

IDAHO SOIL & WATER CONSERVATION COMMISSION <u>FIVE-YEAR (5) PLAN and ANNUAL WORK PLAN CERTIFICATION</u>	DISTRICT: PAYETTE SWCD
	FOR FISCAL YEAR: 2021
	DUE : March 31, 2020

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.

Jo Anne Smith
Board Supervisor Signature

JO ANNE SMITH
Printed Name

04/28/2020
Date

(208) 642-6129
District Telephone

payetteswcd@gmail.com
District Email Address

FOR SWC USE ONLY:

DATE OF CONFIRMATION:

PAYETTE SOIL & WATER CONSERVATION DISTRICT

5 Year Plan 2020 - 2025

Contents

Executive Summary	1
Land Use	1
Payette County 2017 Census of Agriculture	2
Payette County Landownership	2
Hydrology	3
Economic Conditions and Outlook	3
Natural Resource Assessment	3
Surface Water Quality	3
Nitrate Priority Area	4
District Operations	5
FY2021 (7/1/20– 6/30/21) Annual Plan of Work	7
Conservation District Priority 1: Information and Education	8
Conservation District Priority 2: District Operations	9
Conservation District Priority 2: District Operations (continued)	10
Conservation District Priority 4: Irrigated Cropland	12
Conservation District Priority 5: Fish and Wildlife	12
Conservation District Priority Area 6: Rangeland	13

Executive Summary

Conservation districts are local units of government established under state law to carry out natural resource management programs at a local level by providing technical assistance and tools to manage and protect land and water resources. The Payette Soil and Water Conservation District is one of 50 Conservation Districts in Idaho. Idaho Soil and Water Conservation Districts are political subdivisions of State government but are not State agencies.

Conservation Districts provide assistance to private landowners and land users in the conservation, sustainment, improvement and enhancement of Idaho's natural resources. They are catalysts for coordinating and implementing conservation programs, channeling expertise from all levels of government into action at the local level. Programs are non-regulatory, providing science-based technical assistance, incentive-based financial programs, and informational and educational programs at the local level.

Payette Soil and Water Conservation District partners with local, state and federal entities in order to provide educational opportunities to increase awareness of sustainable agriculture such as maintaining and improving soil fertility. In 2009 Payette SWCD Supervisors started the first Soil Health Symposium because they wanted to bring local landowners together and talk about what was being done at the local level to improve soil health. They also brought the scientific community in to present useful information on a broader scale. Payette SWCD along with their partners have turned the Symposium into an annual event taking place each February at the Four Rivers Cultural Center in Ontario, Oregon.

The District also seeks out funding sources and enters into partnerships in order to provide financial incentives to implement best management practices to improve soil health and water quality. The District works with USDA Natural Resources Conservation Service. USDA, NRCS provides financial and technical assistance to landowners and operators through the District through a variety of federal programs. The District also works with the Idaho Soil and Water Conservation Commission.

Land Use

Payette Soil and Water Conservation District is located within the boundaries of Payette County in the western part of the state bordering the Snake River and Oregon. The District includes the cities of Fruitland, New Plymouth and Payette.

Payette County is 257,920 acres or 403 Square miles in size and geographically located in the Payette section of the Columbia Plateau. The flood plains of the Payette and Snake Rivers can stretch two miles in width and are bordered by terraces at various elevations above the rivers. Soils are predominately silt and/or sandy loams in the valleys and terraces. The elevation in the district ranges from approximately 2,000 to 4,000 feet.

Climate is semiarid with cold winters and hot, dry summers. The average low temperature in the winter is 28°F in winter and 82°F in the summer. The average precipitation in Payette County is 11 inches per year.

<https://www.census.gov/quickfacts/fact/table/payettecountyidaho/PST045219>

Land use is mainly agricultural with irrigated cropland and pastures, along with upland grazing. Approximately 160,000 acres are under some form of irrigation. Irrigation water is supplied through in-

river diversions, pumps, or from withdrawals from Black Canyon Reservoir. Uplands are mainly used for open grazing of cattle and sheep. Landownership is mostly private with public lands found in the uplands and river bottom. Agriculture has dominated the land use since early settlement and remains the dominant social and economic base. The primary crops grown in Payette County include hay, wheat, corn, mint and vegetables, including seed. Dairy and livestock feeding operations are also an essential component of Payette County agriculture.

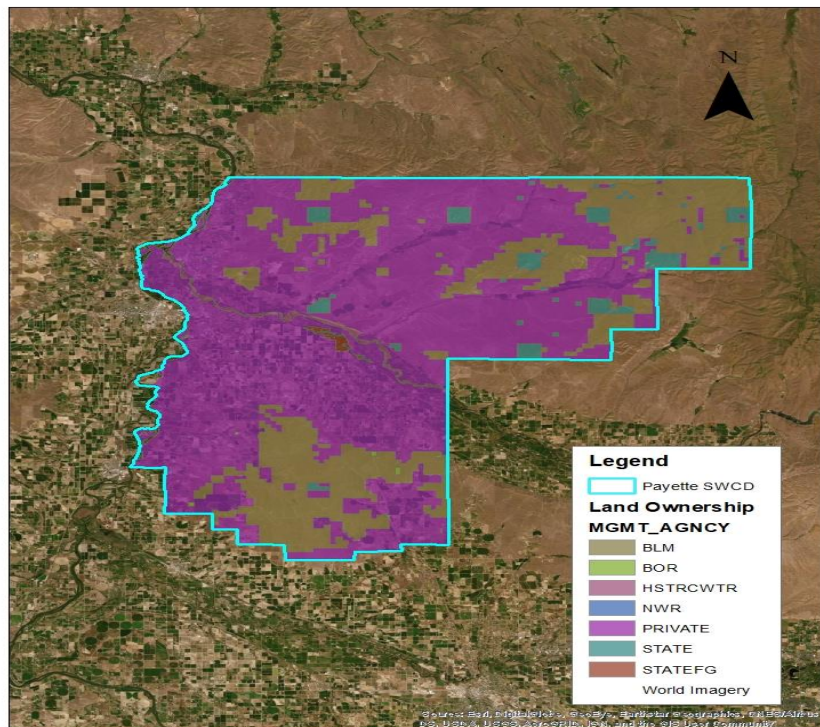
Payette County 2017 Census of Agriculture

Number of farms	538
Land in farms (acres)	160,361
Average size of farms (acres)	254
CROPLAND (acres)	55,622
PASTURELAND (acres)	104,738

https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Idaho/cp16075.pdf

Payette County Landownership

GIS Landownership	Acres
Private	1,916,232
BLM	214,606
BOR	219
ID F&G	758
State	8,807
HSTRCWTR	3,109



Hydrology

Payette County contains the mouth of the Payette River where it empties into the Snake River and forms the western border of Idaho. Big Willow and Little Willow Creek flow into Payette County from the northeast from Adams and Gem Counties uplands and empty into the Payette River. Little Willow and Big Willow Creeks, Payette River and Snake River are all on the 303(d) list because they do not meet their beneficial uses. Total maximum daily loads have been completed for all these waterbodies. Pollutants impacting water quality in these waterbodies include sediment and nutrients from non-point sources.

The Snake River borders Payette County for approximately 24 miles. This section of the Snake River is referred to as Middle Snake Payette, Hydrologic Unit Code 17050115. The Idaho Department of Environment Quality and Oregon Environmental Quality collaborated on the Snake River - Hells Canyon Total Maximum Daily Load (TMDL) which includes the Middle Snake Payette and it was approved by Environmental Protection Agency (EPA) in 2004. The document can be found at the following link: https://www.deq.idaho.gov/media/454498-snake_river_hells_canyon_entire.pdf

Idaho Department of Environmental Quality subbasin assessments and Total Maximum Daily Load (TMDL) plans for the Lower Payette River Hydrologic Unit Code 17050122 have been approved by the Environmental Protection Agency (EPA). Idaho Soil and Water Conservation Commission, in cooperation with Payette Soil and Water Conservation District and the Lower Payette River Watershed Advisory Group completed Implementation Plans for the Lower Payette River watershed, located in Payette Soil and Water Conservation District. All documents can be found at the following link: <http://www.deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/payette-river-subbasin/>

Economic Conditions and Outlook

According to the United State Census Bureau website information reported from July 2019, the population in Payette County was 23,551. The median income for a household in the county was \$50,289. About 12.0% of families and 15.7% of the population were below the poverty line, including 22.6% of those under age 18 and 9.3% of those age 65 or over. The most common employment sectors in Payette County are agriculture, manufacturing, retail trade, health care, and social assistance.

Natural Resource Assessment

USDA National Agricultural Statistics Service 2017 Payette County Profile states that acreage in farming remained the same from 2012 to 2017 in Payette Soil and Water Conservation District. 98% are family farms.

Idaho grew by 2.1% in 2019 and Payette County has had an increased growth rate of 1.34% from 2019 to 2020 according to the most recent United States census data. As the population increases in Ada and Canyon Counties, more people are moving into Payette County and farmland preservation is a priority for the district as well as local citizens and government.

Surface Water Quality

Water quality remains a priority in the district. Sources of pollutants include both point sources and nonpoint sources. Point sources are limited mainly to municipal wastewater treatment plants and confined animal feeding operations. Nonpoint sources are associated with agricultural, urban, suburban,

and rural areas. Best management practices to address water quality degradation are implemented in the district on a voluntary basis. The Natural Resource Conservation Service provides technical and financial assistance through programs such as the Environmental Quality Incentives Program. This is the most reliable funding source available for landowners in the district and provides financial assistance for water quality best management practices such as converting from surface to pivot sprinkler irrigation.

The Payette Soil and Water Conservation District submits proposals to the Idaho Department of Environmental Quality for Nonpoint Source Management §319 Subgrants. Typically, the grant program provides approximately 1.5 million dollars yearly but is competitive throughout the state and funding is inconsistent. In the past ten years the district has received two grants to provide district landowners in the Little Willow Creek and Lower Payette River watersheds with approximately \$377,661 to treat a total of 395 acres. All acreage included sprinkler irrigation installation to wheel lines and pivot except for one sediment basin installed to capture tail water from 24 acres of surface irrigated cropland. Load reductions for projects implemented were estimated at 1,400 tons/year for sediment and 2,800 pounds/year for phosphorous.

Agricultural practices are slowly shifting in the district. With more knowledge of soil health principles there is more adoption of practices to increase soil health. More fields are using cover crops, applying minimum tillage practices and replacing chemical fertilizer with compost. More landowners are also using livestock to increase soil health for crop production. Education is a priority to the Payette Soil and Water Conservation District, and the annual Soil Health Symposium provides local education and access to resources which landowners and operators can utilize on their operations and increase soil health. The Payette Soil and Water Conservation District will continue hosting the Annual Soil Health Symposium with the assistance of financial partners such as the Soil and Water Conservation Commission, USDA Natural Resource Conservation Service and local Conservation Districts.

Nitrate Priority Area

Nitrate is the most common and widespread contaminant in Idaho's ground water and can cause health problems. The principal health concern is that infants less than 6 months old may become seriously ill if they drink water with nitrate concentrations greater than 10 milligrams per liter (mg/L) (drinking water standards). This contaminant can cause methemoglobinemia, which has symptoms including shortness of breath and bluish skin, and if left untreated can cause death. Nitrate comes from fertilizers, septic systems, livestock operations, and industries including food processing. DEQ uses results of nitrate monitoring—the findings from laboratory analysis of ground water samples—from throughout the state. Nitrate monitoring data are used to define areas with high nitrate concentrations. Geostatistical methods are applied that use criteria based on drinking water standards. An area is considered a nitrate priority area (NPA) if 25% of the wells sampled in the area have at least 5 mg/L, which is one-half the drinking water standard of 10 mg/L. The NPAs are ranked (prioritized) in order of severity (one is the most impacted), based on factors such as the population and number of public water systems in the area, water quality trends, and beneficial uses in addition to drinking water. DEQ aids communities that are developing management strategies related to the land uses in these areas. Public education is a main component of the strategies. The strategies, which are focused on improving ground water quality, are compiled in a ground water quality improvement plan. DEQ also coordinates with other agencies to implement management strategies. DEQ reevaluates the areas every 5 years to determine if the strategies are effectively improving ground water quality. As part of the goal to restore degraded ground water, DEQ has developed a list of NPAs throughout the state where ground water has been compromised due to nitrate contamination.

The list ranks NPAs in the state based on severity of nitrate degradation. Payette County is ranked number 10 in the statewide ranking (IDEQ, 2008)

Idaho's Ground Water Quality Protection Act of 1989 (Idaho Code 39-1) authorized a comprehensive approach for maintaining and improving Idaho's ground water quality. The 1996 Idaho Ground Water Quality Plan (GWQP) was written as a result of the act and outlines the various state and local responsibilities for protecting Idaho's ground water quality (Ground Water Quality Council 1996). Idaho Department of Environmental Quality (IDEQ) is designated as the primary agency to coordinate and administer ground water quality protection programs for the state of Idaho.

People who rely on private wells for their drinking water supply are particularly at risk of exposure to high levels of nitrate and other contaminants. Private well owners are not required to test their water on a regular basis and may not be aware a problem exists. Public water systems (PWSs) are subject to the Safe Drinking Water Act and are required to test their water regularly. Nitrate levels in public drinking water must be below 10 mg/L MCL.

The Payette County Ground Water Quality Improvement and Drinking Water Source Protection Plan was written by Idaho Department of Environmental Quality in 2012. The information provided in the plan is an educational and informational resource for local governments and land-management entities. It is intended to provide background information for decision making and to help prioritize and coordinate water quality related activities throughout Payette County.

<https://deq.idaho.gov/media/60177445/nitrate-priority-areas-fs-1015.pdf>

<https://deq.idaho.gov/water-quality/ground-water/nitrate/>

Ground Water Quality is a priority for Payette Soil and Water Conservation District. The district will continue to partner with local, state and federal agencies to assist with implementation of best management practices that reduce nitrate loading of the ground water, thereby improving ground water quality.

District Operations

Payette Soil and Water Conservation District receives funding through general funds appropriated by the Idaho Legislature to the Idaho Soil and Water Conservation Commission (ISWCC). Funding is allocated to Payette Soil and Water Conservation District by the ISWCC as 5 different funding sources as follows:

Allocation Name	Amount
Base Funding	\$8,500.00
Capacity Building	\$800.00
Operations	\$2,000.00
Match	11,236.36

Districts in Idaho can receive up to 2:1 match from the Idaho Legislature for every dollar they bring in locally. Payette SWCD Board of Supervisors present district activities every year to Payette County, City of Payette, Fruitland, New Plymouth and the local irrigation districts all of which donate a small amount of funding every year except for Fruitland.

The total amount received from these local governments in FY2019 amounted to \$9,000.00. The district could have received a match allocation from the commission in the amount of \$18,000.00 if the legislature funded the full 2:1 match.

The District employs one part-time manager, pays all expenses for leased office and supplies, pays local organization dues and all other expenses. The District manager writes and submits grant proposals as they come up for funding for landowner implementation for best management practices. The only other funding source available to Districts to provide assistance to landowners for implementing best management practices in Idaho is the Nonpoint Source Management 319 Subgrants managed by Idaho Department of Environmental Quality. The 319-grant program is competitive across the state and Payette Soil and Water Conservation District has only been successful at securing two of these grants in the past 10 years.



FY2021 (7/1/20– 6/30/21) Annual Plan of Work Payette Soil and Water Conservation District

Contact: Jo Anne Smith - Chairperson

Telephone Number: (208) 642-6129

Email: payetteswcd@gmail.com

County Served: Payette Legislative District: 9

Mission of the Payette Soil and Water Conservation District

- Payette Soil and Water Conservation District will work towards conserving and enhancing natural resources for the economic and environmental benefit of present and future generations in Payette County using educational, financial, and technical assistance to promote voluntary resource conservation practices.

Trends & Issues Impacting Conservation in the Payette Soil and Water Conservation District

- Water Quality: TMDL development and implementation
- Irrigated Cropland: Promote adoption of soil and water conservation practices
- Fish and Wildlife: Support and approve wildlife resource management plans; threatened and endangered species
- Pasture and Hay: Assist with planning and application of conservation on pasture and hay land
- Rangeland: Assist with planning and application of conservation on rangeland
- Other Impacts: Property tax increases; rural subdivision of farm and range lands; availability of funds for district operations; economic disruption and distress due to COVID-19

Projects Planned, Coordinated or Managed by the Payette Soil and Water Conservation District

- Host the annual Soil Health Symposium to educate producers on techniques to improve soil health.
- Write 319 grant for the 4th phase of funding for the Middle Snake Payette Clean Water Project.
- Coordinate efforts to address TMDLs in Payette County and surrounding watersheds.
- Seek out grants when opportunity arises.

Funding Sources for District Operations and Projects Coordinated

- State of Idaho
 - Payette County
 - Cities of Payette and New Plymouth and Fruitland
 - Irrigation districts and companies
 - Payette River Water Users Association
 - Pursue other funding sources, private and public.
-



FY2021 (7/1/20 – 6/30/21) Annual Plan of Work Payette Soil and Water Conservation District

Conservation District Priority 1: Information and Education

Objective: Educate producers, ranchers, and the public about natural resources conservation.

Goal(s): Increase the public awareness of the importance of conserving our natural resources.

Actions	Date	Agency	Goals Achieved
Continue to seek out partners in planning Annual Soil Health Symposium.	Summer-20	PSWCD Supervisors, PSWCD Staff, NRCS	
Host 12 th Annual Soil Health Symposium	Spring-21	PSWCD Supervisors, PSWCD Staff, NRCS	
Update District website: www.payetteswcd.org	Monthly	PSWCD Staff	
Provide an Information Booth at Payette County Fair	Aug-20	PSWCD Staff	
Promote conservation programs available for landowners from partners	Ongoing	PSWCD Supervisors, PSWCD Staff	
Promote the conservation district and natural resource educational programs to local entities.	Ongoing	PSWCD Supervisors, PSWCD Staff	
Distribute quarterly district newsletter	Spring-20 Summer-20 Fall-20 Spring-21	PSWCD Supervisors, PSWCD Staff	
Public tour of resource concerns and projects	Fall-20	PSWCD Supervisors, PSWCD Staff	
Create brochures for home owners constructing on small acreages	Fall-20	PSWCD Supervisors, PSWCD Staff	



FY2021 (7/1/20 – 6/30/21) Annual Plan of Work Payette Soil and Water Conservation District

Conservation District Priority 2: District Operations

Objective: Inform the Payette County Commissioners, City Mayors, State Legislators, and the public about district activities and conservation issues.

Goal(s): Maintain a viable district in order to provide efficient and effective service to the public.

Actions	Date	Agency	Goals Achieved
Each District Supervisor will try to attend at least one IASCD conference.	Nov-20	PSWCD Supervisors	
Participate in USDA Local Working Group meeting(s)	Fall-20 Spring-21	PSWCD Supervisors, PSWCD Staff, NRCS	
Participate as a member of the West Central Highlands RC&D Council	Monthly	PSWCD Supervisors, PSWCD Staff	
Continue to meet with the cities and county to discuss district accomplishments and to secure funding	May-20 May-21	PSWCD Supervisors, PSWCD Staff	
Actively support the IASCD with dues and participation in annual and division meetings, funding permitting	Spring-20 Fall-20 Spring-21	PSWCD Supervisors, PSWCD Staff	
Promote the importance of agriculture and natural resources conservation in Payette County	Ongoing	PSWCD Supervisors, PSWCD Staff, NRCS	
Seek other groups and/or organizations to promote PSWCD's programs	Ongoing	PSWCD Supervisors, PCSWCD Staff	
Investigate methods to increase funding for district operations	Ongoing	PSWCD Supervisors, PSWCD Staff	
Schedule and hold monthly PSWCD Board Meetings	Monthly	PSWCD Chair, PSWCD Staff	
Develop and submit Conservation District Annual Plan of Work, updating 5-Year Plan	Mar-20 Mar-21	PSWCD Supervisors, PSWCD Staff	



FY2021 (7/1/20 – 6/30/21) Annual Plan of Work Payette Soil and Water Conservation District

Conservation District Priority 2: District Operations (continued)

Objective: Inform the Payette County Commissioners, City Mayors, State Legislators, and the public about district activities and conservation issues.

Goal(s): Maintain a viable district in order to provide efficient and effective service to the public.

Actions	Date	Agency	Goals Achieved
Complete Financial & Match Report	Aug-20	PSWCD Supervisors, PSWCD Staff	
Maintain financial management system using QuickBooks	Ongoing	PSWCD Staff	
Promote training to develop new skills and knowledge for staff and supervisors	Ongoing	PSWCD Supervisors, PSWCD Staff	
Conduct an employee(s) review	Annual	PSWCD Supervisors	



FY2021 (7/1/20 – 6/30/21) Annual Plan of Work Payette Soil and Water Conservation District

Conservation District Priority 3: Water Quality

Objective: Assist district cooperators with planning and application of Water Quality Best Management Practices.

Goal(s): To meet state water quality standards, regulations, and requirements

Actions	Date	Agency	Goals Achieved
Identify sources of funding and associated programs for water quality projects in Payette County	July-20 June-21	PSWCD Supervisors, PSWCD Staff, NRCS	
Provide support for the implementation of the Lower Payette River TMDL, Boise River TMDL, Little Willow TMDL, Big Willow TMDL, and Middle Snake Hells Canyon TMDL	July-20 June-21	PSWCD Supervisors, PSWCD Staff, NRCS	
Conservation application to improve water quality Goal: 1260 acres	July-20 June-21	PSWCD Staff, NRCS	
Apply conservation practices to improve irrigation efficiency Goal: 800 acres	July-20 June-21	PSWCD Staff, NRCS	
Promote best management practices for containment and application of animal waste, reducing the impact of animal waste on natural resources	July-20 June-21	PSWCD Staff, NRCS	
Cooperate with Idaho Power Water Quality Improvement	July-20 June-21	PSWCD Supervisors, PSWCD Staff, NRCS	



FY2021 (7/1/20 – 6/30/21) Annual Plan of Work Payette Soil and Water Conservation District

Conservation District Priority 4: Irrigated Cropland

Objective: Promote soil and water conservation on irrigated lands

Goal(s): To work with cooperators to plan and implement BMPs to conserve soil & water.

Actions	Date	Agency	Goals Achieved
Develop and approve conservation plans on irrigated land (crop, pasture and hay) Goal 10 plans	July-20 June- 21	NRCS	
Implement BMPs Goal:1000 acres	July-20 June-21	NRCS	
Develop and approve conservation plans on range, pasture and hay land Goal: 1000 acres per year	July-20 June-21	NRCS	

Conservation District Priority 5: Fish and Wildlife

Objective: Maintain and enhance wildlife resource conservation

Goal(s): Conservation of fish and wildlife resources

Actions	Date	Agency	Goals Achieved
Develop conservation plans to address wildlife resources. Goal: 150 acres	July-20 June-21	NRCS	
Apply conservation practices to improve fish and wildlife habitat Goal: 150 acres (wetland, recreational and enhancement)	July-20 June-21	NRCS	



FY2021 (7/1/20 – 6/30/21) Annual Plan of Work Payette Soil and Water Conservation District

Conservation District Priority Area 6: Rangeland

Objective: Assist with planning and application of conservation plans on rangeland, pasture and hay land

Goal(s): To protect and improve rangeland, pasture and hay land through proper resource treatment

Actions	Date	Agency	Goals Achieved
Develop and approve conservation plans on range, pasture and hay land Goal: 1000 acres	July-20 June-21	NRCS	
Implement conservation practices for grazing land resource protection Goal: 1000 acres	July-20 June-21	NRCS	