Latah Soil & Water Conservation District

RESOURCE CONSERVATION PLAN

Five-Year Plan

Fiscal Year 2015 - 2019
Version 15.0

Contact Information:
David Huggins, Chairman
Kenneth Stinson, District Manager

220 East Fifth Street, Suite 208
Moscow, ID 83843-2964
(208) 882-4960 ext. 112
lswcd@latahsoil.org
www.latahsoil.org

Supervisors
David Huggins, Chairman
Frank Walker, Vice Chairman
Kevin Meyer, Treasurer
Josh Jones, Secretary
Garry Esser, Supervisor
Kyle Hawley, Supervisor
Tom Trail, Supervisor
Cody Anderson, Associate Supervisor
Lee Hawley, Associate Supervisor
Kevin Wagner, Associate Supervisor

Staff
Tabitha Brown, Assistant Resource Conservation Planner
Bill Dansart, Resource Conservation Planner
Brenda Erhardt, Resource Conservation Planner
Trish Heekin, Resource Conservation Planner
Jason Marchinek, Resource Conservation Planner/Field Operations Manager
Kenneth Stinson, District Manager

Latah Soil and Water Conservation District

During its seven decades in existence, the Latah Soil and Water Conservation District has maintained a firm commitment and solid level of support for voluntary conservation and responsible management of Latah County's natural resources.

As the first legally organized conservation district in Idaho, the Latah Soil and Water Conservation District (Latah SWCD) demonstrated its high ambitions early on and has continued to strive to meet the needs of landowners and land users in Latah County. The Latah SWCD is 1 of 50 conservation districts in Idaho which serve 99% of the state's area.

The Latah SWCD provides the public with a formal channel for cooperating with one another and with city, county, state, tribal, and federal agencies in resource conservation on lands in Latah County. The Latah SWCD offers guidance, technical and financial assistance, and information to people with land use and other natural resource needs and concerns. The Latah SWCD supervisors and staff supply educational information and outreach programs to increase community awareness about the sustainable management of our local natural resources.

This Resource Conservation Plan facilitates these activities by outlining procedures and methods, prioritizing current needs, and identifying future expectations. It also provides a means to prioritize the Latah SWCD's resources, allowing the Latah SWCD Board to measure progress and results, promote sustainable resource management, and encourage collaboration between individuals, organizations and government agencies. The Latah SWCD seeks to ensure that the land, water and wildlife resources under its care will be viable and sustainable for current and future generations.

This document identifies resource conservation needs throughout Latah County and presents the Latah SWCD's Five-Year Resource Conservation Plan for meeting those needs. This Five-Year Plan will be reviewed and updated annually by the Latah SWCD Board of Supervisors.

Mission Statement

Lead local efforts to promote the stewardship of natural resources through the development of comprehensive plans and the implementation of strategies for economic and ecological sustainability, on behalf of our citizens, through the coordination of leadership, information, and funding.

Goals

Local Governance - Lead and support landowner, land user, local community, and government agency efforts to collectively identify natural resource issues of concern, review alternative solutions to address these issues, and undertake local efforts to resolve priority issues using voluntary mechanisms.

District Capacity - Develop and maintain the political and organizational capacity to fully exercise Latah SWCD rights and responsibilities.

Community Outreach - Promote efforts to enhance local community understanding of ecological systems, the social systems directly dependent upon these natural systems, and the political and organizational systems developed for the management of natural resources within Latah County.

Comprehensive Planning - Promote individual, local, regional, state, tribal and national planning efforts that recognize, and manage for, the interconnected elements of natural systems and seek sustainable management approaches for the natural resources within the Latah SWCD while providing for the long-term natural resource conservation objectives of landowners and land users, strengthening the long-term health of local economies, and protecting the long-term public interest of the community.

Coordinated Implementation - Lead the voluntary implementation of conservation efforts that seek to simultaneously protect and enhance the long-term productivity of the Latah SWCD's natural resource base while providing for the long-term natural resource conservation objectives of land owners and land users, protecting the established rights of individual landowners and land users, strengthening the long-term health of local economies, and protecting the long-term public interest of the community.

Latah SWCD policies and conservation practices will seek consistency with the mission statement and related goals.

Certificate of Adoption

We, the Board of Supervisors of the Latah Soil and Water Conservation District, this _____ day of March, 2014, do hereby approve the following document known as the Latah Soil and Water Conservation District Resource Conservation Plan.

As evidence of our adoption and final approval, we do hereby affix our signatures to this document.

David Huggins, Chairman _____

Frank Walker, Vice Chairman _____

Kevin Meyer, Treasurer _____

Josh Jones, Secretary _____

Garry Esser, Supervisor _____

Kyle Hawley, Supervisor _____

Tom Trail, Supervisor _____

Resource Conservation Plan Overview

Planning for comprehensive natural resource management in a coordinated fashion at a county scale is a challenge. The Latah SWCD, as a formal governmental subdivision of the State of Idaho, is charged with providing local leadership regarding natural resource management in addition to technical and financial support to private landowners and land users with respect to the conservation of natural resources.

The Resource Conservation Plan has been developed for two primary audiences. First, there are those entities that want to understand, in the broadest sense, the natural resource conservation approaches proposed by the Latah SWCD Board of Supervisors. For those readers, the Resource Conservation Plan, in its entirety, provides a comprehensive view of the work that could be undertaken by the Board of Supervisors and staff over the next five years if adequate resources become available. The entire document should prove useful to elected officials and conservation agencies who would like to coordinate conservation management programs with the Latah SWCD.

Second, the Resource Conservation Plan has also been organized for those individuals and/or organizations that have a resource-specific interest within Latah County (e.g., erosion within agricultural fields, restoring fish runs within the Potlatch River, or weed control on range and pasture lands). For these entities, individual resource work plans have been developed as comprehensive informational sheets that can be reviewed somewhat independently of the entire Resource Conservation Plan. These individual resource conservation work plans are located within Chapter 10.

The table of contents has been designed as a detailed outline of the Resource Conservation Plan so readers can easily find information that is of interest. The table of contents, especially Chapter 10: Coordinated Implementation, is designed to be the first point of reference for readers with a resource-specific interest. Within the table of contents are active links to the individual sections within the document.

The first four chapters of the Resource Conservation Plan are designed to provide background information pertaining to conservation districts, Latah County, resource conditions within Latah County, and the framework within which the Latah SWCD works in a collaborative fashion with other agencies and organizations.

The Resource Conservation Plan addresses, in detail, the five primary management goals of the Latah SWCD. Each goal has a set of detailed work plans to address issues related to each goal.

Local Governance	Chapter 6
District Capacity	Chapter 7
Community Outreach	Chapter 8
Comprehensive Planning	Chapter 9
Coordinated Implementation	Chapter 10

The Resource Conservation Plan is designed to be continuously critiqued from within as well as outside the Latah SWCD. As new local, state, and federal policies are adopted and current resource management practices are reviewed, there will be regular changes to

the Resource Conservation Plan to reflect changes in community priorities, natural resource management policies, and research findings.

Once the Resource Conservation Plan is developed with proposed strategies and tasks, the Latah SWCD will develop an Annual Work Plan. While the Resource Conservation Plan identifies strategies and tasks that could be accomplished within the next five years if adequate technical and financial resources become available, the Annual Work Plan will identify those prioritized tasks suggested within the Resource Conservation Plan that can be completed within the coming fiscal year with existing Latah SWCD financial and staffing resources.

Feedback on the Resource Conservation Plan is encouraged and appreciated. Please see the cover page for contact information.

Latah Soil and Water Conservation District Resource Conservation Plan

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Acronyms and Abbreviations

AgPlan	Idaho Agricultural Pollution Abatement Plan
BAG	Basin Advisory Group
BiOp	Biological Opinion
BLM	Bureau of Land Management
BMP	Best Management Practices
BOCC	Board of County Commissioners
BPA	Bonneville Power Administration
BURP	Beneficial Use Reconnaissance Project
CBAG	Clearwater Basin Advisory Group
CCRP	Continuous Conservation Reserve Program
CDC	Conservation Data Center
CES	Cooperative Extension Service
CFR	Code of Federal Regulations
cfs	Cubic Feet per Second
Clearwater RC&D	Clearwater Resource Conservation and Development Council, Inc.
CNF	Clearwater National Forest
COE	Corps of Engineers
Council	Northwest Power and Conservation Council
CPI	Clearwater Pheasant Initiative
CRFMP	Columbia River Fish Management Plan
CRP	Conservation Reserve Program
CSP	Conservation Security Program
CWA	Clean Water Act
CWD	Coarse Woody Debris
EPA	Environmental Protection Agency
EQIP	Environmental Quality Incentive Program
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
FCRPS	Federal Columbia River Power System
FLEP	Forest Land Enhancement Program
FPA	Forest Practices Act
FRPP	Farm and Ranch Lands Protection Program
FSA	Farm Services Agency
FWS	Fish and Wildlife Service
GRP	Grassland Reserve Program
HIP	Habitat Improvement Program
I&E	Information and Education
IASCD	Idaho Association of Soil Conservation Districts
ICBEMP	Interior Columbia Basin Ecosystem Management Project
IDAPA	Idaho Administrative Procedures Act
IDEA	Idaho District Employees Association
IDEQ	Idaho Department of Environmental Quality

IDFG	Idaho Department of Fish and Game
IDL	Idaho Department of Lands
IDWR	Idaho Department of Water Resources
INFISH	Inland Fisheries
INPS	Idaho Native Plant Society
ISDA	Idaho State Department of Agriculture
ITD	Idaho Transportation Department
Latah SWCD	Latah Soil and Water Conservation District
LHTAC	Local Highway Technical Assistance Council
LIP	Landowner Incentive Program
LOD	Large Organic Debris
LSRCP	Lower Snake River Fish and Wildlife Compensation Plan
NACD	National Association of Conservation Districts
NLHD	North Latah Highway District
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NPT	Nez Perce Tribe
NRCS	Natural Resources Conservation Service
NWPCC	Northwest Power and Conservation Council
OSC	Idaho Office of Species Conservation
PAC	Policy Advisory Committee
PACFISH	Pacific Fisheries
PBAC	Palouse Basin Aquifer Committee
PCEI	Palouse Clearwater Environmental Institute
PCSRF	Pacific Coast Salmon Recovery Fund
PF	Pheasants Forever
PFW	Partners for Fish and Wildlife
PL	Public Law
PLT	Palouse Land Trust
PPF	Palouse Prairie Foundation
RCRDP	Resource Conservation and Rangeland Development Program
RHCA	Riparian Habitat Conservation Areas
ROCC	Resource of Community Concern
SCD	Soil Conservation District
SCS	Soil Conservation Service (former title of the NRCS)
SDWA	Safe Drinking Water Act
SIP	Stewardship Incentive Program
SLHD	South Latah Highway District
SPZ	Stream Protection Zones
STIP	State Transportation Improvement Program
SWC	Idaho Soil and Water Conservation Comission
SWCD	Soil and Water Conservation District
TMDL	Total Maximum Daily Load
TU	Trout Unlimited
UAA	Use Attainability Analysis
UI	University of Idaho

USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WAG	Watershed Advisory Group
WHIP	Wildlife Habitat Incentives Program
WHIP SI	Wildlife Habitat Incentives Program Salmon Initiative
WQPA	Water Quality Program for Agriculture
WRIA	Water Resource Inventory Area
WRP	Wetlands Reserve Program
WSU	Washington State University

Glossary

Adaptive Management	A cyclical process (plan, act, monitor, assess, repeat, or modify plan) in which managers treat actions as experiments, from which they improve management actions.
Anadromous	Migrating from salt to fresh water, as in the case of a fish moving from the sea into a river to spawn. Steelhead and salmon are examples of anadromous fish.
Cost-Share	Funds provided by an agency to private landowners to share in the cost of voluntary conservation.
Edge Effect	The effect exerted by adjoining communities on the population structure within the marginal zone (ecotone), which often contains a greater number of species and higher population densities of some species than either adjoining community.
Evolutionary Significant Unit (ESU)	A population (or group of populations) that is substantially reproductively isolated from other population units of the same species, and represents an important component in the evolutionary legacy of the species.
Forb	A broad-leaved herbaceous plant.
Herbaceous	Refers to a plant having non-woody stems and which die back annually.
Limiting Factor	Any environmental factor, or group of related factors, which exist at suboptimal level and thereby prevent an organism from reaching its full biotic potential.
Loess	A fine unconsolidated wind-blown sediment.
Pacific Fisheries	Federal land management guidelines designed to protect anadromous fish.
Snag	A standing, partly or completely dead tree, often missing a top or most of the smaller branches. Snags are used by a variety of wildlife species for several functions, including nesting sites, foraging, roosting, and signaling.
Special Status Species	Include any species which is listed, or proposed for listing, as threatened or endangered by the US Fish and Wildlife Service or National Oceanic and Atmospheric Agency Fisheries Service under the provisions of the Endangered Species Act; any species covered by the Migratory Bird Treaty; any species designated by the US Fish and Wildlife Services as a “candidate” or “listing” species or “sensitive” species; any species designated by the USDA Forest Service as “sensitive” species; or any species which is listed and protected by a

state agency in a category implying potential endangerment of extinction (aka species of concern or species-at-risk).

TMDL The Total Maximum Daily Load is a quantitative assessment of water quality problems and contributing pollutant sources. The TMDL specifies the amount of pollution reduction necessary to meet water quality standards, allocates the necessary pollutant limits among the contributing sources in the watershed, and provides a basis for taking actions needed to restore the waterbody.

Chapter 1: Latah Soil and Water Conservation District

The Latah Soil and Water Conservation District was the first conservation district established in Idaho.

History of the Latah Soil and Water Conservation District

The need for local citizen input into soil and water conservation activities resulted in the formation of the Latah Soil and Water Conservation District (Latah SWCD) and conservation districts throughout the United States and island territories. The Latah SWCD was formed in 1940.

In 1936, prior to the formation of the Latah SWCD, voluntary soil conservation associations were established in four communities in Latah County. On January 6, 1940 three petitions from various parts of Latah County were filed with the Idaho Soil Conservation Commission (SCC) (name changed to Idaho Soil and Water Conservation Commission/SWC effective July 1, 2010), requesting three separate districts. On January 30, 1940, a fourth petition was submitted covering all the lands previously included and was signed by the 203 Latah County landowners.

On February 13, 1940, a public hearing was held in Moscow. The result of the hearing was a unanimous assent for the formation of the Latah Soil Conservation District. A referendum held on March 16 passed and on April 25, Guy Kitch and Henry Bottjer were appointed as the first Latah SCD supervisors. A Certificate of Organization was issued on May 1, 1940 making the Latah SCD the first legal soil conservation district formed in Idaho. On June 15, 1940, an election was held making Ralph Naylor, Roy Emmerson, and King Ingle the first elected District supervisors, giving the Latah SCD Board five members.

In August 1964, the Latah SCD petitioned the State to change the organization's name from Latah Soil Conservation District to the current name, the Latah Soil and Water Conservation District. The change of the name was designed to reflect the Latah SWCD's work with not only soil but water resources as well. Also in 1964, the Latah SWCD, along with the Latah County Commissioners, co-sponsored the initial Idaho-Washington Resource Conservation and Development Council.

To the beginning: In the 1930's serious soil erosion problems were occurring throughout the nation. Congress, having seen the dust blowing past their office windows in our nation's capitol, acted at the urging of conservation leaders to form a Soil Erosion Service (later to be named the Soil Conservation Service, SCS) to fight the erosion menace occurring during the "dust bowl" era. The agency's first activity was to work with private land managers to design and implement demonstrations of successful practices for preventing soil erosion. In the first few years of operation the federal agents were not always welcomed on the land by the farmers and ranchers. It was envisioned by the United States Department of Agriculture (USDA) in the mid-1930's that the formation of local citizen boards would provide the much needed local input and information to the field staff of the SCS regarding local natural resource priorities and conservation practices that would work to prevent erosion. These local citizen boards were called soil conservation districts. Thus, the basis of conservation district plans, programs, and activities had its origins in the need for local input; this focus on local citizen input and involvement continues to the present.

Conservation District Law

District Law in Idaho

To get the local soil conservation district formation started, USDA developed a Model Conservation District Law designed for state legislatures to consider adopting as law to form state political subdivisions known as soil conservation districts. The model law also provided for a support agency to be formed to assist with district programs at the state agency level. The model law was sent to each state and has been amended and passed in all 50 states and the US island territories and protectorates. To date, there are approximately 3,000 conservation districts operating throughout the nation with citizen boards elected or nominated for appointment by their constituents.

The Idaho State Soil Conservation District Law begins with a statement of condition regarding the importance of controlling erosion. To quote, *"It is the determination of the state of Idaho that: (a) Forest lands, rangelands and agricultural lands maintained in a healthy condition are a legitimate land use contributing to the economic, social and environmental well-being of the state and its citizens…"* This importance to the people of the state of Idaho remains high today. While strides have been made in conservation work in Latah County and in Idaho, locally-led conservation activities are as important as ever in our history.

Conservation districts have often been labeled as "agricultural" entities. But in reality, conservation districts are multifaceted organizations with authorizing state legislation that specifically mentions the following roles for the local conservation district:

- Provide for the conservation of the soil and soil resources
- Control and prevention of soil erosion
- Prevention of floodwater and sediment damages
- Further the conservation, development, utilization, and disposal of water
- Preserve natural resources
- Prevent impairment of dams and reservoirs
- Assist in maintaining the navigability of rivers and harbors
- Preserve wildlife
- Protect the tax base
- Protect public lands
- Promote the health, safety, and general welfare of the people of this state

The legislation allows for a conservation district to work with local citizens to bring together a specific set of programs that will address the unique natural resource base in the local area. This can include any combination of soil, water, flooding, conservation, wildlife, and even public lands conservation work, as listed above.

Not a regulatory entity

Conservation districts are different from other natural resource agencies and entities because of their close working relationship with local citizens, in particular landowners and land users. Their unique position of not being a regulatory entity allows the conservation district staff and board members the opportunity to advocate on behalf of land managers needing assistance to voluntarily apply conservation practices on their lands. Conservation districts provide technical, financial and educational resources from a variety of sources to assist land managers with planning and installing conservation practices to meet the natural resource needs on their property.

Not only is the Idaho state legislation silent with regard to any regulatory authority for conservation districts, it reinforces the non-regulatory nature of the conservation district by including references to obtaining the consent of the landowner or obtaining the necessary rights of interests in such lands. The non-regulatory nature of conservation districts is further demonstrated by the section regarding consent of state agencies and owners of lands for control measures and works of improvement.

The authorizing legislation provides significant powers and authorities for the conservation district supervisors and the operation of the conservation district as a subdivision of the State of Idaho. Notably absent from this authorizing legislation is a formal funding mechanism for conservation districts to independently generate funding to provide the important technical, financial, and educational services and products for landowners within their districts. While other states have granted conservation districts taxing or special assessment authority, no such authority yet exists in Idaho. Examples of

western states with taxing and/or assessment authority are Washington, Oregon, and California. Conservation districts in Idaho must rely on a patchwork of funding mechanisms and sources to support even the most basic project and program operations.

Conservation District Structure

Conservation districts work through non-regulatory mechanisms to assist local landowners and land users with the identification of conservation practices that may be beneficial to the resource conservation objectives of the landowner and the public, as a whole. From those identified landowner needs, conservation districts may seek out available technical, financial and educational resources to meet their conservation needs. The focus on landowner needs through non-regulatory methods represents uniqueness in function when compared to regulatory local, state, and federal agencies.

Latah SWCD Structure

The Latah Soil and Water Conservation District (Latah SWCD) is made up of seven elected supervisors who serve staggered four-year terms.[1] Supervisors are elected by public ballot on general election day and serve without compensation. This election system provides an opportunity for local citizens to serve, provide leadership, and show commitment to the resource needs of citizens within the conservation district boundaries. The Latah SWCD also has three associate members who participate in activities and the decision-making processes, although they do not formally vote.

The Latah SWCD deals with requests for assistance on a priority basis determined by the Latah SWCD Board according to available resources, technical assistance, and feasibility. Public participation is a priority. In addition, the Latah SWCD maintains open channels of communication with the county and local governmental organizations, and confers with them regularly. Latah SWCD programs and policies comply with federal and state laws and regulations on nondiscrimination regarding race, color, gender, national origin, religion, age, disability, political beliefs and marital or familial status. The Latah SWCD is an equal opportunity employer.

The Board of Supervisors, with the aid of Latah SWCD staff, coordinates all of the activities and responsibilities of the Latah SWCD.

[1] The Idaho legislation that created conservation districts states: The governing body of the district shall consist of five (5) supervisors, elected or appointed as provided in this chapter. Elections shall be conducted pursuant to the provisions of this section and the uniform district election law, chapter 14, title 34, Idaho Code. If at any time the supervisors of a district deem it necessary, they may request permission from the state soil and water conservation copmmission to increase the number of supervisors to seven (7). Idaho Code 22-2721 (http://legislature.idaho.gov/idstat/Title22/T22CH27SECT22-2721.htm)

Latah SWCD Financing

While conservation districts are identified as the primary entities to provide natural resource conservation assistance to private landowners and land users, they lack the district-wide taxing authority most elected entities have to generate basic operational funds. The Latah SWCD is funded almost entirely by general contributions from Latah County, cities and general funds from the Idaho Legislature and project grants and contracts from federal and state entities.

The Latah SWCD generates operational funds through a four-phase funding process. The Latah SWCD's general operations budget is developed in the first three phases of the process.

Phase I – State of Idaho Base Funding

The State of Idaho provides each conservation district with $8,500 for their base of operations. If no additional funding was received from individual counties and/or cities, this would be the sum total of a conservation district's general operations budget.

Phase II – Local County/City Contributions

On an annual basis, conservation districts request funding support from the counties and cities within which they operate. For fiscal year 2013, districts throughout the State received $484,697.76 in local contributions (cash and services). Local funding per district ranged from $800 to $51,275.

For fiscal year 2013, Latah County provided $18,500 ($15,500 cash and $3,000 in-kind contribution) and the City of Moscow provided $2,500 in contributions to Latah SWCD.

Phase III – State of Idaho 2 to 1 Matching Funds

In addition to the $8,500 base of operations provided by the State of Idaho, the Legislature may allocate Phase III funding to conservation districts based on the level of Phase II county/city funding received by individual conservation districts. The Idaho Legislature may allocate Phase III funding, through the Idaho Soil and Water Conservation Commission (SWC), "in a sum not to exceed twice the amount of funds and services allocated to each district by the county commissioners in the previous fiscal year and funds or services allocated to each district by authorized officials or other local units of government or organizations in the previous fiscal year, provided that any such allocation by the commission shall not exceed fifty thousand dollars ($50,000) to any one (1) district in a fiscal year" (Idaho Code § 22-2727).

For fiscal year 2013, of the $484,697.76 received in local funding, the SWC (with input from a partner workgroup) approved $619,700 to be eligible for 2 to 1 match funding. After accounting for the $50,000 limit rule, funding a full 2 to 1 matching ratio would have required $829,374.20. In actuality the Legislature provided $619,700 in match funding (a difference of $209,674.20). Funds allocated as match represented a 1.28 to 1 funding ratio for fiscal year 2013.

In fiscal year 2013, five districts achieved maximum match funding of $50,000.

In fiscal year 2013, the State of Idaho provided $28,731.08 in matching funds to the Latah SWCD (compared to $30,500.25 in fiscal year 2012).

Phase IV – District Independent Requests for Funding

When a conservation district has developed a sufficient general operations budget through a combination of Phases I, II and III funding, a conservation district will have the financial capacity to recruit and retain professional staff. Staff can then independently seek Phase IV funding from outside sources to begin developing programs, through grants and contracts, to deliver conservation programs directly to private landowners and land users within their conservation district boundaries. As Phase II and III funding increases, Phase IV funding should increase proportionately.

The Latah SWCD currently receives general operations funding from Latah County, the City of Moscow, and the State of Idaho. Latah SWCD supervisors and the District Manager meet with the Latah County Board of County Commissioners (BOCC) once a year to discuss the Latah SWCD's activities, accomplishments, and goals; and to request Latah County Phase II funding support. The Latah SWCD has made similar presentations to City of Moscow staff and elected officials.

In fiscal year 2013, Phase I funding from the State of Idaho to the Latah SWCD was $8,500. Phase II local contributions to the Latah SWCD totaled $21,000, with Latah County contributing $18,500 and the City of Moscow contributing $2,500. In Phase III, the State of Idaho allocated $28,731.08 to match the Phase II contribution from Latah County and the City of Moscow. The cumulative funding from these three phases totaled $58,231.08 and formed the base of Latah SWCD's fiscal year 2013 general operations budget.

Over the past several years, the Latah SWCD has used the funding allocated to the general operations budget to solicit Phase IV funding through a multitude of grants and contracts from various federal, state, and private entities. These Phase IV funds have been generated to undertake the

implementation of best management practices and comprehensive resource planning efforts.

So far in fiscal year 2014, the Latah SWCD has used the $58,231.08 general operations budget from Phases I, II and III to generate over $1.6 million in Phase IV funding from various grants and contracts. Since fiscal year 1999, the Latah SWCD has been awarded over $15.6 million in Phase IV funding.

Chapter 2: Overview of Latah County

In 1870, pioneers attracted by deposits of gold, silver, mica and opals began moving to the area we know as Latah County. Sawmills were built and in 1872, the first mail route was established between Moscow and Lewiston. The first railroad, the Northern Pacific, reached Moscow in 1885. Agriculture was the main occupation in the area for many of the first settlers.

In 1886, the Territorial Legislature passed an act to create La Tah (later Latah). "Latah" is a combination of two area Native American names. The first part, La, is the first syllable of La Koh, meaning "pine trees" and the second part, Tah, is the first syllable of Tah-lo, derived from "stone from which are made pestles." Thus, Latah means the pine and pestle place. Latah was originally part of Nez Perce County.[2]

[2] Information derived from http://www.latah.id.us/history.php

Latah County: Area

Latah County is approximately 1,077 square miles, or 697,000 acres in area, of which over 90% is devoted to agriculture and forest land uses. The population of Latah County is approximately 35,000. The county is located in the northern Idaho panhandle; to the immediate west lies Whitman County, Washington. These counties are referred to as "the Palouse."

The Latah SWCD's area of responsibility encompasses all of Latah County and includes the Palouse and Potlatch River watersheds and their related tributaries (Figure 1). The communities of Kendrick, Juliaetta, Troy, Deary, and Bovill are located in the Potlatch River drainage basin. Genesee is centered in the Cow Creek valley of the Palouse River. The City of Moscow is located in the Paradise Creek/South Fork of the Palouse River drainage basin. The communities of Onaway, Potlatch, Princeton, and Harvard are located in the North Fork of the Palouse River drainage. In Washington State, along the western boundary of Latah County, there are several communities whose residents own land within Latah County. Pullman, Washington is the closest town to the west of the Latah County boundary.

Private individuals own approximately 77% of land in Latah County, with additional acreage under the jurisdiction of federal, state, and county governments (Figure 2).

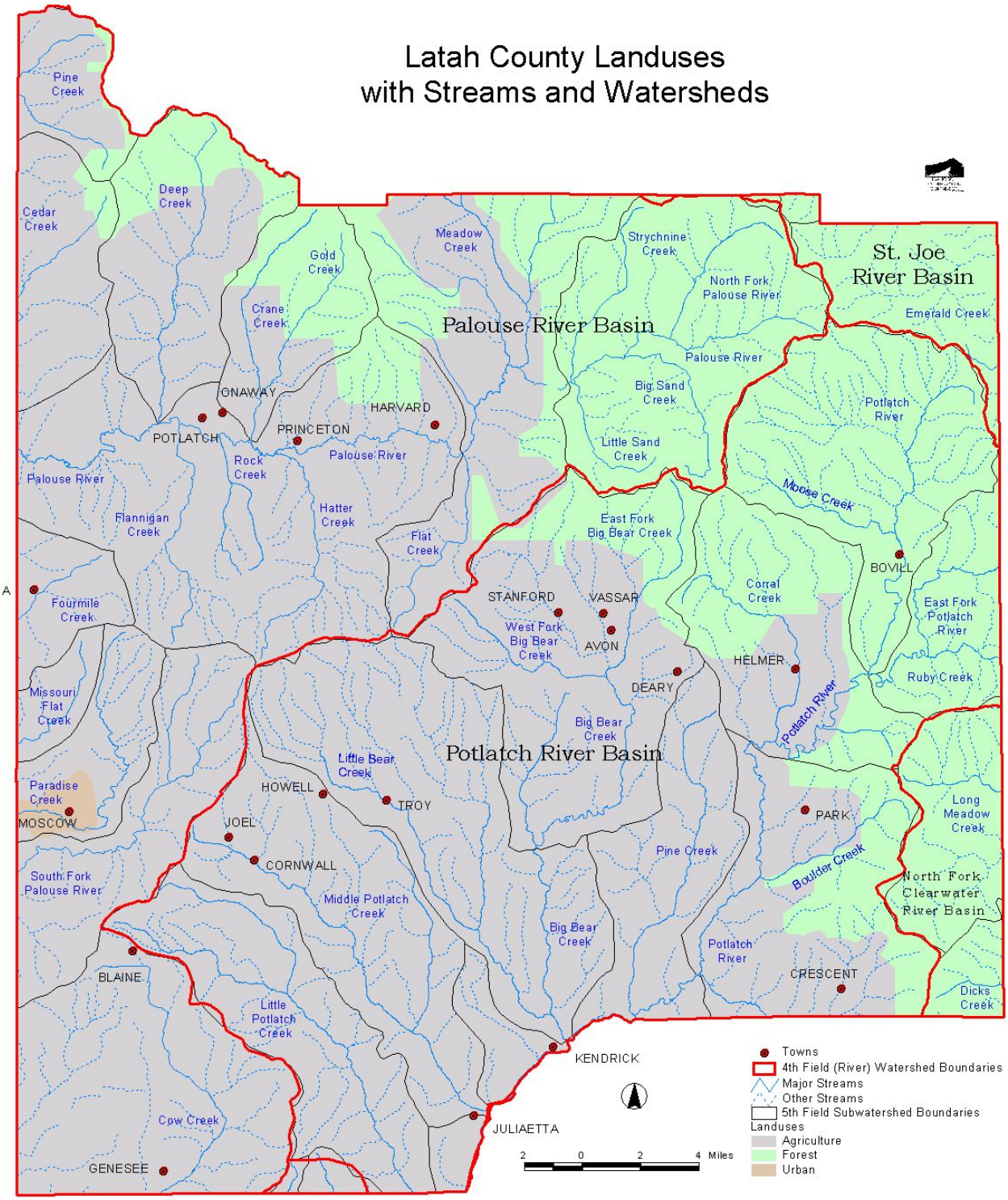

Figure 1 Latah County land uses with streams and watersheds.

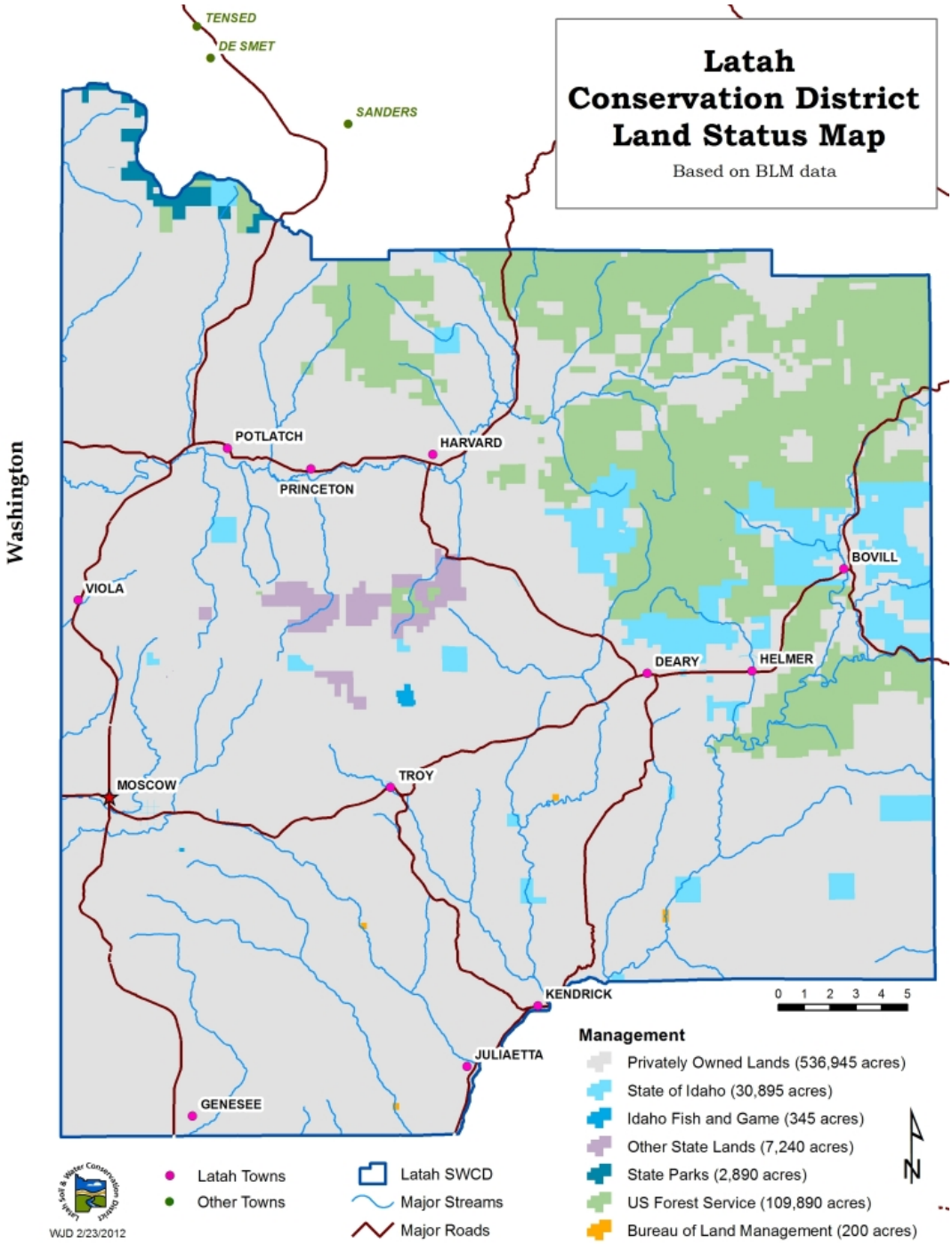

Figure 2 Latah County land ownership.

The elevation of Latah County varies from approximately 800 feet above sea level at Juliaetta to 5,300 feet above sea level in the mountainous eastern region. Topography in the county grades from flatter prairie lands and rolling hills in the west to more rugged steeply-sloped mountains and canyons to the east (Figure 3).

Topography and Climate

Rainfall varies between 20 inches annually in lower elevations and 34 inches in the forested areas. Total annual precipitation averages 24 inches, of which 35% falls in the April to September growing season. Annual seasonal snowfall averages 47 inches. July and August are the warmest months, with an average high of 80°F. Winter temperatures usually stay near or below the freezing level. According to temperature and precipitation data recorded at Moscow, the growing season length (number of days with daily minimum temperature >28°F) averages 123 days.

Long-term trends in precipitation and snowfall in the Potlatch River watershed were observed by Teasdale and Barber (2005).[3] Reported precipitation has apparently increased over the last century within the late winter and spring period (December through March). Increases ranging from 21 to 32 percent were observed, with late winter precipitation increasing more than early winter precipitation. Snowfall reported for December has increased 89 percent (from 1900 to 2000), while February and March snowfall has decreased by 6 and 7 percent, respectively.

Precipitation patterns in the region appear to be shifting to a wetter, rainfall-dominated regime in late winter and spring, possibly increasing the number and severity of rain-on-frozen-ground events. These trend observations by Teasdale and Barber (2005) were made using the data collected at the University of Idaho (UI) Plant Science Farm. There are no long-term climate stations within the Potlatch River watershed; therefore, their work depended on the nearest climate and weather monitoring stations, outside Moscow.

Geology

The mountain soils of Latah County are generally shallow, underlain by either granite or ancient sedimentary bedrock. The granite soils occur in the Moscow Mountain Range and the Paradise Ridge areas. The soils with sedimentary bedrock are located on the northern and eastern edges of the County. Long-time geologic erosion has prevented natural build-up of deep soils. Some areas have accumulations of a foot or more of volcanic ash. These soils have a high production potential for woodland products. However, the light fluffy nature of this volcanic ash leads to erosive conditions when these soils are disturbed.

[3] Teasdale, Gregg N. and Michael E. Barber. 2005. Aerial Assessment of Ephemeral Gully Erosion and Channel Erosion in the Lower Potlatch River Basin. Research Report. State of Washington Water Research Center, Pullman, WA.

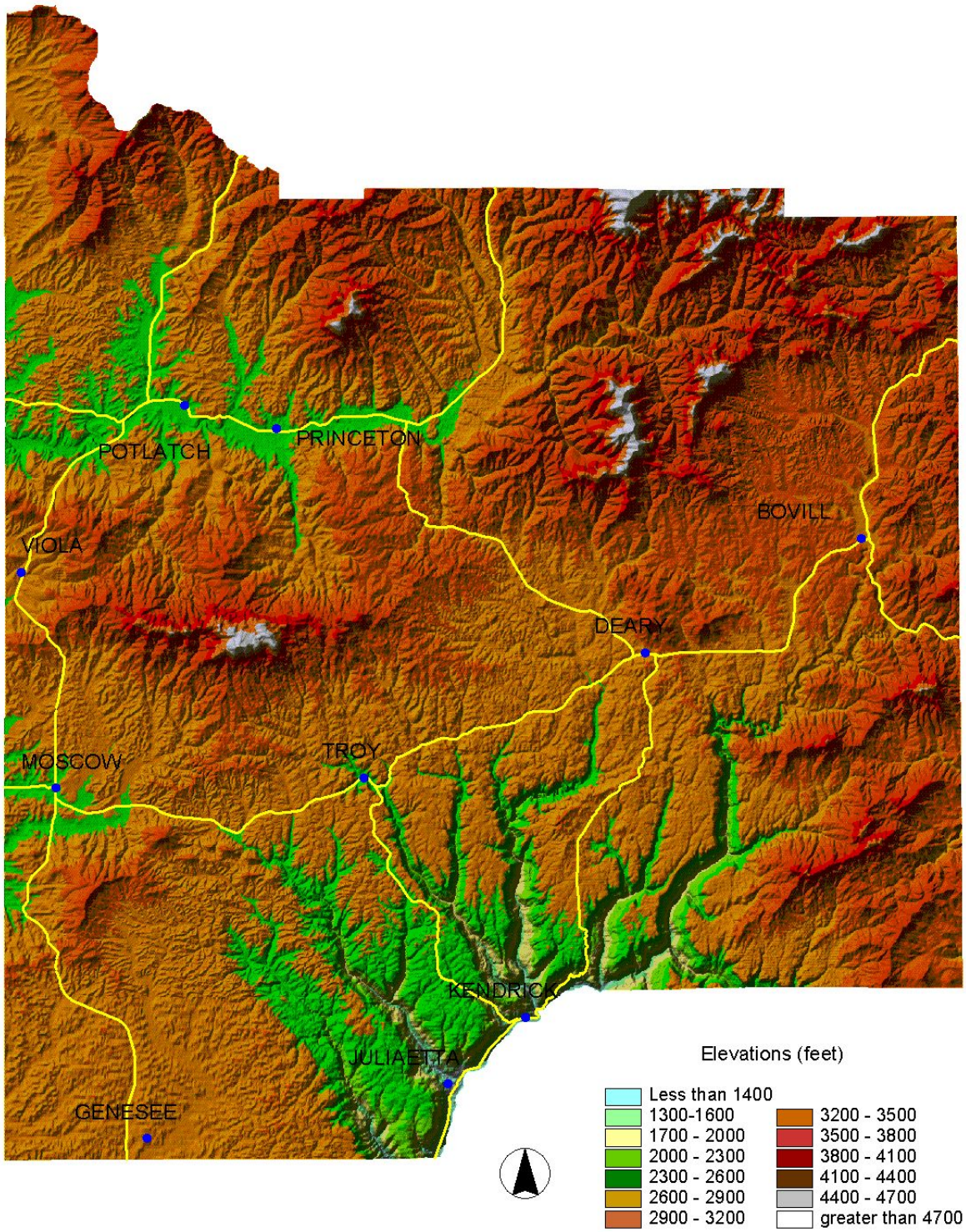

Figure 3 Elevation map of Latah County.

Deep canyon areas exist along the Potlatch River and its tributaries. Due to the steep terrain, soils are quite shallow. The soils of south-facing slopes are, in general, not as deep as those on north slopes, and generally support grass-dominated vegetation. The north slopes are cooler and support fairly thick stands of conifers, mostly Douglas-fir.

Soils

The majority of the soils in Latah County[4] consist of rolling uplands of wind-deposited soils, called loess. The underlying material is 25 million-year-old Columbia River basalt. The dune-like form of the rolling Palouse hills, with steep north slopes, was created by periods of wind-blown deposits of silt (loess), followed by periods of vegetative growth. The loess material was transported to the region from central Washington, where the silt was deposited following several flooding and glacial retreat events. All Latah County soils show effects from these ancient dust storms. However, on the steeper mountain slopes, this material eroded away quite quickly and moved down in elevation to form bottom land soils.

Soils of the western and southern parts of the county were influenced by native grassland vegetation. The first two feet of these soils are dark colored due to decayed grass roots. This highly organic residue makes these soils highly productive for cultivated dryland crop production. Ridges and knobs of lighter, tan-colored soils are found throughout this region, indicative of loss of organic matter through severe erosion.

A transition from grasslands to coniferous forests occurs as the elevation and precipitation increase to the east and north of the Palouse. The soils developed under these climatic and vegetative influences lack the high organic residues and are of a lighter color. Much of this area has been cleared of trees and converted to farmland. Compared to the deeper soils in the southwestern part of Latah County, these previously forested soils are less stable, are usually on steeper slopes, and are considerably more susceptible to erosion from snowmelt runoff and summer storms. Throughout the uplands are areas of bottom land soils formed of water-transported materials from various sources. The bottom lands are subject to frequent periods of flooding, creating new channels and plugging old ones. A large variation of soils exists in these bottom lands. For the most part, these areas are somewhat poorly drained and are subject to frosts caused by cold air drainage.

[4] The Latah County soil survey is located at http://soildatamart.nrcs.usda.gov/Manuscripts/ID610/0/id610_text.pdf

Latah County: Watersheds

Watersheds

There are four principal watersheds within Latah County (Figure 1). The Palouse River basin encompasses the northern and western portions of the county. Major tributaries in this basin include the Palouse River, Paradise Creek, South Fork Palouse River, and Cow Creek, which all flow toward the main Palouse River and on to the Snake River in Washington. The Potlatch River basin is found in the southern half of the county and includes streams that flow south toward the Clearwater River. The Potlatch River basin includes the Potlatch River, and tributaries Big and Little Bear Creeks, Middle and Little Potlatch Creeks, Corral Creek, and Pine Creek.

The St. Joe River basin is in the forested northeastern corner of the county. This headwater area drains toward the St. Joe River and on to Lake Coeur d'Alene. The southeastern corner of the county houses the North Fork Clearwater River basin. These headwater streams drain to Dworshak Reservoir, located in the North Fork Clearwater River watershed.

Latah County: Land Use

Land Use

Latah County ranks 10th among Idaho counties in population and 29th in area. Land cover in Latah County includes primarily forest land (48%), non-irrigated cropland (31%), and shrub/rangeland (18%). Remaining 3% is urban or wetland (Figure 4).

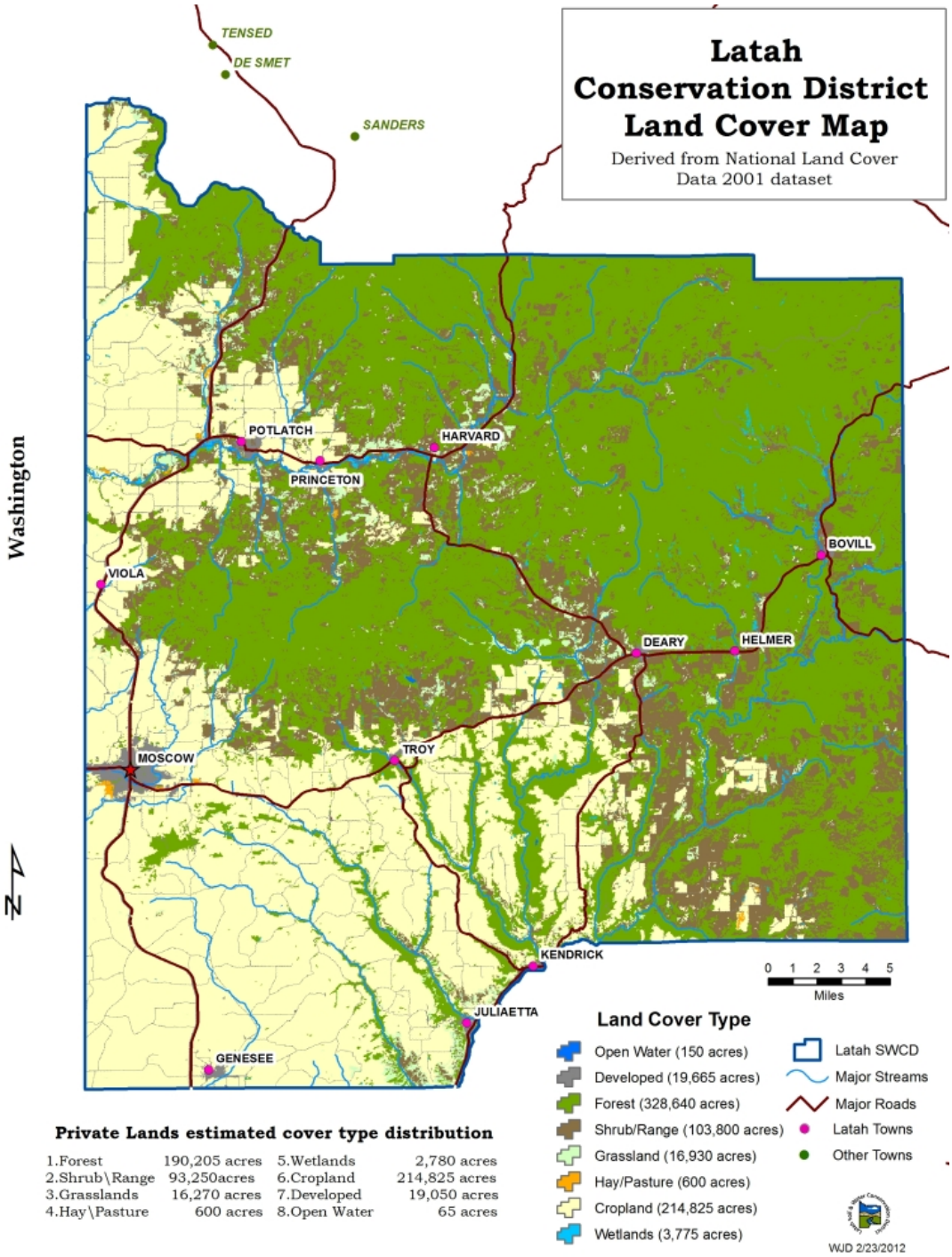

Figure 4 Distribution of land cover for all of Latah County and for private land within Latah County (see text in lower left of figure).

Latah County: Transportation and Infrastructure

Transportation and Infrastructure

Primary access to and from Latah County is provided by US Highway 95. This is the primary north-south route for Idaho transportation networks, as it is the only road providing access between northern and southern Idaho. This is a two- and four-lane paved road with turnouts. State highways 3, 6, 8, and 9 provide access to and between the smaller, more remote towns and recreation areas in the central and eastern parts of Latah County.

Secondary county roads, many of which are gravel, provide access to the adjoining areas within the county. Many of the roads in Latah County were originally built to facilitate logging and farming activities. As such, many of these roads can support timber harvesting equipment, logging trucks, farming equipment, and fire fighting equipment. Need for access to new home sites and new residential subdivisions has increased secondary road construction within the county in the last two decades. The county road system is maintained by the North Latah Highway District and the South Latah Highway District. A variety of trails and closed roads are found throughout the region.

High tension power lines also cross Latah County to supply electricity to the communities of Latah, Benewah, Nez Perce, Clearwater, and Shoshone counties, as well as nearby neighboring communities in Washington State.

Latah County: Demographics

Demographics

Latah County has a current population over 37,000, of which 22,000 live in the City of Moscow. This number fluctuates with attendance at the University of Idaho (UI), which has an average annual enrollment of approximately 13,000 students. The county population increased 6.6 percent from 2000 to 2010.[5]. In 2010, nearly 94 percent of the county population was Caucasian, with approximately 2.1 percent Asian, 0.8 percent African American, and 0.6 percent American Indian and Alaska Native persons.

There are approximately 34.6 persons per square mile within Latah County, which has a land area of 1,077 square miles, though the majority reside in and near Moscow. There are about 13,000 households in the county. A summary of the educational level achieved by residents of Latah County is 91 percent high school graduates, with 41 percent possessing a Bachelor's degree or higher.

[5] Information derived from http://quickfacts.census.gov/qfd/states/16/16057.html

Latah County: Economics

The primary sources of income in Latah County are agriculture, forestry, health care and employment with the University of Idaho and Washington State University. Moscow is the urban, political, and commercial center of the county. The communities of Juliaetta, Kendrick, Troy, Deary, Genesee, and Potlatch have small business districts. The communities of Onaway and Bovill have very limited commercial development. Some of these small, incorporated cities are currently experiencing a decline in population. Many residents are no longer able to find substantial work and are moving to larger cities. The unincorporated communities in the county include Avon, Cedar Creek, Harvard, Helmer, Howell, Joel, Princeton, and Viola.

Economics

The county's major employers include the UI and Washington State University (WSU). Other sources of employment include the Moscow/Pullman Daily News; Latah County; City of Moscow; State of Idaho; federal government; school districts; Avista; Gritman Medical Center; Bennett Lumber Products; Wal-Mart; Winco; merchants of the Palouse Empire and Eastside Marketplace malls, and independent farming and logging operations.

Much of the county's economic future depends upon the availability and sustainability of natural resources. The natural resource industry accounts for approximately 6 percent of the employment within Latah County. A significant proportion of the residents of Latah County rely, either directly or indirectly, on agriculture and/or timber production for their livelihood. Winter wheat is the major dryland crop, followed by peas and lentils, spring wheat and barley, canola and rapeseed, hay, and grass seed. There are numerous cattle operations throughout the county. In 2007, the market value of sales of crops produced in Latah County totaled approximately $57.4 million and sales from livestock totaled about $3.4 million.[6]

The median household income reported in the county is $35,518 (reported in 2003), and the per capita income is $16,690. Nearly 59 percent of the population of Latah County are home owners, with a median house value of $126,400 (2000 census).[7].

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[6] Information retrieved from http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Idaho/cp16057.pdf

[7] Data derived from Population Estimates, 2000 Census of Population and Housing, 1999 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority- and Women-Owned Business, Building Permits, Consolidated Federal Funds Report, and 1997 Census of Governments: retrieved from internet website http://quickfacts.census.gov/qfd/states/16/16057.html

Chapter 3: Resources within Latah County

European-American settlement of Latah County began with prospectors, who arrived in the 1860's, drawn by the discovery of precious metals in streams just east of the forest/prairie margin. By the end of the 1860's, settlers had claimed creek bottom lands around Paradise Valley (near present-day Moscow), Union Flat Creek, and the upper Palouse River.

Cultural Resources

Typical archeological sites within Latah County include settlements, lithic scatters, village sites, rock art, and hunting blinds. The Nez Perce peoples had a network of trails throughout the area, which included trade routes, as well as gathering and hunting routes. Some of the trails were later used by homesteaders and miners. Traditional cultural properties are also present within Latah County; these cultural resources are significant places or settings that do not necessarily have any associated material remains. For example, a traditional cultural property can be a mountain, river, or natural feature (i.e. rock formation, meadow, etc.). The integrity of some cultural resources has been impacted by past logging activities, road building, mining, and grazing.

Cultural Resources

The National Park Service (NPS) maintains the National Register of Historical Places as a repository of information on significant cultural locales. These may be buildings, roads or trails, places where historical events took place, or other noteworthy sites. The National Park Service lists 40 significant cultural resource sites in Latah County; among those sites are the White Spring Ranch in Genesee, the Nob Hill Historic District in Potlatch, and the Hotel Bovill in Bovill.[8]

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of proposed activities on historic properties, and to provide state historic preservation officers, tribal historic preservation officers, and as necessary, the Advisory Council on Historic Preservation, a reasonable opportunity to review and comment on these actions. Cultural resource impacts are qualitatively assessed through a presence/absence determination of significant cultural resources. If necessary, mitigation measures may be required during potential disturbing activities such as timber harvest, prescribed fire, road construction, flood abatement, and other activities.

[8] Information about these and the other Latah County historic sites can be found at the National Register database on the NPS website, http://www.nr.nps.gov/

Agricultural Lands

There are approximately 1,100 farms in Latah County encompassing over 340,000 acres.[9]. The number of farms has increased by 24 percent since 2002, while the acres of land in farms have increased by 1 percent. The average size of farm in the county is 312 acres, down 18 percent since 2002.

Soft white wheat, spring wheat, barley, lentils, peas, oats, canola, and grass seed are the major crops grown across the county. All wheat grown in the county (reported in the 2007 Census of Agriculture) amounted to over 91,834 acres; acres grown in lentils equaled over 18,475 acres; forage acres, including hay and silage, accounted for 19,676 acres; dry edible peas grown amounted to 12,892; and barley equated to 11,659 acres. Approximately 10 percent of the farmable cropland is currently enrolled in the USDA Conservation Reserve Program (CRP), in which farm land is left idle for a period of at least 10 years while being maintained in a permanent cover crop of grass, grass and forbs, or shrubs and trees.

According to the 2007 Census of Agriculture, there were over 6,843 cattle and calves raised in Latah County; 3,233 sheep and lambs; and 1,843 horses.

The Palouse region, including Latah County, has been reported to have had one of the highest soil erosion rates in the country.[10] Breaking out the original deep-rooted cover of perennial grasses and forbs left the soil vulnerable to erosion by wind and water. Farming practices of the late 19th through the mid-twentieth century exacerbated these erosion problems. Summer fallow left the soils with poor surface protection during the winter; straw and pea crop residues were burned off, leaving the soil with less organic binding material; and heavy, aggressive farming equipment pulverized the soil, leaving it more vulnerable to wind and water erosion. Past high levels of erosion had multiple effects, including reduced water quality and lowered soil productivity. As topsoil eroded away, less fertile subsoil remained, and more fertilizer has been required to achieve the same crop yields.

Erosion measurements and control efforts began in the early 1930's. Soil loss by water erosion in the Palouse River basin from 1939 to 1972 was severe in the heavily farmed areas, where soil losses of 15-18 tons per acre per year were documented. Erosion control practices instituted since the late

[9] Information retrieved from http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Idaho/cp16057.pdf

[10] Sisk, T.D. 1998. Perspectives on the land-use history of North America: a context for understanding our changing environment. U.S. Geological Survey, Biological Resources Division, Biological Science Report USGS/BRD/BSR 1998-0003 (Revised September 1999). Internet website at http://biology.usgs.gov/luhna/chap10.html

1970s have reduced erosion from cropland in the Palouse River Basin by at least 10 percent.[11] Through conservation efforts over the last 30 years, erosion has been reduced significantly. Reduced-tillage and no-tillage methods, used in combination with rotations of crop varieties and retention of more crop residues, have reduced erosion potential of Latah County's agricultural lands.

Forest Lands

Latah County's forest resources have been a major economic factor for more than 100 years.[12] Pioneer farmers began by clearing forested land on the eastern side of the county and using the logs and lumber as building materials. Around the turn of the century the lumber industry began extensive operation in the northern, northeastern, and eastern parts of the county. There are an estimated 402,300 acres of forest land in Latah County, accounting for over one-half of the county's acreage. Approximately 115,000 forest land acres are privately owned; the remainder are under federal and state ownership. Today, about 1,400 individuals and corporations own the private forest lands in Latah County.

Latah County soils and climate are conducive to growing trees. According to the Idaho soil survey,[13] the soils of the northern portion of the county are generally classified as Minaloosa-Huckleberry. These soils, found in the Latah County portion of the St. Joe National Forest, are very deep to moderately deep, well drained, formed in loess, in volcanic ash, and in residuum derived from shale and quartzite. The forest communities on these soils are dominated by grand fir and Douglas-fir.

Soils found along the granitic Moscow Mountain area (referred to as the Palouse Range) near the north-central portion of Latah County are mapped as Vassar-Uvi. These soils are well drained, formed in volcanic ash, in loess, and in granitic residuum, and support a western red cedar, grand fir, and western white pine community.

The southeastern, canyon portion of Latah County is predominantly made up of the Klickson-Bluespring soil map units. This portion of the Clearwater National Forest has soils that are very deep to moderately deep, well drained, and formed in colluvium. The soil survey reports the forest community on these soils as mainly Douglas-fir and ponderosa pine.

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[11] Ebbert, James C., and Roe, R. Dennis, 1998, Soil erosion in the Palouse River Basin: Indications of improvement: U.S. Geological Survey Fact Sheet FS-069-98, on line at URL http://wa.water.usgs.gov/pubs/fs/fs069-98/

[12] Latah County Wildland Fire Mitigation Plan. April 2005. Idaho Department of Lands. Available online at: http://www.idl.idaho.gov/nat_fire_plan/county_wui_plans/latah/latahplan.htm

[13] The Latah County soil survey is located at http://soildatamart.nrcs.usda.gov/Manuscripts/ID610/0/id610_text.pdf

According to the Latah County Wildland Fire Mitigation Plan[14] a century of wildland fire suppression, coupled with past land-use practices (primarily timber harvest and farming), has altered plant community succession, resulting in dramatic shifts in stocking, species composition, and fire regimes. Consequently, forests in Latah County have become more susceptible to large-scale, high-intensity fires that pose a threat to life, property, and natural resources. High-intensity, stand-replacing fires have the potential to seriously damage soils and native vegetation. A shift in plant species composition, due to invasion and spread of invasive herbaceous species, has also influenced fire regime and frequency.

Generally, the plant community and structure within the forest lands of Latah County are best described as a combination of dry, semi-mesic forests in the southern portions of the county, and mesic forest types at the northern and eastern boundaries.

Often, the drier, semi-mesic sites consisted of open, park-like stands of fire-adapted ponderosa pine, western larch, and Douglas-fir; as a result of fire suppression and ecological succession, many of these formerly open stands are now dense and decadent stands of fire intolerant species such as grand fir. These sites are now more susceptible to high-intensity wildland fire.

The more mesic sites are consisted of western white pine, Douglas-fir, western larch, grand fir, with some ponderosa pine on the southerly slopes and ridgetops. Climax species for these sites are western hemlock and western red cedar. These sites typically experienced a longer fire interval that was stand-replacing in nature. The conditions of these stands have declined at a faster than historic rate due to high mortality of western white pine caused by the introduction of blister rust. This ongoing mortality, coupled with insects and diseases affecting the other species in the community, has caused fuel loads to increase beyond previously natural accumulations.

In some dry meadows and grassland habitats, a shift in fire regimes has resulted in changes in ecological succession patterns, such as accelerated encroachment of trees and shrubs.

[14] The Latah County Wildland Fire Mitigation Plan is located at: http://www.idl.idaho.gov/nat_fire_plan/county_wui_plans/latah/latahplan.htm.

Rangelands and Grazing Lands

About 196,000 acres of grazing land is found in Latah County.[15] About five percent of the agricultural income in the county is from the sale of livestock products. Nearly 15,000 acres is referred to as rangeland, while 181,000 acres is grazable wood land.

Rangeland is found primarily on the south-facing slopes in the canyons adjacent to the lower portions of the Potlatch River and its tributaries. The natural vegetation on much of the rangeland of Latah County has been largely depleted by continuous heavy use early in spring since the 1880's. Much of the original bluebunch wheatgrass and Idaho fescue has been replaced by annual brome grasses and sod-forming bluegrass.

Grazable wood lands are found in forested areas where timber harvest, fire, or other disturbance has opened or maintained the forest canopy in a sufficiently open condition to allow the production of understory vegetation. The amount of forage produced in the grazable wood land areas depends mainly on the amount of light that reaches the forest floor. After logging or fire, there is a large increase in the production of understory vegetation for a number of years. As the canopy closes, understory production decreases. In many forested areas, where fire suppression and ecological succession have lead to over-stocking and closed canopy, only sparse growth occurs in the understory.

Rangelands

Cow and calf operations are the primary type of cattle production, although some calves are held over or are purchased to be sold as yearlings. The average size of ranches is about 1,000 acres. Typically, there is a winter feeding period of five or six months, during which the cattle are kept in winter feeding areas. Feed for winter is usually produced on farms. Those few livestock operations that have canyon rangeland available can shorten the winter feeding period to three or four months because these warmer, dryer sites have forage available earlier in the year than is typical in the grazed wood lands. The grazing season begins early in April on the rangeland and lasts until mid-December. Grazing on the forested land begins in mid-May and lasts until late in October. Most livestock spend summer and fall on forested range. Calving usually occurs from late in January until early in March.

[15] Latah County Wildland Fire Mitigation Plan. April 2005. Idaho Department of Lands. Available online at: http://www.idl.idaho.gov/nat_fire_plan/county_wui_plans/latah/latahplan.htm

Water Resources

The major public uses of water in Latah County are municipal requirements and recreational uses. Since crop production is accomplished with normal annual rainfall, water is not stored for large-scale irrigation in Latah County.

Ground Water

Ground water is the sole source of water for the cities of Pullman and Moscow, the University of Idaho (UI), and Washington State University (WSU), and people and industry in the surrounding rural areas. Ground water in the Palouse Basin is pumped from aquifers located primarily in basalt. The primary drinking water source is a deeper basalt aquifer referred to as the Grande Ronde; while a shallower basalt aquifer, the Wanapum, provides limited water for the cities and universities, but is the primary water supply for rural residents. [16]

Since ground water development began in the late 1890's, ground water use has steadily increased, while the basalt aquifers in the Palouse Basin have experienced a drop in water level. Based on the continually falling ground water level and recent findings that ground water recharge is less than previously thought, it appears that the entities are pumping more water than is being recharged naturally to the deeper aquifer. This possibility has resulted in heightened concern among area residents and elected officials, leading to a sense of urgency to develop methods to increase recharge and stop the fall in the water table. Efforts are underway to reduce ground water pumpage through water conservation, exploration into increased recharge methods, and the use of wastewater effluent to supplant current landscape irrigation and other nonpotable demands for the deep aquifer water. Since issues such as basin extent, recharge and discharge, and interconnection between aquifers are not known or accurately documented, the questions are not well understood and development of solutions is difficult.

Surface Water: the Palouse River

There are two principal surface water basins within Latah County—the Palouse River and the Potlatch River. The Palouse River flows approximately 29 miles from its headwaters near the Hoodoo Mountains to the Idaho/Washington state line. In the State of Washington, the Palouse River flows another 110 miles before reaching the Columbia River. The United States Geological Service (USGS) has maintained a gauge on the Palouse River, located two miles west of the town of Potlatch.[17] The periods of record are from October 1914 through September 1919, and from December 1966 through the current year. The streams in this basin have a pattern of low flows during the late summer and early fall months, and high flows in the spring and early summer months. The peak discharge is

[16] Geological and Hydrogeological References: Palouse Region.Compiled by: John Bush, Steve Gill, Christian Petrich and Jack Pierce. Palouse Basin Aquifer Committee University of Idaho, Moscow, ID. PBAC Technical Report 99-02 August 1999.

[17] Stream gauge height and discharge recordings available at website: http://waterdata.usgs.gov/id/nwis/uv?13345000

typically in late March, April, or early May. A peak discharge of 14,600 cubic feet per second (cfs) was recorded on the Palouse River on February 9, 1996, while a minimum flow of 0.09 cfs was recorded on September 24, 1973. Several streams in the Palouse River watershed are intermittent from their source to the mouth; some streams begin as perennial streams and then become intermittent, while others are completely perennial streams.

In general, the hydrology of the streams in the upper Palouse River watershed are controlled by snowmelt and ground water while the hydrology of the streams running through agricultural land in the lower Palouse River Subbasin are controlled by snowmelt and precipitation events. Over the past century it is likely that the hydrology of the Palouse River has been altered due to changes in land use.

Surface Water: the Potlatch River

Roughly 1,900 miles of tributary streams feed the Potlatch River, which is approximately 56 miles long. The stream receives most of its flow from rain and snowmelt in the winter and spring. A USGS gauging station near the mouth of the Potlatch River was returned to operation in August 2003. The station continues to collect real-time data including gauge height and discharge. [18] A USGS gauging station at Kendrick recorded stream gauge height and discharge of the Potlatch River from 1945-1960. Other USGS stations have been intermittently in place throughout the Potlatch watershed, including the East Fork of the Potlatch River below Mallory Creek near Bovill (1959 to 1960) and on the East Fork of the Potlatch River near Bovill (1959 to 1971).

The majority (over 95 percent) of the annual stream flow in the Potlatch River drainage occurs from December through June. On average, the February through May period accounts for 75 percent of the annual stream flow, with March and April the months of peak discharge. During the winter (November through March) an intermittent snowpack covers parts of the watershed. Rain accompanied by warm chinook winds is a common occurrence in the winter and early spring, which often results in high and rapid runoff, due to rain-on-snow events. The majority of the maximum daily precipitation events for each year occurs in November, December, or January and range from 1 to 2 inches. However, localized, high-intensity rainfall may occur at any time of the year, producing high and rapid runoff. Precipitation events that exceed 2 inches a day in the watershed are not unusual.

Flow regimes were estimated for each of the streams evaluated in the Potlatch River Subbasin Assessment and TMDLs.[19] This report describes the February 1996 rain-on-snow event that caused widespread flooding in the lower Clearwater River Basin. The report cites research that documents

[18] Stream gauge height and discharge recordings available at website: http://waterdata.usgs.gov/id/nwis/uv?13341570

[19] The Potlatch River Subbasin Assessment and Total Maximum Daily Load document can be located at: http://www.deq.idaho.gov/water/data_reports/surface_water/tmdls/potlatch_river/potlatch_river.cfm

high-runoff, rain-on-snow events have a return rate of approximately 15 years, with previous large events recorded in 1919, 1933, 1948, 1964, and 1974.

The Potlatch River hydrograph has been altered by timber, agriculture, mining, and urban land uses, all of which have resulted in changes to vegetative cover, soil compaction, channel morphology, and storage capacity. The current hydrograph reflects a "flashy" system where runoff occurs quickly. Instantaneous discharges of 8,000 cfs in winter and early spring followed by late summer flows less than 10 cfs are not uncommon.

Forest land streams of the upper elevations of the Potlatch River watershed are characterized by low gradients, dense canopy cover, meadow connectivity, stable banks, and small substrate composition. Riparian systems within the meadows of the forest zone were often altered and degraded by railroad construction and logging in the late 19th and early 20th centuries. Low gradients, incised channels, limited riparian vegetation, small substrate composition, and a flashy hydrograph characterize upland streams within the agricultural area of the Potlatch River watershed. The canyons located lower in the drainage are characterized by steep/timbered slopes and shallow soils. Canyons are deeply incised due to the basalt bedrock composition. The canyon streams are characterized by high gradients, large substrate size, riffle/pocketwater habitat types, and a flashy hydrograph.

In 1987, Congress amended the Federal Clean Water Act and renamed it the Water Quality Act. Section 303(d)/303(b) of the amended Water Quality Act requires each state to complete a statewide water quality assessment and develop a management program for controlling nonpoint source pollution affecting both surface water and groundwater.[20]

Surface Water: General

Nonpoint source pollution includes runoff from agricultural lands, mining operations, logging activities, construction sites, and city streets. These sources are referred to as nonpoint because they cannot be traced to a specific identifiable point of entrance into a waterway or aquifer. These pollutants contrast with point source pollutants, which are discharged from a specific point or stationary location. Common point sources of pollution are discharges from industries and municipal sewage treatment plants.

The streams in Latah County exhibit a great diversity in water quality. Existing water quality problems are primarily due to sedimentation, nutrient discharge, and associated pollutants. Water quality issues can be attributed to agricultural activities (including channelization and over-grazing), timber harvesting practices, and urban sewer and stormwater runoff. Erosion and stormwater runoff carry soil particles, nutrients, chemical fertilizers, pesticides, and organic matter from fields, roads, and sewer systems into streams. These substances cause an increase in stream turbidity, oxygen

[20] Idaho's Integrated §303(d)/§305(b) Report can be found at: http://www.deq.state.id.us/water/data_reports/surface_water/monitoring/integrated_report.cfm.

demand, and nutrient levels. Along with other biochemical imbalances, these factors have a negative effect on aquatic organisms, fish spawning habitat, and stream use. Other wildlife species may also be adversely affected when a severely polluted stream is a key habitat component. As sediment is carried downstream, it continues to negatively affect water quality. Upon reaching larger rivers, where water is needed for municipal and industrial uses, sediment increases the cost of water purification. Ultimately, sediment is deposited in major river channels and reservoirs where it can interfere with navigation and reduce the useful capacity and life of dams.

Existing water quality issues within Latah County may be summarized by land use, other activities, and corresponding possible effects on water quality:

Non-Irrigated Cropland Activities

1) sediment loading from erosion from fields
2) nutrient/pesticide contributions from surface runoff and leaching
3) riparian damage from channelization, removal of riparian vegetation, or farming too near or in a riparian zone

Forest Land Activities

1) sediment loading from erosion due to road construction and timber harvest activities
2) nutrient contributions from erosion and organic debris
3) riparian damage during road construction and harvest activities

Grazing Land Activities

1) riparian damage from grazing near or in a riparian zone, resulting in over-widening, soil compaction, mass wasting, stream bank erosion and sedimentation
2) nutrient/pathogen contributions from animal wastes, especially from concentrated animal feed operations or wintering grounds
3) riparian zone damage due to decreased vegetation and loss of plant diversity

Recreation Activities

1) riparian damage from concentrated fishing, camping, and off-road activities, and reduced vegetative cover
2) erosion and vegetative destruction caused by off-road vehicles

Urban Activities

1) negative impacts from dense residential and commercial development, including road construction, urban runoff, and increase in non-permeable surfaces
2) negative impacts from urban sprawl, including road construction, urban runoff, and potentially negative water quality contributions from sewer or septic system discharges
3) riparian damage resulting from urban development such as home and road construction, equipment use, removal of vegetation, and stream channelization

Fish and Wildlife

The two principal stream systems within Latah County have one significant difference—Palouse Falls. The Potlatch River and its tributaries flow freely, with no major man-made impoundments existing from the headwaters to the mouth, and supports anadromous fish migration and spawning. However, as the Palouse River flows southwesterly into Washington state, it encounters a deep canyon of basalt. The river plunges over Palouse Falls near its confluence with the Snake River. The falls, at 182 feet tall, is a current and historic migration barrier for anadromous fish.

Fish Resources

The Palouse River reportedly supported native resident fish species, including two members of the Catostomidae family (suckers), largescale sucker and bridgelip sucker; and four members of the Cyprinidae family (minnows), including peamouth, northern pikeminnow, chiselmouth, and redside shiner.[21] Four Cottidae species (sculpins) are native to the Palouse River system, including slimy sculpin, mottled sculpin, Paiute sculpin, and torrent sculpin. Native salmonids were not historically recorded in the Palouse River system above Palouse Falls, although native salmonid presence in the watershed is probable at low densities. Currently, the bridgelip sucker is more prevalent in smaller streams than the largescale sucker; the peamouth inhabits most streams; the northern pikeminnow occurs in the Palouse River mainstem and tributaries; and the torrent sculpin is the only sculpin currently reported in the system.

The Potlatch River and its tributaries support a cold water fishery, which includes the common game species of rainbow, brook, and steelhead trout. Other fish species occurring in the Potlatch River include largemouth and smallmouth bass, pumpkinseed, northern pikeminnow, chiselmouth, bridgelip sucker, yellow perch, speckled and longnose dace, redside shiners, sunfish, and sculpin. Two species listed as threatened under the federal Endangered Species Act occur in the Potlatch River system: steelhead (*Oncorhynchus mykiss*) and bull trout (*Salvelinus confluentus*).

Wildlife Resources

Latah County is rich with wildlife resources. The extensive list at the end of this chapter represents a general overview of the wildlife species found within Latah County.[22]

The US Fish and Wildlife Service (USFWS) maintains the Endangered Species List and considers and determines species on the list. The USFWS also offers programs to survey and conserve endangered and threatened species, often in cooperation with the Idaho Department of Fish and Game (IDFG). The IDFG

[21] Palouse Subbasin Assessment. Draft-May 2004. Sponsored by the Palouse-Rock Lake Conservation District. Prepared by Resource Planning Unlimited, Inc.
[22] Adapted to Latah County from the Idaho Fish and Game website accessed 02/27/06 at: http://fishandgame.idaho.gov/cms/wildlife/

maintains a county-by-county list of wildlife listed under the Endangered Species Act. Federally listed wildlife known from Latah County include:[23]

- Yellow-billed Cuckoo (*Coccyzus americanus*) [candidate species]
- Lynx (*Lynx canadensis*) [listed as threatened]
- Steelhead (*Oncorhynchus mykiss*) [listed as threatened]
- Bull Trout (*Salvelinus confluentus*) [listed as threatened]

Wildlife likely to occur within Latah County includes the following:

Birds (known to breed in Latah County)

Loons and Grebes
- Pied-billed Grebe *Podilymbus podiceps*

Bittern, Herons, Egrets and Ibises
- American Bittern *Botaurus lentiginosus*
- Great-blue Heron *Ardea herodias*

Waterfowl
- Canada Goose *Branta canadensis*
- Wood Duck *Aix sponsa*
- Green-winged Teal *Anas crecca*
- Mallard *Anas platyrhynchos*
- Blue-winged Teal *Anas discors*
- Cinnamon Teal *Anas cyanoptera*
- Northern Shoveler *Anas clypeata*
- Common Merganser *Mergus merganser*

Vultures, Hawks, Eagles and Falcons
- Turkey Vulture *Cathartes aura*
- Osprey *Pandion haliaetus*
- Northern Harrier *Circus cyaneus*
- Rough-legged Hawk *Buteo lagopus*
- Red-tailed Hawk *Buteo jamaicensis*
- Swainson's Hawk *Buteo swainsoni*
- Cooper's Hawk *Accipiter cooperii*
- Sharp-shinned Hawk *Accipiter striatus*
- Northern Goshawk *Accipiter gentilis*
- American Kestrel *Falco sparvarius*

Upland Species
- Gray Partridge *Perdix perdix* *Exotic
- Ring-necked Pheasant *Phasianus colchicus* *Exotic
- Spruce Grouse *Falcipennis canadensis*
- Blue Grouse *Dendragapus obscurus*
- Ruffed Grouse *Bonasa unbellus*
- Wild Turkey *Meleagris gallopavo* *Exotic
- Northern Bobwhite *Colinus virginianus* *Exotic
- California Quail *Callipepla californica* *Exotic

Rails, Coots, and Cranes
- American Coot *Fulica americana*

Shorebirds, Plovers and Sandpipers
- Killdeer *Charadrius vociferus*
- Spotted Sandpiper *Actitis macularia*
- Common Snipe *Gallinago gallinago*

Doves and Cuckoos
- Rock Dove *Columba livia* *Exotic
- Mourning Dove *Zenaida macroura*
- Yellow-billed Cuckoo *Coccyzus americanus*

Owls
- Barn Owl *Tyto alba*
- Western Screech Owl *Otus kennicottii*

[23] Threatened and endangered species list for Latah County accessed 08/27/07 from website: http://fishandgame.idaho.gov/cms/tech/cdc/t&e_vertebrates_by_county.cfm

Great Horned Owl *Bubo virginianus*
Northern Pygmy-owl *Glaucidium gnoma*
Barred Owl *Strix varia*
Great Gray Owl *Strix nebulosa*
Long-eared Owl *Asio otus*
Short-eared Owl *Asio flammeus*
Northern Saw-whet Owl *Aegolius acadicus*

Nighthawks and Goatsuckers

Common Nighthawk *Chordeiles minor*

Swifts

Vaux's Swift *Chaetura vauxi*
White-throated Swift *Aeronautes saxatalis*

Hummingbirds

Black-chinned Hummingbird *Archilochus alexandri*
Calliope Hummingbird *Stellula calliope*
Rufous Hummingbird *Selasphorus rufus*

Kingfishers

Belted Kingfisher *Ceryle alcyon*

Woodpeckers

Lewis' Woodpecker *Melanerpes lewis*
Red-naped Sapsucker *Sphyrapicus nuchalis*
Downy Woodpecker *Picoides pubescens*
Hairy Woodpecker *Picoides villosus*
White-headed Woodpecker *Picoides albolarvatus*
Northern Flicker *Colaptes auratus*
Pileated Woodpecker *Dryocopus pileatus*

Flycatchers

Olive-sided Flycatcher *Contopus cooperi*
Western Wood-pewee *Contopus sordidulus*
Willow Flycatcher *Empidonax traillii*
Hammond's Flycatcher *Empidonax hammondii*
Dusky Flycatcher *Empidonax oberholseri*
Cordilleran Flycatcher *Empidonax occidentalis*
Say's Phoebe *Sayornis saya*
Western Kingbird *Tyrannus verticalis*
Eastern Kingbird *Tyrannus tyrannus*

Larks and Swallows

Horned Lark *Eremophila alpestris*
Tree Swallow *Tachycineta bicolor*
Violet-green Swallow *Tachycineta thalassina*
Northern Rough-winged Swallow *Stelgidopteryx serripennis*
Bank Swallow *Riparia riparia*
Cliff Swallow *Petrochelidon pyrrhonota*
Barn Swallow *Hirundo rudtica*

Corvids

Gray Jay *Perisoreus canadensis*
Steller's Jay *Cyanocitta stelleri*
Black-billed Magpie *Pica hudsonia*
American Crow *Corvus brachyrhynchos*
Common Raven *Corvus corax*

Chickadees and Titmice

Black-capped Chickadee *Poecile atricapillus*
Mountain Chickadee *Poecile gambeli*
Chestnut-backed Chickadee *Poecile rufescens*

Nuthatches and Creepers

Red-breasted Nuthatch *Sitta canadensis*
White-breasted Nuthatch *Sitta carolinensis*
Pygmy Nuthatch *Sitta pygmaea*
Brown Creeper *Certhia americana*

Wrens and Dippers

Rock Wren *Salpinctes obsoletus*
Bewick's Wren *Catherpes bewickii*
House Wren *Troglodytes aedon*
Winter Wren *Troglodytes troglodytes*

American Dipper *Cinclus mexicanus*

Kinglets and Gnatchatchers

Golden-crowned Kinglet *Regulus satrapa*
Ruby-crowned Kinglet *Regulus calendula*

Thrushes and Thrashers

Western Bluebird *Sialia mexicana*
Mountain Bluebird *Sialia currucoides*
Townsend's Solitaire *Myadestes townsendi*
Veery *Cartharus fuscenscens*
Swainson's Thrush *Catharus ustulatus*
Hermit Thrush *Catharus guttatus*
American Robin *Turdus migratorius*
Varied Thrush *Ixoreus naevius*
Gray Catbird *Dumetella carolinensis*

Pipits, Waxwings, Shrikes, and Starling

Bohemian Waxwing *Bombycilla garrulus*
Cedar Waxwing *Bombycilla cedrorum*
European Starling *Sturnus vulgaris* *Exotic

Vireos

Plumbeus Vireo *Vireo plumbeus*
Cassin's Vireo *Vireo cassinii*
Warbling Vireo *Vireo gilvus*
Red-eyed Vireo *Vireo olivaceus*

Warblers

Orange-crowned Warbler *Vermivora celata*
Nashville Warbler *Vermivora ruficapilla*
Yellow Warbler *Dendroica petechia*
Yellow-rumped Warbler *Dendroica coronata*
Townsend's Warbler *Dendroica townsendii*
American Redstart *Setophaga ruticilla*
Northern Waterthrush *Seiurus noveboracensis*
MacGillivray's Warbler *Oporornis tolmiei*
Common Yellowthroat *Geothlypis trichas*
Wilson's Warbler *Wilsonia pusilla*
Yellow-breasted Chat *Icteria virens*

Tanagers

Western Tanager *Piranga ludoviciana*

Grosbeaks and Buntings

Black-headed Grosbeak *Pheucticus melanocephalus*
Lazuli Bunting *Passerina amoena*

Towhees and Sparrows

Spotted Towhee *Pipilo maculatus*
Chipping Sparrow *Spizella passerina*
Lark Bunting *Calamospiza melanocorys*
Savannah Sparrow *Passerculus sandwichensis*
Grasshopper Sparrow *Ammodramus savannarum*
Fox Sparrow *Passerella iliaca*
Song Sparrow *Melospiza melodia*
Lincoln's Sparrow *Melospiza lincolnii*
Dark-eyed Junco *Junco hyemalis*

Blackbirds, Meadowlarks, and Orioles

Bobolink *Dolichonyx oryzivorus*
Western Meadowlark *Sturnella neglecta*
Red-winged Blackbird *Agelaius pheoniceus*
Brewer's Blackbird *Euphagus cyancophalus*
Brown-headed Cowbird *Molothurs ater*
Bullock's Oriole *Icterus bullockii*

Finches

Cassin's Finch *Carpodacus cassinii*
House Finch *Carpodacus mexicanus*
Red Crossbill *Loxia curvirostra*
Common Redpoll *Carduelis flammea*
Pine Siskin *Carduelis pinus*
American Goldfinch *Carduelis tristis*

Evening Grosbeak *Coccothraustes vespertinus*

Exotic Sparrow

House Sparrow *Passer domesticus* *Exotic

Mammals

Opossum

Virginia Opossum Didelphis virginiana *Exotic

Moles and Shrews

Masked Shrew *Sorex cinereus*
Vagrant Shrew *Sorex vagrans*
Dusky Shrew *Sorex monticolus*
Dwarf Shrew *Sorex nanus*
Water Shrew *Sorex palustris*
Pygmy Shrew *Sorex hoyi*

Bats

Little Brown Bat *Myotis lucifugus*
Yuma Myotis *Myotis yumanensis*
Long-eared Myotis *Myotis evotis*
Fringed Myotis *Myotis thysanodes*
Long-legged Myotis *Myotis volans*
Western Small-footed Myotis *Myotis ciliolabrum*
Silver-haired Bat *Lasionycteris noctivagans*
Big Brown Bat *Eptesicus fuscus*
Hoary Bat *Lasiurus cinereus*
Townsend's Big-eared Bat *Corynorhinus townsendii*
Pallid Bat *Antrozous pallidus*

Pikas, Rabbits, and Hares

American Pika *Ochotona princeps*
Mountain Cottontail *Sylvilagus nuttallii*
Snowshoe Hare *Lepus americanus*

Rodents and Squirrels

Yellow-pine Chipmunk *Tamias amoenus*
Red-tailed Chipmunk *Tamias ruficaudus*
Yellow-bellied Marmot *Marmota flaviventris*
Merriam's Ground Squirrel *Spermophilus canus*
Columbian Ground Squirrel *Spermophilus columbianus*
Golden-mantled Ground Squirrel *Spermophilus lateralis*
Red Squirrel *Tamiasciurus hudsonicus*
Eastern Gray Squirrel *Sciurus carolinensis* *Exotic
Eastern Fox Squirrel *Sciurus niger* *Exotic
Northern Flying Squirrel *Glaucomys sabrinus*

Pocket Gophers

Northern Pocket Gopher *Thomomys talpoides*

Pocket Mice and Kangaroo Rats

Ord's Kangaroo Rat *Dipodomys ordii*

Beaver

American Beaver *Castor canadensis*

Mice, Rats, and Voles

Deer Mouse *Peromyscus maniculatus*
Bushy-tailed Woodrat *Neotoma cinerea*
Southern Red-backed Vole *Clethrionomys gapperi*
Heather Vole *Phenacomys intermedius*
Meadow Vole *Microtus pennsylvanicus*
Montane Vole *Microtus montanus*
Long-tailed Vole *Microtus longicaudus*
Water Vole *Microtus richardsoni*
Muskrat *Ondatra zibethicus*
Norway Rat *Rattus norvegicus* *Exotic
House Mouse *Mus musculus* *Exotic
Western Jumping Mouse *Zapus princeps*

Others

Common Porcupine *Erethizon dorsatum*

Carnivores

Coyote *Canis latrans*

Gray Wolf *Canis lupus*
Red Fox *Vulpes vulpes*
Black Bear *Ursus americanus*
Common Raccoon *Procyon lotor*
American Marten *Martes americana*
Badger *Taxidea taxus*
Fisher *Martes pennanti*
Ermine *Mustela erminea*
Long-tailed Weasel *Mustela frenata*
Mink *Mustela vison*
North American Wolverine *Gulo gulo luscus*
American Badger *Taxidea taxus*
Western Spotted Skunk *Spilogale gracilis*
Striped Skunk *Mephitis mephitis*
Northern River Otter *Lutra canadensis*
Mountain Lion *Felis concolor*
Bobcat *Lynx rufus*
Lynx *Lynx canadensis*

Ungulates

Elk *Cervus elaphus*
Mule Deer *Odocoileus hemionus*
White-tailed Deer *Odocoileus virginanus*
Moose *Alces alces*
Rocky Mountain Bighorn Sheep *Ovis canadensis canadensis*

Amphibians and Reptiles

Salamanders and Newts

Long-toed Salamander *Ambystoma macrodactylum*
Tiger Salamander *Ambystoma tigrinum*
Idaho Giant Salamander *Dicamptodon aterrimus*
Coeur d'Alene Salamander *Plethodon idahoensis*
Roughskin Newt *Taricha granulosa* *Exotic

Frogs and Toads

Western Toad *Bufo boreas*
Woodhouse's Toad *Bufo woodhousii*
Pacific Chorus Frog *Pseudacris regilla*
Great Basin Spadefoot *Spea intermontana*
Rocky Mountain Tailed Frog *Ascaphus montanus*
Bullfrog *Rana catesbeiana* *Exotic
Columbia Spotted Frog *Rana luteiventris*

Lizards and Turtles

Short-Horned Lizard *Phrynosoma douglasii*
Northern Alligator Lizard *Elgaria coerulea*
Western Skink *Eumeces skiltonianus*
Painted Turtle *Chrysemys picta*

Snakes

Rubber Boa *Charina bottae*
Gopher Snake or Pine Snake *Pituophis catenifer*
Western Terrestrial Garter Snake *Thamnophis elegans*
Common Garter Snake *Thamnophis sirtalis*
Racer *Coluber constrictor*
Ringneck Snake *Diadophis punctatus*
Night Snake *Hypsiglena torquata*
Western Rattlesnake *Crotalus viridis*

Chapter 4: Interagency Collaboration

The Latah Soil and Water Conservation District (Latah SWCD) provides the public with a formal channel for cooperating with one another and with federal, tribal, state, and county agencies in resource conservation on lands within Latah County. The Latah SWCD offers guidance, assistance, and information to people with land use and other natural resource needs and concerns. Latah SWCD Supervisors and staff supply educational information to increase community awareness about the sustainable management of our local natural resources.

Many policies and laws affect natural resource management within Latah County. The following sections discuss current laws and policies at the federal, tribal, state, and local levels.

Laws and Policies

Federal Laws and Policies

Endangered Species Act

The Endangered Species Act (ESA) is federal legislation developed to protect and recover species at risk of extinction, as well as the critical habitats upon which they depend. To conserve listed species, the ESA states that it is unlawful for anyone to "take" (i.e. kill or harm) endangered or threatened species and their critical habitats. The 4(d) rule, so called because its requirements and guidelines are found in Section 4(d) of the ESA, identifies actions related to threatened or endangered species that are limitations or exceptions to enforcement of the general ESA rule. An action may be exempt from enforcement under the rule if it adequately protects or conserves the listed species.

Section 7 of the ESA [16 U.S.C. 1531 et seq.] outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 7(a)(1) directs federal agencies to utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of species listed pursuant to the ESA. Under this provision, federal agencies often enter into partnerships and memoranda of understanding with the US Fish and Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration Fisheries Service (NOAA) Fisheries Service for implementing and funding conservation agreements, and for developing management and recovery plans for listed species. The two agencies encourage the creation of partnerships and collaborative planning efforts to develop proactive approaches to conservation and recovery of listed species.

ESA Section 7(a)(2) states that each federal agency shall insure that any action they authorize, fund, or carry out is not likely to jeopardize the

continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. In fulfilling these requirements, each federal agency must use the best available scientific and commercial data. This section of the ESA defines the consultation process, which is further developed in regulations promulgated at 50 CFR §402. Permits for incidental take under Section 10(a)(l)(B) require a USFWS or NOAA Fisheries intra-service consultation.

Consultations are conducted in the same manner as under Section 7 except that the incidental take statement is governed by Section 10(a)(1)(B) to the extent that mitigation, including off-site compensation not directed at the affected individuals, may be considered. The USFWS and NOAA Fisheries have developed a handbook for Habitat Conservation Planning and Incidental Take Permit Processing (November 1996), which may be referenced for further information.

Idaho's federally-listed candidate, threatened, and endangered species within Latah County include:[24]

Yellow-billed Cuckoo	*Coccyzus americanus*	(Candidate Species)
Lynx	*Lynx canadensis*	(Listed as Threatened)
Steelhead	*Oncorhynchus mykiss*	(Listed as Threatened)
Bull Trout	*Salvelinus confluentus*	(Listed as Threatened)
Spalding's Catchfly	*Silene spaldingii*	(Listed as Threatened)
Water Howellia	*Howellia aquatilis*	(Listed as Threatened)

NOAA Fisheries Critical Habitat Areas

Federal Laws and Policies

The ESA requires the federal government to designate critical habitat for any species listed under the ESA. Critical habitat is defined as specific areas with physical or biological features essential to the conservation of the species, and which may require special management considerations or protection. Critical habitat designations must take into consideration the economic impact, impact on national security, and any other relevant impact of such designation.

Between 1989 and 2000, NOAA Fisheries listed 26 evolutionary significant units (ESUs) of Pacific salmon and steelhead in the Pacific Northwest and California. During that period the agency enacted final critical habitat designations for six of the 26 fish species: Snake River sockeye, Snake River fall chinook, Snake River spring/summer chinook, Snake River steelhead, Sacramento winter-run chinook, central California coast coho, and southern Oregon/northern California coast coho. In February 2000, NOAA Fisheries published final critical habitat designations for 19 ESUs listed at that time. The agency determined that there would be no economic impact resulting from the designations, contending that very few or no additional requirements would be imposed beyond those already associated with the listing of the

[24] List derived from the Idaho Department of Fish and Game: http://fishandgame.idaho.gov/cms/tech/CDC/t&e.cfm

species themselves. A legal challenge was filed by the National Association of Homebuilders, and a federal court ruled that NOAA Fisheries did not adequately consider the economic impacts of the critical habitat designations.

In April 2002, NOAA Fisheries withdrew the February 2000 critical habitat designations. Another lawsuit, filed by the Pacific Coast Federation of Fishermen's Association and other plaintiffs, alleged that NOAA Fisheries failed to timely designate critical habitat for the 19 ESUs for which critical habitat had been vacated (as well as an additional listed species, the northern California steelhead). A settlement was imposed and NOAA Fisheries ultimately agreed to file final critical habitat designations by August 15, 2005, for the 20 ESUs that were listed as of that date. NOAA Fisheries filed final 2005 rules with the *Federal Register* to designate critical habitat areas in Washington, Oregon, Idaho, and California for 19 species of salmon and steelhead listed as threatened or endangered under the ESA. The designations include a separate rule for 12 ESUs listed in Washington, Oregon, and Idaho, and another for seven species listed in California. The final rules include analyses of economic and other impacts of such designations, and address comments received from public and peer reviewers on the agency's proposed designations announced in November 2004.

Unlike the 2000 designations, which relied on the US Geological Service (USGS) maps of subbasins and included all accessible river reaches within the current range of the listed species, the 2005 designations use a much finer, more specific scale in designating critical habitat for salmon and steelhead. The current designations identify stream and near-shore habitat areas where listed salmon and steelhead have actually been observed, or where biologists with local area expertise presume them to occur. These habitat areas are located within more than 800 watersheds in the Pacific Northwest and California. The final designations use information provided during the public comment period on the proposed rule, and information gathered by the more than 400 watershed groups already involved in large-scale salmon recovery planning efforts in Washington, Oregon, Idaho, and California. The final designations also include updated scientific information to designate new "critical habitat" in estuarine and near-shore marine areas. Except for a small area in Hood Canal, Washington, unoccupied areas are not designated as critical habitat at this time.

PACFISH and INFISH

PACFISH and INFISH federal strategies were developed as interim strategies designed to protect populations and habitats of fish species of concern on lands managed by the USDA Forest Service (USFS) and the USDI Bureau of Land Management (BLM). PACFISH (anadromous fish) and INFISH (resident fish) strategies restrict actions in Riparian Habitat Conservation Areas (RHCA), most notably by defining the standard width of the four categories of RHCAs. RHCAs include fish-bearing streams;

permanently flowing nonfish bearing streams, ponds, lakes, and wetlands greater than one acre and intermittent streams; wetlands less than one acre; landslides; and landslide-prone areas. Deviation from the defined RHCA width requires consultation with NOAA Fisheries and the USFWS.

Clean Water Act

Idaho's state water quality standards have been established and approved by the US Environmental Protection Agency (EPA). These standards, required under the Clean Water Act (CWA), are designed to protect, restore, and preserve water quality in waterbodies that have designated beneficial uses, such as drinking water, contact recreation (e.g. fishing and swimming), and cold or warm water aquatic life (including salmonids). Designated uses have been identified for most, but not all, water bodies within Idaho. Each use has narrative and/or numeric standards that describe the level of water quality necessary to support the identified uses. For those bodies not yet designated, the presumed existing uses are cold water aquatic life and primary or secondary contact recreation.

Designated uses and standards can be found in Idaho Code IDAPA 58.01.02. When a lake, river or stream fails to meet the water quality criteria that support its designated uses, specific actions are required under state and federal law to ensure that the impaired (unable to support beneficial uses) waterbody is restored to a healthy fishable, swimmable condition. Sections of rivers and streams that have been identified as impaired are part of the Idaho 2002 §303(d) list of impaired waters.

The Idaho Department of Environmental Quality (IDEQ) and EPA have a legal, court-ordered responsibility to ensure that these impaired waters be dealt with in a timely manner. This means that a total maximum daily load (TMDL) must be written for each identified (listed) impaired waterbody. The TMDL is a quantitative assessment of water quality problems and contributing pollutant sources. It specifies the amount of pollution reduction necessary to meet water quality standards, allocates the necessary pollutant limits among the contributing sources in the watershed, and provides a basis for taking actions needed to restore the waterbody. IDEQ is responsible for preparing the TMDLs. Stream segments within the exterior boundaries of the Nez Perce Indian Reservation (NPT) are developed through a tri-party agreement between the state of Idaho, the NPT, and EPA. Development of TMDLs also includes coordination with the Clearwater Basin Advisory Group and Watershed Advisory Groups (CBAG and WAG) as required by Idaho Code Title 39, Chapter 36.

Federal Water Pollution Control Act of 1972 Section 404

Permits from the US Department of Army Corps of Engineers (USACE) permits are required under §404 of the CWA for discharges of dredged or fill material into waters of the United States, including wetlands. This includes excavation activities that result in the discharge of dredged material that destroy or degrade waters of the United States. USACE permits are also

required under §10 of the Rivers and Harbors Act of 1899 for work or structures waterward of the ordinary high water mark of or affecting, navigable waters of the United States.

Safe Drinking Water Act

Originally passed in 1974, the Safe Drinking Water Act (SDWA) was passed by Congress to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and delineates actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. The SDWA does not regulate individual private wells serving fewer than 25 individuals.

IDEQ is authorized to administer Idaho's Drinking Water Program through the federal Safe Drinking Water Act and the Idaho Rules for Public Drinking Water Systems (IDAPA 58.01.08). Within the State of Idaho, approximately 95% of the state's drinking water comes from ground water. Surface water, such as streams, rivers, reservoirs, and springs, supplies the remaining 5%.

Tribal Laws and Policies

Tribal Treaty Rights

Indian tribal areas of interest are displayed in the Interior Columbia River Basin Draft Environmental Impact Statement (1997). That document defines the following three tribes as having an area of interest within portions of the Palouse River watershed in Latah County: Coeur d'Alene Tribe, Nez Perce Tribe, and Spokane Tribe.

Tribal Laws and Policies

The Nez Perce people have inhabited areas within Latah County for millennia. The first Indian groups may have occupied the area as early as 10,000 years ago (Ecovista 2003). Prior to the treaty of 1855, the Nez Perce used the Clearwater region for hunting, fishing, gathering food, horse pasturing, and other cultural uses. The Clearwater River Subbasin, including the Potlatch River watershed, is a part of the over 13 million acres in central Idaho, northeastern Oregon and southeastern Washington included in the pre-treaty area of tribal use.

The Tribe reserves the right of its members to hunt and fish within and outside of the Nez Perce Reservation, and treaty rights apply to areas beyond current reservation boundaries. The treaty rights are based on the Treaties of 1855 and 1863, which maintained and protected the NPT's historic rights to fish, hunt, and gather roots and berries and other resources on the reservation at usual and accustomed places:

- 1855 Treaty, Article 3: "The exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians: as also the right of taking fish at all usual and accustomed places in common with citizens of the territory, and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land."

- 1863 Treaty, Article 8: "The United States also agree to reserve all springs or fountains not adjacent to, or directly connected with, the streams and rivers within the lands hereby relinquished, and to keep back from settlement or entry so much of the surrounding land as may be necessary to prevent the said springs or fountains being enclosed; and, further, to preserve a perpetual right of way to and from the same, as watering places, for the use in common of both whites and Indians."

State Laws and Policies

Idaho Forest Practices Act

The Idaho Forest Practices Act (FPA) was passed by the Idaho legislature in 1974 and amended by the legislature in 1980, 1986, 1987, 1989, 1990, 1991, 1992, 1995 and 2001. The Idaho Forest Practices Act is contained within Idaho Code, Title 38, Chapter 13. These rules constitute the minimum standards for the conduct of forest practices on forest land and describe the administrative procedures necessary to implement those standards. In the FPA, forest land is defined as federal, state, and private land growing forest tree species which are, or could be at maturity, capable of furnishing raw material used in the manufacture of lumber or other forest products. Although the FPA rules apply to activities on private lands within the state of Idaho, the state does not hold management authority over these lands. Prior to beginning forestry operations, private owners and operators are required to obtain a Notice of Forest Practice and Certificate of Compliance through the Idaho Department of Lands (IDL).

Standards are established for stream protection zones (SPZ) around streams. These standards condition or limit practices within the SPZs; for example, skidding logs in or through streams is prohibited. The FPA also addresses large organic debris (LOD) functions, retention of existing shade, and designates trees to be left ("leave trees"), determined by distance from stream, stream width, tree diameter, and number of trees. Class I streams, including lakes, are those used for domestic water supply and/or are important to fish for spawning, rearing or migration. The SPZ of a Class I stream is the area encompassed by a slope distance of 75 feet on each side of ordinary high water mark. The SPZ of a Class II stream is the area encompassed by a slope distance of 30 feet on each side of ordinary high water mark. Class II streams that do not contribute flow to Class I streams have minimum Stream Protection Zones of 5 feet.

Stream Channel Protection Act

The Idaho Department of Water Resources (IDWR) is responsible for enforcing the Stream Channel Protection Act, which requires permits for in-channel work or developments. State agencies, including the IDEQ and Idaho Department of Fish and Game (IDFG), have the opportunity to review and comment on the potential environmental effects of proposed projects. IDWR also manages Idaho's water rights program. The Idaho Code gives the Water Resource Board the authority to hold instream flow water rights for the purpose of maintaining minimum stream flows to protect a variety of instream uses. No minimum stream flows to protect fish habitat, recreation, aquatic life, and wildlife habitat have been established on rivers within the Palouse or Potlatch River watersheds.

Local Laws and Policies

Latah County Land Use Ordinances

Latah County adopted land use ordinances pursuant to the authority granted in Title 67, Chapter 65, of the Idaho Code and Article 12, Section 2, of the Idaho Constitution. The Latah County Comprehensive Plan and the Latah SWCD Resource Conservation Plan share similar goals and objectives as noted in the following sections of the County's Comprehensive Plan.

> Objective 1 (p. i) – Perservation of agriculture and forest land uses to ensure the continued viability of an agriculture and forest based economy in rural Latah County.
>
> Natural Resource Element (p. 4) -
>
> > Goal: To ensure sound stewardship of the County's natural reources.
> >
> > Policies:
> >
> > 1. Conserve streams, floodplains, wetlands, wooded areas, and other areas of natural significance and, where appropriate, incorporate natural features into planned developments as open space and buffer zones.
> > 2. Prohibit development that significantly pollutes or degrades the natural environment.
> > 3. Maintain sustainable groundwater resources and prevent degradation of groundwater quality.
> > 4. Protect wildlife habitat, particularly critical winter range, from encroachment of incompatible development.

Latah County recently revised the Latah County Land Use Ordinance which provides for setbacks from waterbodies. Within the Land Use Ordinance are floodplain development restrictions (Article 5, Section 5.01) that regulate the lowest allowable elevation for construction within the flood plain. Depending on the site, the floodplain development section may also require permits for a variety of activities in a floodplain, such as installing fencing along a stream.

Programs and Management Plans

At the Federal Level

There are many conservation programs and management plans administered by a multitude of agencies. Federal level programs and plans involved in natural resource management within Latah County include:

- Clearwater Focus Program and Policy Advisory Committee
- Endangered Species Act Implementation Plan
- Federal Columbia River Power System (FCRPS) Biological Opinion and the Basinwide Salmon Recovery Strategy
- Columbia River Fish Management Plan
- Interior Columbia Basin Ecosystem Management Project
- Lower Snake River Fish and Wildlife Compensation Plan
- NOAA Fisheries Restoration Center's Community-Based Restoration Program
- USDA Natural Resources Conservation Service Programs
- Clearwater National Forest Land Plan
- US Fish and Wildlife Service Programs and Plan

Programs and Management Plans:

At the Federal Level

Clearwater Focus Program and Policy Advisory Committee

In 1980, Congress passed the Pacific Northwest Electric Power Planning and Conservation Act, which authorized the states of Idaho, Montana, Oregon, and Washington to create the Northwest Power and Conservation Council (NWPCC). The Act directs the NWPCC to prepare a program to protect, mitigate, and enhance fish and wildlife of the Columbia River Basin that have been negatively affected by the construction and operation of hydroelectric dams, while also assuring the Pacific Northwest has an adequate, efficient, economical, and reliable power supply. The Act also directs the NWPCC to inform the public about fish, wildlife, and energy issues and to involve the public in its decision making.

In late 1996, the 9,645-square-mile Clearwater River Subbasin was designated as a Focus Program under the NWPCC's Columbia River Basin Fish and Wildlife Program. The purpose of the Clearwater Focus Program is to coordinate projects and interagency efforts to enhance and restore aquatic and terrestrial habitats in the Clearwater River Subbasin to meet the goals of the NWPCC's Fish and Wildlife Program. The Idaho Soil and Water Conservation Commission (SWC) and the Nez Perce Tribal Watershed Division co-coordinate the program on behalf of state of Idaho and the NPT.

The Clearwater Focus Program convened the Clearwater Policy Advisory Committee (PAC) in September of 1999 to provide guidance in the development of a subbasin assessment and management plan. Work on the Clearwater Subbasin Summary, Assessment and Management Plan has been coordinated through the Clearwater Focus Program and the PAC. Restoration projects have been conducted on private, state, federal, and tribal lands. Partnerships have been developed for all projects. In addition to the SWC and NPT, project partners have included the USFS, USDA Natural Resources Conservation Service (NRCS), soil and water conservation districts, private landowners, IDFG, IDL, and BLM.

Endangered Species Act Implementation Plan

The EPA, NOAA Fisheries, and USFWS prepared the ESA Implementation Plan in acknowledgement of responsibilities for fish protection under the

Northwest Power Act; for protection of water quality under the CWA; and the agencies' obligations to Indian tribes under law, treaty, and Executive Order. The implementation plan responded to the December 2000 Biological Opinions (BiOp) issued by the USFWS and NOAA Fisheries on the effects to listed species from operations of the Columbia River hydropower system.

The ESA Implementation Plan is a five-year blueprint that organizes collective fish recovery actions by the three agencies. The implementation considers the full cycle of the fish, also known as "gravel to gravel" management or an "All-H" approach (hydrologic, habitat, hatcheries, and harvest). However, it describes only commitments connected to the Federal Columbia River Power System (FCRPS), not the obligations of other federal agencies, states, or private parties. The Implementation Plan describes the three agencies' goals; the performance standards to gauge results over time; strategies and priorities; detailed five-year actions; a research, monitoring, and evaluation plan; and expectations for regional coordination.

Federal Columbia River Power System Biological Opinion and Basinwide Salmon Recovery Strategy

NOAA Fisheries has recently developed several documents and initiatives for the recovery of ESA-listed Snake River steelhead, chinook and sockeye. The Federal Columbia River Power System (FCRPS), Biological Opinion (BiOp), and the Basinwide Salmon Recovery Strategy issued at the end of 2000 contain actions and strategies for habitat restoration and protection for the Columbia River Basin. Agencies are identified to lead efforts in specific aspects of restoration of listed fish and their habitats on non-federal lands. Federal land management will be implemented through current programs that protect important aquatic habitats. Actions within the FCRPS BiOp are intended to be consistent with, or complement, the NWPPC's amended Fish and Wildlife Implementation Plan and state and local watershed planning efforts. NOAA Fisheries has also initiated recovery planning with the establishment of a Technical Recovery Team for the Interior Columbia Basin, which includes Snake River stocks.

Columbia River Fish Management Plan

The Columbia River Fish Management Plan (CRFMP) is an agreement resulting from the US District Court case of U.S. v. Oregon (Case No. 68-513). This agreement between federal agencies, Indian tribes, and state agencies (not including Idaho) set guidelines for the management, harvest, hatchery production, and rebuilding of Columbia River Basin salmonid stocks. Appropriate harvest levels and methods were established for various levels of attainment of interim population goals for spring chinook, summer chinook, sockeye, fall chinook, summer steelhead, and coho salmon. The plan guaranteed the treaty Indian fisheries a minimum of 10,000 spring and summer chinook annually, not dependent on run size. The original CRFMP terminated in 1998; it has since been re-negotiated.

Interior Columbia Basin Ecosystem Management Project

The Interior Columbia Basin Ecosystem Management Project (ICBEMP) was conducted from 1993 to 1997 to develop and implement a scientifically sound, ecosystem-based management strategy for lands administered by the USFS and BLM for lands administered in Idaho, Montana, Wyoming, Nevada, and Utah. An important goal of ICBEMP is to provide long-term direction to replace PACFISH and INFISH. The draft Environmental Impact Statement for ICBEMP was released in June 1997.

Lower Snake River Fish and Wildlife Compensation Plan

The USFWS administers the Lower Snake River Fish and Wildlife Compensation Plan (LSRCP). This plan was authorized by the Water Resources Development Act of 1976 (Public Law 94-587) to mitigate and compensate for fish and wildlife losses caused by the construction and operation of the navigation locks and the four lower Snake River dams. The fishery resource compensation plan identified the need to replace adult salmon and steelhead and resident trout fishing opportunities. The size of the anadromous fish program was based on estimates of salmon and steelhead adult returns to the Snake River Basin prior to the construction of the four lower Snake River dams. In the Clearwater River, the LSRCP funds the Clearwater Hatchery, operated by IDFG and the chinook salmon production portion of the Dworshak North Fork Hatchery operated by the USFWS.

NOAA Fisheries Restoration Center's Community-Based Restoration Program

The objective of the NOAA Fisheries Restoration Center's community-based restoration program is to bring together citizen groups, public and nonprofit organizations, industry, corporations and businesses, youth conservation corps, students, landowners, and local, state and federal agencies to restore fishery habitat across Coastal America. The program partners with national and regional organizations to solicit and co-fund proposals for locally-driven, grass roots restoration projects that address important habitat issues within communities. Several restoration projects in the Clearwater Subbasin, particularly with the NPT, have been funded through various components of this program.

Programs and Management Plans:

At the Federal Level

USDA Farm Service Agency Programs

The Conservation Reserve Program (CRP) and the Continuous Conservation Reserve Program (CCRP) are conservation programs implemented on croplands and riparian areas, respectively, by the USDA Farm Services Agency (FSA). Both programs focus on treatment of soil erosion, and improvement of wildlife habitat and water quality. Currently there are over 45,000 acres enrolled in CRP and CCRP in Latah County (representing approximately 10 percent of the cropland in Latah County). These two programs are managed through the FSA, with technical assistance provided by the NRCS. These programs are voluntary and include some combination of the following: incentive payments (CCRP), cost-sharing for plantings, and annual maintenance and rental payments.

The enrollment of agricultural land with a previous cropping history into CRP has removed some highly erodible land from commodity production. The land is converted into herbaceous and/or woody vegetation to reduce soil and water erosion. CRP contracts last a minimum of 10 years and are designed to aid with the development of wildlife habitat. Practices that are cost-shared under CRP include planting vegetative cover, such as introduced or native grasses and forbs, wildlife cover plantings, and planting conifers.

The CCRP focuses on the improvement of water quality and enhancement riparian areas and wildlife habitat. Practices include shallow water areas, riparian forest buffers, wetland buffers, filter strips, grassed waterways, shelterbelts, and field windbreaks. Enrollment for these practices is not limited to cropland or highly erodible land, as is required for the CRP, and carries a longer contract period (10-15 years), higher installation reimbursement rate, and a higher annual rental and maintenance rate.

USDA Natural Resources Conservation Service Programs

The District Conservationist in the Moscow Field Office is the Natural Resources Conservation Service (NRCS) employee assigned to provide technical assistance to the Latah SWCD and cooperating landowners. The District Conservationist and staff aid the Latah SWCD in working toward goals outlined this Resource Conservation Plan, as well as many of the Latah SWCD's conservation and community outreach programs.

The NRCS administers several cost-sharing programs on private lands. Landowners and land users work with the technical staff of the NRCS to use these federal programs for implementing conservation practices on their lands. The Environmental Quality Incentive Program (EQIP) and the PL 566 (Public Law) Small Watershed Program can be leveraged with other federal, state, or local program funds. The Wildlife Habitat Incentives Program (WHIP) and the Wetland Reserve Program (WRP) restrict the sources of cost-share funding on projects to non-mitigation funds.

The Wildlife Habitat Incentive Program (WHIP), administered and implemented by NRCS, provides financial incentives to develop wildlife habitat on private lands. Participants agree to implement a wildlife habitat development plan and NRCS agrees to provide cost-share assistance for the initial implementation of wildlife habitat development practices. This agreement generally lasts a minimum of 10 years from the date that the contract is signed.

Programs and Management Plans:

At the Federal Level

The NRCS administers and implements EQIP, which provides technical, educational, and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. The program provides assistance to farmers and ranchers to comply with federal, state, and tribal environmental laws, and encourages environmental enhancement.

The purposes of the program are achieved through the implementation of a conservation plan that includes structural, vegetative, and land management practices on eligible land. Five to ten year contracts are developed with eligible producers; with cost-share payments made to assist producers implement one or more eligible structural or vegetative practices. Typical practices include animal waste management facilities, terraces, filter strips, tree planting, and permanent wildlife habitat. Incentive payments can also be made to implement one or more land management practices, such as nutrient management, pest management, and grazing land management.

Another program administered and implemented by NRCS is the Wetlands Reserve Program (WRP). This voluntary program is designed to restore degraded wetlands. Participating landowners can establish permanent or 30-year conservation easements, or can enter into restoration cost-share agreements where no easement is involved.

Clearwater Resource Conservation and Development Council, Inc. Programs

The Clearwater Resource Conservation and Development Council, Inc. (Clearwater RC&D) is an organization whose mission is to enhance the quality of life for the residents of north-central Idaho by maintaining and improving the economic, social, and environmental conditions within the region. The program is locally initiated, locally sponsored and locally directed program. The public, primarily through their elected representatives, participate in Clearwater RC&D programs through projects and activities emphasizing land conservation, community development, water management, as well as addressing other local environmental concerns. USDA NRCS provides a coordinator to the Clearwater RC&D, whose office is located in Moscow, Idaho. The Clearwater RC&D, governed by a volunteer council, is involved in development and protection of natural resources through such projects as: cooperating in improvement of Spring Valley Reservoir and Moscow City Parks; supporting the Clearwater Basin Weed Advisory Group and the Alternative Forest Products Advisory Group; and providing low-cost trees for conservation plantings.

Programs and Management Plans:

At the Federal Level

Clearwater National Forest Land Plan

Forest lands owned by the USFS Clearwater National Forest (CNF) are intermingled with state, Potlatch Corporation, and other privately owned lands. The USFS land allocation, management standards, and guidelines for national forest lands within the Potlatch River watershed are specified in the Clearwater National Forest Plan. According to the Forest Plan, the focus of CNF timber management plan is to restore the landscape to maintain a range of forest conditions, including old forests. Wildland fires are generally controlled to protect young tree stands and adjacent private property. Managers use fire each spring and fall to reduce high forest fuel accumulations and promote the establishment and growth of ponderosa pine stands. During summer and fall, livestock are managed to disperse their numbers, reducing potential negative environmental effects of concentrated use.

PACFISH (anadromous fish) and the INFISH (resident fish) interim strategies, measures designed to protect habitats and populations of fish, were adopted as an amendment to the CNF Forest Plan in 1995. The CNF Forest Plan requires the forest to meet Idaho State Water Quality Standards, and requires monitoring. The format for the monitoring plan is agreed upon by the Northern and Intermountain Regions of the USFS and the IDEQ. The primary goal of monitoring is to determine if land management activities are meeting Forest Plan standards and objectives. The monitoring is divided into two major areas: on-site and instream monitoring. On-site monitoring includes baseline, implementation, best management practices (BMP) effectiveness and PACFISH and INFISH compliance. Instream monitoring addresses the relationship between land disturbance activities, water quality, and fisheries habitat. It includes baseline, effectiveness, and validation monitoring. The forest annually publishes a compilation of monitoring projects and releases it at the Clearwater Interagency Monitoring Coordination meeting held each spring.

The CNF received funding in 2003 to begin revision of their current 1987 forest plan.[25] The planning process has begun, but is currently on hold pending recent court-mandated changes to the 2005 planning rule.

Programs and Management Plans:

At the Federal Level

US Fish and Wildlife Service Programs and Plan

The USFWS administers the Partners for Wildlife Program. The purpose of the program is to develop partnerships to restore and enhance fish and wildlife habitat on private lands. A special emphasis is placed on the restoration of riparian areas, wetlands and native plant communities, especially if they benefit rare plant and animal species. Cost share match can be provided through WHIP, EQIP, WRP and state and private programs. The USFWS offices of the Pacific Northwest Region (Boise and Spokane) can each provide funding and technical assistance, depending on the project location and objective.

The Private Stewardship Grant Program (PSGP) is administered by the USFWS, and provides grants and other assistance on a competitive basis to individuals and groups engaged in private, voluntary conservation efforts that benefit certain species of fish, wildlife, and plants. These species include candidate species, or species listed or proposed as endangered or threatened under the Endangered Species Act of 1973, or other at-risk species on private lands within the United States. Projects considered are those proposed by private landowners and their partners to improve habitat or implement other activities to benefit species on private lands. The PSGP supports on-the-ground conservation actions as opposed to planning or research activities. PSGP funding cannot be used to fund fee title or easements for the acquisition of real property.

[25] Clearwater and Nez Perce National Forests. June 11, 2007. Forest Plan Revision Update. Available at URL http://www.fs.fed.us/cnpz/forest/news/assets/070608_fp_update_.pdf

The USFWS also administers the Lower Snake River Compensation Plan (LSRCP). This plan was authorized under the Water Resources Development Act of 1976 (Public Law 94-587) to mitigate and compensate for fish and wildlife losses caused by the construction and operation of the navigation locks and four lower Snake River dams. The fishery resource compensation plan identified the need to replace adult salmon and steelhead and resident trout fishing opportunities. The size of the anadromous program was based on estimates of salmon and steelhead adult returns to the Snake River Basin prior to the construction of the four lower Snake River dams.

At the Tribal Level

Nez Perce Tribal Programs and Management Plans

The Nez Perce Tribe (NPT) is a major natural resource and land manager, with a number of departments and divisions responsible for protecting, enhancing, and restoring natural resources both on the reservation and within the Tribe's treaty territory. Tribal departments include Department of Fisheries Resource Management (with seven divisions) and the Department of Natural Resources (comprised of Wildlife, Forestry, Water Resources Division, and Cultural Resources). A number of planning and implementation processes are currently underway as a result of interagency coordination.

Programs and Management Plans:

At the Tribal Level

The 1998 Nez Perce Tribe Unified Watershed Assessment and Watershed Restoration Priorities Plan was prepared by the NPT in response to the Clean Water Action Plan of 1998. The Nez Perce Tribe Unified Watershed Assessment and Watershed Restoration Priorities Plan identifies watersheds containing tribal fee and trust lands and tribal usual and accustomed fishing places, and sets out priorities for restoration. The prioritization list of watersheds is similar to CWA Section 303(d) lists of water quality impaired streams. The NPT Water Resources Division implements restoration work in watersheds within the Reservation upon completion of TMDLs that have been developed under a tri-party agreement between the NPT, EPA, and the IDEQ.

Wy-Kan-Ush-Mi Wa-Kish-Wit is the Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs, and Yakima Tribes, published in 1996 (Ecovista 2003). This plan includes adult return targets for each subbasin in the Columbia Basin. Wy-Kan-Ush-Mi Wa-Kish-Wit recommends habitat restoration actions that focus on limiting, restricting, or eliminating land uses that degrade fish habitat, and enhancing populations with implementation of new broodstock, release and production programs.

At the State Level

At the state level, there are many conservation programs and management plans administered by a multitude of state agencies. Programs and plans involved in natural resource management in Latah County are managed by the following agencies and organizations:

- Idaho Association of Soil Conservation Districts
- Idaho Department of Environmental Quality
- Idaho Department of Fish and Game
- Idaho Conservation Data Center, IDFG
- Idaho Department of Lands
- Idaho Department of Water Resources
- Idaho Office of Species Conservation
- Idaho Soil and Water Conservation Commission
- Idaho State Department of Agriculture
- Idaho Transportation Department
- University of Idaho Programs

Programs and Management Plans:

At the State Level

Idaho Association of Soil Conservation Districts

The Idaho Association of Soil Conservation Districts (IASCD) continues to perform water quality monitoring throughout the Potlatch River. Water quality data are being used in part by local, state, and federal entities to develop TMDLs.

Idaho Department of Environmental Quality

The IDEQ 2008-2012 Strategic Plan includes three objectives that are relevant to protecting and restoring ecosystem resources; to: (1) implement surface and ground water quality protection using a watershed approach; (2) protect and improve ground water quality; and (3) reduce pollutants in surface water to meet water quality standards and beneficial uses.

The IDEQ conducts biological and physical habitat surveys of water bodies under the Beneficial Use Reconnaissance Project (BURP); the primary purpose is to determine the ability of the stream segment to support designated and existing beneficial uses. IDEQ completed BURP surveys on most streams in Latah County for CWA §303(d) assessment and development of the 303(d) list (Figure 5).

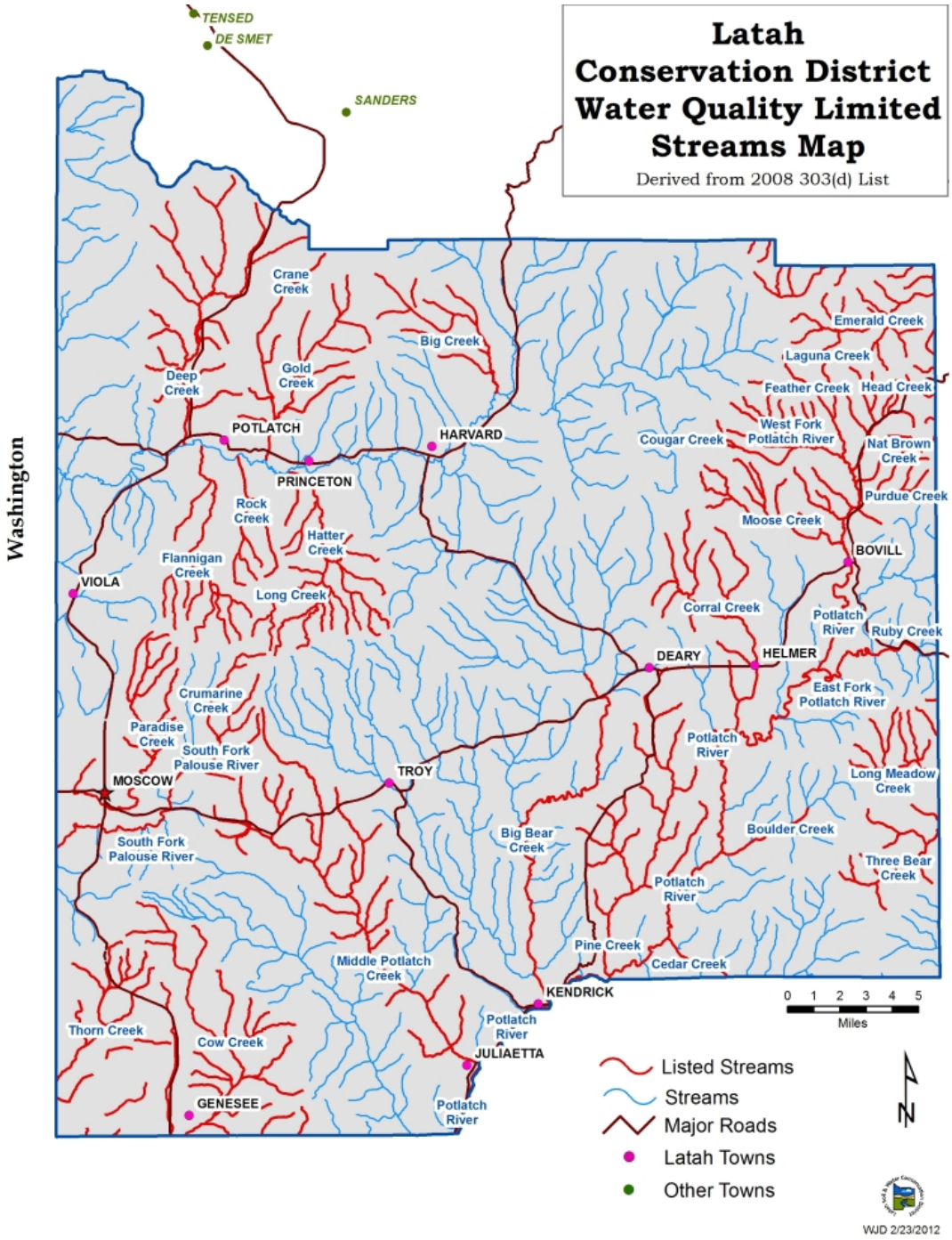

Figure 5 Visual of 303(d) listed streams in Latah County. See Table 1 for actual miles designated as 303(d).

Table 1 Name and stream miles of 303(d) listed streams in Latah County.

Water Quality Limited Streams	Latah SWCD
Stream Name	**Stream Miles**
Arson Creek	2.2
Big Bear Creek	18.1
Big Creek	5.9
Boulder Creek	4.1
Catholic Creek	2.7
Cedar Creek	3.9
Chambers Creek	3.1
Chelsey Creek	1.4
Corral Creek	13.8
Cougar Creek	3.9
Cow Creek	13.1
Crane Creek	7.6
Crumarine Creek	5.0
Deep Creek	12.2
East Fork Big Creek	2.1
East Fork Corral Creek	4.4
East Fork Deep Creek	5.3
East Fork Emerald Creek	8.5
East Fork Gold Creek	1.8
East Fork Potlatch River	4.7
East Fork Rock Creek	3.9
Feather Creek	5.2
Flannigan Creek	12.5
Flat Creek	1.3
Gold Creek	8.7
Hatter Creek	9.8
Head Creek	1.5
Hidden Creek	1.3
Hope Creek	0.0
Hoteling Creek	2.0
Idlers Rest Creek	3.0
Laguna Creek	2.5
Last Chance Creek	3.7
Little East Fork Emerald Creek	2.3
Long Creek	4.5
Long Meadow Creek	4.2
Lost Creek	2.5
McGary Creek	2.5
Middle Fork Deep Creek	1.2

Middle Potlatch Creek	18.5
Moose Creek	9.3
Nat Brown Creek	3.4
Nelson Creek	3.5
Olevan Creek	0.0
Paradise Creek	11.9
Pasture Creek	1.5
Pine Creek	15.5
Porcupine Creek	2.5
Post Creek	1.6
Potlatch River	48.7
Purdue Creek	3.7
Riswold Creek	2.1
Rock Creek	1.7
Round Meadow Creek	1.5
Ruby Creek	2.1
Sheep Creek	2.3
South Fork Palouse River	13.4
Talapus Creek	2.1
Thorn Creek	10.2
Three Bear Creek	6.3
Treasure Gulch	1.3
Waterhole Creek	2.2
West Fork Corral Creek	2.0
West Fork Deep Creek	3.8
West Fork Emerald Creek	4.7
West Fork Flannigan Creek	5.2
West Fork Potlatch River	7.0
West Fork Rock Creek	3.7
West Fork Saint Maries River	2.5
Wolf Creek	1.7
Un Named Stream Segments	298.0

The IDEQ administers the CWA §319 Nonpoint Source Management Program in Idaho and provides technical support to watershed implementation groups and activities. This program administers and awards grants annually, on a competitive basis, for projects that focus primarily on improving the water quality of lakes, streams, rivers, and aquifers. Projects must be consistent with the Idaho Nonpoint Source Management Plan, for which there are seven project sectors: agriculture, urban storm water runoff, transportation, silviculture, mining, ground water activities, and hydro-habitat modification. Projects located in watersheds with an approved TMDL are priorities for funding under this program.

Within Latah County, IDEQ has completed TMDLs for Paradise Creek, Cow Creek, Palouse River Tributaries and the South Fork of the Palouse River. IDEQ initiated Potlatch River TMDL development in 2004, beginning with a subbasin assessment, which included water quality monitoring. The Potlatch River TMDL is currently in draft form.

Following the completion of a TMDL, IDEQ and other state agencies, in coordination with the associated watershed advisory groups (WAGs), develop TMDL implementation plans to identify practices that treat point and non-point pollution issues addressed in the TMDL. To date, only the Paradise Creek TMDL Implementation Plan has been completed.

Programs and Management Plans:

At the State Level

Idaho Department of Fish and Game

Under Title 36 of the Idaho Code, the IDFG is responsible for preserving, protecting, and perpetuating fish and wildlife in the state of Idaho. The IDFG is also responsible for providing continued supplies of fish and wildlife to the citizens of the state for hunting, fishing, and trapping. IDFG management plans and policies relevant to fish and wildlife and their habitat in Latah County include: A Vision for the Future: Idaho Department of Fish and Game Policy Plan, 1990-2005; the Idaho Department of Fish and Game Strategic Plan; the Idaho Department of Fish and Game Five Year Fish Management Plan: 2001-2006; White-tailed Deer, Mule Deer and Elk Management Plan; the Black Bear Management Plan 2000-2010; the Nongame Plan 1991-1995; the Upland Game Plan 1991-1995; the Waterfowl Plan 1991-1995; the Moose, Sheep and Goat Plan 1991-1995; the Mountain Lion Plan 1991-1995; and the Furbearer Plan 1991-1995.

The Habitat Improvement Program (HIP) is a program administered by IDFG to create and improve habitat for upland game and waterfowl on public and private land. Initiated in 1987, the program is designed primarily to help private landowners restore and enhance the natural resources on their property to benefit waterfowl and upland game birds. IDFG HIP provides landowners with financial assistance for building waterfowl nesting structures, installing irrigation systems, purchasing fence materials, planting food plots, and putting in herbaceous, shrub and tree plantings to provide food, and nesting, brood-rearing, and winter cover. Between 1987 and 2003, 4,430 acres in Latah County were improved through HIP-funded projects (3,961 acres for upland birds and 469 acres for waterfowl). The primary practices implemented included: planting dense nesting cover, woody cover, and food plots; building shallow water developments; and protecting riparian areas. HIP Biologists also coordinated Farm Bill Program projects for wildlife habitat enhancement on private lands.

The IDFG assists the Latah SWCD in working with cooperators to improve fish and wildlife habitat through various landowner incentive programs, such as the annual Conservation Plan Giveaway Project. The IDFG also assists the Latah SWCD with community meetings, workshops, and information and education programs.

The Clearwater Pheasant Initiative (CPI) was developed by IDFG to provide funding for pheasant habitat improvement projects in the Clearwater Region. These funds complement HIP funds, but are focused on improving woody cover, planting food plots, and managing crop residue for cover. Many of the acres enrolled under the CPI are located within the Potlatch River watershed.

The IDFG is working with the University of Idaho Landscape Dynamics Lab to map critical wildlife habitat and vertebrate species richness. This information can be used by the Latah County Planning Commission to identify which habitats are most critical to protect; where conservation of soil, water and open space resources is most critical; and where and how restoration efforts might be most effective.

Programs and Management Plans:

At the State Level

The Idaho Conservation Data Center (CDC), part of the IDFG, is the central repository for information related to the state's rare plant and animal populations. The operating philosophy of the CDC is to provide accurate, comprehensive, and timely information on Idaho's rare species to decision makers at the earliest stages of land management planning. The staffs of the CDC are involved with rare plant and natural area surveys and the development of conservation strategies. These activities assist government agencies and private organizations to identify unique areas for protection from disturbance and development.

Idaho Department of Lands

The Idaho Department of Lands (IDL) is responsible for the management and maintenance of nearly 2,500,000 acres of endowment lands in the State of Idaho providing income to the endowment beneficiaries. This includes approximately 40,443 trust acres in the Potlatch River watershed. The IDL is also responsible for administering surface mining laws, placer mining laws, navigable waters regulations, the Idaho Forestry Act Fire Hazard Reduction Law, the Idaho Forest Practices Act, as well as the Idaho Lake Protection Act, which requires permits for work on or above the lake bed and below the ordinary high water mark. The IDL employs a Private Forestry Specialist available to assist private landowners manage their private wood lots.

IDL provides assistance to private landowners to develop timber management plans that comply with site-specific best management practices to protect riparian areas and water quality. The IDL administers the Idaho Forest Stewardship Program that outreach and education.

Idaho Department of Water Resources

The Idaho Department of Water Resources (IDWR) is responsible for enforcing the Stream Channel Protection Act, which requires permits for in-channel work or developments. Permit applications are “joint”, so that USACE and state and federal agencies, including the IDEQ, the IDFG, and NOAA Fisheries, have the opportunity to review and comment on the potential environmental effects of the projects. IDWR also manages Idaho’s

water rights program. The Idaho Code gives the Water Resource Board the authority to hold instream flow water rights for the purpose of maintaining minimum stream flows to protect a variety of instream uses. Minimum stream flows to protect fish habitat, recreation, aquatic life, and wildlife habitat have not been established on streams of the the Palouse River or Potlatch River watersheds.

Idaho Office of Species Conservation

The mission of the Idaho Office of Species Conservation (OSC) is to coordinate policies and programs related to the conservation of candidate, threatened, and endangered, species within the state of Idaho. As outlined in OSC's Strategic Plan, OSC works directly with SWC and conservation districts in Idaho to develop on-the-ground measures for protection and conservation of at-risk species and their habitats. OSC provides funding to conservation districts from funds the agency secures through the Pacific Coastal Salmon Recovery Funds (PCSRF) managed by NOAA Fisheries, Snake River Basin Adjudication (SRBA) funds managed by USFWS and Bonneville Power Administration Accord funds.

Idaho Soil and Water Conservation Commission

The Idaho Soil and Water Conservation Commission (SWC) was created by the Idaho legislature in 1939 and consists of five commission board members appointed to five-year terms by the Governor. ISWCC staff provides technical and administrative support to the 51 conservation districts in Idaho. SWC has provided funding to private landowners and land users through grants and loans from the Resource Conservation and Rangeland Development Program (RCRDP), and through financial incentives under the Water Quality Program for Agriculture (WQPA), all of which may supplement the EPA 319 funds distributed by the IDEQ for water quality improvement projects on agricultural lands.

The purpose of the RCRDP is to improve those rangeland and riparian areas with the potential to provide the greatest benefit to the public through reduction of soil erosion, improvement of water quality, and enhancement of habitat for special status species.

The intent of WQPA is to contribute to protection and enhancement of the quality and value of Idaho's waters by controlling and abating water pollution from agricultural lands. The program provides financial assistance to soil conservation districts to conduct water quality planning studies and implement water quality projects.

The ISWCC also administers the Idaho Agricultural Pollution Abatement Plan (AgPlan). The fourth revision of the AgPlan was certified by Governor Dirk Kempthorne in March 2003. The Ag Plan is Idaho's response to Section 208 of the federal CWA (PL 92-500) and represents the agricultural portion of the State Water Quality Management Plan. The AgPlan is the implementing action plan for all nonpoint source agricultural sector activities

in the state. The implementation strategy contains six actions items, including:

- Identify waters with beneficial uses threatened or impaired by agricultural activities
- Prioritize waters to determine needed implementation efforts
- Identify management strategies for implementation
- Define authorities, regulations, and commitments to ensure implementation occurs
- Implement feedback loop process
- Communicate evaluation results, conclusions, and recommendations

Idaho State Department of Agriculture
The mission of the Idaho State Department of Agriculture (ISDA) is to serve consumers and agriculture by safeguarding the public, plants, animals, and environment through promotion, education and regulation. The recently adopted Strategic Plan for ISDA highlights a guiding vision that fosters a cooperative working relationship with other state agencies.

Idaho Transportation Department
The Idaho Transportation Department (ITD) develops project plans through the State Transportation Improvement Program (STIP). These include a five-year project implementation phase and a one-year project development phase. In addition to STIP, corridor planning is conducted in urban, but has not been implemented as a planning methodology in Latah County, which is served by District 2 of the ITD.

The Idaho Transportation Department provides current information to the Latah SWCD on the status and plans of proposed new highway construction, and carries out beneficial conservation work affecting the highway right-of-way wetlands and adjacent agricultural lands. The ITD also provides input to interested parties regarding soil and water conservation and flood prevention problems affected by existing or potential highway work.

The Idaho Legislature created the Local Highway Technical Assistance Council (LHTAC) in 1994 to assist local road districts secure federal road funds for qualifying projects. The Idaho Association of Counties, Idaho Association of Cities, and Association of Highway Districts appoint members to the council, which is comprised of three members from each organization.

Programs and Management Plans:

At the State Level

University of Idaho Programs
The University of Idaho (UI) has been directly involved in several activities addressing fish, wildlife, and water quality issues through projects directed by faculty and students within the College of Agricultural and Life Sciences, the College of Natural Resources, and the College of Science.

The UI Experimental Forest is a multiple-use, working forest of over 8,000 acres administered by the College of Natural Resources. Project areas within the Potlatch River watershed include the Big Meadow Creek Unit, Blodgett Outdoor Classroom, and the Student Management Unit in the Big Meadow Creek drainage. Activities such as timber, watershed, wildlife, and range management, as well as many types of recreation, take place on the forest. Objectives of the forest are to provide students at the university a field laboratory in which to observe and practice what they have learned in the classroom; to provide an area in which to demonstrate to the public the latest forest land management techniques; and to provide a land base for research projects conducted by faculty and students of the college. UI student chapters of professional societies, such as The Wildlife Society, the Society of Range Management, the Society of American Foresters, and the American Fisheries Society actively participate in surveys, educational outreach, and watershed improvement activities.

The UI Cooperative Extension Service (CES) conducts education programs in Latah County. CES agents are trained in agriculture and related fields and have expertise in giving demonstrations, conducting group meetings, and working with the public and media. The CES agent assists the Latah SWCD in working with youth groups, organizing judging teams, and developing and participating in outdoor conservation activities. The CES also has other specialists trained in soils, irrigation, range, and agricultural economics available to provide technical assistance to the Latah SWCD and to residents of Latah County.

In addition, Latah SWCD works closely with Extension Forestry within the University of Idaho's College of Natural Resources.

At the Local Level

At the local level, many groups are involved in natural resource management and protection programs within Latah County, including:

- Clearwater Basin Advisory Group
- Latah Soil and Water Conservation District
- Latah Board of County Commissioners
- Latah Wildlife Association
- Latah Highway Districts (North and South)
- Palouse Auduon Society
- Palouse-Clearwater Environmental Institute
- Palouse Land Trust
- Palouse Prairie Foundation
- Pheasants Forever
- Three Rivers Chapter of Trout Unlimited
- Watershed Advisory Groups

Clearwater Basin Advisory Group
Basin advisory groups (BAG) were created by Idaho state water quality code (Idaho Code §39-3613). The duties of each BAG are specified by Idaho Code §39-3614. The BAGs were designated by the director of the Idaho Department of Environmental Quality to advise the Director on water quality objectives for each river basin in the state. The Clearwater Basin Advisory Group (CBAG) is composed of ten members representing industries and interests affected by the implementation of water quality programs within the Clearwater basin. The CBAG reviews all water quality programs proposed for, and implemented in Latah County, using 319 funding. The BAGs make recommendations to IDEQ concerning monitoring, designated beneficial use status revisions, prioritization of impaired waters, and solicitation of public input.

Latah Soil and Water Conservation District
As the first legally organized conservation district in Idaho, the Latah Soil and Water Conservation District (Latah SWCD) demonstrated its high ambitions early on, and has continued to strive to meet the needs of landowners in Latah County. The Latah SWCD is one of 51 conservation districts in Idaho, which serve 99 percent of the state's area. The mission of the Latah SWCD is to lead local efforts to promote the stewardship of natural resources, through the development of comprehensive plans and the implementation of strategies for economic and ecological sustainability, on behalf of our citizens, through the coordination of leadership information and funding.

The Latah SWCD provides the public with a formal channel for cooperating with one another and with county, state, tribal, and federal agencies in

resource conservation on lands within Latah County. The Latah SWCD offers guidance, assistance, and information to people with land use and other natural resource needs and concerns. Latah SWCD Supervisors and staff supply educational information to increase community awareness about the sustainable management of our local natural resources.

This Resource Conservation Plan facilitates these activities by outlining procedures and methods, prioritizing current needs, and identifying future expectations. It also provides a means of focusing the Latah SWCD's staff and financial resources, allowing the Latah SWCD Board to measure progress and results, promote sustainable resource management, and encourage collaboration between individuals, organizations and government agencies. The Latah SWCD seeks to ensure that the land, water and wildlife resources under its care will be viable and sustainable for current and future generations.

Latah Board of County Commissioners
The Latah Board of County Commissioners (BOCC) works with the Latah SWCD to help landowners and land users with the conservation, development, and wise use of the county's natural resources. The BOCC assists the Latah SWCD in carrying out its resource conservation and development program by evaluating requests for zoning variances, allocating funds, and cooperating with land users in implementing conservation structures and practices.

Latah Wildlife Association

Latah County Highway Districts
The highway districts of Latah County, known as the North Latah Highway District (NLHD), and the South Latah Highway District (SLHD), implement best management practices for erosion and sediment control in county road construction and maintenance. The highway districts work with the Latah SWCD to see that needed conservation practices are applied on road banks and stormwater discharge.

Programs and Management Plans:

At the Local Level

Palouse Audubon Society

Palouse-Clearwater Environmental Institute
The Palouse-Clearwater Environmental Institute (PCEI) is a 501(c)(3) non-profit organization based in Moscow, Idaho. The mission of PCEI is to increase citizen involvement in decisions that affect the region's environment. Through community organizing and education, PCEI assists community members make environmentally sound and economically viable decisions that promote a sustainable future. The primary goals of the organization are to:

- Promote the ecological health and social welfare of the Palouse-Clearwater region

- Participate in the conservation, preservation, and restoration of environmentally sensitive lands, natural areas, and unique ecosystems
- Provide forums for the free exchange of views in matters of concern to the public
- Inform and educate the public on issues of importance to the sustainable future of the Palouse-Clearwater region, thus promoting a well-informed, active and concerned citizenry

PCEI consists of six main program areas: Watersheds, Environmental Education, Green Living, Alternative Transportation, Alternative Energy, and AmeriCorps Placement. The Watersheds Program has been actively engaged in watershed restoration since the early 1990's, beginning with Adopt-a-Stream programs, litter clean-up, and storm drain labeling. PCEI implemented restoration projects on several watersheds throughout the county and surrounding regions; these projects range in size from backyards to large swaths of rural agricultural areas. Restoration treatments include re-sloping and streambank stabilization, restoration of floodplain connectivity, wetlands construction, revegetation with native riparian species, and restoration of channel complexity. All restoration projects are collaborative, science-based and community-centered, heavily utilizing volunteers and striving to build collaborative relationships with multiple agencies, families, schools, and other organizations. The primary targets of watershed restoration efforts have been water quality improvement projects involved in TMDL development and implementation, including reductions in sediments, bacteria, nutrients, and temperature. PCEI emphasizes preservation and restoration of native habitats for the long-term survival of native species of plants and animals.

Palouse Land Trust

The Palouse Land Trust (PLT) was formed in 1995 to help landowners and communities in the Palouse region conserve and protect unique and open areas. Conservation easements are the major mechanism used to accomplish this goal. Several projects managed by the Palouse Land Trust within the region include conservation easements, such as the Fosberg Preserve, the Berman Creekside Park, Emerald Creek Garnet Preserve, Idler's Rest Preserve, the Stage Property Easement, and a co-held easement at Cougar Bay on Lake Coeur d'Alene.

Palouse Prairie Foundation

The Palouse Prairie Foundation (PPF) was formed in 2002. The mission of the PPF is to promote preservation and restoration of native Palouse Prairie ecosystems in Latah and Whitman Counties through public awareness, education, literature resources, encouraging responsible local seed production, and by acting as a leader or consultant in Palouse Prairie restoration efforts.

Trout Unlimited

A local chapter of Trout Unlimited (TU) was established in the spring of 2004. The Three Rivers Chapter of Trout Unlimited has an area of responsibility which includes the Potlatch and Palouse River watersheds. Trout Unlimited's mission is to conserve, protect, and enhance cold water fisheries. In its short existence, the Three Rivers Chapter has supported several erosion control projects, assisted IDFG officials with steelhead tagging projects, and provided educational opportunities for local youth groups.

Pheasants Forever

Pheasants Forever (PF) is a non-profit organization dedicated to the protection and enhancement of pheasant, quail, and other wildlife populations in North America through habitat improvement, land management, public awareness, and education. The North Idaho Chapter (chapter 98) covers programs and projects in Latah County.

Nationally, in 2005, chapter volunteers completed over 20,000 habitat projects. Pheasants Forever has played an active role in the development and implementation of USDA Farm Bill policy and programs, which includes the Conservation Reserve Program (CRP). Pheasants Forever has more than 110,000 members in over 600 local chapters across the United States and Canada.

Watershed Advisory Groups

Watershed Advisory Groups (WAGs) were created by the Idaho State Water Quality Code (Idaho Code §39-3615). WAGs, with members approved by BAGs, were formed to provide advice to the IDEQ regarding specific actions needed to control point and nonpoint sources of pollution within watersheds where designated beneficial uses are not fully supported. WAG duties are specified in Idaho Code §39-3616. The code specifically calls for creation of WAGs for water bodies that were labeled as high priority on the TMDL schedule established for Idaho.

The Paradise Creek WAG was formed in 1996 and developed the Paradise Creek TMDL, which was adopted in 1997. The Paradise Creek TMDL Implementation Plan was adopted in 1998. The Palouse River Tributaries WAG was formed in 2004 and developed the Palouse River Tributaries Subbasin Assessment and TMDL in 2005. The Cow Creek WAG formed in 2005 and developed the Cow Creek Subbasin Assessment and TMDL in 2005. In 2006, the South Fork Palouse River WAG was formed and developed the South Fork Palouse River Watershed Assessment and TMDL and the implementation plan is under development. The Potlatch River WAG was formed in 2007 to develop the Potlatch River Tributaries Subbasin Assessment and TMDL; the assessment and plan are not yet completed.

Chapter 5: Overview of Work Plans

The following sections of the Resource Conservation Plan delineate individual work plans and are organized by two dominant themes. First, work plans are organized by the five main goals associated with the mission statement of the Latah Soil and Water Conservation District (Latah SWCD), as outlined at the beginning of this document.

The five goals include:

- **Local Governance**
- **Latah SWCD Capacity**
- **Community Outreach**
- **Comprehensive Planning**
- **Coordinated Implementation**

The second organizational theme affects the Coordinated Implementation goal outlined in Chapter 10. Within the Coordinated Implementation goal, the Latah SWCD approaches the issue of organizing on-the-ground conservation efforts in a way that closely mirrors the intuitive grouping of issues by members of the public, not necessarily conventional agency departmentalization. For example, as opposed to identifying water quality as a single issue of concern as is often done by conservation agencies, the Resource Conservation Plan identifies fisheries and public health as Resources of Community Concern and addresses water quality in the context of these categories. While community members may have a concern regarding water quality in a very general sense, their specific concerns are often referenced in the context of how water quality affects the fisheries resources they value or their public health concerns regarding the safety of drinking water from area wells.

The Coordinated Implementation goal highlighted in Chapter 10 is subdivided into eight Resources of Community Concern (ROCCs). The eight ROCCs include:

- **Agricultural Lands**
- **Fisheries**
- **Forest Lands**
- **Public Health**
- **Range and Pasture Lands**
- **Special Status Species**
- **Threatened and Endangered Ecosystems**
- **Wildlife**

The following chapters are dedicated to each of the five broad goals of the Latah SWCD. Within each chapter, individual resource goals, objectives,

strategies and tasks are outlined as necessary elements to fulfilling the five stated goals. In order to clarify the language used within the individual work plans contained within these chapters, the planning terms used in this Resource Conservation Plan are defined here. A slightly modified set of planning terms are defined in Chapter 10.

Goal: While the Latah SWCD has developed five major goals necessary for the fulfillment of the adopted Mission Statement, additional resource goals will be developed to provide more detailed focus with regard to the conservation issues to be addressed by the Latah SWCD within each of the following chapters. Goals are generally broad statements highlighting a preferred direction for the Latah SWCD in an effort to satisfy the Mission Statement.

Objective: Objectives are defined as general approaches designed to fulfill individual goals. Objectives may be measurable in broad terms.

Strategy: Strategies are more specific methods designed to fulfill the identified objectives.

Task: These are individual roles, or activities, that will be considered by the Latah SWCD within the next 5 years in order to fully implement the identified strategies. Individual tasks will have varying degrees of Latah SWCD involvement. The following list of "actions" summarizes a decreasing level of Latah SWCD commitment. Each task will be associated with a single action identifying the maximum degree of commitment the Latah SWCD may be willing to make within the next five years, if adequate technical and financial resources become available to commit to individual tasks. The Latah SWCD will commit lesser degrees of action if resources are limited.

For example, in the Resource Conservation Plan, the Latah SWCD may identify its preferred role over the next five-year period as: "*Participate* in IDEQ's development of the Cedar Creek Watershed Plan". However, due to limited funding and/or staffing resources available within Latah SWCD's FY09 budget, the Board of the Latah SWCD, through its FY09 Annual Plan, may opt to simply identify their role as: "*Review* IDEQ's Cedar Creek Watershed Plan".

The following list of task "actions" summarizes a decreasing level of Latah SWCD involvement or commitment:

Coordinate: Coordination implies an active leadership role for the design, development and implementation of a given task.

Participate: Participation implies that another entity or individual assumes the lead coordination role and the Latah SWCD serves in an active advisory or supporting role.

Facilitate: Facilitation assumes a temporary leadership role with primary roles eventually assumed by other parties. The facilitation role of the Latah SWCD is to link interested individuals with existing agencies and community resources.

Review: Reviews include the identification and summation of resource conservation concerns within Latah County and an outline of the Latah SWCD's potential future role.

Monitor: Monitoring implies a passive role that simply keeps the Latah SWCD alert to resource conservation issues that may affect Latah County.

Inform: Inform refers to the dissemination of readily available resource conservation information.

Sponsor: Sponsorship implies financial contributions in the form of membership dues or project/event donations.

Endorse: Endorsement implies explicit support for individual conservation strategies developed by other agencies and organizations. The Latah SWCD does not have an active role within the proposed strategy.

The Latah SWCD addresses a wide variety of issues from governance to on-the-ground implementation. Hence, in an effort to make this document as user-friendly as possible to a wide audience, the resource goals, objective, strategies, and tasks within the Resource Conservation Plan have been organized as independent work plans that can be reviewed individually by the reader. This allows readers to review and/or print only the work plans that are of immediate interest to them.

Chapter 6: Local Governance

Latah SWCD Goal

Lead and support landowner, land user, local community, and government agency efforts to collectively identify natural resource issues of concern, review alternative solutions to address these issues and undertake local efforts to resolve priority issue, using voluntary mechanisms.

The Latah Soil and Water Conservation District (Latah SWCD) provides local leadership in natural resources conservation. The Latah SWCD is governed by a Board of Supervisors comprised of local landowners, elected by, and accountable to, the citizens of Latah County. In its governance role, the Latah SWCD provides local leadership as it coordinates directly with federal, state, and tribal agencies to develop natural resources conservation and management practices. The Latah SWCD also leads neighborhood meetings, such as the Palouse Basin Water Summit; these meetings are open to the public and are intended for the discussion of local resource issues. Based on identified community priorities, the Latah SWCD applies its technical skill, knowledge base, and facilitation abilities to assist landowners in their conservation efforts.

The function of the Latah SWCD is to make available technical, financial, and educational resources from varied sources, and coordinate them to meet the needs of local land users, for the conservation of soil, water and related natural resources.

Formal Working Relationships

As a political entity of the state of Idaho, the Latah SWCD defines its relationships with other governmental entities through a set of formal agreements that recognize each other as equal conservation partners. The development and maintenance of these government-to-government "partnership" agreements is an important part of the Latah SWCD's governance goal. The basis of this partnership relationship is defined in the guiding principles adopted by core conservation agencies within the state of Idaho at the 2004 Annual Conference of the Idaho Association of Soil Conservation Districts. In summary, these guiding principles include:

- Listen to, anticipate and respond to customer needs
- Anticipate, identify and address issues
- Retain decision-making at the lowest appropriate level
- Advocate ecosystem management
- Maintain and enhance the grassroots delivery system
- Build alliances to expand the partnership
- Foster economically viable environmental policies

- Enhance, maintain and conserve the State's natural resources and environment

Strong and effective working relationships are necessary to efficiently meet the conservation needs of local landowners and land users. The Latah SWCD has built working relationships with local, state, and federal agencies, and private organizations, in order to provide multiple programs, as well as educational, technical, and financial resources, for conservation activities within Latah County.

The Idaho State Legislature recognized the need for formal agreements between conservation districts and other entities within the statute creating conservation districts: *To cooperate, or enter into agreements with, and within the limits of appropriations duly made available to it by law, to furnish financial or other aid, to any agency, governmental or otherwise, or any owner of lands within the district, in carrying on erosion-control and prevention operations and works of improvement for flood prevention and the conservation, development, utilization, and disposal of water within the district, subject to such conditions as the supervisors may deem necessary to advance the purpose of this act*."[26]

The Idaho Statute creates a broad-based authority for the Latah SWCD to develop agreements with, and furnish financial or other aid, to any land user, non-government, or government entities, in order to make available technical, educational, and financial resources from a wide variety of sources for conservation work in Latah County. The state law provides for a conservation district to administer conservation projects for the federal or state governments or any of its agencies. This authority establishes a basis for many of the agreements the Latah SWCD has with local, state and federal agencies.

As noted above, the conservation district can enter agreements with any federal agency to deliver conservation services and programs. Examples of federal agencies that have working agreements with conservation districts include the Environmental Protection Agency (EPA), Bonneville Power Administration (BPA), US Forest Service (USFS), Bureau of Land Management (BLM), US Fish and Wildlife Service (USFWS), USDA Natural Resources Conservation Service (NRCS), and National Atmospheric and Oceanic Administration Fisheries Service (NOAA Fisheries). The Latah SWCD has formal working agreements with USDA and the State of Idaho.

[26] Statute available at http://www3.state.id.us/cgi-bin/newidst?sctid=220270021.K

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Mutual Agreement between USDA, Governor of Idaho, and Latah SWCD

Unique to conservation districts across the nation is a Mutual Agreement signed by the Secretary of the United States Department of Agriculture, Idaho's Governor, and the Chair of the Latah SWCD. This agreement acknowledges a working relationship that authorizes all USDA agencies and State of Idaho agencies to work with the local conservation district to deliver conservation programs. The Mutual Agreement also establishes the basis for specific agreements, outlining technical, financial, and educational resources to be shared between the signing entities. The current Mutual Agreement was signed in 1996.

Cooperative Working Agreement between NRCS, SWC, Latah SWCD

For over 60 years the NRCS, formerly the Soil Conservation Service (SCS), has had an agreement with the Latah SWCD and the Idaho Soil and Water Conservation Commission (SWC) to provide conservation services and programs to land managers. Outlined within the current agreement are commitments to provide technical services, programs, educational activities, training, and other resources, as well as the sharing of personnel, office space, equipment, and vehicles, for the effective delivery of conservation programs and services. The current Cooperative Working Agreement was signed in 2009. The Idaho Association of Soil and Water Conservation Districts was also a signatory to the 2009 agreement.

The Cooperative Working Agreement described above established the unique local, state, and federal partnership that has proven effective over the past 60 years. In addition to the overall agreement, state and federal agencies have agreements with conservation districts specific to program delivery activities within a particular district.

Idaho State Agencies

The SWC was formed in the 1930s, within the same state law as the local conservation districts, to provide support and service to soil conservation districts.

The legislation creating conservation districts and the SWC included the following statement: "*It is in the best interest of the state of Idaho…That the state Idaho Soil and Water Conservation Commission provides support to soil conservation districts in the wise use and enhancement of soil, water and related resources."* Idaho Code § 22-2716(3)(F)

Idaho Soil and Water Conservation Commission Assistance

- Assist in coordinating district programs statewide
- Provide financial and technical assistance
- Assist with projects, practices, budgets, contracts, laws and regulations, programs, plans
- Disseminate information concerning activities and programs of districts
- Assist districts with exercising their powers spelled out in district law

The Latah SWCD can enter into agreements with any other state agency to deliver conservation services and programs. Examples of other state agencies with working agreements with local conservation districts include the Idaho Office of Species Conservation (OSC), Idaho Department of Environmental Quality (IDEQ), Idaho State Department of Agriculture (ISDA), Idaho Department of Lands (IDL), Idaho Department of Fish and Game (IDFG) and the Idaho Department of Transportation (ITD).

Local Governments

The Latah SWCD has also entered into working agreements with the Latah Board of County Commissions and the City of Moscow to provide, receive, and make available conservation services for local citizens.

Conservation District Associations (State and National)

Idaho's conservation districts have formed area, state, and national associations to combine resources that provide influence, information exchange, products and services needed by individual districts.

1	Ada
2	Adams
3	Balanced Rock
4	Bear Lake
5	Benewah
6	Blaine
7	Bonner
8	Boundary
9	Bruneau River
10	Butte
11	Camas
12	Canyon
13	Caribou
14	Central Bingham
15	Clark
16	Clearwater
17	Custer
18	East Cassia
19	East Side
20	Elmore
21	Franklin
22	Gem
23	Gooding
24	Idaho
25	Jefferson
26	Kootenai-Shoshone
27	Latah
28	Lemhi
29	Lewis
30	Madison
31	Minidoka
32	Nez Perce
33	North Bingham
34	North Side
35	Oneida
36	Owyhee
37	Payette
38	Portneuf
39	Power
40	Snake River
41	South Bingham
42	Squaw Creek
43	Teton
44	Twin Falls
45	Valley
46	Weiser River
47	West Cassia
48	West Side
49	Wood River
50	Yellowstone

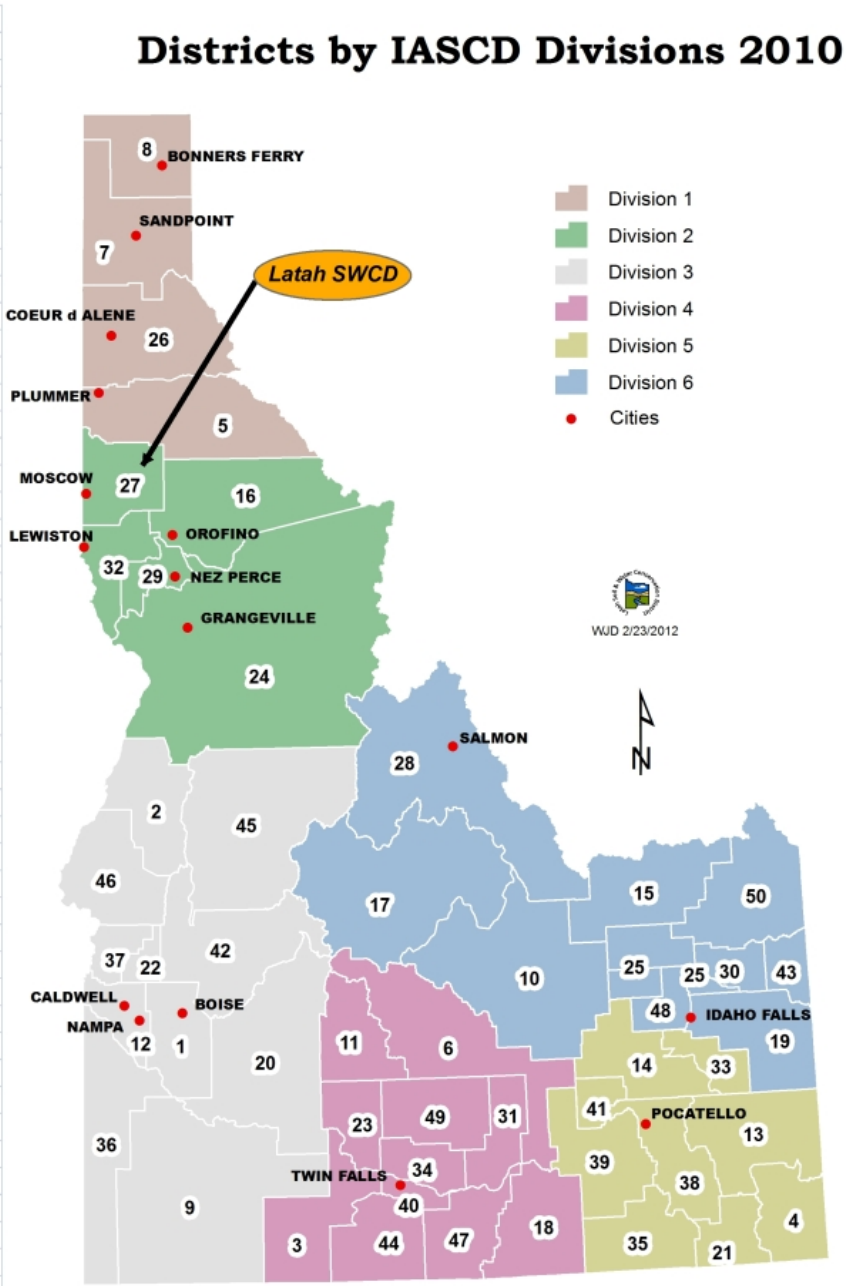
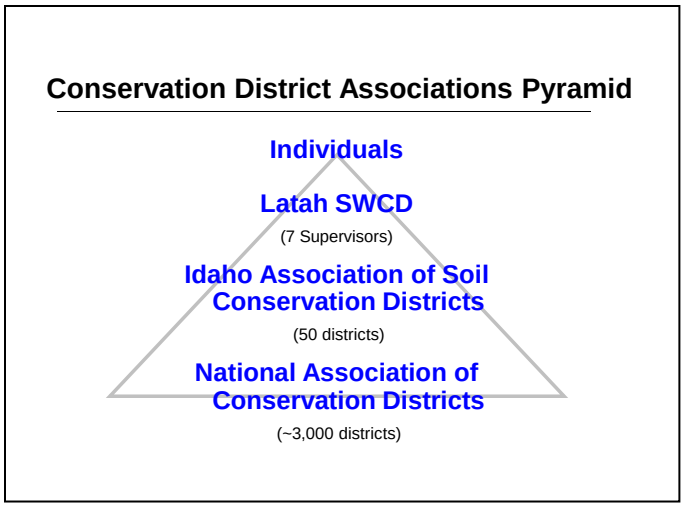


Figure 6 There are 50 conservation districts in the State of Idaho, organized by six divisions within the Idaho Association of Soil Conservation Districts.



The Idaho Association of Soil Conservation Districts (IASCD) is a voluntary, non-profit association of Idaho's 50 soil conservation districts (see Figure 6) cooperating in the management of Idaho's natural resources. In conjunction with districts from other states, they form part of a national network, the National Association of Conservation Districts (NACD), comprising approximately 3,000 districts and approximately 17,000 individual supervisors.

Idaho Association of Conservation Districts

The IASCD was organized in 1944 to provide a unified voice for conservation in Idaho. Its members work closely with the SWC on policy and natural resource issues and programs. The IASCD also provides a forum for discussion of common problems, including erosion and sediment control, water quality, forestry, wildlife, research, conservation, pasture and range management, resource planning, and environmental education. In order to pursue its goal of wise resource management, the IASCD informs the Idaho legislature and the Congress of its views on natural resource concerns.

National Association of Conservation Districts

For nearly 70 years, conservation districts have worked to promote and establish the wise use and conservation of natural resources. The NACD serves as the national voice for the nation's nearly 3,000 conservation districts. Its programs and activities are intended to advance the goals and objectives of conservation districts in helping the millions of cooperating landowners and land managers they serve conserve and protect America's natural resources.

NACD was founded by conservation district leaders in 1946, and is built on the philosophy that conservation decisions should be made by the local people who are most affected by those decisions. NACD's purpose is:

- To represent conservation districts as their national voice on natural resource conservation issues

- To provide useful information on conservation programs, policies and issues to conservation districts, state associations of conservation districts, conservation partners and the public
- To analyze conservation programs and policy issues that have a direct impact on the conservation and protection of natural resources
- To offer services to member districts

Non-Governmental Organizations

Conservation districts have working agreements with non-governmental organizations for delivering conservation services and programs locally. Examples of organizations that have working agreements with conservation districts include Ducks Unlimited, Pheasants Forever, Society of Range Management, and the Soil and Water Conservation Society.

Local Governance Work Plan

Goal

Lead and support landowner, land user, local community, and government agency efforts to collectively identify natural resource issues of concern, review alternative solutions to address these issues, and undertake local efforts to resolve priority issues using voluntary mechanisms.

The local governance work plan is divided into two components. Each component has individual objectives, strategies and associated tasks. These components include:

- Latah SWCD Governance
- Local Governance

Latah SWCD Governance

Objective

Fully exercise the rights and responsibilities of the Latah Soil and Water Conservation District Board of Supervisors as a locally elected body.

Strategy

Develop and maintain the capacity of the Latah SWCD to coordinate information and resources to identify and address locally identified and prioritized natural resource management concerns.

Tasks

1. Coordinate directly with federal, tribal, state and local agencies to develop and/or revise conservation policies and management practices to improve the Latah SWCD's ability to fulfill the conservation goals, objectives, strategies, and tasks as outlined in this Resource Conservation Plan.
2. Coordinate directly with other elected officials to address common natural resource management concerns.
3. Coordinate with the signatories of the Mutual Agreement and the Cooperative Working Agreement to make necessary revisions to the agreements, as needed.
4. Coordinate Latah conservation breakfast meetings with the Latah Board of County Commissioners and Idaho State Legislators.
5. Participate with the Idaho Association of Soil Conservation District/Division II collaborative efforts within North Central Idaho

(Clearwater, Idaho, Latah, Lewis and Nez Perce conservation districts).

6. Coordinate monthly Latah SWCD Board meetings so that they are easily accessible to the public.
7. Participate in the Idaho Association of Soil Conservation Districts' annual conference.
8. Participate with other conservation district boards and staff with developing policy, management and technical capacity, as requested.

Local Governance

Objective

Support local efforts to address common natural resource issues of concern through processes that engage and expand the community's capacity to voluntarily address natural resources management issues at the local level.

Strategy

Provide educational, technical, and financial assistance to community-based processes that seek to communicate and coordinate local efforts to identify and address resource management concerns through voluntary mechanisms.

Tasks

9. Participate in public forums on topics of local interest.
10. Participate in local watershed advisory groups through administrative and technical support, as requested by individual watershed advisory groups.
11. Participate in the annual Palouse Basin Water Summit.

Chapter 7: District Capacity

Latah SWCD Goal

Develop and maintain the political and organizational capacity to fully exercise Latah SWCD rights and responsibilities.

By the very nature of being a political subdivision of the State of Idaho, the Latah Soil and Water Conservation District (Latah SWCD) is accountable to the citizens within its boundaries for activities, programs, funding, and services. Public involvement in identifying natural resource needs and priorities is essential for the Latah SWCD to develop services and programs to meet the needs of the citizens within Latah County. Long-range goals and priorities are built from citizen's discussions with the District Supervisors and Associate members, staff, and partners, regarding local natural resource issues, needs, and recommendations.

The Latah SWCD hosts citizen input meetings and annual meetings, conducts surveys, receives input directly from cooperators receiving services, and encourages informal discussions held throughout the county to maintain a constant flow of citizen and community input on needs and priorities.

Idaho Statute § 22-2722 reinforces the non-regulatory nature of conservation districts, by stipulating that conservation districts obtain the consent of the owner of such lands or the necessary rights of interests in such lands.

> *To conduct demonstrational projects within the district on lands owned or controlled by this state or any of its agencies, with the cooperation of the agency administering and having jurisdiction thereof, and on any other lands within the district upon obtaining the consent of the owner of such lands or the necessary rights of interests in such lands, in order to demonstrate by example the means, methods, and measures by which soil and soil resources may be conserved, and soil erosion in the form of soil-blowing and soil-washing may be prevented and controlled; works of improvement for flood prevention and the conservation, development, utilization, and disposal of water may be carried out.*[27]

The non-regulatory nature of conservation districts is further demonstrated by § 22-2722 of conservation district law regarding consent of state agencies and owners of lands for control measures and works of improvement.

> *To carry out preventive and control measures and works of improvement for flood prevention or the conservation, development, utilization, and disposal of water within the districts including, but not limited, to engineering operations, methods of cultivation, the growing of vegetation, changes in use of land, and the measures listed in subsection C of section 22-2716, on*

[27] See http://legislature.idaho.gov/idstat/Title22/T22CH27SECT22-2722.htm

lands owned or controlled by this state or any of its agencies, with the cooperation of the agency administering and having jurisdiction thereof, and on any other lands within the district upon obtaining the consent of the owner of such lands or the necessary rights or interests in such lands.[28]

[28] See http://legislature.idaho.gov/idstat/Title22/T22CH27SECT22-2722.htm

District Capacity Work Plan

Goal

Develop and maintain the political and organizational capacity to fully exercise Latah SWCD rights and responsibilities.

The district capacity work plan is divided into three categories with individual objectives, strategies and associated tasks. These categories include:

- Board Leadership
- Professional Staffing
- Organization Infrastructure

Board Leadership

Objective

Enhance and maintain the leadership capacity of the Board of Supervisors to direct the natural resource planning and management efforts of the Latah SWCD.

Strategy

Provide opportunities for residents of Latah County to actively participate with the Latah SWCD.

Tasks

1. Coordinate Latah SWCD elections in concert with Latah County's general election.
2. Coordinate the recruitment of interested landowners and agricultural operators that might have an interest in serving as supervisors or associate supervisors.

Strategy

Provide opportunities for Board supervisors to actively participate in local, state and national forums to influence policies affecting natural resource management within Latah County and the State of Idaho.

Tasks

3. Participate in local, regional, state, tribal and federal intergovernmental processes that address issues relevant to the Latah SWCD's mission, goals and objectives.

4. Participate in the Idaho Association of Soil Conservation Districts (IASCD).
5. Sponsor the National Association of Conservation Districts (NACD).
6. Participate as a member of the Clearwater Resource Conservation and Development Council.
7. Participate in district capacity training for district supervisors.

Professional Staffing

Objective

Recruit, train and maintain professional staff necessary for the development and management of Latah SWCD programs and infrastructure. Latah SWCD staff provides the necessary program development and management structure to fulfill the Latah SWCD's mission, goals and objectives.

Strategy

Implement Latah SWCD policies that will enhance the recruitment and retention of professional staff.

Tasks

8. Coordinate and maintain a salary schedule and employee benefits package comparable to peer positions within state and federal agencies.
9. Coordinate staff training.
10. Coordinate technical and management assistance to other conservation districts, as requested.
11. Sponsor the Idaho District Employees Association (IDEA).
12. Participate with the Idaho District Employees Association (IDEA).

Organizational Infrastructure

Objective

Develop and maintain a Latah SWCD infrastructure that is capable of supporting current and future programs. This infrastructure includes the office environment, internal policies and procedures, and outreach communication systems.

Strategy

Maintain a professional office environment designed to support the needs of Latah SWCD staff and clients.

Tasks

13. Coordinate a central Latah SWCD filing system. This filing system will include historical and current information.
14. Coordinate a central public information area within the office to provide updated information to cooperators, inter-agency staff and the general public.
15. Coordinate the development and maintenance of a computer network, and update computer software and hardware necessary for the effective delivery of Latah SWCD programs.
16. Coordinate the development of a district Geographic Information System (GIS) database and perform technical data analyses
17. Coordinate the purchase and maintenance of district vehicles and field equipment.

Strategy

Maintain Latah SWCD policies and procedures in a fashion that maintains professional accounting, public records, and personnel management standards.

Tasks

18. Coordinate a professional accounting system to manage Latah SWCD funds in accordance with standard accounting policies while maintaining the security of the personnel and program participant's sensitive information.
19. Coordinate the development and maintenance of a Latah SWCD operations and procedural manual.
20. Coordinate updates to the Latah SWCD's personnel policies, as needed.
21. Coordinate updates to the Latah SWCD's mission, goals, objectives, and actions, as needed.

Chapter 8: Community Outreach

Latah SWCD Goal

Promote efforts to enhance local community understanding of ecological systems, the social systems directly dependent upon these natural systems, and the political and organizational systems developed for management of natural recourses within Latah County.

Programs offered by the Latah SWCD include an extensive community outreach program. Programs are designed for the general community, youth, landowners and land users, and university faculty and students.

Enhanced appreciation of natural resources is promoted through a variety of hands-on exercises and demonstrations throughout the year. An annual event that everyone has looked forward to since 1986 is the Sixth Grade Conservation Awareness Days. This two-day event is designed for all sixth-graders in Latah County and held at Spring Valley Reservoir near Troy.

The Latah SWCD provides local coordination of the annual Idaho Association of Soil Conservation District (IASCD) and National Association of Conservation District (NACD) poster and speech contests for area grade school and high school students, respectively.

Forums are coordinated to promote grower interaction and technology transfer. The Latah SWCD also hosts demonstrations, such as the Direct Seed Drill Demo, and social recognition events, such as the annual Latah Conservation Stewardship Award ceremony.

Youth and adult programs are complemented through postings on the Latah SWCD's website (www.latahsoil.org). The website includes information and links that enhance the user's understanding of issues affecting natural resources throughout Latah County. A public display area is also maintained at the Latah SWCD office to provide a variety of hand-outs, brochures, maps, and contacts for area growers and the community. The Latah SWCD;s newsletter, *The Working Conservationist,* is published quarterly and distributed throughout the county.

Community Outreach Work Plan

Goal

Promote efforts to enhance the local communities' understanding of ecological systems, the social systems directly dependent upon these natural systems, and the political and organizational systems developed for the management of natural resources within Latah County.

Objective

Coordinate and support educational opportunities to enhance the community's understanding of natural resource systems and the management policies and programs that affect the management of natural resources within Latah County.

The community outreach work plan is divided into four categories with individual strategies and associated tasks. These categories include:

- General Community Outreach
- Youth Outreach
- Landowner/Land user Outreach
- University Outreach

General Community Outreach

Strategy

Provide tangible opportunities for members of the general public to become educated about natural resources issues within Latah County and the conservation efforts of the Latah SWCD, public natural resource management agencies, and private landowners.

Tasks

1. Coordinate maintenance of distribution lists for distributing Latah SWCD announcements and publications.
2. Coordinate the development and maintenance of the Latah SWCD website.
3. Coordinate the development and maintenance of the Latah SWCD blog.
4. Coordinate the development and distribution of Latah SWCD press releases and updates.
5. Coordinate community educational forums to discuss natural resource management programs within Latah County.

6. Coordinate a display highlighting Latah SWCD programs at the Latah County Fair.

Youth Outreach

Strategy

Provide opportunities for area youth to learn about natural resource management issues within Latah County and to interact with local natural resource management professionals.

Tasks

7. Coordinate the annual Conservation Awareness Days for area schools.
8. Sponsor Envirothon, Forestry Contest, Land and Soil Evaluation Event, and Idaho Ag in the Classroom up to the historical amounts.
9. Coordinate scholarships for students to attend Natural Resources Camp.
10. Coordinate assistance for teams to participat in Envirothon, Idaho State Forestry Contest, and Landand Soil Evaluation Event.
11. Coordinate annual poster and essay contests
12. Coordinate classroom presentations as requested.

Landowner/Land User

Strategy

Provide opportunities for local landowners, land users, and land managers to review new information regarding natural resource management activities and opportunities within Latah County, the state of Idaho, and the Pacific Northwest.

Tasks

13. Coordinate the annual Latah Conservation Stewardship Award banquet and field tour.
14. Participate in the annual Family Forest Landowners and Managers conference.
15. Participate in the annual North Idaho Grazing Workshop sponsored by IASCD/Division II.
16. Coordinate field and farm tours to highlight new and innovative technologies and practices.
17. Coordinate general display materials in the Latah SWCD office for landowners and land users.

University Outreach

Strategy

Participate in educational opportunities to interact with university faculty, staff and students regarding private land management issues within Latah County, and to highlight the professional challenges and opportunities associated with management issues.

Tasks

18. Coordinate scholarships and/or internships for university students focused on natural resource conservation.
19. Inform students regarding natural resource topics, as requested and as time permits.
20. Participate in formal and field presentations and forums as board and staff time permits.
21. Facilitate the development of landowner/land user contacts with research teams from the University of Idaho and/or Washington State University when it is mutually beneficial to all affected parties.

Chapter 9: Comprehensive Planning

Latah SWCD Goal

Promote individual, local, regional, state, tribal and national planning efforts that recognize, and manage for, the interconnected elements of natural systems and seek sustainable management approaches for the natural resources within the Latah SWCD while providing for the long-term natural resource conservation objectives of landowners and land users, strengthening the long-term health of local economies and protecting the long-term public interest of the community.

At the center of a conservation district's services to citizens is the development of long-range plans that bring together information about the natural resource issues, pressures, needs, trends, and recommended actions for their conservation district.

The Latah SWCD has developed this Resource Conservation Plan as the master planning document to provide the foundation for the development of programs to address natural resource management issues within Latah County. It includes goals, objectives, strategies, and tasks for conservation efforts that are built from citizen input and the leadership of the Latah SWCD supervisors. The plan provides guidelines and essential information for critical natural resources management issues to land managers, government officials, and other leaders within Latah County.

The Idaho Soil Conservation District Law provides the basis for the development of a long-range plan.

> *To develop comprehensive plans for the conservation of soil resources and for the control and prevention of soil erosion and for flood prevention or the conservation, development, utilization, and disposal of water within the district, which plans shall specify in such detail as may be possible, the acts, procedures, performances, and avoidances which are necessary or desirable for the effectuation of such plans, including the specifications of engineering operations, method of cultivation, the growing of vegetation, cropping programs, tillage practices, and changes in use of land, and to publish such plans and information and bring them to the attention of occupiers of lands within the district.*[29]

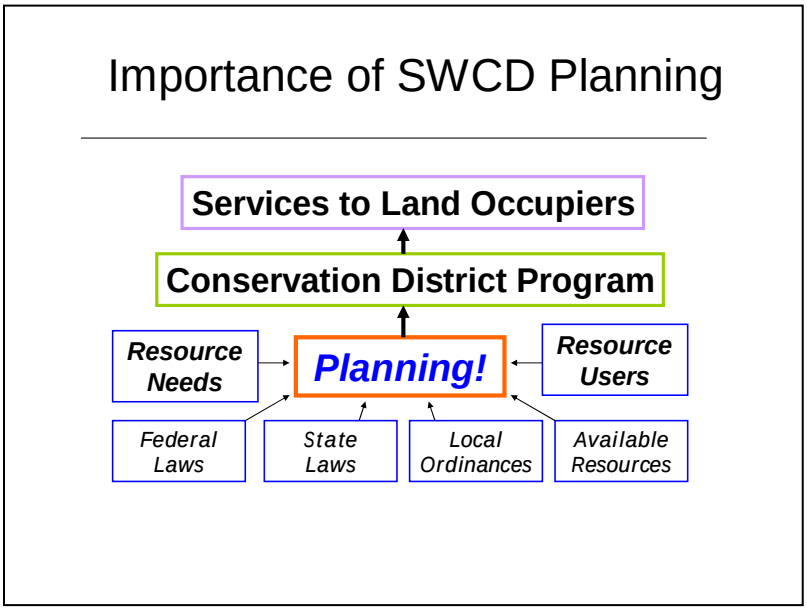
Latah SWCD's Five-Year Resource Conservation Plan

The Resource Conservation Plan seeks to suggest strategies and tasks that the Board of Supervisors think should be undertaken by the Latah SWCD if adequate technical and financial resources can be secured.

The Latah SWCD also operates under an Annual Work Plan. The Annual Work Plan includes details of activities and services planned for the year,

[29] See http://legislature.idaho.gov/idstat/Title22/T22CH27SECT22-2722.htm

persons responsible for leading the activities, timelines, and budget information. While the Resource Conservation Plan seeks to identify strategies and tasks that could be done within the next five years with additional resources, the Annual Work Plan identifies those strategies and tasks suggested within the Resource Conservation Plan that can be done within the next fiscal year with existing Latah SWCD resources.



Comprehensive Planning Work Plan

Goal

Promote individual, local, regional, state, tribal, and national planning efforts that recognize, and manage for, the interconnected elements of natural systems and seek sustainable management approaches for the natural resources within the District while providing for the long-term natural resource conservation objectives of land owners and land users, strengthening the long-term health of local economies, and protecting the long-term public interest of the community.

The comprehensive planning efforts of the Latah SWCD are divided into four categories with individual objectives, strategies, and associated tasks. These categories include:

- Landowner and Land User Conservation Planning Assistance
- Watershed Planning
- Community/Economic Development Planning
- Land Use and Transportation Planning

Landowner and Land User Conservation Planning Assistance

Objective

Support individual landowner's and land user's comprehensive planning efforts that provide for their long-term conservation objectives while protecting and enhancing the natural resources within Latah County.

Strategy

Provide technical planning assistance directly to landowners and land users to meet their long-term conservation objectives while fulfilling appropriate conservation program objectives.

Tasks

1. Coordinate the development and maintenance of an efficient and effective Latah SWCD process for planning and contracting services between the Latah SWCD and individual landowners and land users.
2. Coordinate the identification and development, if needed, of appropriate professional standards and specifications for conservation practices.
3. Coordinate the development and revision of cost-share policies for delivery of Latah SWCD programs.

4. Coordinate conservation planning assistance to partner state and federal conservation agencies when staff resources are available and the assistance is mutually beneficial to Latah SWCD and affected parties.
5. Review state and national planning policies that may affect the ability of the Latah SWCD to provide conservation planning assistance to landowners and land users.

Watershed Planning

Objective

Actively participate in local, regional, tribal, and state watershed planning efforts that provide for the long-term conservation objectives of landowners and land users while protecting and enhancing natural resources within Latah County.

Strategy

Coordinate local watershed planning efforts and participate in state and regional efforts through technical reviews.

Tasks

The following watershed planning tasks are organized by descending watershed scale.

Columbia and Snake Rivers

6. Monitor Columbia River watershed planning efforts to determine possible effects on the Latah SWCD's ability to provide resource conservation services.
7. Monitor Snake River watershed planning efforts to determine possible effects on the Latah SWCD's ability to provide resource conservation services.
8. Monitor the Snake River Basin Adjudication (SRBA) process to determine possible effects on the Latah SWCD's ability to provide resource conservation services.

Clearwater River

9. Participate with the Clearwater Technical Group.
10. Monitor Clearwater River watershed planning efforts to determine possible effects on the Latah SWCD's ability to provide resource conservation services.

Potlatch River

11. Coordinate continued updates to The Latah SWCD's Potlatch River Watershed Management Plan.
12. Participate in the Idaho Department of Environmental Quality's (DEQ) Total Maximum Daily Load (TMDL) processes related to the Potlatch River watershed.
13. Review IDFG's Potlatch River fisheries monitoring program.
14. Review ISDA's and IDEQ's Potlatch River water quality monitoring programs.
15. Review USDA Forest Service and Idaho Department of Lands' (IDL) planning efforts within the Potlatch River watershed to determine opportunities for collaborative conservation on private lands within the watershed.
16. Coordinate the development and implemention of a Latah SWCD watershed monitoring plan for the Potaltch River and tributaries.

Palouse River

17. Participate in Washington State's Water Resource Inventory Area 34 (WRIA) planning effort for the Palouse River watershed.
18. Participate with the Palouse River Tributaries WAG.
19. Review the Palouse Basin Aquifer Committee's (PBAC) planning efforts to protect and improve water quality and quantity of local groundwater systems.
20. Review IDEQ's water quality monitoring programs throughout the watershed.
21. Coordinate the development and implemention of a Latah SWCD watershed monitoring plan for the Palouse River and tributaries.

South Fork Palouse River

22. Monitor Washington Department of Ecology's TMDL process for the South Fork Palouse River.
23. Participate with the South Fork Palouse River WAG and associated state agency's efforts to develop an implementation plan for the South Fork Palouse River TMDL.

Paradise Creek

24. Participate in the revision process of the Paradise Creek TMDL and/or implementation plan.
25. Review IDEQ's process if a Use Attainability Analysis (UAA) is initiated.
26. Review University of Idaho's watershed research findings.

Cow Creek/Union Flat Creek

27. Participate with the Cow Creek WAG and associated state agency's efforts to develop a TMDL implementation plan for the Cow Creek watershed.

Community/Economic Development Planning

Objective

Participate in local, regional and state community and economic development planning efforts that strengthen the long-term sustainability of natural resource-based economies.

Strategy

Engage in community and economic development opportunities that have the potential to directly affect Latah County landowners' and land users' community and/or economic interests in natural resource management activities.

Tasks

28. Review economic opportunities for biofuel production, and associated agricultural crop production, within Latah County and the greater Palouse region.
29. Review opportunities for forest biomass utilization within Latah County and north-central Idaho.
30. Endorse research to maintain bluegrass production in Latah County through non-burning methods.
31. Facilitate efforts to increase the resiliency and self-sufficiency of family farm operations.

Land Use and Transportation Planning

Objective

Promote land use and transportation planning activities throughout Latah County that support the long-term natural resource conservation objectives of the Latah SWCD.

Strategy

Provide land use and transportation planning[30] assistance to individual governmental entities as they seek to better understand natural resource

[30] Planning assistance does not necessarily include site specific regulatory zoning issues that may come before a city or county government. Planning assistance is directed at the county-wide perspectives that are not parcel or landowner specific.

conservation issues within Latah County and North-Central Idaho and how voluntary conservation incentives may be incorporated into specific land-use and transportation planning efforts.

Tasks

32. Coordinate the development of a government-to-government agreement with Latah County for Latah SWCD input into county-wide natural resource conservation planning efforts that emphasize voluntary incentive-based programs.
33. Endorse the development of voluntary open space planning efforts by private and public entities when these efforts are consistent with the mission and goals of the Latah SWCD.
34. Coordinate the develop of a government-to-government agreement with the North Latah Highway District (NLHD)and the South Latah Highway District (SLHD) to address erosion, wildlife, fish passage and resource mitigation issues on county roads.
35. Coordinate the develop of a government-to-government agreement with the Idaho Transportation Department (ITD) to address erosion, wildlife, fish passage, and resource mitigation issues associated with state highways in Latah County.

Strategy

Upon request, provide natural resources conservation assistance to individual landowners seeking to develop individual properties while simultaneously protecting and/or enhancing the natural resources affected by their development proposals.

Tasks

36. Coordinate limited technical assistance directly to landowners seeking to develop individual parcels within geographic areas of concern for the Latah SWCD.

Chapter 10: Coordinated Implementation

Coordinated Implementation Goal

Lead the voluntary implementation of conservation efforts that seek to simultaneously protect and enhance the long-term productivity of the District's natural resource base while providing for the long-term natural resource conservation objectives of land owners and agricultural operators, protecting the established rights of individual land owners and operators, strengthening the long-term health of local economies and protecting the long-term public interest of the community.

Resources of Community Concern (ROCCs)

The Latah SWCD's goal of coordinated implementation focuses on the development of work plans for each resource of community concern. A resource of community concern is defined as an individual issue, or grouping of issues, that is inherently valuable to members of the community. This community value is strong enough to warrant a voluntary commitment of time, energy and/or financial resources.

The Resources of Community Concern (ROCCs) are grouped into eight broad categories for planning and management purposes. Within each of these ROCCs there is a further refinement of the issues allowing for a detailed description of conservation concerns, possible resolution strategies, and proposed tasks for the Latah SWCD to consider.

ROCCs:

- Agricultural Lands
- Fisheries
- Forest Lands
- Public Health
- Range and Pasture Lands
- Special Status Species
- Threatened Ecosystems
- Wildlife

ROCC Work Plans

Individual ROCC work plans are developed in this chapter as separate worksheets for the reader's ease. ROCC work plans are designed to be independent sources of information that can be separated from the main document and provide enough information for the reader to understand the resource of concern, conservation strategies for consideration, and proposed Latah SWCD tasks.

While comprehensive natural resource management is increasingly complicated, the use of ROCC work plans allows for very detailed and critical discussions regarding individual resources of community concern, proposed conservation approaches and the Latah SWCD's possible role within the next five years.

Latah SWCD ROCC work plans will be updated when new information becomes available through interactions with the general public, conservation agencies, and/or the research community. ROCC work plans will also be updated to account for changes in legislation, rules and policies.

Individual ROCC work plans are divided into the following ten sections. Definitions for each section are highlighted.

Primary ROCC

A Resource of Community Concern (ROCC) is defined as an issue that motivates individuals and community organizations to voluntarily dedicate time, energy and resources to the protection and/or enhancement of that resource. Primary ROCCs are broad groups of resources and secondary ROCCs are further delineations of primary ROCCs. The eight primary ROCCS include: Agricultural Lands, Fisheries, Forest Lands, Public Health, Range and Pasture Lands, Special Status Species, Threatened Ecosystems, and Wildlife.

Secondary ROCC

Secondary ROCCs represent a more refined definition of ROCCs that better define resource units for management purposes (e.g., Wildlife/Game Species).

Geographic Focus

The geographic focus defines the area of concern for the identified ROCC. This focus could be county-wide or limited to a specific watershed, community, etc.

ROCC Conservation Goal

Conservation goals are unique to individual ROCCs, both primary and secondary. The defined ROCC conservation goal within each ROCC work plan summarizes the preferred future condition for the ROCC. Conservation goals will focus on issues associated with the protection and enhancement of ROCC long-term sustainable conditions.

Limiting Factors

Limiting factors are issues that limit the attainment of the previously identified ROCC conservation goals.

Objectives

Objectives are general approaches to reducing the effects that identified limiting factors have on the attainment of the ROCC conservation goals.

Strategies

Strategies are preferred approaches to fulfill the previously identified objectives. Whenever possible, methods to monitor and evaluate the effectiveness of selected strategies should be identified.

Rationale

The rationale section summarizes technical and policy reasoning behind the selected strategies for an individual ROCC work plan. The explicit statement of Latah SWCD rationale allows for continued discussion as to the merits of current technical and policy reasoning and allows for the introduction of new technical and/or policy information into the planning process.

When appropriate, references used within the rationale section will be identified through superscript numbering to reference resources within the notes section of individual ROCC work plans.

Notes

In this section, supplemental information that might be of interest to the reader with respect to the identified ROCCs, objectives, strategies and rationale is introduced.

Tasks

This section identifies the roles, or activities, that should be considered by the Latah SWCD within the next 5 years in order to fully implement the identified strategies within an individual work plan.

Each task delineates an explicit degree of Latah SWCD commitment. The following list of "actions" summarizes a decreasing level of Latah SWCD commitment and is used when developing individual work plans. Each task will be associated with a single action identifying the highest degree of commitment the Latah SWCD will consider making within the next 5-years if technical and financial resources become available to the Latah SWCD. If resources are limited, Latah SWCD may consider actions requiring a lesser degree of commitment.

Coordinate: Coordination implies an active leadership role for the design, development and implementation of a given task.

Participate: Participation implies that another entity or individual assumes the lead coordination role and the Latah SWCD serves in an active advisory or supporting role.

Facilitate: Facilitation assumes a temporary leadership role with primary roles eventually assumed by other parties. The facilitation role of the Latah SWCD is to link interested individuals with existing agencies and community resources.

Review: Reviews include the identification and summation of resource conservation concerns within Latah County and an outline of the Latah SWCD's potential future role.

Monitor: Monitoring implies a passive role that simply keeps the Latah SWCD alert to resource conservation issues that may affect Latah County.

Inform: Inform refers to the dissemination of readily available resource conservation information.

Sponsor: Sponsorship implies financial contributions in the form of membership dues or project/event donations.

Endorse: Endorsement implies explicit support for individual conservation strategies developed by other agencies and organizations. The Latah SWCD does not have an active role within the proposed strategy.

Common 5-year Tasks Applicable to all ROCCs

There are commons tasks applicable to all eight Resources of Community Concern and they apply in varying degrees to the issues and concerns highlighted throughout Chapter 10 – Coordinated Implementation. The common Latah SWCD 5-year tasks include:

1. Coordinate and participate in inter-agency efforts relevant to the fulfillment of each ROCC's goal and objectives.
2. Facilitate landowner and land user access to technical resources, financial resources and educational resources (e.g., handbooks, resource guides, demonstrations, tours, roundtables, competitions, etc.) relevant to the fulfillment of each ROCC's goal and objectives.
3. Endorse federal, tribal, state, local and non-governmental efforts to implement management plans and practices that are consistent with the Latah SWCD's mission statement and will significantly enhance the fulfillment of each ROCC's goal and objectives.
4. Endorse land use planning efforts consistent with Latah SWCD's mission statement and each ROCC's goal and objectives.
5. Endorse research and monitoring efforts consistent with Latah SWCD's mission statement and each ROCC's goal and objectives.
6. Review program development opportunities consistent with each ROCC's goal and objectives.

Agricultural Lands

Agricultural Lands Resource Conservation Goal

> *Maintain and improve long-term soil productivity on agricultural lands while providing voluntary opportunities for the long-term preservation of working agricultural lands in Latah County.*

The agricultural lands resource of community concern is divided into two secondary resources of community concern: soil productivity and agricultural land preservation.

Soil Productivity

Soil productivity addresses the inherent ability of agricultural soils to produce sustainable crops. Soil productivity has ROCC work plans for each of two identified limiting factors:

- Soil Health/Quality Deficiencies
- Precision Management Deficiencies

Agricultural Land Preservation

The agricultural land preservation category addresses issues and concerns that affect the long-term viability of productive agriculture as an on-going land management practice within Latah County. Agricultural land preservation addresses the community's desire to maintain economically viable agricultural lands within Latah County. This desire may be increased in areas where the pressures of urban and suburban growth are greatest.

Agricultural land preservation has a ROCC work plan for each of the three identified limiting factors. The limiting factors related to the agricultural land preservation conservation goal include:

- Loss of Productive Agricultural Lands
- Loss of Rural Amenities
- Crop Predation by Animals

Agricultural Lands
Soil Productivity
Soil Health/Quality Deficiencies

Primary ROCC: Agricultural Lands

Secondary ROCC: Soil Productivity

Geographic Focus: Latah County

ROCC Conservation Goal: Maintain and improve long-term soil productivity on agricultural lands through development, adoption, promotion, and demonstration of practices that benefit inherent and dynamic soil properties associated with productivity potential, within the framework of economic and social needs.

Limiting Factor: Soil Health/Quality Deficiencies

Objective(s):
1. Reduce threats to agricultural sustainability (erosion, acidification, organic matter loss.)
2. Encourage adoption of management practices that improve physical, chemical, and/or biological soil properties and processes limiting productivity and soil health.

Strategies:
1. Promote the most appropriate cropping system, tillage, residue management, and concentrated flow best management practices to improve soil productivity.
2. Improve transfer of knowledge as appropriate.

Rationale:
1. Degradation of soil quality has resulted from tillage-based crop management systems (e.g., water erosion and tillage translocation, loss of soil organic matter, changes in soil fauna, and soil acidification).
2. Even with adoption of soil conserving practices, agricultural productivity and sustainability continue to be threatened by alteration of soil properties and processes (aggregate stability, infiltration rat and water holding capacity; cation/nutrient absorption; pH buffering capacity; food source) important to overall soil health.

Notes:

Latah SWCD Five-Year Tasks:
1. Coordinate trials addressing alternatives to commercial fertilizer inputs.
2. Coordinate soil erosion and water quality control practices to manage concentrated flow affecting agricultural lands (i.e., BMP program that complements existing NRCS programs).
3. Facilitate outreach and adoption of appropriate strategies to halt or reverse soil acidification.
4. Facilitate ability of agricultural producers to evaluate achievement of goals through yield monitoring, soil testing, plant testing, and soil health monitoring/assessment. This includes coordinating acquisition of a weigh wagon to facilitate yield trials.
5. Participate in on-farm investigations/trials of best management practices or alternative practices.
6. Participate with NRCS to develop and/or modify Best Management Practice standards and specifications while also informing landowners and land users of NRCS programs.
7. Endorse research evaluating direct linkages between productivity and soil biology response to management practices.

8. Review projects investigating the relationship between cropping system, soil organic matter, soil health, nutritional value of food, and human health.
9. Participate in understanding the role of pesticide carryover in productivity loss and influence of rotation in addressing pesticide carryover issues.

Agricultural Lands
Soil Productivity
Precision Management Deficiencies

Primary ROCC: Agricultural Lands
Secondary ROCC: Soil Productivity
Geographic Focus: Latah County
ROCC Conservation Goal: Maintain and improve long-term soil productivity on agricultural lands through development, adoption, promotion, and demonstration of practices that benefit inherent and dynamic soil properties associated with productivity potential, within the framework of economic and social needs.
Limiting Factor: Precision Management Deficiencies
Objective(s): 1. Improve efficiency of input through proper timing, placement, rate, and application.
Strategies: 1. Incorporate precision agriculture practices to more precisely manage chemical applications.
Rationale: 1. Improper nutrient and pest management can limit crop quantity and quality, impact non-target plant and animal species, and impose greater environmental risks.
Notes:
Latah SWCD Five-Year Tasks: 1. Coordinate synthesis of existing knowledge on current topics of high priority (e.g., the relationship between cropping system, soil organic matter, soil health, nutritional value of food, and human health). Draw from local expertise/experience, extension publications, relevant research, etc. 2. Facilitate programs targeting adoption of precision agriculture principles and/or technology including but not limited to remote sensing diagnostics to evaluate mid-season progress. 3. Coordinate increased understanding of how precision agriculture impacts economic and environmental sustainability of agroecosystems. 4. Coordinate mitigation practices for sensitive areas. 5. Monitor advances in soil fertility testing and nutrient management planning to improve understanding of individual agroecosystems. 6. Facilitate coordination with crop breeders to develop crop varieties with desired traits (pest, disease, residue breakdown) and additional winter crops for rotation.

Agricultural Lands
Agricultural Land Preservation
Loss of Productive Agricultural Lands

Primary ROCC: Agricultural Lands
Secondary ROCC: Agricultural Land Preservation
Geographic Focus: Latah County
ROCC Conservation Goal: Maintain productive agricultural lands within Latah County through the implementation of voluntary strategies that support profitable family farms and rural economies.
Limiting Factor(s): Loss of productive agricultural lands.
Objective(s): 1. Maintain productive agricultural lands through voluntary incentives and programs.
Strategies: 1. Support land-use planning for the principle of protecting resources and the agricultural environment and infrastructure that farmers and ranchers require to produce food and fiber for current and future generations. 2. Support farmland protection programs, which focus on maintaining agricultural viability.
Rationale: 1. Many farmland protection programs favor protecting actively farmed agricultural landscapes rather than merely preserving open space. Protecting the most productive agricultural lands and continuing farmland use will be most successful in the face of rising land values in urban fringe areas.
Notes: USDA's Farm and Ranch Lands Protection Program provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses.
Latah SWCD Five-Year Tasks: 1. Review "right-to-farm" programs to support continued commercial agricultural production in Latah County. 2. Endorse research to review the effects of set-aside programs and conservation easements on individual farm and rural community economies. 3. Endorse voluntary farmland protection programs focusing on maintaining agricultural viability.

Agricultural Lands
Agricultural Land Preservation
Loss of Rural Amenities

Primary ROCC: Agricultural Lands
Secondary ROCC: Agricultural Land Preservation
Geographic Focus: Latah County
ROCC Conservation Goal: Maintain rural amenities in Latah County by preserving active farmlands.
Limiting Factor(s): Loss of rural amenities.
Objective(s): 1. Recognize that farmland produces more for society than food and fiber. 2. Preserve the amenities farmland provides such as opportunities for outdoor recreation, viewing wildlife and rural scenes, and assurance that the agrarian way of life continues. 3. Provide an opportunity to protect rural amenities by preserving agricultural lands.
Strategies: 1. Promote voluntary farmland protection programs that include preservation of scenic beauty and cultural heritage as primary goals.
Rationale: 1. In sparsely populated states, such as Idaho, it may seem unnecessary to explicitly protect areas for aesthetics, given the relative abundance of rural amenities that exist. Therefore, efforts to protect aesthetic values may need to focus on minimizing the loss of rural amenities through a focus on farmland preservation.
Notes: USDA's Farm and Ranch Lands Protection Program provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses.
Latah SWCD Five-Year Tasks: 1. Review "right-to-farm" programs to support continued commercial agricultural production in Latah County. 2. Review the outcomes from forums and committees that examine how farmland protection programs fit into the broad array of state and local rural land conservation programs in Idaho. 3. Endorse voluntary farmland protection programs focusing on maintaining agricultural viability.

Agricultural Lands
Agricultural Land Preservation
Crop Predation by Animals

Primary ROCC: Agricultural Lands
Secondary ROCC: Agricultural Land Preservation
Geographic Focus: Latah County
ROCC Conservation Goal: Maintain productive agricultural lands within Latah County through the implementation of voluntary strategies that limit losses due to crop predation.
Limiting Factor: Deer and Elk Predation on Crops
Objective(s): 1. Reduce losses to crop predation.
Strategies: 1. Improve awareness of crop predation issues and their causes. 2. Increase hunter access to private lands through voluntary programs administered by the Idaho Department of Fish and Game (IDFG). 3. Plan wildlife habitat improvements to minimize attractiveness of cropland to populations of deer and elk.
Rationale: 1. Latah County is a “hot spot” for crop predation based on the proximity of agricultural lands to healthy populations of elk and white-tailed deer. 2. Crop predation is increasing as rural lands are being converted to residential uses and hunting access on those and adjacent croplands is restricted.
Notes:
Latah SWCD Five-Year Tasks: 1. Facilitate landowner communication with IDFG to report predation and develop hunter access to private lands. 2. Participate in cooperative meetings among agricultural producers, rural landowners, county zoning committee members, and IDFG to develop strategies that will decrease losses to crop predation. 3. Review programs to increase public awareness of crop predation by elk and deer.

Fisheries

Fisheries Resource Conservation Goal

Preserve and restore fish habitat for the benefit of resident and anadromous fish.

Protection and restoration of fish habitat are two key goals of conservation practices promoted by the Latah SWCD. The fisheries resource of community concern is divided into two secondary resources of community concern: resident fish and anadromous fish.

Resident Fish

The two principal steam systems within the county are the Palouse River and Potlatch River systems. The Palouse River historically supported native resident fish species including two members of the Catostomidae family (suckers), largescale sucker and bridgelip sucker, and four members of the Cyprinidae family (minnows), including peamouth, northern pikeminnow, chiselmouth, and redside shiner. Four Cottidae species (sculpins) are native to the Palouse River system, including slimy sculpin, mottled sculpin, Paiute sculpin, and torrent sculpin. Native salmonids were not historically recorded in the Palouse River system above Palouse Falls, although low densities of native salmonids is probable at low densities. Currently, the bridgelip sucker is more prevalent in smaller streams than the largescale sucker; the peamouth inhabits most streams; the northern pikeminnow occurs in the Palouse River mainstem and tributaries; and the torrent sculpin is the only sculpin currently reported in the system.

The Potlatch River and its tributaries support a cold water resident fishery which includes the common game species of rainbow and brook trout. Other fish species occurring in the Potlatch River include westslope cutthroat trout, largemouth and smallmouth bass, pumpkinseed, northern pikeminnow, chiselmouth, bridgelip sucker, yellow perch, speckled and longnose dace, redside shiners, sunfish, and sculpin.

A ROCC work plan for each of the identified limiting factors is developed for resident fish. The limiting factors related to the fisheries resource conservation goal include:

- Degraded Water Quality
- Extreme Fluctuations in Water Quantity
- Degraded In-stream Habitat Conditions

Anadromous Fish

The Palouse River and Potlatch River systems have one significant difference - Palouse Falls. As the Palouse River flows southwesterly into Washington State, it plunges over Palouse Falls near its confluence with the Snake River. The falls, at 182 feet tall, is a current and historical barrier for anadromous fish migration into Idaho. The Potlatch River flows freely, with no significant natural or man-made impediments from its headwaters to its mouth, and does support anadromous fish migration into Latah County.

Anadromous fish are those fish that spawn and rear in freshwater before migrating downstream to open ocean waters. The anadromous fish returns to its birthplace after reaching maturity in the ocean. Steelhead are the significant anadromous fish in the Potlatch River; limited numbers of fall chinook and coho salmon are also found.

Steelhead in the Potlatch River watershed are considered members of the Snake River steelhead group. Snake River steelhead are generally classified as summer run, based on their adult run timing patterns. Summer steelhead enter the Columbia River from late June to October. After holding over in the Columbia River through the winter, summer steelhead spawn during the following spring, usually from February through April. Unlike salmon, steelhead can return to the ocean after spawning and will return year after year to spawn where they hatched.

A ROCC work plan for anadromous fish is delineated in The Latah SWCD's *Potlatch River Watershed Management Plan* (Potlatch Plan). The Potlatch Plan delineates, by priority sub-watersheds within the Potlatch River watershed, best management practices to address the limiting factors within each sub-watershed. In summary, the limiting factors for steelhead within the Potlatch River include:

- High water temperatures
- Flashy stream flows
- Low summer base flows
- Lack of complexity in stream composition
- Barriers to Migration
- Sedimentation

For the purposes of this Resource Conservation Plan, the Potlatch River Watershed Management Plan serves as the ROCC work plan for anadromous fish within Latah County.

Fisheries
Resident Fisheries
Degraded Water Quality

Primary ROCC: Fisheries

Secondary ROCC: Resident Fisheries

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore resident fish habitat throughout Latah County in a way that is consistent with habitat protection and restoration needs of other fish and wildlife species.

Limiting Factor(s): Degraded water quality

Objective(s):
1. Reduce point and non-point sediment inputs to Latah County streams.
2. Protect and restore riparian habitats that shade streams and lower water temperatures.

Strategies:
1. Use agricultural and forestry practices that minimize soil erosion, such as no-till or low-till cultivation, direct seeding, plantings on erodible lands, optimal timing of timber harvest relative to soil moisture, the protection of riparian vegetation along intermittent and perennial waterways, and decommissioning and long-term stabilization of forest roads.
2. Stabilize known sources of sediment input including gullies and washes, eroding stream banks, forest roads, and heavily grazed riparian areas.
3. Protect riparian vegetation with fencing and off-stream or limited-access watering points for livestock.
4. Restore a native shrub and tree assemblage to degraded wetland and riparian habitats.

Rationale:
1. Of 391 stream miles assessed for water quality in the Palouse Watershed, 253 miles (65%) exceeded temperature standards for coldwater aquatic life and 157 miles (40%) exceeded state water quality standards for siltation/sedimentation. Similarly, 246 of 450 assessed stream miles (54%) in the Potlatch Basin were listed as impaired for siltation/sedimentation and/or temperature in 2002.
2. Elevated sediment levels degrade spawning habitat, interfere with feeding behavior, reduce growth rates, alter the macroinvertebrate prey base, and introduce elevated concentrations of sediment-bound carbon and nutrients to the stream system.
3. In Latah County, the primary source of sediment input to streams at low elevations is agricultural runoff.[c] At higher elevations, in forested areas, inputs from roads become a major factor. For example, flooding in 1995/1996 caused over 900 landslides on the Clearwater National Forest; 58% of these were associated with forest roads.
4. All fishes native to Latah County require cold water conditions. High temperatures negatively affect these species' swimming endurance, reproduction, behavior, and survival. Idaho State water quality standards for cold water aquatic life require a maximum daily average stream temperature below 19°C. Rainbow trout, a popular sport fish, prefer temperatures near 14°C, and native northern pikeminnow select habitats from 16°C to 22°C.

5. Overgrazing within riparian areas reduces or eliminates stream shading and decreases stream depth through sedimentation and channel widening; both processes increase stream temperature. Timber harvest within the riparian zone has similar effects.
6. Riparian areas show improvement in the recruitment of woody vegetation and associated shade and bank stability within four years of grazing exclusion. Marked results are visible over longer timeframes and can be accelerated through plantings and appropriate vegetation management.

Notes:

Latah SWCD Five-Year Tasks:

1. Coordinate local riparian restoration efforts, including streamside plantings, fenced cattle exclosures and off-stream watering developments, control of invasive vegetation, and streambank stabilization.
2. Coordinate local restoration efforts designed to stabilize known sources of sediment input (e.g. eroding gullies, bare streambanks, forest roads).
3. Coordinate conservation planning efforts with agricultural producers, including the use of programs designed to encourage protection of prairie, wetlands, and riparian areas and highly erodible lands.
4. Endorse forestry practices that minimize erosion and retain shading for streams.

Fisheries
Resident Fisheries
Extreme Fluctuations in Water Quantity

Primary ROCC: Fisheries

Secondary ROCC: Resident Fisheries

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore resident fish habitat throughout Latah County in a way that is consistent with habitat protection and restoration needs of other fish and wildlife species.

Limiting Factor(s): Extreme fluctuations in water quantity

Objective(s):
1. Restore a more natural, less flashy, hydrograph to streams in the Potlatch and Palouse River Watersheds.
2. Increase summer base flows to streams in the Potlatch and Palouse River Watersheds.

Strategies:
1. Protect and restore functioning riparian and wetland habitats.
2. Promote upland land uses that retain vegetative or residue cover year-round, including cover crops and crop rotations, restoration planting programs, and the restoration of native prairie.
3. Promote sustainable forest harvest practices.

Rationale:
1. Healthy riparian communities mediate the delivery of water to streams, slowing overland flows and reducing their velocity, allowing greater infiltration and storage, leading to more stable base flow conditions. Riparian vegetation also acts as a source for recruitment of large woody debris to stream channels, and an associated attenuation of high runoff velocities. Wetlands also slow overland flows and promote infiltration and storage, improving base flows. Improved storage allows slower, longer release of cool waters into waterways longer into the season.
2. Upland vegetative cover and land use activities that have removed permanent vegetative cover have a major effect on the timing and quantity of water delivered to area streams. For example, in the Potlatch River Watershed, peak discharge for a five-year, 24-hour storm was modeled at 850 cfs under pre-settlement ground cover and canopy conditions. The same storm event under present land cover conditions has an estimated peak of 2,980 cfs. Total discharge for the event was calculated at 1,265 acre-feet for the historic conditions and 3,720 acre-feet for present conditions.

Notes:

Latah SWCD Five-Year Tasks:
1. Coordinate local riparian restoration efforts, including streamside plantings, fenced cattle exclosures and off-stream watering developments, control of invasive vegetation, and streambank stabilization.
2. Coordinate conservation programs designed to encourage the establishment of permanent vegetative cover and restoration of prairie, wetlands, and riparian zones.
3. Inform interested landowners regarding cover crops, crop rotations, residue management, sustainable forest practices, and prairie restoration.

Fisheries
Resident Fisheries
Degraded In-Stream Habitat Conditions

Primary ROCC: Fisheries

Secondary ROCC: Resident Fisheries

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore resident fish habitat throughout Latah County in a way that is consistent with habitat protection and restoration needs of other fish and wildlife species.

Limiting Factor(s): Degraded in-stream habitat conditions

Objective(s):

1. Protect and restore clean gravel substrates that act as spawning habitat for some native resident fish, such as northern pikeminnow, and for popular sport fish, such as rainbow trout.
2. Improve the quantity and quality of pool habitats that fish use for resting and feeding.

Strategies:

1. Use agricultural and forestry practices that minimize soil erosion and maximize vegetative ground cover, such as no-till or low-till cultivation, direct seeding, permanent plantings on erodible lands, optimal timing of timber harvest relative to soil moisture, restoration of riparian vegetation along intermittent and perennial waterways and wetlands, and decommissioning and long-term stabilization of forest roads.
2. Stabilize known sources of sediment input to streams, including gullies and washes, eroding stream banks, forest roads, and heavily grazed riparian areas.
3. Protect intact riparian forest and restore a native herbaceous, shrub and tree assemblage to degraded riparian and wetland habitats. Retain large, older age-classes of trees in forested streamside habitats for recruitment to the stream as large woody debris.

Rationale:

1. Clean spawning-quality gravel substrates were historically present within 97 miles of the Potlatch River and its tributaries. In 1950, the lower 22.5 miles of the Potlatch River still contained suitable spawning gravels. Currently, most of the lower 22.5 miles do not contain acceptable spawning habitat. Spawning gravels are found in the main stem Potlatch River from Cedar Creek to its confluence with the East Fork Potlatch River and within nine of eleven tributaries. Within the Palouse River watershed, streams with spawning gravels include the upper and middle Palouse River, upper Big Creek, upper Flannigan Creek, upper Gold Creek and upper Hatter Creek. The absence or siltation of spawning gravels may limit reproduction of resident sport fish.
2. Scouring from high flow events and siltation due to upland and streamside erosion eliminate clean gravel habitats. Scouring flows are intensified by the removal of natural vegetative cover in uplands and along stream courses. In Latah County, the primary source of sediment input to streams at low elevations is agricultural runoff. At higher elevations in forested areas inputs from roads become a major factor. For example, flooding in 1995/1996 caused over 900 landslides on the Clearwater

National Forest; 58% of these were associated with forest roads.

3. Pool habitats are important as resting and feeding habitat for resident fishes and are essential in predator avoidance. Large woody debris forms an important component of pool habitats and has been lost from many reaches of the Palouse and Potlatch watersheds because of historic timber harvest and the salvage of wildfire and disease-damaged stands.

Notes:

Latah SWCD Five-Year Tasks:

1. Coordinate local riparian restoration efforts, including streamside plantings, fenced cattle exclosures and off-stream watering developments, control of invasive vegetation, and streambank stabilization.
2. Coordinate local restoration efforts designed to stabilize known sources of sediment input (e.g. eroding gullies, bare streambanks, forest roads).
3. Coordinate conservation planning with agricultural producers, including the use of conservation programs designed to encourage protection of prairie, wetland, and riparian areas and highly erodible lands.
4. Inform interested landowners regarding cover crops, crop rotations, residue management, sustainable forest practices, and prairie restoration.
5. Endorse forest practices that encourage the recruitment of large woody debris to streams.

Fisheries
Anadromous Fisheries
High Water Temperatures

Primary ROCC: Fisheries
Secondary ROCC: Anadromous Fisheries
Geographic Focus: Potlatch River Watershed
ROCC Conservation Goal: Protect and restore anadromous fish habitat in the Potlatch River Watershed as outlined in the Potlatch River Watershed Management Plan consistent with habitat protection and restoration needs of other native fish and wildlife species.
Limiting Factor(s): High Water Temperatures
Objective(s): 1. Reduce high water temperatures in streams that have rearing habitat for wild steehead.
Strategies: 1. See Potlatch River Watershed Management Plan – Chapter 7.
Rationale: 1. Steelhead require cold water conditions. High temperatures negatively affect this species' swimming endurance, reproduction, behavior, and survival. Idaho State water quality standards for coldwater aquatic life require a maximum daily average stream temperature below 19°C. Migrating adult steelhead prefer temperatures from 7.8°C–11.1°C, and steelhead growth rates are highest at 15°C.
Notes:
Latah SWCD Five-Year Tasks: 1. Coordinate the implementation of best management practices as outlined in the Potlatch River Watershed Management Plan.

Fisheries
Anadromous Fisheries
Flashy Stream Flows

Primary ROCC: Fisheries
Secondary ROCC: Anadromous Fisheries
Geographic Focus: Potlatch River Watershed
ROCC Conservation Goal: Protect and restore anadromous fish habitat in the Potlatch River Watershed as outlined in the Potlatch River Watershed Management Plan consistent with habitat protection and restoration needs of other native fish and wildlife species.
Limiting Factor(s): Flashy Stream Flows
Objective(s): 1. Reduce the high peaks of stream flows throughout the Potlatch River watershed.
Strategies: 1. See Potlatch River Watershed Management Plan – Chapter 7.
Rationale: 1. Flashy stream flows are characteristic of a watershed that has a reduced ability to retain water in the uplands. This inability to retain water creates high winter/early spring runoff events that can damage steelhead habitat, carrying off spawning gravels and covering remaining gravels with sediment. In addition, with limited storage capacity in the uplands there is a reduction in summer flows, thus reducing availability of pools for summer rearing habitat.
Notes:
Latah SWCD Five-Year Tasks: 1. Coordinate the implementation of best management practices as outlined in the Potlatch River Watershed Management Plan.

Fisheries
Anadromous Fisheries
Low Summer Base Flows

Primary ROCC: Fisheries
Secondary ROCC: Anadromous Fisheries
Geographic Focus: Potlatch River Watershed
ROCC Conservation Goal: Protect and restore anadromous fish habitat in the Potlatch River Watershed as outlined in the Potlatch River Watershed Management Plan consistent with habitat protection and restoration needs of other native fish and wildlife species.
Limiting Factor(s): Low Summer Base Flows
Objective(s): 1. Increase summer base flows in steelhead producing streams to increase rearing habitat.
Strategies: 1. See Potlatch River Watershed Management Plan – Chapter 7.
Rationale: 1. Many of the smaller streams within the Potlatch River watershed have severe reductions in flow over the summer months, thus reducing or eliminating rearing habitat.
Notes:
Latah SWCD Five-Year Tasks: 1. Coordinate the implementation of best management practices as outlined in the Potlatch River Watershed Management Plan.

Fisheries
Anadromous Fisheries
Lack of Complexity in Stream Composition

Primary ROCC: Fisheries
Secondary ROCC: Anadromous Fisheries
Geographic Focus: Potlatch River Watershed
ROCC Conservation Goal: Protect and restore anadromous fish habitat in the Potlatch River Watershed as outlined in the Potlatch River Watershed Management Plan consistent with habitat protection and restoration needs of other native fish and wildlife species.
Limiting Factor(s): Lack of Complexity in Stream Composition
Objective(s): 1. Increase stream complexity to include pools and large woody debris.
Strategies: 1. See Potlatch River Watershed Management Plan – Chapter 7.
Rationale: 1. Steelhead spawning and rearing habitat requires a variety of stream characteristics. Many streams within the Potlatch River systems have lost many of these characteristics due to channelization, severe flooding, sedimentation, and lack of vegetation and large woody debris. Increasing the desirable characteristics of streams will increase habitat for steelhead spawning and rearing.
Notes:
Latah SWCD Five-Year Tasks: 1. Coordinate the implementation of best management practices as outlined in the Potlatch River Watershed Management Plan.

Fisheries
Anadromous Fisheries
Barriers to Migration

Primary ROCC: Fisheries
Secondary ROCC: Anadromous Fisheries
Geographic Focus: Potlatch River Watershed
ROCC Conservation Goal: Protect and restore anadromous fish habitat in the Potlatch River Watershed as outlined in the Potlatch River Watershed Management Plan consistent with habitat protection and restoration needs of other native fish and wildlife species.
Limiting Factor(s): Barriers to migration
Objective(s): 1. Eliminate steelhead migration barriers within the Potlatch River.
Strategies: 1. See Potlatch River Watershed Management Plan – Chapter 7.
Rationale: 1. Migration barriers limit adult steelhead access to spawning areas and may limit outmigration of young returning to the Potlatch and Clearwater rivers.
Notes:
Latah SWCD Five-Year Tasks: 1. Coordinate the implementation of best management practices as outlined in the Potlatch River Watershed Management Plan.

Fisheries
Anadromous Fisheries
Sedimentation

Primary ROCC: Fisheries
Secondary ROCC: Anadromous Fisheries
Geographic Focus: Potlatch River Watershed
ROCC Conservation Goal: Protect and restore anadromous fish habitat in the Potlatch River Watershed as outlined in the Potlatch River Watershed Management Plan consistent with habitat protection and restoration needs of other native fish and wildlife species.
Limiting Factor(s): Sedimentation
Objective(s): 1. Reduce sedimentation throughout the Potlatch River watershed.
Strategies: 1. See Potlatch River Watershed Management Plan – Chapter 7.
Rationale: 1. High sedimentation in streams and rivers reduces viable steelhead spawning habitat by filling in spawning gravels..
Notes:
Latah SWCD Five-Year Tasks: 1. Coordinate the implementation of best management practices as outlined in the Potlatch River Watershed Management Plan.

Forest Lands

Forest Lands Resource Conservation Goal

> *Preserve and restore forest productivity on private and public lands while providing voluntary opportunities for the long-term preservation of working forest lands in Latah County.*

The forest lands resource of community concern is divided into two secondary resources of community concern: forest productivity and forest land preservation.

Forest Productivity

There are an estimated 402,300 acres of forest land in Latah County (over one-half of the county's acreage). Timber has been harvested in the area since 1870. The productivity of Latah County forests has declined due to high mortality of western white pine caused by the introduction of blister rust. In addition, fire suppression and ongoing mortality, coupled with insects and disease, have increased fuel loads beyond natural accumulations and changed the frequency and intensity of fire.

There are six significant issues considered limiting factors to the fulfillment of the forest productivity resource conservation goal. They include:

- Soil Erosion
- Altered Fire Regimes
- Harmful Insects and Diseases
- Invasive Plants
- Reduced Stand Diversity
- Inadequate Stand Stocking

Forest Land Preservation

Forest lands contribute to the local economy through jobs in timber extraction, the processing of lumber, and the manufacture of wood-based products. Forest lands provide opportunities for recreational activities, such as hiking, hunting, camping, fishing, photography, bird-watching, cross-country skiing, mushroom-gathering, and snowmobiling, and related economic inputs. Less tangible values of open space, wildlife diversity and scenic beauty are also supported by Latah County's forest lands.

The forest land preservation goal touches on issues that affect the long-term viability of timber harvest as an on-going land management practice. Two limiting factors addressed here include:

- Resource Conflicts
- Unsustainable Harvest

Forest Lands
Forest Productivity
Soil Erosion

Primary ROCC: Forest Lands
Secondary ROCC: Forest Productivity
Geographic Focus: Latah County
ROCC Conservation Goal: Protect and enhance forest conditions that maintain ecosystem functions and processes, support water quality, and provide for habitat and species diversity, while enhancing the future production potential of private forests.
Limiting Factor: Soil erosion
Objective(s): 1. Reduce soil erosion resulting from road building or maintenance, forest harvesting operations, and grazing. 2. Reduce the risk of extensive soil erosion from large-scale wildfires. See the ROCC task list for the limiting factor of altered fire regimes.
Strategies: 1. Implement best management practices for building and maintaning roads. 2. Implement best management practices for forest harvesting operations. 3. Reduce livestock grazing when grazing pressure will increase soil erosion. 4. Reduce damaging activities on vulnerable sites when soils are saturated.
Rationale: 1. Existing best management practices for road building and maintenance and harvesting practices emphasize practices that minimize erosion and protect water quality. 2. Grazing on sparsely vegetated soil or on extreme slopes is likely to cause significant soil erosion.
Notes:
Latah SWCD Five-Year Tasks: 1. Facilitate landowner access to technical resources and educational opportunities related to best management practices for road building and maintenance and harvesting practices. 2. Participate in programs that assist landowners with development of alternatives to grazing livestock in areas with sparse vegetative cover and/or extreme slopes.

Forest Lands
Forest Productivity
Altered Fire Regimes

Primary ROCC: Forest Lands

Secondary ROCC: Forest Productivity

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and enhance forest conditions that maintain ecosystem functions and processes, support water quality, and provide for habitat and species diversity, while enhancing the future production potential of private forests.

Limiting Factor: Altered fire regimes.

Objective(s):
1. In order to minimize catastrophic fire potential, reduce the area of forested land having a high departure from the natural (historical) fire regime.
2. Reduce the negative impacts of past fire suppression upon forest health.

Strategies:
1. Implement fuel reduction treatments such as density reduction (i.e. thinning) and prescribed fire.

Rationale:
1. Fire suppression within some forest types has resulted in stands with higher densities than occurred historically. Fire suppresion and forest succession have also led to changes in tree species composition. These conditions may result in increased risk of future catastrophic fire, reduced tree growth rates, reduced habitat diversity and vegetation resources for wildlife, and increased risk of disease or insect outbreaks.

Notes:

Latah SWCD Five-Year Tasks:
1. Facilitate fire-related activities and programs that are part of the Latah County All Hazards Mitigation Plan.
2. Endorse mapping efforts that will help to prioritize areas for treatment and help landowners assess fire risk on their property and surrounding lands.
3. Facilitate landowner efforts to complete forest thinnings for fuel-reduction and/or prescribed fire treatments.

Forest Lands
Forest Productivity
Harmful Insects and Diseases

Primary ROCC: Forest Lands
Secondary ROCC: Forest Productivity
Geographic Focus: Latah County
ROCC Conservation Goal: Protect and enhance forest conditions that maintain ecosystem functions and processes, support water quality, and provide for habitat and species diversity, while enhancing the future production potential of private forests.
Limiting Factor: Harmful insects and diseases
Objective(s): 1. Reduce the extent and impact of native insect and disease outbreaks. 2. Prevent or stop the spread of exotic insects and diseases.
Strategies: 1. Reduce the area of forested land having a high departure from the natural (historical) fire regime. Achievement of this goal may require stand treatments such as density reduction (i.e. thinning) and prescribed fire. 2. Improve early detection and treatment of insect and disease problems/outbreaks through education and technical resources.
Rationale: 1. Forests that have a high degree of departure from the natural (historical) fire regime also tend to have altered insect and disease populations and higher rates of mortality when outbreaks occur.
Notes:
Latah SWCD Five-Year Tasks: 1. Facilitate landowner contacts with technical agencies to diagnose and treat forest insect or disease outbreaks. 2. Facilitate landowner efforts to complete stand density reduction or other appropriate treatments to reduce risks of insect or disease outbreaks. 3. Endorse programs or activities that educate landowners about harmful insects and diseases.

Forest Lands
Forest Productivity
Invasive Plants

Primary ROCC: Forest Lands

Secondary ROCC: Forest Productivity

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and enhance forest conditions that maintain ecosystem functions and processes, support water quality, and provide for habitat and species diversity, while enhancing the future production potential of private forests.

Limiting Factors: Invasive plants

Objective(s):
1. Reduce the spread of invasive plants (including noxious weeds) into private and public forest lands.
2. Improve control of established invasive plants (including noxious weeds).

Strategies:
1. Ensure compliance with the existing Idaho State Noxious Weed Law (which is enforced by the Latah County Weed Control Department).
2. Reduce, or eliminate, grazing in areas having large noxious weed or invasive plant populations and in highly disturbed areas especially prone to invasion.
3. Reduce the spread of noxious weeds and invasive plants following road building or maintenance and forest harvesting operations by implementing monitoring and control activities soon after these disturbances occur.

Rationale:
1. Noxious weeds reduce the diversity of communities and threaten water quality. Taprooted species, such as spotted knapweed, increase surface runoff and sediment yields and thus negatively affect the health of forest soils. Flammable high-density weeds such as spotted knapweed and downy brome increase fuel loads that may contribute to higher intensity, stand-replacing fires.

Notes:

Latah SWCD Five-Year Tasks:
1. Facilitate landowner access to educational materials related to the identification and control of invasive plants.
2. Participate in programs that assist landowners with control of large populations of noxious weeds or invasive plants.
3. Participate in programs that assist landowners with alternatives to grazing livestock in areas that are highly disturbed or have significant noxious weed populations.
4. Participate in efforts to educate travelers and woods workers about need to clean equipment and vehicles to prevent spread of invasive species.
5. Endorse US Forest Service certified straw program to eliminate/reduce transport of propagules of invasive species.

Forest Lands
Forest Productivity
Reduced Stand Diversity

Primary ROCC: Forest Lands
Secondary ROCC: Forest Productivity
Geographic Focus: Latah County
ROCC Conservation Goal: Protect and enhance forest conditions that maintain ecosystem functions and processes, support water quality, and provide for habitat and species diversity, while enhancing the future production potential of private forests.
Limiting Factor: Reduced stand diversity
Objective(s): 1. Retain and enhance forest genetic diversity. 2. Increase tree species and structural diversity within forest stands.
Strategies: 1. Conduct timber harvest practices that will maintain and/or enhance the genetic diversity within the remaining stand. 2. Conduct timber harvest practices that maintain healthy representatives of various age classes and species. 3. Maintain and/or create snags within and adjacent to harvest units.
Rationale: 1. Forests that have structural diversity and diversity within and among species may show greater resiliency in response to disturbances such as disease, insects, and fire.[d,e] Forest structural and compositional diversity also provide wildlife habitat diversity, and affect the forest microclimate, nutrient cycling, productivity, and decomposition.[f,g,h]
Notes:
Latah SWCD Five-Year Tasks: 1. Participate with Idaho Department of Lands with regard to the implementation of Idaho's Statewide Forest Resource Strategy. 2. Facilitate landowner access to technical materials related to profitable and ecologically sound harvesting practices. 3. Endorse programs or activities that educate landowners on profitable and ecologically sound harvesting practices, including snag retention.

4. Participate in sustainable forest management outreach and conservation programs for private landowners within Latah County.
5. Review revisions to the Idaho Forest Practices Act, as they are drafted.

Forest Lands
Forest Productivity
Inadequate Stand Stocking

Primary ROCC: Forest Lands
Secondary ROCC: Forest Productivity
Geographic Focus: Latah County
ROCC Conservation Goal: Protect and enhance forest conditions that maintain ecosystem functions and processes, support water quality, and provide for habitat and species diversity, while enhancing the future production potential of private forests.
Limiting Factor: Inadequate stand stocking
Objective(s): 1. Increase forest stand stocking densities in a manner that simultaneously enhances ecosystem function and future production potential.
Strategies: 1. Achieve post-harvest minimum stocking levels suggested by the Idaho Forest Practices Act (FPA) Residual Stocking and Reforestation Rule 050. 2. Increase reforestation on cut-over timber lands that have been removed from agricultural production.
Rationale: 1. Adequate forest stocking is essential for the development of healthy stands of timber that protect water quality, provide wildlife habitat, and provide timber for future harvest.
Notes:
Latah SWCD Five-Year Tasks: 1. Facilitate landowner access to technical resources and programs related to reforestation.

Forest Lands
Forest Land Preservation
Resource Conflicts

Primary ROCC: Forest Lands
Secondary ROCC: Forest Land Preservation
Geographic Focus: Latah County
ROCC Conservation Goal: Preserve working forest lands within Latah County through the implementation of voluntary strategies that support sustainable timber extraction consistent with natural processes and the protection of water quality and habitat for fish and wildlife.
Limiting Factor: Resource conflicts
Objective(s): 1. Protect the viability of timber extraction on forest lands by avoiding regulatory conflicts related to resources such as wildlife, fish, and water.
Strategies: 1. Apply a proactive, multidisciplinary approach to stand management. 2. Facilitate voluntary compliance with best management practices and the Idaho Forest Practices Act.
Rationale: 1. Taking water quality, habitat for fish and wildlife, and human values such as recreation and aesthetics into account from the outset of stand planning protects land managers from costly conflicts during the late stages of harvest planning and implementation. The Idaho Forest Practices Act is designed to minimize potential negative effects of timber harvest on water quality and fish habitat.[a] Private landowners can avert legal actions that interfere with profitable harvest by avoiding negative effects to these public resources.
Notes:
Latah SWCD Five-Year Tasks: 1. Facilitate the delivery of multi-disciplinary forest planning information to landowners. 2. Participate in the annual Family Forest Landowners and Managers Conference. 3. Endorse programs that assist landowners in identifying and complying with applicable forest management regulations.

Forest Lands
Forest Land Preservation
Unsustainable Harvest

Primary ROCC: Forest Lands

Secondary ROCC: Forest Land Preservation

Geographic Focus: Latah County

ROCC Conservation Goal: Preserve working forest lands within Latah County through the implementation of voluntary strategies that support sustainable timber extraction consistent with natural processes and the protection of water quality and habitat for fish and wildlife.

Limiting Factor: Unsustainable harvest

Objective(s):
1. Apply forest practices that allow for long-term economic and ecological sustainability of forest lands and local communities dependent upon these resources.

Strategies:
1. Explore the feasibility of alternative forest products, such as cones, decorative wood, or greenery, that allow economic inputs from forest lands between harvest cycles or when traditional timber harvest is not ecologically or economically reasonable.
2. Evaluate value-added forest products for niche markets that may improve the profitability and sustainability of small wood lots and longer harvest rotations.
3. Promote forest management practices that maintain long-term forest productivity.

Rationale:
1. Working forest lands are protected when the long-term profitability of managing these lands for timber production is maintained. Alternative forest products have potential to increase the economic viability of wood lots when timber harvest is not ecologically sound, or between harvest rotations.
2. Value-added products, created directly from timber, or produced from specialty wood for niche markets, can increase economic returns from longer forest rotations.
3. Longer rotations may benefit a forest's value for wildlife and fish habitat, water quality, and recreational use.

Notes:

Latah SWCD Five-Year Tasks:
1. Endorse forest practices that protect long-term productivity.
2. Monitor forest products and practices that may improve the ecological and economical sustainability of working forest lands.
3. Monitor proposed modifications to Idaho Forest Practices Act and related policies.
4. Facilitate landowner access to information about conservation easements.

Public Health

Public Health Resource Conservation Goal

> *Support the management of natural resources in a manner that protects the public health of citizens of Latah County and the Palouse region while simultaneously providing for long-term economic sustainability of private working lands in Latah County.*

The Public Health resource of community concern focuses on public health issues that can be linked to land management activities within Latah County. Strategies and tasks will focus on best management practices that can be implemented to protect and restore natural resource conditions that provide benefits to public health.

The Public Health ROCC is delineated into five primary categories:

- Air Quality
- Global Climate Change
- Drinking Water Quantity
- Drinking Water Quality
- Surface Water/Recreational Contact

Air Quality
On average, the air quality in Latah County is excellent; 97 percent of recorded days show good air quality, and 3 percent show moderate air quality. County air quality meets National Ambient Air Quality Standards by a comfortable margin. Primary air pollutants include particulate matter, carbon monoxide emissions, and volatile organic compound emissions. Unpaved roads are the primary contributor to particulate matter in the county; motor vehicles are the largest source of carbon monoxide and volatile organic compounds.

<u>Limiting factors</u> pertaining to air quality in Latah County include:

- Agricultural Field Burning
- Forest Slash Burning
- Unpaved Roads

Global Climate Change

There is increasing interest is altering human behaviors to reduce the potential for global climate change. This concern regarding global climate change is stated as motivation to increase biofuels production, increase land management practices that sequester carbon from the atmosphere and reduce fossil fuel consumption.

The following issues may be addressed by land management activities within Latah County to slow net carbon release into the atmosphere:

- Enhance Profitable Carbon Sequestering Land Management Activities
- Minimize Carbon Emissions through Reduced Fossil Fuel Consumption

Drinking Water Quantity

Groundwater is the primary source for drinking water and primary source for landscape irrigation water in Latah County. Two basalt aquifers, the Grande Ronde and Wanapum, are tapped in Latah County. Carbon dating of water from the deeper Grande Ronde aquifer indicates a very slow to nonexistent recharge rate. The Wanapum Aquifer experiences seasonal recharge; however water levels in this aquifer were depleted in the 1940s and 1950s from excessive pumping. The City of Moscow and University of Idaho have relied more heavily on the Grande Ronde Aquifer since the 1950s. As water levels drop in the Grande Ronde Aquifer, the City of Moscow has shifted use to shallower wells located in the Wanapum Aquifer. Studies are currently underway to characterize recharge to the Wanapum Aquifer.

The following <u>limiting factors</u> jeopardize sustainable drinking water supplies in Latah County:

- Limited Aquifer Recharge
- Non-sustainable Water Consumption

Drinking Water Quality

Currently the quality of drinking water for the majority of residents within Latah County is not known to be impaired. However, nitrate levels are considered high in the community of Genesee, and the seasonally recharged Wanapum Aquifer remains somewhat vulnerable to surface water pollution. Additionally, those communities (e.g., Troy) and rural residents relying on surface drinking water supplies may be easily susceptible to drinking water contamination.

The long-term quality of drinking water supplies may be affected by the following limiting factors:

- Contamination of Shallow Aquifers
- Contamination of Surface Water Supplies

Surface Water/Recreational Contact

Beyond supplying drinking water to residents in Latah County, surface waters throughout Latah County need to be protected for occasional recreational use. Waters in Latah County are used for fishing, swimming, wading and boating. For the purposes of this Resource Conservation Plan, the water quality parameters showing the greatest impact on public health issues are considered public health pollutants that will be considered limiting factors to recreational water quality in local streams and lakes.

The Potlatch River Basin is impaired by a variety of public health pollutants including bacteria, nutrients, oil and grease, organics and pesticides. In the Palouse River Basin, bacteria and nutrients impair waters.

Each public health pollutant grouping is considered a limiting factor to water quality and a ROCC work plan has been developed for each of the following:

- Bacteria
- Nutrients
- Oil and Grease
- Organics and Pesticides

Public Health
Air Quality
Agricultural Field Burning

Primary ROCC: Public Health
Secondary ROCC: Air quality
Geographic Focus: Latah County
ROCC Conservation Goal: Protect air quality throughout Latah County.
Limiting Factor: Agricultural field burning
Objective(s): 1. Avoid air pollution impacts to public health by managing agricultural field burning to minimize impacts to the public while maintaining profitable crop production.
Strategies: 1. Consider alternatives to bluegrass field burning to minimize smoke from
Rationale: 1.
Notes:
Latah SWCD 5-Year Tasks: 1. Monitor existing agricultural field burning laws and policies. 2. Review alternatives to bluegrass field burning.

Public Health
Air Quality
Forest Slash Burning

Primary ROCC: Public Health
Secondary ROCC: Air Quality
Geographic Focus: Latah County
ROCC Conservation Goal: Protect air quality throughout Latah County.
Limiting Factor: Forest slash burning
Objective(s): 1. Avoid air pollution impacts to public health by managing forest slash burning to minimize impacts to the public while maintaining long-term forest health.
Strategies: 1. Promote disposal of forest slash via methods that minimize smoke into populated areas.
Rationale: 1. Smoke for forest slash burning may be managed to minimize public health risks through the managed timing of slash burning.
Notes:
Latah SWCD 5-Year Tasks: 1. Monitor existing forest slash field burning laws and policies.

Public Health
Air Quality
Unpaved Roads

Primary ROCC: Public Health
Secondary ROCC: Air Quality
Geographic Focus: Latah County
ROCC Conservation Goal: Protect air quality throughout Latah County.
Limiting Factor: Unpaved roads
Objective(s): 1. Avoid air pollution impacts to public health by reducing particulate matter input from unpaved roads in, and within close proximity to, towns and unincorporated places. 2. Reduce particulate matter inputs from high-traffic unpaved roads.
Strategies: 1. Implement chemical dust control measures for unpaved roads within town and city limits, and for roads within unincorporated communities. 2. Where economically feasible, surface unpaved roads within town and city limits. 3. Implement dust control measures on a prioritized basis for high-traffic rural roads.
Rationale: Unpaved roads are the largest single contributor to particulate matter air pollution in Latah County. Particulate matter from road dust poses the greatest risk to public health where it occurs in close proximity to high-density populations. Controlling dust seasonally on unpaved roads within towns and unincorporated communities will minimize human health risks. Surfacing these roads provides a longer-term solution to particulate matter control.
Notes:
Latah SWCD 5-Year Tasks: 1. Monitor dust-control measures implemented by local communities.

Public Health
Global Climate Change
Profitable Carbon Sequestration Opportunities

Primary ROCC: Public Health
Secondary ROCC: Global Climate Change
Geographic Focus: National and International
ROCC Conservation Goal: Reduce carbon emissions and support self-sustaining carbon sequestering land management practices.
Limiting Factor: Profitable carbon sequestration opportunities
Objective(s): 1. Establish conservation programs that can create profitable land management practices that sequester carbon on a long-term basis.
Strategies: 1. Develop federal, state, local and/or private carbon sequestration conservation programs that can be readily implemented by local landowners on a long-term basis. 2. Delivery carbon sequestration programs in an efficient and effective manner through the Latah SWCD or related conservation agencies/organizations.
Rationale: Carbon sequestration practices/programs may have an effect on global climate change if they can be delivered at a significant scale. To enhance the adoption of such practices, they may need to be profitable in order to be self-sustaining and implemented on an appropriate geographic and temporal scale.
Notes:
Latah SWCD 5-Year Tasks: 1. Participate in carbon sequestration programs at local, state and national levels that show a likely impact at an appropriate geographic and temporal scale.

Public Health
Global Climate Change
Carbon Emission Reduction

Primary ROCC: Public Health
Secondary ROCC: Global Climate Change
Geographic Focus: Pacific Northwest, National and International
ROCC Conservation Goal: Reduce carbon emissions and support self-sustaining carbon sequestering land management practices.
Limiting Factor: Lack of alternative fuels to replace fossil fuels.
Objective(s): 1. Promote land management practices that reduce fossil fuel consumption. 2. Promote alternative bio-fuels as a replacement for fossil fuels.
Strategies: 1. Develop, promote and deliver conservation tillage programs that reduce the number of equipment passes over a field. 2. Promote the use of bio-fuels as a replacement fuel when there is a net environmental and social benefit.
Rationale: The reduction of carbon emissions is a concept that has wide social and political support. However, the availability of alternative fuels is extremely limited at this time. In addition, many of the alternative fuels carry unique environmental/social costs and benefits that need to be fully addressed.
Notes:
Latah SWCD 5-Year Tasks: 1. Participate in profitable land management practices that reduce carbon emissions through a reduction in fossil fuel consumption. 2. Endorse alternatives to fossil fuels that prove to have net environmental, economic and social benefits.

Public Health
Drinking Water Quantity
Limited Aquifer Recharge

Primary ROCC: Public Health

Secondary ROCC: Drinking Water Quantity

Geographic Focus: Latah County

ROCC Conservation Goal: Safeguard drinking water supplies.

Limiting Factor: Limited aquifer recharge

Objective(s):
1. Protect aquifer recharge zones from land uses that limit recharge to the aquifer.

Strategies:
1. Identify and characterize recharge zones that supply the Wanapum Aquifer.
2. Protect and restore natural vegetation within aquifer recharge zones.
3. Develop a management plan that restricts the extent of impervious surfaces within aquifer recharge areas.

Rationale:
Of the two primary aquifers within Latah County, only the Wanapum recharges at an appreciable rate; however recharge zones are not clearly defined for this aquifer. Protection of recharge zones allows precipitation to percolate to the aquifer and replenish the available water supply. Natural vegetation reduces overland runoff and enhances infiltration. Impervious surfaces such as roads, rooftops and sidewalks inhibit the movement of precipitation to groundwater. Large volumes of runoff "dumped" from impervious surfaces exceed the soil's ability to absorb water; instead of infiltrating to groundwater this precipitation leaves the area as surface runoff and frequently washes sediment and pollutants with it.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in local efforts to identify aquifer recharge zones.
2. Participate in the development of land use plans that protect local aquifers.
3. Facilitate landowners' use of programs, such as CCRP and CRP that protect and restore natural perennial vegetation within aquifer recharge zones.
4. Inform local landowners regarding the value of native vegetation that requires minimal irrigation.

Public Health
Drinking Water Quantity
Non-Sustainable Water Consumption

Primary ROCC: Public Health
Secondary ROCC: Drinking Water Quantity
Geographic Focus: Latah County
ROCC Conservation Goal: Safeguard drinking water supplies.
Limiting Factor: Non-sustainable water consumption
Objective(s): 1. Achieve sustainable water consumption in agreement with existing and future predicted recharge capabilities of local aquifers.
Strategies: 1. Develop water management plans for local communities that promote water resource conservation. 2. Develop alternative landscape irrigation sources, such as wastewater reclamation. 3. Encourage low-water landscaping for homes, public buildings and parks, and commercial buildings through education and incentive programs.
Rationale:
Notes:
Latah SWCD 5-Year Tasks: 1. Participate in water conservation planning undertaken by local governments. 2. Provide information on water conservation to landowners. 3. Review programs to develop alternative landscape irrigation sources.

Public Health
Drinking Water Quality
Contamination of Shallow Aquifers

Primary ROCC: Public Health
Secondary ROCC: Drinking Water Quality
Geographic Focus: Latah County
ROCC Conservation Goal: Protect the health of Latah County citizens by safeguarding clean drinking water supplies.
Limiting Factor: Contamination of shallow aquifers
Objective(s): 1. Prevent the contamination of groundwater via hazardous spills and infiltration of pollutants.
Strategies: 1. Identify and characterize recharge zones that supply the Wanapum Aquifer. 2. Develop land use plans that protect aquifer recharge zones from incompatible land uses such as: landfills, concentrated animal feeding operations, hazardous material storage, and petroleum storage. 3. Develop comprehensive clean-up and monitoring plans in the event that hazardous materials are spilled within aquifer recharge zones.
Rationale: Spills and leaks of hazardous substances most likely occur where these materials are stored. Land uses that concentrate pollutants, such as landfills and animal feeding operations, are incompatible with aquifer recharge zones. If hazardous substances are spilled within a recharge zone (for example a pesticide spill by an agricultural producer), clean-up plans should be available to expedite effective containment of the spill prior to groundwater contamination.
Notes:
Latah SWCD 5-Year Tasks: 1. Participate in local efforts to identify and protect aquifer recharge zones. 2. Endorse efforts to develop hazardous material clean-up plans.

Public Health
Drinking Water Quality
Contamination of Surface Water Supplies

Primary ROCC: Public Health
Secondary ROCC: Drinking Water Quality
Geographic Focus: Latah County
ROCC Conservation Goal: Protect the health of Latah County citizens by safeguarding clean drinking water supplies.
Limiting Factor: Contamination of surface water supplies by polluted runoff
Objective(s): 1. Prevent the contamination of surface drinking water systems.
Strategies: 1. Develop land use plans that protect surface waters from conflicting land uses such as: landfills, concentrated animal feeding operations, hazardous material storage, and petroleum storage. 2. Develop comprehensive clean-up and monitoring plans in the event that hazardous materials are spilled within drinking water drainages.
Rationale: Surface drinking water systems are highly susceptible to contamination by contaminated overland flows.
Notes:
Latah SWCD 5-Year Tasks: 1. Participate in local efforts to identify and protect surface drinking water protection zones. 2. Endorse efforts to develop hazardous material clean-up plans.

Public Health
Surface Water/Recreational Contact
Bacteria

Primary ROCC: Public Health

Secondary ROCC: Surface Water/Recreational Contact

Geographic Focus: Latah County

ROCC Conservation Goal: Support the health of Latah County citizens by safeguarding surface water quality related to recreational uses.

Limiting Factor: Bacteria

Objective(s):
1. Reduce bacteria loads in Latah County waters to support primary and secondary contact recreation beneficial uses.

Strategies:
1. Upgrade and inspect municipal wastewater facilities to avoid bacterial contamination of surface waters.
2. Manage livestock and ranch operations to avoid point source and non-point source contamination of waters with animal waste.
3. Clean up and dispose of pet waste appropriately. Do not wash pet waste to storm drains or leave waste near streams or lakes.
4. Inspect and upgrade private septic systems to avoid failure.

Rationale:
Bacteria in surface waters have been linked to human illness. Fecal coliform is the primary water quality indicator bacteria for water quality standards. Bacteria are introduced to streams and lakes from inadequately treated sewage, improperly handled livestock operations, pet droppings in urban areas and failing septic systems.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in revisions of TMDLs and associated Implementation Plans for the Potlatch River and Palouse River watersheds.
2. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments.
3. Inform livestock producers on appropriate waste management and facilitate the use of available programs (e.g. EQIP) to implement proper waste handling.
4. Inform rural landowners regarding septic system evaluation and upkeep.
5. Endorse appropriate upgrades to local wastewater treatment facilities.

Public Health
Surface Water/Recreational Contact
Nutrients

Primary ROCC: Public Health

Secondary ROCC: Surface Water/Recreational Contact

Geographic Focus: Latah County

ROCC Conservation Goal: Support the health of Latah County citizens by safeguarding surface water quality related to recreational uses.

Limiting Factor: Nutrients

Objective(s):
1. Promote land management practices that reduce nutrient loads to recreational surface waters that may affect the public's health related to recreational use of local streams, rivers and lakes.

Strategies:
1. Improve nutrient use efficiency and avoid wasteful runoff through proper timing, placement, rate, and application of crop nutrients.
2. Minimize nutrient runoff from residential landscapes through appropriate timing and application of fertilizers.
3. Minimize the need for external nutrient inputs in landscape plantings by using locally adapted plant varieties.
4. Encourage densely vegetated riparian buffers to protect lakes and streams by intercepting and sequestering nutrients.

Rationale:
1. Excess nutrients enter waterways through runoff from fertilized crops, lawns, and gardens. Livestock manure may also contribute surplus nutrients. Excess nutrients encourage algae and aquatic plant growth that depletes dissolved oxygen.
2. Judicious nutrient management by agricultural producers will maximize the yield from a given application and minimize wasteful runoff. Residential landowners can also reduce their nutrient contribution through educated fertilizer use and appropriate planting choices.
3. Vegetated buffers are a proven method for intercepting nutrients and avoiding excess inputs to streams and wetlands. Dense buffers over 100 feet wide that include grasses and shrubs provide the best results for water quality protection.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in revisions of TMDLs and related Implementation Plans for the Potlatch River and Palouse River watersheds.
2. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments.
3. Inform agricultural landowners regarding efficient nutrient use.
4. Inform residential landowners regarding locally adapted landscape plants and effective fertilizer application.
5. Endorse programs that encourage densely vegetated buffers around streams, lakes, and wetlands.

Public Health
Surface Water/Recreational Contact
Oil and Grease

Primary ROCC: Public Health
Secondary ROCC: Surface Water/Recreational Contact
Geographic Focus: Latah County
ROCC Conservation Goal: Support the health of Latah County citizens by safeguarding surface water quality related to recreational uses.
Limiting Factor: Oil and grease
Objective(s): 1. Promote land management practices that minimize the input of oil and grease to waters in Latah County.
Strategies: 1. Promote best management practices to minimize oil and grease spills. 2. Promote appropriate disposal of oils and grease to minimize contamination. 3. Encourage densely vegetated riparian buffers to protect lakes and streams.
Rationale: 1. Oil and grease washed from driveways, roads, and parking lots is a primary source of input to stormwater; untreated stormwater may drain directly to streams in some cases. 2. Vegetated buffers are a proven method for intercepting pollutants and avoiding inputs to streams and wetlands. Dense buffers that include grasses and shrubs provide the best results for water quality protection.
Notes:
Latah SWCD 5-Year Tasks: 1. Coordinate local riparian restoration efforts that include streamside plantings. 2. Inform landowners regarding motor oil disposal points. 3. Endorse programs that encourage densely vegetated buffers around streams, lakes, and wetlands.

Public Health
Surface Water/Recreational Contact
Organics and Pesticides

Primary ROCC: Public Health

Secondary ROCC: Surface Water/Recreational Contact

Geographic Focus: Latah County

ROCC Conservation Goal: Support the health of Latah County citizens by safeguarding surface water quality related to recreational uses.

Limiting Factor: Organics and pesticides

Objective(s):
1. Reduce the input of organic compounds and pesticides to waters in Latah County.

Strategies:
1. Implement integrated pest management and efficient pesticide application practices to minimize the runoff of pesticides from agricultural fields.
2. Develop response plans for the effective containment and clean up of pesticide and other organic chemical spills.
3. Educate residential landowners in the appropriate application and disposal of pesticides to minimize residential runoff.
4. Educate landowners and commercial businesses on the proper disposal of solvents and pesticides and provide safe and convenient disposal points for hazardous substances.
5. Encourage densely vegetated riparian buffers greater than 100 feet in width to protect lakes and streams by intercepting contaminated runoff.

Rationale:
1. Integrated pest management can reduce the quantity of pesticide applied to agricultural fields and thus minimize the potential for runoff to streams and lakes.
2. A well-planned response to chemical spills can reduce the probability that chemicals will enter waterways.
3. Providing information to landowners and commercial users can minimize the improper use and disposal of pesticides and solvents. Illegal dumping can be curbed by providing safe disposal points.
4. Vegetated buffers are a proven method for intercepting pollutants and avoiding inputs to streams and wetlands. Dense buffers over 100 feet wide that include grasses and shrubs provide the best results for water quality protection.

Notes:

Latah SWCD 5-Year Tasks:

1. Participate in revisions of TMDLs and associated Implementation Plans for the Potlatch River and Palouse River watersheds. .
2. Coordinate local riparian restoration efforts to minimize pesticide delivery to local streams.
3. Inform agricultural producers and residential landowners regarding integrated pest management and effective pesticide use.
4. Inform landowners regarding hazardous substance disposal points.
5. Endorse programs that encourage densely vegetated buffers around streams, lakes, and wetlands.

Range and Pasture Lands

Range and Pasture Lands Resource Conservation Goal

> *Preserve and restore range and pasture land productivity for the benefit of wildlife and livestock while providing voluntary opportunities for the long-term preservation of working rangelands in Latah County.*

The range and pasture lands ROCC is divided into two secondary ROCCs: range and pasture productivity and rangeland preservation.

Range and Pasture Productivity
About 196,000 acres of grazing land are found in Latah County. Nearly 15,000 acres are referred to as rangeland, while 181,000 acres are grazable woodland. Livestock and livestock derived products make up approximately 6.8 percent of agricultural income in Latah County. Rangeland productivity is threatened by shifts in species composition and abundance to favor less palatable vegetation. Erosion and soil compaction also affect the yield of pasture grasses. Grazable woodland and some rangelands suffer declines in productivity as canopy vegetation matures and excludes light from the understory.

ROCC work plans address the following limiting factors:

- Invasive Plants
- Soil Erosion and Compaction
- Departures from Natural Woodland Stocking Densities

Rangeland Preservation
Rangeland provides economic inputs to Latah County, including direct inputs from livestock and indirect inputs from recreational uses of rangelands. Range and pasture lands also provide aesthetic values of open space and an agrarian landscape.

A ROCC work plan addresses the following limiting factor:

- Loss of Range and Pastureland

Range and Pasture Lands
Range and Pasture Productivity
Invasive Plants

Primary ROCC: Range and Pasture Lands

Secondary ROCC: Range and Pasture Productivity

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore natural productivity to range and pasture lands for the benefit of livestock and wildlife.

Limiting Factor: Invasive plants

Objective(s):
1. Reduce the spread of invasive plants into private and public rangelands and grazed woodlands.
2. Improve control of existing invasive plant populations on private and public rangelands and grazed woodlands.

Strategies:
1. Ensure compliance with the existing Idaho State Noxious Weed Law, and with weed regulations developed by the Clearwater National Forest and local municipalities.
2. Manage grazing within infested range and pasturelands to avoid the spread of infestations to new sites.
3. Implement weed monitoring and control on recently disturbed sites and on heavily infested rangelands.

Rationale:
1. Rangeland weeds cause a national $2 billion loss annually for the livestock industry. Species such as yellow star-thistle interfere with feeding. Other species, such as downy brome, lower the quality and yield of forage. Taprooted species, such as spotted knapweed, increase surface runoff and sediment yields and thus affect the health of rangeland soils.
2. Improper grazing practices act to spread noxious weeds. Properly managed grazing can be used as a weed control method.
3. Recently disturbed lands are vulnerable to infestation and heavy infestations will generally not improve without active management.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in local efforts to control invasive weeds.
2. Facilitate landowner access to programs that may assist them in weed control efforts.
3. Inform landowners regarding the identification and effective control of invasive weeds.
4. Inform interested landowners regarding rangeland restoration.

Range and Pasture Lands
Range and Pasture Productivity
Soil Erosion and Compaction

Primary ROCC: Range and Pasture Lands

Secondary ROCC: Range and Pasture Productivity

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore natural productivity to range and pasturelands for the benefit of livestock and wildlife.

Limiting Factor: Soil erosion and compaction

Objective(s):
1. Minimize soil erosion risks and reduce existing erosion on range and pasture lands.
2. Avoid soil compaction on range and pasture lands.

Strategies:
1. Manage grazing to preserve groundcover and minimize exposed soil.
2. Temporarily reduce or exclude livestock from lands where sparse groundcover is contributing to rill and gully erosion.
3. Implement best management practices to address concentrated erosion.
4. Manage livestock to avoid concentrations of animals on wet ground that is vulnerable to compaction.

Rationale:
1. Healthy soils maximize forage and the productivity of rangelands. Perennial groundcover binds soil and minimizes losses to erosion. Where grazing has exceeded the vegetation's ability to regenerate, livestock exclusion or reduction in stocking can allow vegetation to recover and avoid soil loss. Areas of concentrated erosion may require active management (e.g. gully plugs, mulch, straw bales, etc.) for soils to stabilize and regain vegetation. Wet soils are especially vulnerable to compaction, and heavy livestock or vehicle traffic will reduce the ability of these areas to support vegetation.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate the development of grazing plans that preserve appropriate levels of groundcover.
2. Inform landowners regarding effective erosion control and prevention.
3. Inform landowners regarding vulnerable soils and periods of time where soils are most susceptible to compaction.

Range and Pasture Lands
Range and Pasture Productivity
Departures from Natural Woodland Stocking Densities

Primary ROCC: Range and Pasture Lands
Secondary ROCC: Range and Pasture Productivity
Geographic Focus: Latah County
ROCC Conservation Goal: Protect and restore natural productivity to range and pasturelands for the benefit of livestock and wildlife.
Limiting Factor: Departures from natural woodland stocking densities
Objective(s): 1. Achieve woodland stocking consistent with historic natural processes to reduce the risk of catastrophic fire and enhance grazing productivity for livestock and wildlife.
Strategies: 1. Identify woodlands and historically open forest lands with a significant departure from historic/natural tree densities. 2. Where consistent with local ecology and land use, implement mechanical thinning and prescribed fire to reduce stocking densities and fuel loads.
Rationale: Fire suppression within some forest types has resulted in stands with higher densities than occurred historically and changes in tree species composition. These conditions may result in reduced habitat diversity and vegetation resources for wildlife and livestock, increased risk of future catastrophic fire, reduced tree growth rates, and increased risk of disease or insect outbreaks.
Notes:
Latah SWCD 5-Year Tasks: 1. Inform interested landowners regarding woodland and forest management and thinning. 2. Endorse efforts to identify and map lands with high fuel loads and a significant departure from natural stand density.

Range and Pasture Lands
Rangeland Preservation
Loss of Range and Pasture Lands

Primary ROCC: Range and Pasture Lands
Secondary ROCC: Rangeland Preservation
Geographic Focus: Latah County
ROCC Conservation Goal: Maintain productive rangelands within Latah County through the implementation of voluntary strategies for the benefit of livestock and wildlife.
Limiting Factor: Loss of range and pasture lands
Objective(s): 1. Prevent damage and degradation to range and pasturelands that render them unfit for grazing. 2. Preserve rangelands and pastures through voluntary mechanisms.
Strategies: 1. Address weed infestations and soil erosion on range and pasturelands in a timely manner. 2. Apply land use planning strategies to preserve working rangelands and the agricultural environment and infrastructure that farmers and ranchers require to produce food and fiber for current and future generations.
Rationale: 1. Rangeland degradation can limit the use of lands for livestock production, and in extreme cases render areas unfit for grazing. (For example, when toxic weeds occupy a pasture.) Loss of rangeland through degradation may not be permanent; however restoration is costly and difficult. Conversion of rangeland to urban and suburban uses is permanent; rangelands near urban areas are most at risk as land values rise in the suburban fringe.
Notes:
Latah SWCD 5-Year Tasks: 1. Coordinate the development of sustainable grazing plans by landowners to protect rangeland against soil erosion and infestation by noxious weeds. 2. Participate in local efforts to control invasive weeds and facilitate landowner access to programs that may assist them in weed control efforts. 3. Inform interested landowners of rangeland restoration opportunities. 4. Review voluntary land protection programs that focus on maintaining the viability of range and pasture lands.

Special Status Species

Special Status Species Resource Conservation Goal

> *Protect and restore habitat for the survival of individual special status animal and plant species within Latah County and the Palouse region.*

For the purposes of this resource conservation plan, special status species are those vascular and non-vascular plants and vertebrate animals known or suspected to occur within Latah County with a state conservation rank of one or two (critically imperiled or imperiled), or listed as sensitive by USDA Forest Service (USFS) Region 1 or the Idaho division of the BLM, or designated as special status species by IDFG.

The Special Status Species ROCC is divided into two secondary ROCCs; one for animals and one for plants. ROCC work plans are designed to address general limiting factors that have been identified as affecting multiple special status species.

Special Status Animals

Twenty-nine special status vertebrates are known to occur, or potentially occur, within Latah County (Table 1). Birds represent the largest class of special status vertebrates; many are associated with habitats affected by fragmentation or degradation such as riparian woodland or mature forest. Bats represent another significant group; the causes for declines in these species are largely unknown. The four listed carnivore species have been susceptible to direct human conflicts and/or fur trapping. Habitat degradation and fragmentation are the primary causes of concern for amphibian and reptile species. Three special status species are resident or anadromous fish; limiting factors and work plans for these species are contained within the Fisheries primary ROCC section.

Three <u>limiting factors</u> affecting special status animals are addressed in ROCC work plans. These include:

- Habitat Degradation
- Disruption of Ecosystem Processes
- Habitat Fragmentation

Table 1. Special status vertebrates known or potentially occurring in Latah County, ID.

Common Name	Scientific Name	Primary Habitats	ESA Status[a]	State Rank[b]	USFS Region 1[c]	Idaho BLM[d]	IDFG[e]
Swainson's Hawk	*Buteo swainsoni*	Riparian, Agricultural	-	S3B	-	Type 5	PNG
Northern Goshawk	*Accipiter gentilis*	Mature Forest	-	S3/S4	S	Type 3	PNG
Yellow-billed Cuckoo	*Coccyzus americanus*	Riparian	C	S2B	-	Type 1	SS
Northern Pygmy Owl	*Glaucidium gnoma*	Woodland, Forest	-	S4	-	Type 5	SS
Barred Owl	*Strix varia*	Mature Forest	-	S4	-	-	SS
Short-eared Owl	*Asio flammeus*	Agricultural, Prairie, Wodland	-	S4	-	Type 5	PNG
Lewis' Woodpecker	*Melanerpes lewis*	Woodland, Riparian, Forest	-	S3B	-	Type 3	PNG
White-headed Woodpecker	*Picoides albolarvatus*	Forest, Mature Forest	-	S2	S	Type 4	PNG
Black-backed Woodpecker	*Picoides arcticus*	Forest, Mature Forest	-	S3	S	Type 5	SS
Willow Flycatcher	*Empidonax traillii*	Riparian, Woodland	-	S4	-	Type 3	SS
Pygmy Nuthatch	*Sitta pygmaea*	Mature Forest, Woodland	-	S1	S	Type 5	SS
Grasshopper Sparrow	*Ammodramus savannarum*	Agricultural, Prairie	-	S2B	-	Type 5	PNG
Pygmy Shrew	*Sorex hoyi*	Forest, Mature Forest, Riparian	-	S1	-	-	UW
Long-eared Myotis	*Myotis evotis*	Forest, Mature Forest, Riparian	-	S3	-	Type 5	SS
Fringed Myotis	*Myotis thysanodes*	Forest, Mature Forest, Prairie, Woodland	-	S2	S	Type 3	SS
Townsend's Big-eared Bat	*Corynorhinus townsendii*	Forest, Mature Forest, Woodland	-	S3	S	Type 3	PNG

Table 1. Special status vertebrates known or potentially occurring in Latah County, ID. (*continued*)

Common Name	Scientific Name	Primary Habitats	ESA Status[a]	State Rank[b]	USFS Region 1[c]	Idaho BLM[d]	IDFG[e]
Pallid Bat	*Antrozous pallidus*	Forest, Mature Forest, Prairie	-	S1	-	-	PNG
Gray Wolf	*Canis lupus*	Forest, Mature Forest, Riparian, Woodland	XN	S3	-	Type 1	G
Fisher	*Martes pennanti*	Mature Forest, Riparian	-	S1	S	Type 3	FB
North American Wolverine	*Gulo gulo luscus*	Mature Forest	-	S2	S	Type 3	SS
Lynx	*Lynx Canadensis*	Forest, Mature Forest	LT	S1	-	Type 1	SS
Idaho Giant Salamander	*Dicamptodon aterrimus*	Mature Forest, Riparian	-	S3	-	Type 3	PNG
Coeur d'Alene Salamander	*Plethodon idahoensis*	Forest, Mature Forest, Riparian	-	S2	S	Type 3	PNG
Western Toad	*Bufo boreas*	Forest, Prairie, Riparian	-	S4	S	Type 3	PNG
Northern Alligator Lizard	*Elgaria coerulea*	Woodland, Forest, Prairie	-	S2	-	Type 5	SS
Ringneck Snake	*Diadophis punctatus*	Forest, Prairie, Woodland	-	S2	S	Type 5	SS
Steelhead	*Oncorhynchus mykiss*	Stream	LT	S3	-	Type 1	SS; G
Bull Trout	*Salvelinus confluentus*	Stream	LT	S3	-	Type 1	SS; G
Westslope Cutthroat	*Oncorhynchus clarki lewisi*	Stream	-	S3	S	Type 2	G

a. Status under the federal Endangered Species Act: **LT**= listed threatened; **XN** = experimental nonessential population; **C** = candidate for listing.
b. State NatureServe conservation status rank: **S1** = critically imperiled; **S2** = imperiled; **S3** = vulnerable; **S4** = apparently secure; **B** = rank applies to breeding population.
c. USDA Forest Service Region 1 status: **S** = sensitive.
d. USDI Bureau of Land Management status in Idaho: **Type 1** = federally listed or candidate for listing; **Type 2** = rangewide or globally imperiled; **Type 3** = regionally or statewide imperiled; **Type 4** = peripheral to Idaho; **Type 5** = watch list, not BLM sensitive.
e. Idaho Department of Fish and Game species designation: **FB** = furbearing species; **G** = game species; **PNG** = protected non-game species; **SS** = special status species; **UW** = unprotected wildlife.

Special Status Plants

Twenty-nine special status plants occur within Latah County (Table 2). Five species are non-vascular lichens or mosses, and four are spore-reproducing ferns or moonworts. The remaining species are herbaceous flowering plants. Habitat loss and degradation are the driving factors behind rarity for most special status plants. Nine are closely associated with rare Palouse Prairie, and an additional nine are tied to the understory of mature forest.

Two limiting factors affecting special status plants are addressed in ROCC work plans. These include:

- Habitat Loss
- Habitat Fragmentation and Degradation

Table 2. Special status vascular and non-vascular plants known or potentially occurring in Latah County, ID.

Common Name	Scientific Name	Primary Habitats	ESA Status[a]	State Rank[b]	USFS Region 1[c]	Idaho BLM[d]	INPS[e]
Jessica's Aster	*Aster jessicae*	Palouse Prairie, Pine Woodland	-	S2	-	Type 2	GP2
Deer-fern	*Blechnum spicant*	Forest, Mature Forest	-	S3	S	Type 3	S
Mingan Moonwort	*Botrychium minganense*	Forest, Mature Forest	-	S3	S	Type 4	S
Mountain Moonwort	*Botrychium montanum*	Mature Forest	-	S2	S	-	GP3
Least Moonwort	*Botrychium simplex*	Forest, Wetland, Meadow	-	S2	S	-	S
Green Bug Moss	*Buxbaumia viridis*	Mature Forest	-	not ranked	S	-	S
Broad-fruit Mariposa	*Calochortus nitidus*	Palouse Prairie, Pine Woodland	-	S3	S	Type 2	GP3
Henderson's Sedge	*Carex hendersonii*	Western Redcedar Forest, Wetland	-	S3	-	Type 5	M
Phantom Orchid	*Cephalanthera austiniae*	Mature Forest	-	S3	-	-	M
Palouse Thistle	*Cirsium brevifolium*	Palouse Prairie	-	S2	-	-	GP3
Lichen	*Cladonia andereggii*	Mature Forest	-	S1	S	-	S
Transcending Reindeer Lichen	*Cladonia transcendens*	Mature Forest	-	S3	-	-	2
Case's Corydalis	*Corydalis caseana ssp. Hastate*	Forest, Riparian	-	S3	-	Type 3	GP3

Table 2. Special status vascular and non-vascular plants known or potentially occurring in Latah County, ID. (*continued*)

Common Name	Scientific Name	Primary Habitats	ESA Status[a]	State Rank[b]	USFS Region 1[c]	Idaho BLM[d]	INPS[e]
Idaho Hawksbeard	*Crepis bakeri ssp. idahoensis*	Canyon grasslands	-	S2	-	Type 2	GP2
Clustered Lady's-slipper	*Cypripedium fasciculatum*	Forest, Mature Forest	-	S3	S	-	2
Crested Shield-fern	*Dryopteris cristata*	Wet Meadow, Forested Wetland	-	S2	S	-	S
Sticky Goldenweed	*Haplopappus hirtus var. sonchifolius*	Palouse Prairie, Pine Woodland	-	S1	S	-	GP3
Palouse Goldenweed	*Haplopappus liatriformis*	Palouse Prairie, Pine Woodland, Canyon Grasslands	-	S2	-	Type 2	GP2
Water Howellia	*Howellia aquatilis*	Vernal Ponds	LT	S2	-	-	GP1
Salmon-flower Desert-parsley	*Lomatium salmoniflorum*	Basalt Cliffs	-	S2	S	Type 3	GP3
Bank Monkeyflower	*Mimulus clivicola*	Moist Exposed Mineral Soil	-	S3	-	Type 5	M
Nail Lichen	*Pilophorus acicularis*	Mature Forest	-	S2	-	-	2
Slender Woolly-heads	*Psilocarphus tenellus*	Wetlands	-	S2	-	-	S
California Scurf-pea	*Rupertia physodes*	Pine Woodland, Canyon Grasslands	-	S1	-	-	1
Spalding's Silene	*Silene spaldingii*	Palouse Prairie, Canyon Grasslands	LT	S1	-	Type 1	GP2
	Sphaerocarpos hians	Palouse Prairie	-	S1	-	-	GP1
Leiberg's Tauschia	*Tauschia tenuissima*	Palouse Prairie, Meadows	-	S3	-	-	GP3
Western Starflower	*Trientalis latifolia*	Forest, Meadows	-	S3	-	-	M
Douglas' Clover	*Trifolium douglasii*	Palouse Prairie, Wetlands, Meadows	-	S2	S	Type 3	GP2

a. Status under the federal Endangered Species Act: **LT**= listed threatened
b. State NatureServe conservation status rank: **S1** = critically imperiled; **S2** = imperiled; **S3** = vulnerable; **S4** = apparently secure.
c. USDA Forest Service Region 1 status: **S** = sensitive.
d. USDI Bureau of Land Management status in Idaho: **Type 1** = federally listed or candidate for listing; **Type 2** = rangewide or globally imperiled; **Type 3** = regionally or statewide imperiled; **Type 4** = peripheral to Idaho; **Type 5** = watch list, not BLM sensitive.
e. Idaho Native Plant Society designation: **GP1** = globally rare highest priority; **GP2** = globally rare high priority; **GP3** = globally rare priority; **1** = state rare highest state priority; **2** = state rare high priority; **S** = sensitive; **M** = monitor.

Special Status Species
Animals
Habitat Degradation

Primary ROCC: Special Status Species
Secondary ROCC: Animals
Geographic Focus: Latah County
ROCC Conservation Goal: Protect special status wildlife and preserve and restore the habitats, landscape connectivity, and ecosystem processes necessary to sustain these populations in Latah County.
Limiting Factor: Habitat degradation
Objective(s): 1. To protect high quality habitats critical to populations of special status animals in Latah County. 2. To restore degraded habitats to a condition capable of supporting populations of special status animals.
Strategies: 1. Place high priority on preservation of the following habitats in land use planning: mature forest, riparian and wetland areas, and ponderosa pine woodlands. 2. Protect abandoned mine habitats from closure and human disturbance. Ensure public safety with “bat gates” where possible. 3. Practice forest management that supports a variety of stand age-classes and allows for the production of snags and dynamic stand openings. 2. Protect riparian vegetation with fencing and off-stream or limited access watering points for livestock. 4. Restore a native shrub and tree assemblage to degraded riparian habitats.
Rationale: 1. Of 29 special status vertebrates, 16 use mature coniferous forest habitats, 11 rely on riparian vegetation, and 12 use open woodland habitats. Other habitat types, such as agricultural lands and young forest are also used; however, with the advent of modern land use practices, mature forest, open ponderosa pine woodland, and robust riparian communities have become less common in the landscape. 2. Four special status bat species are known to or may roost in abandoned mines. Closure of mines may significantly reduce available habitat for these species. 3. A variety of stand ages is important for several forestdwelling special status species. Mature forests support northern goshawks, barred owls, white-headed and black-backed woodpeckers, Idaho giant salamanders, bats, and secretive species such as the North American wolverine. Younger forests are important to northern pygmy owls, Lewis’ woodpecker, and many species for foraging. 4. Healthy riparian vegetation, with a variety of tree and shrub age classes, are used by many special status species and are especially important for willow flycatchers, yellow-billed cuckoos, and fisher.

Notes:
Latah SWCD 5-Year Tasks: 1. Coordinate local riparian restoration efforts, including: streamside plantings, control of invasive vegetation, fenced cattle exclosures, and off-stream watering developments. 2. Participate in land use planning efforts that voluntarily sustain existing ponderosa pine woodlands, mature forests, and riparian areas and wetlands. 3. Endorse forest management practices that support a variety of stand age classes.

Special Status Species
Animals
Disruption of Ecosystem Processes

Primary ROCC: Special Status Species

Secondary ROCC: Animals

Geographic Focus: Latah County

ROCC Conservation Goal: Protect special status wildlife and preserve and restore the habitats, landscape connectivity, and ecosystem processes necessary to sustain these populations in Latah County.

Limiting Factor: Disruption of ecosystem processes

Objective(s):
1. Protect ecosystem processes that sustain the habitats important to special status species.
2. Where possible, restore or replicate important ecosystem processes that have been lost.

Strategies:
1. Implement land use planning that allows for natural processes such as forest succession, fire, flooding, predation, and migration. Strategies may include developing fire safety zones around rural homes, floodplain management, long-term multi-use forest planning, and road planning to avoid the disruption of migration routes. These strategies may lessen human conflicts with naturally occurring processes.
2. Where natural processes have been lost, and reintroduction is not practical, implement management practices that replicate some of the functions of these processes. For example, implement thinning followed by prescribed burning where wildfire is not realistic.
3. Protect the elements that are necessary for important ecosystem processes. For example, forestland must be preserved in order to support natural forest succession.
4. Target and control invasive elements that disrupt natural processes. New populations of invasive weeds and introduced insect pests should receive high priority. Existing weed and insect pest populations should be approached from multiple angles to achieve effective control.

Rationale:
Wildlife habitats are the result of dynamic processes on a landscape level. When these processes are removed or altered, the distribution of habitat types changes and affects the wildlife community. Special status species particularly affected by the loss or alteration of natural processes include: black-backed woodpecker, white-headed woodpecker, Lewis' woodpecker, barred owl, pygmy nuthatch, and northern goshawk. The suppression of fire in the forest landscape may be one of the most significant process disruptions affecting wildlife.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in land use planning that recognizes and allows for natural processes, such as fire, forest succession, and flooding.
2. Endorse forestry practices that replicate some of the functions of naturally occurring

fire.

3. Endorse forestry practices that allow for forest succession processes and the maintenance of a variety of stand ages.
4. Endorse planning and management activities that encourage natural hydrology (see ROCC Fisheries-Extreme Fluctuations in Water Quantity) and the protection of a natural floodplain.

Special Status Species
Animals
Habitat Fragmentation

Primary ROCC: Special Status Species

Secondary ROCC: Animals

Geographic Focus: Latah County

ROCC Conservation Goal: Protect special status wildlife and preserve and restore the habitats, landscape connectivity, and ecosystem processes necessary to sustain these populations in Latah County.

Limiting Factor: Habitat fragmentation

Objective(s):
1. Avoid habitat fragmentation through comprehensive land use planning.
2. Repair habitat fragmentation to maximize connectivity among valuable habitats.

Strategies:
1. During land use planning, avoid fragmenting rare and quality habitats by placing new roads, structures, transmission corridors, etc. outside such habitats.
2. During land use planning, prioritize the protection of existing contiguous blocks of rare and high value habitats and lands that act as corridors among quality habitat.
3. Where feasible, decommission forest roads.
4. Identify opportunities for connectivity among natural areas and prioritize restoration and natural area acquisition to maximize connectivity among high value habitats.
5. Protect and restore streamside riparian communities.

Rationale:
1. When a contiguous block of habitat is dissected, two primary factors decrease its value to wildlife. First, smaller islands of habitat are not adequate for species that have large home range requirements, such as wolverine, lynx, and gray wolf. Second, “edge effects” degrade the existing habitat by allowing the invasion of noxious weeds and incursion of non-native predators. Edge habitats are also more susceptible to forest blow-down and human disturbance. Even in the absence of harvest activities, roads increase the edge within forest stands.
2. Connectivity among habitats is especially valuable within agricultural and developed landscapes. Species such as pygmy shrew, western toad, northern alligator lizard and ring-necked snake are susceptible to predation and vehicle collisions as they move across roads and fields with little cover. Connectivity allows for seasonal movement between habitats, the safe dispersion of young, and re-colonization of habitats.
3. Streamside riparian zones provide natural corridors among habitats within agricultural and developed landscapes. Riparian corridors are subject to extreme “edge effects” based on their linear nature, but may be valuable for migrating wildlife and small species.

Notes:

Latah SWCD 5-Year Tasks:

1. Coordinate local riparian restoration efforts to remove passage barriers for wild steelhead and other aquatic species of special status.
2. Participate in land use planning efforts that identify and protect large blocks of valuable contiguous habitat and documented wildlife movement corridors.
3. Endorse the decommissioning and stabilization of forest roads.

Special Status Species
Plants
Habitat Loss

Primary ROCC: Special Status Species
Secondary ROCC: Plants
Geographic Focus: Latah County
ROCC Conservation Goal: Protect special status plants by preserving and restoring the habitats necessary to sustain these populations in Latah County.
Limiting Factor: Habitat loss
Objective(s): 1. Preserve rare habitats that are essential to special status plant species. 2. Where feasible, restore valuable rare habitats.
Strategies: 1. Implement land use planning that preserves remnant Palouse Prairie, wetland, and riparian habitats. 2. Implement forestry practices that protect areas of mature timber and produce additional mature forest stands. 3. Seek out opportunities to restore Palouse Prairie on public and private lands.
Rationale: 1. Eighteen special status plants are strongly associated with Palouse Prairie, canyon grasslands, or mature forest. The remaining eleven species occupy forest habitats (including mature forest) or wetland/riparian areas within Palouse Prairie and canyon grasslands. 2. Less than six percent of original Palouse Prairie remains, and endemic plants associated with this prairie are rare. Mature forest is also uncommon in Latah County due to timber harvest. 3. Restoration may be necessary to provide adequate habitat to sustain special status plants dependant on Palouse Prairie. Remaining fragments of prairie are vulnerable to the encroachment of exotic weeds and urban and agricultural development.
Notes:
Latah SWCD 5-Year Tasks: 1. Coordinate Palouse Prairie, canyon grassland, and mature forest protection restoration efforts. 2. Participate in land use planning that preserves remnant prairie, canyon grassland, and mature forest habitats. 3. Endorse forestry practices that encourage a diversity of stand ages across the landscape, including mature forest.

Special Status Species
Plants
Habitat Fragmentation and Degradation

Primary ROCC: Special Status Species

Secondary ROCC: Plants

Geographic Focus: Latah County

ROCC Conservation Goal: Protect special status plants by preserving and restoring the habitats necessary to sustain these populations in Latah County.

Limiting Factor: Habitat fragmentation and degradation

Objective(s):
1. Prevent the fragmentation of plant communities of high value to special status plant species.
2. Reduce existing fragmentation within communities of high value to special status plant species.
3. Protect valuable plant communities from further degradation and restore native species to these communities.

Strategies:
1. During land use planning place high priority on retaining contiguous areas of Palouse Prairie, canyon grassland, and mature forest.
2. Decommission and stabilize forest roads; place high priority on roads that intersect mature stands.
3. Actively manage prairie remnants, wetlands, and riparian areas to control infestations of noxious weeds.
4. Restore native vegetation to Palouse Prairie and canyon grassland habitats on public and available private lands.

Rationale:
1. When a contiguous vegetation community is dissected, “edge effects” act to degrade the remaining community. Within forested areas the canopy is interrupted, allowing shade-intolerant species to colonize the area. Microclimates are also affected; canopy removal leads to higher temperatures and greater evaporation. Noxious weeds invade natural communities from roads and transmission corridors. Human and livestock disturbance to native plant communities are concentrated along edges.
2. Invasive weeds are a primary threat to native plant communities in Latah County. Weeds compete with native vegetation for soil moisture and nutrients. Some weeds, such as spotted knapweed, actively suppress the growth of surrounding vegetation. Noxious weeds have the ability to create monotypic stands of vetation and eliminate diversity in a plant community.
3. Remnant Palouse Prairie exists as fragmented patches across Latah County. The development of contiguous Palouse Prairie capable of supporting populations of special status plants will require restoration efforts.

Notes:

Latah SWCD 5-Year Tasks:

1. Coordinate Palouse Prairie, canyon grassland, and mature forest protection and restoration efforts.
2. Inform interested landowners regarding prairie restoration opportunities.
3. Inform landowners regarding the identification and effective control of invasive weeds.
4. Endorse infrastructure planning that minimizes the fragmentation of vegetation communities that support special status plants.
5. Endorse the decommissioning and stabilization of forest roads.

Threatened Ecosystems

Threatened Ecosystems Resource Conservation Goal

> *Protect and restore threatened ecosystems in Latah County and the Palouse region on a scale that supports the self-sustaining function of these ecosystems.*

Within the Threatened Ecosystems ROCC, Latah SWCD efforts will focus on the following five ecosystem types:

- Camas Meadows
- Canyon Grasslands
- Palouse Prairie
- Ponderosa Pine
- Wetlands

The conversion of land in Latah County from native bunchgrass prairie and timbered slopes to harvested forestland and agricultural fields began in the late 1800's. Today less than six percent of the original native prairie remains and commercial stand management has largely replaced the natural processes that once shaped forestlands. The following <u>limiting factors</u> are organized according to the threatened ecosystem they affect:

- Camas Meadows
  - Lowered Water Tables
  - Land Conversion
  - Invasive Plants
- Canyon Grasslands
  - Livestock Grazing
  - Invasive Plants
- Palouse Prairie
  - Land Conversion
  - Invasive Plants
- Ponderosa Pine
  - Altered Fire Regimes
  - Disease and Insects
- Wetlands
  - Lowered Water Tables
  - Land Conversion
  - Invasive Plants

Threatened Ecosystems
Camas Meadows
Lowered Water Tables

Primary ROCC: Threatened Ecosystems
Secondary ROCC: Camas Meadows
Geographic Focus: Latah County
ROCC Conservation Goal: Protect and restore camas meadows in Latah County on a scale that supports the self-sustaining function of these ecosystems.
Limiting Factor: Lowered water tables
Objective(s): 1. Return local water tables within the camas meadows to historic depths.
Strategies: 1. Protect Palouse streams from further downcutting and associated lowering of the local water table by minimizing erosion and sediment inputs to streams. 2. Reverse historic downcutting on Palouse streams through restoration.
Rationale: 1. Camas formerly occupied seasonally moist, emergent wetlands throughout the Palouse. One study near Moscow indicated that 13 percent of the land area was historically occupied by camas meadows. 2. Exceptionally high erosion rates during the early twentieth century lead to downcutting in local streams and a subsequent lowering of the water table. This deprived seasonal wetlands of the hydrology necessary to support camas and allowed agricultural cultivation in former camas meadows.
Notes:
Latah SWCD 5-Year Tasks: 1. Coordinate local stream restoration efforts. 2. Endorse research to develop effective methods to return streams to their natural elevations and restore local water tables. 3. Facilitate programs targeting erosion reduction.

Threatened Ecosystems
Camas Meadows
Land Conversion

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Camas Meadows

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore camas meadows in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Limiting Factor: Land conversion

Objective(s):
1. Protect existing camas meadows from conversion to uses that do not support the maintenance of this plant community.
2. Restore camas meadow communities to areas that have been historically converted to non-compatible land uses.

Strategies:
1. Identify and map existing camas meadow communities in Latah County on public and private lands.
2. Implement land use planning that protects camas meadows on public lands.
3. Provide incentives and assistance to private landowners with camas meadows to aid in the protection of these ecosystems.
4. Identify priority areas for restoration to camas meadows based on condition, current land use, and ownership.
5. Implement restoration practices using best available science and adaptive management.

Rationale:
1. Camas occupied seasonally wet meadows throughout the Palouse prior to land conversion during the 19th and early 20th centuries. These meadows were frequently too wet to cultivate during the spring, but were planted in non-native forage and used as pasture. Lowering of the water table by the early 20th century allowed cropping in some former meadows.
2. In one study area near Moscow, 13 percent of the land area was historically camas meadow.
3. Incentive and assistance programs may be most effective for protecting existing camas meadows because most land in the Palouse region is privately owned. Likewise, restoration resources should be prioritized to favor public lands and highly motivated landowners because camas meadows are not compatible with intensive land use activities.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in camas meadow restoration efforts.
2. Participate in efforts to identify existing camas meadow communities and potential restoration sites.
3. Endorse research to develop effective restoration methods for camas meadow communities.
4. Inform interested landowners regarding restoration of native plant communities.
5. Facilitate access to programs that assist in the restoration of native plant

communities.

6. Inform interested landowners regarding land trusts and conservation easements

Threatened Ecosystems
Camas Meadows
Invasive Plants

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Camas Meadows

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore camas meadows in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Limiting Factor: Invasive plants

Objective(s):
1. Effectively control invasive plants within identified camas meadow restoration sites to allow the establishment of a native camas community.
2. Prevent reed canarygrass from colonizing existing camas meadows.

Strategies:
1. Develop effective techniques for controlling invasive non-native plants within the Palouse landscape. These techniques may include intensive, multi-year site preparation prior to meadow restoration, and the use of herbicides, shade cloth, and hand pulling. Special emphasis should be placed on reed canarygrass.
2. Monitor extant camas meadow communities to locate and combat reed canarygrass infestations.

Rationale:
1. Seasonally wet meadows that supported camas communities were converted to pastureland as the Palouse was settled. Some pastures were further developed into cropland as water tables fell in the early 20th century. The remaining pasturelands (as well as riparian zones, flats, ditches, etc.) have largely become monotypic stands of reed canarygrass. This aggressive grass and the dense thatch it forms can eliminate camas and other native grasses and forbs.
2. Control methods for reed canarygrass require sustained efforts over multiple years and subsequent monitoring and maintenance. Tailored protocols for seasonally wet meadows in the Palouse have not been developed. Chemical and physical control have shown limited success, and may not be compatible with restored camas meadows.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in invasive plant control efforts within existing and/or restored camas meadow communities.
2. Sponsor research to develop effective methods for the control of reed canarygrass in seasonally wet meadows.

Threatened Ecosystems
Canyon Grasslands
Livestock Grazing

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Canyon Grasslands

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore canyon grassland ecosystems in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Limiting Factor: Livestock grazing

Objective(s):
1. Protect the ecological integrity of canyon grasslands by managing grazing to safeguard native plant species.

Strategies:
1. Where overgrazing has lead to the deterioration of plant communities, remove grazing pressure for a period of time and actively manage for the reestablishment of a healthy native plant community.
2. Develop sustainable grazing plans that are compatible with the regeneration of healthy native vegetation.

Rationale:
Canyon grasslands share a vegetation assemblage similar to Palouse Prairie; however canyon grasslands occur on steeper slopes with thinner soils and have remained uncultivated in general. Overgrazing has lead to shifts in the vegetation community toward non-native grasses and invasive forbs. Hoof action, combined with heavy grazing that leaves exposed soil, can also contribute to erosion on these steep slopes.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate the development of sustainable grazing plans by connecting landowners with programs administered by the state and federal conservation agencies that aid in agricultural land use planning.
2. Inform landowners regarding sustainable stocking rates, seasonal grazing rotations, and soil protection.

Threatened Ecosystems
Canyon Grasslands
Invasive Plants

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Canyon Grasslands

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore canyon grassland ecosystems in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Limiting Factor: Infestation by noxious weeds

Objective(s):
1. Control existing infestations of noxious weeds within canyon grasslands.
2. Prevent the further incursion of noxious weeds into canyon grasslands.

Strategies:
1. Ensure compliance with the existing Idaho State Noxious Weed Law and with weed regulations developed by the Clearwater National Forest and local municipalities.
2. When moving livestock from infested areas to canyon grasslands secure them for a period of time with clean forage and remove weed propagules from their coats and hoofs.
3. Manage grazing pressure to avoid soil disturbance and areas of bare ground.
4. Implement weed monitoring and aggressive control on recently disturbed sites and on heavily infested grasslands.

Rationale:
1. The composition of canyon grasslands has been significantly altered by the introduction of non-native species. Even in relatively undisturbed tracts of canyon grassland the number of non-native and invasive species has increased dramatically since 1950.
2. Improper grazing practices act to spread noxious weeds. Properly managed grazing can be used as a weed control method.
3. Recently disturbed lands are vulnerable to infestation; heavy infestations will generally not improve without active management.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate canyon grassland restoration efforts that include the control of invasive weeds.
2. Facilitate landowner access to programs that may assist them in weed control efforts.
3. Inform landowners on the identification and effective control of invasive weeds.
4. Inform landowners about canyon grassland restoration.
5. Inform landowners about land trusts and conservation easements.

Threatened Ecosystems
Palouse Prairie
Land Conversion

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Palouse Prairie

Geographic Focus: Western portion of Latah County

ROCC Conservation Goal: Protect and restore Palouse Prairie ecosystems in Latah County and the Palouse region on a scale that supports the self-sustaining function of these ecosystems.

Limiting Factor: Land Conversion to agricultural and residential uses

Objective(s):
1. Protect remnant Palouse Prairie sites.
2. Restore a native Palouse Prairie community to selected sites.

Strategies:
1. Identify existing Palouse Prairie sites in Latah County and prioritize for protection.
2. Provide information, assistance and incentives for voluntary protection efforts on private lands, such as conservation easements.
3. Identify practical sites for restoration of Palouse Prairie.
4. Research effective practices for large-scale restoration that could potentially be used by CRP participants.
5. Implement restoration activities.

Rationale:
1. Palouse Prairie ecosystems are rare; most of what once was Palouse Prairie has been converted to cropland. Unprotected remnant sites occur primarily on private lands.
2. Latah County supports a substantial area of CRP land (over 34,000 acres). However, the majority of CRP lands are seeded in non-native perennial grasses. Because the Palouse Prairie has been declared an endangered ecosystem, current CRP guidelines encourage its restoration.
3. Restoration of native Palouse Prairie is challenging and labor intensive. Incursion by noxious weeds hampers the establishment of native vegetation, and support by soil microbes and the formation of a natural biotic crust are necessary for successful establishment. These difficulties have precluded large-scale restoration efforts in most cases.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate planning efforts to identify potential sites for protection and/or restoration.
2. Coordinate Palouse Prairie protection and restoration projects.
3. Endorse research to identify effective restoration methods.
4. Facilitate the use of CRP and other state and federal programs available to landowners for prairie restoration.
5. Inform landowners regarding protection and restoration options for Palouse Prairie.

Threatened Ecosystems
Palouse Prairie
Invasive Plants

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Palouse Prairie

Geographic Focus: Western portion of Latah County

ROCC Conservation Goal: Protect and restore Palouse Prairie ecosystems in Latah County and the Palouse region on a scale that supports the self-sustaining function of these ecosystems

Limiting Factor: Noxious weed infestations

Objective(s):
1. Control existing infestations of noxious weeds within remnant Palouse Prairie.
2. Prevent the further incursion of noxious weeds into remnant and restored Palouse Prairie.

Strategies:
1. Ensure compliance with the existing Idaho State Noxious Weed Law and with weed ordinances developed by local municipalities.
2. Monitor remnant prairie sites and implement seasonal weed control.
3. Aggressively control weeds on recently disturbed sites and on heavy infestations.
4. Research methods for effective ongoing weed suppression in Palouse Prairie.

Rationale:
1. The composition of Palouse Prairie communities has been significantly altered by the introduction of non-native species. The open nature of bunchgrass prairie and the cool-season adaptation of its grasses leave it vulnerable to invasion by warm season grasses and aggressive forbs. Even within relatively undisturbed tracts of Palouse Prairie, such as Kamiak Butte in Whitman County, the number of non-native and invasive species has increased dramatically since 1950.
2. Efficient methods for long-term weed control in Palouse Prairie are lacking, and may hinder the restoration of large tracts of prairie, such as CRP lands.
3. Recently disturbed lands are vulnerable to infestation and heavy infestations will generally not improve without active management.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate Palouse Prairie restoration efforts that include the control of invasive weeds.
2. Sponsor research to identify effective long-term weed control methods for Palouse Prairie.
3. Facilitate landowner access to programs that may assist them in weed control efforts.
4. Inform landowners on the identification and effective control of invasive weeds.

Threatened Ecosystems
Ponderosa Pine Habitat
Altered Fire Regimes

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Ponderosa Pine Habitat

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore ponderosa pine habitat in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Limiting Factor: A reduction in the frequency of low-intensity fire

Objective(s):
1. Improve the condition of existing ponderosa pine woodlands and forests through the appropriate reintroduction of fire and/or the use of suitable alternative forest treatments.
2. Increase the occurrence of ponderosa pine forests and woodlands in the landscape through the appropriate reintroduction of fire and/or the use of suitable alternative forest treatments.

Strategies:
1. Identify overstocked ponderosa pine stands at risk for catastrophic fire or disease.
2. Identify Latah County lands historically occupied by ponderosa pine forest and woodlands.
3. Develop land management plans that include forest density reduction and prescribed burning within ponderosa pine stands and historic ponderosa pine habitats.
4. Implement stand management activities to replicate the beneficial effects of fire and/or prescribed burning where appropriate.

Rationale:
1. Based on satellite imagery, approximately four percent of Latah County lands supports ponderosa pine forests. This represents a loss of 89 percent of original ponderosa pine stands from the county. Ponderosa pine requires less than 66 percent canopy occlusion to regenerate, and many historic pine stands have been overtaken by shade tolerant, fire susceptible species such as grand fir.
2. Selective thinning can reduce competition for resources and allow successful growth and regeneration of ponderosa pine. A combination of selective thinning and prescribed fire also encourages the development of healthy ponderosa pine stands.

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in the development of land management plans that include the use of prescribed fire to promote the establishment of historic stand densities and species mixtures.
2. Endorse mapping efforts that will prioritize historic ponderosa pine stands and existing inappropriately stocked stands for treatment with prescribed fire and/or mechanical thinning.
3. Inform landowners on density reduction and prescribed fire treatments.

Threatened Ecosystems
Ponderosa Pine Habitat
Disease and Insects

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Ponderosa Pine Habitat

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore ponderosa pine habitat in Latah County on a scale that supports the self-sustaining function of these ecosystems

Limiting Factor: Disease and insect infestations

Objective(s):
1. Promote the persistence of existing stands of ponderosa pine through control of damaging insect pests and diseases.

Strategies:
1. Identify stands at risk for disease and insect infestation due to overstocking.
2. Implement appropriate mechanical thinning and prescribed fire within overstocked ponderosa pine stands.
3. Identify and contain localized insect infestations (especially infestations by the western pine bark beetle).
4. Manage timber harvest residue to reduce the risks of insect or disease infestation.

Rationale:
1. Stocking rates that depart significantly from historic stand densities increase the vulnerability of ponderosa pine stands to disease and attack by insects such as the western pine bark beetle. Residual material from thinning activities can also increase the susceptibility of stands to the western pine bark beetle. The use of prescribed fire and appropriate timing of harvest activities can reduce this risk. The western pine bark beetle has the ability to devastate stands containing a variety of age classes of pine. Pheromone treatments and selective insecticide use can reduce losses to some extent.

Notes:

Latah SWCD 5-Year Tasks:
1. Sponsor efforts to identify, map, and prioritize at-risk ponderosa pine stands.
2. Inform landowners regarding methods for minimizing the potential for infestation by western pine bark beetle; provide information regarding the identification and treatment of insect and disease infestations in ponderosa pine.
3. Endorse the appropriate thinning and prescribed fire application to vulnerable ponderosa pine stands.
4. Monitor the status of forest health in Latah County.

Threatened Ecosystems
Wetlands
Lowered Water Tables

Primary ROCC: Threatened Ecosystems
Secondary ROCC: Wetlands
Geographic Focus: Latah Couny – western portion
ROCC Conservation Goal: Protect and restore wetland ecosystems in Latah County and the Palouse region on a scale that supports the self-sustaining function of these ecosystems.
Limiting Factor: Lowered water tables
Objective(s): 1. Return local water tables within the Palouse Prairie region of Latah County to historic depths.
Strategies: 1. Protect Palouse streams from further downcutting and associated lowering of the local water table by minimizing erosion and sediment inputs to streams. 2. Reverse historic downcutting on Palouse streams through restoration.
Rationale: 1. One study near Moscow indicated that 13 percent of the land area was historically occupied by wet meadows. Another found that 97 percent of wetlands within the Palouse region have been converted to crops, hay, or pasture. Exceptionally high erosion rates during the early twentieth century lead to downcutting in local streams and subsequent lowering of the water table. This deprived wetlands of the hydrology necessary to support seasonally wet meadows and allowed agricultural cultivation in former wetlands.
Notes:
Latah SWCD 5-Year Tasks: 1. Coordinate local stream/wetland restoration efforts. 2. Endorse research to develop effective methods to return streams to their natural elevations and restore local water tables. 3. Facilitate programs targeting erosion reduction.

Threatened Ecosystems
Wetlands
Land Conversion

Primary ROCC: Threatened Ecosystems

Secondary ROCC: Wetlands

Geographic Focus: Latah County

ROCC Conservation Goal: Protect and restore wetland ecosystems in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Limiting Factor: The conversion of wetlands to agricultural, transportation and urban uses

Objective(s):
1. Protect existing wetlands from incompatible uses.
2. Restore functioning wetland communities to converted sites.

Strategies:
1. Identify, describe and map wetland communities in Latah County on public and private lands.
2. Implement land use planning that protects wetlands on public lands.
3. Provide incentives and assistance to private landowners with wetlands to aid in the protection of these ecosystems.
4. Prioritize wetlands for restoration based on their potential contributions to water quality, wildlife habitat, support of sensitive plants, and other values.
5. Implement wetland restoration using best available science and adaptive management.

Rationale:
1. Seasonally wet meadows occurred throughout the Palouse prior to land conversion during the 19th and early 20th centuries. These meadows were frequently too wet to cultivate during the spring, but were planted in non-native forage and used as pasture. Lowering of the water table by the early 20th century allowed cropping in some former meadows. In one study area near Moscow, 13 percent of the land area was historically wet meadow.
2. Incentive and assistance programs may be most effective for protecting existing wetlands because most land in the Palouse region is privately owned.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate local wetland protection and restoration efforts.
2. Endorse efforts to map and characterize existing wetlands and identify potential protection and restoration sites.
3. Inform landowners regarding wetland protection and restoration opportunities.
4. Facilitate access to programs that assist in the protection and restoration of wetland communities.
5. Inform landowners regarding land trusts and conservation easements.

Threatened Ecosystems
Wetlands
Invasive Plants

Primary ROCC: Threatened Ecosystems
Secondary ROCC: Wetlands
Geographic Focus: Latah County
ROCC Conservation Goal: Protect and restore wetland ecosystems in Latah County on a scale that supports the self-sustaining function of these ecosystems.
Limiting Factor: Invasive Plants
Objective(s): 1. Effectively control reed canarygrass and other invasive plants within wetland restoration sites to allow the establishment of a native vegetation community. 2. Prevent reed canarygrass from colonizing healthy wetland communities.
Strategies: 1. Develop effective techniques for controlling reed canarygrass within Latah County wetlands. These techniques may include intensive, multi-year site preparation prior to wetland restoration, and the use of herbicides, shade cloth, and hand pulling. 2. Monitor existing wetland communities to locate and combat reed canarygrass infestations.
Rationale: 1. Many wetland communities were converted to pastureland as Latah County was settled. Most pasture lands (as well as riparian zones, flats, ditches, etc.) have largely become monotypic stands of reed canarygrass. This aggressive grass and the dense thatch it forms eliminate native vegetation. 2. Control methods for reed canarygrass require sustained effort over multiple years and subsequent monitoring and maintenance. Protocols tailored to the conditions in Latah County have yet to be developed. Chemical and physical control have shown limited success, and may not be compatible with some restored wetland communities.
Notes:
Latah SWCD 5-Year Tasks: 1. Coordinate reed canarygrass control efforts within existing and restored wetland communities. 2. Sponsor efforts to develop effective methods for the control of reed canarygrass in seasonally wet meadows. 3. Inform landowners regarding control of reed canarygrass.

Wildlife

Wildlife Resource Conservation Goal

> *Protect, create and/or enhance wildlife habitats and populations to sustainable levels for aesthetics, organic cultural pursuits, and environmental/biological diversity.*

The Wildlife ROCC is divided into two secondary ROCCs: game species and non-game species. For the purposes of this Resource Conservation Plan, game species are those wildlife species identified by IDFG as big game, trophy, furbearers, upland game or waterfowl. Non-game species include all remaining vertebrate wildlife such as raptors, songbirds, amphibians, small mammals, and reptiles.

Game Species

Idaho supports robust hunting opportunities. In 2006, 156,900 hunters purchased tags for big game. Latah County provides opportunities to hunt a variety of wildlife and is part of Game Management Units 8 and 8A. Within this conservation plan, game species are divided into ungulate, mountain lion and bear, furbearer, upland game bird, and waterfowl categories. Factors affecting each group are summarized in Table 3.

Ungulates

Ungulates include white tailed deer, mule deer, elk, moose and bighorn sheep. White tailed deer are found throughout Latah County; mule deer are most frequently hunted in the southern portion of the county; elk are commonly hunted in the eastern and southern portions of the county; moose are most often encountered in the forested eastern parts of the county; and bighorn sheep can be hunted in the canyons associated with the lower Potlatch River. ROCC work plans address the following limiting factors affecting ungulate habitat in Latah County:

- Habitat Loss
- Habitat Fragmentation
- Invasive Plants
- Riparian Habitat Degradation

Upland Game Birds

Upland game birds hunted in Latah County include gray partridge, ring-necked pheasant, spruce grouse, blue grouse, ruffed grouse, wild turkey, northern bobwhite, and California quail. Gray partridge, pheasant, California quail, and northern bobwhite can be hunted within agricultural areas and brushy riparian and woodland habitats. All three grouse species and wild turkey are associated with coniferous forest and other

forested habitats. The following limiting factors affecting upland game bird habitat are addressed by ROCC work plans:

- Habitat Loss
- Habitat Fragmentation
- Riparian Habitat Degradation

Waterfowl

Waterfowl available to hunt in Latah County include: Canada goose, wood duck, green-winged teal, mallard, blue-winged teal, cinnamon teal, northern shoveler, and common merganser. IDFG includes American coot and common snipe within the waterfowl hunt as well. These waterfowl species are most commonly hunted in agricultural settings and near wetlands, streams, rivers and associated riparian areas. Work plans have been developed for the following limiting factors affecting waterfowl habitat:

- Wetland Conversion
- Invasive Plants
- Riparian Habitat Degradation

Mountain Lion and Black Bear

Mountain lion and black bear are hunted primarily within eastern Latah County. In Idaho both may be hunted with hounds and black bear may be hunted with bait. Work plans have been developed for the following limiting factors affecting cougar and black bear habitat:

- Habitat Loss
- Habitat Fragmentation

Furbearers

Furbearers trapped in Latah County include coyote, river otter, badger, beaver, fox, marten, mink, bobcat, muskrat, and raccoon. The habitats of these species are affected by the following limiting factors:

- Habitat Loss
- Habitat Fragmentation
- Riparian Habitat Degradation
- Wetland Conversion

Table 3. Factors affecting game species in Latah County.

	Ungulates	Bear & Mountain Lion	Upland Game	Waterfowl	Furbearers
Habitat Loss	X	X	X		X
Habitat Fragmentation	X	X	X		X
Disturbance to Wintering/Calving Areas	X				
Invasive Plants	X			X	
Riparian Habitat Degradation	X		X	X	X
Wetland Conversion				X	X

Non-game Species

The many non-game wildlife species found in Latah County contribute to essential ecosystem processes; provide economic inputs through recreation, insect control, and the support of healthy natural communities; and offer intangible benefits such as aesthetic value. Rare and vulnerable wildlife are addressed in the Special Status Species section of this chapter. Non-game wildlife are organized by the following seven species groups: raptors and owls; forest birds; urban, grassland, woodland and riparian birds; bats; native rodents, insectivores and rabbits; amphibians; and reptiles. Many limiting factors affect all groups of wildlife; whereas some limiting factors affect only one or two. Each habitat limiting factor is addressed by one work plan. The wildlife groups affected by each factor are shown in Table 4.

- Landscape Changes in Forest Structure
- Conversion of Palouse Prairie and Canyon Grasslands
- Wetland Conversion
- Riparian Habitat Degradation
- Habitat Fragmentation
- Disruption of Ecosystem Processes
- Mine Closures

Table 4. Factors affecting non-game wildlife in Latah County.

	Raptors & Owls	Forest Birds	Urban Riparian Prairie Birds	Bats	Native Rodents Shrews Rabbits	Amphibians	Reptiles
Landscape changes in forest structure	X	X		X	X	X	
Conversion of Palouse Prairie and canyon grasslands	X		X		X		X
Wetland conversion	X		X		X	X	X
Riparian degradation	X	X	X	X	X	X	X
Habitat fragmentation	X	X			X	X	X
Disruption of ecosystem processes (esp. fire)	X	X		X	X	X	
Mine closures				X			

Wildlife
Game Species
Habitat Loss

Primary ROCC: Wildlife

Secondary ROCC: Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Protect viable, balanced and sustainable populations of game species for wildlife diversity; aesthetics; and organic cultural pursuits such as hunting, viewing, photography, etc.

Limiting Factor: Habitat loss through urban/suburban encroachment, altered ecosystem processes, and land management activities

Objective(s):
1. Minimize habitat loss to urban/suburban encroachment.
2. Sustain, or replicate as far as possible, ecosystem processes (such as fire) that create and maintain habitats vital to game species.
3. Conduct forest management and agricultural activities in a manner that promotes a favorable spatial and temporal distribution of key habitats for game species.

Strategies:
1. Assist landowners with measures to develop sustainable natural resource uses that are profitable within today's competitive markets and preserve the value of their land as habitat for game species.
2. Provide rural landowners with information on wildlife habitat cost-share programs, land trusts, and other programs as alternatives to land subdivision and development.
3. Where consistent with local ecology and land use, implement mechanical thinning, timber harvest, and prescribed fire to create a diversity of stand age classes and structures favorable for game species.
4. Encourage agricultural practices that are favorable for upland game birds, waterfowl, and other wildlife species, including: leaving crop residue; refraining from mowing field borders, fencelines, and road edges; mowing hay pastures after July 1; and maintaining a mixture of cropland, pasture, and brushy vegetation.

Rationale:
1. The choice to transfer farm, ranch, and forest lands to development is usually a financially based decision, and oftentimes landowners may be willing to consider alternative land use options if these options are presented to them.
2. Ungulates often use multiple forest habitat types in close proximity. Meadows and recently harvested or burned areas may be used for foraging, second growth or riparian brush may be used for bedding, and mature forest may be used for winter cover and foraging.
3. Agricultural lands provide valuable habitat for waterfowl and upland game birds. Fields with crop residue in proximity to tall grass or brush are preferable for feeding. Brushy, weedy, or grassy field margins, fencelines, and road edges may be used for nesting. Hay pastures are also used for nesting; successful broods are more likely if mowing begins after June.

Notes:

Latah SWCD 5-Year Tasks:

1. Facilitate the use of programs such as CRP, CCRP and WHIP that provide valuable wildlife habitat within agricultural settings.
2. Inform landowners regarding cost-share programs, land trusts, conservation easements, and other options that may be available to protect critical habitat on private lands.
3. Inform landowners regarding agricultural practices that benefit game species.
4. Endorse forestry practices that replicate some of the functions of naturally occurring fire.
5. Endorse forestry practices that allow for forest succession processes and the maintenance of a variety of species.

Wildlife
Game Species
Habitat Fragmentation

Primary ROCC: Wildlife

Secondary ROCC: Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Protect viable, balanced and sustainable populations of game species for wildlife diversity; aesthetics; and organic cultural pursuits such as hunting, viewing, photography, etc.

Limiting Factor: Habitat fragmentation

Objective(s):
1. Avoid habitat fragmentation and conflicts between game species (especially deer) and traffic through thoughtful land use planning.
2. Repair habitat fragmentation to maximize connectivity among valuable habitats.

Strategies:
1. During land use planning avoid fragmenting quality habitats by placing new roads, structures, transmission corridors, etc. outside such habitats.
2. During land use planning prioritize the protection of existing contiguous blocks of high value habitats and lands that act as corridors among quality habitat.
3. Where feasible, decommission forest roads and/or limit the use of roads that traverse wintering habitat during critical calving and wintering periods for ungulates.
4. Identify opportunities for connectivity among natural areas and prioritize restoration and natural area acquisition to maximize connectivity among high value habitats.
5. Protect and restore streamside riparian communities for use as travel corridors.
6. Provide rural landowners with information on wildlife habitat cost-share programs, land trusts, and other programs as alternatives to land subdivision and development.
7. Plan enhancement activities for game species, such as food plots, away from heavily traveled roads and developed areas.

Rationale:
1. When a contiguous block of habitat is dissected, two primary factors decrease its value to game species. First, smaller islands of habitat are not adequate for species that have large home range requirements, such as elk, bear and cougar. Second, “edge effects” degrade the existing habitat by allowing the invasion of noxious weeds and incursion of non-native predators. Edge habitats are also more susceptible to forest blow-down and human disturbance. Even in the absence of harvest activities, roads increase the edge within forest stands.
2. Connectivity among habitats is especially valuable within developed landscapes. Deer are susceptible to vehicle collisions as they move across roads to reach foraging or bedding areas. Connectivity allows for seasonal movement between habitats and the safe dispersion of young.

3. Streamside riparian zones provide natural corridors among habitats within agricultural and developed landscapes. Riparian corridors are subject to extreme "edge effects" based on their linear nature, but may be valuable for migrating ungulates, waterfowl and furbearers.
4. Suburban encroachment creates interfaces with ungulates that often result in traffic related incidents. Providing strategically located travel corridors away from roadways and developments will allow deer to seek food, water, and shelter without the need to traverse high traffic areas and minimize injuries and fatalities to wildlife and humans.

Notes:

Latah SWCD 5-Year Tasks:

1. Coordinate local riparian restoration efforts, including: streamside plantings, control of invasive vegetation, fenced cattle exclosures, and off-stream watering developments.
2. Endorse land use planning efforts that identify and protect large blocks of valuable contiguous habitat and documented ungulate movement corridors.
3. Endorse the decommissioning and stabilization of forest roads and road closures during ungulate calving and wintering periods.
4. Endorse the development of game species habitat enhancement projects outside of the rural/suburban interface and away from heavily traveled roads.

Wildlife
Game Species
Invasive Plants

Primary ROCC: Wildlife

Secondary ROCC: Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Protect viable, balanced and sustainable populations of game species for wildlife diversity; aesthetics; and organic cultural pursuits such as hunting, viewing, photography, etc.

Limiting Factor: Invasive plants

Objective(s):
1. Minimize the introduction and spread of invasive plants on ungulate rangelands.
2. Improve the control of existing invasive plant populations on private and public lands.
3. Effectively manage reed canarygrass within valuable wetland and riparian habitats.

Strategies:
1. Ensure compliance with the existing Idaho State Noxious Weed Law, and with weed regulations developed by the Clearwater National Forest and local municipalities. In particular, enhance compliance with weed-free feed programs for pack animals and stock grazed in backcountry areas.
2. Identify and map infestations of noxious weeds affecting valuable habitat for game species. Such occurrences may include infestations within ungulate winter range, invasive species affecting wetlands, or weeds affecting important high elevation meadows. Prioritize control of such infestations based on feasibility and expected gains for game species.
3. Manage livestock grazing within infested public and private range to avoid the spread of infestations to new sites.
4. Develop effective techniques for controlling reed canarygrass within wetlands and riparian areas. These techniques may include intensive, multi-year site preparation prior to restoration, and the use of herbicides, shade cloth, and hand pulling.
5. Implement weed monitoring and control on recently disturbed sites.

Rationale:
1. Noxious weeds reduce the value of ungulate foraging habitats. Species such as yellow star-thistle and spotted knapweed interfere with ungulate feeding. Other species, such as downy brome, lower the quality and yield of forage. Taprooted species, such as spotted knapweed, increase surface runoff and sediment yields and thus affect the health of soils.
2. Wetlands and riparian zones dominated by reed canarygrass lack the variety of cover types, open water, and food resources for waterfowl and upland game birds found in healthy wetland systems.
3. Improper grazing practices act to spread noxious weeds. Properly managed grazing can be used as a weed control method.
4. Recently disturbed lands are vulnerable to infestation and heavy infestations will generally not improve without active management.

Notes:
Latah SWCD 5-Year Tasks: 1. Participate in local efforts to map and control weed infestations that negatively affect ungulate range. 2. Participate in efforts to develop effective methods for the control of reed canarygrass. 3. Facilitate landowner access to programs that may assist them in weed control efforts. 4. Inform landowners regarding the identification and effective control of invasive plants, including noxious weeds and reed canarygrass.

Wildlife
Game Species
Riparian Habitat Degradation

Primary ROCC: Wildlife

Secondary ROCC: Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Protect viable, balanced and sustainable populations of game species for wildlife diversity; aesthetics; and organic cultural pursuits such as hunting, viewing, photography, etc.

Limiting Factor: Riparian habitat degradation

Objective(s):
1. To improve the condition of riparian habitats, especially the recruitment of mature cottonwood trees and willow thickets, for the use of game species.

Strategies:
1. Protect riparian vegetation with fencing and off-stream or limited access watering points for livestock.
2. Combat invasive species and restore a native tree and shrub assemblage to degraded riparian habitats.

Rationale:
1. Riparian habitats are essential for a variety of game species. Furbearers such as mink, otter, beaver, marten, muskrat, and raccoon use these habitats extensively and rely on woody vegetation for cover and food. Tree nesting waterfowl, such as wood duck and common goldeneye depend on mature riparian trees. Riparian vegetation may act as a corridor for ungulate, cougar and bear movement through naturally open or agricultural settings.
2. Livestock grazing affects riparian vegetation by limiting recruitment of mature cottonwood trees and shrubs, promoting the spread of invasive weeds, and interfering with the reproduction of native forbs and grasses. Riparian areas show improvement in the recruitment of woody vegetation and associated shade and bank stability within four years of grazing exclusion. Marked results are visible over longer timeframes and can be accelerated through plantings and appropriate vegetation management.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments, control of invasive vegetation, and streambank stabilization.

Wildlife
Game Species
Wetland Conversion

Primary ROCC: Wildlife

Secondary ROCC: Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Protect viable, balanced and sustainable populations of game species for wildlife diversity; aesthetics; and organic cultural pursuits such as hunting, viewing, photography, etc.

Limiting Factor: Conversion and degradation of wetlands

Objective(s):
1. Protect existing wetlands of high value to game species.
2. Restore degraded wetlands to improve their function as habitat for waterfowl, furbearers, and other game species.

Strategies:
1. Identify and map wetland communities of high value or potentially high value to game species.
2. Provide incentives and assistance to private landowners with high value wetlands to aid in the protection of these ecosystems.
3. Prioritize wetlands for restoration based on their potential contributions to wildlife habitat.
4. Implement wetland restoration including the control of reed canarygrass using best available science and adaptive management.

Rationale:
1. In one study area near Moscow, 13 percent of the land area was historically wetland; 97% of wetlands in the Palouse region have been converted to crop or pasture land. Wetlands are vital to waterfowl, furbearers, and upland game birds; ungulates, cougar and bear also use these habitats. Degraded wetlands, frequently typified by monotypic stands of reed canarygrass, lack the variety of cover types, open water, and food resources found in healthy wetland systems.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate local wetland protection and restoration efforts.
2. Participate in efforts to map and characterize existing wetlands and identify potential restoration sites.
3. Facilitate access to programs that assist in the restoration of wetland communities.
4. Sponsor research to develop effective methods for the control of reed canarygrass in wetlands.
5. Inform landowners about land trusts and conservation easements that may aid in wetland protection.
6. Inform interested landowners regarding the control of reed canarygrass.

Wildlife
Non-Game Species
Landscape Changes in Forest Structure

Primary ROCC: Wildlife

Secondary ROCC: Non-Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions, economic, cultural, and aesthetic values.

Limiting Factor: Landscape changes in forest structure

Objective(s):
1. Provide forested habitats in a quantity and with an age class composition capable of supporting a natural assemblage of non-game wildlife.

Strategies:
1. Based on the needs of forest dependent wildlife, identify quantifiable landscape goals in terms of the quantity, distribution, and age classes of forest habitats.
2. Integrate identified landscape goals into public and private land use planning activities.
3. Provide incentives and assistance to private landowners such that management for a forested landscape beneficial to non-game wildlife becomes economically profitable.
4. Practice forest management that supports a variety of stand age-classes and allows for the production of snags and dynamic stand openings.

Rationale:
1. The quantity and distribution of forested habitats has changed in Latah County as a result of timber harvest, disease, and fire suppression. As the distribution of forest types departs from its historic baseline, the assemblage of non-game wildlife shifts to favor those species adapted to the new landscape. Non-game wildlife dependent on diminishing forest age classes become rare.
2. Forest types that were once more common in Latah County include open ponderosa pine and stands of white pine.
3. Non-game wildlife are also adapted to a juxtaposition of forest types, such as recently burned areas used in foraging adjacent to mature stands used for shelter.[b]

Notes:

Latah SWCD 5-Year Tasks:
1. Participate in local land use planning efforts that integrate ecologically sound landscape level goals for forested habitats.
2. Facilitate the use of existing programs that provide incentives and assistance to landowners as they manage forestland for the benefit of non-game wildlife.
3. Inform interested landowners on forest management that supports a variety of stand age classes.
4. Endorse research to identify economically and ecologically sound landscape goals in terms of the quantity, distribution, and age classes of forest habitats.

Wildlife
Non-Game Species
Conversion of Palouse Prairie and Canyon Grasslands

Primary ROCC: Wildlife

Secondary ROCC: Non-Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions and economic, cultural, and aesthetic values.

Limiting Factor: Loss of Palouse Prairie and canyon grassland habitats

Objective(s):
1. Protect remnant Palouse Prairie and canyon grassland habitats.
2. Restore native Palouse Prairie and canyon grassland habitats for the benefit of non-game wildlife.

Strategies:
1. Identify extant Palouse Prairie and canyon grassland sites in Latah County and prioritize for protection.
2. Provide information, assistance and incentives for voluntary protection efforts on private lands, such as conservation easements.
3. Manage grazing to maintain appropriate cover of native vegetation within canyon grasslands.
4. Identify practical sites for restoration of Palouse Prairie and canyon grasslands.
5. Research effective practices for large-scale restoration that could potentially be used by CRP participants.
6. Implement restoration activities.

Rationale:
1. Most non-game wildlife native to western Latah County are adapted to Palouse Prairie or canyon grassland habitats. Some, such as coyote, have adjusted well to an agricultural landscape; whereas others, such as the grasshopper sparrow, are less able to meet their needs within this altered setting.
2. Palouse Prairie habitats are rare because they have been almost entirely converted to crop production. Unprotected remnant sites occur primarily on private lands.
3. Latah County supports a substantial area of CRP land (over 34,000 acres); however the majority of CRP lands are seeded in non-native perennial grasses. Because the Palouse Prairie has been declared an endangered ecosystem, current CRP guidelines encourage its restoration.
4. In some areas canyon grasslands have been subject to erosion and incursion by invasive weeds as a result of poor grazing management.
5. Restoration of native Palouse Prairie and canyon grasslands is challenging and labor intensive. Incursion by noxious weeds hampers the establishment of native vegetation, and support by soil microbes and the formation of a natural biotic crust are necessary for successful establishment. These difficulties have precluded large-scale restoration efforts in most cases.

Notes:

Latah SWCD 5-Year Tasks:

1. Coordinate Palouse Prairie and canyon grassland protection and restoration efforts.
2. Coordinate planning efforts to identify potential sites for protection and/or restoration.
3. Sponsor research to identify effective long-term weed control methods for Palouse Prairie and canyon grasslands.
4. Facilitate landowner access to programs that may assist them in weed control efforts within canyon grassland or Palouse Prairie habitats.
5. Facilitate the use of CRP and other state and federal programs available to landowners for prairie restoration.
6. Facilitate the development of sustainable grazing plans by connecting landowners with programs administered by federal and state conservation agencies that aid in agricultural land use planning.
7. Inform interested landowners about protection and restoration of Palouse Prairie.

Wildlife
Non-Game Species
Wetland Conversion and Degradation

Primary ROCC: Wildlife

Secondary ROCC: Non-Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions, economic, cultural, and aesthetic values.

Limiting Factor: Conversion and degradation of wetlands

Objective(s):
1. Protect existing wetlands of high value to non-game wildlife.
2. Restore degraded wetlands to improve their function as wildlife habitat.

Strategies:
1. Identify and map wetland communities of high value to wildlife.
2. Provide incentives and assistance to private landowners with high value wetlands to aid in the protection of these ecosystems.
3. Prioritize wetlands for restoration based on their potential contributions to wildlife habitat.
4. Implement wetland restoration including the control of reed canarygrass using best available science and adaptive management.

Rationale:
1. In one study area near Moscow, 13 percent of the land area was historically wetland, and 97% of wetlands in the Palouse region have been converted to crop or pasture land.
2. Wetlands are vital to the persistence of many species of non-game wildlife in Latah County. All amphibian species require wetlands for breeding and the rearing of young; some, such as the Columbia spotted frog, remain within wetland habitats through adulthood. Some reptiles, such as the garter snake, are most abundant in wetland habitats. Proximity to water is also a habitat factor for many bird and small mammal species.
3. Degraded wetlands, frequently typified by monotypic stands of reed canarygrass, lack the variety of cover types, open water, and food resources found in healthy wetland systems.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate local wetland protection and restoration efforts.
2. Participate in efforts to map and characterize existing wetlands and identify potential restoration sites.
3. Participate in efforts to develop effective methods to control reed canarygrass in seasonally wet meadows.
4. Facilitate access to programs that assist in the restoration of wetland communities.
5. Inform interested landowners regarding land trusts and conservation easements.
6. Inform interested landowners regarding the control of reed canarygrass.

Wildlife
Non-Game Species
Riparian Habitat Degradation

Primary ROCC: Wildlife

Secondary ROCC: Non-Game Species

Geographic Focus: Latah County

ROCC Conservation Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions, economic, cultural, and aesthetic values.

Limiting Factor: Riparian habitat degradation

Objective(s):
1. To improve the condition of riparian habitats, especially the recruitment of mature cottonwood trees and willow thickets, for the use of non-game wildlife.

Strategies:
1. Combat invasive species and restore a native tree and shrub assemblage to degraded riparian habitats.
2. Protect riparian vegetation with fencing and off-stream or limited access watering points for livestock.

Rationale:
1. Riparian habitats are essential for a variety of wildlife. Raptors and owls that hunt in agricultural fields often perch and nest in mature riparian vegetation. Songbirds nest in riparian shrubs and trees and feed on fruits and seeds produced by a variety of riparian shrubs, forbs, and grasses. Riparian vegetation acts as a corridor for wildlife movement through agricultural or urban settings, and provides cover for resident species.
2. Livestock grazing affects riparian vegetation by limiting recruitment of mature cottonwood trees and shrubs, promoting the spread of invasive weeds, and interfering with the reproduction of native forbs and grasses.
3. Riparian areas show improvement in the recruitment of woody vegetation and associated shade and bank stability within four years of grazing exclusion. Marked results are visible over longer timeframes and can be accelerated through plantings and appropriate vegetation management.

Notes:

Latah SWCD 5-Year Tasks:
1. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments, control of invasive vegetation, and streambank stabilization.

Wildlife
Non-Game Species
Habitat Fragmentation

Primary ROCC: Wildlife

Secondary ROCC: Non-Game species

Geographic Focus: Latah County

ROCC Conservation Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions, economic, cultural, and aesthetic values.

Limiting Factor: Habitat fragmentation

Objective(s):
1. Avoid habitat fragmentation through thoughtful land use planning.
2. Repair habitat fragmentation to maximize connectivity among valuable habitats.

Strategies:
1. During land use planning avoid fragmenting rare and quality habitats by placing new roads, structures, transmission corridors, etc. outside such habitats.
2. During land use planning prioritize the protection of existing contiguous blocks of rare and high value habitats and lands that act as corridors among quality habitat.
3. Where feasible, decommission forest roads.
4. Identify opportunities for connectivity among natural areas and prioritize restoration and natural area acquisition to maximize connectivity among high value habitats.
5. Protect and restore streamside riparian communities.

Rationale:
1. When a contiguous block of habitat is dissected, two primary factors decrease its value to wildlife. First, smaller islands of habitat are not adequate for species that have large home range requirements. Second, “edge effects” degrade the existing habitat by allowing the invasion of noxious weeds and incursion of non-native predators. Edge habitats are also more susceptible to forest blow-down and human disturbance. Even in the absence of harvest activities, roads increase the edge within forest stands.
2. Connectivity among habitats is especially valuable within agricultural and developed landscapes. Reptiles, amphibians and small mammals are susceptible to predation and vehicle collisions as they move across roads and fields with little cover. Connectivity allows for seasonal movement between habitats, the safe dispersion of young, and re-colonization of habitats.
3. Streamside riparian zones provide natural corridors among habitats within agricultural and developed landscapes. Riparian corridors are subject to extreme “edge effects” based on their linear nature, but may be valuable for migrating wildlife and small species.

Notes:

Latah SWCD 5-Year Tasks:

1. Coordinate local riparian restoration efforts, including: streamside plantings, control of invasive vegetation, fenced cattle exclosures, and off-stream watering.
2. Participate in land use planning efforts that identify and protect large blocks of valuable contiguous habitat and documented wildlife movement corridors.
3. Endorse the decommissioning and stabilization of forest roads.

Wildlife
Non-Game Species
Disruption of Ecosystem Processes

Primary ROCC: Wildlife

Secondary ROCC: Non-Game species

Geographic Focus: Latah County

ROCC Conservation Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions, economic, cultural, and aesthetic values.

Limiting Factor: Disruption of ecosystem processes

Objective(s):
1. Protect ecosystem processes such as fire and natural flooding.
2. Where possible, restore or replicate important ecosystem processes that have been lost.

Strategies:
1. Implement land use planning that allows for natural processes such as forest succession, fire, and flooding. Strategies may include developing fire safety zones around rural homes, floodplain management, and long-term multi-use forest planning. These strategies may lessen human conflicts with naturally occurring processes.
2. Where natural processes have been lost, and reintroduction is not practical, implement management practices that replicate some of the functions of these processes. For example, implement thinning followed by prescribed burning where wildfire is not realistic.
3. Protect the elements that are necessary for important ecosystem processes. For example, forestland must be preserved in order to support natural forest succession.
4. Target and control invasive elements that disrupt natural processes. New populations of invasive weeds and introduced insect pests should receive high priority. Existing weed and insect pest populations should be approached from multiple angles to achieve effective control.

Rationale:
1. Wildlife habitats are the result of dynamic processes on a landscape level. When these processes are removed or altered the distribution of habitat types changes and affects the wildlife community. Forest birds and forest dwelling small mammals are particularly affected by the loss of wildland fire. The suppression of fire in the forest landscape may be one of the most significant process disruptions affecting wildlife.

Notes:

Latah SWCD 5-Year Tasks:

1. Participate in land use planning that recognizes and allows for natural processes, such as fire, forest succession, and flooding.
2. Endorse forestry practices that replicate some of the functions of naturally occurring fire.
3. Endorse forestry practices that allow for forest succession processes and the maintenance of a variety of stand ages.
4. Endorse planning and management activities that encourage natural hydrology (see ROCC Fisheries-Extreme Fluctuations in Water Quantity) and the protection of floodplain connectivity.

Wildlife
Non-Game Species
Mine Closures

Primary ROCC: Wildlife
Secondary ROCC: Non-Game Species
Geographic Focus: Latah County
ROCC Conservation Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions, economic, cultural, and aesthetic values.
Limiting Factor: Mine closures
Objective(s): 1. Protect human safety while allowing the use of abandoned mines by bats and other non-game species.
Strategies: 1. Protect abandoned mine habitats from closure and human disturbance. 2. Install “bat gates” to ensure public safety in lieu of mine closures.
Rationale: 1. Many bat species use abandoned mines as hibernacula and maternity roosts. In northern Idaho general declines in bat populations have been stabilized by using bat gates when mines are closed. Abandoned mines pose a risk to humans; however, bat gates can prevent most human intrusions, while permitting use by bats.
Notes:
Latah SWCD 5-Year Tasks: 1. Endorse the use of bat gates during mine closures.

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Latah Soil & Water Conservation District

ANNUAL WORK PLAN

Fiscal Year 2015

(July 1, 2014 - June 30, 2015)
Version 15.0

Contact Information:
David Huggins, Chairman
Kenneth Stinson, District Manager

220 East Fifth Street, Room 212
Moscow, ID 83843-2964
(208) 882-4960 ext. 112
lswcd@latahsoil.org
www.latahsoil.org

Supervisors
David Huggins, Chairman
Frank Walker, Vice Chairman
Kevin Meyer, Treasurer
Josh Jones, Secretary
Garry Esser, Supervisor
Kyle Hawley, Supervisor
Tom Trail, Supervisor
Cody Anderson, Associate
Lee Hawley, Associate
Kevin Wagner, Associate

Staff
Tabitha Brown, Assistant Resource Conservation Planner
Bill Dansart, Resource Conservation Planner
Brenda Erhardt, Resource Conservation Planner
Trish Heekin, Resource Conservation Planner
Jason Marchinek, Resource Conservation Planner/Field Operations Manager
Kenneth Stinson, District Manager

Mission Statement

Lead local efforts to promote the stewardship of natural resources through the development of comprehensive plans and the implementation of strategies for economic and ecological sustainability, on behalf of our citizens, through the coordination of leadership, information and funding.

Goals

Local Governance - Lead and support landowner, land user, local community, and government agency efforts to collectively identify natural resource issues of concern, review alternative solutions to address these issues, and undertake local efforts to resolve priority issues using voluntary mechanisms.

District Capacity - Develop and maintain the political and organizational capacity to fully exercise Latah SWCD rights and responsibilities.

Community Outreach - Promote efforts to enhance local community understanding of ecological systems, the social systems directly dependent upon these natural systems, and the political and organizational systems developed for management of natural resources within Latah County.

Comprehensive Planning - Promote individual, local, regional, state, tribal and national planning efforts that recognize, and manage for, the interconnected elements of natural systems and seek sustainable management approaches for the natural resources within the Latah SWCD while providing for the long-term natural resource conservation objectives of landowners and land users, strengthening the long-term health of local economies and protecting the long-term public interest of the community.

Coordinated Implementation - Lead the voluntary implementation of conservation efforts that seek to simultaneously protect and enhance the long-term productivity of the Latah SWCD's natural resource base while providing for the long-term natural resource conservation objectives of landowners and land users, protecting the established rights of individual landowners and land users, strengthening the long-term health of local economies, and protecting the long-term public interest of the community.

Overview of Annual Work Plan

The Annual Work Plan delineates current District priorities as derived from the Latah SWCD Five-Year Resource Conservation Plan. The Annual Work Plan is comprehensive *only with regard to specific tasks to be completed during the current fiscal year*. Annual tasks listed in this plan are proposed for completion with existing financial and technical resources. Where applicable, tasks are assigned a lead district supervisor. District staff members responsible for implementing each task are also identified, with the lead staff member listed first. For example, if Huggins is the lead supervisor and Heekin is the lead staff with support from Erhardt, it will appear as (Huggins/Heekin, Erhardt). In FY15, policy leadership is assigned to the Board, as a whole, until newer board members become more familiar with their individual roles on the Board of Supervisors.

The companion Five-Year Resource Conservation Plan was developed to serve as a comprehensive document. It thoroughly identifies Latah SWCD objectives and strategies as they pertain to each of the five Latah SWCD goals. The Five-Year Plan includes a complete list of tasks that Latah SWCD could accomplish over the next five years should adequate technical and financial resources become available. Furthermore, it provides overviews of the Latah SWCD (history, law, structure and financing), Latah County (area, watersheds, land use, transportation and infrastructure, demographics, and economics), natural resources within Latah County, and interagency collaboration.

Each task within the Five-Year Resource Conservation Plan and the Annual Work Plan begins with a specific "action word" described as follows:

Coordinate: Coordination implies an active leadership role for the design, development and implementation of a given task.

Participate: Participation implies that another entity or individual assumes the lead coordination role and the Latah SWCD serves in an active advisory or supporting role.

Facilitate: Facilitation assumes a temporary leadership role with primary roles eventually assumed by other parties. The facilitation role of the Latah SWCD is to link interested individuals with existing agencies and community resources.

Review: Reviews include the identification and summation of resource conservation concerns within Latah County and an outline of the Latah SWCD's potential future role.

Monitor: Monitoring implies a passive role that simply keeps the Latah SWCD alert to resource conservation issues that may affect Latah County.

Inform: Inform refers to the dissemination of readily available resource conservation information.

Sponsor: Sponsorship implies financial contributions in the form of membership dues or project/event donations.

Endorse: Endorsement implies explicit support for individual conservation strategies developed by other agencies and organizations. The Latah SWCD does not have an active role within the proposed strategy.

Organization of Annual Work Plan

The Annual Work Plan is divided into five separate work plans which correspond to the five Latah SWCD Goals:

Local Governance
District Capacity
Community Outreach
Comprehensive Planning
Coordinated Implementation

Within each of the five work plans, tasks are grouped into categories. The Coordinated Implementation Work Plan is subdivided according to eight categories know as Resources of Community Concern (ROCCs). These include:

Agricultural Lands
Fisheries
Forest Lands
Public Health
Range and Pasture Lands
Special Status Species
Threatened Ecosystems
Wildlife

Note: Water quality resource concerns are addressed throughout the above-listed resource concerns.

Local Governance Work Plan

Goal: Lead and support landowner, land user, local community, and government agency efforts to collectively identify natural resource issues of concern, review alternative solutions to address these issues, and undertake local efforts to resolve priority issues using voluntary mechanisms.

The local governance work plan is categorized according to:
1) Latah SWCD Governance
2) Local Governance

Latah SWCD Governance Tasks
1. Coordinate directly with federal, tribal, state and local agencies to develop and/or revise conservation policies and management practices to improve the Latah SWCD's ability to fulfill the conservation goals, objectives, strategies, and tasks as outlined in the Resource Conservation Plan. (All staff) 2. Coordinate directly with other elected officials to address common natural resource management concerns. (Board/Stinson) 3. Coordinate with the signatories of the Mutual Agreement and the Cooperative Working Agreement to make necessary revisions to the agreements, as needed. (Board/Stinson) 4. Coordinate Latah conservation breakfast meetings with the Latah Board of County Commissioners and Idaho State Legislators. (Stinson) 5. Participate with the Idaho Association of Soil Conservation District/Division II collaborative efforts within North Central Idaho (Clearwater, Idaho, Latah, Lewis and Nez Perce conservation districts). (Board/Stinson) 6. Coordinate monthly Latah SWCD Board meetings so that they are easily accessible to the public. (Stinson) 7. Participate in the Idaho Association of Soil Conservation Districts' annual conference. (Board/Stinson) 8. Participate with other conservation district boards and staff with developing policy, management and technical capacity, as requested. (Board/All staff)

Local Governance Tasks
1. Participate in public forums on topics of local interest. (Board/All staff) 2. Participate in the annual Palouse Basin Water Summit. (Stinson)

District Capacity Work Plan

Goal: Develop and maintain the political and organizational capacity to fully exercise Latah SWCD rights and responsibilities.

The district capacity work plan is categorized according to:
1) Board Leadership
2) Professional Staffing
3) Organizational Infrastructure

Board Leadership Tasks	
1.	Coordinate Latah SWCD elections in concert with Latah County's general election. (Stinson)
2.	Coordinate the recruitment of interested landowners and agricultural operators that might have an interest in serving as supervisors or associate supervisors. (Board)
3.	Participate in local, regional, state, tribal and federal intergovernmental processes that address issues relevant to the Latah SWCD's mission, goals and objectives. (Board/Stinson)
4.	Participate in the Idaho Association of Soil Conservation Districts (IASCD). (Board)
5.	Sponsor the National Association of Conservation Districts (NACD). (Board)
6.	Participate as a member of the Clearwater Resource Conservation and Development Council. (Stinson)
7.	Participate in district capacity training for district supervisors. (Board/Stinson)

Professional Staffing Tasks	
1.	Coordinate and maintain a salary schedule and employee benefits package comparable to peer positions within state and federal agencies. (Board/Stinson)
2.	Coordinate staff training. (Stinson, All staff)
3.	Coordinate technical and management assistance to other conservation districts, as requested. (Stinson, All staff)
4.	Sponsor the Idaho District Employees Association (IDEA). (Board)

Organizational Infrastructure Tasks	
1.	Coordinate a central Latah SWCD filing system. This filing system will include historical and current information. (Stinson)
2.	Coordinate the development and maintenance of a computer network; update computer software and hardware necessary for the effective delivery of Latah SWCD programs. (Stinson, Marchinek)
3.	Coordinate the development of a district GIS database and perform technical data analyses (Dansart)
4.	Coordinate a professional accounting system to manage Latah SWCD funds in accordance with standard accounting policies while maintaining the security of the personnel and program participant's sensitive information. (Stinson)
5.	Coordinate updates to the Latah SWCD's personnel policies, as needed. (Stinson)
6.	Coordinate updates to the Latah SWCD's mission, goals, objectives, etc. (Stinson)
7.	Coordinate the purchase and maintenance of district vehicles and field equipment. (Marchinek)

Community Outreach Work Plan

Goal: Promote efforts to enhance local community understanding of ecological systems, the social systems directly dependent upon these natural systems, and the political and organizational systems developed for management of natural resources within Latah County.

The community outreach work plan is categorized according to:
1) General Community Outreach
2) Youth Outreach
3) Landowner/Land User Outreach
4) University Outreach

General Community Outreach Tasks
1. Coordinate maintenance of distribution lists for distributing Latah SWCD announcements and publications. (All staff) 2. Coordinate the development and maintenance of the Latah SWCD website. (Stinson) 3. Coordinate the development and distribution of Latah SWCD press releases and updates. (Stinson) 4. Coordinate community educational forums to discuss natural resource management programs within Latah County. (All staff)

Youth Outreach Tasks
1. Coordinate the annual Conservation Awareness Days for area schools. (Stinson) 2. Sponsor Envirothon, Forestry Contest, Land and Soil Evaluation Event, and Idaho Ag in the Classroom up to the historical amounts. (Board/Stinson) 3. Coordinate scholarships for students to attend Natural Resources Camp. (Board/Stinson) 4. Coordinate assistance for teams to participate in Envirothon, Idaho State Forestry Contest, and Land and Soil Evaluation Event. (Board/Stinson) 5. Coordinate annual poster and essay contests. (Stinson) 6. Coordinate classroom presentations as requested. (Stinson)

Landowner/Land User Outreach Tasks
1. Coordinate the annual Latah Conservation Stewardship Award banquet and field tour. (Stinson) 2. Participate in the annual Family Forest Landowners and Managers conference. (Stinson) 3. Participate in the annual North Idaho Grazing Workshop sponsored by IASCD/Division II. (All staff) 4. Coordinate field and farm tours to highlight new and innovative technologies and practices. (All staff)

University Outreach Tasks
1. Coordinate scholarships and/or internships for university students focused on natural resource

	conservation. (Brown, Stinson)
2.	Participate in formal and field presentations and forums as board and staff time permits. (Heekin, Erhardt)

Comprehensive Planning Work Plan

Goal: Promote individual, local, regional, state, tribal, and national planning efforts that recognize, and manage for, the interconnected elements of natural systems and seek sustainable management approaches for the natural resources within the Latah SWCD while providing for the long-term natural resource conservation objectives of landowners and land users, strengthening the long-term health of local economies and protecting the long-term public interest of the community.

The comprehensive planning work plan is categorized according to
1) Landowner and Land User Conservation Planning
2) Watershed Planning
3) Community/Economic Development Planning
4) Land-Use and Transportation Planning

Landowner and Land User Conservation Planning Tasks
1. Coordinate the development and maintenance of an efficient and effective Latah SWCD process for planning and contracting services between the Latah SWCD and individual landowners and land users. (Heekin, Dansart, Stinson) 2. Coordinate the identification and development, if needed, of appropriate professional standards and specifications for conservation practices. (Dansart, Heekin) 3. Coordinate conservation planning assistance to partner state and federal conservation agencies when staff resources are available and the assistance is mutually beneficial to Latah SWCD and affected parties. (Heekin, Dansart) 4. Review state and national planning policies that may affect the ability of the Latah SWCD to provide conservation planning assistance to landowners and land users. (Stinson, Heekin, Dansart)

Watershed Planning Tasks
Columbia and Snake Rivers
1. Monitor the Snake River Basin Adjudication (SRBA) process to determine possible effects on the Latah SWCD's ability to provide resource conservation services. (Stinson)
Clearwater River
1. Participate with the Clearwater Technical Group. (Stinson, Dansart, Heekin, Erhardt) 2. Monitor Clearwater River watershed planning efforts to determine possible effects on the Latah SWCD's ability to provide resource conservation services. (Stinson, Dansart, Heekin, Erhardt)
Potlatch River
1. Coordinate continued updates to The Latah SWCD's Potlatch River Watershed Management Plan. (Stinson) 2. Participate in the Idaho Department of Environmental Quality's (IDEQ) Total Maximum Daily Load (TMDL) processes related to the Potlatch River watershed. (Dansart, Stinson) 3. Review IDFG's Potlatch River fisheries monitoring program. (Stinson, Dansart, Heekin) 4. Review ISDA's and IDEQ's Potlatch River water quality monitoring program. (Dansart) 5. Review USDA Forest Service and Idaho Department of Lands' (IDL) planning efforts within the Potlatch River watershed to determine opportunities for collaborative conservation on private lands within the

watershed. (Dansart, Heekin, Stinson, Marchinek)
Palouse River
1. Review the Palouse Basin Aquifer Committee's (PBAC) planning efforts to protect and improve water quality and quantity of local groundwater systems. (Dansart) 2. Review IDEQ's water quality monitoring programs throughout the watershed. (Dansart)
Cow Creek/Union Flat Creek
1. Participate with the Cow Creek WAG and associated state agency's efforts to develop a TMDL implementation plan for the Cow Creek watershed. (Dansart, Stinson)

Community/Economic Development Planning Tasks
1. Review economic opportunities for biofuel production, and associated agricultural crop production, within Latah County and the greater Palouse region. (Stinson, Brown) 2. Review opportunities for forest biomass utilization within Latah County and north-central Idaho. (Stinson)

Land Use and Transportation Planning Tasks

Coordinated Implementation Work Plan

Goal: Lead the voluntary implementation of conservation efforts that seek to simultaneously protect and enhance the long-term productivity of the Latah SWCD's natural resource base while providing for the long-term natural resource conservation objectives of landowners and land-users, protecting the established rights of individual landowners and land-users, strengthening the long-term health of local economies, and protecting the long-term public interest of the community.

The coordinated implementation work plan is subdivided according to eight primary Resources of Community Concern (ROCCs) for planning and management purposes. These include:

Agricultural Lands
Fisheries
Forest Lands
Public Health
Range and Pasture Lands
Special Status Species
Threatened Ecosystems
Wildlife

Note: Water Quality Resource Concerns are addressed throughout the above-listed ROCCs.

A ROCC is defined as an individual issue, or grouping of issues, that is inherently valuable to members of the community. This community value is strong enough to warrant a voluntary commitment of time, energy and/or financial resources. A unique conservation goal pertains to each ROCC. Each of the eight primary ROCCs is divided into secondary ROCCs. Annual Work Plan tasks within the Coordinated Implementation Work Plan are organized according to secondary ROCCs.

There are commons tasks applicable to all eight primary Resources of Community Concern. Tasks common to all ROCCs include:

1. Coordinate and participate in inter-agency efforts relevant to the fulfillment of each ROCC's goal and objectives. (All staff)
2. Facilitate landowner and land user access to technical resources, financial resources and educational resources (e.g., handbooks, resource guides, demonstrations, tours, roundtables, competitions, etc.) relevant to the fulfillment of each ROCC's goal and objectives. (All staff)
3. Endorse federal, tribal, state, local and non-governmental efforts to implement management plans and practices that are consistent with the Latah SWCD's mission statement and will significantly enhance the fulfillment of each ROCC's goal and objectives. (Board/All staff)
4. Endorse land use planning efforts consistent with Latah SWCD's mission statement and each ROCC's goal and objectives. (Board/Stinson)
5. Endorse research and monitoring efforts consistent with Latah SWCD's mission statement and each ROCC's goal and objectives. (Board/All staff)
6. Review program development opportunities consistent with each ROCC's goal and objectives. (Stinson, All staff)

Agricultural Lands

Agricultural Lands Resource Conservation Goal: Maintain and improve long-term soil productivity on agricultural lands while providing voluntary opportunities for the long-term preservation of working agricultural lands in Latah County.

The agricultural lands ROCC is categorized according to two secondary ROCCs:
1) Soil Productivity
2) Agricultural Land Preservation

Soil Productivity Goal: Maintain and improve long-term soil productivity on agricultural lands through development, adoption, promotion, and demonstration of practices that benefit inherent and dynamic soil properties associated with productivity potential within the framework of economic and social needs.

Soil Productivity Tasks
Soil Health/Quality Deficiencies
1. Coordinate trials addressing alternatives to commercial fertilizer inputs. (Board/Brown, Stinson) 2. Coordinate soil erosion and water quality control practices to manage concentrated flow affecting agricultural lands (i.e., BMP, program that complements existing NRCS programs). (Board/Brown, Stinson) 3. Facilitate outreach and adoption of appropriate strategies to halt or reverse soil acidification. (Board/Brown, Stinson) 4. Facilitate ability of agricultural producers to evaluate achievement of goals through yield monitoring, soil testing, plant testing, and soil health monitoring/assessment. This includes coordinating acquisition of a weigh wagon to facilitate yield trials. (Board/Brown, Stinson) 5. Participate in on-farm investigations/trials of best management practices or alternative practices. (Board/Brown, Stinson) 6. Participate with NRCS to develop and/or modify Best Management Practice standards and specifications while also informing landowners and land users of NRCS programs. (Board/Brown, Stinson) 7. Endorse research evaluating direct linkages between productivity and soil biology response to management practices. (Board)
Precision Management Deficiencies
1. Coordinate synthesis of existing knowledge on current topics of high priority (e.g., the relationship between cropping system, soil organic matter, soil health, nutritional value of food, and human health). Draw from local expertise/experience, extension publications, relevant research, etc. (Board/Brown, Stinson) 2. Facilitate programs targeting adoption of precision agriculture principles and/or technology including but not limited to remote sensing diagnostics to evaluate mid-season progress. (Board/Brown, Stinson) 3. Coordinate increased understanding of how precision agriculture impacts economic and environmental sustainability of agroecosystems. (Board/Brown, Stinson) 4. Coordinate mitigation practices for sensitive areas. (Board/Brown, Stinson) 5. Monitor advances in soil fertility testing and nutrient management planning to improve understanding

of individual agroecosystems (Board/Brown)

Agricultural Land Preservation Goal: Maintain productive agricultural lands within Latah County through the implementation of voluntary strategies that support profitable family farms and rural economies.

Limiting factors affecting agricultural land preservation include: loss of productive agricultural lands, loss of rural amenities, and crop predation by animals.

Agricultural Land Preservation Tasks
Loss of Productive Agricultural Lands
1. Review “right-to-farm” programs to support continued commercial agricultural production in Latah County. (Stinson, Brown)
Loss of Rural Amenities
Crop Predation by Animals
1. Review programs to increase public awareness of crop predation by elk and deer. (Stinson, Brown)

Fisheries

Fisheries Resource Conservation Goal: Preserve and restore fish habitat for the benefit of resident and anadromous fish.

The fisheries ROCC is categorized according to two secondary ROCCs:
1) Resident Fish
2) Anadromous Fish.

Resident Fish Goal: Protect and restore resident fish habitat throughout Latah County in a way that is consistent with habitat protection and restoration needs of other fish and wildlife species.

Resident Fish Tasks[1]
Degraded Water Quality
1. Coordinate local riparian restoration efforts, including streamside plantings, fenced cattle exclosures and off-stream watering developments, control of invasive vegetation, and streambank stabilization. 2. Coordinate local restoration efforts designed to stabilize known sources of sediment input (e.g. eroding gullies, bare streambanks, and forest roads).
Extreme Fluctuations in Water Quantity
Degraded In-Stream Habitat Conditions
1. Coordinate conservation planning with agricultural producers, including the use of conservation programs designed to encourage protection of prairie, wetland, and riparian areas and highly erodible lands.

[1] In FY15, projects undertaken that benefit resident fish will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.

Anadromous Fish Goal: Protect and restore anadromous fish habitat in the Potlatch River Watershed as outlined in the Potlatch River Watershed Management Plan consistent with habitat protection and restoration needs of other native fish and wildlife species.

Limiting factors affecting anadromous fish include: These factors include: high water temperatures, flashy stream flows, low summer base flows, lack of stream complexity, barriers to migration, and sedimentation. These issues are addressed in the Potlatch River Watershed Management Plan.

Anadromous Fish Tasks

1. Coordinate the implementation of best management practices as outlined in the Potlatch River Watershed Management Plan.

   The majority of funding managed by the Latah SWCD are grants and contracts secured from various state and federal funding sources for implementation of Latah SWCD's Potlatch River Watershed Management Plan. FY15 efforts seek to address several limiting factors that affect the production and distribution of wild steelhead within the Potlatch River.

   Highlighted below are the projects, organized by subwatersheds within the Potlatch River drainage, which will be managed by Latah SWCD in FY15.

   Big Bear Creek
   - IDL Schwartz Creek Passage Barrier Removals (Dansart, Stinson)
   - IDL Big Bear Forest Riparian Restoration (Marchinek, Stinson)
   - Upper Big Bear Riparian Restoration (Heekin, Marchinek)
   - Riparian Plantings/Vegetation Monitoring (Heekin, Marchinek)
   - Culvert Inventory (Dansart)
   - Stream Assessment (Dansart, Heekin, Erhardt, Marchinek)

   Bob's Creek

   Boulder Creek
   - Riparian Plantings/Vegetation Monitoring (Heekin, Marchinek)

   Cedar Creek
   - Culvert Inventory (Dansart)

   Corral Creek
   - Racetrack Meadow Restoration (Heekin, Marchinek, Erhardt)
   - Railroad Fill Removal Site Stabilization (Heekin, Marchinek)
   - Avulsion/Round Meadow Restoration (Heekin, Marchinek)
   - Tee/Colby Meadow Restoration (Heekin, Erhardt, Marchinek)
   - USFS West Fork Meadow Restoration (Heekin, Erhardt)
   - USFS Livestock Off-Site Water Developments (Dansart)
   - Water Table Monitoring (Dansart)
   - Stream Assessment (Dansart, Erhardt)
   - Discharge Monitoring (Dansart)

Cougar Creek
- Stream Assessment (Dansart)

East Fork Potlatch River
- Forest Road Stabilization (Dansart)
- Riparian Plantings/Vegetation Monitoring (Heekin, Erhardt, Marchinek)
- Culvert Inventory (Dansart)

Feather Creek
- USFS Road Relocation and Meadow Restoration (Engineering) (Dansart)

Leopold Creek

Little Bear Creek
- Dutch Flat Dam Passage Barrier Removal (Dansart, Heekin, Marchinek, Erhardt)
- Riparian Plantings/Vegetation Monitoring (Heekin, Erhardt, Marchinek)
- Culvert Inventory (Dansart)
- Discharge Monitoring (Dansart)

Little Potlatch Creek
- Riparian Plantings/Vegetation Monitoring (Heekin, Erhardt, Marchinek)
- Streambank erosion monitoring (Dansart, Erhardt, Marchinek)

Lower Potlatch River Mainstem

Middle Potlatch Creek
- Stream Assessment (Dansart, Erhardt, Marchinek)
- Riparian Plantings/Vegetation Monitoring (Heekin, Erhardt, Marchinek)

Moose Creek
- IDL Livestock Off-site Water Developments (Dansart)

Pine Creek
- Riparian Plantings/Vegetation Monitoring (Heekin, Erhardt, Marchinek)
- Culvert Inventory (Dansart)

Pivash Creek

Purdue Creek

Ruby Creek

Upper Potlatch River Mainstem
- USFS Livestock Off-site Water Developments (Dansart)
- Culvert Inventory (Dansart)

Forest Lands

Forest Lands Resource Conservation Goal: Preserve and restore forest productivity on private and public lands while providing voluntary opportunities for the long-term preservation of working forest lands in Latah County.

The forest lands ROCC is categorized according to two secondary ROCCs:
1) Forest Productivity
2) Forest Land Preservation

Forest Productivity Goal: Protect and enhance forest conditions that maintain ecosystem functions and processes, support water quality, and provide for habitat and species diversity, while enhancing the future production potential of private forests.

Forest Productivity Tasks
Soil Erosion
1. Facilitate landowner access to technical resources and educational opportunities related to best management practices for road building and maintenance and harvesting practices. (Stinson)
Altered Fire Regimes
1. Facilitate landowner efforts to complete forest thinnings for fuel-reduction and/or prescribed fire treatments. (Stinson)
Harmful Insects and Diseases
1. Endorse programs or activities that educate landowners about harmful insects and diseases. (Board/Stinson)
Invasive Plants
1. Facilitate landowner access to educational materials related to the identification and control of invasive plants. (Heekin, Erhardt)
Reduced Stand Diversity
1. Participate with the Idaho Department of Lands with regard to the implementation of Idaho's Statewide Forest Resource Strategy. (Stinson) 2. Facilitate landowner access to technical materials related to profitable and ecologically sound harvesting practices. (Stinson) 3. Endorse programs or activities that educate landowners on profitable and ecologically sound harvesting practices, including snag retention. (Board/Stinson)
Inadequate Stand Stocking
1. Facilitate landowner access to technical resources and programs related to reforestation. (Stinson)

Forest Land Preservation Goal: Preserve working forest lands within Latah County through the implementation of voluntary strategies that support sustainable timber extraction consistent with natural processes and the protection of water quality and habitat for fish and wildlife.

Forest Land Preservation Tasks
Resource Conflicts
1. Facilitate the delivery of multi-disciplinary forest planning information to landowners. (Stinson) 2. Participate in the annual Family Forest Landowners and Managers Conference. (Stinson) 3. Facilitate landowner access to information about conservation easements. (Stinson)
Unsustainable Harvest
1. Monitor forest products and practices that may improve the ecological and economical sustainability of working forest lands. (Stinson)

Public Health

Public Health Resource Conservation Goal: Support the management of natural resources in a manner that protects the public health of citizens of Latah County and the Palouse region while simultaneously providing for long-term economic sustainability of private working lands in Latah County.

The public health ROCC is categorized according to five secondary ROCCs:
1) Air Quality
2) Global Climate Change
3) Drinking Water Quantity
4) Drinking Water Quality
5) Surface Water/Recreational Contact

Air Quality Goal: Protect air quality throughout Latah County.

Air Quality Tasks
Agricultural Field Burning
1. Monitor existing agricultural field burning laws and policies. (Stinson)
Forest Slash Burning
Unpaved Roads

Global Climate Change Goal: Reduce carbon emissions and support self-sustaining carbon sequestering land management practices.

Global Climate Change Tasks
Profitable Carbon Sequestration Opportunities
1. Participate in carbon sequestration programs at local, state and national levels that show a likely impact at an appropriate geographic and temporal scale. (Stinson)
Carbon Emissions Reduction

Drinking Water Quantity Goal: Safeguard drinking water supplies.

Drinking Water Quantity Tasks
Limited Aquifer Recharge
1. Participate in water conservation planning undertaken by local governments. (Dansart, Stinson)
Non-Sustainable Water Consumption

Drinking Water Quality Goal: Protect the health of Latah County citizens by safeguarding clean drinking water supplies.

Drinking Water Quality Tasks
Contamination of Shallow Aquifers
1. Participate in local efforts to identify and protect aquifer recharge zones. (Dansart, Stinson)
Contamination of Surface Water Supplies
1. Participate in local efforts to identify and protect surface drinking water protection zones. (Dansart, Stinson)

Surface Water/Recreational Contact Goal: Protect the health of Latah County citizens by safeguarding surface water quality for recreational use.

Surface Water/Recreational Contact Tasks[2]
Bacteria
1. Participate in revisions of TMDLs and associated Implementation Plans for the Potlatch River and Palouse River watersheds. (Dansart, Stinson) 2. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments.
Nutrients
1. Participate in revisions of TMDLs and associated Implementation Plans for the Potlatch River and Palouse River watersheds. (Dansart, Stinson) 2. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments.
Oil and Grease
1. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments.
Organics and Pesticides
1. Coordinate local riparian restoration efforts to minimize pesticide delivery to local streams.

[2] In FY15, implementation projects undertaken that affect public health will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.

Range and Pasture Lands

Range and Pasture Lands Resource Conservation Goal: Preserve and restore range and pasture land productivity for the benefit of wildlife and livestock while providing voluntary opportunities for the long-term preservation of working rangelands in Latah County.

The range and pasture lands ROCC is categorized according to two secondary ROCCs:
1) Range and Pasture Productivity
2) Rangeland Preservation

Range and Pasture Productivity Goal: Protect and restore natural productivity to range and pasturelands for the benefit of livestock and wildlife.

Range and Pasture Productivity Tasks
Invasive Plants
1. Facilitate landowner access to programs that may assist them in weed control efforts. (Heekin, Erhardt) 2. Inform landowners regarding the identification and effective control of invasive weeds. (Heekin, Erhardt)
Soil Erosion and Compaction
Departures from Natural Woodland Stocking Densities

Rangeland Preservation: Maintain productive rangelands within Latah County through the implementation of voluntary strategies for the benefit of livestock and wildlife.

Rangeland Preservation Tasks
Loss of Range and Pasture Lands
1. Review voluntary land protection programs that focus on maintaining the viability of range and pasture lands. (Stinson)

Special Status Species

Special Status Species Resource Conservation Goal: Protect and restore habitat for the survival of individual special status animal and plant species within Latah County and the Palouse region.

The special status species ROCC is categorized according to two secondary ROCCs:
1) Animal
2) Plant

Animal Goal: Protect special status animal species and preserve and restore the habitats, landscape connectivity, and ecosystem processes necessary to sustain these populations in Latah County.

Animal Tasks[3]
Habitat Degradation
1. Coordinate local riparian restoration efforts, including: streamside plantings, control of invasive vegetation, fenced cattle exclosures, and off-stream watering developments.
Disruption of Ecosystem Processes
Habitat Fragmentation
1. Coordinate local riparian restoration efforts to remove passage barriers for wild steelhead and other aquatic species of special status.

[3] In FY15, implementation projects undertaken that affect special status animal species will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.

Plant Goal: Protect special status plants by preserving and restoring the habitats necessary to sustain these populations in Latah County.

Plant Tasks
Habitat Loss
1. Coordinate Palouse Prairie, canyon grassland, and mature forest protection and restoration efforts. (Heekin, Erhardt, Marchinek)
Habitat Fragmentation and Degradation
1. Coordinate Palouse Prairie, canyon grassland, and mature forest protection and restoration efforts. (Heekin, Erhardt, Marchinek) 2. Inform interested landowners regarding prairie restoration opportunities. (Heekin, Erhardt) 3. Inform landowners regarding the identification and effective control of invasive weeds. (Heekin, Erhardt)

Threatened Ecosystems

Threatened Ecosystem Resource Conservation Goal: Protect and restore threatened ecosystems in Latah County and the Palouse region on a scale that supports the self-sustaining function of these ecosystems.

The threatened ecosystem ROCC is categorized according to five secondary ROCCs:
1) Camas Meadows
2) Canyon Grasslands
3) Palouse Prairie
4) Ponderosa Pine
5) Wetlands

Camas Meadows Goal: Protect and restore camas meadows in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Camas Meadows Tasks
Lowered Water Tables
Land Conversion
Invasive Plants

Canyon Grasslands Goal: Protect and restore canyon grassland ecosystems in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Canyon Grasslands Tasks
Livestock Grazing
Invasive Plants

Palouse Prairie Goal: Protect and restore Palouse Prairie ecosystems in Latah County and the Palouse region on a scale that supports the self-sustaining function of these ecosystems.

Palouse Prairie Tasks
Land Conversion
1. Coordinate planning efforts to identify potential sites for protection and/or restoration. (Heekin, Erhardt) 2. Coordinate Palouse Prairie restoration projects. (Heekin, Erhardt, Marchinek) 3. Endorse research to identify effective restoration methods. (Board/Heekin, Erhardt)

4. Facilitate the use of CRP and other state and federal programs available to landowners for prairie restoration. (Heekin, Erhardt) 5. Inform landowners regarding protection and restoration options for Palouse Prairie. (Heekin, Erhardt)
Invasive Plants
1. Coordinate Palouse Prairie restoration efforts that include the control of invasive weeds. (Heekin, Erhardt) 2. Facilitate landowner access to programs that may assist them in weed control efforts. (Heekin, Erhardt) 3. Inform landowners on the identification and effective control of invasive weeds. (Heekin, Erhardt)

Ponderosa Pine Goal: Protect and restore ponderosa pine habitat in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Ponderosa Pine Tasks
Altered Fire Regimes
Disease and Insects

Wetlands Goal: Protect and restore wetland ecosystems in Latah County on a scale that supports the self-sustaining function of these ecosystems.

Wetlands Tasks[4]
Lowered Water Tables
1. Coordinate local stream/wetland restoration efforts.
Land Conversion
1. Inform landowners regarding wetland protection and restoration opportunities. 2. Facilitate access to programs that assist in the protection and restoration of wetland communities. 3. Inform landowners regarding land trusts and conservation easements.
Invasive Plants

[4] In FY15, wetland projects will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.

Wildlife

Wildlife Resource Conservation Goal: Protect, create and/or enhance wildlife habitats and populations to sustainable levels for aesthetics, organic cultural pursuits, and environmental/biological diversity.

The wildlife ROCC is categorized according to two secondary ROCCs:
1) Game Species
2) Non-Game Species

Game Species Goal: Protect viable, balanced and sustainable populations of game species for wildlife diversity; aesthetics; and organic cultural pursuits such as hunting, viewing, photography, etc.

Game Species Tasks
Habitat Loss
1. Facilitate the use of programs such as CRP, CCRP and WHIP that provide valuable wildlife habitat within agricultural settings. (Heekin, Erhardt) 2. Inform landowners regarding cost-share programs, land trusts, conservation easements, and other options that may be available to protect critical habitat on private lands. (Heekin, Erhardt) 3. Inform landowners regarding agricultural practices that benefit game species. (Heekin, Erhardt)
Habitat Fragmentation
Invasive Plants
Riparian Habitat Degradation [5]
1. Coordinate local riparian restoration efforts, including: streamside plantings, fenced cattle exclosures and off-stream watering developments, control of invasive vegetation, and streambank stabilization.
Wetland Conversion
1. Coordinate local wetland protection and restoration efforts.[6]

[5] In FY15, riparian habitat restoration projects will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.
[6] In FY15, wetland restoration projects will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.

Non-Game Species Goal: Maintain healthy populations of non-game wildlife throughout Latah County to support ecosystem functions, economic, cultural, and aesthetic values.

Non-Game Tasks
Landscape Changes in Forest Structure
Conversion of Palouse Prairie and Canyon Grasslands
1. Coordinate Palouse Prairie and canyon grassland protection and restoration efforts. (Heekin, Erhardt, Marchinek) 2. Coordinate planning efforts to identify potential sites for protection and/or restoration. (Heekin, Erhardt) 3. Facilitate landowner access to programs that may assist them in weed control efforts within canyon grassland or Palouse Prairie habitats. (Heekin, Erhardt) 4. Facilitate the use of CRP and other state and federal programs available to landowners for prairie restoration. (Heekin, Erhardt) 5. Inform interested landowners about protection and restoration of Palouse Prairie. (Heekin, Erhardt)
Wetland Conversion and Degradation
1. Coordinate local wetland protection and restoration efforts.[7]
Riparian Habitat Degradation[8]
1. Coordinate local riparian restoration efforts, including: streamside plantings, control of invasive vegetation, fenced cattle exclosures, and off-stream watering.
Habitat Fragmentation
Disruption of Ecosystems Processes
Mine Closures

[7] In FY15, wetland restoration projects will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.

[8] In FY15, riparian habitat restoration projects will be accomplished as a complementary component to projects focused on restoration of anadromous fish habitat. Staff leads for these tasks are identified within the anadromous fish tasks.

Acronyms and Abbreviations

AgPlan	Idaho Agricultural Pollution Abatement Plan
BAG	Basin Advisory Group
BiOp	Biological Opinion
BLM	Bureau of Land Management
BMP	Best Management Practices
BOCC	Board of County Commissioners
BPA	Bonneville Power Administration
BURP	Beneficial Use Reconnaissance Project
CBAG	Clearwater Basin Advisory Group
CCRP	Continuous Conservation Reserve Program
CDC	Conservation Data Center
CES	Cooperative Extension Service
CFR	Code of Federal Regulations
cfs	Cubic Feet per Second
Clearwater RC&D	Clearwater Resource Conservation and Development Council, Inc.
CNF	Clearwater National Forest
COE	Corps of Engineers
Council	Northwest Power and Conservation Council
CPI	Clearwater Pheasant Initiative
CRFMP	Columbia River Fish Management Plan
CRP	Conservation Reserve Program
CSP	Conservation Security Program
CWA	Clean Water Act
CWD	Coarse Woody Debris
EPA	Environmental Protection Agency
EQIP	Environmental Quality Incentive Program
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
FCRPS	Federal Columbia River Power System
FLEP	Forest Land Enhancement Program
FPA	Forest Practices Act
FRPP	Farm and Ranch Lands Protection Program
FSA	Farm Services Agency
FWS	Fish and Wildlife Service
GRP	Grassland Reserve Program
HIP	Habitat Improvement Program
I&E	Information and Education
IASCD	Idaho Association of Soil Conservation Districts
ICBEMP	Interior Columbia Basin Ecosystem Management Project
IDAPA	Idaho Administrative Procedures Act
IDEA	Idaho District Employees Association
IDEQ	Idaho Department of Environmental Quality

IDFG	Idaho Department of Fish and Game
IDL	Idaho Department of Lands
IDWR	Idaho Department of Water Resources
INFISH	Inland Fisheries
INPS	Idaho Native Plant Society
ISDA	Idaho State Department of Agriculture
ITD	Idaho Transportation Department
Latah SWCD	Latah Soil and Water Conservation District
LHTAC	Local Highway Technical Assistance Council
LIP	Landowner Incentive Program
LOD	Large Organic Debris
LSRCP	Lower Snake River Fish and Wildlife Compensation Plan
NACD	National Association of Conservation Districts
NLHD	North Latah Highway District
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NPT	Nez Perce Tribe
NRCS	Natural Resources Conservation Service
NWPCC	Northwest Power and Conservation Council
OSC	Idaho Office of Species Conservation
PAC	Policy Advisory Committee
PACFISH	Pacific Fisheries
PBAC	Palouse Basin Aquifer Committee
PCEI	Palouse Clearwater Environmental Institute
PCSRF	Pacific Coast Salmon Recovery Fund
PF	Pheasants Forever
PFW	Partners for Fish and Wildlife
PL	Public Law
PLT	Palouse Land Trust
PPF	Palouse Prairie Foundation
RCRDP	Resource Conservation and Rangeland Development Program
RHCA	Riparian Habitat Conservation Areas
ROCC	Resource of Community Concern
SCD	Soil Conservation District
SCS	Soil Conservation Service (former title of the NRCS)
SDWA	Safe Drinking Water Act
SIP	Stewardship Incentive Program
SLHD	South Latah Highway District
SPZ	Stream Protection Zones
STIP	State Transportation Improvement Program
SWC	Idaho Soil and Water Conservation Comission
SWCD	Soil and Water Conservation District
TMDL	Total Maximum Daily Load
TU	Trout Unlimited

UAA	Use Attainability Analysis
UI	University of Idaho
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WAG	Watershed Advisory Group
WHIP	Wildlife Habitat Incentives Program
WHIP SI	Wildlife Habitat Incentives Program Salmon Initiative
WQPA	Water Quality Program for Agriculture
WRIA	Water Resource Inventory Area
WRP	Wetlands Reserve Program
WSU	Washington State University

IDAHO SOIL & WATER CONSERVATION COMMISSION	DISTRICT: LATAH
FIVE-YEAR (5) PLAN and ANNUAL WORK PLAN CERTIFICATION	FOR FISCAL YEAR: 2015
	DUE : March 31, 2014

CERTIFICATION

On behalf of my local Board of Supervisors, I hereby certify that the attached Five-Year (5) Plan and Annual Work Plan is true and accurate, and further submit said Plan for the above named District and fiscal year.

A copy of this Five-Year (5) Plan and Annual Work Plan shall be kept at the District office and is available for public inspection.

Board Supervisor Signature

David Huggins

Printed Name

3/19/2014

Date

509.338.2549 (STINSON CELL)

Telephone

kstinson@latahsoil.org

District Email Address

FOR SWC USE ONLY:

DATE OF CONFIRMATION: