

Introduction

The Goose Creek 8-Digit Hydrologic Unit Code (HUC) subbasin contains 726,850 acres of which 453,403 are in Idaho. Sixty two percent of the subbasin is in Cassia County and less than 1 percent is in Twin Falls County, Idaho. Twenty-eight percent is in Elko County, Nevada and 10 percent of the basin is in Box Elder County, Utah.

Twenty nine percent of the basin is privately owned and 71 percent is publicly owned.

Seventy three percent of the basin is in shrubland, rangeland and forest and 16 percent is in grass, pasture, or hayland. Eleven percent is cropland, and the remainder is water, wetlands, developed or barren.

Elevations range from 10,339 feet on Mt. Independence in the northeastern portion of the HUC to 4,240 feet in the northern portion of the HUC.

Conservation assistance is provided by 3 Conservation Districts in Idaho, 1 in Nevada, 1 in Utah and 2 Resource Conservation and Development offices.

Profile Contents

[Introduction](#)

[Physical Description](#)

[Landuse Map & Precipitation Map](#)

[Common Resource Area](#)

[Resource Settings](#)

[Progress/Status](#)

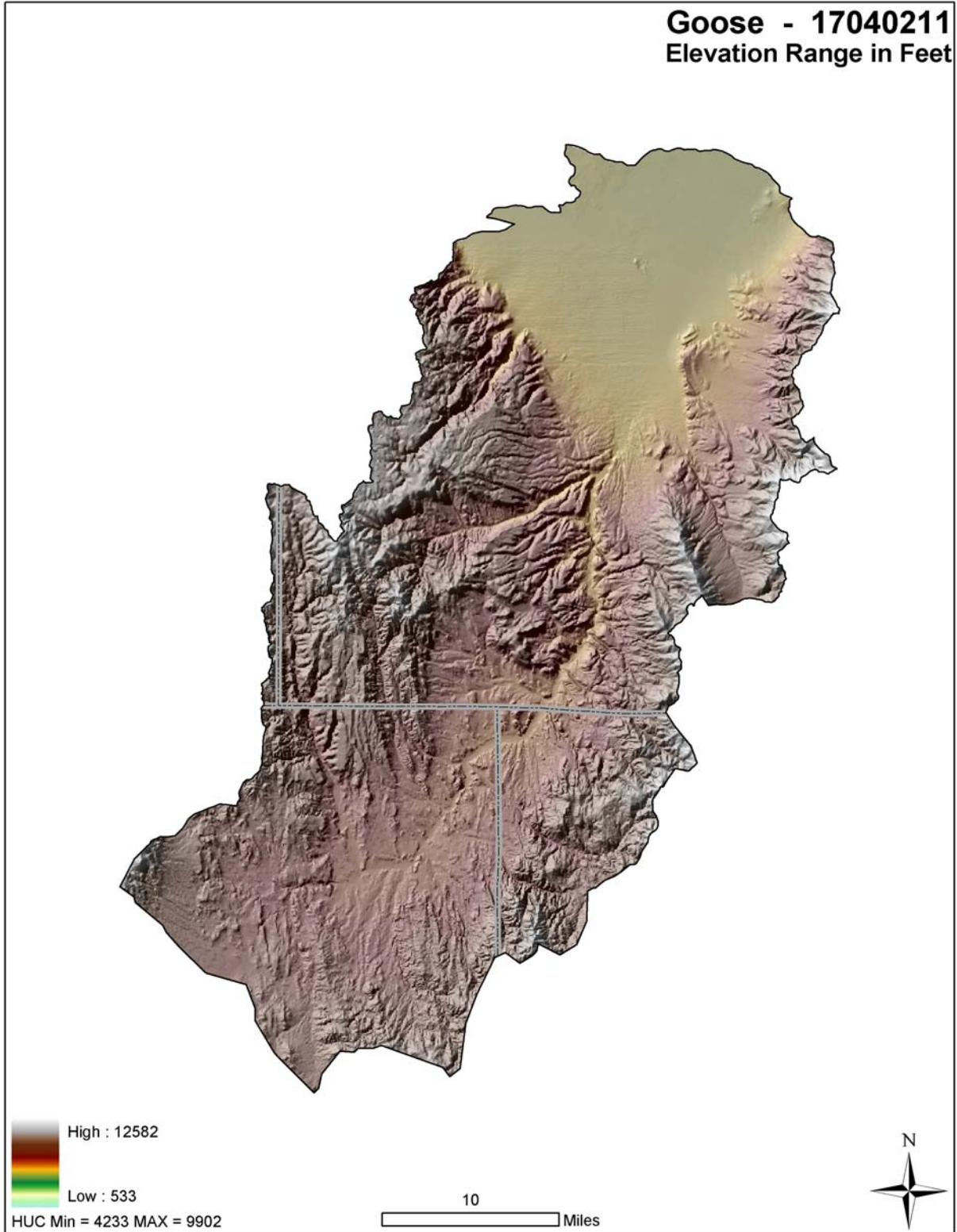
[Resource Concerns](#)

[Census and Social Data](#)

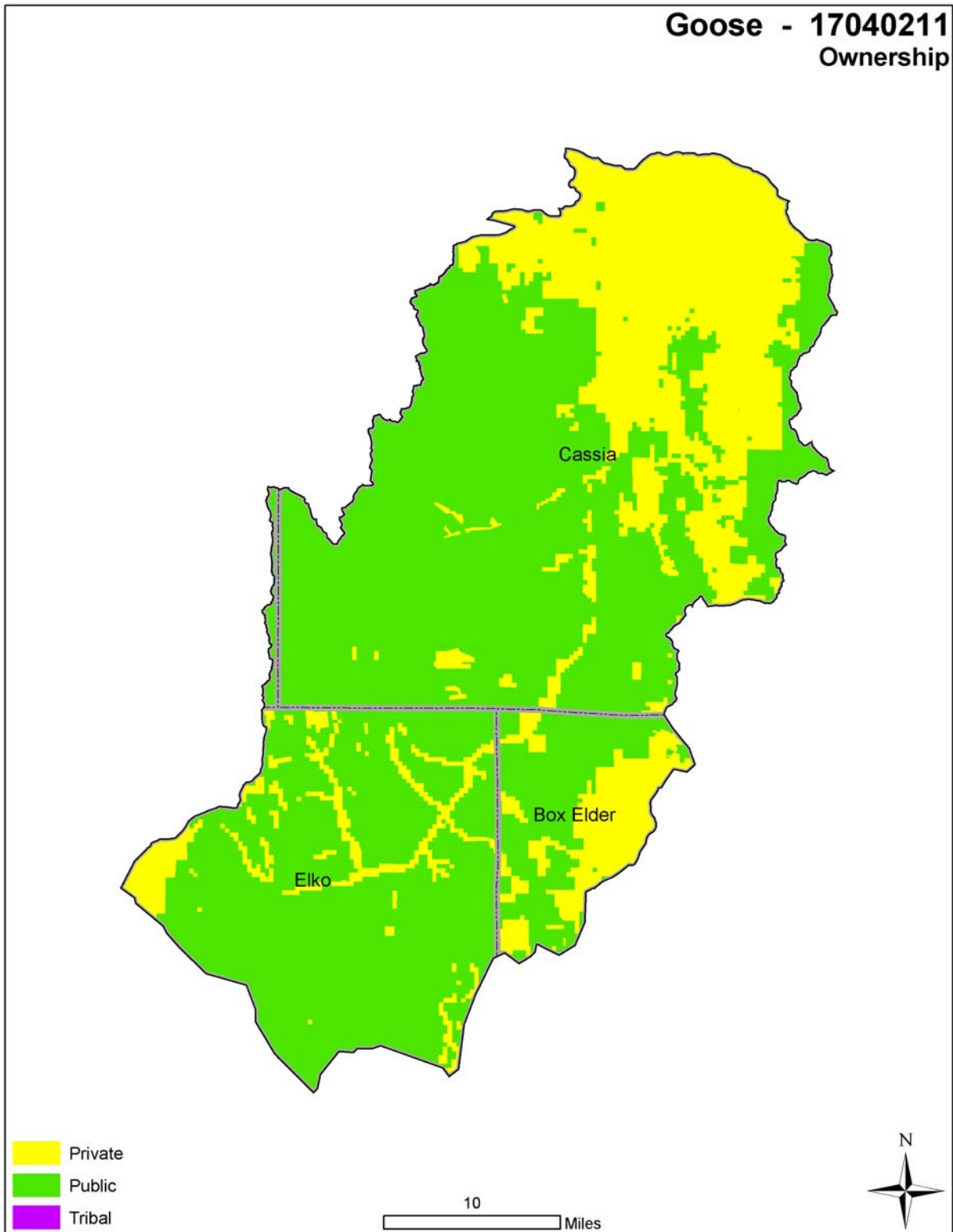
[Footnotes/Bibliography](#)

[Future Conservation Needs](#)

Relief Map



General Ownership¹





Idaho

Goose Creek - 17040211

8 Digit Hydrologic Unit Profile November 2008

Physical Description

(IDAHO ACRES ONLY)

Land Cover/ Land Use (NLCD ²)	Ownership - (2003 Draft BLM Surface Map Set ¹)							Totals	% of HUC
	Public		Private		Tribal				
	Acres	%	Acres	%	Acres	%			
Forest	13,360	3%	310	<1%		--	13,670	3%	
Grain Crops		--	35,410	16%		--	35,410	8%	
Conservation Reserve ³ Program (CRP) Land		--	(1,464)	(<1%)		--	(1,464)	(<1%)	
Grass/Pasture/Haylands	42,850	10%	36,190	8%		--	79,030	17%	
Orchards/Vineyards/Berries		--		--		--		--	
Row Crops			45,110	10%		--	45,110	10%	
Shrub/Rangelands	235,920	52%	42,650	40%		--	278,570	61%	
Water/Wetlands/ Developed/Barren	830	<1%	780	<1%		--	1,610	<1%	
Idaho HUC Totals	295,400	71%	158,000	29%		--	453,400	100%	

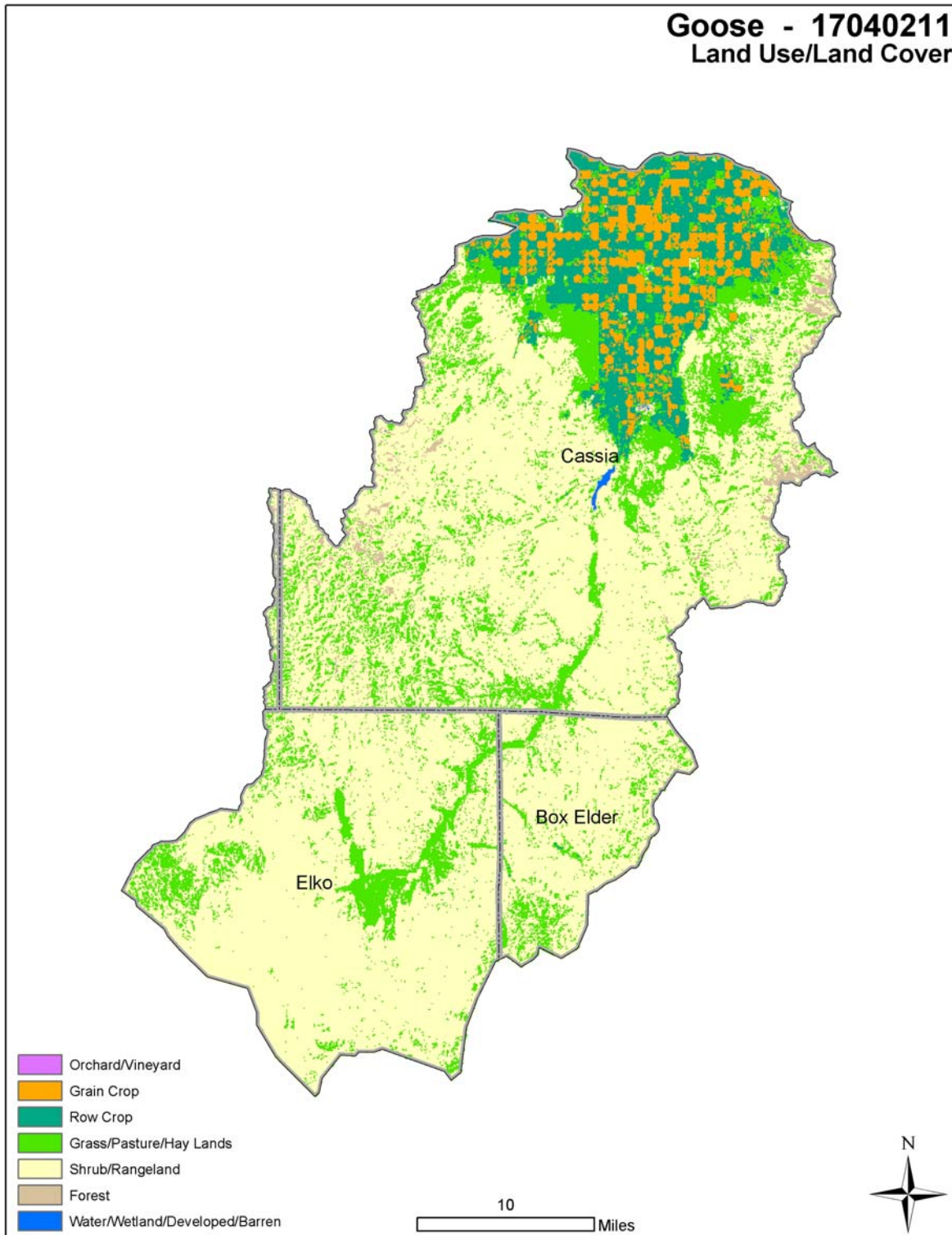
Irrigated Lands ⁴	Type of Land	ACRES	% of Irrigated Lands	% of HUC
	Cultivated Cropland	80,800	91.4%	11.1%
	Non-Cultivated Cropland *	6,100	6.9%	0.8%
	Pastureland	1,500	1.7%	0.2%
	Total Irrigated Lands	88,400	100%	12.1%

- * Includes permanent hayland and horticultural cropland.

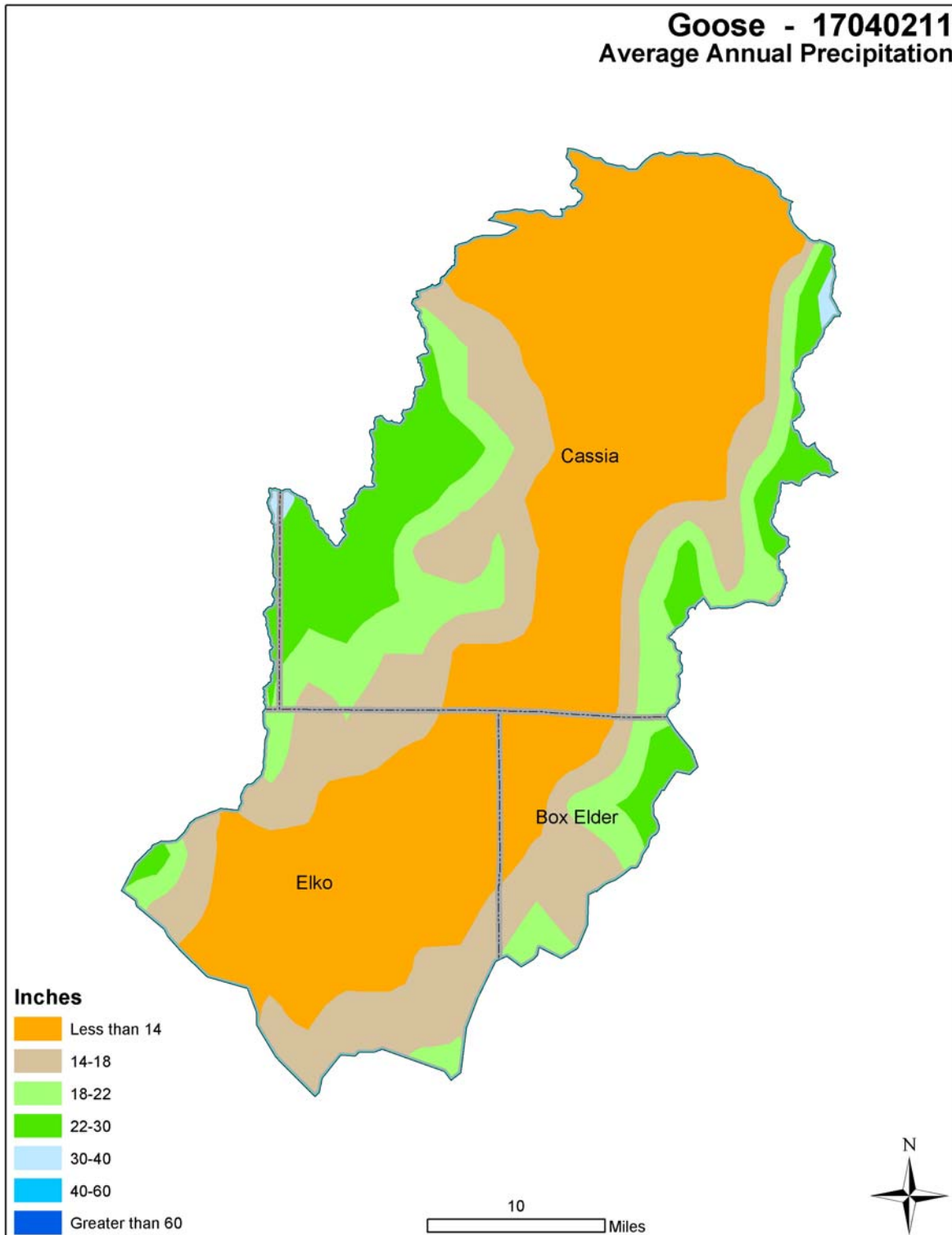
- ³ CRP acres are included in Grass/Pasture/Haylands.

* 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.

Land Use/Land Cover²

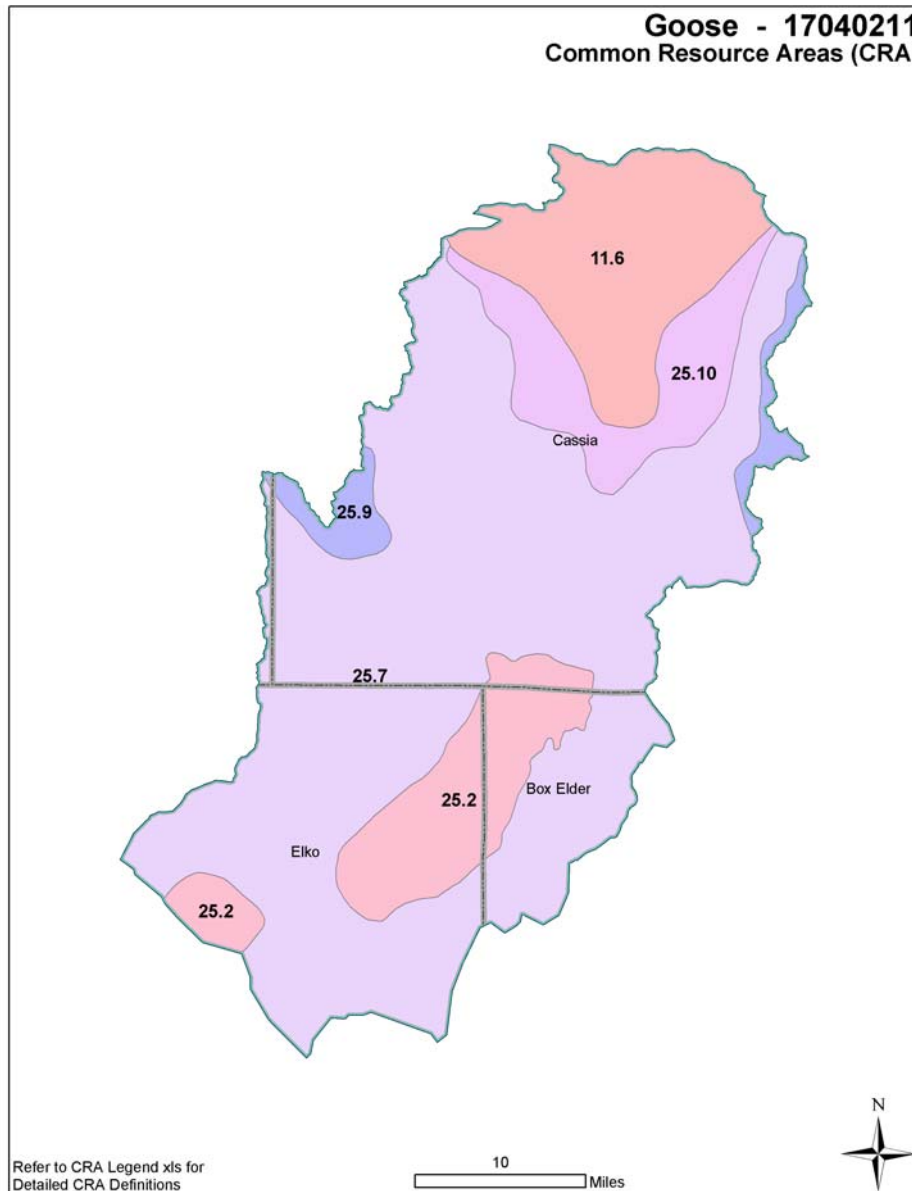


Average Annual Precipitation¹⁵



Common Resource Area Map

The Common Resource Areas (CRA) delineated below for the Lower Henrys 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.

11.6 Snake River Plains - Magic Valley: This unit is underlain by alluvium, loess, and basalt lava flows. Its aridic soils require irrigation to grow commercial crops. Many canals, reservoirs, and diversions supply water to its pastureland, cropland, and residential, commercial, and industrial developments. Small grains, alfalfa, sugar beets, potatoes, and beans are grown. Livestock and dairy farms are common. Dams, irrigation diversions, pollution, and channel alteration have affected water quality. Over-irrigation has raised ground water levels and created artificial wetlands. Natural vegetation is mostly sagebrush and bunchgrass but low terraces have salt tolerant plants. Population density is greater than in adjacent rangeland-dominated units.

25.2 Owyhee High Plateau – Dissected: This unit has alluvial fans, rolling plains, and shear-walled canyons that are cut into extrusive rocks. Sagebrush High Lava Plateau 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.

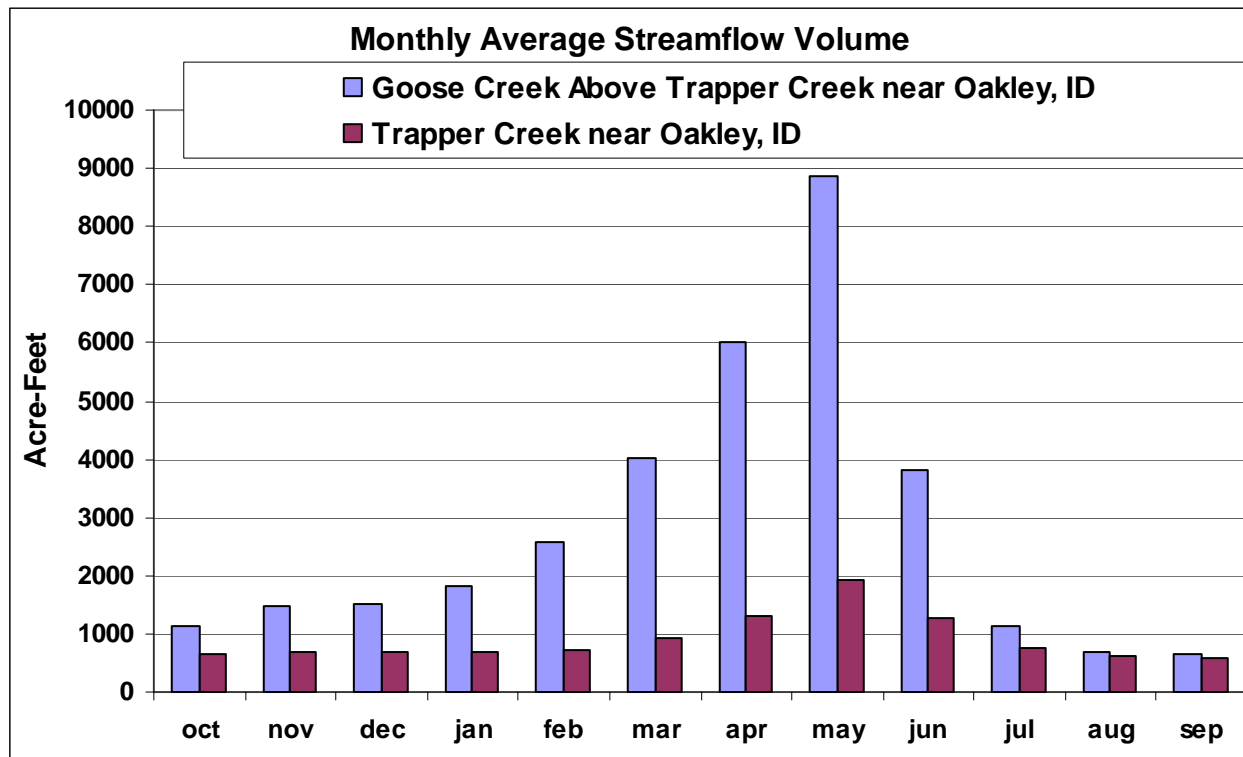
25.7 Owyhee High Plateau – Semiarid: This unit occupies an elevational band between the higher mountains and the lower inter-montane valleys. Hills and Low Mountains Potential natural vegetation is mostly sagebrush steppe. Cool season grasses are more common than in the adjacent, drier regions. Juniper woodland grows on rock outcrops. Land use is primarily livestock grazing.

25.9 Owyhee High Plateau – High: The High Elevation Forests and Shrublands ecoregion is mountainous and occupies the elevational band above Elevation Forests and Shrublands Sagebrush Steppe- and Woodland-Covered Hills and Low Mountains region. It is characterized by a mix of conifers, mountain brush, and sagebrush grassland. North-facing slopes and many flatter areas support open stands of Douglas-fir, aspen and lodgepole pine. Winters are colder and mean annual precipitation is greater than in lower regions.

25.10 Owyhee High Plateau – Sagebrush: The unit is in valleys is flanked by hills and mountains. It is dominated by sagebrush grassland. Grazing is the Steppe Valleys dominant land use but non-irrigated wheat and barley farming is much more common than in the semiarid Central Basin and Range region. The Sagebrush Steppe Valleys region is less suitable for cropland agriculture and has less available water than many parts of the Snake River Plain.

Streamflow Summary [\[7\]](#)

There are two active USGS gages in the Goose Creek Basin: Goose Creek above Trapper Creek near Oakley, ID (drainage area of 633 square miles) and Trapper Creek near Oakley, ID (drainage area of 53.7 square miles). Most of the streamflow from these creeks flow into Oakley Reservoir, also known as Lower Goose Creek Reservoir, which has a usable capacity of 77,400 Acre-Feet. Irrigation is the main use of the water in the Goose Creek valley. Water rights indicate that about 2,700 acres depend on the irrigated water above the Goose Creek stream gage. Knowledge of the winter snow water content is critical for water users in this basin. There are three SNOTEL sites located above 6,500 feet that measure the mountain snow water content, precipitation and air temperature in the headwaters of the Oakley Basin that help indicate the runoff volumes. The snowpack in this region receives an average range of 19.7 inches of snow water to 25.3 inches of snow water and the snowpack usually reaches its peak around the first of April. Both of these streams rely on the spring snowmelt to produce runoff, typically from March through June. On average from water year's 1911-2007, Goose Creek's annual streamflow is 33,684 Acre-Feet and 67% of the flow occurs from March through June. Trapper Creek's annual streamflow is 10,854 Acre-Feet and 50% of the flow occurs during the same runoff period.





Idaho

Goose Creek - 17040211

8 Digit Hydrologic Unit Profile November 2008

Streamflow Summary¹ – Continued

Irrigated Adjudicated Water Rights⁶⁾		CFS	
	Surface Water	1,657.3	
	Groundwater	1,173.2	
	Total Irrigated Adjudicated Water Rights	2,830.5	
Stream Flow Data⁷	Goose Creek above Trapper Creek near Oakley, Idaho; USGS ID #13082500; 1911-2007.		ACRE-FEET
		Average Annual	33,684
		March-June Average	22,712
		Percent of Average Annual	67
Stream Data		MILES	PERCENT
	Total Stream Miles ⁸	2,706.5	
	Water quality impaired streams ^{9,10}	330	
	Anadromous Fish Presence (Streamnet) ¹¹	--	-
	Bull Trout Presence (Streamnet) ¹¹	--	-
<i>*Percent of Total Miles of streams in HUC</i>			
Land Cover/Use² based on a 100 ft. stretch on both sides of all streams in the 100K Hydro Layer		ACRES	PERCENT
	Forest	820	1%
	Grain Crops	3760	4%
	Grass/Pasture/Hay Lands	20,370	21%
	Row Crops	5,430	6%
	Shrub/Rangelands – Includes CRP Lands	64,620	68%
	Water/Wetlands/Developed/Barren	450	<1%
	Total Acres of 100 ft stream buffers	95,450	100%
Land Capability Class⁴	I – slight limitations	800	0.8%
	II – moderate limitations	59,400	58.1%
	III – severe limitations	36,200	35.4%
	IV – very severe limitations	3,400	3.3%
	V – no erosion hazard, but other limitations	0	0
	VI – severe limitations, unsuited for cultivation, limited to pasture, range, forest	0	0
	VII – very severe limitations, unsuited for cultivation, limited to grazing, forest, wildlife	2,500	2.4%
	VIII – misc areas have limitations, limited to recreation, wildlife, and water supply	0	0
	Total Crop, Pasture Lands & CRP	102,300	100.0%

Streamflow Summary⁷ – Continued

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

Resource Settings

Pasture

Improved dryland pasture with introduced forage species including wheatgrasses, fescues, bromes, and orchardgrass. Older established pasture stands of low vigor, with encroachment of noxious weeds. Continuous season-long grazing is typical. No commercial fertilizers are applied, and pest management practices are limited. Livestock water may be inadequate. Irrigated pastures are often surface irrigated on variable soils with slopes

1-5%. Irrigation water distributed via earthen ditches, with tailwater eventually returning to rivers or streams. Fields may have been leveled. Irrigation efficiency is 25-35%. Plants are introduced forage species, conventionally tilled when rotating pasture (10 years) and grain (2 years). Fertilizers are sometimes applied, but without soil testing or nutrient management.

Dry Cropland

Primarily winter wheat/fallow (precipitation 10-14 inches) or annual spring barley (precipitation 16-22 inches), on silt loams with slopes 0-15%. Often characterized by significant ephemeral and concentrated flow erosion. Conventional tillage results in <15% residue after planting. Application of nutrients and pesticides typically does not meet Idaho standards.

Surface Irrigated Cropland

Conventionally tilled, intensively cultivated cropland on slopes 0-7%. Precipitation is 12 inches or less. Small grains and alfalfa are grown in most rotations, with corn (silage, sweet, grain), sugar beets, potatoes and beans. Irrigation-induced erosion exceeds the threshold. Wind erosion may be a problem following low residue row crops. Nutrient, pest, and/or irrigation water management may be less than desirable.

Sprinkler Irrigated Cropland

Conventionally tilled cropland on soils ranging from sands to sandy loams. Wind erosion is typically a problem from March to June, creating air quality and visibility hazards. Various combinations of small grains, alfalfa, beets, potatoes, beans and barley are grown. Some rotations contain less than 50% high residue crops. 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.

Hayland

Conventionally tilled, surface irrigated on 0-7% slopes. 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

Low elevation desert to high elevation, steep rangeland. Low elevation desert characterized by sagebrush and perennial bunchgrasses. Frequent fires have eliminated some areas of sagebrush, with annual cheatgrass and



Idaho

Goose Creek - 17040211

8 Digit Hydrologic Unit Profile November 2008

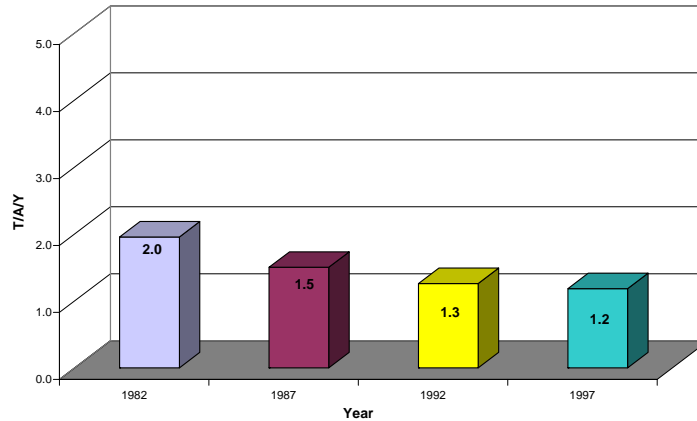
Resource Settings – Continued

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. Sagebrush and perennial bunchgrasses with variable soils are on nearly level flats to benches and rolling hills.

High elevation range has precipitation greater than 16 inches, on steep slopes and high mountain valleys. Access to riparian areas on all rangeland types is not typically managed.

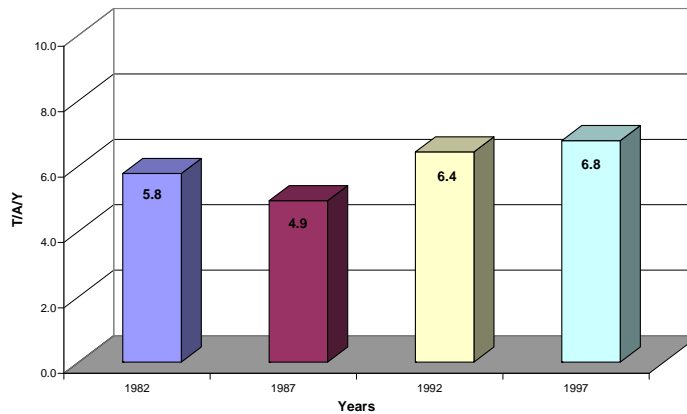
Resource Concerns

Soil Loss by Water Erosion
For Cropland, Pasture & CRP
Goose Creek



Sheet and rill erosion on the sub basin's croplands, pasturelands and CRP have been essentially static since 1982. A slight overall decrease of about 1 ½ tons per acre per year has been observed during the 15 year period between 1982 and 1997.

Soil Loss by Wind Erosion
Cropland, Pasture and CRP
Goose Creek



Wind Erosion rates have increased slightly during the 15 year period between 1982 and 1997. Rates have increase by about 1 ton per acre per year. A fluctuation in cultivated cropland acres accounts for some the increase. A slight decrease in non-cultivated crop acreage also accounts for the slight increase in wind erosion rates.

Resource Concerns – Continued

Impacted Water Bodies ^{1,9,10} (ID17040211)	Stream Miles	Sediment, Siltation or TSS	Nutrients	Bacteria	Temperature	Dissolved Oxygen	Flow/Habitat Alteration ¹	Other or Unknown
Lower Goose Creek Reservoir (SK002L_0L)	Lake	x ²	x ²			x ²	x	
Beaverdam Creek (SK006_02, 03)	62.2	X	x	x	x ³	x ³		x
Birch Creek (SK009_03)	2.3		x	x				x
Birch Creek (SK012_02, 03, 04)	84.4	x ²		x		x ²		
Blue Hill Creek (SK010_02, 03)	21.3							x ²
Cold Creek (SK011_02)	15.8				x ³			x ²
Goose Creek (SK005_05)	18.8	X			x			
Goose Creek (SK008_02)	63.2			x ²				
Little Cottonwood Creek (SK000_02a)	63.2			x			x	
Mill Creek (SK013_02)	53.1				x ²			
Trapper Creek (SK003_04)	7.3	X	x	x ²		x ²	x	
Trapper Creek (SK003_04a)	0.3						x	
Unclassified Waters (SK000_05)	4.3	X	x	x	x	x		
TOTAL STREAM MILES:	330.0							

¹ Flow and habitat alteration are not considered pollutants by the Idaho Department of Environmental Quality, and are not addressed by the TMDL.

² Subbasin assessment recommends delisting on the next Integrated Report.

³ Subbasin assessment proposes adding to the next Integrated Report and has had a TMDL developed. Shading indicates TMDL in place.

The primary land use within the subbasin is rangeland. Some irrigated agriculture also exists in the northern portion where water is either pumped from the ground or diverted from Goose Creek Reservoir. Available water quality data for suspended sediment, dissolved oxygen, and nutrients indicate that designated beneficial uses are not currently impaired within the Lower Goose Creek Reservoir. Area streams, however, have been impacted by nutrients, suspended sediment/bedload, and bacteria. Temperature is also a concern on several streams. Potential sources of pollutants in the subbasin include confined animal feeding operations (CAFOs), septic systems, and activities such as farming and grazing. Wildfire occurrence on forest and rangelands may also contribute to impacts on a short-term basis. Seasonal return flows from irrigated agriculture impact area streams. While the total surface discharges from other subbasin activities are relatively small, higher concentrations of pollutants can make the impact of these loadings significant, particularly at lower flows. Where access to streams by livestock is concentrated, loss or reduction of streamside vegetation is severe and can cause stream bank erosion and sedimentation. In addition, elevated bacteria levels appear to coincide with the grazing season. Water withdrawal for pasture irrigation or stock water can result in completely dry channels downstream from diversions, reducing riparian habitat.



Idaho

Goose Creek - 17040211

8 Digit Hydrologic Unit Profile November 2008

Resource Concerns – Continued

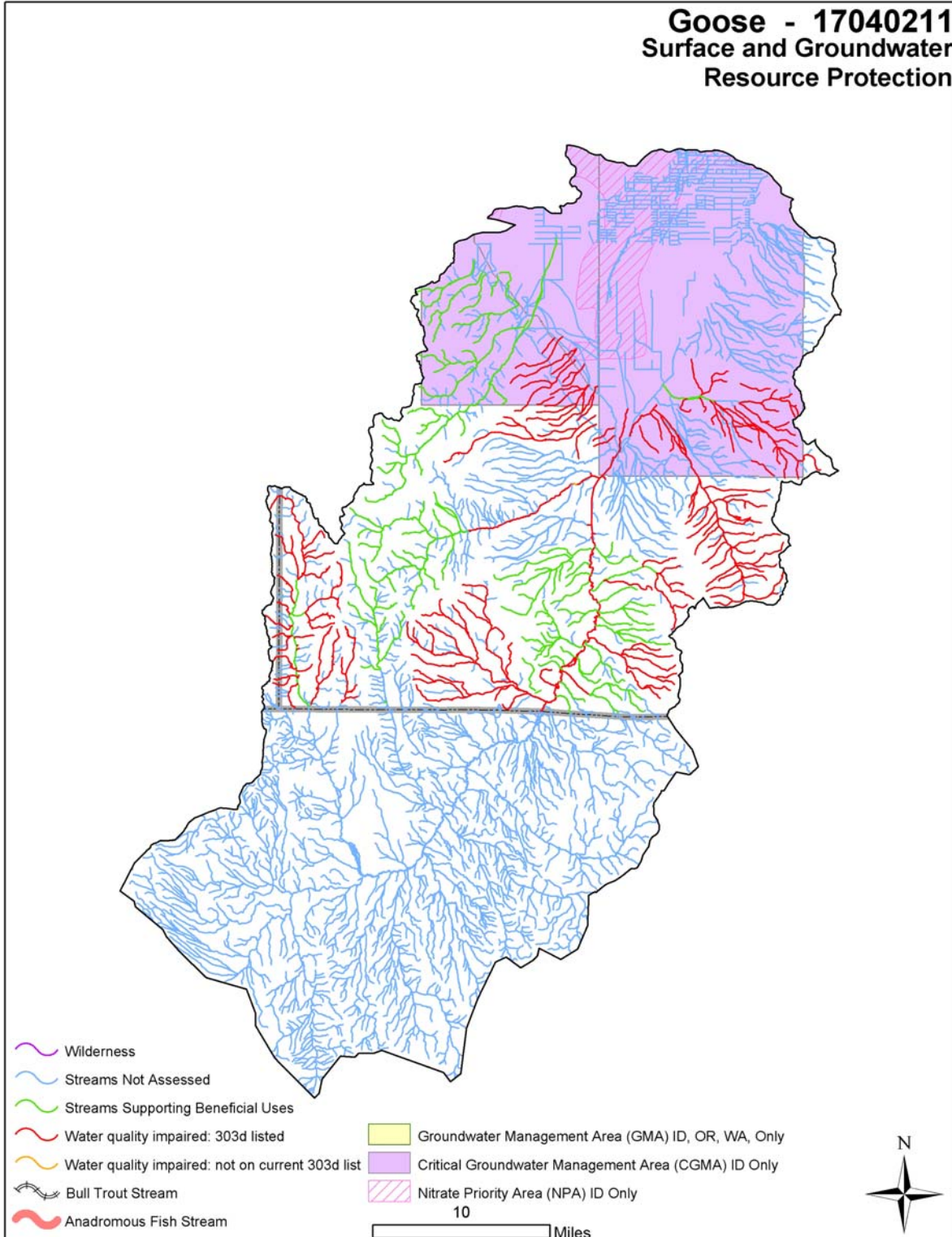
The northern part of the watershed has groundwater impacted by nitrates. The Burley/Marsh Creek Nitrate Priority Area is ranked third on the IDEQ list of twenty-five priority areas. As of 2002, the entire area had a median nitrate value of 7.8 mg/L, with over 20% of wells sampled exceeding the drinking water standard (10 mg/L). Some pesticides have also been detected. The Cassia County Groundwater Management Plan (IDEQ) was completed in 2004 to address issues from all land uses impacting ground water in the area.

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

Watershed Projects, Plans, Studies, and Assessments*	
Federal:	State:
NRCS Watershed Plans/Studies/Assessments^{/14,15}	IDEQ TMDLs^{/16}
	Goose Creek Subbasin Assessment and TMDL 2004
	IDEQ 319 Projects^{/17}
	Burley-Marsh Creek Groundwater Management Project (2008)
NWPC Subbasin Plans and Assessments^{/18}	SCC Plans/Projects^{/19}
Upper Snake Province Assessment (2004)	Goose Creek TMDL Implementation Plan (in process)
	ISDA Regional Water Quality Projects^{/20}
	Cassia County Regional Groundwater Monitoring Project (On-going)
	Goose Creek Water Quality Monitoring (2006)
	IDWR Comprehensive Basin Plans^{/21}
	None

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

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





Goose Creek - 17040211

Idaho

8 Digit Hydrologic Unit Profile November 2008

Resource Concerns – Continued

Resource Concerns/ Issues by Land Use								
SWAPA*	Specific Resource Concerns/Issues	Pasture	Hayland	Dry Crops	Surface Irrigated Crops	Sprinkler Irrigated Crops	Rangeland	Grazed 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			
Water Quality, Ground	Nutrients and organics		x	x	x	x		
	Pesticides		x	x	x	x		
Soil Condition	Organic matter depletion			x	x	x		
	Compaction	x		x	x	x		
Plant Condition	Productivity, health and vigor	x	x	x			x	
	Noxious and invasive plants	x		x	x	x	x	x
	Wildfire hazard						x	
Domestic Animals	Inadequate feed or water	x					x	x
Fish and Wildlife	Inadequate water	x					x	x
	Inadequate cover/shelter	x			x	x	x	

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

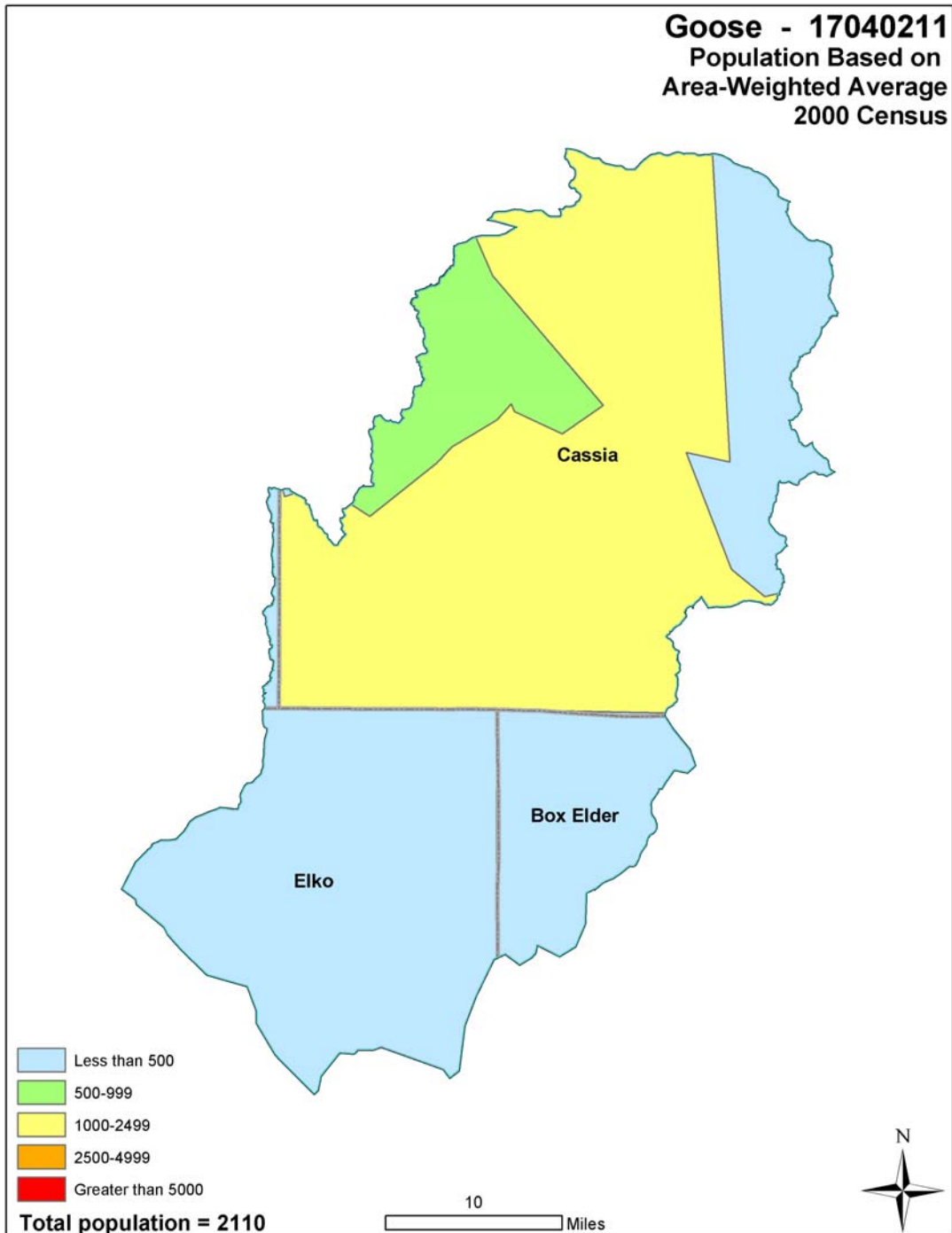
Human considerations: Implementation of conservation practices and enhancement has the potential for change in management and cost of production. Installation of practices will have an upfront cost and require maintenance. In the short run increased management may be required as new techniques are learned. 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 – None Invertebrates – None Plants – None	Plants – Christ's Indian Paintbrush
	PROPOSED SPECIES
ESSENTIAL FISH HABITAT – None	CRITICAL FISH HABITAT – None

Census and Social Data [/26](#)

Population: 2,110

Number of Farms: 250





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 may not accurately reflect the actual watershed-specific portion of the counties.

Sixty-four 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 7.0 percent of the total. Ninety-six 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 1,000 acres with an average of 820 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 decreased by 16.0 percent. Farm size is up 26.2 percent. The market value of production is up by 32.7 percent. Government payments to farmers have increased by 78.1 percent. Farm sales range from less than \$1,000 to more than \$500,000 per year. Sixty-one 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	250	650	\$416,700	\$16,900
2002	210	820	\$552,800	\$30,100
Change	-16.0%	26.2%	32.7%	78.1%

Economic Profile:

	Watershed	Idaho	United States
Population	2,110	1,466,000	299,398,000
Per Capita Personal Income (2005)	\$25,200	\$28,500	\$34,500
Median Home Value (2000)	\$83,100	\$106,600	\$119,600
Percent Unemployment (2006)	3.8%	3.4%	4.6%
Percent Below Poverty Level (2004)	14.7%	11.5%	12.7%



Idaho

Goose Creek - 17040211

8 Digit Hydrologic Unit Profile November 2008

Progress/Status

PRS Data							
Conservation Treatment Acres	FY04	FY05	FY06	FY07	FY08	Avg/Year	Total
Access Road (560) ft	0	7920	0	0	0	1584.0	7920
Brush Management (314) (acres)	1241	1200	0	599	125	760.0	3165
Compost Facility (317) number	0	0	1	0	0	0.2	1
Comprehensive Nutrient Management Plan (100) (no.)	0	1	4	2	0	1.4	7
Conservation Cover (327) (acres)	0	20	218	627	513	216.3	1378
Conservation Crop Rotation (328) (acres)	0	35	386	2885	0	661.2	3306
Cover Crop (340) acres	0	803	0	430	0	246.6	1233
Critical Area Planting (342) acres	0	13	0	0	0	2.6	13
Deep Tillage (324) acres	0	1250	0	0	0	250.0	1250
Fence (382) (ft)	0	20330		4808	0	6284.5	25138
Forage Harvest Management (511) acres	0	1280	38	64	0	276.4	1382
Grade Stabilization Structure (410) number	0	3	0	1	4	1.0	8
Irrigation System, Sprinkler (442) (acres)	0	42	197	406	31	161.3	676
Irrigation System, Surface (443) (acres)	0	1	0	6	0	1.4	7
IWC High & Low Pressure Pipeline (430DD) & (430EE) (ft)	0	0	3350	34112	2200	9365.5	39662
Irrigation Water Management (449)	0	1490	420	3438	0	1069.6	5348
Manure Transfer (634) number	0	0	0	2	0	0.4	2
Nutrient Management (590) (acres)	0	2193	124	2025	0	868.4	4342
Pasture and Hay Planting (512) (acres)	0	1266	40	843	0	429.8	2149
Pest Management (595) (acres)	0	1303	124	1576	592	750.8	3595
Pipeline (516) (ft)	0	5280	0	6131	0	2282.2	11411
Prescribed Grazing (528&528A) (acres)	0	1116	3011	3217	1961	1836.0	9305
Pumping Plant (533) number	0	0	1	1	1	0.5	3
Range Planting (550) acres	0	1635	0	140	0	443.8	1775
Residue Management Mulch Till (345&329B) (acres)	0	1291	316	1043	0	530.0	2650
Residue Management Ridge Till (329C) (acres)	0	9	0	435	0	88.8	444
Residue Management Seasonal (344) (acres)	0	1228	147	739		528.5	2114
Streambank and Shoreline Protection (580) (ft)	0	0	6594	16000	0	4518.8	22594
Structure For Water Control (587) (no.)	0	0	0	3	1	0.8	4
Surface Roughening (609) acres	0	803	213	1017	0	508.3	2033



Idaho

Goose Creek - 17040211

8 Digit Hydrologic Unit Profile November 2008

Progress/Status – Continued

PRS Data							
Conservation Treatment Acres	FY04	FY05	FY06	FY07	FY08	Avg/Year	Total
Upland Wildlife Management (645)(acres)	0	937	1094	2311	314	1085.5	4656
Waste Storage Facility (313) (no.)	0	0	3	0	0	0.6	3
Watering Facility (614) number	0	5	0	4	0	1.8	9
Use Exclusion (472) acres	0	0	0	628	0	125.6	628
Wetland Enhancement (659) (acres)	0	40	66	13	0	23.8	119

Progress in the last five years has been focused on:

- ~ grazing management
- ~ wildlife habitat management
- ~ livestock water availability

Resource concerns that require ongoing attention:

- ~ rangeland health
- ~ water quality & water quantity
- ~ prescribed grazing
- ~ pest management
- ~ wildlife habitat improvements

Lands Removed from Production through Farm Bill Programs

- Conservation Reserve Program (CRP): **1,464 Acres**
- Wetland Reserve Program (WRP): **None**

Footnotes/Bibliography

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

1. Ownership Layer – Source: This spatial data contains surface management land status (sometimes known as "ownership") and Public Land Survey System (PLSS) information for Idaho. The Bureau of Land Management (BLM) in Idaho creates and maintains these spatial data layers. The primary source of the spatial features is the BLM Geographic Coordinate Database (GCDB), which contains official survey records and corresponding geodetic control information maintained by the BLM Cadastral program. In areas where GCDB records are unavailable, the spatial features are taken from a variety of sources including the BLM Idaho Resource Base Data collection, US Geological Survey Digital Line Graphs (DLGs), and US Forest Service Cartographic Feature Files (CFFs), among others. The source of the attribute information is the BLM Master Title Plats (MTPs) and careful cooperation with other government agencies that own or manage land parcels. The layer is available from the Inside Idaho (Interactive Numeric & Spatial Information Data Engine): <http://inside.uidaho.edu> For current ownership status, consult official records at appropriate federal, state or county offices. Ownership classes grouped to calculate Public Ownership vs. Private Ownership.
2. National Land Cover Dataset (NLCD): NLCD 92 (National Land Cover Data 1992) is a 21-category land cover classification scheme that has been applied consistently over the conterminous U.S. It is based primarily on the unsupervised classification of Landsat TM (Thematic Mapper) 1992 imagery. Ancillary data sources included topography, census, agricultural statistics, soil characteristics, other land cover maps, and wetlands data. The NLCD 92 classification is provided as raster data with a spatial resolution of 30 meters. The layer is available from: <http://edcwww.cr.usgs.gov/products/landcover/nlcd.html>
Description: Abstract: These data can be used in a geographic information system (GIS) for any number of purposes such as assessing wildlife habitat, water quality, pesticide runoff, land use change, etc. The State data sets are provided with a 300 meter buffer beyond the State border to facilitate combining the State files into larger regions.
3. Farm Services Agency, USDA, 2005. CRP acres from GIS (CLU) database.
4. ESTIMATES FROM THE 1997 NRI DATABASE (REVISED DECEMBER 2000) REPLACE ALL PREVIOUS REPORTS AND ESTIMATES. Comparisons made using data published for the 1982, 1987, or 1992 NRI may produce erroneous results. This is due to changes in statistical estimation protocols, and because all data collected prior to 1997 were simultaneously reviewed (edited) as 1997 NRI data were collected. All definitions are available in the glossary. In addition, this December 2000 revision of the 1997 NRI data updates information released in December 1999 and corrects a computer error discovered in March 2000. For more information: <http://www.nrcs.usda.gov/technical/NRI/>
5. PRISM Climate Mapping Project. Annual precipitation data. See http://www.ocs.orst.edu/prism_new.html for further information.
6. Irrigated Adjudicated Water Rights – Idaho Department of Water Resources
<http://www.idwr.idaho.gov/water/srba/mainpage/>
7. USGS Idaho Streamflows, gaging station data (<http://waterdata.usgs.gov/id/nwis/sw/>) and estimates for ungaged streams based on statistical data (<http://water.usgs.gov/osw/streamstats/idaho.html>).
8. National Hydrography Dataset (NHD). Developed by the US Geological Survey in cooperation with U.S. Environmental Protection Agency and other state and local partners (<http://nhd.usgs.gov>).
9. IDEQ. 2002 Integrated Report (approved December 2005).
http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/integrated_report.cfm.
10. IDEQ. 2004. Goose Creek Subbasin Assessment and TMDL.
http://www.deq.idaho.gov/water/data_reports/surface_water/tmdls/goose_creek/goose_creek.cfm



Idaho

Goose Creek - 17040211

8 Digit Hydrologic Unit Profile November 2008

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.idaho.gov/gisdata/gis_data.htm
13. (Feedlot) Idaho State Department of Agriculture: <http://www.agri.state.id.us/> FOIA request.
14. Natural Resource Conservation Service, Watershed Projects Planned and Authorized, <http://www.nrcs.usda.gov/programs/watershed>
15. Natural Resource Conservation Service, Watershed Plans, Studies and Assessments completed, http://www.nrcs.usda.gov/programs/watershed/Surveys_Pln.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/tmdl/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.idaho.gov/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/waq.htm>, and Water Quality Program, <http://www.scc.state.id.us/Docs/WOPA%20FACT%20SHEET.doc>
20. Idaho State Department of Agriculture (ISDA). Groundwater water quality regional projects. <http://www.agri.state.id.us/Categories/Environment/water/gwReports.php>
21. Idaho Department of Water Resources (IDWR). State Comprehensive Water Plans. http://www.idwr.idaho.gov/waterboard/planning/Comp_Basin_Plans.htm
22. 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.agcensus.usda.gov/Publications/2002/Census_by_State/Idaho/index.asp



Idaho
November 2008

Goose Creek – 17040211 8 Digit Hydrologic Unit Profile

Conservation Activities and Future Conservation Needs

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 systems for the years 2004 through 2008.

The following Future Conditions Tables are estimates 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 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.
4. Urban development of land that was open space as farmland or rangeland presents its own type of resource problems that will require treatment as well as reduce the projected needs for traditional conservation associated with existing cropland and rangeland that is converted to urban use.



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Dry Cropland

Current Conditions	Total acres	Riparian Potential
Total Dry Cropland	1,460	150
Typical Management Unit/Ownership	650	
Current Farm Bill participation	30%	

Future Conditions	Riparian Potential	Total Acres
Dry Cropland Acres		1,310
Conversion to Riparian RMS	150	
Total Acres		1,460

Projected Treatment Needs for Dry Cropland:												
Dry Cropland	Quantity		Costs		Effects				Implementation			
Practices	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Dry Cropland	Ac.	1,310			+3	+2	+2	+3				
Conservation Crop Rotation (328)	Ac.	1,310	\$ -	\$ -					X			X
Contour / Cross Slope Farming (330)	Ac.	1,310	11,800	3,900					X			X
Deep Tillage (324)	Ac.	660	29,700	9,900					X			X
Diversion (362)	Ft.	2,640	7,900	200					X			X
Forage Harvest Management (511)	Ac.	390	-	-					X			X
Grassed Waterway (412)	Ac.	15	27,000	500					X	X		X
Nutrient Management (590)	Ac.	1,310	39,300	13,100					X			X
Pasture & Hayland Planting (512)	Ac.	520	78,000	800					X		X	X
Pest Management (595)	Ac.	1,310	45,200	15,100					X			X
Residue Management, Mulch Till (345)	Ac.	660	29,700	9,900					X			X

Conservation Activities for Dry Cropland – Continued

Projected Treatment Needs for Dry Cropland (Continued):												
Dry Cropland	Quantity		Costs		Effects				Implementation			
Practices	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Dry Cropland	Ac.	1,310			+3	+2	+2	+3				
Residue Management, No Till/Strip Till/Direct Seed (329)	Ac.	1,310	117,900	39,300					X			X
Sediment Basin (350)	No.	10	20,000	600					X		X	X
Stripcropping (585)	Ac.	330	8,300	100					X			X
Terrace (600)	Ft.	63,360	177,400	1,800					X			X
Upland Wildlife Habitat Management (645)	Ac.	200	6,000	2,000					X			X
Water and Sediment Control Basin (638)	No.	16	19,200	600					X			X
Windbreak/Shelterbelt Establishment (380)	Ft.	5,280	8,200	100					X			X
Dry Cropland Riparian	Ac.	150			+3	+2	+3	+3				
Access Control (472)	Ac.	10	400	-					X	X		X
Channel Bank Vegetation (322)	Ft.	610	\$ 1,800	\$ -					X			X
Channel Stabilization (584)	Ft.	610	15,300	100					X			X
Fence (382)	Ft.	21,120	37,000	700					X	X		X
Nutrient Management (590)	Ac.	150	2,300	800					X	X		X
Pest Management (595)	Ac.	150	3,600	1,200					X			X
Pipeline (516)	Ft.	21,120	57,000	1,100					X			X
Prescribed Grazing (528)	Ac.	150	2,300	800					X			X
Pumping Plant (533)	No.	8	18,200	200					X			X
Riparian Forest Buffer (391)	Ac.	14	32,200	300					X			X
Riparian Herbaceous Cover (390)	Ac.	14	2,500	-					X	X		X
Streambank & Shoreline Prot (580)	Ft.	3,050	167,800	16,800					X	X		X



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Dry Cropland – Continued

Projected Treatment Needs for Dry Cropland (Continued):												
Dry Cropland	Quantity		Costs		Effects				Implementation			
Practices	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Dry Cropland Riparian (Continued)	Ac.	150			+3	+2	+3	+3				
Tree/Shrub Establishment (612)	No.	250	300	-					X			X
Upland Wildlife Management (645)	Ac.	20	600	200					X	X		X
Watering Facility (614)	No.	16	22,400	200					X			X
Wetland Wildlife Management (644)	Ac.	15	500	200					X			X
Total RMS Costs			\$ 989,800	\$ 120,500								

Potential RMS Effects Summary for Dry Cropland		
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$ 49,500	\$ 6,000
Potential Farm Bill Programs	\$ 940,300	\$ 114,500
Operator O&M and Management Cost		\$ 120,500
Annual Management Incentives (3 yrs - Incentive Payments)	\$ 288,900	
Operator Investment	\$ 375,200	
Federal Costshare	\$ 325,700	
Total RMS Costs	\$ 989,800	\$ 120,500
Estimated Level of Participation		75%
Total Acres in RMS System		1,100
Anticipated Cost at Estimated Level of Participation	\$	742,400
Participating landowners will be in compliance with TMDLs		
Improves habitat for ESA endangered & threatened species		



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Irrigated Cropland/Hayland

Current Conditions	Total acres	Riparian Potential
Total Irrigated Cropland/Hayland	86,900	
Typical Management Unit/Ownership	650	
Surface Irrigated Cropland/Hayland	34,760	
Sprinkler Irrigated Cropland/Hayland	52,140	
Current Farm Bill participation	15%	

Future Conditions	Riparian Potential	Total Acres
Sprinkler Irrigated Cropland/Hayland		86,900
Total Irrigated Cropland/Hayland Acres		86,900

Projected Treatment Needs for Irrigated Cropland/Hayland:												
Irrigated Cropland/Hayland	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
Sprinkler Irrigation	Ac.	86,900			+3	+2	+2	+3				
Cover Crop (340)	Ac.	21,730	\$ 1,303,800	\$ 13,000					X			X
Conservation Crop Rotation (328)	Ac.	86,900	-	-					X			X
Constructed Wetland (656)	No.	10	110,000	1,100					X			X
Forage Harvest Management (511)	Ac.	21,730	-	-					X			X
Irrigation System, Microirrigation (441)	Ac.	4,400	6,732,000	336,600					X			X
Irrigation System, Sprinkler (442)	Ac.	34,760	21,551,200	431,000					X			X
Irrigation Water Conveyance (430DD)	Ft.	859,320	7,046,400	35,200					X			X
Irrigation Water Management (449) - Low level	Ac.	60,830	912,500	304,200					X			X
Irrigation Water Management (449) - Meters and Moisture Sensors	Ac.	26,070	782,100	260,700					X			X



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Irrigated Cropland/Hayland - Continued

Projected Treatment Needs for Irrigated Cropland/Hayland (Continued):												
Practices	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
Nutrient Management (590)	Ac.	86,900	2,607,000	869,000					X			X
Pest Management (595)	Ac.	86,900	2,998,100	999,400					X			X
Pumping Plant (533)	No.	220	2,860,000	28,600					X			X
Residue Mngt, Mulch Till (345)	Ac.	86,900	7,821,000	2,607,000					X			X
Residue Management Seasonal (344)	Ac.	86,900	1,955,300	651,800					X			X
Residue Mngt, No Till/Strip Till (329)	Ac.	8,700	783,000	261,000					X			X
Sediment Basin (350)	No.	65	130,000	3,900					X			X
Structure for Water Control (587) -Fish Screen	No.	220	803,000	8,000					X			X
Surface Roughening (609)	Ac.	86,900	2,607,000	869,000					X			X
Upland Wildlife Habitat Management (645)	Ac.	13,000	390,000	130,000					X			X
Well Decommissioning (355)	No.	25	21,300	-					X			X
Windbreak/Shelterbelt Establishment (380)	Ft.	718,100	1,113,100	11,100					X			X
Total RMS Costs			\$62,526,800	\$7,820,600								



Conservation Activities for Irrigated Cropland/Hayland - Continued

Potential RMS Effects Summary for Irrigated Cropland/Hayland

Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$3,126,300	\$391,000
Potential Farm Bill Programs	\$59,400,500	\$7,429,600
Operator O&M and Management Cost		\$7,820,600
Annual Management Incentives (3 yrs - Incentive Payments)	\$20,856,000	
Operator Investment	\$22,398,600	
Federal Cost Share	\$19,272,200	
Total RMS Costs	\$62,526,800	\$7,820,600
Estimated Level of Participation		75%
Total Acres in RMS System		65,200
Anticipated Cost at Estimated Level of Participation		\$46,895,100
Total Acre Feet of Water Saved Annually		96,690
Increases infiltration and storage of water in soil profile		
Participating landowners will be in compliance with TMDLs		
Improves habitat for ESA endangered & threatened species		



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Irrigated Pasture

Current Conditions	Total Acres	Riparian/ Wetland Potential
Surface Irrigated Pasture	1,050	
Sprinkler Irrigated Pasture	450	
Total Irrigated Pasture	1,500	150
Typical Management Unit/Ownership	650	
Current Farm Bill participation	30%	

Future Conditions	Total Acres
Surface Irrigated Pasture	
Sprinkler Irrigated Pasture	1,350
Total Conversion to Riparian Pasture RMS	150
Total Acres	1,500



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Irrigated Pasture - Continued

Projected Treatment Needs for Irrigated Pasture												
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
Sprinkler Irrigation	Ac.	1,350			+3	+3	+2	+3				
Fence (382)	Ft.	42,240	\$ 99,300	\$ 2,000					X			X
Irrigation Water Conveyance (430DD)	Ft.	63,360	519,600	2,600					X			X
Irrigation System Sprinkler (442)	Ac.	1,050	651,100	13,000					X			X
Irrigation Water Management (449)	Ac.	1,350	30,400	10,100					X			X
Nutrient Management (590)	Ac.	1,350	40,500	13,500					X			X
Pasture & Hayland Planting (512)	Ac.	540	81,000	800					X			X
Pest Management (595)	Ac.	1,350	32,400	10,800					X			X
Pipeline (516)	Ft.	42,240	116,200	600					X			X
Prescribed Grazing (528)	Ac.	1,350	20,300	6,800					X			X
Structure for Water Control (587)- Fish Screen	No.	20	73,000	700					X	X		X
Upland Wildlife Management (645)	Ac.	200	6,000	2,000					X			X
Watering Facility (614)	No.	20	28,000	300					X			X
Windbreak/Shelterbelt Establish(380)	Ft.	21,120	32,700	300					X			X

Conservation Activities for Irrigated Pasture - Continued

Projected Treatment Needs for Irrigated Pasture (Continued):												
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
Riparian Pastures	Ac.	150			+1	+1	+3	+3				
Animal Trails and Walkways (575)	Ft.	10,560	\$ 52,800	\$ 500					X			X
Access Control (472)	Ac.	10	400	-					X	X	X	X
Channel Bank Vegetation (322)	Ft.	610	1,800	-					X			X
Channel Stabilization (584)	Ft.	610	15,300	100					X			X
Fence (382)	Ft.	10,560	24,800	500					X	X	X	X
Nutrient Management (590)	Ac.	150	2,300	800					X			
Pasture & Hayland Planting (512)	Ac.	60	9,000	100					X			X
Pest Management (595)	Ac.	150	3,600	1,200					X			X
Pipeline (516)	Ft.	10,560	29,000	100					X			X
Prescribed Grazing (528)	Ac.	150	2,300	800					X			X
Riparian Forest Buffer (391)	Ac.	15	34,500	300					X			X
Riparian Herbaceous Cover (390)	Ac.	15	2,600	-					X			X
Streambank & Shoreline Prot (580)	Ft.	3,050	167,800	8,400					X	X	X	X
Stream Crossing (578)	No.	4	11,800	100					X			X
Tree/Shrub Establishment (612)	No.	250	117,500	1,200					X			X
Upland Wildlife Management (645)	Ac.	25	800	300					X			X
Watering Facility (614)	No.	4	5,600	100					X		X	X
Wetland Wildlife Management (644)	Ac.	15	500	200					X			X
Total RMS Costs			\$ 2,212,800	\$ 78,200								



Conservation Activities for Irrigated Pasture - Continued

RMS Cost Summary for Irrigated Pasture:

Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$ 110,600	\$ 3,900
Potential Farm Bill Programs	\$ 2,102,200	\$ 74,300
Operator O&M and Management Cost		\$ 78,200
Annual Management Incentives (3 yrs - Incentive Payments)	\$ 139,100	
Operator Investment	\$ 1,092,200	
Federal Costshare	\$ 981,500	
Total RMS Farm Bill Costs	\$ 2,212,800	
Estimated Level of Participation		75%
Total Acres in RMS System		1,100
Anticipated Cost at Estimated Level of Participation	\$	1,659,600
Total Acre Feet of Water Saved Annually		1,690
Total Annual Forage Production Benefits (animal unit months)		5,400
Improves ground water and surface water quality by minimizing off-site transport		
Improves riparian habitat for ESA endangered & threatened species		



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Grazed Rangeland, Pasture and Forestland

Current Conditions	Grazed	Ungrazed	Riparian/ Wetland/ Potential	Total Acres
Private Rangeland and Dry Pasture	69,810		6,980	69,810
Typical Management Unit/Ownership	820			
Current Farm Bill participation	15%			

Future Conditions	Rangeland/Pasture	Riparian	Total Acres
	62,830	6,980	69,810

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

Practices	Quantity		Costs		Effects				Implementation				
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	WRP	CREP	Other
Grazed Range, Dry Pasture & Forestland	Ac.	62,830			+3	+2	+3	+3					
Animal Trails and Walkways (575)	Ft.	258,720	\$ 1,293,600	\$ 12,900					X				X
Brush Management (314)	Ac.	18,850	565,500	5,700					X				X
Fence (382)	Ft.	517,440	1,216,000	24,300					X				X
Firebreak (394)	Ft.	258,720	517,400	10,300					X				X
Pasture & Hayland Planting (512)	Ac.	12,566	1,884,900	18,800					X				X
Pest Management (595)	Ac.	62,830	1,507,900	502,600					X				X
Pipeline (516)	Ft.	258,720	711,500	3,600					X				X
Pond (378)	No.	25	170,000	1,700					X				X
Prescribed Grazing (528)	Ac.	62,830	942,500	314,200					X				X
Range Planting (550)	Ac.	20,730	2,902,200	29,000					X				X
Spring Development (574)	No.	50	125,000	600					X	X			X



Idaho

Goose Creek – 17040211
8 Digit Hydrologic Unit Profile

November 2008

Conservation Activities for Grazed Rangeland, Pasture and Forestland - Continued

Projected Treatment Needs for Grazed Rangeland, Dry Pasture and Forestland :													
Practices	Quantity		Costs		Effects				Implementation				
	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	WRP	CREP	Other
Grazed Range, Dry Pasture & Forestland	Ac.	62,830			+3	+2	+3	+3					
Upland Wildlife Management (645)	Ac.	12,560	376,800	125,600					X	X			X
Watering Facility (614)	No.	100	140,000	1,400					X				X
Well (642)	No.	50	225,000	2,300					X				X
Range & Dry Pasture Riparian	Ac.	6,980			+3	+2	+3	+3					
Access Control (472)	Ac.	350	12,300	400					X	X	X		X
Channel Bank Vegetation (322)	Ft.	26,830	80,500	1,600					X				X
Channel Stabilization (584)	Ft.	26,830	670,800	3,400					X				X
Fence (382)	Ft.	29,040	68,200	1,400					X	X	X		X
Pasture & Hayland Planting (512)	Ac.	700	105,000	1,100					X				X
Pest Management (595)	Ac.	6,980	167,500	55,800					X				X
Pipeline (516)	Ft.	43,560	119,800	600					X				X
Prescribed Grazing (528)	Ac.	6,980	104,700	34,900					X				X
Pumping Plant (533)	No.	5	11,400	100					X				X
Riparian Forest Buffer (391)	Ac.	620	1,426,000	14,300					X				X
Riparian Herbaceous Cover (390)	Ac.	620	108,500	1,100					X	X	X		X
Stream Crossing (578)	No.	50	148,000	700					X	X	X		X
Streambank & Shoreline Prot (580)	Ft.	134,160	7,378,800	368,900					X	X			X
Tree/Shrub Establishment (612)	Ac.	10,730	13,900	100					X				X
Upland Wildlife Management (645)	Ac.	1,400	42,000	14,000					X	X			X
Watering Facility (614)	No.	11	9,600	100					X		X		X
Wetland Wildlife Management (644)	Ac.	700	21,000	7,000					X		X		X
Total RMS Costs			\$23,066,300	\$1,558,500									



Conservation Activities for Grazed Rangeland, Pasture and Forestland - Continued

RMS Cost Summary for Grazed Rangeland, Pasture and Forestland:

Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$ 1,153,300	\$ 77,900
Potential Farm Bill Programs	\$21,913,000	\$1,480,600
Operator O&M and Management Cost		\$1,558,500
Annual Management Incentives (3 yrs - Incentive Payments)	\$ 3,162,400	
Operator Investment	\$8,653,500	
Federal Costshare	\$11,250,400	
Total RMS Farm Bill Costs	\$23,066,300	
Estimated Level of Participation		35%
Total Acres in RMS System		24,400
Anticipated Cost at Estimated Level of Participation	\$	8,073,200
Total Annual Forage Production Benefits (acre unit months)		3,700
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		



Idaho
November 2008

Goose Creek – 17040211 8 Digit Hydrologic Unit Profile

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		4
AFOs		2
Current Farm Bill participation	15%	
Total CAFOs and AFOs		6

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

Conservation Activities for Headquarters - Continued

Projected Treatment Needs for Headquarters:													
Practices	Quantity		Costs		Effects				Implementation				
	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	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.	-	-	-					X				X
Feed Lot	No.	4			+3	+1	+3	+3					
Structural/Management Practices													
Waste Storage Facility (313) CAFO	No.	3	262,500	5,250					X				X
Waste Storage Facility (313) AFO	No.	1	45,000	900					X				X
Total RMS Costs			\$ 307,500	\$ 6,150									



Conservation Activities for Headquarters - Continued

RMS Cost Summary for Headquarters		
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$ 15,400	\$ 300
Potential Farm Bill Programs	\$ 292,100	\$ 5,850
Operator O&M and Management Cost		\$ 6,150
Annual Management Incentives (3 yrs - Incentive Payments)	\$ 30,800	
Operator Investment	\$ 146,100	
Federal Costshare	\$ 130,600	
Total RMS Costs	\$ 307,500	
Estimated Level of Participation		35%
Total CAFO/AFO in RMS System		1
Anticipated Cost at Estimated Level of Participation		\$ 107,600
Reduces impact to ground and surface water quality		
90% participation reflects Local, State and Federal regulations		