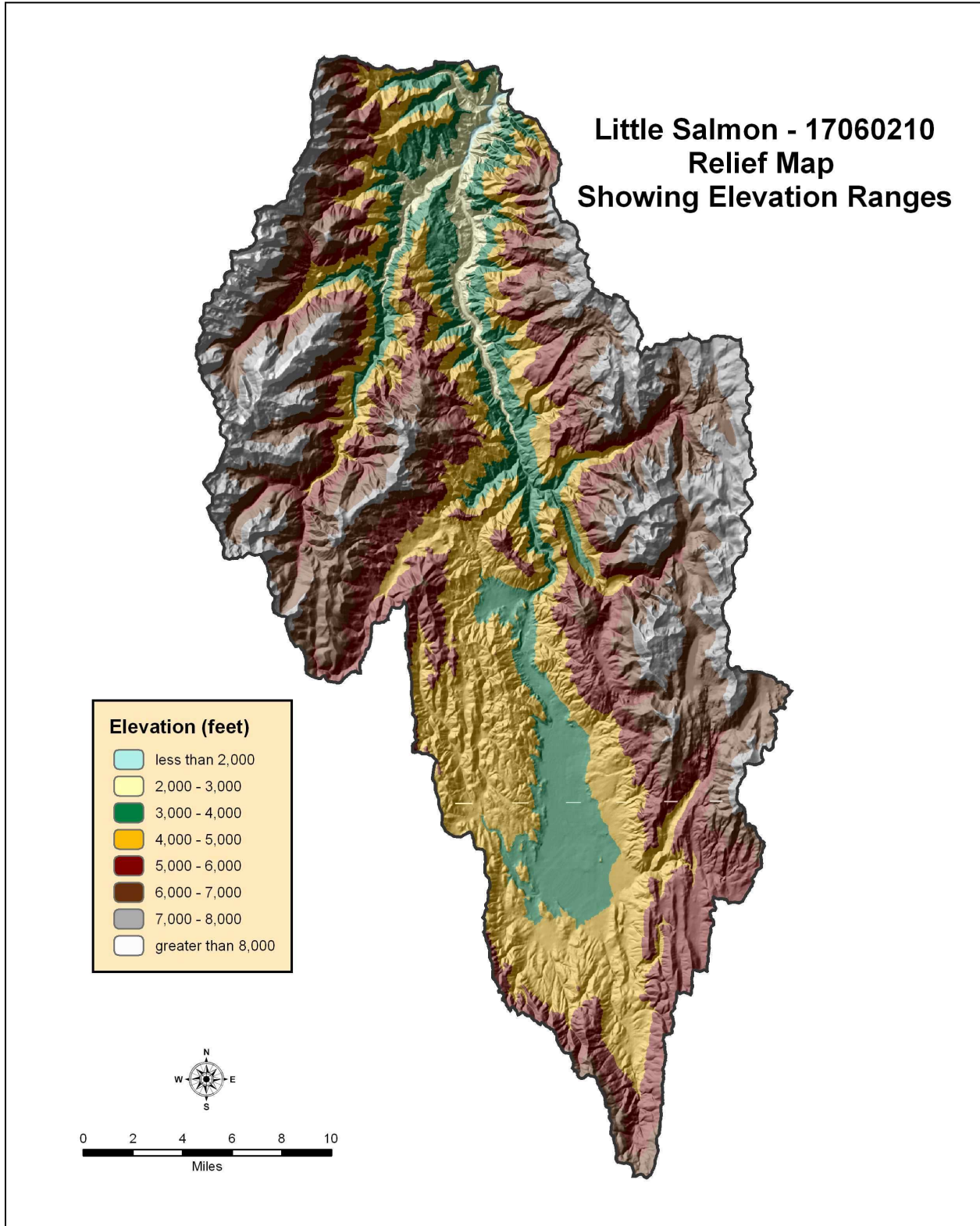
[Census and Social Data](#)

[Progress/Status](#)

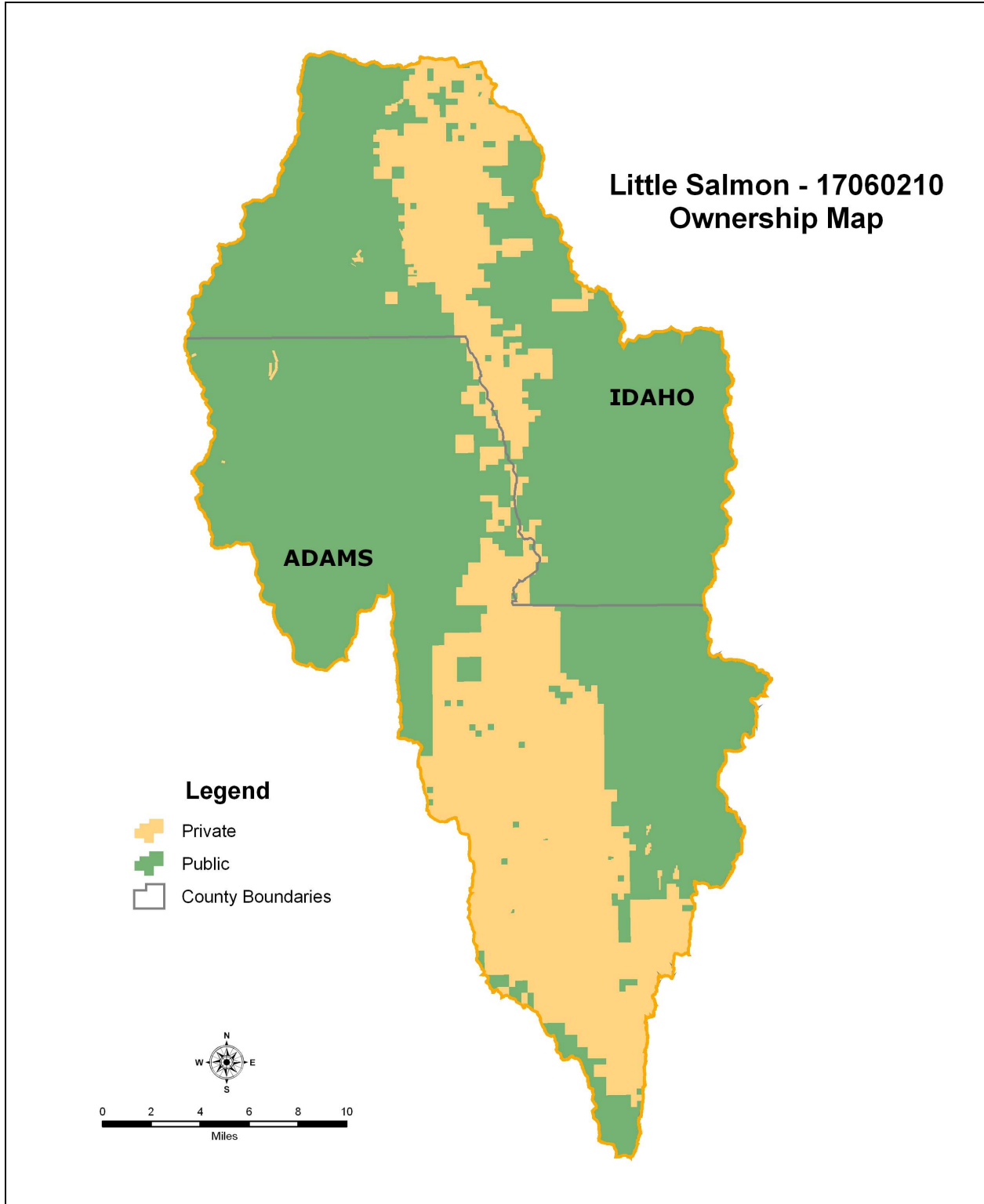
[Footnotes/Bibliography](#)

[Future Conservation Needs](#)

**Relief Map**



**General Ownership**





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## Physical Description

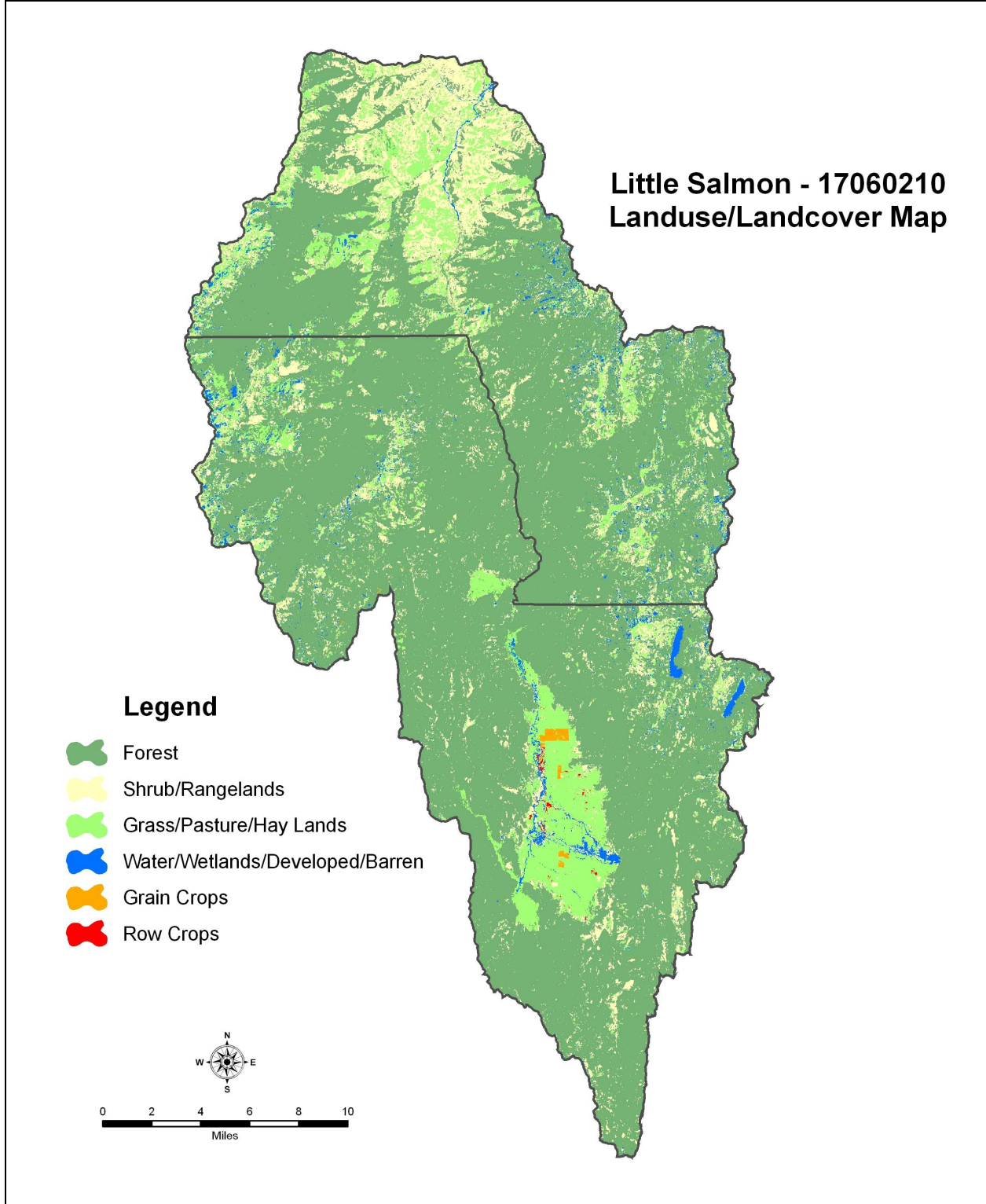
Land Cover/ Land Use (NLCD <sup>/2</sup> )	Ownership - (2003 Draft BLM Surface Map Set <sup>/1</sup> )							Totals	% of HUC
	Public		Private		Tribal				
	Acres	%	Acres	%	Acres	%			
Forest	194,751	53%	69,946	19%			<b>264,697</b>	<b>72%</b>	
Grain Crops	68	<1%	477	<1%			<b>545</b>	<b>&lt;1%</b>	
Conservation Reserve <sup>/3</sup> Program (CRP) Land		--	14	<1%			<b>14</b>	<b>&lt;1%</b>	
Wetlands Reserve Program (WRP) Land			274				<b>274</b>	<b>&lt;1</b>	
Grass/Pasture/Hay Lands	21,941	6%	22,411	6%			<b>44,352</b>	<b>12%</b>	
Orchards/Vineyards/Berries		--		--		--		<b>--</b>	
Row Crops		--	235	<1%			<b>235</b>	<b>&lt;1%</b>	
Shrub/Rangelands	31,698	9%	19,352	5%			<b>51,050</b>	<b>14%</b>	
Water/Wetlands/ Developed/Barren	6,626	2%	1,287	<1%			<b>7,913</b>	<b>2%</b>	
<b>Idaho HUC Totals*</b>	<b>255,083</b>	<b>69%</b>	<b>113,996</b>	<b>31%</b>		<b>0%</b>	<b>369,080</b>	<b>100%</b>	

\*Totals are approximate due to calculation methods used

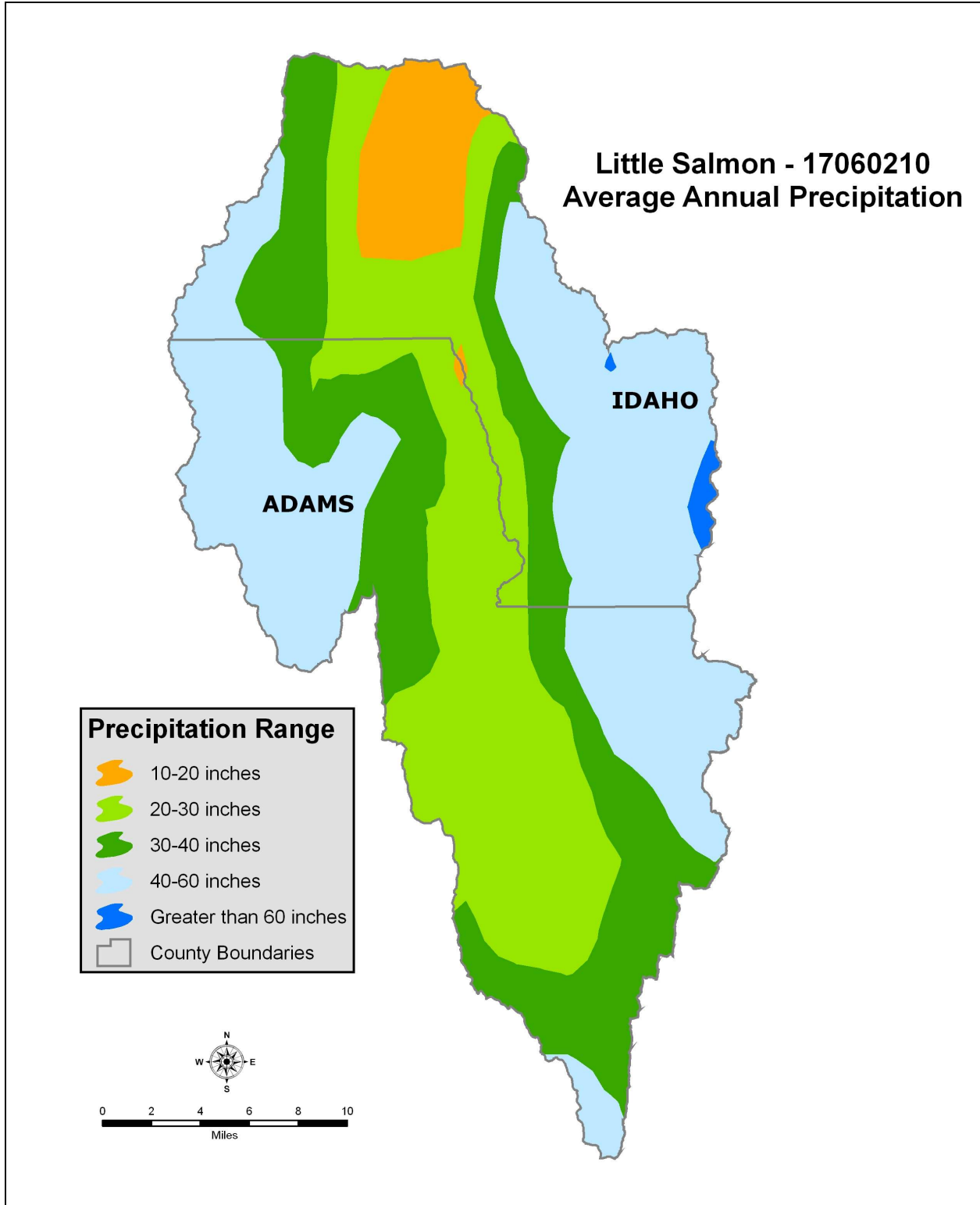
Irrigated Lands <sup>/4</sup>	Type of Land	ACRES	% of Irrigated Lands	% of HUC
	Cultivated Cropland	0	0%	0%
	Non-Cultivated Cropland**	1,900	8%	<1%
	Pastureland	20,900	92%	6%
	<b>Total Irrigated Lands</b>	<b>22,800</b>	<b>100%</b>	<b>6%</b>

\*\*Includes permanent hayland and horticultural cropland.

**Land Use / Land Cover**



**Average Annual Precipitation**

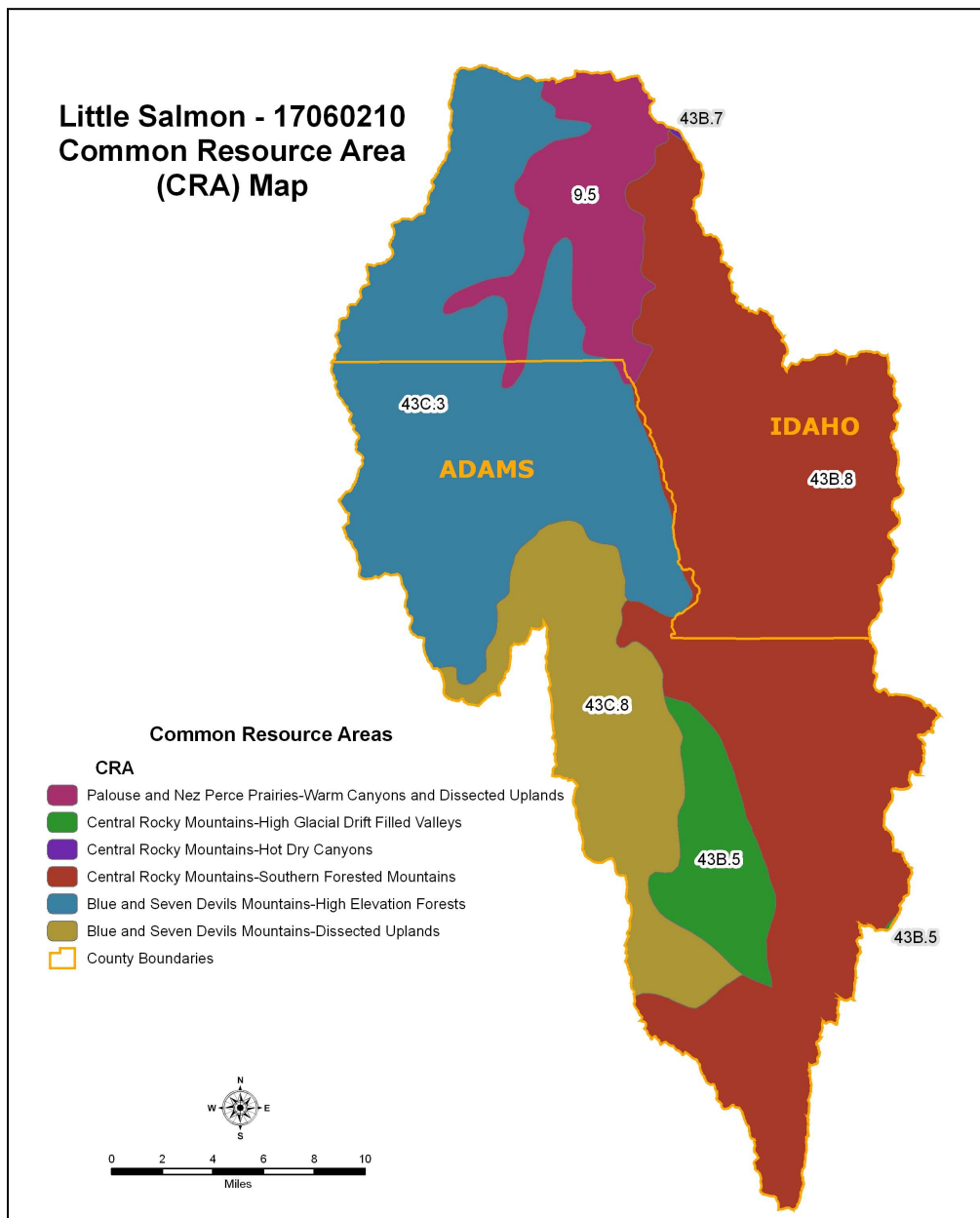


## Common Resource Area Map

**CRA Map - areas with a majority are listed below - for descriptions of every class within the HUC, go to: <http://ice.id.nrcs.usda.gov/website/cra/viewer.htm>**

A Common Resource Area (CRA) 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.

[\(General Manual Title 450 Subpart C 401.21\)](#)





## Common Resource Area Descriptions

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 landuse/landcover, political boundaries, Digital General Soil Map of the U.S. (updated STATSGO), and ecoregion boundaries;
- A consistent (correlated) geographic index for Conservation System Guides information and the eFOTG
- A geographic linkage with the national MRLA framework

### **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 depths of 2,000 to 5,000 feet through metasedimentary and metavolcanic rock. Canyon depth and the exposed metamorphic rocks result in stony soils on canyon slopes that retain little moisture. The dominant soils are Dixiejett and Lickskillet soil series. Temperature regime is mesic and the moisture regime is xeric and aridic. Mean annual precipitation is 12 to 16 inches. Bluebunch wheatgrass, Sandberg's bluegrass, and spiny greenbush are adapted to these hot, dry conditions. Land use includes grazing and recreation on National Forest lands and in the Hells Canyon National Recreation Area.

### **43B.5 Central Rocky Mountains--High Glacial Drift-Filled Valleys**

The High Glacial Drift-Filled Valleys ecoregion contains terraces, outwash plains, moraines, wetlands, and hills that are much less rugged and less forested than the Southern Forested Mountains. Originally, sedges and rushes were common on wet soils, bunchgrasses and mountain big sagebrush occurred on drier soils, and lodgepole pine and ponderosa pine grew on valley floors. Winters are cold and snowy. It receives large amounts of spring runoff from mountain snow pack. It is summer pasture for large numbers of livestock; cropland and growing residential and recreational developments also occur. Flood irrigation and grazing have raised sediment and phosphorus levels in streams.

### **43B.7 Central Rocky Mountains--Hot Dry Canyons**

The Hot Dry Canyons ecoregion is deeply dissected. Local relief can approach 5,000 feet and canyons become warmer and drier with increasing depth. There is little winter snowfall. Ponderosa pine, mountain sagebrush, and grasses are widespread; Douglas-fir also occurs but is less common than in the Lochsa-Selway-Clearwater Canyons. South-facing slopes are drier and less wooded than north-facing slopes. Mining has affected canyon bottoms some of which now serve as transportation corridors.

### **43B.8 Central Rocky Mountains--Southern Forested Mountains**

The Southern Forested Mountains ecoregion is mantled by droughty soils derived from granitic rocks and is only marginally affected by maritime influence. Open Douglas-fir is common, grand fir and subalpine fir occur at higher elevations, and ponderosa pine grows in canyons. Mountain sagebrush and forest are found in the south. Streams are subject to high sediment loading when soils are disturbed.



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### **Common Resource Area Descriptions - continued**

#### **43C.3 Blue and Seven Devils Mountains - High Elevation Blue and Seven Devils Mountain Forests**

This unit is characterized by forested plateaus having cryic temperatures. These areas characteristically have deep snowpack, and a very short growing season. Moisture regime is udic. Vegetation is dominated by subalpine fir, Engelmann spruce, and western larch. Streams follow fault lines, have steep gradients and have eroded deep canyons. Land uses include grazing, logging, recreation, and wildlife habitat.

#### **43C.8 Blue and Seven Devils Mountains - Blue and Seven Devils Mountains Dissected Uplands**

This unit is characterized by deeply dissected forested mountain slopes. Temperature regime is frigid and the moisture regime is xeric. Vegetation is grand fir, Douglas-fir and ponderosa pine. The soils on the north facing slopes retain an ash mantle but south facing slopes lack this mantle due to erosion. Below about 4,500 feet elevation, the Douglas fir forest changes abruptly to the grassland of the Warm Canyons and Dissected Uplands CRA.



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## Streamflow Summary [/7, 28](#)

The hydrology of the Little Salmon subbasin is dominated by the Little Salmon River mainstem as it flows through grassy meadows in the upper part of the watershed through mostly forested canyons and rangelands before it drains into the Salmon River at Riggins, Idaho. The Little Salmon flows from south to northeast in the subbasin across a drainage area of 576 square miles. The average annual (daily) flow of the Little Salmon River near Riggins is 718 cfs; this is based on 30 years of flow data (1976 to 2005). Major tributaries to the Little Salmon River in the subbasin include the Rapid River, Boulder Creek and Hazard Creek. Peak flows generally occur in May or June and normally range from 2000 to 8000 cfs with a recorded low of 1500 cfs (1977) to a high peak over 10,000 cfs (1997). Base flows predominate in August through October.

From the Little Salmon TMDL (IDEQ, 2006):

“Nearly all irrigation in this basin uses surface water. About 92 percent of the irrigated acres are located upstream of the confluence of Round Valley Creek and the Little Salmon River. The majority of these 18,500 acres are irrigated with water from Twin Granite, Goose Lake and Brundage Reservoirs (IDWR 1998). These three reservoirs are in the headwaters of Goose Creek and its tributary, Brundage Creek. The upper end of the basin (upstream from Round Valley Creek) uses about 72,000 acre-feet of water a year for irrigation (BLM 2000). About 8 percent, or 700 acres, of the irrigated acres in the basin are downstream of the confluence of Round Valley Creek and the Little Salmon River. IDWR water-right records indicate approximately 700 acres of irrigation from various surface water sources in the subbasin south of Pollock (IDWR, 1998). Ninety-three percent of these acres are irrigated from water diverted from drainages on the west side of the basin (Rapid River, Shingle Creek, Papoose Creek, and Squaw Creek). Using IDWR estimation methodology, the volumetric use is estimated at about 2,800 acre-feet a year in this portion of the basin (BLM, 2000).

Brundage Reservoir is a 270 acre reservoir used for irrigation located at 6,238 feet in the Goose Creek watershed. It receives water from Brundage Creek, a tributary to Goose Creek. The reservoir is bordered by Brundage Mountain (elevation 7,802 feet) on the south and an unnamed peak (elevation 7,677 feet) on the north. The USFS holds a 500 acre-foot water right for fish and wildlife habitat with the designated beneficial use being for recreational storage. Originally built as a Works Project Administration project in 1936, the current dam (the original was replaced in 1987) is 92 feet long, 63 feet high and has a capacity of 7,330 acre-feet. The reservoir typically fills between late May and early July with water releases starting in late June and continuing through early September. At full pool, the maximum release is 291 cfs and this release comes out from the bottom of the dam.”

		<b>Acre-Feet</b>	
<b>Stream Flow Data</b>	USGS 13316500, USGS Little Salmon River at Riggins, ID, 1976-2005	Average Annual	519,956
		Mar-July Average	408,539
		Percent of Average Annual	79%



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		CFS	Number	
<b>Irrigated Adjudicated Water Rights</b> <sup>/6)</sup>	Surface Water	702	1799	
	Groundwater	9	40	
	<b>Total Irrigated Adjudicated Water Rights</b>	<b>711</b>	<b>1839</b>	
		<b>MILES</b>	<b>PERCENT</b>	
<b>Stream Data</b>	Total Miles <sup>/8</sup>	746	--	
	Water quality impaired streams <sup>/9</sup>	140	19%*	
	Anadromous Fish Presence (Streamnet) <sup>/11</sup>	174	23%	
	Bull Trout Presence (Streamnet) <sup>/11</sup>	299	40%	
<i>*Percent of Total Miles of streams in HUC</i>				
		<b>ACRES</b>	<b>PERCENT</b>	
<b>Land Cover/Use</b> <sup>/2</sup> based on a 100 ft. stretch on both sides of all streams in the 100K Hydro Layer	Forest	24,968	72%	
	Grain Crops	8	<1%	
	Grass/Pasture/Hay Lands	3,797	11%	
	Row Crops	50	<1%	
	Shrub/Rangelands – Includes CRP Lands	4,747	14%	
	Water/Wetlands/Developed/Barren	959	3%	
	<b>Total Acres of 100 ft stream buffers</b>	<b>34,529</b>	<b>100%</b>	
<b>Land Capability Class</b> <sup>/4</sup>	<b>I</b> – slight limitations			
	<b>II</b> – moderate limitations			
	<b>III</b> – severe limitations			
	<b>IV</b> – very severe limitations	9,100	38%	
	<b>V</b> – no erosion hazard, but other limitations	13,700	58%	
	<b>VI</b> – severe limitations, unsuited for cultivation, limited to pasture, range, forest	900	4%	
	<b>VII</b> – very severe limitations, unsuited for cultivation, limited to grazing, forest, wildlife			
	<b>VIII</b> – misc areas have limitations, limited to recreation, wildlife, and water supply			
	<b>Total Crop &amp; Pasture Lands</b>	<b>23,700</b>	<b>100%</b>	
<b>Confined Animal Feeding Operations – Dairies/Feedlots</b> <sup>/12, 13, 26</sup>				
<b>Operation Type</b>	<b>Number</b>	<b>&lt;300</b>	<b>300-999</b>	<b>1000-4999</b>
<b>Dairy</b>				
<b>Feedlots</b>	3	3		

## Resource Settings

**Pasture:** The majority of this land is surface irrigated pastures in the valleys, with non-irrigated pasture, range, and grazed forest in the uplands. The average growing season lasts about 37 to 50 days. Much of the spring run-off is diverted and stored for irrigation. In the valley, soils are glacial outwash, alluvial fans, terraces and plains, drainageways and stream bottoms with zero percent slopes. The vegetation consists primarily of meadow grasses such as timothy, orchard grass, as well as water grass, sedges and various willows.

The soils in the mountainous areas are mainly granitic. The vegetation is dominated by coniferous forests made up of Ponderosa Pine, Douglas Fir, Grand Fir, and subalpine Fir. Other vegetation includes Idaho fescue, bluebunch wheatgrass, and snowberry.

The area is covered in snow from November to March typically. Temperatures range from an average daily temperature of 8 degrees C in January to 22 degrees C in July. Annual precipitation averages 25 inches with approximately 22 inches occurring between October and May. Cattle are present in the area throughout the year, with the summer months receiving the heaviest use.

Upland pastures are located above flood plains on steeper, dissected hill sides or mountain sides. Average precipitation is 12 to 14 inches.

**Hayland:** : Non-irrigated riparian hayland is typically flat. The growing season is 40 to 65 days. Annual precipitation is 22-25 inches.

Non-irrigated upland hayland has precipitation of 12 inches or greater.

Surface irrigated hayland is usually on a zero percent slope with 12 inches or less per year of precipitation. The growing season is 37 to 50 days.

**Range:** Rangeland is used for livestock grazing, wildlife habitat, and recreation. The average operation of grazing consists of 1500 acres of deeded land supplemented with grazing by permit on Federal rangeland. The grazing season extends from mid-April through mid-November.

Much of the Idaho fescue and bluebunch wheatgrass that covered the rangeland has now been replaced by annual brome grass, medusahead, wildrye, annual forbs, and sod-forming bluegrass. In areas that have similar climate and topography, differences in the kind and amount of vegetation produced on rangeland are closely related to soil type. Loamy to gravelly soils dominate rangeland in this watershed.

## Resource Settings - continued

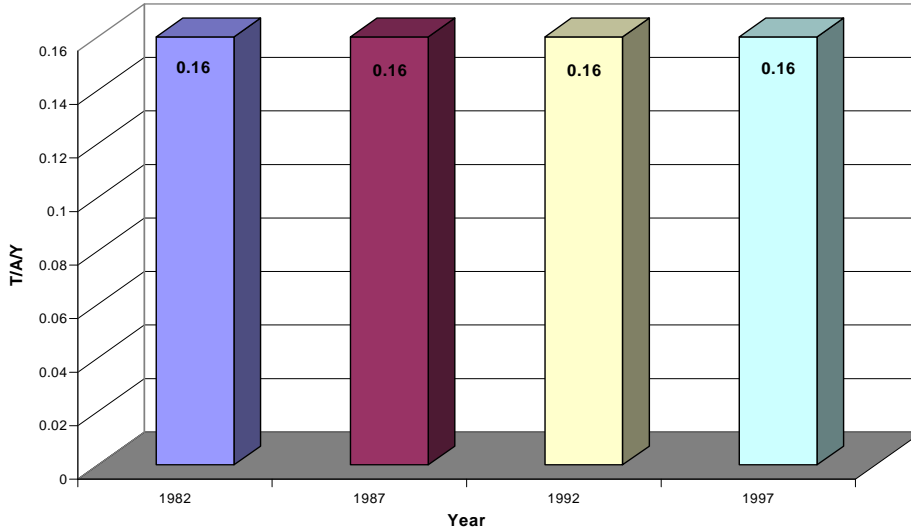
**Forests and Grazed Forests:** The riparian forest consists of mixed conifers and deciduous trees. The associated understory is comprised of grasses and brush species with inclusions of wetter area vegetation types. Soils are silt loams and clay loams that are shallow to deep, and can have low to high rock fragment content. Soils range from somewhat poorly drained to well drained. Average annual precipitation ranges from 18 to 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.

Ponderosa pine and dryer Douglas fir habitat types are found at elevation ranges 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 25 percent. 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, Englemann spruce, subalpine fir, lodgepole pine, larch and wetter habitat types are found at elevations greater than 4,000 feet on a variety of soil types. Slopes are generally greater than 25 percent. 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.

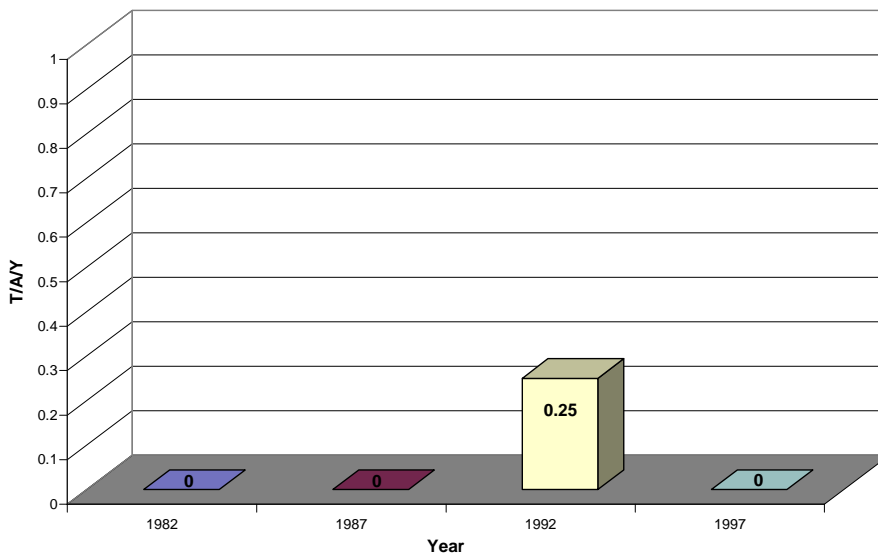
**Resource Concerns**

**Soil Loss by Water Erosion  
For Cropland, Pasture & CRP**



Sheet and rill erosion by water on the sub basin croplands, pasturelands and CRP have been essentially static since 1982. Sheet and rill erosion is not a major issue on cropland in this sub basin. Susceptibility to sheet and rill erosion is low in this sub basin because most of the cropland is relatively flat.

**Soil Loss by Wind Erosion  
For Cropland, Pasture & CRP**



Wind is not a significant issue in the Little Salmon Watershed because a moist climate during seasons of potential wind erosion combined with acreages of non-cultivated crops reduces the hazard of wind erosion.



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## Resource Concerns – continued

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.

The listed streams are impaired by several pollutants, primarily sediment and temperature. Agricultural land uses contribute to water quality impacts. Other pollutant sources include timber harvest activities, stormwater runoff and land development. Flow and habitat alteration problems exist within the watershed.

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

Impacted Water Bodies <sup>9</sup> (ID 17060306)  Named Streams	Stream Miles*	Bacteria	Nutrients	Sediment	Temperature	Dissolved Oxygen	Other or Unknown
Big Creek (SL009_02a)	4.4						X
Elk Creek (SL016_03)	1			X			
Little Salmon River (SL001_02)	98.5			X			
Little Salmon River (SL007_04)	8.7				X		
Little Salmon River (SL007_05)	17.0						X
Indian Creek (SL001_02a)	2.5			X			
Shingle Creek (SL002_02a)	6.1			X			
Brundage Reservoir (SL011L_0L)	215 ac.				X		
<b>Total Stream Miles:</b>	<b>138.2</b>						

Shading indicates TMDL in place





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### Resource Concerns - continued

#### ***Watershed Projects, Plans, Studies and Assessments***

##### **NRCS Watershed Projects** /14.15.29

Upper Meadow, conservation easement, fencing, planting with native species, return diverted water to main channel, off-site water development 274 ac treated, NRCS, USFWS, IDFG. 1996-2000.

Round Valley riparian plantings with native species, NOAA, NRCS. 1996-2004

Brundage Dam reconstruction completed 1984.

Brundage Watershed land treatment completed 1997.

Planting projects in Little Salmon, NOAA Fisheries, NRCS, 2004.

##### **NRCS Watershed Plans, Studies and Assessments** /14.15.18.29

Watershed Plan and Final EIS for Brundage Watershed. USDA, SCS-USFS. 1980. Plan completed 1984.

##### **NWPCC** /18

Northwest Power and Conservation Council. 2005. Salmon Subbasin Plan. In: Columbia River Basin Fish and Wildlife Program. Portland, Oregon.

##### **BLM** /28

Bureau of Land Management. 2000. Little Salmon River Subbasin Biological Assessment. Cottonwood, Idaho

Bureau of Land Management. 2000. Road slope erosion control.

Bureau of Land Management. 2004. Trail Creek culvert replacement.

##### **Office of Species Conservation Projects (Pacific Coast Salmon Recovery Funds)** /18

Rapid River Cross O Ranch, diversion improvement. BoR, ISCC, PCSRF, Idaho SWCD, 2005.

Shingle Creek fish screen. PCSRF, Mitchell Act, BoR, IDFG, Idaho SWCD, 2005.

Squaw Creek diversion (barrier) removal. PCSRF, City of Riggins, 2005.

Squaw Creek culvert replacement. PCSRF, NOAA Fisheries, BoR, Idaho Fish and Wildlife Foundation, Idaho County.

##### **USFS** /28

USFS. 1992. Riparian Inventory: Upper Hard Creek and Bascom Canyon subwatersheds

USFS. 1993a. Riparian Inventory: Elk Creek Subwatershed

USFS. 1993b. Riparian Inventory: Rapid-Paradise Subwatershed.

USFS. 1994a. Hazard Creek Subwatershed Riparian Inventory.

USFS. 1995. Biological Assessment: Lower Little Salmon River and Rapid River

USFS. 1996a. Brundage Reservoir Subwatershed Riparian Inventory.

USFS. 1996b. Riparian Inventory: Goose Creek Subwatershed

USFS. 1999. Biological Assessment of Ongoing National Forest Activities on Federally Listed and Forest Service Sensitive Fish Species in the Little Salmon River Watershed.

USFS. 2003a. Little Salmon River Subbasin Review. Payette National Forest

USFS. 2003b. Southwest Idaho Ecogroup Land and Resource Management Plans and Final EIS.

USFS. 2004a. Three Mile Creek and Four Mile Creek Subwatershed Riparian Inventory.

USFS. 2004b. Meadow Slope Wildland Fire Protection Project. Draft EIS.

##### **NOAA** /18

NOAA Fisheries and Idaho Office of Species Conservation. 2006. Draft Salmon and Steelhead Recovery in Snake River Basin.

**Resource Concerns - continued*****Watershed Projects, Plans, Studies and Assessments*****IDEQ TMDL and other Assessments** <sup>/28</sup>

Idaho Department of Environmental Quality. 2006. Little Salmon River Subbasin Assessment and Total Maximum Daily Loads. Boise, Idaho.

Idaho Department of Environmental Quality. 1998. Lower Snake River Subbasin, Snake River Subbasin, Lower Salmon River Subbasin, and Little Salmon Subbasin Bull Trout Problem Assessment. Clearwater Basin Bull Trout Technical Advisory Team. Boise, Idaho.

**ISDA Regional Water Quality Studies** <sup>/30</sup>

Idaho State Department of Agriculture. 2005. Little Salmon River and Big Creek Water Quality Monitoring Report: April 2004 through October 2004. ISDA Technical Report Summary W-13. Boise, Idaho.

**Other State Assessments** <sup>/27,28</sup>

Idaho Soil Conservation Commission. 2001. Big Creek of Adams County Idaho Physical Characterization of Riparian Area. Boise, Idaho.

IDFG. 2002. Bull Trout Habitat Restoration: Little Salmon River 2001 Completion Report. Volume 132 Article 5. Boise, Idaho.

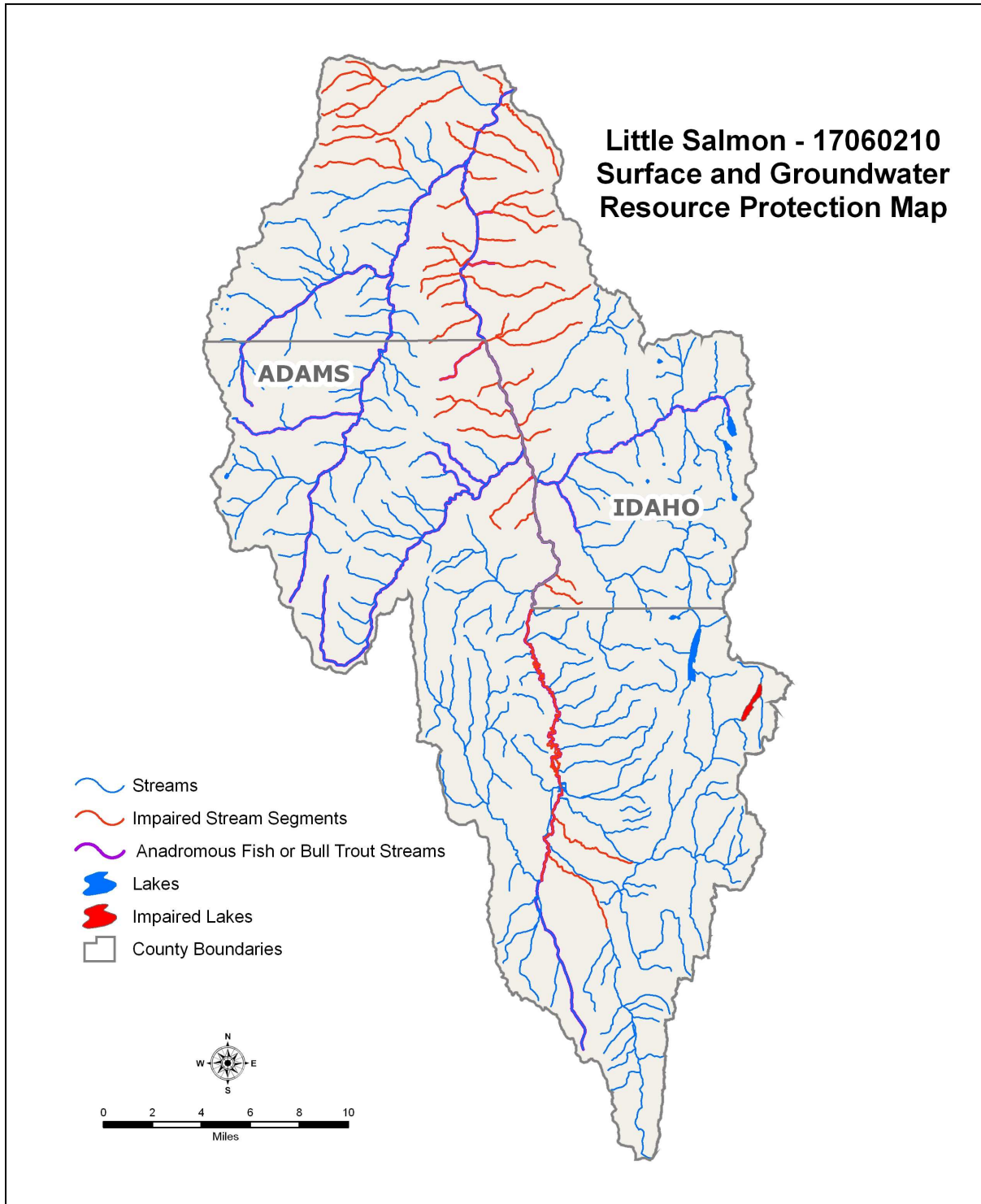
IDFG. 1965. Inventory of Idaho Streams and Recommendations for Habitat Improvement: Part I, Snake, Salmon, Weiser, Payette, and Boise River Drainages.

Idaho Department of Water Resources. 1998. Draft Resource Inventory. Little Salmon River Basin Comprehensive State Water Plan. Boise, Idaho.

IWRB (Idaho Water Resource Board). 2001. Comprehensive State Water Plan – Part B, Little Salmon River Basin.

## Resource Concerns – continued

### Surface and Groundwater Resource Protection





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## Resource Concerns – continued

Resource Concerns/ Issues by Land Use								
SWAPA Soil, Water, Air, Plants, Animals	Specific Resource Concerns/Issues	Pasture	Hayland	Dry Crops	Surface Irrigated Crops	Sprinkler Irrigated Crops	Rangeland	Grazed or Ungrazed Forest
Soil Erosion	Sheet and rill							
	Ephemeral or classic gully							
	Wind							
	Streambank	x	x				x	x
Water Quantity	Inefficient use on irrigated lands	x	x					
Water Quality, Surface	Suspended sediment	x	x				x	x
	Nutrients and organics	x	x				x	x
Water Quality, Ground	Nutrients and organics							
	Pesticides							
Soil Condition	Organic matter depletion							
	Compaction	x					x	x
Plant Condition	Productivity, health and vigor	x	x				x	x
	Plants not adapted or suited	x	x				x	x
	Noxious and invasive plants	x	x				x	x
	Wildfire hazard						x	x
Domestic Animals	Inadequate feed or water	x					x	x
Fish and Wildlife	Inadequate water							
	Inadequate cover/shelter	x	x				x	x

**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.

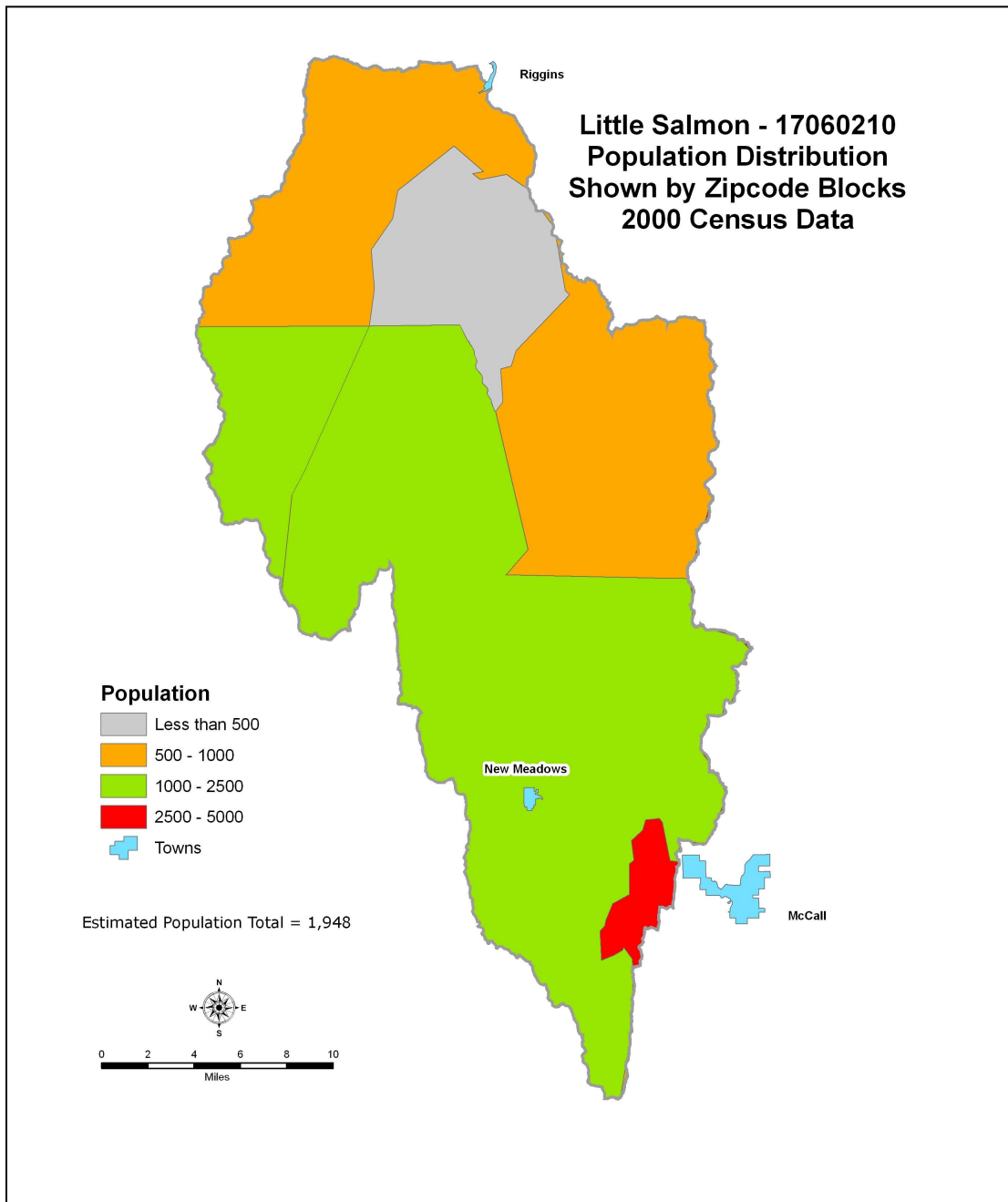
FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES <sup>/11, 25, 31</sup>	
<b>Threatened Species</b>	<b>Candidate Species</b>
<b>Mammals</b> – Lynx, Gray Wolf (E), Northern Idaho Ground Squirrel <b>Birds</b> – Bald Eagle <b>Fish</b> – Bull Trout, Chinook Salmon, Steelhead <b>Invertebrates</b> – None <b>Plants</b> – None	<b>Fish</b> - None <b>Birds</b> – None  <b>PROPOSED SPECIES</b> None
<b>ESSENTIAL FISH HABITAT</b> –Chinook Salmon,	<b>CRITICAL FISH HABITAT-</b> Steelhead Spring/Summer Chinook <sup>/31</sup>

## Census and Social Data [/26](#)

Population: 1,948

Number of Farms: 120

	0-49 acres	50-999 acres	1000+ acres
Number of Farms	45	58	17





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## Census and Social Data - continued

Fifty seven 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 but women make up 35% of the total. Slightly more than ninety-eight percent of all operators are white. Non-white operators are of American Indian, Pacific Islander, or Hispanic background.

Farm size ranges from less than 10 acres to more than 1,000 acres with an average of 720 acres. Agricultural land in the watershed is a mix of woodland, range, pasture and hayland. Land users in the watershed utilize EQIP, CRP, Continuous CRP, WRP and other programs to implement conservation plans. Farm size, market value of production and government payments to farmers are up over the past several years. Farm sales range from less than \$1,000 to more than \$500,000 per year. Eighty eight percent of farms reported sales of less than \$50,000 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.

	Number of farms	Average size farm	Market Value of Production (Average Farm)	Government Payments (Average Farm)
1997	130	700	\$32,600	\$5,700
2002	120	720	\$33,200	\$6,900
Change	-7.7%	2.9%	1.8%	21.1%

## Economic Profile

	Watershed	Idaho	United States
Population (2000)	1,948		
Per Capita Personal Income (2002)	\$21,600	\$25,476	\$30,906
Median Home Value (2000)	\$88,700	\$106,300	\$119,600
Percent Unemployment (2004)	10.4	4.7%	5.5%
Percent Below Poverty Level (2003)	13.8%	11.8%	12.5%



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### Progress / Status

PRS DATA				
Conservation Treatment Applied	FY04	FY05	FY06	Total
Fence (382) (ft)		4,692	1,964	6,656
Fish Passage (396) (no)			3	3
Irrigation System, Surface and Subsurface (443) (ac)		156		156
Pest Management (595) (ac)			200	200
Pipeline (516) (ft)			2,585	2,585
Prescribed Grazing (528A) (ac)			1,980	1,980
Row Arrangement (557) (ac)		1		1
Spring Development (574) (no)			3	3
Streambank and Shoreline Protection (580) (ft)			500	500
Structure for Water Control (587) (no)			2	2
Surface Drainage, Field Ditch (607) (ft)		7		7

Progress in the last seven years has been focused on:

- ~ erosion control
- ~ nutrient management

Resource concerns that require ongoing attention:

- ~ erosion control
- ~ nutrient management
- ~ prescribed grazing
- ~ riparian area improvement
- ~ water quality & water quantity

### Lands Removed from Production through Farm Bill Programs

- Conservation Reserve Program (CRP): **14**
- Wetland Restoration Program (WRP): **274**

### 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](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>).





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9. IDEQ. 2002 Integrated Report (approved December 2005).  
[http://www.deq.idaho.gov/water/data\\_reports/surface\\_water/monitoring/integrated\\_report.cfm](http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/integrated_report.cfm).
10. Idaho Soil Conservation Commission (SCC), Water Quality Program for Agriculture (WQPA).  
<http://www.scc.state.id.us/waq.htm>
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-new.htm](http://www.idwr.state.id.us/gisdata/gis_data-new.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](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](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/surfacewater.nps/reports/cfm](http://www.deq.state.id.us/water/data_reports/surfacewater.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 component  
[http://www.deq.state.id.us/water/data\\_reports/surface\\_water/nps/reports.cfm#component](http://www.deq.state.id.us/water/data_reports/surface_water/nps/reports.cfm#component).  
<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.idaho.gov/gw/gwdatasummary.htm>
21. Idaho Department of Water Resources (IDWR). State Comprehensive Water Plans.  
[http://www.idwr.idaho.gov/waterboard/planning/Comp\\_Basin\\_Plans.htm](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.
23. Groundwater Management Areas and Critical Groundwater Management Areas designated by the Idaho Department of Water Resources (IDWR).  
<http://www.idwr.idaho.gov/hydrologic/projects/gwma>



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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](http://www.deq.state.id.us/water/prog_issues/ground_water/nitrate.cfm#ranking)
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.  
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### Future Conservation Needs

The following Tables are an estimate of the future needs of conservation practices in the watershed.

Estimates of future needs in the watershed are based on the following factors:

1. Estimates of total conservation needs based on benchmark conditions in the watershed
2. Present level of conservation installation reported in the NRCS web based reporting system
3. Local knowledge of the area, past and ongoing project activities and professional judgement
4. Practices previously installed which have exceeded their expected life (life span), are no longer accomplishing the conservation objective, and may need to be replaced or upgraded



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## Conservation Activities for Grass/Pasture/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 and PRS Reporting system for the Years 2004 through 2006.

Current Conditions	Total Acres	Riparian Acres
Surface Irr. Grass/Pasture/Hayland	21,660	
Sprinkler Irr. Grass/Pasture/Hayland	1,140	
Total Grass/Pasture/Hay Lands	22,800	1,936
Typical Management Unit/Ownership	720	
Current Farm Bill Participation	2%	

Current Level of Treatment for Grass/Pasture/Hay Lands												
Grass/Pasture/Hay Lands	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Surface Irr. Grass/Pasture/Hayland	Ac.	21,660			-1	±	-2	-2				
Fence (382)	Ft.	0	\$ -									
Forage Harvest Management (511)	Ac.	0										
Heavy Use Area Protection (561)	Ac.	0										
Irrigation System, Surface and Subsurface (443)	Ac.	156	\$ -	\$ 5,620					X			
Nutrient Management (590)	Ac.	0										
Pasture/Hayland Planting (512)	Ac.	0										
Pest Management (595)	Ac.	0										
Pipeline (516)	Ft.	2,000	\$ -	\$ 110					X			X
Prescribed Grazing (528)	Ac.	372	\$ -	\$ 1,860					X			X
Spring Development (574)	No.	2	\$ -	\$ 20					X			X
Structure for Water Control (587)	No.	1	\$ -	\$ 10					X			X
Tree and Shrub Establishment (612)	Ac.	0										
Upland Wildlife Habitat Mgmt (645)	Ac.	0										
Watering Facility (614)	No.	0										



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Current Level of Treatment for Grass/Pasture/Hay Lands												
Grass/Pasture/Hay Lands	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Sprinkler Irr. Grass/Pasture/Hayland	Ac.	1,140			-1	±	-2	-2				
Fence (382)	Ft.	0										
Firebreak (394)	Ft.	0										
Forage Harvest Management (511)	Ac.	0										
Heavy Use Area Protection (561)	Ac.	0										
Nutrient Management (590)	Ac.	0										
Pasture/Hayland Planting (512)	Ac.	0										
Pest Management (595)	Ac.	0										
Pipeline (516)	Ft.	585	\$ -	\$ 30					X			X
Prescribed Grazing (528)	Ac.	123	\$ -	\$ 620					X			X
Spring Development (574)	No.	1	\$ -	\$ 10					X			X
Structure for Water Control (587)	No.	1	\$ -	\$ 10					X			X
Tree and Shrub Establishment (612)	Ac.	0										
Upland Wildlife Habitat Mgmt (645)	Ac.	0										
Watering Facility (614)	No.	0										
<b>Total RMS Costs</b>			\$ -	\$ 8,290								



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<b>Future Conditions</b>	Total Acres	Riparian Acres
Surface Irr. Grass/Pasture/Hayland	17,328	
Sprinkler Irr. Grass/Pasture/Hayland	5,472	
Total Irr. Grass/Pasture/Hay Land	22,800	
Conversion to Riparian RMS		1,936

Project Future Level of Treatment for Grass/Pasture/Hay Lands												
Grass/Pasture/Hay Land	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
<b>Surface Irr. Grass/Pasture/Hay Land</b>	<b>Ac.</b>	<b>17,328</b>			<b>+3</b>	<b>+2</b>	<b>+3</b>	<b>+3</b>				
Fence (382)	Ft.	182,984	\$ 366,000	\$ 7,320					x			x
Forage Harvest Management (511)	Ac.	15,595	\$ -	\$ -								
Heavy Use Area Protection (561)	Ac.	7	\$ 105,000	\$ 5,250					x			x
Irrigation System, Surface and Subsurface (443)	Ac.	3,290	\$ 3,760,800	\$ 112,820					x			
Nutrient Management (590)	Ac.	15,595	\$ 233,900	\$ 77,980					x			x
Pasture/Hayland Planting (512)	Ac.	8,664	\$ 866,400	\$ 8,660					x			x
Pest Management (595)	Ac.	15,595	\$ 467,900	\$ 155,950					x			x
Pipeline (516)	Ft.	17,870	\$ 42,800	\$ 860					x			x
Prescribed Grazing (528)	Ac.	15,595	\$ 228,300	\$ 76,120					x			x
Spring Development (574)	No.	14	\$ 28,200	\$ 1,410					x			x
Structure for Water Control (587)	No.	6	\$ 2,500	\$ 30					x			x
Tree and Shrub Establishment (612)	Ac.	866	\$ 389,700	\$ 3,900					x			x
Upland Wildlife Habitat Mgmt (645)	Ac.	866	\$ 13,000	\$ 4,330					x			x
Watering Facility (614)	No.	20	\$ 30,000	\$ 300					x			x



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Project Future Level of Treatment for Grass/Pasture/Hay Lands												
Grass/Pasture/Hay Land	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
<b>Sprinkler Irr. Grass/Pasture/HayLand</b>	Ac.	5,472			+3	+2	+3	+3				
Fence (382)	Ft.	57,784	\$ 115,600	\$ 2,310					x			x
Forage Harvest Management (511)	Ac.	4,925	\$ -	\$ -								
Heavy Use Area Protection (561)	Ac.	2	\$ 30,000	\$ 1,500					x			x
Irrigation System, Sprinkler (442)	Ac.	4,332	\$ 2,382,600	\$ 47,650					x			
Irrigation Wtr. Conveyance, High Pressure, Undergrd. Plastic (430DD)	Ft.	11,286	\$ 110,400	\$ 550								
Irrigation Water Management (449)	Ac.	4,925	\$ 147,800	\$ 49,250								
Nutrient Management (590)	Ac.	4,925	\$ 73,900	\$ 24,630					x			x
Pasture/Hayland Planting (512)	Ac.	1,368	\$ 136,800	\$ 1,370					x			x
Pest Management (595)	Ac.	4,925	\$ 147,800	\$ 49,250					x			x
Pipeline (516)	Ft.	6,723	\$ 16,600	\$ 330					x			x
Prescribed Grazing (528)	Ac.	4,925	\$ 72,000	\$ 24,010					x			x
Spring Development (574)	No.	4	\$ 7,100	\$ 350					x			x
Structure for Water Control (587)	No.	2	\$ 500	\$ 10					x			x
Tree and Shrub Establishment (612)	Ac.	274	\$ 123,300	\$ 1,230					x			x
Upland Wildlife Habitat Mgmt (645)	Ac.	274	\$ 4,100	\$ 1,370					x			x
Watering Facility (614)	No.	12	\$ 18,000	\$ 180					x			x
<b>Total RMS Costs</b>			<b>\$ 9,921,000</b>	<b>\$ 658,920</b>								



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Current Level of Treatment for Grass/Pasture/Hay Lands Riparian												
Grass/Pasture/Hay Lands Riparian	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
<b>Grass/Pasture/Hay Lands Riparian</b>	Ac.	1,936			+1	+1	+2	+2				
Channel Bank Vegetation (322)	Ac.	0										
Channel Stabilization (584)	Ft.	0										
Fence (382)	Ft.	6,656	\$ -	\$ 270					X			X
Fish Passage 396)	No.	3	\$ -	\$ 700								X
Heavy Use Area Protection (561)	Ac.	0										
Irrigation Water Management(449)	Ac.	0										
Pest Management (595)	Ac.	200	\$ -	\$ 2,000					X			X
Prescribed Grazing (528)	Ac.	1,485	\$ -	\$ 7,430					X			X
Riparian Forest Buffer (391)	Ac.	0										
Riparian Herbaceous Cover (390)	No.	0										
Stream Crossing (578)	Ft.	0										
Stream Hab/Improve Mgmt (395)	Ft.	0										
Streambank/Shoreline Prot. (580)	Ft.	500	\$ -	\$ 450					X			X
Structure for Water Control (587)	Ac.	0										
Tree/Shrub Establishment (612)	Ac.	0										
Upland Wildlife Hab. Mgmt. (645)	Ac.	0										
Use Exclusion (472)	Ac.	0										
Watering Facility	Ac.	0										
Wetland Creation (658)	Ac.	0										
Wetland Enhancement (659)	Ac.	0										
Wetland Wildlife Hab. Mgmt (644)	No.	0										
<b>Total RMS Costs</b>			<b>\$ 0</b>	<b>\$ 10,850</b>								





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Future Level of Treatment for Grass/Pasture/Hay Lands Riparian												
Grass/Pasture/Hay Lands Riparian Practices	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Irrigated Grass/Pasture/Hay Lands Riparian (Surface & Sprinkler)	Ac.	1,936			+3	+2	+3	+3				
Channel Bank Vegetation (322)	Ac.	3	\$ 9,000	\$ 180					X			X
Channel Stabilization (584)	Ft.	3,696	\$ 73,900	\$ 370					X			X
Fence (382)	Ft.	25,555	\$ 37,800	\$ 760					X			X
Fish Passage (396)	Ft.	232	\$ 20,300	\$ 410								X
Heavy Use Area Protection (561)	Ac.	3	\$ 45,000	\$ 2,250					X			X
Irrigation Water Management(449)	Ac.	1,742	\$ 52,300	\$ 17,420					X			X
Pest Management (595)	Ac.	1,742	\$ 46,300	\$ 15,420					X			X
Prescribed Grazing (528)	Ac.	1,742	\$ 3,900	\$ 1,290					X			X
Riparian Forest Buffer (391)	Ac.	20	\$ 30,000	\$ 300					X	X		X
Riparian Herbaceous Cover (390)	Ac.	20	\$ 6,000	\$ 60					X	X		X
Stream Crossing (578)	No.	20	\$ 70,000	\$ 3,500					X			X
Stream Hab/Improve Mgmt (395)	Ac.	20	\$ 350,000	\$ 7,000					X			X
Streambank/Shoreline Prot. (580)	Ft.	3,696	\$ 143,800	\$ 2,880					X			X
Structure for Water Control (587)	Ft.	240	\$ 120,000	\$ 1,200					X			X
Tree/Shrub Establishment (612)	Ac.	58	\$ 26,100	\$ 260					X	X		X
Use Exclusion (472)	Ac.	387	\$ 13,500	\$ 410					X			X
Watering Facility	No.	8	\$ 12,000	\$ 120					X			X
Wetland Creation (658)	Ac.	20	\$ 100,000	\$ 1,000					X	X		X
Wetland Enhancement (659)	Ac.	20	\$ 700	\$ 10					X	X		X
Wetland Wildlife Hab. Mgmt (644)	Ac.	98	\$ 1,500	\$ 490					X	X		X
<b>Total RMS Costs</b>			<b>\$ 1,153,100</b>	<b>\$ 55,150</b>								



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<b>Potential RMS Effects for Grass/Pasture/Hayland</b>			
<b>Cost Items and Programs</b>		<b>Costs</b>	<b>O&amp;M Costs</b>
Non Farm Bill Programs		\$3,633,400	\$219,880
Potential Farm Bill Programs		\$7,440,700	\$494,190
Operator O&M and Management Cost			\$714,070
Annual Management Incentives ( 3yrs - Incentive Payments)		\$1,492,700	
Operator Investment		\$5,120,400	
Federal Costshare		\$4,461,000	
<b>Total RMS Costs</b>		<b>\$11,074,100</b>	<b>\$714,070</b>
Estimated Level of Participation			75%
Total Acres in RMS System			17,100
Anticipated Cost at Estimated Level of Participation			\$8,305,600
Total Annual Forage Production Benefits (animal unit months)			2280
Total Acre Feet of Water Saved Annually			15,390
Increases infiltration and storage of water in soil profile			
Participating landowners will be in compliance with TMDLs			
Improves habitat for ESA endangered and threatened species			



Idaho

# Little Salmon – 17060201

8 Digit Hydrologic Unit Profile

February 2007

<b>Current Conditions</b>	Total Acres	Riparian Potential
Total Shrub/Range Land	19,352	1,800
Typical Management Unit/Ownership	720	
Current Farm Bill Participation	2%	

Current Level of Treatment for Shrub/Range Land												
Shrub/Range Land	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Practices	Unit	Quantity										
Shrub/Range Land	Ac.	19,352										
Channel Bank Vegetation (322)	Ac.	0										
Brush Management (314)	Ac.	0										
Fence (382)	Ft.	0										
Pest Management (595)	Ac.	0										
Pipeline (516)	Ft.	0										
Pond (378)	No.	0										
Spring Development (574)	Ac.	0										
Upland Wildlife Hab. Mgmt.	Ac.	0										
Watering Facility (614)	No.	0										
<b>Total RMS Costs</b>			\$ 0	\$ 0								



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# Little Salmon – 17060201

8 Digit Hydrologic Unit Profile

February 2007

Current Level of Treatment for Shrub/Range Land Riparian												
Shrub/Range Land Practices	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Shrub/Range Land Riparian	Ac.	1,800										
Brush Management (314)	Ac.	0										
Channel Bank Vegetation (322)	Ac.	0										
Fence (382)	Ft.	0										
Pest Management (595)	Ac.	0										
Pipeline (516)	Ft.	0										
Pond (378)	No.	0										
Prescribed Grazing (528)	Ac.	0										
Riparian Herbaceous Cover (390)	Ac.	0										
Riparian Forest Buffer (391)	Ac.	0										
Spring Development (574)	No.	0										
Stream Crossing (578)	No.	0										
Tree and Shrub Estab. (614)	Ac.	0										
Use Exclusion (472)	Ac.	0										
Watering Facility (614)	No.	0										
Wetland Wildlife Mgmt. (644)	Ac.	0										
<b>Total RMS Costs</b>			\$ 0	\$ 0								



Idaho

# Little Salmon – 17060201

## 8 Digit Hydrologic Unit Profile

February 2007

Future Level of Treatment for Shrub/Range Land												
Shrub/Range Land	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
<b>Shrub/Range Land</b>	<b>Ac.</b>	<b>19,352</b>			<b>+2</b>	<b>+2</b>	<b>+2</b>	<b>+3</b>				
Brush Management (314)	Ac.	30	\$ 800	\$ 10					X			X
Fence (382)	Ft.	79,200	\$ 158,400	\$ 3,170					X	X		X
Pest Management (595)	Ac.	9,676	\$ 290,300	\$ 96,760					X			X
Pipeline (516)	Ft.	18,000	\$ 48,600	\$ 970					X			X
Pond (378)	No.	20	\$ 120,000	\$ 1,200					X			X
Prescribed Grazing (528)	Ac.	17,417	\$ 261,300	\$ 87,090					X			X
Spring Development (574)	No.	20	\$ 47,000	\$ 2,350					X			X
Upland Wildlife Hab. Mgmt.	Ac.	1,935	\$ 29,000	\$ 9,680					X	X		X
Watering Facility (614)	No.	20	\$ 30,000	\$ 300					X			X
<b>Shrub/Range Land Riparian</b>	<b>Ac.</b>	<b>1,800</b>			<b>+2</b>	<b>+2</b>	<b>+3</b>	<b>+3</b>	<b>X</b>			<b>X</b>
Brush Management (314)	Ac.	3	\$ 100	\$ -					X			X
Channel Bank Vegetation (322)	Ac.	18	\$ 54,000	\$ 1,080					X	X		X
Fence (382)	Ft.	7,392	\$ 14,800	\$ 300					X	X		X
Pest Management (595)	Ac.	900	\$ 27,000	\$ 9,000					X			X
Pipeline (516)	Ft.	1,680	\$ 4,500	\$ 90					X			X
Pond (378)	No.	2	\$ 12,000	\$ 120					X			X
Prescribed Grazing (528)	Ac.	1,620	\$ 24,300	\$ 8,100					X			X
Riparian Herbaceous Cover (390)	Ac.	90	\$ 27,000	\$ 270					X	X		X
Riparian Forest Buffer (391)	Ac.	90	\$ 135,000	\$ 1,350					X	X		X
Spring Development (574)	No.	2	\$ 4,700	\$ 240					X			X
Stream Crossing (578)	No.	7	\$ 24,500	\$ 1,230					X			X
Tree and Shrub Estab. (614)	Ac.	36	\$ 16,200	\$ 160					X			X
Use Exclusion (472)	Ac.	180	\$ 6,300	\$ 190					X			X
Watering Facility (614)	No.	2	\$ 3,000	\$ 30					X			X
Wetland Wildlife Mgmt. (644)	Ac.	180	2700	900					X	X		X
<b>Total RMS Costs</b>			<b>\$1,341,500</b>	<b>\$224,590</b>								



Idaho

## Little Salmon – 17060201

8 Digit Hydrologic Unit Profile

February 2007

<b>Potential RMS Effects for Shrub/Rangeland</b>			
Cost Items and Programs		Costs	O&M Costs
Non Farm Bill Programs		\$67,100	\$11,230
Potential Farm Bill Programs		\$1,274,400	\$213,400
Operator O&M and Management Cost			\$224,630
Annual Management Incentives ( 3yrs - Incentive Payments)		\$634,600	
Operator Investment		\$387,000	
Federal Costshare		\$319,900	
<b>Total RMS Costs</b>		<b>\$1,341,500</b>	<b>\$224,630</b>
Estimated Level of Participation			35%
Total Acres in RMS System			6,773
Anticipated Cost at Estimated Level of Participation			\$469,500
Total Annual Forage Production Benefits (animal unit months)			1000
Participating landowners will be in compliance with TMDLs			
Improves habitat for ESA endangered and threatened species			



Idaho

# Little Salmon – 17060201

8 Digit Hydrologic Unit Profile

February 2007

<b>Current Conditions</b>		Total Acres	Potential Riparian Acres
Total Grazed Forest Lands / Private		69,946	6,598
Typical Management Unit/Ownership		720	
Current Farm Bill Participation		2%	

Current Level of Treatment for Grazed Forest Lands / Private												
Grazed Forest Lands / Private	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
<b>Grazed Forest Lands / Private</b>	Ac.	69,946										
Critical Area Planting (342)	Ac.	0										
Fence (382)	Ft.	0										
Firebreak (394)	Ft.	0										
Forest Site Prep	Ac.	0										
Forest Slash Treatment	Ac.	0										
Forest Stand Improvement	Ac.	0										
Forest Trail/Landing	Ac.	0										
Nutrient Management	Ac.	0										
Pest Management	Ac.	0										
Pond	Ac.	0										
Prescribed Forestry	Ac.	0										
Prescribed Grazing	Ac.	0										
Spring Development	Ac.	0										
Tree/Shrub Establishment (612)	Ac.	0										
Upland Wildlife Hab. Mngt. (645)	Ac.	0										
Use Exclusion (472)	Ac.	0										
<b>Total RMS Costs</b>			\$ 0	\$ 0								



Idaho

# Little Salmon – 17060201

## 8 Digit Hydrologic Unit Profile

February 2007

	Total Acres	Potential Riparian Acres
<b>Future Conditions</b>		
Total Grazed Forest Lands / Private	69,946	6,598
Typical Management Unit/Ownership	720	
Current Farm Bill Participation	2%	

Future Level of Treatment for Grazed Forest Lands / Private												
Grazed Forest Lands / Private	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
<b>Grazed Forest Lands / Private</b>	Ac.	69,946			+3	+2	+3	+3				
Critical Area Planting (342)	Ac.	1,400	\$ 665,000	\$ 19,950					x			x
Fence (382)	Ft.	264,000	\$ 726,000	\$ 14,520					x			x
Firebreak (394)	Ft.	100,000	\$ 193,000	\$ 38,600					x			x
Forest Site Prep (490)	Ac.	3,497	\$ 874,300	\$ 0					x			x
Forest Slash Treatment (384)	Ac.	2,098	\$ 524,500	\$ 0					x			x
Forest Stand Improvement (666)	Ac.	3,497	\$ 1,224,000	\$ 36,720					x			x
Forest Trail/Landing (655)	Ac.	700	\$ 308,000	\$ 1,540					x	x		x
Nutrient Management (595)	Ac.	24,481	\$ 367,200	\$ 122,410					x	x		x
Pest Management (590)	Ac.	62,951	\$ 1,888,500	\$ 629,510					x			x
Pond (378)	Ac.	14	\$ 84,000	\$ 840					x			x
Prescribed Forestry (409)	Ac.	3,500	\$ 52,500	\$ 17,500					x			x
Prescribed Grazing (528)	Ac.	62,951	\$ 944,300	\$ 314,760					x			x
Spring Development (574)	Ac.	14	\$ 32,900	\$ 330					x	x		x
Upland Wildlife Hab. Mngt. (645)	Ac.	10,492	\$ 157,400	\$ 52,460					x	x		x
Use Exclusion (472)	Ac.	3,497	\$ 122,400	\$ 3,670					x			x
Watering Facility (614)	No.	14	\$ 21,000	\$ 210					x			x





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# Little Salmon – 17060201

8 Digit Hydrologic Unit Profile

February 2007

Future Level of Treatment for Grazed Forest Lands / Private												
Grazed Forest Lands / Private Practices (Continued)	Quantity		Costs		Effects				Implementation			
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Grazed Forest Lands / Riparian	Ac.	6,598			+2	+2	+3	+3				
Critical Area Planting (342)	Ac.	132	\$62,700	\$1,880					X			X
Fence (382)	Ft.	26,400	\$72,600	\$1,450					X			X
Prescribed Grazing	Ac.	5,938	\$89,100	\$29,690					X			X
Riparian Forest Buffer (391)	Ac.	132	\$198,000	\$1,980					X			X
Use Exclusion (472)	Ac.	330	\$11,600	\$350					X			X
<b>Total RMS Costs</b>			<b>\$8,619,000</b>	<b>\$1,288,370</b>								



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# Little Salmon – 17060201

8 Digit Hydrologic Unit Profile

February 2007

<b>Potential RMS Effects for Forestland</b>			
<b>Cost Items and Programs</b>		<b>Costs</b>	<b>O&amp;M Costs</b>
Non Farm Bill Programs		\$431,000	\$64,420
Potential Farm Bill Programs		\$8,188,000	\$1,223,950
Operator O&M and Management Cost			\$1,288,370
Annual Management Incentives ( 3yrs - Incentive Payments)		\$3,499,000	
Operator Investment		\$2,775,500	
Federal Costshare		\$2,344,500	
<b>Total RMS Costs</b>		<b>\$8,619,000</b>	<b>\$1,288,370</b>
Estimated Level of Participation			50%
Total Acres in RMS System			34,973
Anticipated Cost at Estimated Level of Participation			\$4,309,500
Total Annual Forage Production Benefits (animal unit month)			5,167
Participating landowners will be in compliance with TMDLs			
Improves habitat for ESA endangered and threatened species			