Introduction

The American Falls 8-Digit Hydrologic Unit Code (HUC) subbasin contains 1,835,370 acres. Fifty one percent of the subbasin is in Bingham County, 25 percent in Power County, 8 percent in Butte, 7 percent in Bannock, 4 percent in Jefferson, 3 percent in Bonneville and the remaining 2 percent is split between Blaine and Oneida counties. Forty three percent of the basin is publicly owned, 38 percent is privately owned and 19 percent is tribal lands.

Sixty seven percent of the basin is in shrubland, rangeland, grass, pasture, or hayland. Seventeen percent is cropland, 5 percent is CRP and the remainder water, wetlands, forest, barren and developed.

Elevations range from 4,300 feet to over 8,800 feet.

Conservation assistance is provided by 6 Soil and Water Conservation Districts, 3 Soil Conservation Districts, 1 Natural Resource Conservation District and 4 Resource Conservation and Development Offices.

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American Falls - 17040206
Ownership Map

Legend
- Private
- Public
- Tribal
# Physical Description

<table>
<thead>
<tr>
<th>Land Cover/ Land Use (NLCD(^2))</th>
<th>Ownership - (2003 Draft BLM Surface Map Set (^1))</th>
<th>Totals</th>
<th>% of HUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>Private</td>
<td>Tribal</td>
<td></td>
</tr>
<tr>
<td>Acres %</td>
<td>Acres %</td>
<td>Acres %</td>
<td>Totals %</td>
</tr>
<tr>
<td>Forest 14,520 1%</td>
<td>4,160 &lt;1%</td>
<td>15,260 1%</td>
<td>33,940</td>
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<tr>
<td>Grain Crops --</td>
<td>103,700 6%</td>
<td>21,160 1%</td>
<td>124,860</td>
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<tr>
<td>Conservation Reserve/3 Program (CRP) Land --</td>
<td>69,110 4%</td>
<td>23,210 1%</td>
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<tr>
<td>Grass/ Pasture/Hay Lands 86,740 5%</td>
<td>190,500 10%</td>
<td>80,550 4%</td>
<td>357,790</td>
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<tr>
<td>Orchards/Vineyards/ Berries --</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<tr>
<td>Row Crops --</td>
<td>159,920 9%</td>
<td>15,560 1%</td>
<td>175,480</td>
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<tr>
<td>Shrub/Rangelands 576,740 31%</td>
<td>127,950 7%</td>
<td>159,140 9%</td>
<td>863,830</td>
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<tr>
<td>Water/Wetlands/Developed/Barren 100,950 6%</td>
<td>47,830 3%</td>
<td>38,370 2%</td>
<td>187,150</td>
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<tr>
<td>Idaho HUC Totals 778,950 43%</td>
<td>703,170 38%</td>
<td>353,250 19%</td>
<td>1,835,370</td>
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## Irrigated Lands\(^4\)

<table>
<thead>
<tr>
<th>Type of Land</th>
<th>ACRES</th>
<th>% of Irrigated Lands</th>
<th>% of HUC</th>
</tr>
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<tbody>
<tr>
<td>Cultivated Cropland</td>
<td>348,700</td>
<td>82%</td>
<td>19%</td>
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<tr>
<td>Non-Cultivated Cropland *</td>
<td>31,300</td>
<td>7%</td>
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<tr>
<td>Pastureland</td>
<td>42,700</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Total Irrigated Lands</td>
<td>422,700</td>
<td>100%</td>
<td>23%</td>
</tr>
</tbody>
</table>

* Includes permanent hayland and horticultural cropland.
Land Use/Land Cover

Legend
- Shrub/Rangelands
- Grass/Pasture/Hay Lands
- Forest
- Row Crops
- Grain Crops
- Water/Wetlands/Developed/Barren

Land use/Land cover Map
Average Annual Precipitation

[Map of Eastern Idaho showing average annual precipitation in inches with color-coded ranges]

17040206
Average Annual Precipitation in Inches

- 9-13
- 13-17
- 17-21
- 21-35
- Greater than 35
Common Resource Area Map

The Common Resource Areas (CRA) delineated below for the American Falls 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 Management Guide Sheet information and the eFOTG;
- A geographic linkage with the national MLRA framework.

11.2 Snake River Plains – Lava Fields: This unit consists of basalt lava flows, cinder cones, and spatter cones. Exposed basalt or very shallow loessial soils over volcanics are characteristic and are either barren or sparsely covered by shrubs and grasses. Soil moisture regime is aridic and soil temperature regime is dominantly mesic. Livestock carrying capacity is very low. Surface water availability is very limited. This unit includes the part of the Idaho National Engineering Laboratory. Lithology, depth to bedrock, livestock carrying capacity, and water availability are unlike neighboring units.

11.3 Snake River Plains – Upper Snake River Plain: The nearly level unit is characterized by cropland, pastureland, cities, suburbs, and industries. Extensive surface irrigated small grain, sugar beet, potato, and alfalfa farming occurs. Frost-free season is shorter and crop variety is less than downstream CRA units. Aquatic resources have been degraded by irrigation diversions, channelization, dams, sewage treatment, nonpoint pollution, food processing and phosphate processing.

11.4 Snake River Plains – Eastern Snake River Basalt Plain: This unit is characterized by shallow, stony soils that are unsuitable for cultivation. Only small areas have soils deep enough to be farmed under sprinkler irrigation. Rangeland is widespread. Potential natural vegetation is mostly sagebrush and bunchgrass. It is cool enough to have some regeneration capacity and still contain native plants.

13.1 Eastern Idaho Plateaus – Dissected Plateaus and Teton Basin: This unit is used for cropland and rangeland. Potatoes are an important cash crop. Sprinkler irrigated land supports potatoes, alfalfa, and pasture. Non-irrigated land supports small grains. Mollisols developed in thick loess deposits or alluvium and are subject to wind erosion. Potential natural vegetation is sagebrush steppe and is unlike the forests of the higher, more rugged mountains. Wet meadows occur in the poorly-drained soils of the Teton Basin.

13.4 Eastern Idaho Plateaus – Sagebrush Steppe- and Woodland-Covered Hills and Low Mountains: This unit occupies an elevational band between the higher mountains and the lower inter-montane valleys. Potential natural vegetation is mostly sagebrush steppe. Cool season grasses are more common than in the adjacent, drier units. Juniper woodland vegetative sites occur on shallow rock soils. Land use is primarily livestock grazing.
13.5 Eastern Idaho Plateaus – High Elevation Forests and Shrublands: This unit is mountainous and occupies the elevational band above Sagebrush Steppe Valleys and Woodland-Covered Hills and Low Mountains CRA units. 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 the mean annual precipitation is higher than in lower elevational units.

13.6 Eastern Idaho Plateaus – Sagebrush Steppe Valleys: This valley unit is flanked by hills and mountains. It is dominated by sagebrush grassland and lacks woodlands, open conifer forest, and the saltbush-greasewood vegetation. Perennial bunchgrasses are more abundant than in the Sagebrush Basins and Slopes in Utah. Valleys mostly drain to the Snake River and fish assemblages are unlike those of the internally-drained basins to the south (MLRA 28A). Grazing is the dominant land use but non-irrigated wheat and barley farming is much more common than in MLRA 28A. This unit is less suitable for cropland and has less available water than many parts of the Snake River Plain (MLRA 11).

Streamflow Summary

The average annual flow of the Snake River just above Shelley, Idaho is approximately 4,424,800 acre-feet (1983-2004), and the average annual flow below American Falls Reservoir is 5,450,400 acre-feet (1983-2004). Flow is regulated by American Falls Reservoir and other reservoirs, having a combined usable capacity of 4,600,000 acre-feet. Upstream reservoir releases may be made for flood control or for passing water for downstream use. Considerable water leaks into the Snake River Plain Aquifer above the American Falls Reservoir Station (near Neely, Idaho). The flows of the Snake River below American Falls are highly regulated and display less of the typical snowmelt hydrograph pattern.
<table>
<thead>
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<th>Irrigated Adjudicated Water Rights</th>
<th>CFS</th>
<th>ACRE-FEET</th>
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<tr>
<td>Surface Water</td>
<td>4,390</td>
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<tr>
<td>Groundwater</td>
<td>4,645</td>
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<tr>
<td>Total Irrigated Adjudicated Water Rights</td>
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<table>
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<tr>
<th>Stream Flow Data</th>
<th>USGS 13077000, Snake River at Neely ID, 1983-2004</th>
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<tr>
<td>Average Annual</td>
<td>5,450,400</td>
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<tr>
<td>March-July Average</td>
<td>3,278,700</td>
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<td>Percent of Average Annual</td>
<td>Mar – Jul 60%</td>
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<td>Total Stream Miles</td>
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<td>Water Quality Impaired Streams</td>
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<td>Anadromous Fish Presence (Streamnet)</td>
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<tr>
<td>Bull Trout Presence (Streamnet)</td>
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<table>
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<th>Land Cover/Use</th>
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<tr>
<td>Forest</td>
<td>947</td>
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<tr>
<td>Grain Crops</td>
<td>7,139</td>
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<td>Grass/Pasture/Hay Lands</td>
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<td>Row Crops</td>
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<td>Shrub/Rangelands – Includes CRP Lands</td>
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<td>Water/Wetlands/Developed/Barren</td>
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<td>Total Acres of 100 ft stream buffers</td>
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<table>
<thead>
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<th>Land Capability Class</th>
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<td>I – slight limitations</td>
<td>0</td>
</tr>
<tr>
<td>II – moderate limitations</td>
<td>315,700</td>
</tr>
<tr>
<td>III – severe limitations</td>
<td>86,600</td>
</tr>
<tr>
<td>IV – very severe limitations</td>
<td>73,200</td>
</tr>
<tr>
<td>V – no erosion hazard, but other limitations</td>
<td>1,900</td>
</tr>
<tr>
<td>VI – severe limitations, unsuited for cultivation, limited to pasture, range, forest</td>
<td>32,700</td>
</tr>
<tr>
<td>VII – very severe limitations, unsuited for cultivation, limited to grazing, forest, wildlife</td>
<td>3,200</td>
</tr>
<tr>
<td>VIII – misc areas have limitations, limited to recreation, wildlife, and water supply</td>
<td>0</td>
</tr>
<tr>
<td>Total Crop &amp; Pasture Lands</td>
<td>513,300</td>
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</tbody>
</table>
Resource Settings

Pasture
Some improved dryland pasture with introduced forage species including wheatgrasses, fescues, bromes, and orchardgrass. Older established 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 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.

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 NRCS standards.

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 by siphon tube or gated pipe, but there is also some border irrigation. A variety of crops are grown in many combinations, including corn (silage, sweet, grain), beets, peas and beans. Small grains and/or alfalfa are included in many rotations. 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. Impacted surface and/or ground water quality is common.

Sprinkler Irrigated Cropland
Conventionally tilled cropland on soils ranging from sands to loams. Wind erosion is typically a problem from March to June, creating air quality and visibility hazards. Various combinations of small grains, alfalfa, beets, corn, 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 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
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 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 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, 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, pasturelands and CRP have been essentially static since 1992 but has decreased by almost 1 ½ tons per acre per year since 1982. Sheet and rill erosion is not a major issue on cropland in this subbasin, with the exception of the Arbon Valley area. Susceptibility to sheet and rill erosion is low in this subbasin because the natural precipitation is low and the cropland is relatively flat. The Arbon Valley area has a predominantly wheat/fallow dryland rotation. Sheet and rill and ephemeral erosion are considered a moderate to severe problem in this area.

Wind erosion has decreased by about ½ tons per acre per year on cropland, pasture and CRP in this sub basin between 1982 and 1997. Following a spike in wind erosion in 1987 and 1992, wind erosion has decreased by approximately 3 tons per acre per year. The spike in wind erosion in 1987 and 1992 was primarily caused by an increase in potatoes and sugar beet acreage.
### Resource Concerns – Continued

<table>
<thead>
<tr>
<th>Impacted Water Bodies (ID17040206)</th>
<th>Stream Miles</th>
<th>Sediment, Siltation or TSS</th>
<th>Nutrients</th>
<th>Bacteria</th>
<th>Temperature</th>
<th>Dissolved Oxygen</th>
<th>Flow Alteration&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Other or Unknown</th>
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<tr>
<td>American Falls Reservoir (SK001L_0L, SK001_05)</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>Bannock Creek (SK002_02, 03,04, 05)</td>
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<td>x</td>
<td>x</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>Hazard Creek (SK025_02a)</td>
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<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>Knox Creek (SK009_02,03)</td>
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<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x</td>
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<tr>
<td>McTucker Creek (SK024_02)</td>
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<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x</td>
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<td>Seagull Bay Tributary</td>
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<td>Snake River (SK022_02)</td>
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<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
<td>x&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>Sterling Wasteway</td>
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**TOTAL STREAM MILES:** 706.3

<sup>1</sup> Flow alteration not listed for many segments, but identified as impacting the Snake River and tributaries within the watershed.

<sup>2</sup> Proposed change to 2002 Integrated Report. Miles not listed for waterbodies with nutrient TMDLs established to meet loads in downstream segments. **Shading** indicates TMDL (draft) in place.
American Falls - 17040206
Idaho                     8 Digit Hydrologic Unit Profile  June 2006

Resource Concerns – Continued

Nutrients and sediment are the major pollutants which impact beneficial uses of surface waters in this watershed. The American Falls Reservoir has a history of algal bloom problems. A variety of human activities are potential sources of pollutants in the watershed, including irrigated and dryland agriculture, grazing, urban stormflow and septic systems, feedlots/dairies, and roads. Flow alteration is a problem in this highly regulated system. Shoreline erosion is a major concern for American Falls Reservoir, and portions of major tributaries in the watershed have poor bank stability. There are two areas in the watershed where ground water is impacted by nitrates (designated Nitrate Priority Areas). An area within the Ft. Hall Reservation has been impacted by soil fumigants.

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

<table>
<thead>
<tr>
<th>Watershed Projects, Plans, Studies, and Assessments*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal:</strong></td>
</tr>
<tr>
<td>NRCS Watershed Plans/Studies/Assessments /14,15</td>
</tr>
<tr>
<td>Fort Hall Ground Water Quality Plan (On-going)</td>
</tr>
<tr>
<td>NWPC Subbasin Plans and Assessments /18</td>
</tr>
<tr>
<td>Upper Snake Subbasin Assessment (2004)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

* Listing includes past efforts in the watershed, and on-going studies and assessments.
NOTE: The 303(d) list (IDEQ 1998) has recently been replaced with the Integrated Report (IDEQ 2005). There may be slight discrepancies between this map and impacted waters listed in the Integrated Report.
**Resource Concerns – Continued**

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

*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**

<table>
<thead>
<tr>
<th>Threatened and Endangered Species</th>
<th>Candidate Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals – None</td>
<td>Birds – Yellow-billed Cuckoo</td>
</tr>
<tr>
<td>Birds – Bald Eagle</td>
<td></td>
</tr>
<tr>
<td>Fish – None</td>
<td>PROPOSED SPECIES - None</td>
</tr>
<tr>
<td>Invertebrates – Bliss Rapids Snail, Desert Valvata</td>
<td></td>
</tr>
<tr>
<td>Plants – None</td>
<td></td>
</tr>
<tr>
<td>ESSENTIAL FISH HABITAT – None</td>
<td>CRITICAL FISH HABITAT – None</td>
</tr>
</tbody>
</table>
Census and Social Data

Population: 75,740
Number of Farms: 1,499

<table>
<thead>
<tr>
<th></th>
<th>0-49 acres</th>
<th>50-999 acres</th>
<th>1000+ acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
<td>853</td>
<td>457</td>
<td>189</td>
</tr>
</tbody>
</table>

Total population = 75,740
Population

- Less than 500
- 500-999
- 1000-2499
- 2500-4999
- Greater than 5000
Census and Social Data - continued

Fifty seven percent of farm operators are farmers by occupation. The remaining operators have off-farm jobs as their primary occupation. The majority of operators are male; women make up 7.7 percent of the total. Ninety-two 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 880 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.

Farm size and market value of production to farmers are up over the past several years. Government payments to farmers are up substantially for the same period. Farm sales range from less than $1,000 to more than $500,000 per year. Seventy four percent of the farms reported sales of less than $50,000 per year.

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

<table>
<thead>
<tr>
<th></th>
<th>Average size farm</th>
<th>Market Value of Production (Average Farm)</th>
<th>Government Payments (Average Farm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>850</td>
<td>$201,100</td>
<td>$20,800</td>
</tr>
<tr>
<td>2002</td>
<td>880</td>
<td>$242,100</td>
<td>$25,600</td>
</tr>
<tr>
<td>Change</td>
<td>4.0%</td>
<td>20.0%</td>
<td>23.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Watershed</th>
<th>Idaho</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2000)</td>
<td>75,740</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per Capita Personal Income (2001)</td>
<td>$19,900</td>
<td>$24,500</td>
<td>$30,400</td>
</tr>
<tr>
<td>Median Home Value (2000)</td>
<td>$87,200</td>
<td>$106,600</td>
<td>$119,600</td>
</tr>
<tr>
<td>Percent Unemployment (2002)</td>
<td>6.8%</td>
<td>5.4%</td>
<td>5.78%</td>
</tr>
<tr>
<td>Percent Below Poverty Level (2003)</td>
<td>13.7%</td>
<td>11.8%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

This watershed is unique because of the number of acres in the Shoshone-Bannock Fort Hall Indian Reservation. Tribal land encompasses 544,000 acres. There are approximately 70 Tribal member farmers in the watershed who are actively engaged in farm operations. Land use is as follows. 320,000 acres of range, 175,000 acres of irrigated acres, most of which is leased to non-Tribal farmers. 35,000 non-irrigate acres of which 7,000 are cropped and 28,000 acres are in CRP. The remainder of acres are home sites, industrial, native river bottom, pasture and miscellaneous.

Fort Hall straddles Bannock Bingham and Power counties, and is in the Pocatello metro area. The community was named for the 1834 fort, which was named for Henry Hall.
Progress/Status

<table>
<thead>
<tr>
<th>Conservation Treatment Acres</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
<th>Avg/Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management (number)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.3</td>
<td>1</td>
</tr>
<tr>
<td>Residue Management (acres)</td>
<td>434</td>
<td>1912</td>
<td>300</td>
<td>882.0</td>
<td>2646</td>
</tr>
<tr>
<td>Irrigation System (sprinkler)(acres)</td>
<td>578</td>
<td>346</td>
<td>407</td>
<td>443.7</td>
<td>1331</td>
</tr>
<tr>
<td>Irrigation Water Conveyance, Pipeline, High Pressure Underground Plastic (430DD) (ft)</td>
<td>5823</td>
<td>18636</td>
<td>11469</td>
<td>11976.0</td>
<td>35928</td>
</tr>
<tr>
<td>Irrigation Water Management (acres)</td>
<td>690</td>
<td>1209</td>
<td>522</td>
<td>807.0</td>
<td>2421</td>
</tr>
<tr>
<td>Nutrient Management (acres)</td>
<td>520</td>
<td>2435</td>
<td>119</td>
<td>1024.7</td>
<td>3074</td>
</tr>
<tr>
<td>Pest Management (acres)</td>
<td>5035</td>
<td>2121</td>
<td>147</td>
<td>2434.3</td>
<td>7303</td>
</tr>
<tr>
<td>Prescribed Grazing (acres)</td>
<td>1680</td>
<td>805</td>
<td>1689</td>
<td>1391.3</td>
<td>4174</td>
</tr>
<tr>
<td>Fence (ft)</td>
<td>6000</td>
<td>36850</td>
<td>3260</td>
<td>15370.0</td>
<td>46110</td>
</tr>
<tr>
<td>Pipeline (516) (ft)</td>
<td>5035</td>
<td>8304</td>
<td>8803</td>
<td>7380.7</td>
<td>22142</td>
</tr>
<tr>
<td>Wildlife Habitat (acres)</td>
<td>1403</td>
<td>1042</td>
<td>321</td>
<td>922.0</td>
<td>2766</td>
</tr>
<tr>
<td>Windbreak/Shelterbelt Establishment (380) (ft)</td>
<td>40983</td>
<td>16250</td>
<td>1860</td>
<td>19697.7</td>
<td>59093</td>
</tr>
</tbody>
</table>

Progress in the last three years has been focused on:
~ irrigation water management
~ nutrient management
~ pest management
~ erosion control

Resource concerns that require ongoing attention:
~ erosion control
~ irrigation water management
~ nutrient management
~ water quality and water quantity
~ prescribed grazing
~ pest management
~ wildlife habitat improvements

Lands Removed from Production through Farm Bill Programs
- Conservation Reserve Program (CRP): **92,320 acres**
- Wetland Reserve Program (WRP): **None**
American Falls - 17040206
Idaho
8 Digit Hydrologic Unit Profile
June 2006

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.


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/techni


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.


17. Idaho Department of Environmental Quality, Watershed protection: Nonpoint source management (319 grant), Reports and program resources. http://www.deq.state.id.us/water/data_reports/surface_water.nps/reports/cfm

18. Subbasin assessments and plans are developed by local groups (SWCDs, Watershed Councils, Tribes and others) as part of the Northwest Power and Conservation Council's fish and wildlife program in the Columbia River Basin. This program is funded and implemented by the Bonneville Power Administration. http://www.nwcouncil.org/fw/subbasinplanning/Default.htm


22. 303d Listed Streams designated by the Idaho Department of Environmental Quality (1998) and approved by the Environmental Protection Agency, Section 303d Clean Water Act


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


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
Future Conservation Needs

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

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

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

*The following Current Conditions Tables have been developed to estimate the present level of conservation installed within the HUC, based on what has been reported in the PRMS and PRS Reporting system for the Years 2004 through 2006.

<table>
<thead>
<tr>
<th>Current Conditions</th>
<th>Total acres</th>
<th>Riparian Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dry Cropland</td>
<td>82,700</td>
<td></td>
</tr>
<tr>
<td>Typical Management Unit/Ownership</td>
<td>880</td>
<td>8,270</td>
</tr>
<tr>
<td>Current Farm Bill participation</td>
<td></td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Level of Treatment for Dry Cropland:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Cropland</td>
</tr>
<tr>
<td>Practices</td>
</tr>
<tr>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Dry Cropland</td>
</tr>
<tr>
<td>Conservation Crop Rotation (328)</td>
</tr>
<tr>
<td>Residue Management Mulch Till (329B)(345)</td>
</tr>
<tr>
<td>Residue Management NoTill/StripTill (329A)</td>
</tr>
<tr>
<td>Water and Sediment Control Basin (638)</td>
</tr>
<tr>
<td>Upland Wildlife Habitat Management (645)</td>
</tr>
</tbody>
</table>
## Conservation Activities for Dry Cropland/Hayland - Continued

### Future Conditions

<table>
<thead>
<tr>
<th>Potential</th>
<th>Total Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Cropland Acres</td>
<td>74,430</td>
</tr>
<tr>
<td>Conversion to Riparian RMS</td>
<td>8,270</td>
</tr>
<tr>
<td>Total Acres</td>
<td>82,700</td>
</tr>
</tbody>
</table>

### Project Future Level of Treatment for Dry Cropland:

| Practices                        | Unit  | Quantity | Additional Investment Cost | Annual O&M and Mgmt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQIP | WHIP | CREP | Other |
|----------------------------------|-------|----------|-----------------------------|----------------------------|--------------------|----------------|---------|-----|-----|------|------|------|-------|
| Dry Cropland                     | Ac.   | 74,430   |                             |                            |                    |                |         |     |     |      |      |      | 1     |
| Conservation Crop Rotation (328) | Ac.   | 74,430   | $                            | $                          | $                  | $              |         |     |     |      |      |      | X     |
| Contour Farming (330)            | Ac.   | 74,430   | $558,200                     | $186,100                   | X                  | X              |         |     |     |      |      |      |       |
| Deep Tillage (324)               | Ac.   | 74,430   | $3,349,400                   | $1,116,500                 | X                  | X              |         |     |     |      |      |      |       |
| Diversion (362)                  | Ft.   | 152,430  | $419,200                     | $8,400                     | X                  | X              |         |     |     |      |      |      |       |
| Forage Harvest Management (511)  | Ac.   | 29,780   | $                            | $                          |                    |                |         |     |     |      |      |      | X     |
| Grassed Waterway (412)           | Ac.   | 420      | $756,000                     | $15,100                    | X                  | X              |         |     |     |      |      |      |       |
| Nutrient Management (590)        | Ac.   | 74,430   | $1,116,500                   | $372,200                   | X                  | X              |         |     |     |      |      |      |       |
| Pasture & Hayland Planting (512) | Ac.   | 29,780   | $2,978,000                   | $29,800                    | X                  | X              | X       |     |     |      |      |      |       |
| Pest Management (595)            | Ac.   | 74,430   | $2,232,900                   | $744,300                   | X                  | X              |         |     |     |      |      |      |       |
| Residue and Tillage Management   | Ac.   | 37,220   | $1,410,200                   | $470,100                   | X                  | X              |         |     |     |      |      |      |       |
| Mulch Till (345)                 | No.   | 37,210   | $1,632,200                   | $544,100                   | X                  | X              |         |     |     |      |      |      |       |
| Residue and Tillage Management   | No.   | 470      | $1,292,500                   | $38,800                    | X                  | X              | X       |     |     |      |      |      |       |
| No Till / Strip Till / Direct Seed (329) | No. | 37,210 | $1,632,200 | $544,100 | X | X | | | | |
| Sediment Basin (350)             | No.   | 470      | $1,292,500                   | $38,800                    | X                  | X              | X       |     |     |      |      |      |       |
| Stripcropping (585)              | Ac.   | 37,230   | $930,800                     | $9,300                     | X                  | X              |         |     |     |      |      |      |       |
| Terrace (600)                    | Ft.   | 3,658,370| $8,048,400                   | $80,500                    | X                  | X              |         |     |     |      |      |      |       |
| Upland Wildlife Habitat Management (645) | Ac. | 11,170 | $132,000 | $55,900 | X | X | | | | |
| Water and Sediment Control Basin (638) | No. | 3,740 | $3,916,500 | $117,500 | X | X | | | | |
| Windbreak/Shelterbelt Establishment (380) | Ft. | 304,870 | $1,548,700 | $15,500 | X | X | | | | |
## Conservation Activities for Dry Cropland/Hayland * - Continued

### Current Level of Treatment for Dry Cropland

| Practices                        | Unit    | Quantity | Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQIP | WHIP | CREP | Other |
|----------------------------------|---------|----------|----------------|---------------------------|--------------------|---------------|----------|----|-----|------|------|------|-------|
| Dry Cropland Riparian            | Ac.     | 8,270    |                |                           | +3                 | +2            | +3       | +3 |     |      |      |      |       |
| Channel Bank Vegetation (322)    | Ac.     | 830      | $ 4,150,000    | $ 83,000                  | X                  | X             |          |    |     |      |      |      |       |
| Channel Stabilization (584)      | Ft.     | 19,980   | $ 359,600      | $ 1,800                   | X                  | X             |          |    |     |      |      |      |       |
| Fence (382)                      | Ft.     | 137,810  | $ 241,200      | $ 4,800                   | X                  | X             | X        |    |     |      |      |      |       |
| Pest Management (595)            | Ac.     | 8,270    | $ 248,100      | $ 82,700                  | X                  | X             | X        |    |     |      |      |      |       |
| Pipeline (516)                   | Ft.     | 145,070  | $ 391,700      | $ 7,800                   | X                  | X             | X        |    |     |      |      |      |       |
| Prescribed Grazing (528)         | Ac.     | 8,270    | $ 124,100      | $ 41,400                  | X                  | X             | X        |    |     |      |      |      |       |
| Pumping Plant (533)              | No.     | 55       | $ 156,800      | $ 3,100                   | X                  | X             | X        |    |     |      |      |      |       |
| Riparian Forest Buffer (391)     | Ac.     | 460      | $ 1,380,000    | $ 13,800                  | X                  | X             | X        |    |     |      |      |      |       |
| Riparian Herbaceous Cover (390)  | Ac.     | 460      | $ 23,000       | $ 200                     | X                  | X             | X        |    |     |      |      |      |       |
| Streambank & Shoreline Prot (580)| Ft.     | 49,960   | $ 1,199,000    | $ 119,900                 | X                  | X             | X        |    |     |      |      |      |       |
| Tree/Shrub Establishment (612)   | Ac.     | 120      | $ 54,000       | $ 500                     | X                  | X             | X        |    |     |      |      |      |       |
| Upland Wildlife Management (645) | Ac.     | 1,240    | $ 18,600       | $ 6,200                   | X                  | X             | X        |    |     |      |      |      |       |
| Use Exclusion (472)              | Ac.     | 410      | $ 14,400       | $ 400                     | X                  | X             | X        |    |     |      |      |      |       |
| Watering Facility (614)          | No.     | 110      | $ 110,000      | $ 1,100                   | X                  | X             | X        |    |     |      |      |      |       |
| Wetland Wildlife Management (644)| Ac.     | 830      | $ 12,500       | $ 4,200                   | X                  | X             | X        |    |     |      |      |      |       |
| **Total RMS Costs**              |         |          | $ 38,804,500   | $4,175,000                |                    |                |          |    |     |      |      |      |       |

---

American Falls - 17040206  
Idaho 8 Digit Hydrologic Unit Profile  
June 2006

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### Potential RMS Effects Summary for Dry Cropland

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<thead>
<tr>
<th>Cost Items and Programs</th>
<th>Costs</th>
<th>O&amp;M Costs</th>
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<td><strong>Total RMS Costs</strong></td>
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- Estimated Level of Participation: 75%
- Total Acres in RMS System: 62,025
- Anticipated Cost at Estimated Level of Participation: $29,103,400

- 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

**Current Conditions**

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<th>Total Irrigated Cropland/Hayland</th>
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<tr>
<td>Surface Irrigated Cropland/Hayland</td>
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<tr>
<td>Sprinkler Irrigated Cropland/Hayland</td>
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<td>Current Farm Bill participation</td>
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<th>Practices</th>
<th>Quantity</th>
<th>Additional Investment Cost</th>
<th>Annual O&amp;M and Mngt. Cost</th>
<th>Water Conservation</th>
<th>Water Storage</th>
<th>Fish Habitat</th>
<th>WQ</th>
<th>EQIP</th>
<th>WHIP</th>
<th>CREP</th>
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<td>Pumping Plant (533)</td>
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</table>
Conservation Activities for Irrigated Cropland/Hayland – Continued

| Surface Irrigated Cropland/Hayland | 19,000 |
| Sprinkler Irrigated Cropland/Hayland | 361,000 |
| Total Irrigated Cropland/Hayland Acres | 380,000 |

### Project Future Level of Treatment for Irrigated Cropland/Hayland:

| Practices                      | Quantity | Additional Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQIP | WHIP | CREP | Other |
|--------------------------------|----------|----------------------------|----------------------------|--------------------|-----------------|---------|----|-----|------|------|------|-------|
| Surface Irrigation             | Ac. 19,000 | $855,000 | $285,000 | +2                 | +1              | +2      | +2 | X   | X    |      |      |
| Anionic Polyacrylamide, (PAM) (450) | Ac. 19,000 | $855,000 | $285,000 | X                  | X               |         |    |     |      |      |      |
| Conservation Crop Rotation (328) | Ac. 19,000 | $     - | $     - | X                  | X               |         |    |     |      |      |      |
| Constructed Wetland (656)      | No. 2     | $100,000 | $1,000   | X                  | X               |         |    |     |      |      |      |
| Forage Harvest Management (511) | Ac. 19,000 | $     - | $     - | X                  | X               |         |    |     |      |      |      |
| Irrigation System, Surface (443) | Ac. 14,500 | $2,175,000 | $65,300 | X                  | X               |         |    |     |      |      |      |
| Irrigation System, Gated Surge (443) | Ac. 1,500 | $825,000 | $24,800  | X                  | X               |         |    |     |      |      |      |
| Irrigation Tailwater Recovery (447) | No. 60    | $906,000 | $27,200  | X                  | X               |         |    |     |      |      |      |
| Irrig. System, Micro Irrigation (Drip) (441) | Ac. 1,500 | $1,875,000 | $93,800 | X                  | X               |         |    |     |      |      |      |
| Irrigation Water Conveyance (430 EE) | Ft. 68,620 | $258,000 | $1,300   | X                  | X               |         |    |     |      |      | X    |
| Irrigation Water Conveyance (430 HH) (Gated Pipe) | Ft. 34,310 | $140,000 | $1,400   | X                  | X               |         |    |     |      |      | X    |
| Irrigation Water Management (449) - Low Level | Ac. 13,300 | $275,100 | $91,700  | X                  | X               |         |    |     |      |      | X    |
| Irrigation Water Management (449) - Meters and Moisture Sensors | Ac. 5,700 | $171,000 | $57,000  | X                  | X               |         |    |     |      |      | X    |
| Land Leveling/Smoothing (464 & 466) | Ac. 4,750 | $950,000 | $28,500  | X                  | X               |         |    |     |      |      | X    |
| Nutrient Management (590)       | Ac. 19,000 | $259,200 | $86,400  | X                  | X               |         |    |     |      |      | X    |
| Pest Management (595)           | Ac. 19,000 | $482,900 | $161,000 | X                  | X               |         |    |     |      |      | X    |
| Sediment Basin (350)            | No. 120   | $330,000 | $9,900   | X                  | X               |         |    |     |      |      | X    |
| Residue Management Mulch Till (345) | Ac. 19,000 | $855,000 | $285,000 | X                  | X               |         |    |     |      |      | X    |
## Conservation Activities for Irrigated Cropland/Hayland – Continued

### Project Future Level of Treatment for Irrigated Cropland/Hayland (Continued):

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<th>Practices</th>
<th>Quantity</th>
<th>Costs</th>
<th>Effects</th>
<th>Implementation</th>
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<td></td>
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<td>Additional Costs</td>
<td>O&amp;M and Mngt. Cost</td>
<td>Water Conservation</td>
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### Conservation Activities for Irrigated Cropland/Hayland – Continued

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<th>Quantity</th>
<th>Additional Investment Cost</th>
<th>Annual O&amp;M and Mngt. Cost</th>
<th>Water Conservation</th>
<th>Water Storage</th>
<th>Habitat</th>
<th>WQ</th>
<th>EQIP</th>
<th>WHIP</th>
<th>CREP</th>
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<td>Windbreak/Shelterbelt Establishment (380)</td>
<td>Ft. 2,976,700</td>
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<tr>
<td><strong>Total RMS Costs</strong></td>
<td><strong>$365,671,700</strong></td>
<td><strong>$29,683,700</strong></td>
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### Conservation Activities for Irrigated Cropland/Hayland – Continued

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<th>Cost Items and Programs</th>
<th>Costs</th>
<th>O&amp;M Costs</th>
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<td><strong>Total RMS Costs</strong></td>
<td><strong>$365,671,700</strong></td>
<td><strong>$29,683,700</strong></td>
</tr>
</tbody>
</table>

- Estimated Level of Participation: 75%
- Total Acres in RMS System: 285,000
- Anticipated Cost at Estimated Level of Participation: $274,253,800
- Total Acre Feet of Water Saved Annually: 318,612
- 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 Pasture

### Current Conditions

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Total Acres</td>
<td>42,700</td>
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<tr>
<td>Sprinkler Irrigated Pasture</td>
<td>500</td>
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<tr>
<td>Total Irrigated Pasture</td>
<td>880</td>
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### Current Level of Treatment for Irrigated Pasture

<table>
<thead>
<tr>
<th>Practices</th>
<th>Quantity</th>
<th>Costs</th>
<th>Additional Investment Cost</th>
<th>Attrition Unit</th>
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<tbody>
<tr>
<td><strong>Surface Irrigation</strong></td>
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</tr>
<tr>
<td>Fence (382)</td>
<td>24,689</td>
<td>$900</td>
<td>-$</td>
<td>Ac.</td>
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<tr>
<td>Irrigation Water Management (449)</td>
<td>Ac.</td>
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<td>-$</td>
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<tr>
<td>Nutrient Management (590)</td>
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<td>-$</td>
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<td>Pipeline (516)</td>
<td>9,905</td>
<td>$500</td>
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<td>Prescribed Grazing (528)</td>
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<td>$200</td>
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<td>Watering Facility (614)</td>
<td>16</td>
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<td>-$</td>
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<tr>
<td><strong>Sprinkler Irrigation</strong></td>
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<td>Fence (382)</td>
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<td>Irrigation System Sprinkler (442)</td>
<td>Ac.</td>
<td>$200</td>
<td>-$</td>
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<tr>
<td>Irrigation Water Conveyance (430DD)</td>
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<td>$40</td>
<td>-$</td>
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<td>Nutrient Management (595)</td>
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<td>-$</td>
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<tr>
<td>Pasture and Hayland Planting (512)</td>
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<td>$80</td>
<td>-$</td>
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<td>Prescribed Grazing (528)</td>
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<td>$2,200</td>
<td>-$</td>
<td>Ac.</td>
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<td>6</td>
<td>$100</td>
<td>-$</td>
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<td></td>
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</tbody>
</table>

### Implementation

- **CRP**: X
- **WHIP**: X
- **E EQIP**: X

### Effects

- **Water Storage WQ**: 3
- **Water Conservation**: 2
- **Fish Habitat**: 2
- **Water Quality**: +3
- **Water Quantity**: +2
- **Surface Irrigation**: +1
- **Fence (382) Ft.**: +1
- **Irrigation System Sprinkler (442)**: +3
- **Irrigation Water Conveyance (430DD)**: +3
- **Nutrient Management (595)**: +3
- **Pasture and Hayland Planting (512)**: +1
- **Prescribed Grazing (528)**: +1
- **Watering Facility (614)**: +1

### Costs

- **Annual O&M and Mgt. Cost**: $600
- **Additional Investment Cost**: $200
- **Water Conservation**: $1,100
- **Water Storage WQ**: $500
- **Fish Habitat**: $2,200
- **Surface Irrigation**: $2,200
- **Fence (382) Ft.**: $200
- **Irrigation System Sprinkler (442)**: $2,200
- **Irrigation Water Conveyance (430DD)**: $2,200
- **Nutrient Management (595)**: $1,100
- **Pasture and Hayland Planting (512)**: $80
- **Prescribed Grazing (528)**: $2,200
- **Watering Facility (614)**: $100
- **Surface Irrigation**: $900
- **Fence (382) Ft.**: $200
- **Irrigation System Sprinkler (442)**: $2,200
- **Irrigation Water Conveyance (430DD)**: $2,200
- **Nutrient Management (595)**: $600
- **Pasture and Hayland Planting (512)**: $80
- **Prescribed Grazing (528)**: $1,200
- **Watering Facility (614)**: $200
- **Surface Irrigation**: $900
- **Fence (382) Ft.**: $200
- **Irrigation System Sprinkler (442)**: $2,200
- **Irrigation Water Conveyance (430DD)**: $2,200
- **Nutrient Management (595)**: $600
- **Pasture and Hayland Planting (512)**: $80
- **Prescribed Grazing (528)**: $1,200
- **Watering Facility (614)**: $200

### June 2006
### Conservation Activities for Irrigated Pasture – Continued

#### Future Conditions

<table>
<thead>
<tr>
<th></th>
<th>Total Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Irrigated Pasture</td>
<td>5,050</td>
</tr>
<tr>
<td>Sprinkler Irrigated Pasture</td>
<td>32,100</td>
</tr>
<tr>
<td>Total Conversion to Riparian Pasture RMS</td>
<td>5,550</td>
</tr>
<tr>
<td>Total Acres</td>
<td>42,700</td>
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</table>

#### Project Future Level of Treatment for Irrigated Pasture:

| Practices                           | Quantity | Additional Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQIP | WHIP | CREP | Other |
|-------------------------------------|----------|----------------------------|----------------------------|--------------------|-----------------|---------|----|-----|------|------|------|-------|
| Surface Irrigation                  | Ac. 5,050|                             |                            |                    |                 |         |    |     |      |      |      |       |
| Fence (382)                         | Ft. 84,480| $104,600                   | $2,100                     | +1                 | +1              | +1      | +1 |     |      |      | X    | X     |
| Irrigation System Surface (443)     | Ac. 5,050| $757,500                   | $22,700                    | +1                 | +1              | +1      | +1 |     |      |      | X    | X     |
| Irrigation Tailwater Recovery (447) | No. 8    | $120,800                   | $3,600                     | +1                 | +1              | +1      | +1 |     |      |      | X    | X     |
| Irrigation Water Conveyance (430HH)| Ft. 166,650| $679,900                   | $6,800                     | X                  |                 | X       |     |     |      |      | X    | X     |
| Irrigation Water Conveyance (430EE)| Ft. 333,300| $1,323,200                 | $6,600                     | X                  |                 | X       |     |     |      |      | X    | X     |
| Irrigation Water Management (449)   | Ac. 5,050| $111,900                   | $37,300                    | X                  |                 | X       |     |     |      |      | X    | X     |
| Nutrient Management (590)           | Ac. 5,050| $73,000                    | $24,300                    | X                  |                 | X       |     |     |      |      | X    | X     |
| Pasture & Hayland Planting (512)    | Ac. 2,020| $202,000                   | $2,000                     | X                  |                 | X       |     |     |      |      | X    | X     |
| Pest Management (595)               | Ac. 5,050| $145,600                   | $48,500                    | X                  |                 | X       |     |     |      |      | X    | X     |
| Prescribed Grazing (528)            | Ac. 5,050| $58,200                    | $19,400                    | X                  |                 | X       |     |     |      |      | X    | X     |
| Structure for Water Control (587)-Fish Screen | No. 63  | $756,000                  | $7,600                     | X                  |                 | X       |     |     |      |      | X    | X     |
| Upland Wildlife Management (645)    | Ac. 760  | $11,400                    | $3,800                     | X                  |                 | X       |     |     |      |      | X    | X     |
| Watering Facility (614)             | No. 32   | $16,000                    | $200                       | X                  |                 | X       |     |     |      |      | X    | X     |
| Windbreak/Shelterbelt Establish(380)| Ft. 84,480| $429,200                   | $4,300                     | X                  |                 | X       |     |     |      |      | X    | X     |
Conservation Activities for Irrigated Pasture – Continued

<table>
<thead>
<tr>
<th>Project Future Level of Treatment for Irrigated Pasture (Continued):</th>
<th>Practices</th>
<th>Unit</th>
<th>Quantity</th>
<th>Additional Investment Cost</th>
<th>Annual O&amp;M and Mngt. Cost</th>
<th>Effects</th>
<th>Costs</th>
<th>Implementation</th>
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<td>$18,300</td>
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<td>Pest Management (595)</td>
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<td>$319,800</td>
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<td>X</td>
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<tr>
<td></td>
<td>Nutrient Management (590)</td>
<td>Ac.</td>
<td>32,100</td>
<td>$718,700</td>
<td>$159,900</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
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<td>Pasture &amp; Hayland Planting (512)</td>
<td>Ac.</td>
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<td>Nutrient Management (590)</td>
<td>Ac.</td>
<td>32,100</td>
<td>$718,700</td>
<td>$159,900</td>
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<tr>
<td></td>
<td>Pasture &amp; Hayland Planting (512)</td>
<td>Ac.</td>
<td>32,100</td>
<td>$1,944,000</td>
<td>$160,600</td>
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<td>X</td>
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<tr>
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<td>Pest Management (595)</td>
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<td>$319,800</td>
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<td>Prescribed Grazing (528)</td>
<td>Ac.</td>
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<td>$24,000</td>
<td>$24,000</td>
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<td>X</td>
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<td>Structure for Water Control (587)</td>
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<td>Fish Screen</td>
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<td>X</td>
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<td>Riparian Pastures</td>
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<td>X</td>
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<td>Channel Stabilization (584)</td>
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<td>$161,700</td>
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<td>Fence (382)</td>
<td>Fl.</td>
<td>92,400</td>
<td>$1,000</td>
<td>$3,200</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>Nutrient Management (590)</td>
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<td>2,220</td>
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<td>Pasture &amp; Hayland Planting (512)</td>
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<td>2,220</td>
<td>$83,300</td>
<td>$27,800</td>
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<td>X</td>
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<td>Pest Management (595)</td>
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<td>$83,300</td>
<td>$27,800</td>
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<td>X</td>
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<td>2,220</td>
<td>$83,300</td>
<td>$27,800</td>
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<td>X</td>
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<td>Riparian Forest Buffer (390)</td>
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<td>250</td>
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<tr>
<td></td>
<td>Riparian Herbaceous Cover (390)</td>
<td>Ac.</td>
<td>250</td>
<td>$750,000</td>
<td>$7,500</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>
Conservation Activities for Irrigated Pasture – Continued

| Practices                                      | Unit   | Quantity | Additional Investment Cost | Annual O&M and Mngt. Cost | Water Conservation | Water Storage | Habitat | WQ | EQIP | WHIP | CREP | Other |
|------------------------------------------------|--------|----------|----------------------------|----------------------------|--------------------|---------------|----------|-----|-----|------|------|------|-------|
| Streambank & Shoreline Prot (580)             | Ft.    | 26,570   | $637,700                   | $63,800                    |                    |               |          |     |     |      |      |      |       |
| Tree/Shrub Establishment (612)                 | Ac.    | 120      | $54,000                    | $500                       |                    |               |          |     |     | X    |      |      |       |
| Upland Wildlife Management (645)               | Ac.    | 830      | $12,500                    | $4,200                     |                    |               |          |     |     |      |      |      |       |
| Use Exclusion (472)                            | Ac.    | 280      | $9,800                     | $300                       |                    |               |          |     |     |      | X    |      |       |
| Watering Facility (614)                        | No.    | 70       | $70,000                    | $700                       |                    |               |          |     |     | X    |      |      |       |
| Wetland Wildlife Management (644)              | Ac.    | 560      | $8,400                     | $2,800                     |                    |               |          |     |     |      | X    |      |       |
| **Total RMS Costs**                            |        |          | **$46,703,900**            | **$1,901,900**             |                    |               |          |     |     |      |      |      |       |

RMS Cost Summary for Irrigated Pasture:

<table>
<thead>
<tr>
<th>Cost Items and Programs</th>
<th>Costs</th>
<th>O&amp;M Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Farm Bill Programs</td>
<td>$2,335,200</td>
<td>$95,100</td>
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</tr>
<tr>
<td>Potential Farm Bill Programs</td>
<td>$44,368,700</td>
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<tr>
<td>Operator O&amp;M and Management Cost</td>
<td></td>
<td>$1,901,900</td>
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<tr>
<td>Annual Management Incentives (3 yrs - Incentive Payments)</td>
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<td>Operator Investment</td>
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<td>Federal Costshare</td>
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<tr>
<td><strong>Total RMS Farm Bill Costs</strong></td>
<td>$46,703,900</td>
<td>$1,901,900</td>
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</tr>
<tr>
<td>Estimated Level of Participation</td>
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<tr>
<td>Total Acres in RMS System</td>
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<td>Anticipated Cost at Estimated Level of Participation</td>
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<tr>
<td>Total Acre Feet of Water Saved Annually</td>
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<tr>
<td>Total Annual Forage Production Benefits (animal unit months)</td>
<td>$103,400</td>
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<td></td>
</tr>
</tbody>
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- 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

<table>
<thead>
<tr>
<th></th>
<th>Grazed</th>
<th>Ungrazed</th>
<th>Riparian/Wetland/Potential</th>
<th>Total Acres</th>
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</thead>
<tbody>
<tr>
<td>Private Rangeland and Dry Pasture</td>
<td>335,250</td>
<td>37,250</td>
<td>372,500</td>
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<td>Typical Range Management Unit</td>
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<tr>
<td>Current Farm Bill participation</td>
<td>15%</td>
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</tbody>
</table>

### Current Level of Treatment for Grazed Rangeland, Dry Pasture and Forestland:

<table>
<thead>
<tr>
<th>Practices</th>
<th>Quantity</th>
<th>Costs</th>
<th>Annual O&amp;M and Mngt. Cost</th>
<th>Water Conservation</th>
<th>Water Storage</th>
<th>Habitat</th>
<th>WQ</th>
<th>EQIP</th>
<th>WHIP</th>
<th>WRP</th>
<th>CREP</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range / Pasture (w/prescribed grazing)</td>
<td>372,500</td>
<td></td>
<td>$</td>
<td>+/-</td>
<td>+/-</td>
<td>+/-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescribed Grazing (528)</td>
<td>Ac. 14,737</td>
<td>$</td>
<td>-</td>
<td>$73,700</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Pest Management (595)</td>
<td>Ac.    29</td>
<td>$</td>
<td>-</td>
<td>$300</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Watering Facility (614)</td>
<td>No. 3</td>
<td>$</td>
<td>-</td>
<td>$30</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipeline (516)</td>
<td>Ft. 7,548</td>
<td>$</td>
<td>-</td>
<td>$400</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fence (382)</td>
<td>Ft. 7,920</td>
<td>$</td>
<td>-</td>
<td>$300</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
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</tr>
</tbody>
</table>
### Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland - Continued

#### Future Conditions

<table>
<thead>
<tr>
<th>Rangeland / Pasture</th>
<th>Riparian</th>
<th>Total Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>335,250</td>
<td>37,250</td>
<td>372,500</td>
</tr>
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</table>

#### Current Level of Treatment for Grazed Rangeland, Dry Pasture and Forestland:

<table>
<thead>
<tr>
<th>Practices</th>
<th>Quantity</th>
<th>Costs</th>
<th>Effects</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Annual O&amp;M and Mngt. Cost</td>
<td>Water Conservation</td>
<td>Water Storage</td>
</tr>
<tr>
<td>Grazed Range, Pasture and Forestland</td>
<td>Ac. 335,250</td>
<td>$2,212,600 $22,100</td>
<td>+3</td>
<td>+2</td>
</tr>
<tr>
<td>Brush Management (314)</td>
<td>Ac. 110,630</td>
<td>$9,666,400 $193,300</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fence (382)</td>
<td>Ft. 5,531,550</td>
<td>$2,671,800 $534,400</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Firebreak (394)</td>
<td>Ft. 1,384,360</td>
<td>$10,056,600 $3,352,200</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pest Management (595)</td>
<td>Ac. 335,250</td>
<td>$3,717,400 $74,300</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pipeline (516)</td>
<td>Ft. 1,384,360</td>
<td>$650,000 $6,500</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pond (378)</td>
<td>No. 130</td>
<td>$4,807,700 $1,602,600</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Prescribed Grazing (528)</td>
<td>Ac. 335,250</td>
<td>$9,956,700 $99,600</td>
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<td>X</td>
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<tr>
<td>Range Planting (550)</td>
<td>Ac. 110,630</td>
<td>$1,233,800 $6,200</td>
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<td>X</td>
</tr>
<tr>
<td>Spring Development (574)</td>
<td>No. 525</td>
<td>$1,005,800 $335,300</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Upland Wildlife Management (645)</td>
<td>Ac. 67,050</td>
<td>$522,000 $5,200</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Watering Facility (614)</td>
<td>No. 260</td>
<td>$780,000</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Well (642)</td>
<td>No. 260</td>
<td>$31,500</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Range &amp; Pasture Riparian</td>
<td>Ac. 37,250</td>
<td>$18,650,000 $373,000</td>
<td>+3</td>
<td>+2</td>
</tr>
<tr>
<td>Channel Bank Vegetation (322)</td>
<td>Ac. 3,730</td>
<td>$1,622,300 $8,100</td>
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<td>X</td>
</tr>
<tr>
<td>Fence (382)</td>
<td>Ft. 306,330</td>
<td>$536,100 $10,700</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pest Management (595)</td>
<td>Ac. 37,250</td>
<td>$1,117,500 $372,500</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pipeline (516)</td>
<td>Ft. 76,580</td>
<td>$206,800 $4,100</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Prescribed Grazing (528)</td>
<td>Ac. 37,250</td>
<td>$558,800 $186,300</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pumping Plant (533)</td>
<td>No. 16</td>
<td>$45,600 $900</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Riparian Forest Buffer (391)</td>
<td>Ac. 1,030</td>
<td>$3,090,000 $30,900</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Riparian Herbaceous Cover (390)</td>
<td>Ac. 1,030</td>
<td>$51,500</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>


### Conservation Activities for Grazed Rangeland, Dry Pasture and Forestland – Continued

#### Current Level of Treatment for Grazed Rangeland, Dry Pasture and Forestland:

<table>
<thead>
<tr>
<th>Practices</th>
<th>Quantity</th>
<th>Costs</th>
<th>Effects</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EQIP WHIP WRP CREP Other</td>
</tr>
<tr>
<td>Quantity</td>
<td>Investment Cost</td>
<td>Annual O&amp;M and Mngt. Cost</td>
<td>Water Conservation</td>
<td>Water Storage</td>
</tr>
<tr>
<td>Range &amp; Pasture Riparian (cont.)</td>
<td></td>
<td></td>
<td></td>
<td>X X X X X X</td>
</tr>
<tr>
<td>Streambank &amp; Shoreline Prot (580)</td>
<td>Ft. 225,330</td>
<td>$ 5,407,900</td>
<td>$ 540,800</td>
<td>X X X X</td>
</tr>
<tr>
<td>Tree/Shrub Establishment (612)</td>
<td>Ac. 375</td>
<td>$ 168,800</td>
<td>$ 1,700</td>
<td>X X X X</td>
</tr>
<tr>
<td>Upland Wildlife Management (645)</td>
<td>Ac. 7,450</td>
<td>$ 111,800</td>
<td>$ 37,300</td>
<td>X X X X</td>
</tr>
<tr>
<td>Use Exclusion (472)</td>
<td>Ac. 750</td>
<td>$ 26,300</td>
<td>$ 800</td>
<td>X X X X X X</td>
</tr>
<tr>
<td>Watering Facility (614)</td>
<td>No. 58</td>
<td>$ 58,000</td>
<td>$ 600</td>
<td>X X X X</td>
</tr>
<tr>
<td>Wetland Wildlife Management (644)</td>
<td>Ac. 3,730</td>
<td>$ 56,000</td>
<td>$ 18,700</td>
<td>X X X X</td>
</tr>
<tr>
<td>Total RMS Costs</td>
<td></td>
<td>$78,988,200</td>
<td>$7,826,400</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Cost Items and Programs</th>
<th>Costs</th>
<th>O&amp;M Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Farm Bill Programs</td>
<td>$ 3,949,400</td>
<td>$ 391,300</td>
</tr>
<tr>
<td>Potential Farm Bill Programs</td>
<td>$75,038,800</td>
<td>$7,435,100</td>
</tr>
<tr>
<td>Operator O&amp;M and Management Cost</td>
<td>$7,826,400</td>
<td></td>
</tr>
<tr>
<td>Annual Management Incentives (3 yrs - Incentive Payments)</td>
<td>$17,714,200</td>
<td></td>
</tr>
<tr>
<td>Operator Investment</td>
<td>$18,280,600</td>
<td></td>
</tr>
<tr>
<td>Federal Costshare</td>
<td>$42,993,400</td>
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</tr>
<tr>
<td>Total RMS Farm Bill Costs</td>
<td>$78,988,200</td>
<td></td>
</tr>
</tbody>
</table>

- Estimated Level of Participation: 35%
- Total Acres in RMS System: 117,300
- Anticipated Cost at Estimated Level of Participation: $ 27,645,900
- Total Annual Forage Production Benefits (acre unit months): 18,800

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 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. Kinds and amounts of component practices required for proper operation are site specific, but typically include the following practices. Note that an AFO can be designated as a CAFO regardless of number of animals if it is found to be a significant polluter.

Anaerobic Digester (366), Composting Facility (317), Access Road (560), 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), 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 and future needs for CAFOs and AFOs reflect the following component practices of Waste Storage Facility (313).

<table>
<thead>
<tr>
<th>Current Conditions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAFOs</td>
<td>11</td>
</tr>
<tr>
<td>AFOs</td>
<td>59</td>
</tr>
<tr>
<td>Current Farm Bill participation</td>
<td>15%</td>
</tr>
<tr>
<td>Total CAFOs and AFOs</td>
<td>70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Level of Treatment for Headquarters</th>
<th>Quantity</th>
<th>Costs</th>
<th>Effects</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practices</td>
<td>Unit</td>
<td></td>
<td></td>
<td>EQIP WHIP WRP CREP Other</td>
</tr>
<tr>
<td>Dairy</td>
<td>Ac.</td>
<td>53</td>
<td>+/-</td>
<td>-1 -3 -3</td>
</tr>
<tr>
<td>Waste Storage Facility (313) CAFO</td>
<td>No.</td>
<td>-</td>
<td>$ - $</td>
<td>- - -3</td>
</tr>
<tr>
<td>Waste Storage Facility (313) AFO</td>
<td>No.</td>
<td>6</td>
<td>$ 5,400</td>
<td>- -5,400</td>
</tr>
</tbody>
</table>
Conservation Activities for Headquarters – Continued

Future Conditions

<table>
<thead>
<tr>
<th>Total Dairies &amp; Feedlots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairies Needing Structural Practices</td>
</tr>
<tr>
<td>Dairies Needing Management Practices</td>
</tr>
<tr>
<td>Feedlots Needing Management and Structural Practices</td>
</tr>
<tr>
<td>Total Dairies and Feedlots</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Practices</th>
<th>Quantity</th>
<th>Costs</th>
<th>Effects</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Annual O&amp;M and Mngt. Cost</td>
<td>Water Conservation</td>
<td>Water Storage</td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td>Investment Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural/Management Practices</td>
<td></td>
<td></td>
<td>+3</td>
<td>+2</td>
</tr>
<tr>
<td>Waste Storage Facility (313) CAFO</td>
<td>No.</td>
<td>-</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Waste Storage Facility (313) AFO</td>
<td>No.</td>
<td>12</td>
<td>$ 540,000</td>
<td>10,800</td>
</tr>
<tr>
<td>Feed Lot</td>
<td></td>
<td></td>
<td>+3</td>
<td>+1</td>
</tr>
<tr>
<td>Structural/Management Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Storage Facility (313) CAFO</td>
<td>No.</td>
<td>9</td>
<td>$ 87,500</td>
<td>$ 15,750</td>
</tr>
<tr>
<td>Waste Storage Facility (313) AFO</td>
<td>No.</td>
<td>6</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Total RMS Costs</td>
<td></td>
<td>$ 1,524,700</td>
<td>$ 30,494</td>
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</tr>
</tbody>
</table>

Project Future Level of Treatment for Headquarters

<table>
<thead>
<tr>
<th>Practices</th>
<th>Quantity</th>
<th>Costs</th>
<th>Effects</th>
<th>Implementation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Annual O&amp;M and Mngt. Cost</td>
<td>Water Conservation</td>
<td>Water Storage</td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td>Investment Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural/Management Practices</td>
<td></td>
<td></td>
<td>+3</td>
<td>+2</td>
</tr>
<tr>
<td>Waste Storage Facility (313) CAFO</td>
<td>No.</td>
<td>-</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Waste Storage Facility (313) AFO</td>
<td>No.</td>
<td>12</td>
<td>$ 540,000</td>
<td>10,800</td>
</tr>
<tr>
<td>Feed Lot</td>
<td></td>
<td></td>
<td>+3</td>
<td>+1</td>
</tr>
<tr>
<td>Structural/Management Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Storage Facility (313) CAFO</td>
<td>No.</td>
<td>9</td>
<td>$ 87,500</td>
<td>$ 15,750</td>
</tr>
<tr>
<td>Waste Storage Facility (313) AFO</td>
<td>No.</td>
<td>6</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Total RMS Costs</td>
<td></td>
<td>$ 1,524,700</td>
<td>$ 30,494</td>
<td></td>
</tr>
</tbody>
</table>
Conservation Activities for Headquarters – Continued

### RMS Cost Summary for Headquarters

<table>
<thead>
<tr>
<th>Cost Items and Programs</th>
<th>Costs</th>
<th>O&amp;M Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Farm Bill Programs</td>
<td>$76,200</td>
<td>$1,500</td>
</tr>
<tr>
<td>Potential Farm Bill Programs</td>
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<tr>
<td>Operator O&amp;M and Management Cost</td>
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<tr>
<td>Annual Management Incentives (3 yrs - Incentive Payments)</td>
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<tr>
<td>Operator Investment</td>
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<tr>
<td>Federal Costshare</td>
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<tr>
<td><strong>Total RMS Costs</strong></td>
<td><strong>$1,524,700</strong></td>
<td><strong>$30,494</strong></td>
</tr>
</tbody>
</table>

- Estimated Level of Participation: 90%
- Total CAFO/AFO in RMS System: 63
- Anticipated Cost at Estimated Level of Participation: $1,372,200
- Reduces impact to ground and surface water quality

90% participation reflects Local, State and Federal regulations.