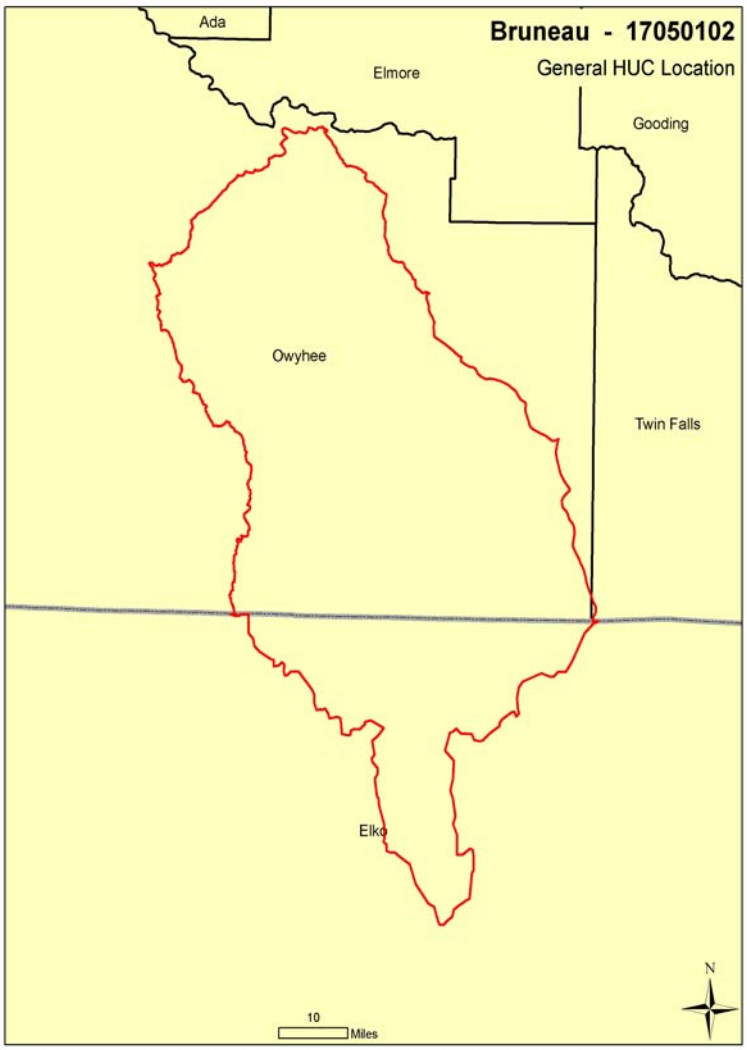
Bruneau – 17050102

Idaho / Nevada — 8 Digit Hydrologic Unit Profile — April 2008



Introduction

The Bruneau 8-Digit Hydrologic Unit Code (HUC) subbasin contains 2,112,600 acres in Idaho and Nevada. Seventy-six percent of the subbasin is in Owyhee County, Idaho and 24 percent in Elko County, Nevada. Nine percent of the basin is privately owned, 1 percent is under tribal ownership and 90 percent is publicly owned.

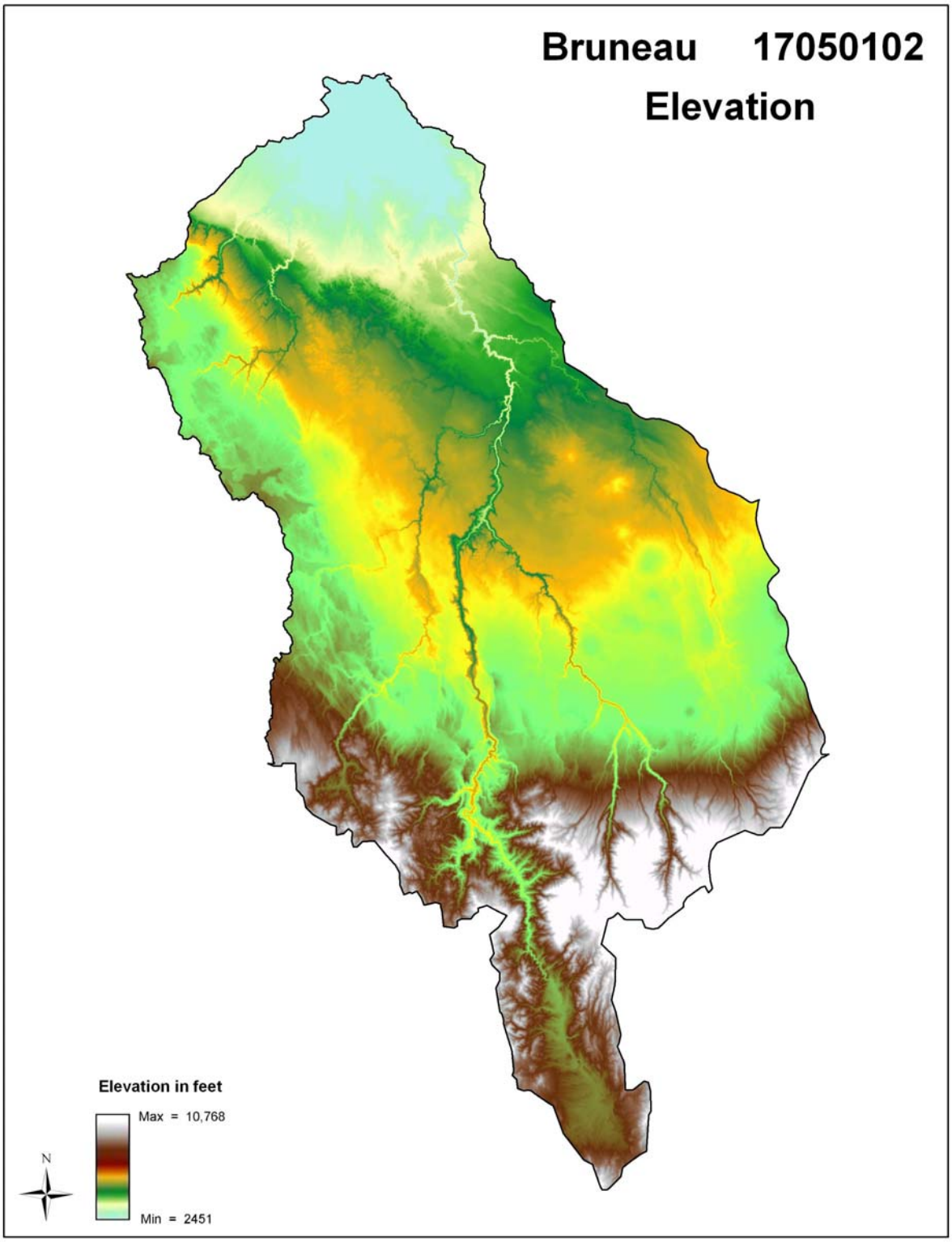
Ninety-six percent of the basin is in shrubland, rangeland, grass, pasture, or hayland, one percent is cropland, and the remainder is forest, water, wetlands, developed or barren.

Elevations range from 2,451 feet in the northwestern portion of the HUC to over 10,768 feet in the south central portion of the HUC. The mean elevation is 5,343 feet.

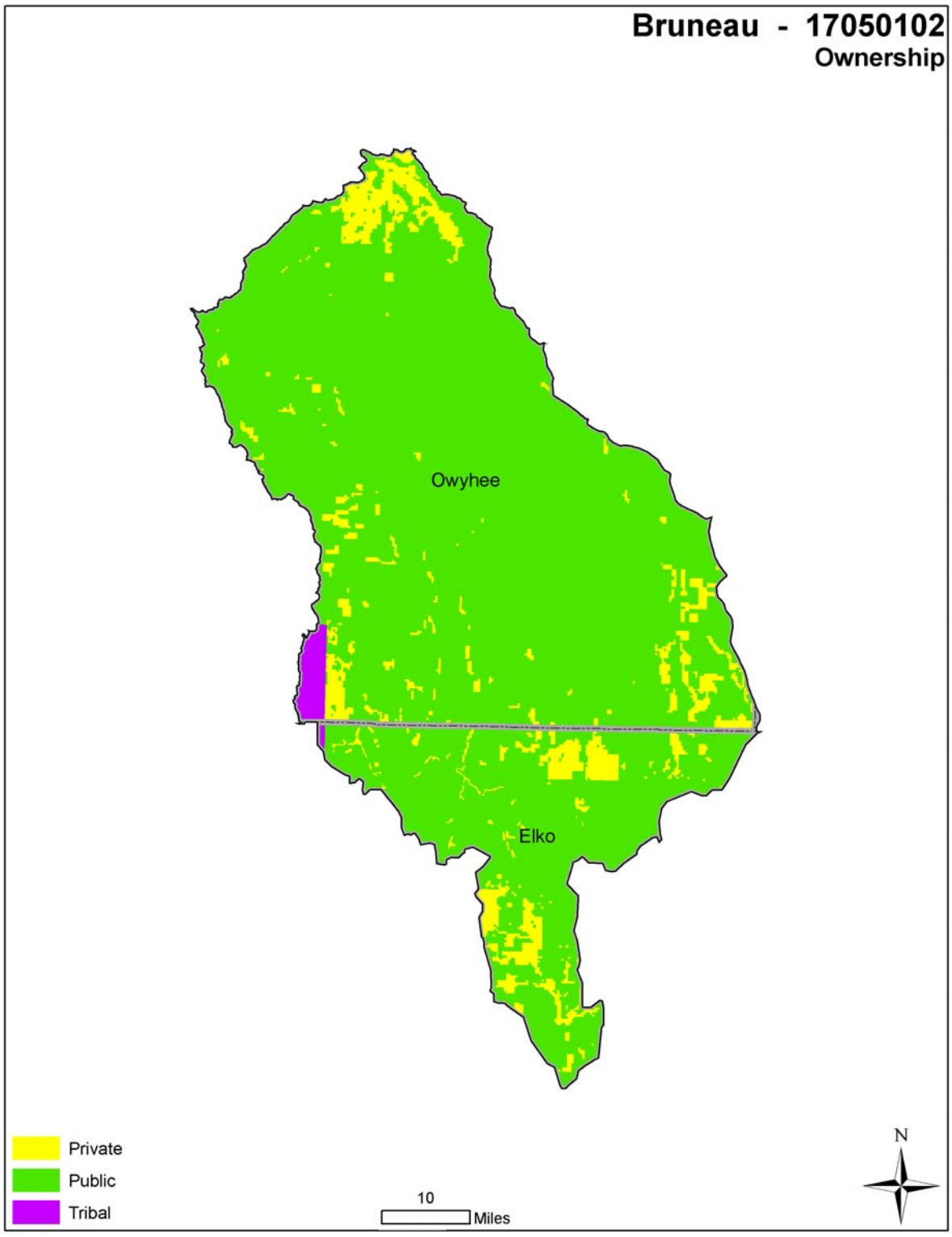
Conservation assistance is provided by 6 Soil Conservation Districts, 2 in Idaho and 4 in Nevada. and 2 Resource Conservation and Development (RC&D) offices, 1 in Idaho and 1 in Nevada.

Profile Contents

Relief Map


Bruneau 17050102
Elevation
Elevation in feet
Max = 10,768
Min = 2451
N

General Ownership[/1]



Physical Description – Land Cover / Land Use - Acres

Land Cover / Land Use (NLCD[2])	Ownership - (2003 Draft BLM Surface Map Set[1])							
	Public		Private		Tribal			
	Idaho Acres	Nevada Acres	Idaho Acres	Nevada Acres	Idaho Acres	Nevada Acres	Idaho Totals	Nevada Totals
Forest	890	41,810	900	780	1,250	160	3,040	42,750
Grain Crops	0	0	9,520	60	0	0	9,520	60
Conservation Reserve[3] Program (CRP) Land	0	0	0	0	-	0	0	0
Grass/Pasture/ Hay Lands	289,670	71,960	29,660	14,040	2,490	150	321,820	86,150
Orchards/ Vineyards/ Berries	0	0	0	0	-	0	0	0
Row Crops	0	0	5,640	0	-	0	5,640	0
Shrub/Rangelands	1,168,270	328,290	62,470	52,280	16,280	1,660	1,247,020	382,230
Water/Wetlands/ Developed/ Barren	5,940	940	5,440	670	1,380	0	12,760	1,610
Idaho & Nevada HUC Totals	**1,464,770**	**443,000**	**113,630**	**67,830**	**21,400**	**1,970**	**1,599,800**	**512,800**
HUC Total							**2,112,600**	

Irrigated Lands[4] (Idaho & Nevada)	Type of Land	IDAHO ACRES	NEVADA ACRES	% of HUC
	Cultivated Cropland	2,400	000	0.1
	Non-Cultivated Cropland *	15,000	440	0.7
	Pastureland	5,300	1,180	0.3
	Total Irrigated Lands	**22,700**	**1,620**	**1.1**

***** Includes permanent hayland and horticultural cropland.

* Any differences between the acres in the above Table and the Future Conservation Needs Tables in the back of this document are due to the differences in Land Cover acres as opposed to Land Use acres. However the Total Private acres balance between the Land Use and Land Cover acres.

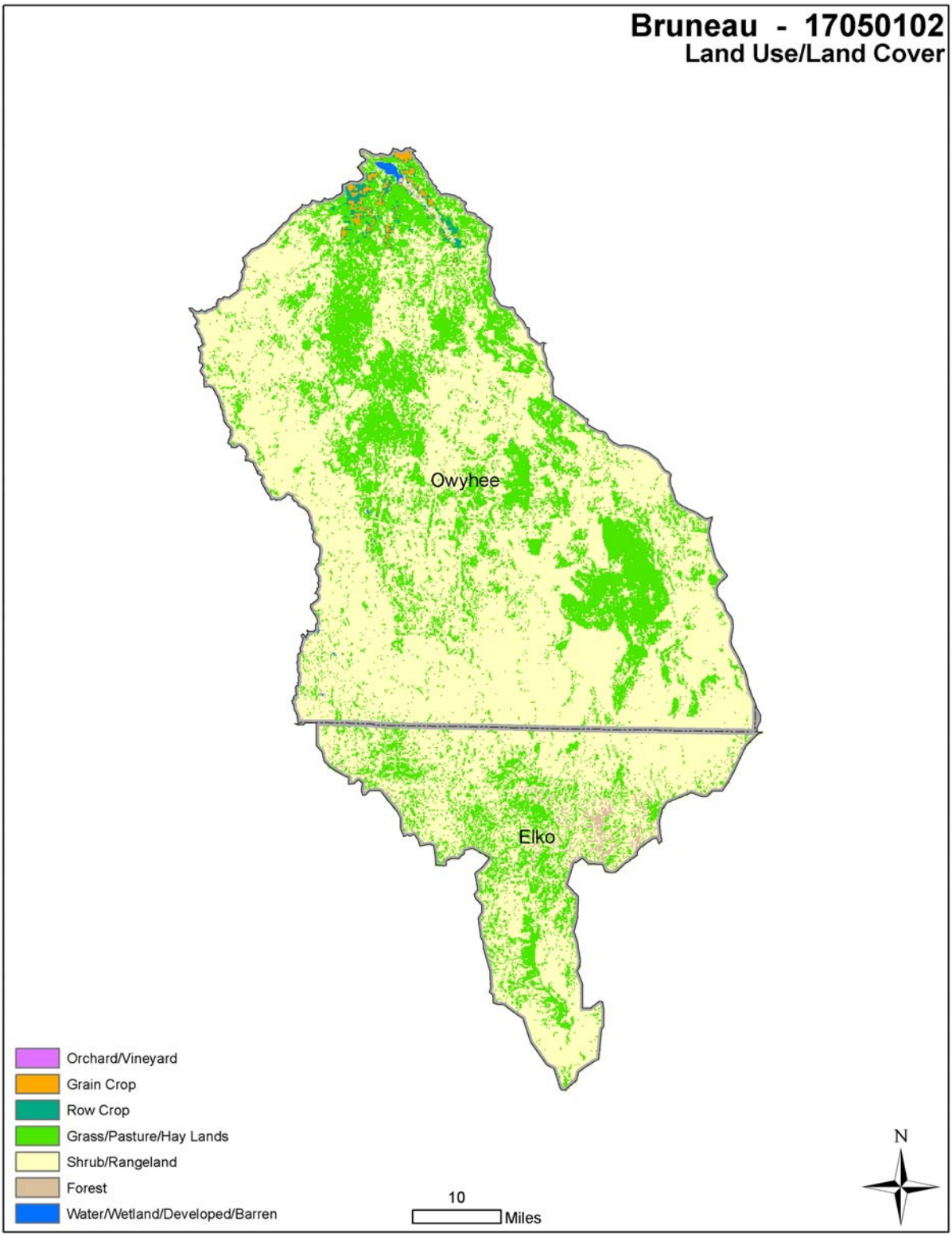
Physical Description - Land Cover/Land Use – Percentage of Acres

Land Cover / Land Use (NLCD[12])	Ownership - (2003 Draft BLM Surface Map Set[1])							
	Public		Private		Tribal		Total % of Idaho Land	Total % of Nevada Land
	% of Idaho Land	% of Nevada Land	% of Idaho Land	% of Nevada Land	% of Idaho Land	% of Nevada Land		
Forest	0.06	8.15	0.06	0.15	0.08	0.03	0.2%	8.3%
Grain Crops	-	-	0.6	<0.1	-	-	0.6%	<0.1%
Conservation Reserve[13] Program (CRP) Land	-	-	-	-	-	-	0	0
Grass/Pasture/Hay Lands	18.1	14.03	1.9	2.74	0.1	0.03	20.1%	16.8%
Orchards/Vineyards/ Berries	-	-	-	-	-	-	0	0
Row Crops	-	-	0.4	-	-	-	0.4%	0
Shrub/Rangelands	73	64.1	3.9	10.2	1	0.3	77.9%	74.6%
Water/Wetlands/ Developed/ Barren	0.4	0.2	0.3	0.1	0.1	0	0.8%	0.3%
Idaho & Nevada HUC Totals	**91.6%**	**86.4%**	**7.1%**	**13.2%**	**1.3%**	**0.4%**	**100%**	**100%**
HUC Total							**100 %**	

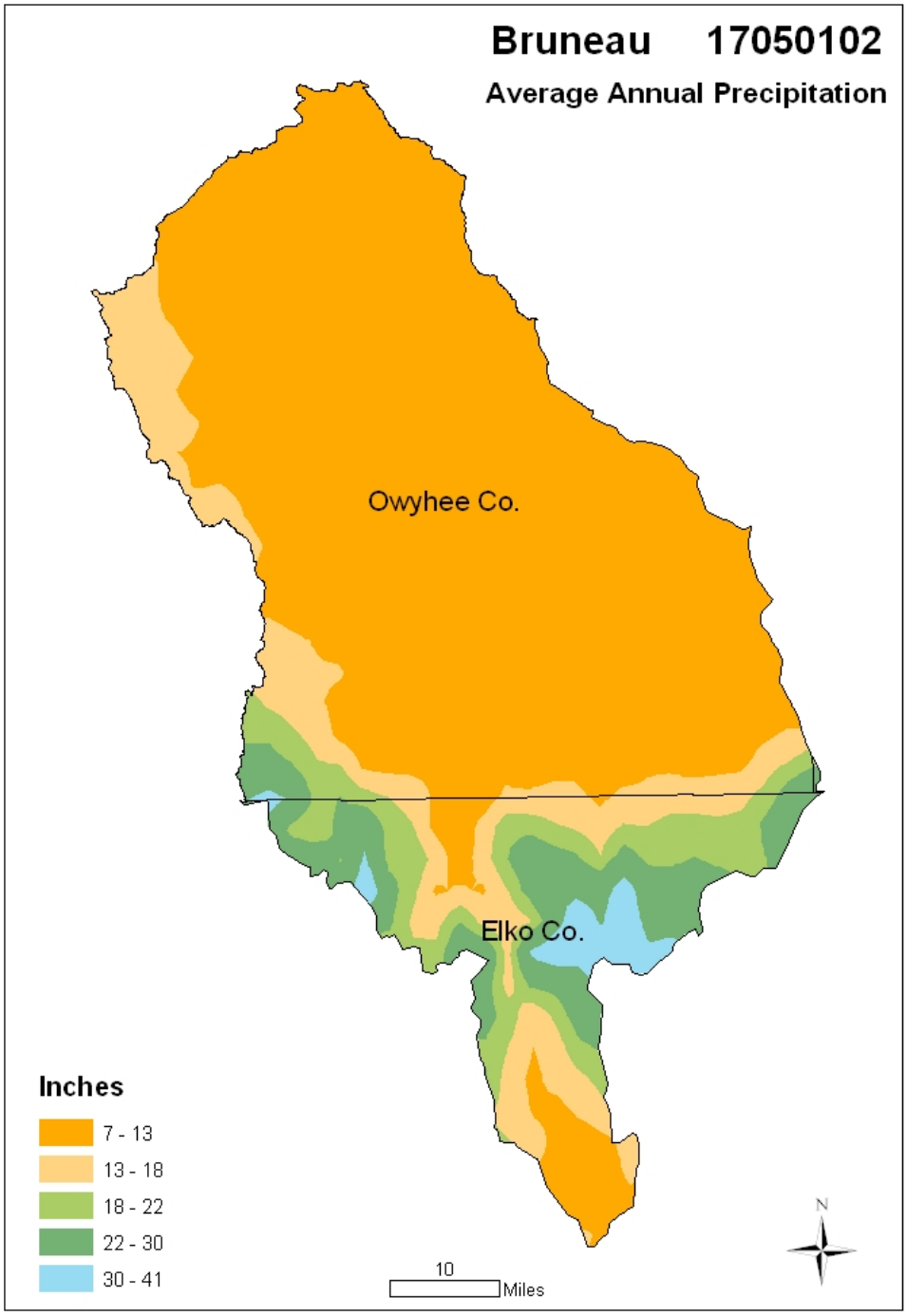
Irrigated Lands[14] (Idaho & Nevada)	Type of Land	% of Idaho Irrigated Lands	% of Nevada Irrigated Lands	% of HUC
	Cultivated Cropland	10.6	00	0.1
	Non-Cultivated Cropland *	66.1	27.2	0.7
	Pastureland	23.3	72.8	0.3
	Total Irrigated Lands	**100**	**100**	**1.1**

* Includes permanent hayland and horticultural cropland.

Land Use / Land Cover[/2]



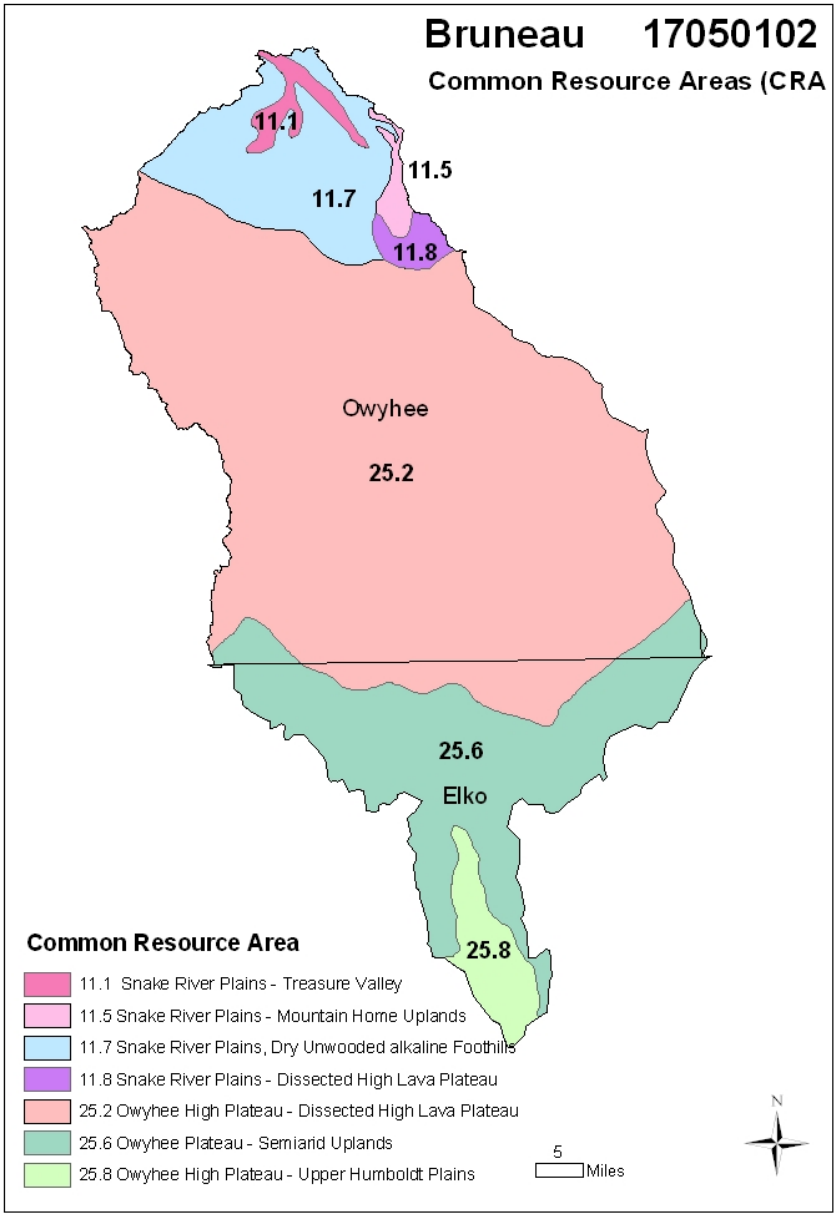
Average Annual Precipitation[/5] *



***Actual precipitation range: 14 to 41 (9-41 in Nevada).**

Common Resource Area Map

The Common Resource Areas (CRA) delineated below for the Bruneau HUC are described in the next section (for additional information, see http://www.id.nrcs.usda.gov/technical/soils/common_res_areas.html). A 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 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 System Guides information and the eFOTG;
- A geographic linkage with the national MLRA framework.

11.1 Snake River Plains - Treasure Valley: This unit is characterized by irrigated cropland, pastureland, and rapidly growing cities, suburbs, and industries. Many canals, reservoirs, and diversions are present. Aridic soils predominate and require irrigation to grow commercial crops. Surface water quality has been significantly affected by channel alteration, dams, irrigation return flow, and urban, industrial, and agricultural pollution. Crops include wheat, barley, alfalfa, sugar beets, potatoes, and beans. Crop diversity is greater, temperatures are warmer, and the mean frost free season is longer than in other CRA units. Population density is much greater than in nearby, rangeland-dominated units.

11.5 Snake River Plains - Mountain Home Uplands: This upland shrub- and grass-covered unit is sparsely populated. Local relief is between that of the flanking foothills and the Magic and Treasure Valleys. Soils are warmer than the frigid soils of the Owyhee Mountains. Today, cheatgrass, medusahead, wild rye, and sagebrush occur and livestock carrying capacity is low; native grasses are rare and vegetative regeneration capacity is limited.

11.7 Snake River Plains - Dry Unwooded Alkaline Foothills: The shrub- and grass-covered foothill unit is higher and more rugged than adjacent valley CRAs. Alkaline lacustrine terrace deposits characterize the soil and support a unique flora. Shallow and moderately deep soils over cemented pans are common. Potential natural vegetation is saltbush-greasewood and sagebrush steppe. Today, cheatgrass and crested wheatgrass are also common and the unit is used for livestock grazing. The soil temperature regime is mesic and the soil moisture regime is aridic.

11.8 Snake River Plains - Dissected High Lava Plateau: This unit consists of alluvial fans, rolling plains, and shear-walled canyons cut into extrusive rocks. Sagebrush grassland is common and scattered woodland grows on rocky uplands. This unit has more cool season grasses than the valleys to the south and lacks the saltbush–greasewood of the Raft River Valley. Frigid and mesic aridisols and mollisols occur. Grazing is the primary land use. Cropland is much less common than in other CRAs. Areas of high water quality and native fish assemblages occur in isolated canyons.

25.2 Owyhee High Plateau - Dissected High Lava Plateau: This unit has alluvial fans, rolling plains, and shear-walled canyons that are cut into extrusive rocks. Sagebrush grassland is common and scattered woodland grows on rocky uplands. This region has more cool season grasses than the valleys to the south and lacks saltbush–greasewood. Frigid and mesic Aridisols and Mollisols occur. Grazing is the primary land use. Cropland is less common than in the Snake River Plain. High water quality and native fish assemblages occur in isolated canyons.

Common Resource Area Descriptions - Continued

25.6 Owyhee High Plateau – Semiarid Uplands: The disjunct Semiarid Uplands ecoregion includes mid-elevation zones in the Owyhee and Jarbidge mountains and hills, volcanic cones, buttes, and rocky outcrops that rise out of neighboring, drier lava plains. Mountain sagebrush, western juniper, mountain brush, and grasses grow in the ecoregion. In the Jarbidge Mountains, juniper woodland can be of limited extent. Elsewhere, density and extent of juniper woodland varies with long term climate changes, grazing pressure, and fire suppression.

25.8 Owyhee High Plateau – Upper Humboldt Plains: This unit consists of broad fans and rolling tuffaceous hills and plains. Isolated low mountains and hills also occur. Soil temperature regime is mostly mesic and frigid. Soil moisture regime is mainly aridic bordering xeric. Common vegetation includes Wyoming big sagebrush, basin big sagebrush, low sagebrush, Idaho fescue, bluebunch wheatgrass and basin wildrye.

Bruneau Basin Snow and Climate Measuring Stations

There are six automated or manually measured high elevation snow and climatic measuring stations in or adjacent to the Bruneau watershed. Three of these stations are automated and part of the USDA NRCS SNOTEL (SNOw TELemetry) network. These SNOTEL stations report hourly climatic data including snow water equivalent, precipitation and air temperature while some stations also report snow depth, soil moisture and soil temperature. Bear Creek SNOTEL and Pole Creek SNOTEL are located within the basin, while Wilson Creek is near the divide with the Salmon Falls basin to the east. Three stations are snow courses that consist of permanently marked sample points where snow depth and snow water equivalent are manually measured monthly in the winter; these snow courses are Big Bend, Seventy-Six Creek and O'Neil Creek. All six stations are part of the USDA NRCS Snow Survey Data Network operated and maintained by the NRCS.

Streamflow Summary[7] Bruneau Basin

The Bruneau River watershed (HUC 17050102) straddles the Nevada-Idaho border. The Nevada headwaters have a maximum elevation of about 10,800 feet and drop to about 2,450 feet before emptying into the Snake River at C.J. Strike Reservoir near Bruneau, Idaho. Three-quarters of the watershed's 2.1 million acres or 3,300 square miles are in Idaho. The main tributaries to the Bruneau River inside the watershed are the Jarbidge River, Sheep Creek, and Jacks Creek. The topography of the area is dominated by dramatic river canyons and these desert rivers provide quality early season whitewater river opportunities. Due to the size of the watershed and limited winter precipitation, river running opportunities are limited to a narrow window during the snow melt season or years with above average snowpacks or abundant spring precipitation. Other beneficial uses include fisheries, irrigation, and municipal water supply.

There are three long term streamflow stations in the watershed; all are operated by the United States Geological Survey. The highest elevation station in the watershed (Station 13162225, Jarbidge River below Jarbidge, NV, 1998-present) measures runoff from the Jarbidge Wilderness which represents slightly less than 1% of total watershed area. The first station on the mainstem for the Bruneau River (Station 13161500, Bruneau River at Rowland, NV, 1913-present) has the longest record and receives runoff from about 12 percent of the watershed; this station is

Streamflow Summary[7] **Bruneau Basin** - Continued

upstream of the confluence with the Jarbidge River and does not include flow measured at that station. The final station (Station 13168500, Bruneau River near Hot Spring, ID, 1909-1915 and 1943-present) is closer to the downstream boundary of the watershed. Diversions above the Hot Spring gage irrigate approximately 12,900 acres. Figure 1 illustrates the monthly average streamflow volume for the three streamflow stations. The mean annual runoff at the Hot Spring, ID station is about 276,000 acre-feet or three and a half times the runoff at the Rowland, NV station. The April through July runoff accounts for about 72 percent of the annual total at each station. The mean annual runoff for the Jarbidge River below Jarbidge, NV is 24,500 acre-feet.

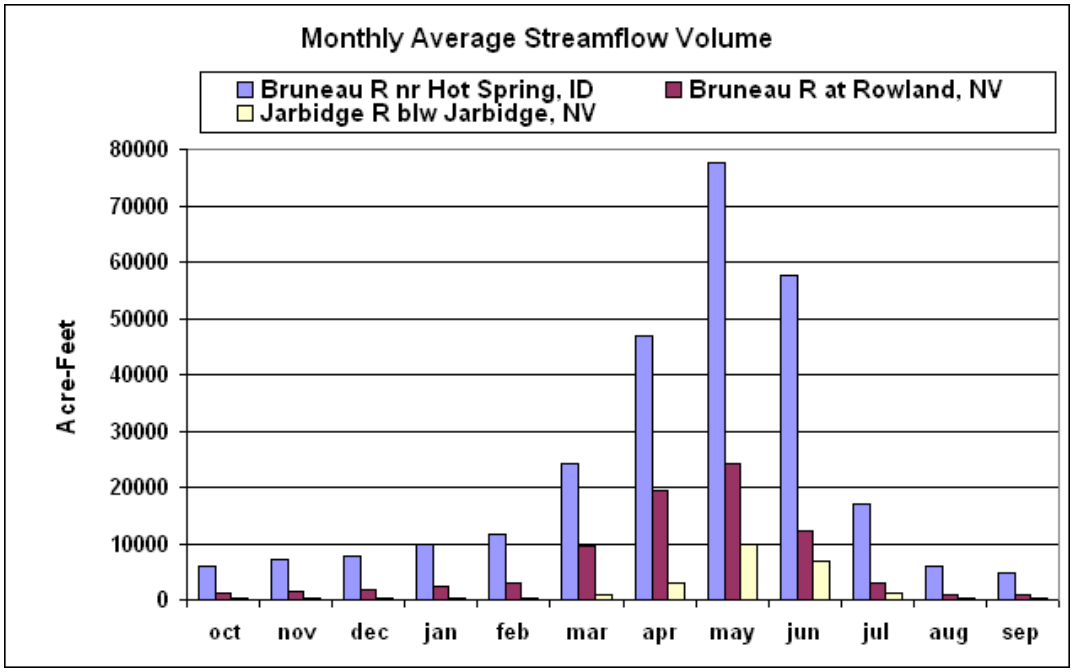


Figure 1: Average Monthly Streamflow at Stations within the Bruneau River watershed (HUC 17050102) for each station's period of record.

Streamflow Summary[/7] Bruneau Basin - Continued

Irrigated Adjudicated Water Rights[/6])		**CFS**	
	Surface Water	787.3	
	Groundwater	495.8	
	Total Irrigated Adjudicated Water Rights	1283.0	
Stream Flow Data[/7]	USGS 13168500 Bruneau River nr Hot Spring, ID; years 1909-1915, 1943-present		**ACRE-FEET**
		Average Annual	275,900
		April - July Average	199,000
		Percent of Average Annual	72%
Stream Data **Percent of Total Miles of streams in HUC*		**MILES**	**PERCENT**
	Total Stream Miles[/8]	1,479	-
	Water quality impaired streams[/9,10]	914	62%
	Anadromous Fish Presence (Streamnet)[/11]	0	-
	Bull Trout Presence (Streamnet)[/11]	196.8	13%
Land Cover / Use[/2] based on a 100 ft. stretch on both sides of all streams in the 100K Hydro Layer		**ACRES**	**PERCENT**
	Forest	4,070	1.6%
	Grain Crops	880	0.4%
	Grass/Pasture/Hay Lands	53,630	21.3%
	Row Crops	420	0.2%
	Shrub/Rangelands	188,680	75%
	Water/Wetlands/Developed/Barren	3,870	1.5%
	Total Acres of 100 ft stream buffers	**251,550**	100%
Land Capability Class[/4] (For Crop and Pasture Lands)	**I** – slight limitations	800	2
	II – moderate limitations	2,400	6.1
	III – severe limitations	6,800	17.3
	IV – very severe limitations	900	2.3
	V – no erosion hazard, but other limitations	7,200	18.3
	VI – severe limitations, unsuited for cultivation, limited to pasture, range, forest	12,300	31.3
	VII – very severe limitations, unsuited for cultivation, limited to grazing, forest, wildlife	8,900	22.6
	VIII – misc areas have limitations, limited to recreation, wildlife, and water supply	0	0
	Total Crop & Pasture Lands	**39,300**	100

Confined Animal Feeding Operations – Dairies/Feedlots[12,13, 26]						
	Number	<200	200-500	500-750	750-1000	>1000
Dairy	2	1	1	0	0	0
	Number	<300	300-999	1,000-4,999	5,000-9,000	>10,000
Feedlots	3	0	1	0	1	1

Resource Settings

Pasture
Some improved dryland pasture with introduced forage species including wheatgrasses, fescues, bromes, and orchardgrass. The older established stands are of low vigor, with encroachment of noxious weeds. Continuous season-long grazing is typical, with below-optimum forage production. No commercial fertilizers are applied, and pest management practices are limited. Livestock water may be inadequate.

Irrigated pastureland includes both low elevation pastures and those in high elevation mountain valleys. Irrigated pastures are often surface irrigated on variable soils with slopes 1-5%. Irrigation water is distributed via earthen ditches, with tailwater eventually returning to rivers or streams. Fields may have been leveled. Irrigation efficiency is 20-35%. Plants are introduced forage species and native perennials, conventionally tilled when rotating pasture (10 years) and grain (2 years). Fertilizers are sometimes applied, but without soil testing or nutrient management. Adjacent riparian areas are important for wildlife.

Surface Irrigated Cropland
Conventionally tilled, often intensively cultivated cropland on 0-7% slopes. Precipitation is 12 inches or less. Soils are typically sandy loams, silt loams, and loams, and may have been extensively land-leveled in the past. Most irrigation is by siphon tube or gated pipe, but there is also some border irrigation. Typical rotations include silage corn, small grains, and alfalfa, although annual grain is also common. Irrigation-induced erosion exceeds the threshold. Wind erosion is a resource problem following low residue row crops. Surface roughening and cover crops is often utilized to reduce wind erosion problems. Nutrient, pest, and/or irrigation water management may be less than desirable. Impacted surface and/or ground water quality is common.

Sprinkler Irrigated Cropland
Conventionally tilled cropland on soils ranging from sands to loams. Rotations containing less than 66% high residue crops can lead to wind erosion problems. Wind erosion is typically a problem from March to June, creating air quality and visibility hazards in some portions of the subbasin. Various combinations of small grains, alfalfa, beets, corn, potatoes, beans and barley are grown. Potato with one or two years of spring grain is a typical rotation on slopes ranging from 0-8%.

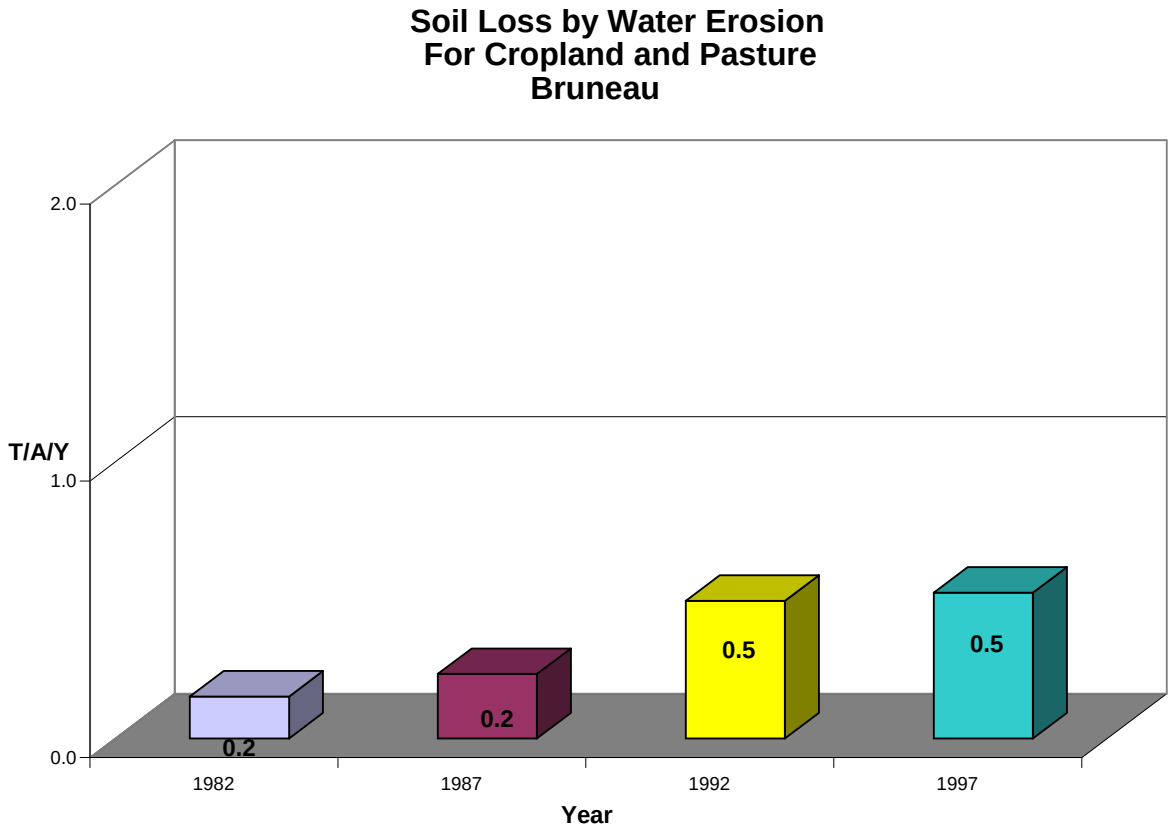
These rotations may have sheet and rill and ephemeral gully erosion problems in the spring following potatoes. Sprinkler-irrigation induced erosion may also be a concern, especially on steeper slopes. Nutrient and pest management may be less than desirable. Irrigation water management and maintenance of sprinkler systems may be less than desirable. Wildlife habitat is often inadequate with limited permanent cover.

Resource Settings - Continued

Hayland
Conventionally tilled, surface and sprinkler irrigated on 0-7% slopes. Irrigation water is normally plentiful. Small grains and alfalfa are grown in rotation, with alfalfa typically maintained for 4-6 years. Grazing of crop aftermath is common. Nutrient, pest or irrigation water management may be less than desirable.

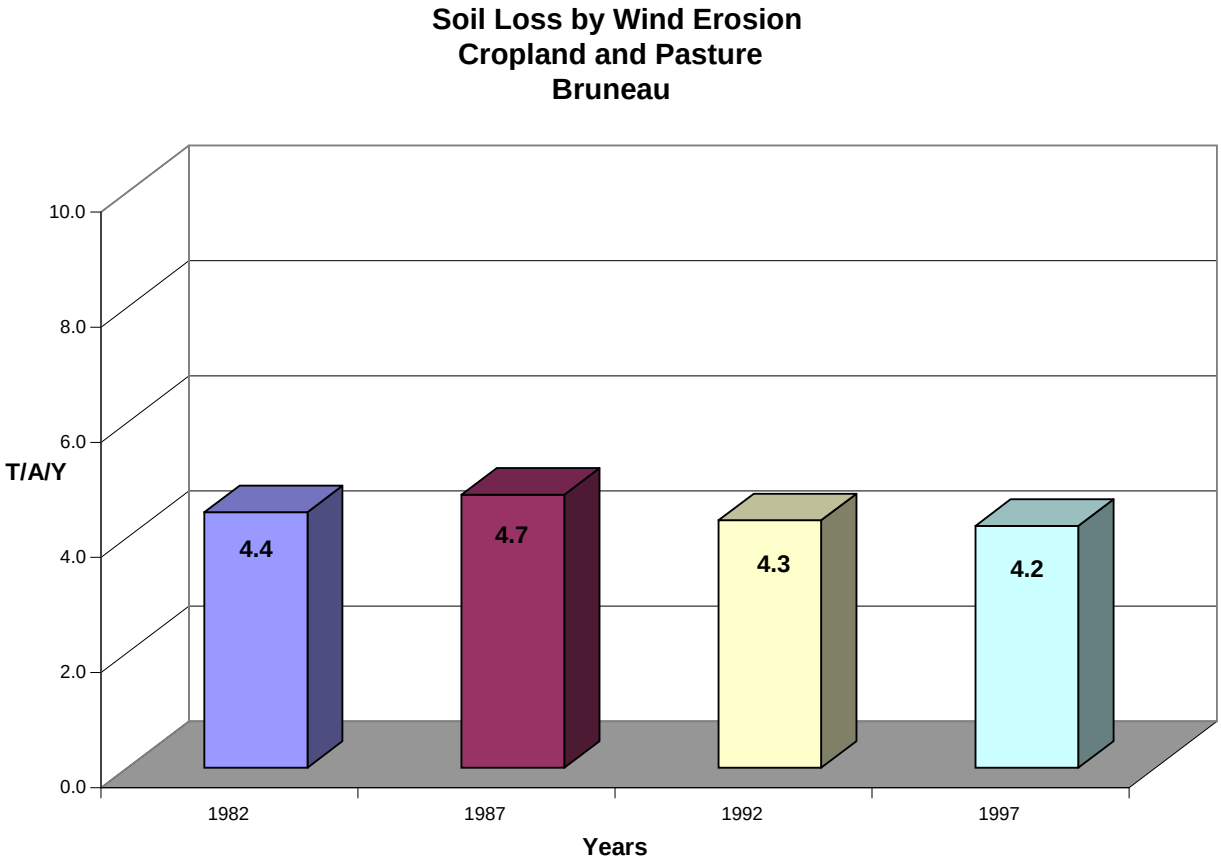
Rangeland
This watershed varies from low elevation desert to high elevation, steep rangeland. Low elevation desert is characterized by sagebrush and perennial bunchgrasses. Frequent fires have eliminated some areas of sagebrush, with annual cheatgrass and other invaders dominant. Carrying capacity can be limited by available water. Land is utilized by antelope and livestock in winter and early spring. Mid-elevation rangeland has precipitation ranging from 12-16 inches. This rangeland consists of sagebrush and perennial bunchgrasses with variable soils on nearly level flats to benches and rolling hills. High elevation range has precipitation greater than 16 inches and occurs on steep slopes and high mountain valleys. Access to riparian areas on all rangeland types is not typically managed, and temperature, nutrients, and sediment may be an associated water quality concern.

Resource Concerns



Sheet and rill erosion by water on the sub basin croplands and pasturelands 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 the natural precipitation is low and the cropland is relatively flat.

Resource Concerns – Continued



Wind erosion on the sub basin's croplands and pasturelands has been essentially static since 1982, but has been reduced from about 4.7 tons per acres per year in 1987 to about 4.2 tons per acre per year in 1997.

Resource Concerns – Continued

Idaho and Nevada Impacted Water Bodies[9,10] (17050102)	Stream Miles	Sediment, Siltation or TSS	Nutrients	Bacteria	Temperature	Dissolved Oxygen	Flow/Habitat Alteration[1]	Other or Unknown
Big Flat Creek (SW030_02)	48.7							x
Big Jacks Creek (SW004_04)	7.4	x					x	
Bruneau River (SW009_06)	16.9		x		x[2]			
Buck Flat Draw (SW035_04)	10.2				x			
Cat Creek (SW019_02)	17.8							x
C.J. Strike Reservoir- Bruneau Arm (SW001_06)	6.1		x					x
Clover Creek (SW028_04,05)	54.3			x				x
Cougar Creek (SW022_02,03)	60.8	x[3]						
Deadwood Creek (SW034_02)	28.1							x
Deer Creek (SW033_03)	5.2							x
EF Jarbridge River[4] (445A.218) [4]	18.6			x[5]	x			x
Hot Creek (SW010_02,03)	50.2	x[3]		x			x	
Jacks Creek (SW002_05)	12.3	x	x	x	x[2]	x		
Marys Creek (SW016_02)	134.8							x
Jarbridge River[4] (445A.219) [4]	7.4		x[5]					x
Jarbridge River[4] (445A.220) [4]	9.0				x			x
Poison Creek (SW025_02,03)	77.4	x[3]						
Pole Creek (SW018_02)	33.0							x
Sheep Creek (SW014_04)	25.5							x
Sugar Valley Creek (SW008_04)	13.8	x	x	x		x		
Sugar Valley Creek (SW008_03,02)	143.5	x[3]						
Three Creek (SW031_03)	7.0	x						
Three Creek (SW031_02)	34.9							x
Wickahoney Creek (SW007_02,03)	91.4	x[3]					x	
TOTAL STREAM MILES:	**914.3**							

[1] Flow and habitat alteration are not considered pollutants by the Idaho Department of Environmental Quality, and are not addressed by the TMDL.
[2] Assessment documented concerns, and recommends listing for the specified pollutant on the next Integrated Report.
[3] Assessment recommends delisting on the next Integrated Report.
[4] Nevada 303d Listing
[5] Delisted, but exceeds Nevada's RMHQ (Requirements to Maintain High Quality Water)
Shading indicates TMDL in place.

The watershed consists of dry, open plateaus dissected by confined, relatively inaccessible canyons. The source for much of the water in the subbasin comes from snowpack and rainfall in the mountain ranges in Nevada. On a seasonal basis, the Bruneau River and other surface waterbodies are impacted by a variety of pollutants, including sediment, temperature, bacteria and nutrients. Potential sources of pollutants in the watershed include irrigated agriculture, aquaculture, riparian habitat and streambank disturbance, livestock, and irrigation diversions.

Resource Concerns – Continued

While most of the watershed is used as rangeland, some areas within basins or bordering large streams are irrigated for pasture and crop production. Where access by livestock is concentrated, loss or reduction of streamside vegetation is severe, causing stream bank erosion and sedimentation. Water withdrawal for irrigation often results in completely dry channels downstream from diversions. A phosphorus target has been set for the Bruneau River and Jacks Creek (0.05 mg/L monthly average) to meet the Snake River TMDL. This will require between 37 – 75% reductions in phosphorus loads. In-stream sediment targets for suspended sediment and surface fines have been established on affected waterbodies to reduce impacts to the fishery. The temperature exceedances in portions of the watershed may be due, in part, to the influence of thermal spring waters. Temperature TMDLs have been postponed pending additional monitoring data.

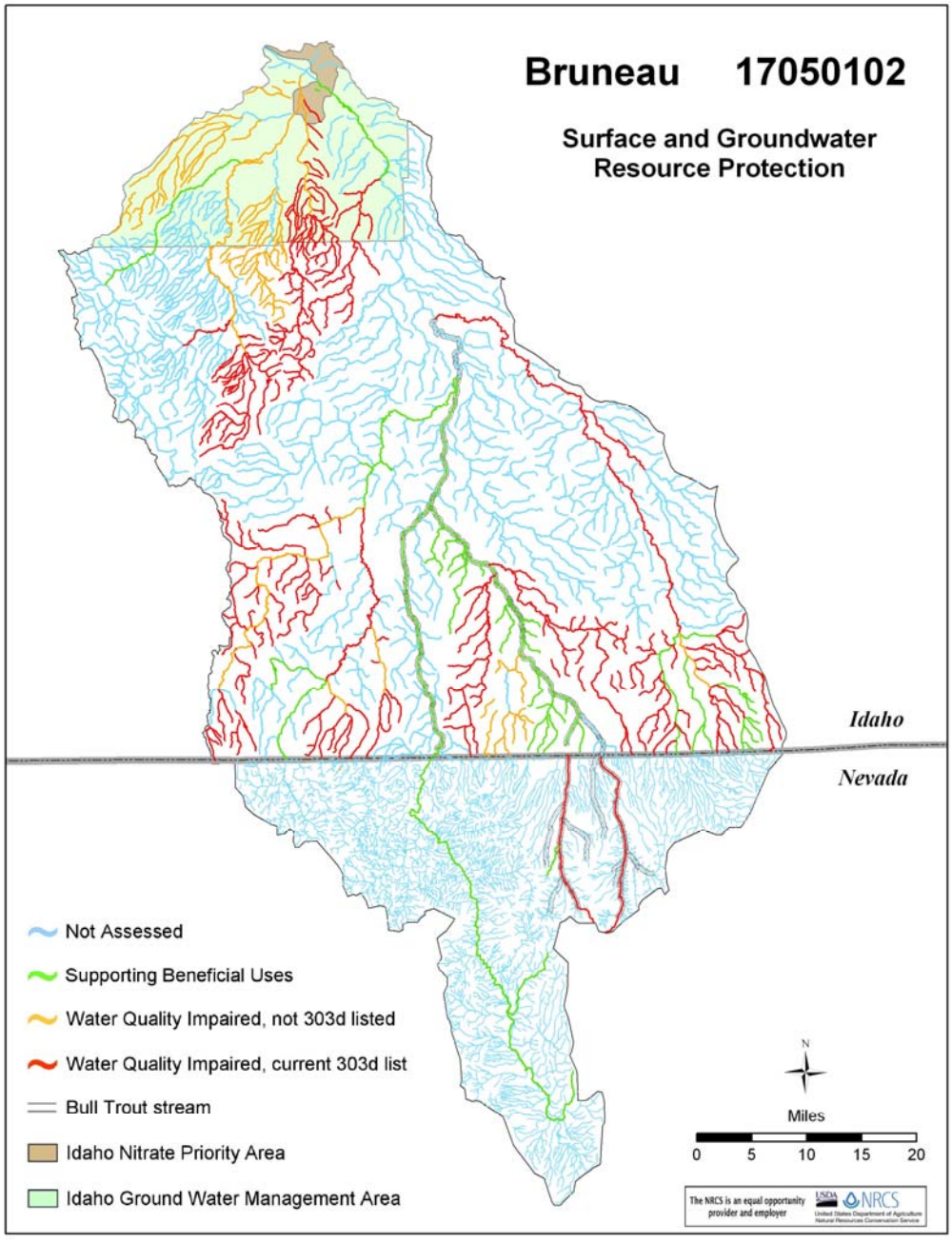
The northern most portion of the watershed, in the vicinity of C.J. Strike Reservoir, has been impacted by nitrates. This area is ranked 14th on the state's nitrate priority area list due to the number of wells exceeding the drinking water standard (10 mg/L). Potential sources of nitrates include commercial nitrogen fertilizer, crop residues, land application of animal waste, animal feeding operations, and septic systems.

Conservation practices that can be used to address these water quality issues include erosion control, grazing management, irrigation water management, nutrient and pest management, residue management, conservation cover, streambank enhancement/restoration, and riparian buffers.

Watershed Projects, Plans, Studies, and Assessments*	
Federal:	***State:***
NRCS Watershed Plans/Studies/Assessments[14,15]	**IDEQ TMDLs[16]**
None	Bruneau River Subbasin Assessment and TMDL (2001) Jacks Creek Aquaculture Addendum TMDL (draft) 2007
	IDEQ 319 Projects/[17]
	Clover Flats Riparian Restoration (2005)
NWPCC Subbasin Plans and Assessments[18]	**SCC Plans/Projects[19]**
Bruneau Subbasin Assessment (2004)	Bruneau River TMDL Agric. Implementation Plan (2002)
	ISDA Regional Water Quality Projects[20]
	Lower Jacks Creek Monitoring Project (1999-2001)
	Grandview and Bruneau Regional Groundwater Study (on-going)
	IDWR Comprehensive Basin Plans[21]
	None

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

Surface and Groundwater Resource Protection[1,22,23,24]



Information based on most current EPA-approved 305b/303d reports: Nevada's 2004 305b report (http://ndep.nv.gov/bwqp/file/305b2004.pdf) and Nevada's 2004 303d List (http://ndep.nv.gov/bwqp/file/2004_303d-list_final_epa-approved_nov05.pdf). Idaho's 2002 Integrated Report (http://www.deq.state.id.us/water/data_reports/surface_water/monitoring/2002.cfm).

Resource Concerns – Continued

Resource Concerns/ Issues by Land Use								
SWAPA*	**Specific Resource Concerns/Issues Idaho and Nevada**	**Pasture**	**Hayland**	**Dry Crops**	**Surface Irrigated Crops**	**Sprinkler Irrigated Crops**	**Rangeland**	**Grazed and Ungrazed Forest**
Soil Erosion	Sheet and rill					x		
	Ephemeral or classic gully					x		
	Irrigation-induced				x			
	Wind				x	x		
	Streambank	x					x	
Water Quantity	Inefficient use on irrigated lands	x	x		x	x		
Water Quality, Surface	Suspended sediment	x	x		x	x	x	
	Nutrients and organics	x	x		x	x		
Water Quality, Ground	Nutrients and organics		x		x	x		
	Pesticides		x		x	x		
Soil Condition	Organic matter depletion					x		
	Compaction	x				x		
Plant Condition	Productivity, health and vigor	x	x				x	
	Noxious and invasive plants	x			x		x	
	Wildfire hazard						x	
Domestic Animals	Inadequate feed or water	x					x	
Fish and Wildlife	Inadequate water						x	
	Inadequate cover/shelter	x			x	x	x	

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

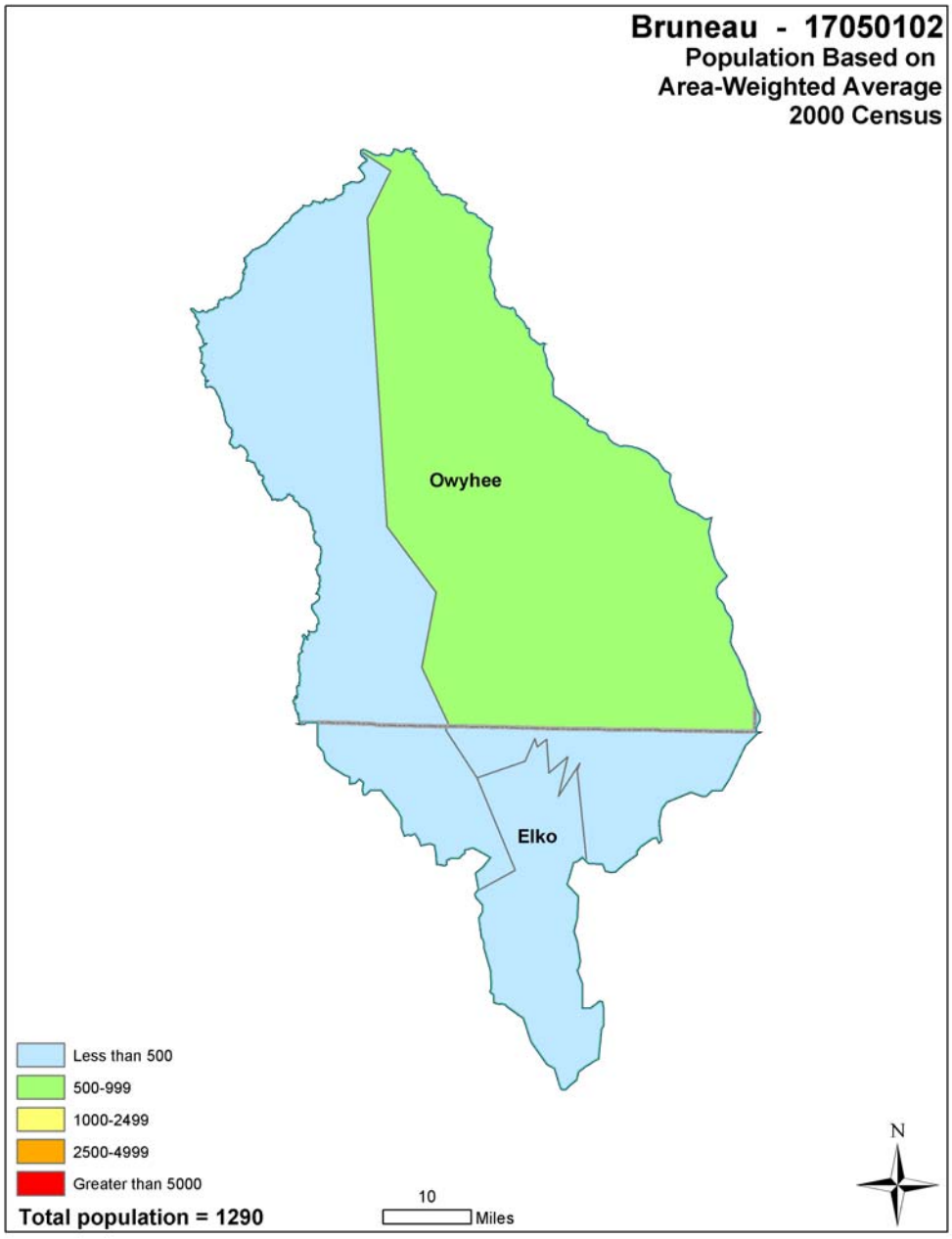
Human considerations: Implementation of conservation practices and enhancement has the potential for change in management and cost of production. Installation of practices will have an upfront cost and require maintenance. In the short run increased management may be required as new techniques are learned. 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.

FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES[25]	
Threatened and Endangered Species	**Candidate Species**
Mammals – None **Birds –** None **Fish –** Bull Trout **Invertebrates** – Bruneau Hot Springsnail, Idaho Springsnail **Plants –** None	**Plants –** None **Vertebrate** – Columbia Spotted Frog **PROPOSED SPECIES**
ESSENTIAL FISH HABITAT - Bull Trout	**CRITICAL FISH HABITAT –** None

Census and Social Data[1/26]

Population: 1,290

Number of Farms: 100



Census and Social Data - continued

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.

Census and Social data shown below are based on county-wide statistics and records and may not accurately reflect the actual watershed-specific portion of the counties.

Sixty-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; women make up 18.3 percent of the total. Ninety percent of all operators are white. Non-white operators are of Hispanic, American Indian and Asian background.

Farm size ranges from less than 10 acres to more than 5,000 acres with an average of 2,040 acres. Agricultural land in the watershed is a mix of cropland, range, pasture and hay land. Land users in the watershed utilize EQIP, CRP, Continuous CRP and other programs to implement conservation plans.

For the period of 1997 through 2002, the number of farms in the watershed has increased by 1.0 percent. Farm size is down 1.5 percent. The market value of production is higher, rising 23.3 percent. Farmers and ranchers in the watershed receive government payments. In 2002, average payments were $12,600. Farm sales range from less than $1,000 to more than $500,000 per year. Sixty-five percent of farms reported sales of less than $50,000 per year.

	Number of farms	Average size farm	Market Value of Production (Average Farm)	Government Payments (Average Farm)
1997	99	2,070	$145,500	Not Reported
2002	100	2,040	$179,400	$12,600
Change	1.0%	-1.5%	23.3%	

Economic Profile:

	Watershed	Idaho	Nevada	United States
Population	1,290	1,466,500	2,495,000	299,398,000
Median Personal Income (2005)	$39,600	$40,500	$47,200	$44,300
Median Home Value (2000)	$98,600	$106,600	$142,000	$119,600
Percent Unemployment (2006)	2.6%	3.4%	4.2	4.6%
Percent Below Poverty Level (2004)	12.8%	11.5%	11.1	12.7%

Progress / Status

The following tables include conservation activities that have been cost-shared under federal and state funded programs and applied and reported in agency databases or reporting systems (PRS Data). Individual conservation efforts applied without cost-share assistance are not reflected. The Future Needs Tables included at the end of this report are based on the conservation activities shown here as well as estimates of percentage of each land use that already meets Resource Quality Criteria as defined in the USDA NRCS Electronic Field Office Technical Guide.

Conservation Treatment Activity – Idaho	FY04	FY05	FY06	FY07	FY08	Avg/Yr	Total
Conservation Crop Rotation (328) ac	0	0	257	129	187	114.6	573
Cover Crop (340) acres	0	0	0	0	183	36.6	183
Forage Harvest Mgmt (511) acres	0	0	34	0	0	0	34
Irrigation System, sprinkler (442) ac	0	271	34	118	187	122.0	610
Irrigation Water Conveyance, Pipeline, High Pressure, Underground Plastic (430DD) ft	0	200	6304	6642	0	2629.2	13146
Irrigation Water Management (449) acres	0	0	463	269	187	183.8	919
Nutrient Management (acres)	0	0	296	118	0	82.8	414
Pasture Planting (512) acres	0	0	0	34	0	6.8	34
Pest Management (595) acres	0	0	291	0	0	58.2	291
Pipeline (516) ft	0	0	0	4600	0	920.0	4600
Prescribed Grazing (528) acres	0	0	0	7451	0	1490.2	7451
Pumping Plant (533) number	0	0	0	1	0	0.2	1
Residue Management, Seasonal (344) acres	0	0	0	129	0	25.8	129
Structure for Water Control (587) number	0	0	0	3	0	0.6	3
Surface Roughening (609) acres	0	0	332	129	0	92.2	461
Watering Facility (614) number	0	0	0	1	0	0.2	1

Conservation Treatment Activity – Nevada	FY04	FY05	FY06	FY07	FY08	Avg/Yr	Total
Critical Area Planting (342) acres					72	14	72
Fence (382) ft				5266	3975	1848	9241
Prescribed Grazing (528 & 528A) acres					548	110	548

Progress in the last three years has been focused on:

~ irrigation water quantity and quality
~ sprinkler conversion for improving water quantity and quality
~ irrigation water management
~ prescribed grazing

Resource concerns that require ongoing attention:

~ improved grazing management
~ erosion control
~ wildlife habitat improvements
~ water quality & water quantity
~ irrigation water management
~ nutrient management
~ pest management
~ stream habitat management and improvement

Lands Removed from Production through Farm Bill Programs

- Conservation Reserve Program (CRP): **None**
- Wetland Reserve Program (WRP): **None**

Footnotes/Bibliography

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) and NDEP, Nevada 2004 303d Impaired Waters List (approved by EPA 2005). http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/integrated_report.cfm. http://ndep.nv.gov/bwqp/file/2004_303d-list_final_epa-approved_nov05.pd

10. IDEQ. 2001. Bruneau River Subbasin Assessment and TMDL. (*Draft Jacks Creek Aquaculture Addendum 2007).* http://www.deq.state.id.us/water/data_reports/surface_water/tmdls/bruneau_river/bruneau_river.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-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
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/.
19. Idaho Soil Conservation Commission (SCC), TMDL watershed implementation plans: agricultural component, http://www.scc.state.id.us/PDF/Ag%20Component%20Status%20Report%20-%202004.pdf, and Water Quality Program, http://www.scc.state.id.us/Docs/WQPA%20FACT%20SHEET.doc
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
22. IDEQ. 2002 Integrated Report (approved December 2005). http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/integrated_report.cfm.
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
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

Conservation Activities and Future Conservation Needs

The following Future Conditions Tables are estimates of the future needs of conservation practices in the watershed. The Tables are based on the already applied conservation activities as well as estimates of percentage of each land use that already meets Resource Quality Criteria as defined in the USDA NRCS electronic Field Office Technical Guide.

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

1. Estimates of total additional conservation needs to reach "Resource Management System" level of treatment based on benchmark conditions in the watershed

2. Local knowledge of the area, past and ongoing project activities and professional judgment

3. 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.

Conservation Activities for Irrigated Cropland/Hayland

Current Conditions	Idaho	Nevada	Total acres
Typical Management Unit/Ownership			2,040
Surface Irrigated Cropland/Hayland	3,910	440	4,350
Sprinkler Irrigated Cropland/Hayland	13,050	-	13,050
Current Farm Bill participation			15%
Total Irrigated Cropland/Hayland	16,960	440	17,400

Future Conditions	Idaho	Nevada	Total Acres
Sprinkler Irrigated Cropland/Hayland	16,060	-	16,060
Drip Irrigated Cropland (Microirrigation)	800	-	800
Surface Irrigated Cropland/Hayland	-	400	400
Total Riparian	100	40	140
Total Irrigated Cropland/Hayland Acres	16,960	440	17,400

Project Future Level of Treatment for Irrigated Cropland/Hayland:							
Irrigated Cropland/Hayland	Quantity			Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Surface Irrigation	Ac.	-	400				
Conservation Crop Rotation (328)	Ac.	-	400	$ -	$ -	$ -	$ -
Forage Harvest Management (511)	Ac.	-	400	-	-	-	-
Irrigation System, Surface (443)	Ac.	-	300	-	-	45,000	1,400
Irrigation System, Gated Pipe/Surge (443)	No/Ac	-	100	-	-	21,500	600
Irrigation Tailwater Recovery (447)	No.	-	2	-	-	30,200	900
Irrigation Water Conveyance (430 EE)	Ft.	-	21,780	-	-	117,200	600
Irrigation Water Conveyance Gated Pipe (431)	Ft.	-	10,890	-	-	44,400	400

Conservation Activities for Irrigated Cropland/Hayland - continued

Project Additional Treatment Needs for Irrigated Cropland/Hayland (Continued):							
Irrigated Cropland/Hayland		Quantity		Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Irrigation Water Management (449) - Low Level	Ac.	-	300	-	-	4,500	1,500
Irrigation Water Management (449) - Meters and Moisture Sensors	Ac.	-	100	-	-	4,500	1,500
Land Leveling/Smoothing (466 & 464)	Ac.	-	100	-	-	20,000	600
Nutrient Management (590)	Ac.	-	400	-	-	6,000	2,000
Pest Management (595)	Ac.	-	400	-	-	9,600	3,200
Sediment Basin (350)	No.	-	3	-	-	5,700	200
Residue Management Mulch Till (345)	Ac.	-	400	-	-	18,000	6,000
Residue Management Seasonal (344)	Ac.	-	400	-	-	9,000	3,000
Structure for Water Control (587) -Fish Screen	No.	-	10	-	-	33,300	300
Upland Wildlife Habitat Management (645)	Ac.	-	70	-	-	2,100	700
Windbreak/Shelterbelt Establishment (380)	Ft.	-	3,650	-	-	5,500	100
Sprinkler Irrigation	Ac.	16,860	-				
Cover Crop (340)	Ac.	4,330	-	216,500	2,200	$ -	$ -
Conservation Crop Rotation (328)	Ac.	16,860	-	-	-	-	-
Constructed Wetland (656)	No.	2	-	36,400	400	-	-
Forage Harvest Management (511)	Ac.	16,860	-	-	-	-	-
Irrigation System, Microirrigation (441)	Ac.	800	-	1,088,000	54,400	-	-
Irrigation System, Sprinkler (442)	Ac.	3,550	-	1,952,500	39,100	-	-
Irrigation Water Conveyance (430DD)	Ft.	71,280	-	491,800	2,500	-	-
Irrigation Water Management (449) - Low level	Ac.	8,650	-	129,800	43,300	-	-

Conservation Activities for Irrigated Cropland/Hayland - continued

Project Additional Treatment Needs for Irrigated Cropland/Hayland (Continued):							
		Quantity		Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Irrigation Water Management (449) - Meters and Moisture Sensors	Ac.	8,650	-	389,300	129,800	-	-
Nutrient Management (590)	Ac.	16,860	-	252,900	84,300	-	-
Pest Management (595)	Ac.	16,860	-	404,600	134,900	-	-
Pumping Plant (533)	No.	16,860	-	1,626,300	16,300	-	-
Residue Mngt, Mulch Till (345)	Ac.	16,860	-	758,700	252,900	-	-
Residue Management Seasonal (344)	Ac.	16,860	-	379,400	126,500	-	-
Residue Mngt, No Till/Strip Till (329)	Ac.	1,800	-	162,000	54,000	-	-
Sediment Basin (350)	No.	30	-	57,000	1,700	-	-
Structure for Water Control (587) - Fish Screen	No.	27	-	89,900	900	-	-
Surface Roughening (609)	Ac.	16,330	-	367,400	122,500	-	-
Upland Wildlife Habitat Management (645)	Ac.	2,520	-	75,600	25,200	-	-
Well Decommissioning (355)	No.	15	-	12,800	-	-	-
Windbreak/Shelterbelt Establishment (380)	Ft.	276,570	-	417,600	4,200	-	-
Riparian	Ac.	100	40				
Channel Bank Vegetation (322)	Ac.	50	20	100	-	-	-
Channel Stabilization (584)	Ft.	4,220	1,680	105,500	5,300	42,000	2,100
Fence (382)	Ft.	84,300	33,720	182,900	3,700	73,200	1,500
Pasture & Hayland Planting (512)	Ac.	50	20	8,000	100	3,200	-
Pest Management (595)	Ac.	100	40	2,400	800	1,000	300
Pipeline (516)	Ft.	32,000	12,800	93,800	500	37,500	200
Prescribed Grazing (528)	Ac.	75	40	1,100	400	600	200
Riparian Forest Buffer (391)	Ac.	25	10	37,500	400	15,000	200

Conservation Activities for Irrigated Cropland/Hayland - continued

Project Additional Treatment Needs for Irrigated Cropland/Hayland (Continued):							
		Quantity		Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Riparian Herbaceous Cover (390)	Ac.	25	10	7,500	100	3,000	-
Stream Crossing (578)	No.	20	10	70,000	3,500	35,000	1,800
Streambank & Shoreline Prot (580)	Ft.	10,540	4,220	500,700	25,000	200,500	10,000
Tree/Shrub Establishment (612)	Ac.	100	40	47,000	500	18,800	200
Upland Wildlife Management (645)	Ac.	15	5	500	200	200	100
Use Exclusion (472)	Ac.	25	10	900	-	300	-
Watering Facility (614)	No.	10	5	8,700	100	4,400	-
Wetland Wildlife Management (644)	Ac.	10	5	300	100	200	100
Total RMS Costs				$ 9,975,400	$ 1,135,800	$ 811,400	$ 39,700

Conservation Activities for Irrigated Cropland/Hayland - continued

Effects of Additional Treatment Needs for Irrigated Cropland/Hayland (Continued):								
	Effects				Implementation			
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Surface Irrigation	+1	+1	+3	+1				
Conservation Crop Rotation (328)					X			X
Forage Harvest Management (511)					X			X
Irrigation System, Surface (443)					X			X
Irrigation System, Gated Pipe/Surge (443)					X			X
Irrigation Tailwater Recovery (447)					X			X
Irrigation Water Conveyance (430 EE)					X	X		X
Irrigation Water Conveyance (430 HH)					X	X		
Irrigation Water Management (449) - Low Level					X			X
Irrigation Water Management (449) -Meters and Moisture Sensors					X			X
Land Leveling/Smoothing (466 & 464)					X			X
Nutrient Management (590)					X			X
Pest Management (595)					X			X
Surface Irrigation								
Conservation Crop Rotation (328)					X			X
Forage Harvest Management (511)					X			X
Irrigation System, Surface (443)					X			X
Irrigation System, Gated Pipe/Surge (443)					X			X
Irrigation Tailwater Recovery (447)					X			X
Irrigation Water Conveyance (430 EE)					X	X		X
Irrigation Water Conveyance (430 HH)					X	X		X
Irrigation Water Management (449) - Low Level					X			X
Irrigation Water Management (449) -Meters and Moisture Sensors					X			X

Conservation Activities for Irrigated Cropland/Hayland - continued

Effects of Additional Treatment Needs for Irrigated Cropland/Hayland (Continued):								
	Effects				Implementation			
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Surface Irrigation	+1	+1	+3	+1				
Land Leveling/Smoothing (466 & 464)					X			X
Nutrient Management (590)					X			X
Pest Management (595)					X			X
Sediment Basin (350)					X			X
Residue Management Mulch Till (345)					X			X
Residue Management Seasonal (344)					X			X
Structure for Water Control (587) -Fish Screen					X			X
Upland Wildlife Habitat Management (645)					X			X
Windbreak/Shelterbelt Establishment (380)					X			X
Sprinkler Irrigation	+3	+2	+2	+3				
Cover Crop (340)					X			X
Conservation Crop Rotation (328)					X			X
Constructed Wetland (656)					X			X
Forage Harvest Management (511)					X			X
Irrigation System, Microirrigation (441)					X			X
Irrigation System, Sprinkler (442)					X			X
Irrigation Water Conveyance (430DD)					X			X
Irrigation Water Management (449) - Low level					X			X
Irrigation Water Management (449) -Meters and Moisture Sensors					X			X
Nutrient Management (590)					X			X
Pest Management (595)					X			X
Pumping Plant (533)					X			X
Residue Mngt, Mulch Till (345)					X			X
Residue Management Seasonal (344)					X			X

Conservation Activities for Irrigated Cropland/Hayland – continued

Effects of Additional Treatment Needs for Irrigated Cropland/Hayland (Continued):								
	Effects				Implementation			
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Surface Irrigation	+1	+1	+3	+1				
Residue Mngt, No Till/Strip Till (329)					X			X
Sediment Basin (350)					X			X
Surface for Water Control (587) Fish Screen					X			X
Surface Roughening (609)					X			X
Upland Wildlife Habitat Management (645)					X			X
Well Decommissioning (355)					X			X
Windbreak/Shelterbelt Establishment (380)					X			X
Riparian	+1	+1	+3	+3				
Channel Bank Vegetation (322)					X			X
Channel Stabilization (584)					X			X
Fence (382)					X	X	X	X
Pasture & Hayland Planting (512)					X			X
Pest Management (595)					X			X
Pipeline (516)					X			X
Prescribed Grazing (528)					X			X
Riparian Forest Buffer (391)					X			X
Riparian Herbaceous Cover (390)					X	X	X	X
Stream Crossing (578)					X	X		X
Streambank & Shoreline Prot (580)					X			X
Tree/Shrub Establishment (612)					X			X
Upland Wildlife Management (645)					X			X
Use Exclusion (472)					X	X	X	X
Watering Facility (614)					X		X	X
Wetland Wildlife Management (644)					X			X

Conservation Activities for Irrigated Cropland/Hayland - continued

Potential RMS Effects Summary for Irrigated Cropland/Hayland					
		Idaho		Nevada	
Cost Items and Programs		Costs	O&M Costs	Costs	O&M Costs
Non Farm Bill Programs		$ 498,800	$ 56,800	$ 40,600	$ 2,000
Potential Farm Bill Programs		$9,476,600	$ 1,079,000	$ 770,800	$ 37,700
Operator O&M and Management Cost			$ 1,135,800		$ 39,700
Annual Management Incentives (3 yrs - Incentive Payments)		$2,924,000		$ 55,700	
Operator Investment		$3,775,100		$ 398,200	
Federal Cost Share		$3,276,300		$ 357,500	
Total RMS Costs		$9,975,400	$ 1,135,800	$ 811,400	$ 39,700
Estimated Level of Participation		75%		75%	
Total Acres in RMS System		12,700		400	
Anticipated Cost at Estimated Level of Participation		$7,481,600		$ 608,600	
Total Acre Feet of Water Saved Annually		10,770		250	
Total Annual Forage Production Benefits (animal unit months)		190.00		100.00	
Increases infiltration and storage of water in soil profile					
Participating landowners will be in compliance with TMDLs					
Improves habitat for ESA endangered & threatened species					

Conservation Activities for Irrigated Cropland/Hayland - continued

Potential RMS Effects Summary for Irrigated Cropland/Hayland (continued)					
				Total	
Cost Items and Programs				Costs	O&M Costs
Non Farm Bill Programs				$ 539,400	$ 58,800
Potential Farm Bill Programs				$10,247,400	$ 1,116,700
Operator O&M and Management Cost					$ 1,175,500
Annual Management Incentives (3 yrs - Incentive Payments)				2,979,700	
Operator Investment				4,173,300	
Federal Costshare				3,633,800	
Total RMS Farm Bill Costs				$10,786,800	
Estimated Level of Participation				75%	
Total Acres in RMS System				13,100	
Anticipated Cost at Estimated Level of Participation				$ 8,090,200	
Total Acre Feet of Water Saved Annually				11,020	
Total Annual Forage Production Benefits (animal unit months)				290	
Improves ground water and surface water quality by minimizing off-site transport					
Improves riparian habitat for ESA endangered & threatened species					

Conservation Activities for Irrigated Pasture

Current Conditions	Total Acres	Riparian/ Wetland Potential
Surface Irrigated Pasture (Idaho)	3,680	
Surface Irrigated Pasture (Nevada)	1,180	
Sprinkler Irrigated Pasture (Idaho)	1,620	
Total Irrigated Pasture	6,480	780
Typical Management Unit/ Ownership	2,040	
Current Farm Bill participation	15%	

Future Conditions	Total Acres
Surface Irrigated Pasture (Nevada)	1,140
Sprinkler Irrigated Pasture (Idaho)	4,560
Total Conversion to Riparian Pasture RMS	780
Total Acres	6,480

Conservation Activities for Irrigated Pasture - continued

Project Treatment Needs for Irrigated Pasture:							
	Quantity			Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Surface Irrigation	Ac.	-	1,140				
Fence (382)	Ft.	-	18,500	$ -	$ -	$ 40,100	$ 800
Irrigation System Surface (443)	Ac.	-	1,140	-	-	171,000	5,100
Irrigation Tailwater Recovery (447)	No.	-	10	-	-	151,000	4,500
Above Ground, Multi-Outlet Pipeline (431)	Ft.	-	39,960	-	-	179,800	1,800
Irrigation Water Conveyance (430EE)	Ft.	-	73,920	-	-	397,700	2,000
Irrigation Water Management (449)	Ac.	-	1,140	-	-	17,100	5,700
Nutrient Management (590)	Ac.	-	1,140	-	-	17,100	5,700
Pasture & Hayland Planting (512)	Ac.	-	426	-	-	68,200	700
Pest Management (595)	Ac.	-	1,140	-	-	27,400	9,100
Prescribed Grazing (528)	Ac.	-	1,140	-	-	17,100	5,700
Structure for Water Control (587)-Fish Screen	No.	-	15	-	-	50,000	500
Upland Wildlife Management (645)	Ac.	-	170	-	-	5,100	1,700
Watering Facility (614)	No.	-	10	-	-	8,700	100
Windbreak/Shelterbelt Establish (380)	Ft.	-	18,500	-	-	27,900	300

Conservation Activities for Irrigated Pasture - continued

Project Treatment Needs for Irrigated Pasture (Continued):							
		Quantity		Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Sprinkler Irrigation	Ac.	4,560	-				
Fence (382)	Ft.	76,560	-	$ 166,100	$ 3,300	$ -	$ -
Irrigation Water Conveyance (430DD)	Ft.	47,520	-	327,900	1,600	-	-
Irrigation System Sprinkler (442)	Ac.	2,940	-	1,617,000	32,300	-	-
Irrigation Water Management (449)	Ac.	4,560	-	68,400	22,800	-	-
Nutrient Management (590)	Ac.	4,560	-	68,400	22,800	-	-
Pasture & Hayland Planting (512)	Ac.	1,820	-	291,200	2,900	-	-
Pest Management (595)	Ac.	4,560	-	109,400	36,500	-	-
Pipeline (516)	Ft.	39,600	-	116,000	600	-	-
Prescribed Grazing (528)	Ac.	4,560	-	68,400	22,800	-	-
Structure for Water Control (587)-Fish Screen	No.	20	-	66,600	700	-	-
Upland Wildlife Management (645)	Ac.	690	-	20,700	6,900	-	-
Watering Facility (614)	No.	30	-	26,100	300	-	-
Windbreak/Shelterbelt Establish(380)	Ft.	292,640	-	441,900	4,400	-	-

Conservation Activities for Irrigated Pasture - continued

Project Treatment Needs for Irrigated Pasture (Continued):							
		Quantity		Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Riparian Pastures	Ac.	640	140				
Animal Trails and Walkways (575)	Ft.	5,275	1,160	$ 6,400	$ 300	$ 5,800	$ 100
Channel Bank Vegetation (322)	Ac.	65	15	100	-	-	-
Channel Stabilization (584)	Ft.	1,270	280	31,800	1,600	7,000	400
Fence (382)	Ft.	21,650	4,750	47,000	900	10,300	200
Nutrient Management (590)	Ac.	640	140	9,600	3,200	2,100	700
Pasture & Hayland Planting (512)	Ac.	255	55	40,800	400	8,800	100
Pest Management (595)	Ac.	640	140	15,400	5,100	3,400	1,100
Pipeline (516)	Ft.	10,820	2,380	31,700	200	7,000	-
Prescribed Grazing (528)	Ac.	640	140	9,600	3,200	2,100	700
Riparian Forest Buffer (391)	Ac.	16	4	24,000	200	6,000	100
Riparian Herbaceous Cover (390)	Ac.	16	4	4,800	-	1,200	-
Streambank & Shoreline Prot (580)	Ft.	3,170	690	150,600	7,500	32,800	1,600
Stream Crossing (578)	No.	16	4	56,000	2,800	14,000	700
Tree/Shrub Establishment (612)	Ac.	16	4	7,500	100	1,900	-
Upland Wildlife Management (645)	Ac.	100	20	3,000	1,000	600	200
Use Exclusion (472)	Ac.	33	7	1,100	-	200	-
Watering Facility (614)	No.	8	2	7,000	100	1,700	-
Wetland Wildlife Management (644)	Ac.	65	15	2,000	700	500	200
Total RMS Costs				$ 3,856,500	$ 185,200	$1,283,600	$ 49,800

Conservation Activities for Irrigated Pasture – continued

Effects of Future Level of Treatment for Irrigated Pasture:								
	Effects				Implementation			
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Surface Irrigation	+1	+1	+1	+1				
Fence (382)					X			X
Irrigation System Surface (443)					X	X	X	X
Irrigation Tailwater Recovery (447)					X			X
Above Ground, Multi-Outlet Pipeline (431)					X			X
Irrigation Water Conveyance (430EE)					X			X
Irrigation Water Management (449)					X			X
Nutrient Management (590)					X			X
Pasture & Hayland Planting (512)					X			X
Pest Management (595)					X			X
Prescribed Grazing (528)					X			X
Structure for Water Control (587)-Fish Screen					X	X		X
Upland Wildlife Management (645)					X			X
Watering Facility (614)					X			X
Windbreak/Shelterbelt Establish (380)					X			X

Conservation Activities for Irrigated Pasture – continued

Effects of Future Level of Treatment for Irrigated Pasture (Continued):								
	Effects				Implementation			
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Sprinkler Irrigation	+3	+3	+2	+3				
Fence (382)					X			X
Irrigation Water Conveyance (430DD)					X			X
Irrigation System Sprinkler (442)					X			X
Irrigation Water Management (449)					X			X
Nutrient Management (590)					X			X
Pasture & Hayland Planting (512)					X			X
Pest Management (595)					X			X
Pipeline (516)					X			X
Prescribed Grazing (528)					X			X
Structure for Water Control (587)-Fish Screen					X	X		X
Upland Wildlife Management (645)					X			X
Watering Facility (614)					X			X
Windbreak/Shelterbelt Establish(380)					X			X

Conservation Activities for Irrigated Pasture – continued

Effects of Future Level of Treatment for Irrigated Pasture (Continued):								
	Effects				Implementation			
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Riparian Pastures	+1	+1	+3	+3				
Animal Trails and Walkways (575)					X			X
Channel Bank Vegetation (322)					X			X
Channel Stabilization (584)					X			X
Fence (382)					X	X	X	X
Nutrient Management (590)					X			
Pasture & Hayland Planting (512)					X			X
Pest Management (595)					X			X
Pipeline (516)					X			X
Prescribed Grazing (528)					X			X
Riparian Forest Buffer (391)					X			X
Riparian Herbaceous Cover (390)					X			X
Streambank & Shoreline Prot (580)					X	X	X	X
Stream Crossing (578)					X			X
Tree/Shrub Establishment (612)					X			X
Upland Wildlife Management (645)					X			X
Use Exclusion (472)					X	X	X	X
Watering Facility (614)					X		X	X
Wetland Wildlife Management (644)					X			X

Conservation Activities for Irrigated Pasture – continued

RMS Cost Summary for Irrigated Pasture:

		Idaho		Nevada	
Cost Items and Programs		Costs	O&M Costs	Costs	O&M Costs
Non Farm Bill Programs		$ 192,800	$ 9,300	$ 64,200	$ 2,500
Potential Farm Bill Programs		$ 3,663,700	$ 175,900	$1,219,400	$47,300
Operator O&M and Management Cost			$ 185,200		$ 49,800
Annual Management Incentives (3 yrs - Incentive Payments)		$ 374,900		$ 92,500	
Operator Investment		$ 1,508,300		$ 515,000	
Federal Costshare		$ 1,973,300		$ 676,100	
Total RMS Farm Bill Costs		$ 3,856,500		$1,283,600	
Estimated Level of Participation			60%		60%
Total Acres in RMS System			3,200		700
Anticipated Cost at Estimated Level of Participation			$ 2,313,900		$ 770,200
Total Acre Feet of Water Saved Annually			4,950		1,090
Total Annual Forage Production Benefits (animal unit months)			15,300		3,200

Conservation Activities for Irrigated Pasture – continued

RMS Cost Summary for Irrigated Pasture (continued):			
		Total	
Cost Items and Programs		Costs	O&M Costs
Non Farm Bill Programs		$ 257,000	$ 11,800
Potential Farm Bill Programs		$4,883,100	$ 223,200
Operator O&M and Management Cost			$ 235,000
Annual Management Incentives (3 yrs - Incentive Payments)		$ 467,400	
Operator Investment		$2,023,300	
Federal Costshare		$2,649,400	
Total RMS Farm Bill Costs		$5,140,100	
Estimated Level of Participation			60%
Total Acres in RMS System			3,900
Anticipated Cost at Estimated Level of Participation			$ 3,084,100
Total Acre Feet of Water Saved Annually			6,040
Total Annual Forage Production Benefits (animal unit months)			1,500
Improves ground water and surface water quality by minimizing off-site transport Improves riparian habitat for ESA endangered & threatened species			

Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland

Current Conditions	Grazed	Riparian/Wetland	Total Acres
Private Rangeland and Dry Pasture (Idaho)	94,990	10,550	105,540
Private Rangeland and Dry Pasture (Nevada)	60,730	6,750	67,480
Total	155,720	17,300	173,020
Typical Management Unit/Ownership	2,040		
Current Farm Bill participation	15%		

Future Conditions	Rangeland/Pasture	Riparian/Wetland	Total Acres
	155,720	17,300	173,020

Project Treatment Needs for Grazed Rangeland, Dry Pasture and Forestland:

		Quantity		Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Grazed Range, Dry Pasture & Forestland	Ac.	94,990	60,730				
Animal Trails and Walkways (575)	Ft.	193,250	61,770	$ 966,300	$ 9,700	$ 308,900	$ 3,100
Brush Management (314)	Ac.	31,350	20,040	1,567,500	15,700	1,002,000	10,000
Fence (382)	Ft.	391,330	250,190	849,200	17,000	542,900	10,900
Firebreak (394)	Ft.	391,330	250,190	782,700	15,700	500,400	10,000
Pasture & Hayland Planting (512)	Ac.	9,500	6,070	1,520,000	15,200	971,200	9,700
Pest Management (595)	Ac.	94,990	60,730	2,279,800	759,900	1,457,500	485,800
Pipeline (516)	Ft.	391,330	250,190	1,146,600	5,700	733,100	3,700
Pond (378)	No.	35	25	238,000	2,400	170,000	1,700
Prescribed Grazing (528)	Ac.	90,450	57,820	542,700	180,900	346,900	115,600
Range Planting (550)	Ac.	31,350	20,040	3,135,000	31,400	2,004,000	20,000

Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland - continued

Project Treatment Needs for Grazed Rangeland, Dry Pasture and Forestland (Continued):							
		Quantity		Costs			
Practices	Unit	Quantity (Idaho)	Quantity (Nevada)	Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Investment Cost (Nevada)	Annual O&M and Mngt. Cost (Nevada)
Spring Development (574)	No.	150	90	360,000	1,800	216,000	1,100
Upland Wildlife Management (645)	Ac.	19,000	12,140	570,000	190,000	364,200	121,400
Watering Facility (614)	No.	150	90	130,500	1,300	78,300	800
Well (642)	No.	50	30	337,500	3,400	202,500	2,000
Range & Dry Pasture Riparian	Ac.	10,550	6,750				
Channel Bank Vegetation (322)	Ft.	1,060	670	2,200	-	1,400	-
Channel Stabilization (584)	Ft.	25,050	16,020	626,300	31,300	400,500	20,000
Fence (382)	Ft.	86,960	55,600	188,700	3,800	120,700	2,400
Pasture & Hayland Planting (512)	Ac.	1,060	670	169,600	1,700	107,200	1,100
Pest Management (595)	Ac.	10,550	6,750	253,200	84,400	162,000	54,000
Pipeline (516)	Ft.	43,480	27,800	127,400	600	81,500	400
Prescribed Grazing (528)	Ac.	10,550	6,750	63,300	21,100	40,500	13,500
Pumping Plant (533)	No.	30	24	86,400	900	69,100	700
Riparian Forest Buffer (391)	Ac.	140	95	210,000	2,100	142,500	1,400
Riparian Herbaceous Cover (390)	Ac.	140	95	42,000	400	28,500	300
Stream Crossing (578)	No.	130	80	455,000	22,800	280,000	14,000
Streambank & Shoreline Prot (580)	Ft.	1,320	20,020	1,487,700	743,900	951,000	475,500
Tree/Shrub Establishment (612)	Ac.	290	180	136,300	1,400	84,600	800
Upland Wildlife Management (645)	Ac.	1,590	1,010	47,700	15,900	30,300	10,100
Use Exclusion (472)	Ac.	530	340	18,000	500	11,600	300
Watering Facility (614)	No.	30	24	26,100	300	20,900	200
Wetland Wildlife Management (644)	Ac.	1,060	670	31,800	10,600	20,100	6,700
Total RMS Costs				**$ 18,397,500**	**$2,191,800**	**$11,450,300**	**$1,397,200**

Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland - continued

Effects of Future Level of Treatment for Grazed Rangeland, Dry Pasture and Forestland:									
	Effects				Implementation				
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	WRP	CREP	Other
Grazed Range, Dry Pasture & Forestland	+3	+2	+3	+3					
Animal Trails and Walkways (575)					X				X
Brush Management (314)					X				X
Fence (382)					X				X
Firebreak (394)					X				X
Pasture & Hayland Planting (512)					X				X
Pest Management (595)					X				X
Pipeline (516)					X				X
Pond (378)					X				X
Prescribed Grazing (528)					X				X
Range Planting (550)					X				X
Spring Development (574)					X	X			X
Upland Wildlife Management (645)					X	X			X
Watering Facility (614)					X				X
Well (642)					X				X
Range & Dry Pasture Riparian	+3	+2	+3	+3					
Channel Bank Vegetation (322)					X				X
Channel Stabilization (584)					X				X
Fence (382)					X	X	X		X
Pasture & Hayland Planting (512)					X				X
Pest Management (595)					X				X
Pipeline (516)					X				X
Prescribed Grazing (528)					X				X

Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland - continued

Effects of Future Level of Treatment for Grazed Rangeland, Dry Pasture and Forestland (Continued):									
	Effects				Implementation				
	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	WRP	CREP	Other
Range & Pasture Riparian (cont.)									
Pumping Plant (533)					X				X
Riparian Forest Buffer (391)					X				X
Riparian Herbaceous Cover (390)					X	X	X		X
Stream Crossing (578)					X	X	X		X
Streambank & Shoreline Prot (580)					X	X			X
Tree/Shrub Establishment (612)					X				X
Upland Wildlife Management (645)					X	X			X
Use Exclusion (472)					X	X	X		X
Watering Facility (614)					X		X		X
Wetland Wildlife Management (644)					X		X		X

Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland - continued

RMS Cost Summary for Grazed Rangeland, Dry Pasture and Forestland:

		Idaho		Nevada	
Cost Items and Programs		Costs	O&M Costs	Costs	O&M Costs
Non Farm Bill Programs		$ 919,900	$ 109,600	$ 572,500	$ 69,900
Potential Farm Bill Programs		$ 17,477,600	$2,082,200	$10,877,800	$1,327,300
Operator O&M and Management Cost			$2,191,800		$1,397,200
Annual Management Incentives (3 yrs - Incentive Payments)		$ 3,788,500		$ 2,421,500	
Operator Investment		$ 6,395,500		$ 3,955,000	
Federal Costshare		$ 8,213,500		$ 5,073,800	
Total RMS Farm Bill Costs		$ 18,397,500		$11,450,300	
Estimated Level of Participation			35%		35%
Total Acres in RMS System			36,900		23,600
Anticipated Cost at Estimated Level of Participation			$6,439,100		$4,007,600
Total Annual Forage Production Benefits (acre unit months)			5,300		3,400

Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland - continued

RMS Cost Summary for Grazed Rangeland, Dry Pasture and Forestland (Continued):

		Total	
Cost Items and Programs		Costs	O&M Costs
Non Farm Bill Programs		$ 1,492,400	$ 179,500
Potential Farm Bill Programs		$28,355,400	$3,409,500
Operator O&M and Management Cost			$3,589,000
Annual Management Incentives (3 yrs - Incentive Payments)		$ 6,210,000	
Operator Investment		$10,350,500	
Federal Costshare		$13,287,300	
Total RMS Farm Bill Costs		$29,847,800	
Estimated Level of Participation			35%
Total Acres in RMS System			60,500
Anticipated Cost at Estimated Level of Participation			$10,446,700
Total Annual Forage Production Benefits (animal unit months)			8,700

Improves infiltration and storage of water in soil profile
Improves upland wildlife habitat for deer, elk, antelope and other species
Improves water quality by reducing erosion and sediment delivery to streams

Conservation Activities for Headquarters

Confined Animal Feed Operations (CAFO - 700 Head Dairies or 1,000 Head Feeder Cattle) and Animal Feed Operations (AFO 200-700 Head of Dairy or 300 to 1,000 Head Feeder Cattle) are variable in complexity depending on size, number of cows and location of the waste storage facility. Note that an AFO can be designated as a CAFO regardless of number of animals if it is found to be a significant polluter.

Kinds and amounts of component practices required for proper operation are site specific, but typically include the following: Anaerobic Digester (366), Composting Facility (317), Access Road (560), Corral Dust Management (785), Dikes (356), Diversions (362), Fence (382), Heavy Use Area Protection (561), Irrigation Water Conveyance (430EE) (430DD), Pipeline (516), Pond (378), Pond Sealing or Lining (521), Pump Plant (533), Roof Runoff Structure (558), Separator, Structure for Water Control (587), Underground Outlet (620), Underground Outlet (620), Waste Treatment Lagoon (359), Watering Facility (614), Well Decommissioning (355), Windbreak/Shelterbelt Establishment (380), Dry Stack Areas and Ramps. Management practices commonly used include. Critical Area Planting (342), Filter Strip (393), Manure Transfer (634), Nutrient Management (590), Pest Management (595) and Waste Utilization (633).

Current Conditions		Total
CAFOs		2
AFOs		3
Current Farm Bill participation	15%	
Total CAFOs and AFOs		5

Conservation Activities for Headquarters - continued

Projected Additional Treatment Needs for Headquarters:													
	Quantity		Costs		Effects				Implementation				
Practices	Unit	Quantity (Idaho)	Additional Investment Cost (Idaho)	Annual O&M and Mngt. Cost (Idaho)	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	WRP	CREP	Other
Dairy	No.				+3	+2	+3	+3					
Structural/Management Practices													
Waste Storage Facility (313) CAFO	No.	-	-	-					X				X
Waste Storage Facility (313) AFO	No.	2	90,000	1,800					X				X
Feed Lot	No.				+3	+1	+3	+3					
Structural/Management Practices													
Waste Storage Facility (313) CAFO	No.	2	175,000	3,500					X				X
Waste Storage Facility (313) AFO	No.	1	45,000	900					X				X
Total RMS Costs			$ 310,000	$ 6,200									

Conservation Activities for Headquarters - continued

RMS Cost Summary for Headquarters		
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	$ 15,500	$ 300
Potential Farm Bill Programs	$ 294,500	$ 5,900
Operator O&M and Management Cost		$ 6,200
Annual Management Incentives (3 yrs - Incentive Payments)	$ 31,000	
Operator Investment	$ 147,300	
Federal Costshare	$ 131,700	
Total RMS Costs	$ 310,000	
Estimated Level of Participation		75%
Total CAFO/AFO in RMS System		2
Anticipated Cost at Estimated Level of Participation	$	108,500
Reduces impact to ground and surface water quality		
Participation reflects Local, State and Federal regulations		

Number of Dairies and Feedlots needing treatment were estimated based on input from Idaho Department of Agriculture and the local NRCS Field Offices.