



Wheeler Soil & Water Conservation District

# Annual Report

July 1, 2019- June 30, 2020



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Photo credit: Cassi Newton

# Wheeler SWCD Board of Directors

Wheeler Soil and Water Conservation District is led by a seven member Board of Directors. Directors are elected by the voters of Wheeler County and serve four year terms.

At the January 2020 Wheeler SWCD Board meeting, Jeremiah Holmes was re-elected as Chairman. Jeremiah and his family have lived in the Spray area for twelve and a half years.

Wayne Lindquist was re-elected to the position of Vice-Chairman. Wayne grew up in South Dakota and moved to Wheeler County in 1995. He and his wife Peggy raise purebred Angus, purebred Charolais cattle, and hay.

Jim Bob Collins ranches east of Mitchell and joined the Wheeler SWCD Board of Directors in 2011. Jim Bob continues a long family history with the Wheeler SWCD with his father and two uncles serving on the Board in the past.

Rusty Rutherford was appointed to the Board of Directors in April 2017. Rusty and his family live outside of Fossil.

Jason Davis has been involved in agriculture his whole life. He currently manages the Fopiano Ranch.

Dave Hunt raises cattle and hay on his ranch outside Fossil. He bought the ranch from his dad in 1971. Dave was elected as the District's Secretary/Treasurer.

Kale Haberman raises hay and produces Charolais and Red Angus cattle in the Mitchell area with his wife Madison and father-in-law Jim Anspach.

The District appreciates the service and dedication of the current Directors. Thank you for your service!



*From left: Dave Hunt, Jim Bob Collins, Kale Haberman, Jason Davis, Wayne Lindquist, Rusty Rutherford, and Jeremiah Holmes*

## Who We Are and What We Do

The Wheeler Soil and Water Conservation District is one of 45 conservation districts in Oregon. Conservation districts are defined by the Oregon Revised Statutes (ORS) as political subdivisions of state government. The SWCD is not a state agency; rather, it is classified as a special district, a form of local government which is required to follow many of the same laws that govern state agencies. SWCDs are led by a locally elected board of directors.

The Wheeler SWCD district is responsible for conservation project planning, technical assistance, and grant writing for individuals or groups in Wheeler County. The work is accomplished by successfully engaging funding sources and creating partnerships with other agencies and landowners. Wheeler SWCD is also responsible for public education and outreach, project oversight, and serves as the Local Management Agency (LMA) for the Oregon Agricultural Water Quality program.

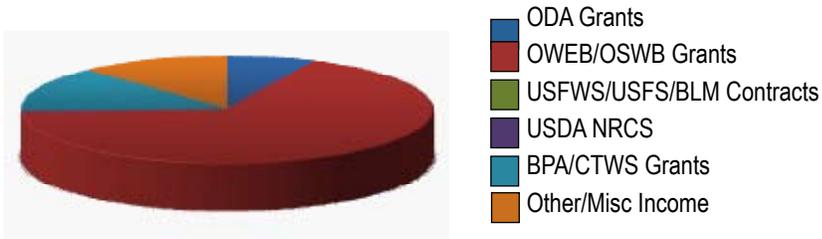
### **District Mission**

The mission of the Wheeler SWCD is to maximize economic and environmental watershed values for Wheeler County residents by developing, conserving and protecting water, soil, plant structures and other natural resources.

# Wheeler SWCD Financial Statement

July 1, 2019 - June 30, 2020

## Revenues

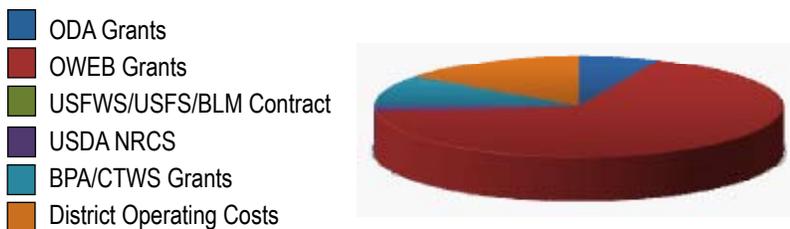


Beginning balance July 1, 2019.....\$644,328

### REVENUES:

Oregon Dept of Ag Grants.....	\$83,315
OWEB/OSWB Grants.....	\$794,527
USFWS/USFS/BLM Contracts.....	\$0
USDA NRCS.....	-\$5,201
BPA/CTWS Contracts.....	\$161,739
Other/Misc Income.....	\$142,658
<b>TOTAL REVENUES.....</b>	<b>\$1,177,038</b>

## Expenses



### EXPENSES:

ODA Grants.....	\$65,014
OWEB/OSWB Grants.....	\$675,112
USFWS/USFS/BLM Contracts.....	\$0
USDA NRCS.....	\$18,590
BPA/CTWS Contracts.....	\$100,717
District Operating Costs.....	\$151,779
<b>TOTAL EXPENSES.....</b>	<b>\$1,011,212</b>
Ending balance June 30, 2020.....	\$810,154

The information presented above is unaudited. A copy of the audit report is available for review. If you'd like to review the report, please call the district office at 541-468-2990.

## Riparian Buffers in Wheeler County



Through the Conservation Reserve Enhancement Program (CREP), landowners or land managers can lease their riparian property for contract periods of 10 to 15 years and receive cost-share funding to make improvements such as tree and shrub plantings, fencing and off channel water developments.

A required component of the program is excluding livestock or any type of agricultural use for the life of the contract. Landowners are also responsible for fence maintenance and keeping weeds to a minimum within the buffer area.

The program is funded and managed by the USDA Farm Services Agency office in Condon and is facilitated by the Wheeler Soil & Water Conservation District's Field Technician II, Bodie Brown. Responsibilities include helping landowners navigate the program paperwork, assessing the property to see if it qualifies and writing the conservation plan.

This year 7.43 miles and 137.3 acres were enrolled in the program in Wheeler County. Since CREP began in Oregon, over 116 miles and 2,251 acres of riparian exclusion buffers have been enrolled in Wheeler County.

For more information regarding the CREP program, contact Bodie Brown, WSWCD Field Technician II, at 541-468-2990.



# Mountain Creek Watershed-Focus Area Accomplishments

Wheeler Soil & Water Conservation District has identified the Mountain Creek watershed in southeast Wheeler County as a Focus Area under the Oregon Department of Agriculture. With this designation, the District is concentrating restoration and tracking efforts in this area. The District has five open conservation projects, one technical assistance project and several more that have been completed and are now in the monitoring stage. Three projects were completed between July 1, 2019 and June 30, 2020 and are described here.



Badger Creek Pipeline After



Badger Creek Pipeline Before

## Upper Badger Creek Pipeline

The Upper Badger Creek Pipeline project was the last piping project on the upper reaches of Badger Creek. The project converted 6,400 feet of leaking and inefficient open irrigation ditch with 6,400 feet of 4-10 inch PVC with 95 risers installed every 40-60 feet. A measuring flume was installed at the head of the pipeline, on the back of the existing ODFW fish screen to provide flume monitoring for the landowner. This project builds on a prior OWEB funded diversion replacement, as well as other significant restoration and enhancement work in this watershed.

Badger Creek is a highly productive stream for the spawning and rearing of steelhead, and altered sediment routing can be detrimental to these vulnerable populations. The old irrigation ditch did not have a method to measure flow into the ditch, and the open irrigation system went along a hillside with sandy soils that had failed in several locations over the years. Each failure would erode the ditch banks and/or the hillside, causing sediment loads to enter into Badger Creek,

and drastically reduce the efficiency of the diverted water. The ditch system also did not allow for good control of the irrigation water pulled out of Badger Creek, which created patches of either under-watered, or over-watered areas within the point of use for the mountain meadow.

The project was located southeast of the town of Mitchell in Wheeler County along Badger Creek, an important steelhead tributary of Mountain Creek. OWEB funds were requested to convert a leaking and inefficient open irrigation ditch to buried pipeline and install a flow measuring device at the end of the existing fish screen. This project was a resubmit and builds on a prior OWEB funded diversion replacement, as well as other significant restoration and enhancements in the Badger Creek watershed.

The project installed a pipeline to convert 6,400 feet of open irrigation ditch. The pipeline included 95 4x4 inch risers installed every 40-60 feet, along with 900 feet of ten inch pipe, 1,600 feet of eight inch pipe, 2,400 feet of six inch pipe, and 1,500 feet of four inch pipe.

## Mountain Creek Diversion-Collins Design

The irrigation diversion that currently serves the Collins Ranch acts as a partial barrier to fish passage while not effectively serving the landowner's irrigation needs. This TA activity will fund the necessary survey, assessment, and design creation needed to develop a replacement diversion and its associated fish screen. The implementation of the provided designs will restore the reach's connectivity while providing the necessary control and ease of maintenance required to achieve an effective operation of the landowner's irrigation system. The existing fish screen is also not sized large enough for the landowner's water rights, so a new screen is needed.

The existing sheet-piling diversion that serves the Collin's Ranch acts as a partial barrier to fish passage when it is in use, and also does not effectively raise the water level high enough to serve the landowner's water right. The existing fish screen is also undersized for the landowner's 7+ cfs water right and so does not function correctly.



Collins Diversion

# Mountain Creek, continued

The TA grant developed a design for a new stream simulation diversion which will provide for the landowner's water right without the need for instream boards or other channel spanning structures. A new fish screen which is sized for up to 7.5 cfs is included in this design. To protect the diversion and the fish return pipe from excess erosion, bank stabilization work was included in the design.

## Badger Creek Diversion #6

The Wheeler SWCD had previously corrected the five barriers upstream of the project site by replacing the five steel diversions with four stream simulation diversions and one sheet piling diversion. This diversion and pipeline work is a key piece of the holistic restoration work being done on Badger Creek.

Two buried pipelines replaced 3,460 feet of open ditch for a more efficient delivery system for two landowners to use for irrigation of pasture. On one pipeline, risers installed every 40-60 feet.

Seven similar stream riffles, as well as 60 pieces of large wood were installed to promote floodplain connectivity and increase habitat complexity. Three acres around the project were fenced and 200 rooted stock plants were installed within the CREP buffer, in addition to the willow cuttings installed as part of the riffles.

A worn wooden bridge was replaced with a prefabricated steel bridge, measuring 25 feet long and 14 feet wide.



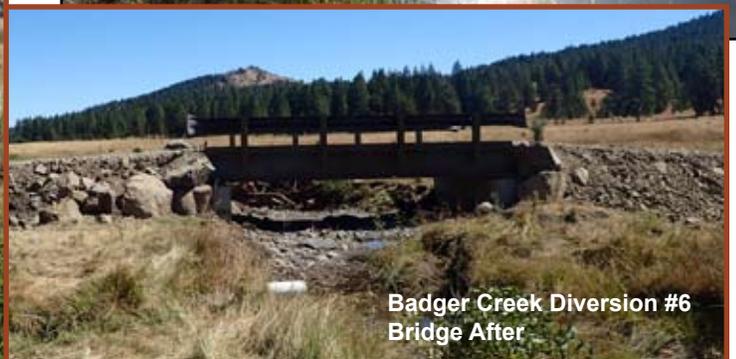
Badger Creek Diversion #6  
After



Badger Creek Diversion #6  
Before



Badger Creek Diversion #6  
Bridge Before



Badger Creek Diversion #6  
Bridge After



## Thanks to our Partners

This Annual Report of the Wheeler Soil and Water Conservation District (WSWCD) reflects activities that occurred during the fiscal year - from July 1, 2019 to June 30, 2020.

The successful implementation of projects would not be possible without the SWCD's partners. Cash or in-kind contributions were made by the Bonneville Power Administration (BPA) in partnership with the Confederated Tribes of Warm Springs, Oregon Watershed Enhancement Board (OWEB), Oregon Department of Agriculture, Oregon State Weed Board, U.S. Fish and Wildlife Service, U.S. Forest Service, Oregon Department of Forestry, Oregon Department of Fish and Wildlife, USDA Natural Resources Conservation Service, Gilliam Soil and Water Conservation District, John Day Partnership, Mid John Day - Bridge Creek Watershed Council, Blue Mountain Land Trust, and of course the cooperating landowners.

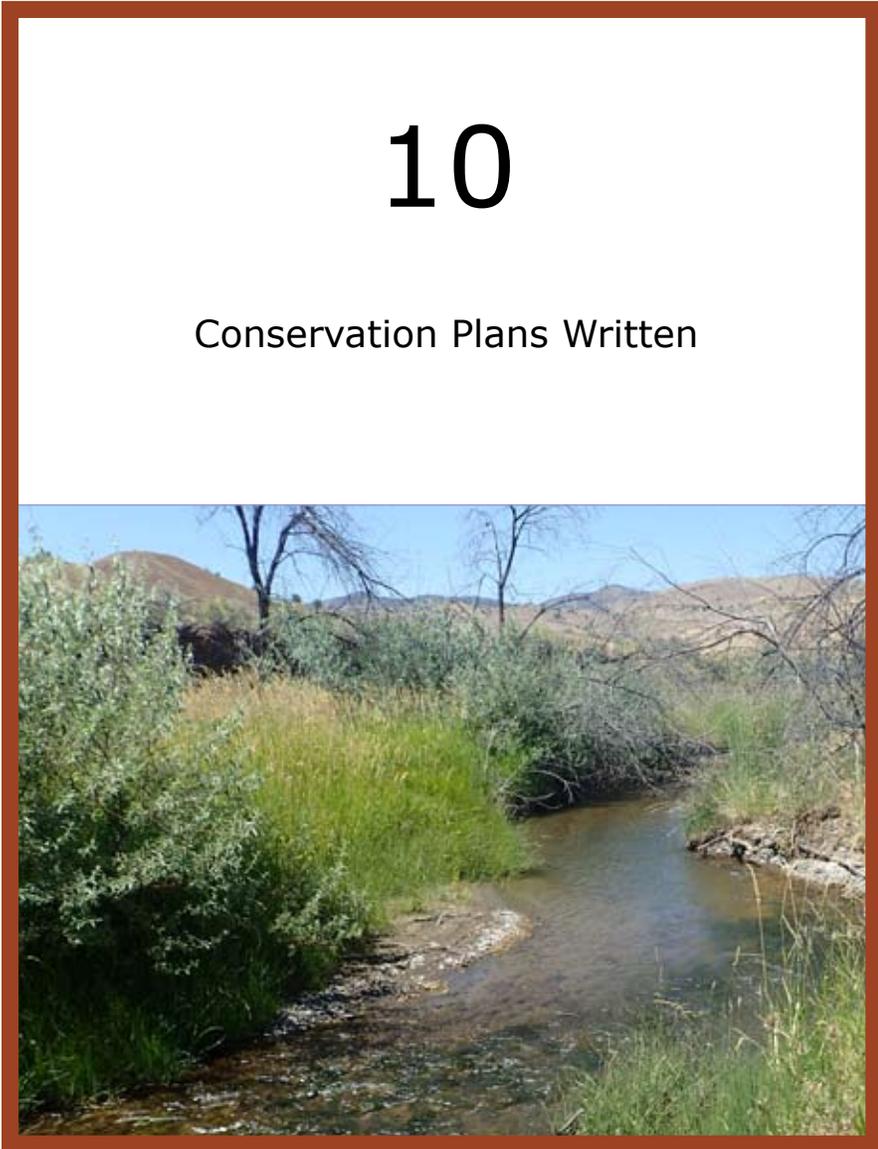
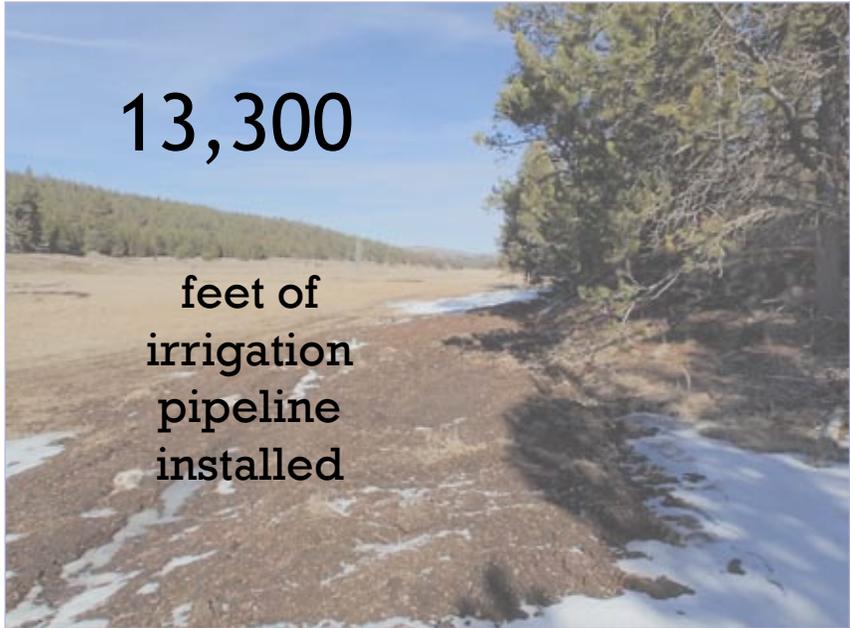


# Wheeler Soil & Water Conservation District

2019-2020 Key Accomplishments

By the Numbers





# Greater Wheeler County Accomplishments

While Mountain Creek is the Wheeler Soil and Water Conservation District's Focus Area, the neighboring watersheds of Bridge Creek, Bear Creek and Cherry Creek have been the additional recipients of the North Slope Ochoco Holistic Restoration grant from USDA Natural Resources Conservation Service. The district and watershed council also work in other areas of the county as opportunities arise. The following technical assistance project was completed in Wheeler County, outside of the Mountain Creek Focus Area in the district's 2019-2020 fiscal year. The district is currently managing two open technical assistance grants and twelve open restoration project grants.

## Rock Creek Reach Assessment

Rock Creek, located in southeast Wheeler County, has long been identified as productive steelhead habitat that would benefit from restoration efforts. This technical assistance grant funded a detailed reach assessment of current conditions as they relate to the limiting factors of salmonid recovery within this watershed. The data has been incorporated into a geospatial database and will be displayed in a manner that allows Wheeler SWCD to accurately prioritize projects, direct their design and oversee implementation. A systematic and well-informed approach to restoration ensures that the greatest benefit to anadromous fish will be realized by the application of available resources. The assessment applied a methodology of stream reach assessment to 35.37 miles of the Rock Creek watershed. It also prioritized juniper areas for restoration using GIS methods; and performed a thorough analysis of the existing irrigation system, resulting in a detailed irrigation efficiency report including recommendations for improvements that could result in instream water savings through leases and/or downstream diversion relocations.

The Wheeler SWCD has already completed reach assessments in the south end of Wheeler County on

Mountain Creek and Bridge Creek. The software and data entry procedures are in place and used in the SWCD's routine duties. In order to expand our restoration project work in this area of the county, it is important for us to complete a reach assessment on Rock Creek which has long been identified as productive steelhead habitat. With a recent change in management personnel, a large section of private land is now available for assessment and highly receptive to restoration project proposals. Partners include OWEB, Wheeler SWCD, the Confederated Tribes of Warm Springs/BPA and the Antone Ranch.

The assessment consisted of a highly detailed on-the-ground survey of the relatively unknown stretches in the Rock Creek Watershed; 18.7 miles on Rock Creek, and 16.7 miles on its tributaries. All surveyed stream lengths are classified as steelhead spawning and rearing habitat by ODFW. The detailed dataset regarding the limiting factors for steelhead will allow for areas of interest, such as where severe limiting factors overlap or where sections of intact habitat exist, to be accurately identified and addressed. Along with directing future restoration projects, this assessment will provide the needed baseline reference by which to measure their effect.

To ensure that the assessment's final report prompts focused, successful, future restoration work it includes: 1) a prioritized list based on the assessment's findings and personnel inputs of in-stream restoration opportunities



# Wheeler County, continued

for ecological benefits, increase in steelhead productivity and cost effective restoration projects; 2) contains high resolution maps containing detailed evaluation of current juniper stands, establish priority juniper removal areas to maximize both ecological and agricultural benefits; 3) contains an extensive survey of the current irrigation system for the development of the Irrigation Efficiency Plan which will be used to rate the priority of identified improvements that will focus on maximizing in-stream water levels, water quality, agricultural productivity, and identify possible in-stream water leases and point of diversion transfers.



## Bear Creek Juniper Removal

The project is located in the uplands of the Middle, and Lower Bear Creek watersheds, sub-watersheds of the Bridge Creek HUC-5 watershed (1707020403), in Wheeler County. According to ODF&W, Bridge Creek and Bear Creek are two of the largest Steelhead producing streams within the region. The Middle Bear Creek sub-watershed consists of approximately 21,500 acres and the Lower Bear Creek sub-watershed is approximately 13,350 acres. These watersheds are heavily populated with the encroachment of Western Juniper, while the native bunchgrass understory remains relatively intact. This project addressed the expansion of Western Juniper on 145 acres through the combination mechanical cutting/piling and is a continuation of 2018 efforts.

The Juniper management sites were selected using NRCS juniper priority criteria and treated using standard NRCS protocols. 145 acres of priority Juniper on slopes 30% and under were treated mechanically. No machinery was

used on slopes greater than 30% to reduce the amount of ground disturbance. All areas selected for treatment are on North Aspect slopes, where soils are deeper and bunchgrass communities remain intact. In a 25-year storm event sediment loads on western juniper sites are estimated at 1,600 pounds per acre. Healthy grasslands produce 400 pounds of sediment per acre in 25-year storm events [Deboodt et. Al 1993]. This suggests that approximately 58,000 lbs of sediment will no longer enter Bear Creek per 25 year storm event. Removal of Juniper also allows for more water to enter the system by eliminating the absorption of the limited soil moisture available by the presence of Western Juniper, and by eliminating the precipitation interception of the Juniper canopy cover. Western Juniper is estimated to intercept 1% of the annual precipitation for every 1% of canopy cover. At an estimated 30% canopy cover and an average of 14 inches of precipitation annually, approximately 16,536,786 gallons of water will be reintroduced into the Bear Creek watershed each year.

## Noxious Weed Update

Wheeler SWCD is continually working with landowners to maintain, eradicate and prevent weed infestations throughout Wheeler County. This year, the District coordinated with 22 landowners to control yellow starthistle, Russian knapweed, spotted knapweed, diffuse knapweed, whitetop, and Canada thistle. We have also

*Continued on page 10*

# Wheeler SWCD Staff & Partners

Wheeler SWCD staff members cover a variety of tasks to keep the district running and to serve our constituents.

After 22 years with Wheeler SWCD, **Judy Potter** retired as the District Manager in July 2019, and took on a contracted role as Finance Manager.

**Chase Schultz** joined the District as a Field Technician in 2015 and stepped into the role of District Manager in August. He oversees all operational, personnel, and fiscal components of the District.

Administrative Assistant, **Cindy Burlingame** left the District in October 2019 to take a position in Fossil. **Cassi Newton** began as the new Administrative Assistant in December. She is responsible for WSWCD and Wheeler County Weed Board meeting organization and records, Director correspondence and training, quarterly and annual reports provided to the Oregon Department of Agriculture (ODA), Biennial Review and LMA oversight, policy revisions, and general office management, assisting staff with various tasks and serves on the Small Grants Team.



Judy



Cassi



Gabe

**Bodie Brown** shifted from Field Technician I to Field Tech II in August 2019. He works with landowners and NRCS to navigate the Farm Service Agency Conservation Reserve Enhancement Program. Bodie also manages the weed grants and is a vital component to the WCWB. In addition, Bodie manages all reporting to Bonneville Power Administration (BPA).

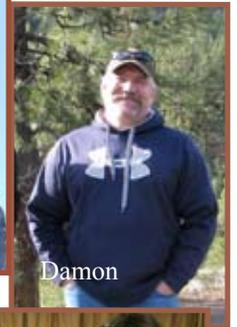
**Brooke Moore** began as the District's Field Tech I in August 2019. Brooke works with NRCS and landowners to manage the RCPP grants for the District.

Brooke has taken the lead on many project reports, ensuring that requirements and deadlines are met. Brooke works closely with Cassi to implement project management for the District. In addition, she has successfully obtained licensing through FAA.

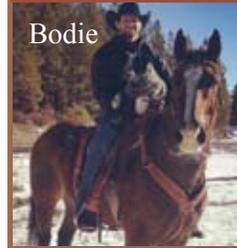
**Debbi Bunch** is the Watershed Technician and serves as coordinator for the Mid-John Day-Bridge Creek Watershed Council. She works with landowners planning conservation projects, writing grants, managing



Chase



Damon



Bodie



Debbi

projects, monitoring, managing the OWEB small grant program in Wheeler County and serving as the lead for the education and outreach program.



Brooke

**Gabe Williams** continues to work with the District to design and implement the complex in-stream and irrigation projects.

**Damon Brosnan** is the NRCS District Conservationist for Wheeler and Gilliam Counties. He coordinates all of the USDA programs for Wheeler County landowners.



## Wheeler County, continued

worked with regional and state partners to coordinate weeds treatments efforts, including Oregon Department of Agriculture, Crooked River Weed Management Area, and Jefferson SWCD. These efforts resulted in chemical treatment of 460 acres of yellow starthistle, 20 acres of Russian knapweed, 10 acres of Canada thistle, 40 acres of Scotch thistle, 5 acres of diffuse knapweed, 10 acres of spotted knapweed, and 2 acres of whitetop.

Wheeler SWCD also worked with landowners and other partners to continue releasing biological control agents

throughout the county on Russian knapweed and Canada thistle. In total, the District treated 25 acres of Canada thistle and 90 acres of Russian knapweed. The future looks promising for biological controls for yellow starthistle and whitetop. Hopefully, these agents will be approved in early 2021.

Please contact Bodie if you have any questions about our weed program or if you need help identifying potential invasive weed species.



# NRCS- Resource Conservation Partnership Program Grant Update

The North Slope Ochoco Holistic Restoration Project is a comprehensive conservation project that will improve water quantity and quality, restore fish and wildlife habitat, improve forest and rangeland health, and sustain agricultural productivity in Wheeler County. Experts used innovative Geographic Information Systems (GIS) technology to address priority natural resource concerns in a ridge-top to ridge-top manner. The project relies on the longstanding, collaborative program by the Wheeler SWCD that focuses on improving and protecting natural resources to benefit agricultural producers, fish and wildlife, and the local community.

The Wheeler Soil and Water Conservation District and USDA Natural Resources Conservation Service completed contracting to implement the North Slope Ochoco Holistic Restoration Project two years ago. The District and NRCS is now working with landowners to complete the 52 contracts that were approved by NRCS with a total obligation of about \$3.4 million in project implementation cost-share.

The table at right describes the conservation practices that were completed in 2019-2020.

The Wheeler Soil and Water Conservation District has spent the last four years seeking match funding from several different partners including the Oregon Watershed Enhancement Boards, The Confederated Tribes of the Warm Springs, The Western Juniper Alliance, Oregon State University, and Oregon Department of Fish and Wildlife. The projects associated with these funds are fish passage improvements, fish habitat restorations, juniper removal, weed control, and spring developments.

For more information, contact Brooke Moore, Wheeler SWCD at 541-468-2990, or Damon Brosnan, NRCS at 541-384-2671, ext 107.

Practice Name	Units	Total
Brush Management	Ac	187
Range Planting	Ac	134
Irrigation Pipeline	Ft	23,600
Structure for Water Control	No.	5
Forest Stand Improvement	Ac	134
Livestock Pipeline	Ft	5,189
Pumping Plant	No.	2
Spring Development	No.	3
Water Facility	No./Gal	4/2,100



*Juniper removal sites, stock water development*

# MISSION STATEMENT

*To maximize economic and environmental watershed values for Wheeler County residents by developing, conserving and protecting water, soil, plant structures and other natural resources.*

~ **Improve the health of the watersheds through holistic measures that enhance water quality and quantity, soil health and conservation for beneficial uses**

- Promote implementation of the Mid-John Day Agricultural Water Quality Management Area Plan.
- Promote and implement USDA Programs.
- Assist and promote watershed council activity.
- Seek funding for projects.
- Provide technical assistance to the public.
- Set strategic priority work areas.
- Implement District projects.
- Initiate major offensive against invasive species.
- Form or maintain partnerships with federal, state and local agencies and tribes.
- Promote relevant research and monitoring.
- Conduct watershed assessments/action plans/conservation planning.

~ **Provide education and outreach to the public**

- Produce newsletters and annual report.
- Organize tours and workshops for students, landowners and land managers.
- Participate in community activities.
- Partner with local schools to further natural resource educational opportunities.
- Develop funding source for public education activities.
- Provide AgWQMAP fact sheets and information for distribution.

~ **Manage the business of the district in an efficient and effective manner**

- Encourage staff and director development by attending workshops, conventions and training sessions.
- Meet state filing requirements for budget, audit and reports.
- Hold monthly board meetings and December annual meeting.
- Seek secure funding by exploring creative and productive ways to finance district operations and fund employee positions.
- Develop operational policies and procedures.

## BOARD MEMBERS

Jeremiah Holmes,  
*Chair*

Wayne Lindquist,  
*Vice-Chair*

Dave Hunt,  
*Secretary/Treasurer*

James Robert Collins

Rusty Rutherford

Jason Davis

Kale Haberman

## DIRECTOR EMERITUS

Ted Molinari

## ASSOCIATE BOARD MEMBERS

Amy Derby

Rob Wade

Non-Profit  
US Postage  
PAID  
Permit #8  
Fossil, OR

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