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#### Weiser - 17050124

Idaho

8 Digit Hydrologic Unit Profile

### Introduction

The Weiser 8-Digit Hydrologic Unit Code (HUC) subbasin is 1,075,435 acres. Washington county accounts for approximately 57 percent of the subbasin. Forty three percent of the subbasin is in Adams County and less than 0.1% in Gem County. Half of the basin is privately owned, with the other half comprised of public land.

Fifty four percent of the basin is shrubland or rangeland; thirty percent is forest. Grass, pasture or hayland comprises 12 percent of the watershed. Approximately two percent of the acreage is cropland and 1 percent of the watershed is enrolled in the Conservation Reserve Program (CRP); the remaining one percent is water, wetland, developed or barren. Established communities located in the subbasin are Weiser, Midvale, Cambridge, and Council.

Elevations range from 2100 feet in the southwestern portion of the subbasin at the confluence of the Weiser River and the Snake River to over 8000 feet in the mountainous east-central portion of the watershed; Council Mountain, the highest point, is 8107 feet. Most of the watershed is between 2500 and 4000 feet in elevation.

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

### **Profile Contents**

Introduction Physical Description Landuse Map & Precipitation Map Common Resource Area Resource Settings Resource Concerns Census and Social Data Progress/Status Footnotes/Bibliography Future Conservation Needs



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#### **Relief Map**





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#### **General Ownership**





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# **Physical Description**

Land Cover/	<b>Ownership - (2003</b> Draft BLM Surface Map Set <sup>/1</sup> )										
Land Use	Publ	ic	Privat	te	Т	ribal	<b>T</b> - 4 -	1-	% of		
(NLCD <sup>/2</sup> )	Acres	%	Acres	%	Acre	s %		lis	HUC		
Forest	277,984	26%	47,881	4%			325,8	865	30%		
Grain Crops	101	<1%	16,105	2%			16,2	06	2%		
Conservation Reserve <sup>/3</sup> Program (CRP) Land			14,585	1%			14,5	85	1%		
Wetlands Reserve Program (WRP) Land			30	<1%			30	)	<1%		
Grass/Pasture/Hay Lands	30,629	3%	97,063	9%			127,692		127,6		12%
Orchards/Vineyards/Berries											
Row Crops			3,144	<1%			3,144		3,144		<1%
Shrub/Rangelands	217,796	20%	358,717	33%			576,5	576,513			
Water/Wetlands/ Developed/Barren	4,847	<1%	6,553	<1%	-		11,4	00	1%		
Idaho HUC Totals*	531,357	49%	544,078	51%			1,075	,435	100%		
*Totals are approximate due to	calculation r	nethods ı	ised								
	Туре о	f Land		ACR	ES	% o Irrigated	f Lands		% of HUC		
Irrigated Lands <sup>/4</sup>	Cultivat	ted Cropla	and	22,0	00	39%	9%		2%		
	Non-Cu	Iltivated C	Cropland**	28,3	00	50%	)		3%		
	Pasture	land		6,60	00	11%	)		<1%		
	Total I	rrigated	Lands	56.9	6.900 100%		/0		<1%		

\*\*Includes permanent hayland and horticultural cropland.



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#### Land Use / Land Cover





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#### **Average Annual Precipitation**





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#### **Common Resource Area Map**

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

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





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#### **Common Resource Area Descriptions**

The National Coordinated CRA Geographic Database provides:

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

#### 10.1 Central Rocky and Blue Mountain Foothills - Warm Dry Blue and Seven Devils Mountain Foothills

This unit lies between Oregon's Blue and Wallowa Mountains and the northwestern Snake River Plain. This unit is characterized by rangeland soils on hills and mountains associated with basalt and exposed tuffaceous sediments. The combined masses of the Cascade Range and the Blue and Wallowa mountains block any maritime influence, creating a continental climate. As a result, plants are subject to wide temperature ranges, high evaporation and transpiration, and high early-season moisture stress. The dominant soils are Brogan, Simas, Ruckles and Ruclick soil series. Temperature regime is mesic and the moisture regime is aridic. Mean annual precipitation is 9 to 12 inches. Vegetation is Wyoming big sage and bluebunch wheatgrass (warm day climate).

#### **<u>10.4 Central Rocky and Blue Mountain Foothills - Semiarid Foothills</u></u>**

The shrub- and grass-covered foothill unit is higher and more rugged than nearby CRA units. A few perennial streams flow across the unit but are absent on the lacustrine deposits of the Unwooded Alkaline Foothills CRA. Shallow, clayey soils are common and often support medusahead, wild rye, cheatgrass, and scattered shrubs. Wildfire frequency is high. Land use is primarily livestock grazing and is distinct from the irrigated agriculture of the Treasure Valley.

#### 11.1 Snake River Plains - Treasure Valley

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

#### 11.7 Snake River Plains - Dry Unwooded Alkaline Foothills

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



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

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

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

#### <u>43C.3 Blue and Seven Devils Mountains - High Elevation Blue and Seven Devils</u> <u>Mountain Forests</u>

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

#### 43C.6 Blue and Seven Devils Mountains - Melange

This unit is characterized by a melange of bedrock types including limestone, mudstone, greenstone and schists. Soil temperature regimes are frigid and cryic and moisture regimes are xeric and udic. Forests dominated by Douglas-fir, ponderosa pine, and lodgepole pine, and shrublands and grasslands also occur. Lithology affects soil, vegetation, and the quantity and quality of surficial water. Grazing is common but logging is limited by the difficulty of reforesting droughty soils.

#### <u>43C.8 Blue and Seven Devils Mountains - Blue and Seven Devils Mountains</u> <u>Dissected Uplands</u>

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



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### Streamflow Summary <sup>/7, 28</sup>

The Weiser River drains 1460 square miles, flowing from north to south through most of the subbasin. The Weiser River flows from east to west for the final eight miles of its length as it approaches its mouth at the town of Weiser. The average annual (daily) flow of the Weiser River at Weiser is 1,009 cfs; this is based on 30 years of flow data (1976 to 2005). Major tributaries to the Weiser River in the subbasin include the Little Weiser River, Middle and West Forks of the Weiser River, Cove Creek, Crane Creek, Warm Springs Creek, Hornet Creek, Spring Creek, Mann Creek and Pine Creek.

Mid to late spring flows usually account for a majority of discharge in the subbasin. Peak flows generally occur in February or March with a recorded low of 344 cfs (1977) to a high peak of 34,500 cfs (1997); discharge is affected to an unknown degree by diversion and regulation. Base flows are predominant in August and September. Snowmelt or seasonal rainstorms drive timing, duration, and volume of peak flows at elevations less than 4000 feet. Rain-on-snow events are a common occurrence in the lower elevations and usually occur in late December and January.

Most of the Weiser River would be classified as having unregulated flow, but diversions for irrigated agriculture are located throughout the watershed. Crane Creek Reservoir and Mann Creek Reservoir store water for irrigation supply and provide enough storage capacity to assist in controlling high spring discharges (DEQ, 2006).

			Acre-Feet
		Average Annual	730,493
Stream Flow Data	USGS 13266000, USGS Weiser River Near Weiser, ID, 1976-2005	Mar-July Average	508,928
		Percent of Average Annual	70%



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					CFS		Number		
		Surface Water			7174		2030		
Irrigated Adjudic Water Rights <sup>/6</sup>	cated	Groundwater			159		466		
		Total Irrigated	Adjudicated Water Rig	ghts	7333		2496		
					MILES		PERCENT		
Stream Data		Total Miles <sup>16</sup>		1,096					
("Named Streams")		Water quality	impaired streams <sup>19</sup>		602		55%		
*Percent of Total Miles of streams in HUC		Anadramous F	ish Presence (Streamr	et) <mark>/11</mark>					
		Bull Trout Pres	sence (Streamnet) <sup>/11</sup>		91		8%		
		ACRES		PERCENT					
		Forest			27,048		24%		
	Grain Crops				1885		2%		
Land Cover/Use	<u> </u>	Grass/Pasture	/Hay Lands		20,213		18%		
stretch on both		Row Crops			261		<1%		
sides of all streams	5	Shrub/Rangela	ands		59,944		54%		
in the 100K Hydro	Layer	Water/Wetland	ls/Developed/Barren		1,792		2%		
		Total Acres o	f 100 ft stream buff	ers	111,143		100%		
		I – slight limitat	ions		1,300		1%		
		II – moderate I	imitations		45,000		36%		
		III – severe lin	nitations		22,000		18%		
		IV – very sever	e limitations		25,200		20%		
Land Canability		V – no erosion l	nazard, but other limitatio	ns	0		0%		
Class <sup>/4</sup>		VI – severe lim limited to pastur	itations, unsuited for culti e, range, forest	vation,	24,000		19%		
VII – very cultivation, l		VII – very seve cultivation, limit	ere limitations, unsuited for ed to grazing, forest, wild	or life	7,200		6%		
<b>VIII</b> – misc areas have limitations, limited to recreation, wildlife, and water supply		0		0%					
		Total Crop &	Pasture Lands		124,700	)	100%		
<b>Confined Animal</b>	Feedir	ng Operatio	ns – Dairies/Fee	dlots <sup>/</sup>	<u>12, 13, 26</u>				
Operation Type	N	umber	<300	3	00-999		1000-9999		
Dairy		4							
Feedlots		10	3		3		4		



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#### **Resource Settings**

#### Irrigated Cropland:

Surface irrigated cropland includes soils subject to past extensive land leveling. Slopes are typically 0-3%, and soil loss tolerance is 2 tons/ac/yr. Soils are predominantly silt loams or sandy loams. Typical surface irrigation consists of siphon tubes (1 ¼ to 3 inches in diameter) applied to corrugated furrows from a 16 to 18 inch concrete ditch, although some earthen ditches are still present. Irrigation wastewater is often re-used for irrigation and eventually discharged into receiving streams and rivers.

Precipitation in the surface irrigated portion of the watershed is less than 12 inches annually. The growing season is 120-160 days. A variety of crops may be grown in different combinations. A grain corn/sugar beet/wheat/onions rotation is considered representative. Alfalfa or alfalfa seed may be included in rotation and is typically maintained for 3 to 4 years. Another potential rotation is grain corn/wheat/potatoes/sugar beets or beans. Conventional tillage, including extensive cultivations, is common.

Conventionally tilled, sprinkler irrigated (wheel line or pivot) cropland is planted predominantly to hay and grain while potatoes are typically irrigated using hand lines. Often, sprinkler irrigation occurs on slopes too steep for furrow irrigation. Irrigation water source for sprinklers varies between surface water from laterals and groundwater from developed wells. Typical rotation is 67% low residue (e.g. potatoes, sugar beets, beans, onions) and 33% high residue (e.g. grain, alfalfa).

Fertilizers and pesticides are applied. Nutrient, pest, and/or irrigation water management may be less than desirable. Surface and groundwater quality are impacted by agricultural operations. Threatened and endangered species, cultural resources, artificial or natural wetlands, 303d listed water bodies, and groundwater sensitive areas are present.

#### Pasture:

Pasture managed for forage production and livestock grazing is located in lower elevation pastures as well as moderate elevation mountain valleys near Fruitvale, Cambridge, and Council. Slopes vary from 0-7%. Irrigation consists of surface, sprinkler, non-irrigated (dryland), and riparian pasture. Surface irrigation can include concrete ditches with siphon tubes, but typically occurs with the use of earthen ditches or tarps on contour ditches. Sprinkler irrigation is less common and dryland pasture can be found primarily in the higher elevation portions of the watershed. Precipitation in the pastureland portions of the watershed ranges from less than 12 inches to more than 26 inches annually.

Typical forage species may be introduced, including wheat grasses, fescues, bromes, orchard grass and alfalfa. The older established stands are of low vigor, with encroachment of invasive weed species. Management varies but typically includes continuous season-long grazing with below-optimum forage production. Nutrient, pest, and grazing management practices are limited. Livestock water is generally inadequate and may include free access to streams associated with pasture units. Adjacent riparian areas are important for wildlife habitat.

Conventional tillage is used when rotating pasture and grain. The average rotation is ten years of pasture and two years of small grain. Irrigation induced erosion is less than T but



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#### **Resource Settings** – continued

may exceed T during the grain rotation. Commercial fertilizers are occasionally applied but typically without soil testing or nutrient management. Animal waste deposited on the fields is harrowed on an irregular basis. Fencing and irrigation field ditches are generally existing practices.

Livestock utilization in riparian pastures is from late spring through fall. Typically these pastures are adjacent to perennial or intermittent streams. Vegetation ranges from native grass/sedge/rush complexes to improved forage species such as timothy, smooth brome grass, creeping meadow foxtail, orchard grass and clover.

Upland pastures are also present and located above flood plains on steeper, dissected hill sides or mountain sides. Vegetation is typically introduced species, such as orchard grass and smooth brome. Native species such as bluebunch wheatgrass, Idaho fescue, pine grass, elk sedge and native shrubs and trees may be found at higher elevations along mountain sides. The majority of grazing animals are cattle, sheep and horses. Big game utilize pasture for early spring and winter grazing. Wildlife includes elk, black bear, whitetail and mule deer, and moose.

#### Hayland:

Rotation typically consists of alfalfa hay (4-6 years) with grass hay (2 years) and spring oats. Slopes range from 0-30%. Conventionally tilled surface and sprinkler irrigated hayland on 0-7% slopes. Irrigation water is normally plentiful. Small grains and alfalfa hay are grown in rotation, with alfalfa typically maintained for 4 to 6 years. Grazing of crop aftermath may occur. Nutrient, pest, and irrigation water management may be less than desirable. Threatened and endangered species, cultural resources, artificial and natural wetlands, 303(d) listed water bodies and groundwater sensitive areas are present.

#### Rangeland:

Consists of low elevation desert to high elevation steep rangeland. Rangeland vegetation is characterized by sagebrush, rabbit brush, bitterbrush interspersed among perennial bunchgrasses and forbs. Some areas where fires or overgrazing have occurred exhibit problems with invasive species such as cheatgrass. Ecological status is typically less at lower elevations and improves with elevation.

Fencing is generally an existing practice. The typical planning unit is 640 acres. Riparian grazing units exhibit impacts to riparian vegetation and a loss of woody species. Riparian vegetation consists of grasses, sedges, rushes and a variety of woody species. Streams are primarily low gradient and depend on vegetation for lateral stability. The riparian rangeland areas are important habitat for a variety of fish and wildlife. Water quality is often a concern for sediment, temperature, and nutrients. Moisture for vegetative growth is primarily from high water tables and stream flows.

#### Forests and Grazed Forests:

The riparian forest consists of mixed conifers and deciduous trees. The associated understory is comprised of grasses and brush species with inclusions of wetter areas. Soils are silt loams and clay loams that are shallow to deep, and can have low to high rock



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#### **Resource Settings** – continued

fragment content. They range from somewhat poorly to well drained. Average annual precipitation ranges from 18 to 35 inches.

Ponderosa pine and Douglas fir habitat types are found at elevation ranges from 1,800 to 4,000 feet on a variety of soil types. Livestock grazing occurs during the summer and early fall period and overgrazing is common. Important wildlife species include elk, deer, moose, bear, raptors and songbirds.



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#### **Resource Concerns**

Sheet and rill erosion by water on croplands and pasturelands in this watershed have been essentially static since 1982. Sheet and rill erosion is not a major issue on cropland in this subbasin. Susceptibility to sheet and rill erosion is low in this subbasin because the natural precipitation is low and the cropland is relatively flat.



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

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

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



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#### Resource Concerns - continued

Wind erosion in this watershed has fluctuated since 1982 and has experienced a slight overall increase between 1982 and 1997. This is mainly attributed to an increase in cultivated crops and a corresponding decrease in non-cultivated crops in both 1987 and 1997.



Conservation practices that can be used to address wind erosion include: surface wetting, surface roughening, windbreaks, seedbed preparation (delayed seeding), mulching, and pasture and hayland planting.



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#### Resource Concerns - continued

Impacted Water Bodies <sup>/9,16</sup> (ID 17050124) Named Waterbodies	Stream Miles*	Bacteria	Nutrients	Sediment	Temperature	Dissolved Oxygen	Other or Unknown
Crane Creek Reconveir (SW0041 01)	2315		v		v		
Crane Creek Reservoir (SW00402)		x	X	x	X		
Cove Creek (SW002_02)	44.7	~	X	x			
Crane Creek (SW003_05)	17.2	х	X	X	х		
Johnson Creek (SW022_02)	16.5						х
Johnson Creek (SW022_03)	6.2						X
Little Weiser River (SW008_02)	79.8				Х		
Little Weiser River (SW008_04)	20.4		Х	Х			
Little Weiser River (SW008_03)	23.7		Х	X			
North Crane Creek (SW006_04)	5.8						X
North Crane Creek (SW006_02)	186.2						X
North Crane Creek (SW006_03)	14.5						X
South Crane Creek (SW005_02)	53.2						X
South Crane Creek (SW005_03)	7.2						X
South Crane Creek (SW005_04)	2.4						X
Weiser River (SW001_06)	21.6	X	Х	Х	X		
Weiser River (SW001_05)	20.7	X	X	X	X		
Weiser River (SW007_05)	31.7		Х	X			
West Fork Weiser River (SW017_03)	12.8						X
West Fork Weiser River (SW017_02)	37.4						X
Total Stream Miles:	602.2						

Shading indicates TMDL in place

Shading indicates TMDL in progress

Action on the TMDL for Crane Creek Reservoir will be deferred until later during 2007 to allow further study and assessment relative to the appropriateness of its designated uses (DEQ, 2007).



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#### **Resource Concerns** - continued

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

#### NWPCC<sup>/18</sup>

DuPont, J., and Kennedy, T. 2000. Weiser River key watershed bull trout problem assessment. Southwest Basin Native Fish Watershed Advisory Group. February, 2000. Northwest Power Planning Council (NPPC), 2002. Draft Boise-Payette-Weiser subbasin

summary.

#### Army Corp of Engineers/18

Army Corp of Engineeers, 1997. Little Weiser River flood control study.

Army Corp of Engineeers, 1997. Little Weiser River streambank protection study.

Army Corp of Engineeers, 1993, Weiser River emergency flood control project.

#### USFWS<sup>/18</sup>

- United States Fish and Wildlife Service, 2003. Idaho endangered, threatened, proposed, and candidate species by county, Adams County. U.S. Fish and Wildlife-Pacific Region.
- United States Fish and Wildlife Service, 2002. Chapter 18, Southwest Idaho recovery unit, Idaho, 110p, In:U.S. Fish and Wildlife, Bull trout (Salvelinus confluentus) Draft recovery plan. Portland, Oregon.

#### **USFS** /<u>18</u>

USFS, 2002 to 2004. Weiser River/Little Weiser River. Numerous projects including fish screens, fish passage restoration, riparian exclosure fencing and vegetative plantings and large woody debris placement.

#### EPA<sup>/30</sup>

Tangarone, D.R. and B. Bogue, 1976. Weiser-Lower Payette water quality surveys. EPA Working Paper 910-8-76-098. Seattle, Washington.

#### USGS<sup>/23</sup>

- USGS, 1977. Water resources of the Weiser River basin, west-central Idaho. Open-File Report 77-418.
- USGS, 1964. Ground water in the Midvale and Council areas, Upper Weiser River basin, Idaho. Water Supply Paper 1779-Q.

#### IDEQ TMDLs/16,28,29

IDEQ, 2007. Weiser River Subbasin Assessment and Total Maximum Daily Loads. Boise, ID.

IDEQ, 2006. Weiser River Subbasin TemperatureTotal Maximum Daily Loads:

Addendum to the Weiser River Subbasin Assessment and TMDL. Boise, ID Other IDEQ Plans and Assessments/16,28,29

- IDEQ, 2004. Preliminary Evaluations of Arsenic Detections in Ground Water: A County Level Arsenic Review. State Ground Water Program Office.
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- IDEO, 1991. Ground Water Vulnerability Assessment, Snake River Plain, Southern Idaho. Boise, ID.



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#### Resource Concerns - continued

#### Watershed Projects, Plans, Studies and Assessments-continued

#### IASCD/SCC TMDL Agricultural Implementation Plans<sup>/19</sup>

Weiser River TMDL Implementation Plan for Agriculture **IDEO/SWCD 319 Projects**<sup>/17</sup>

319 Water Quality Demonstration Project

Other State Assessments / 18, 28, 29

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#### Resource Concerns - continued

#### Surface and Groundwater Resource Protection





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#### Resource Concerns - continued

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

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

FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES <sup>/25</sup>							
Threatened Species	Candidate Species						
Mammals – Lynx, Gray Wolf, Northern Idaho Ground	Mammals - Southern Idaho Ground Squirrel						
Squirrel	Fish - None						
Birds – Bald Eagle	Birds – None						
Fish – Bull Trout							
Invertebrates – Idaho Springsnail	PROPOSED SPECIES - None						
Plants – None							
ESSENTIAL FISH HABITAT - None	CRITICAL FISH HABITAT - None						



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8 Digit Hydrologic Unit Profile June

June 2007

# Census and Social Data<sup>/26</sup>

Population: 6,723

Number of Farms: 549





Idaho

8 Digit Hydrologic Unit Profile

#### Census and Social Data - continued

Fifty nine percent of farm operators are farmers by occupation. The remaining operators have off-farm jobs as their primary occupation. The majority of operators are male but women make up 36% 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 850 acres. Agricultural land in the watershed is a mix of woodland, cropland, range, pasture and hayland. Land users in the watershed utilize EQIP, CRP, Continuous CRP, WRP and other programs to implement conservation plans as well as the state WQPA and 319 programs.

Farm size and market value of production to farmers are up over the past several years. Government payments have remained fairly stable. Farm sales range from less than \$1,000 to more than \$500,000 per year. Eighty two percent of farms reported sales of less than \$50,000 per year.

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

	Number of farms	Average size farm	Market Value of Production (Average Farm)	Government Payments (Average Farm)
1997	600	740	\$57,400	\$7,700
2002	550	850	\$70,900	\$7,600
Change	-8.3%	14.9%	23.5%	-1.3%

#### **Economic Profile**

	Watershed	Idaho	United States
Population (2000)	6,723		
Per Capita Personal Income (2002)	\$20,400	\$25,476	\$30,906
Median Home Value (2000)	\$89,800	\$106,300	\$119,600
Percent Unemployment (2004)	8.1%	4.7%	5.5%
Percent Below Poverty Level (2003)	13.6%	11.8%	12.5%



Idaho

8 Digit Hydrologic Unit Profile

June 2007

# Progress / Status

PRS DATA				
Conservation Treatment Applied	<b>FY04</b>	FY05	<b>FY06</b>	Total
Conservation Completion Incentive First Year (CCIA) (no)			1	1
Conservation Crop Rotation (328) (ac)	199	1,616		1,815
Fence (382) (ft)	23,856	6,033	12,965	42,854
Forage Harvest Management (511) (ac)	641	570	55	1,266
Forest Stand Improvement (666) (ac)			30	30
Irrigation Land Leveling (464) (ac)		58	89	147
Irrigation System, Sprinkler (442) (ac)	6		248	254
Irrigation System, Surface and Subsurface (443) (ac)	5	182	2	189
Irrigation Water Conveyance, Ditch and Canal Lining, Plain				
Concrete (428A) (ft)	192		757	949
Irrigation Water Conveyance, Pipeline, High-Pressure,				
Underground, Plastic (430DD) (ft)	1,150	9,211	3,390	13,751
Irrigation Water Conveyance, Pipeline, Low-Pressure,				
Underground, Plastic (430EE) (ft)	4,934	1,320	3,725	9,979
Irrigation Water Conveyance, Pipeline, Rigid Gated Pipeline				
(430HH) (ft)	6,350	8,150	2,610	17,110
Irrigation Water Conveyance, Pipeline, Steel (430FF) (ft)		175	103	278
Irrigation Water Management (449) (ac)	449	352	578	1,379
Nutrient Management (590) (ac)	62			62
Pasture and Hay Planting (512) (ac)		48	126	174
Pest Management (595) (ac)	736	1,525	55	2,316
Pipeline (516) (ft)		10,299	155	10,454
Pond (378) (no)	1	3	1	5
Prescribed Grazing (528) (ac)		168	676	844
Prescribed Grazing (528A) (ac)	14,476	2,592		17,068
Pumping Plant (533) (no)		1	1	2
Residue Management, Mulch Till (329B) (ac)	180	507	525	1,212
Sediment Basin (350) (no)		1		1
Spring Development (574) (no)			1	1
Structure for Water Control (587) (no)	7	8	4	19
Waste Storage Facility (313) (no)			2	2
Water Well (642) (no)		1		1
Watering Facility (614) (no)		6	2	8



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Idaho

8 Digit Hydrologic Unit Profile

#### Progress / Status - continued

Progress in the last seven years has been focused on:

- ~ erosion control
- ~ irrigation water management
- ~ water quality (surface and ground water)
- ~ education and outreach
- ~ pasture and rangeland management
- ~ nutrient management

Resource concerns that require ongoing attention:

- ~ erosion control
- ~ nutrient management
- ~ prescribed grazing
- ~ riparian area improvement
- $\sim$  water quality & water quantity
- ~ irrigation water use efficiency
- ~ irrigation water management
- ~ pest management

#### Lands Removed from Production through Farm Bill Programs

- Conservation Reserve Program (CRP): 14,585
- Wetland Restoration Program (WRP): 30



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8 Digit Hydrologic Unit Profile

#### 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: <a href="http://edcwww.cr.usgs.gov/products/landcover/nlcd.html">http://edcwww.cr.usgs.gov/products/landcover/nlcd.html</a> 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: <u>http://www.nrcs.usda.gov/technical/NRI/</u>
- 5. PRISM Climate Mapping Project. Annual precipitation data. See <u>http://www.ocs.orst.edu/prism\_new.html</u> for further information.
- 6. Irrigated Adjudicated Water Rights Idaho Department of Water Resources <u>http://www.idwr.idaho.gov/water/srba/mainpage/</u>
- USGS Idaho Streamflows, gaging station data (<u>http://waterdata.usgs.gov/id/nwis/sw/</u>) and estimates for ungaged streams based on statistical data (<u>http://streamstats.usgs.gov/html/idaho.html</u>).
- National Hydrology Dataset (NHD). Developed by the US Geological Survey in cooperation with U.S. Environmental Protection Agency and other state and local partners (<u>http://nhd.usgs.gov</u>).



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#### 8 Digit Hydrologic Unit Profile June 2007

- 9. IDEQ. 2002 Integrated Report (approved December 2005). <u>http://www.deq.idaho.gov/water/data\_reports/surface\_water/monitoring/integrated\_report.cf</u> <u>m</u>.
- 10. Idaho Soil Conservation Commission (SCC), Water Quality Program for Agriculture (WQPA). http://www.scc.state.id.us/waq.htm
- 11. StreamNet is a cooperative venture of the Pacific Northwest's fish and wildlife agencies and tribes and is administered by the Pacific States Marine Fisheries Commission. Streamnet provided data and data services in support of the region's Fish and Wildlife Program and other efforts to manage and restore the region's aquatic resources. Official Streamnet website: <a href="http://www.streamnet.org/">http://www.streamnet.org/</a>
- 12. (Dairy) Idaho Department of Water Resources: <u>http://www.idwr.state.id.us/gisdata/gis\_data-new.htm</u>
- 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, <u>http://www.nrcs.usda.gov/programs/watershed</u>
- 15. Natural Resource Conservation Service, Watershed Plans, Studies and Assessments completed, <u>http://www.nrcs.usda.gov/programs/watershed/Surveys\_Plng.html#Watershed%20Surveys%20and%20Plan</u>
- 16. Idaho Department of Environmental Quality (IDEQ), Surface Water Quality: Subbasin Assessments, TMDLs, and Implementation Plans. <u>http://www.deq.state.id.us/water/data\_reports/surface\_water/tmdls/sba\_tmdl\_master\_list.cf</u> <u>m</u>
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- 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
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- 22. 303d Listed Streams designated by the Idaho Department of Environmental Quality (1998) and approved by the Environmental Protection Agency, Section 303d Clean Water Act 23. Groundwater Management Areas and Critical Groundwater Management Areas designated by the Idaho Department of Water Resources. http://www.idwr.idaho.gov/hydrologic/projects/gwma/
- 23. USGS Publications Warehouse. <u>http://pubs.er.usgs.gov/usgspubs/</u>



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- 25. NRCS Field Office Technical Guide, Section II, Threatened and Endangered List and the Idaho Conservation Data Center, Idaho Department of Fish and Game <u>http://fishandgame.idaho.gov/cms/tech/CDC/</u>
- 26. Data were taken from the 2002 Agricultural Census and adjusted by percent of HUC in the county or by percent of zip code area in the HUC, depending on the level of data available. Data were also taken from the U.S. Census, 2000 by zip code and adjusted by percent of zip code in the HUC.

http://www.nass.usda.gov/Census of Agriculture/Census by State/Idaho/index.asp

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#### **Future Conservation Needs**

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

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

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



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## 8 Digit Hydrologic Unit Profile

June 2007

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

Current Conditions (Private)	Total Acres	Riparian Acres
Total Dry Grass/Pasture/Hay	62,163	9,841
Typical Management Unit/Ownership	850	
Current Farm Bill Participation	5%	

Current Level of Treatment for Dry Grass/Pasture/Hay:												
Dry Grass/Pasture/Hay	ç	uantity	Costs	5		Effects			In	nplem	entatio	on
Practices	Unit	Quantity	Investment Cost	Annual O&M and Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	dIHM	CREP	Other
Dry Grass/Pasture/Hay	Ac.	62,163	\$ -		-3	-/+	-2	-3				
Fence (382)	Ft.	4,320	\$-	\$ 170					х	Х		
Forage Harvest Management (511)	Ac.	760	\$ -	\$ -					Х			
Pasture and Hay Planting (512)	Ac.	104	\$ -	\$ 100					Х			
Pest Management (595)	Ac.	139	\$ -	\$ 1,390					Х			
Prescribed Grazing (528)	Ac.	4,299	\$-	\$ 21,500					Х			
Residue Mngt., Mulch Till (329B)	Ac.	727	\$ -	\$ 10,910					х	х		
Waste Storage Facility	No.	2	\$ -	\$ 2400					Х			
Watering Facility (614)	No.	2	\$-	\$ 30					Х			
Dry Grass/Pasture/Hay Riparian	Ac.	9,841										
Fence (382)	Ft.	1,371	\$-	\$ 50					Х	Х		
Total RMS Costs			\$ -	\$ 36,550								



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# 8 Digit Hydrologic Unit Profile

Future Conditions	Total Acres	Riparian Acres
Total Dry Grass/Pasture/Hay Lands	62,163	
Conversion to Riparian RMS		9,841

Project Future Level of Treatment for	or Grass/Pasture/Hay Lands													
Dry Grass/Pasture/Hay Land	ç	uantity		Costs				Effects			Ir	nplem	entatio	n
Practices	Unit	Quantity	Iı	nvestment	A	nnual O&M d Mnat Cost	Water	Water	Hahitat	WO	EQIP	WHIP	CREP	Other
Dry Grass/Pasture/Hay Land	Ac.	62,163		0050	un	u i inglicost	+2	+3	+3	+2				
Fence (382)	Ft.	512.845	\$	1.017.100	\$	20,340					х	х		x
Forage Harvest Management (511)	Ac.	31,082	\$	-	\$						X			X
Heavy Use Area Protection (561)	Ac.	25	\$	375,000	\$	18,750					Х			X
Nutrient Management (590)	Ac.	55,947	\$	839,200	\$	279,740								х
Pasture and Hay Planting (512)	Ac.	31,082	\$	3,097,800	\$	30,980					Х			Х
Pest Management (595)	Ac.	55,947	\$	1,674,200	\$	558,080					Х			Х
Pipeline (516)	Ft.	128,212	\$	346,200	\$	6,920					Х			
Prescribed Grazing (528)	Ac.	55,947	\$	774,700	\$	258,240					Х			X
Residue and Tillage Management, Mulch Till (345)	Ac.	12,120	\$	512,700	\$	170,900					x	x		x
Spring Development (574)	No.	19	\$	44,700	\$	2,230					Х			Х
Structure for Water Control (587)	No.	19	\$	9,500	\$	100					Х			Х
Watering Facility (614)	No.	97	\$	142,500	\$	1,430					Х			Х
Upland Wildlife Habitat Management (645)	Ac.	6,216	\$	93,200	\$	31,080					x	x		x
Total RMS Costs			\$	8,926,800	\$	1,378,790								



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# 8 Digit Hydrologic Unit Profile

Future Level of Treatment for Dry Grass/														
Dry Grass/Pasture/Hay Lands Riparian	-	Quantity		Costs				Effects			Ir	nplem	entati	on
Practices	Unit	Quantity	In	vestment Cost	Anr Mr	nual O&M and pat Cost	Water	Water	Habitat	WO	EQIP	WHIP	CREP	Other
Dry Grass/Pasture/Hay Riparian	Ac.	9,841				guocot	+1	+1	+3	+3				
Animal Trails and Walkways (575)	Ft	20,297	\$	101,500	\$	10,150					X			х
Channel Bank Vegetation (322)	Ac	98	\$	507,200	\$	10,140					X			х
Channel Stabilization (584)	Ft	4,768	\$	95,400	\$	480					X			Х
Critical Area Planting (342)	Ac	492	\$	233,700	\$	110					Х			Х
Fence (382)	Ft	162,377	\$	322,000	\$	6,440					X	Х		Х
Heavy Use Area Protection (561)	Ac	10	\$	150,000	\$	7,500					X			Х
Riparian Herbaceous Cover (390)	Ac	984	\$	295,200	\$	2,950					Х	Х		Х
Streambank/Shoreline Protection (580)	Ft	4,768	\$	214,600	\$	4,290					x			x
Stream Crossing (578)	No	15	\$	52,500	\$	2,630					X			X
Stream Habitat Improvement Management (395)	Ac	49	\$	857,500	\$	17,150					x			x
Structure for Water Control (587)	No	15	\$	7,500	\$	80					Х			Х
Tree/Shrub Establishment (612)	Ac	492	\$	221,400	\$	2,210					Х	Х		Х
Tree/Shrub Site Preparation (490)	Ac	492	\$	61,500	\$	61,500						Х		
Use Exclusion (472)	Ac	8,857	\$	310,000	\$	9,300					Х	Х		Х
Total RMS Costs		\$3	,430,000	\$	134,930									



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# 8 Digit Hydrologic Unit Profile

Potential RMS Effects for Dry Grass/Pasture/Hayland		
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$1,235,700	\$151,370
Potential Farm Bill Programs	\$11,121,100	\$1,362,350
Operator O&M and Management Cost		\$1,513,720
Annual Management Incentives ( 3yrs - Incentive Payments)	\$3,381,300	)
Operator Investment	\$5,105,600	1
Federal Costshare	\$3,869,900	
Total RMS Costs	\$12,356,800	\$1,513,720
Estimated Level of Participation		90%
Total Acres in RMS System		55,947
Anticipated Cost at Estimated Level of Participation		\$11,121,100
Total Annual Forage Production Benefits (animal unit month	s)	6,972
Participating landowners will be in compliance with TMDLs		
Improves habitat for ESA endangered and threated species		



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# 8 Digit Hydrologic Unit Profile

Current Conditions		Total Acres	Riparian Acres										
Surface Irr. Grass/Pasture/Hayland		13,960											
Sprinkler Irr. Grass/Pasture/Hayland		20,940											
Total Grass/Pasture/Hay Lands		34,900	5,524										
Typical Management Unit/Ownership		850											
Current Farm Bill Participation		10%											
Current Level of Treatment for Irrigated	Grass/P	asture/Hay L	ands										
Grass/Pasture/Hay Lands	Q	uantity	Cost	s			Effects			Ir	nplem	entatio	on
Practices	Unit	Quantity	Investment Cost	0 M	Annual &M and ngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Surface Irr. Grass/Pasture/Hayland	Ac.	13,960				-1	+	-2	-2				
Fence (382)	Ft.	1,152	\$-	\$	50					Χ	Х		Х
Forage Harvest Management (511)	Ac.	202	\$ -	\$	-								
Irrigation Water Conveyance, Ditch and Canal Lining, Concrete (428A)	Ft.	47	\$-	\$	10					x			
Irrigation Water Pipeline, Low-Press, Undergrd., Plastic (430EE)	Ft.	2,495	\$ -	\$	980					x			
Irrigation Water Conveyance, Pipeline, Rigid Gated Pipeline (430HH)	Ft.	4,278	\$-	\$	220					x			
Irrigation Water Conveyance, Pipeline, Steel (430FF)	Ft.	111	\$-	\$	80					x			
Irrigation Water Management (449)	Ac.	55	\$ -	\$	550					Х			
Pasture/Hayland Planting (512)	Ac.	28	\$ -	\$	30					Х			Х
Pest Management (595)	Ac.	37	\$ -	\$	370					Х			
Prescribed Grazing (528)	Ac.	1,146	\$ -	\$	5,730					Х			х
Residue Management, Mulch Till (329B)	Ac.	194	\$ -	\$	2,910					x			



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Current Level of Treatment for Irrigated	Grass/P	asture/Hay L	ands											
Grass/Pasture/Hay Lands	ç	uantity		Costs				Effects			Ir	nplem	entatio	on
Practices	Unit	Ouantity	Inv	vestment Cost	A O8 Mn	nnual M and at.Cost	Water Conservation	Water Storage	Habitat	wo	EQIP	WHIP	CREP	Other
Sprinkler Irr. Grass/Pasture/Hayland	Ac.	20,940	\$	-										
Fence (382)	Ft.	1,728	\$	-	\$	70					Х	Х		Х
Forage Harvest Management (511)	Ac.	304	\$	-	\$	-								
Irrigation Water Conveyance, Pipeline, High-Pressure, Undergrd., Plastic (430DD)	Ft.	3,438	\$	_	\$	1,680					x			
Irrigation Water Conveyance, Pipeline, Steel (430FF)	Ft.	167	\$	-	\$	, 50					x			
Irrigation Water Management (449)	Ac.	83	\$	-	\$	420					х			
Pasture/Hayland Planting (512)	Ac.	42	\$	-	\$	40					Х			Х
Pest Management (595)	Ac.	56	\$	-	\$	560					Х			
Prescribed Grazing (528)	Ac.	1,720	\$	-	\$	8,600					Х			Х
Residue Management, Mulch Till (329B)	Ac.	291	\$	-	\$	4,370					x			
Sprinkler Irr. Grass/Pasture/Hayland	Ac.	20,940	\$	-	\$	-								
Total RMS Costs			\$	-	\$	26,720								



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# 8 Digit Hydrologic Unit Profile

Future Conditions	Total Acres	Riparian Acres
Surface Irr. Grass/Pasture/Hayland	6,980	
Sprinkler Irr. Grass/Pasture/Hayland	27,920	
Total Irr. Grass/Pasture/Hay Land	34,900	
Conversion to Riparian RMS		5,524

Project Future Level of Treatment for Irr														
Irrigated Grass/Pasture/Hay Land	Ç	uantity		Co	sts			Effects			]	[mpler	nentat	ion
Practices	Unit	Quantity	Inv	estment Cost	Ann and N	ual O&M Ingt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Surface Irr. Grass/Pasture/Hay Land	Ac.	6,980				-	+2	+2	+3	+2				
Fence (382)	Ft.	28,793	\$	55,300	\$	1,110					Х	Х		х
Forage Harvest Management (511)	Ac.	6,282	\$	-	\$	-								
Heavy Use Area Protection (561)	Ac.	10	\$	150,000	\$	7,500					X			X
Irrigation Water Conveyance, Ditch and Canal Lining, Concrete (428A)	Ft.	14,396	\$	99,000	\$	1,980					x			
Irrigation Water Conveyance, Pipeline, Low-Press, Undergrd., Plastic (430EE)	Ft.	14,396		93,100	\$	4,650					x			
Irrigation Water Conveyance, Pipeline, Steel (430FF)	Ft.	7,198		99,200	\$	4,960					x			
Irrigation System, Surface and Subsurface (443)	Ac.	698	\$	837,600	\$	41,880					x			
Nutrient Management (590)	Ac.	6,282	\$	94,200	\$	31,410					X			X
Pasture/Hayland Planting (512)	Ac.	3,490	\$	346,200	\$	3,460					х			Х
Pest Management (595)	Ac.	6,282	\$	62,450	\$	62,820					Χ			X
Pipeline (516)	Ft.	7,198	\$	19,400	\$	390					X			X
Prescribed Grazing (528)	Ac.	6,282	\$	77,000	\$	25,680					Х			х
Structure for Water Control (587)	No.	24	\$	12,000	\$	120					X			Х
Tree and Shrub Estab.(612)	Ac.	349	\$	157,100	\$	1,570					Χ	Χ		Χ
Upland Wildlife Habitat Mgmt (645)	Ac.	349	\$	5,200	\$	1,750					Χ	Χ		Χ



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Project Future Level of Treatment for Irr														
Irrigated Grass/Pasture/Hay Land	Q	uantity		Costs				Effects			Im	pleme	ntatio	on
Practices	Unit	Ouantity	In	ivestment Cost	An and	nual O&M Mnat.Cost	Water Conservation	Water Storage	Habitat	wo	EQIP	WHIP	CREP	Other
Sprinkler Irr. Grass/Pasture/Hay Land	Ac.	27,920												
Fence (382)	Ft.	115,170	\$	226,900	\$	4,540					х	х		X
Forage Harvest Management (511)	Ac.	25,128	\$	-	\$	-								
Heavy Use Area Protection (561)	Ac.	10	\$	150,000	\$	7,500					Х			Х
Irrigation System, Sprinkler (442)	Ac.	6,980	\$	3,839,000	\$	76,780					Х			
Irrigation Wtr. Conveyance, High Pressure, Undergrd. Plastic (430DD)	Ft.	57,585	\$	529,600	\$	2,650					х			
Irrigation Water Management (449)	Ac.	25,128	\$	751,400	\$	250,450					Х			
Nutrient Management (590)	Ac.	25,128	\$	376,900	\$	125,640					Х			Χ
Pasture/Hayland Planting (512)	Ac.	6,980	\$	693,800	\$	6,940					Х			Х
Pest Management (595)	Ac.	25,128	\$	752,200	\$	250,720					Х			Χ
Prescribed Grazing (528)	Ac.	25,128	\$	351,100	\$	117,040					Х			Х
Structure for Water Control (587)	No.	17	\$	8,500	\$	90					Х			Χ
Tree and Shrub Establishment (612)	Ac.	1,396	\$	628,200	\$	6,280					x	x		x
Upland Wildlife Habitat Mgmt (645)	Ac.	1,396	\$	20,900	\$	6,980					Х	Х		X
Total RMS Costs			\$ 1	0,436,250	\$	1,044,890								



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Current Level of Treatment for Irrigate	eatment for Irrigated Grass/Pasture/Hay Lands Riparian Hay Riparian Quantity Costs											
Irr. Grass/Pasture/Hay Riparian	Qu	antity	Cos	ts		Effects			Ir	nplem	entat	ion
Practices	Unit	Quantity	Investment Cost	Annual O&M and Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Irr. Grass/Pasture/Hay Riparian	Ac.	5,524			-1	-/+	-1	-1				
Fence (382)	Ft.	5,691	\$-	\$ 230					Χ			Х
Total RMS Costs			\$-	\$ 230								
Future Level of Treatment for Irrigated	Grass/Pa	asture/Hay La	nds-Riparian									
Irrigated Grass/Pasture/Hay Rip.	Qu	antity	Costs			Effects	[[		Ir	nplem	entat	ion
Practices	Unit	Quantity	Investment Cost	Annual O&M and Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	MHIP	CREP	Other
Irrigated Grass/Pasture/Hay Lands Riparian (Surface & Sprinkler)	Ac.	5,524			+3	+2	+3	+2				
Channel Bank Vegetation (322)	Ac.	55	\$ 165,000	\$ 3,300					Χ			Х
Channel Stabilization (584)	Ft.	4,768	\$ 95,400	\$ 480					Χ			Х
Fence (382)	Ft.	91,146	\$ 170,900	\$ 3,420					X	Х		Х
Irrigation Water Management(449)	Ac.	2,762	\$ 82,900	\$ 27,620					X			Х
Nutrient Management (590)	Ac.	4,972	\$ 74,600	\$ 24,860					Х			X
Pest Management (595)	Ac.	4,972	\$ 149,200	\$ 49,720					X			Х
Prescribed Grazing (528)	Ac.	2,762	\$ 41,400	\$ 13,810					X			Х
Riparian Forest Buffer (391)	Ac.	55	\$ 82,500	\$ 830					X	Х		Х
Riparian Herbaceous Cover (390)	Ac.	110	\$ 33,000	\$ 330					X	Х		Х
Stream Crossing (578)	No.	10	\$ 35,000	\$ 1,750					Χ			Х
Streambank/Shoreline Prot. (580)	Ft.	4,768	\$ 214,600	\$ 21,460					Х			Х
Tree/Shrub Establishment (612)	Ac.	55	\$ 24,800	\$ 250					X	Х		Х
Use Exclusion (472)	Ac.	276	\$ 9,700	\$ 290					Χ			X
Watering Facility	No.	9	\$ 13,500	\$ 140					Х			Х
Wetland Enhancement (659)	Ac.	55	\$ 110,000	\$ 1,100					Х			Х
Wetland Wildlife Hab. Mgmt (644)	Ac.	276	\$ 4,100	\$ 1,380					Х	Х		х
Total RMS Costs			\$1,141,600	\$ 147,440								



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Potential RMS Effects for Irrigated Grass/Pasture/Ha	yland	
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$3,750,700	\$408,660
Potential Farm Bill Programs	\$7,827,200	\$783,670
Operator O&M and Management Cost		\$1,192,330
Annual Management Incentives ( 3yrs - Incentive Payments)	\$2,768,950	
Operator Investment	\$5,015,300	
Federal Costshare	\$3,793,600	
Total RMS Costs	\$11,577,850	\$1,192,330
Estimated Level of Participation		75%
Total Acres in RMS System		26,175
Anticipated Cost at Estimated Level of Participation		\$8,683,400
Total Annual Forage Production Benefits (animal unit month	s)	117,398
Total Acre Feet of Water Saved Annually		25,250
Increases infiltration and storage of water in soil profile		
Participating landowners will be in compliance with TMDLs		
Improves habitat for ESA endangered and threated species		



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Current Conditions		Total Acres	Riparian Acres									
Total Irrigated Cropland		22,000	2,146									
Typical Management Unit/Ownership		850										
Surface Irrigated Cropland		16,500										
Sprinkler Irrigated Cropland		5,500										
Current Farm Bill Participation		10%										
Current Level of Treatment for Irrigate	d Cropla	and										
Irrigated Cropland	Q	uantity	Cos	sts		Effects			Ir	npleme	entatio	n
			Additional	Annual	Wator	Wator			dI	ΗIP	с Ш	Jer
Practices	Unit	Quantity	Cost	Mngt.Cost	Conservation	Storage	Habitat	WQ	Ъ	W۲	Я	Oth
Surface Irrigated Cropland	Ac.	16,500			-2	-/+	-/+	-2				
Conservation Completion Incentive First Year (CCIA)	No.	1	\$-	\$ -					x			
Conservation Crop Rotation (328)	Ac.	1,361	\$ -	\$ -					Х			
Irrigation Land Leveling (464)	Ac.	147	\$ -	\$ 1,100					Х			
Irrigation System, Surface and Subsurface (443)	Ac.	189	\$ -	\$ 6,800					x			
Irrigation Water, Ditch and Canal Lining, Plain Concrete (428A)	Ft.	902	\$ -	\$ 120					x			
Irrigation Water Pipeline, High- Pressure, Underground, (430DD)	Ft.	10,313	\$ -	\$ 2,020					x			
Irrigation Water Pipeline, Low-Press, Underground, Plastic (430EE)	Ft.	7,484	\$-	\$ 1,170					x			
Irrigation Water Pipeline, Rigid Gated Pipeline (430HH)	Ft.	12,833	\$ -	\$ 1,340					x			
Irrigation Water Management (449)	Ac.	931	\$ -	\$ 9,310					Х			
Nutrient Management (590)	Ac.	62	\$ -	\$ 310					Х			
Pest Management (595)	Ac.	1,563	\$ -	\$ 15,630					Х			
Sediment Basin (350)	No.	1	\$ -	\$ 80					Х			
Structure for Water Control (587)	No.	18	\$ -	\$ 90					Х			



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Current Level of Treatment for Irrigate	ed Cropla	and										
Irrigated Cropland	Q	uantity	Cos	sts		Effects			Ir	npleme	entatio	on
			Additional Investment	Annual O&M and	Water	Water			qID	/HIP	REP	ther
Practices	Unit	Quantity	Cost	Mngt.Cost	Conservation	Storage	Habitat	WQ	ш	>	0	0
Sprinkler Irrigated Cropland	Ac.	5,500										
Conservation Crop Rotation (328)	Ac.	454	\$ -	\$-					Х			
Irrigation System, Sprinkler (442)	Ac.	254	\$ -	\$ 2,790					Х			
Irrigation Water Management (449)	Ac.	310	\$ -	\$ 3,100					Х			
Pest Management (595)	Ac.	521	\$ -	\$ 5,210					Х			
Pumping Plant (533)	No.	2	\$ -	\$ 140					Х			
Structure for Water Control (587)	No.	1	\$ -	\$ 10					Х			
Water Well (642)	No.	1	\$ -	\$ 80					х			
Total RMS Costs			\$ 0	\$ 49,300								



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Future Conditions		Total Acres	Rip	arian Acres										
Surface Irrigated Cropland		8,250												
Sprinkler Irrigated Cropland		13,750												
Total Irrigated Cropland		22,000		2146										
Project Future Level of Treatment for	· Irrigate	ed Cropland												
Irrigated Cropland	ç	Juantity		Costs				Effects			Ir	npleme	entatio	'n
Practices	Unit	Quantity	Ir	ivestment Cost	Anr and	nual O&M Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	MHIP	CREP	Other
Surface Irrigated Cropland	Ac.	8,250					+2	+1	+1	+3				
Anionic Polyacrylamide (PAM) Erosion Control (450)	Ac.	7,425	\$	334,100	\$	111,380					x			x
Conservation Crop Rotation (328)	Ac.	7,425	\$	-	\$	-					Х			X
Filter Strip (393)	Ac.	165	\$	16,500	\$	330					Х			x
Irrigation Land Leveling (464)	Ac.	825	\$	169,500	\$	5,090					Х			Χ
Microirrigation System, (441)	Ac.	825	\$	1,237,500	\$	61,880					х			x
Irrigation Water Ditch and Canal Lining, Plain Concrete (428A)	Ft.	4,254	\$	23,100	\$	460					х			x
Irr. Water Pipeline, high press, underground, plastic (430DD)	Ft.	17,016	\$	65,600	\$	1,310					х			x
Irrigation Water Pipeline, Low- Press, Underground, Plastic (430EE)	Ft.	17,016	\$	74,500	\$	1,490					x			x
Irrigation Water Pipeline, Rigid Gated Pipeline (430HH)	Ft.	8,508	\$	44,300	\$	890					х			x
Irrigation Water Management (449)	Ac.	7,425	\$	194,800	\$	64,940					x			x
Nutrient Management (590)	Ac.	7,425	\$	110,400	\$	36,820					Х			Х
Pest Management (595)	Ac.	7,425	\$	175,900	\$	58,620					Х			X
Sediment Basin (350)	No.	103	\$	255,000	\$	7,700					Х			X
Structure for Water Control (587)	No.	13	\$	6,500	\$	70					Х			X
Underground Outlet (620)	Ft.	8,508	\$	72,300	\$	720					X			X



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Project Future Level of Treatment for	· Irrigate	ed Cropland												
Irrigated Cropland	ç	uantity	Cos	ts				Effects			Ir	nplem	entatio	n
Practices	Unit	Quantity	Ir	ivestment Cost	An and	nual O&M Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Sprinkler Irrigated Cropland	Ac.	13,750												
Conservation Crop Rotation (328)	Ac.	12,375	\$	-	\$	-					x			x
Irrigation System, Sprinkler (442)	Ac.	8,250	\$	4,397,800	\$	87,960					X			X
Irrigation Water Management (449)	Ac.	12,375	\$	362,000	\$	120,650					x			x
Nutrient Management (590)	Ac.	12,375	\$	185,600	\$	61,880					Х			X
Pest Management (595)	Ac.	12,375	\$	355,600	\$	118,540					X			X
Pumping Plant (533)	No.	3	\$	3,500	\$	70					X			x
Structure for Water Control (587)	No.	3	\$	1,000	\$	10					х			x
Windbreak/Shelterbelt Establishment (380)	Ft.	28,359	\$	127,600	<del>()</del>	1,280					x	x		x
Riparian Surface and Sprinkler Irrigated Cropland	Ac.	2,146												
Channel Bank Vegetation (322)	Ac.	107	\$	553,700	\$	11,070					x	X		x
Channel Stabilization (584)	Ft.	4,768	\$	95,400	\$	480					Х			X
Critical Area Planting (342)	Ac.	107	\$	50,800	\$	1,520					Х			X
Dam, Diversion (348)	No.	3	\$	9,000	\$	100					Χ			X
Riparian Herbaceous Cover (390)	Ac.	107	\$	32,100	\$	320					Х	X		X
Stream Habitat Improvement and Management (395)	Ac.	21	\$	367,500	\$	7,350					x			x
Tree/Shrub Establishment (612)	Ac.	107	\$	48,200	\$	480					х	Х		х
Tree/Shrub Site Preparation (490)	Ac.	107	\$	13,400	\$	13,380					Х	Х		х
Total RMS Costs			\$	9,383,200	\$	776,790								



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Potential RMS Effects for Irrigated Cropland		
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$938,300	\$77,680
Potential Farm Bill Programs	\$8,444,900	\$699,110
Operator O&M and Management Cost		\$776,790
Annual Management Incentives ( 3yrs - Incentive Payments)	\$1,384,300	
Operator Investment	\$4,468,600	
Federal Costshare	\$3,530,300	
Total RMS Costs	\$9,383,200	\$776,790
Estimated Level of Participation		90%
Total Acres in RMS System		19,800
Anticipated Cost at Estimated Level of Participation		\$8,444,900
Total Acre Feet of Water Saved Annually		29,320
Participating landowners will be in compliance with TMDLs		
Improves habitat for ESA endangered and threated species		



# Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Current Conditions	Total Acres	Riparian Acres
Shrub/Rangeland	358,717	37,298
Typical Management Unit/Ownership	850	
Current Farm Bill Participation	5%	

Current Level of Treatment for Shrub/	and											
Shrub/Range Land	Q	uantity	Co	sts		Effects			In	npleme	entatio	n
Practices	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Shrub/Range Land	Ac.	358,717			+1	+1	+1	-2				
Fence (382)	Ft	30,718	\$ -	\$ 1,230					Х			
Pipeline (516)	Ft	10,454	\$ -	\$ 560					Х			
Pond (378)	No	5	\$ -	\$ 300					Х			
Prescribed Grazing (528)	Ac	10,747	\$ -	\$ 53,740					Х			
Spring Development (574)	No	1	\$ -	\$ 120					Х			
Watering Facility (614)	No	6	\$ -	\$ 90					Х			
Shrub/Range Land Riparian	Ac.	37,298			-1	±	-2	-2				
Fence (382)	Ft	3,565	\$ -	\$ 140					Х			
Total RMS Costs			\$ 0	\$ 56,180								



# Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Future Conditions	Total Acres	Riparian Acres
Rangeland	358,717	37,298
Conversion to Riparian RMS		
Total Rangeland	358,717	

Future Level of Treatment for Shrub/Ra														
Shrub/Range Land	ç	uantity		Costs	5			Effects			Ir	npleme	entatio	n
Practices	Unit	Quantity	I	nvestment Cost	Ann Mn	ual O&M and igt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Shrub/Range Land	Ac.	358,717					+3	+2	+3	+3				
Brush Management (314)	Ac	1,794	\$	44,900	\$	450					Х			X
Fence (382)	Ft	1,479,708	\$	2,898,000	\$	57,960					Х	X		Χ
Firebreak (394)	Ft	369,927	\$	714,000	\$	142,790					Х			X
Pest Management (590)	Ac	322,845	\$	9,685,400	\$3,	,228,450					Х			X
Pipeline (516)	Ft	184,963	\$	471,200	\$	9,420					Х			X
Pond (378)	No	140	\$	810,000	\$	8,100					Х			X
Prescribed Grazing (528)	Ac	322,845	\$	4,681,500	\$1,	,560,490					Х			X
Range Planting (550)	Ac	17,936	\$	1,614,200	\$	16,140					Х			X
Heavy Use Area Protection (561)	Ac	100	\$	1,500,000	\$	75,000					х			X
Spring Development (574)	No	140	\$	326,700	\$	16,330					Х			X
Upland Wildlife Habitat Management (645)	Ac	71,743	\$	1,076,100	\$	358,720					x	x		x
Watering Facility (614)	No	280	\$	411,000	\$	4,110					Х			X



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Future Level of Treatment for Shrub/Ra														
Shrub/Range Land	Q	uantity		Costs	5			Effects			Ir	npleme	entatio	n
Practices	Unit	Quantity	Ir	nvestment Cost	Anı Mı	nual O&M and ngt.Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
Shrub/Range Land Riparian	Ac.	37,298					+3	+2	+3	+3				
Channel Bank Vegetation (322)	ac	186	\$	962,600	\$	19,250					Х			X
Channel Stabilization (584)	ft	38,464	\$	769,300	\$	3,850					Х			Х
Critical Area Planting (342)	ac	1,865	\$	885,900	\$	26,580					Х			X
Fence (382)	ft	153,854	\$	300,600	\$	6,010					Χ	X		Χ
Riparian Herbaceous Cover (390)	ac	3,730	\$	1,119,000	\$	11,190					Х	X		Х
Streambank/Shoreline Protection (580)	ft	18,649	\$	885,800	\$	88,580					x			x
Stream Crossing (578)	no	58	\$	203,000	\$	10,150					Х			Х
Stream Habitat Improvement Management (395)	ас	14	\$	250,600	\$	5,010					x			х
Use Exclusion (472)	ac	7,460	\$	261,100	\$	7,830					Х	Х		Х
Total RMS Costs			\$2	9,870,900	\$5,	656,410								



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Potential RMS Effects for Shrub/Rangeland		
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$2,987,100	\$565,640
Potential Farm Bill Programs	\$26,883,800	\$5,090,770
Operator O&M and Management Cost		\$5,656,410
Annual Management Incentives ( 3yrs - Incentive Payments)	\$15,443,000	
Operator Investment	\$3,559,100	
Federal Costshare	\$10,868,800	
Total RMS Costs	\$29,870,900	\$5,656,410
Estimated Level of Participation		90%
Total Acres in RMS System		322,845
Anticipated Cost at Estimated Level of Participation		\$26,883,800
Total Annual Forage Production Benefits (animal unit months)		43,584
Participating landowners will be in compliance with TMDLs		
Improves habitat for ESA endangered and threated species		



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Current Conditions (Private)		Total	Riparian									
Current Conditions (Private)		Acres	Acres									
Total Grazed Forest		47,881	3,974									
Typical Management Unit/Ownership		850										
Current Farm Bill Participation		5%										
Current Level of Treatment for Grazed	Forest:											
Grazed Forest	Ç	uantity	Costs	5		Effects			Ir	nplem	entatio	on
Due stiese	11	Quantity	Investment	Annual O&M and	Water	Water			EQIP	NHIP	CREP	Other
Practices	Unit	Quantity	Cost	Mingt.Cost	Conservation	Storage	Habitat	WQ		-	•	0
Grazed Forest	Ac.	47,881			-1	-/+	-/+	-1				
Forest Stand Improvement (666)	Ac.	30	\$ -	\$ 70								
Grazed Forest Riparian	Ac.	3,974										
Total RMS Costs			\$ -	\$ 70								



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Future Conditions		Total Acres	Rip	oarian Acres										
Total Grazed Forest Lands		47,881		3,974										
Conversion to Riparian RMS														
Total Acres		47,881												
Project Future Level of Treatment for	Grazed	Forest												
Forest	Ç	Juantity		Costs				Effects			Ir	npleme	entatio	n
Practices	Unit	Quantity	Ι	nvestment Cost	A an	nnual O&M d Mnat.Cost	Water Conservation	Water Storage	Habitat	WO	EQIP	WHIP	CREP	Other
Grazed Forest	Ac.	47,881					+2	+1	+3	+2				
Critical Area Planting (342)	Ac.	479	\$	227,500	\$	6,830					Х			X
Fence (382)	Ft.	197,509	\$	395,000	\$	7,900					Х	Х		х
Forest Slash Treatment (384)	Ac.	2,394	\$	897,800	\$	897,750					Х			X
Forest Stand Improvement (666)	Ac.	9,576	\$	4,295,700	\$	21,480					Х			х
Heavy Use Area Protection (561)	Ac.	20	\$	300,000	\$	15,000					Х			X
Pest Management (595)	Ac.	23,941	\$	718,200	\$	239,410					Х			X
Pipeline (516)	Ft.	25,080	\$	67,700	\$	1,350					Х			X
Prescribed Forestry (409)	Ac.	23,941	\$	538,700	\$	179,560					Х			X
Prescribed Grazing (528)	Ac.	23,941	\$	359,100	\$	119,710					Х			X
Spring Development (574)	No.	19	\$	44,700	\$	220					Х			X
Upland Wildlife Habitat Mgmt (645)	Ac.	4,788	\$	71,800	\$	23,940					х	х		x
Watering Facility (614)	No.	37	\$	38,900	\$	390					Х			X
Grazed Forest Riparian	Ac.	3,974					+1	+	+2	+3				
Channel Bank Vegetation (322)	Ac.	80	\$	414,000	\$	8,280					Х			X
Channel Stabilization (584)	ft	4,098	\$	82,000	\$	410					Х			X
Fence (382)	ft	16,393	\$	32,800	\$	660					Х	Х		X
Riparian Forest Buffer (391)	ac	397	\$	595,500	\$	5,960					Х	Х		X
Stream Crossing (578)	no	6	\$	21,000	\$	1,050					Х			X
Use Exclusion (472)	ас	397	\$	13,900	\$	420					Х			X
Total RMS Costs			\$	9,114,300	\$	1,530,320								



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Potential RMS Effects for Grazed Forestland		
Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs	\$455,700	\$76,520
Potential Farm Bill Programs	\$8,658,600	\$1,453,800
Operator O&M and Management Cost		\$1,530,320
Annual Management Incentives ( 3yrs - Incentive Payments)	\$1,687,800	
Operator Investment	\$3,941,100	
Federal Costshare	\$3,485,400	
Total RMS Costs	\$9,114,300	\$1,530,320
Estimated Level of Participation		50%
Total Acres in RMS System		23,941
Anticipated Cost at Estimated Level of Participation		\$4,557,200
Total Annual Forage Production Benefits (animal unit months)		1,796
Participating landowners will be in compliance with TMDLs		
Improves habitat for ESA endangered and threated species		



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 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).



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

Current Conditions		Total
CAFOs		17
AFOs		6
Current Farm Bill participation	15%	
Total CAFOs and AFOs		21

Current Level of Treatment for Headquarters														
	Qu	uantity	C	osts	Effects					Implementation				
Practices	Unit	Quantity	Investment Cost	Annual O&M and Mngt. Cost	Water Conservation	Water Storage	Habitat	wo	EQIP	WHIP	WRP	CREP	Other	
Dairy	Ac.	<b>Z</b>			-1	-1	-2	-3		[				
Waste Storage Facility (313) CAFO	No.	4	\$ -	\$ 7,000					х				Х	
Waste Storage Facility (313) AFO	No.		\$ -	-					Х				Х	
Feed Lot	Ac.				+/-	-1	-3	-3						
Waste Storage Facility (313) CAFO	No.	6	\$ -	\$ 10,500					X				X	
Waste Storage Facility (313) AFO	No.	4	\$ -	\$ 3,600					X				X	



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# 8 Digit Hydrologic Unit Profile

Project Future Level of Treatment for	Headq	uarters													
	Qu	Quantity Costs Effects						In	Implementation						
Practices	Unit	Quantity	In	vestment Cost	Anr ar	nual O&M Id Mngt. Cost	Water Conservation	Water Storage	Habitat	WQ	EQIP	WHIP	WRP	CREP	Other
Dairy	Ac.						+2	+2	+2	+3					
Structural/Management Practices															_
Waste Storage Facility (313) CAFO	No.	8	\$	350,000	\$	7,000					Х				Χ
Waste Storage Facility (313) AFO	No.		\$	-		-					х				Х
Feed Lot	Ac.						+2	+1	+2	+3					
Structural/Management Practices															
Waste Storage Facility (313) CAFO	No.	9	\$	262,500	\$	5,250					х				Χ
Waste Storage Facility (313) AFO	No.	6	\$	90,000	\$	1,800					х				Х
Total RMS Costs			\$	702,500	\$	14,050									_



### Weiser - 17050124

# 8 Digit Hydrologic Unit Profile

RMS Cost Summary for Headquarters				
Cost Items and Programs		Costs	O&M Costs	
Non Farm Bill Programs	\$	35,100	\$ 700	
Potential Farm Bill Programs	\$	667,400	\$ 13,350	
Operator O&M and Management Cost			\$ 14,050	
Annual Management Incentives (3 yrs - Incentive Payments)	\$	70,300		
Operator Investment	\$	333,700		
Federal Costshare	\$ 298,500			
Total RMS Costs	\$ 7	702,500		
Estimated Level of Participation			95%	
Total CAFO/AFO in RMS System	20			
Anticipated Cost at Estimated Level of Participation	\$ 667,400			
Reduces impact to ground and surface water quality				
90% participation reflects Local, State and Federal regulations				