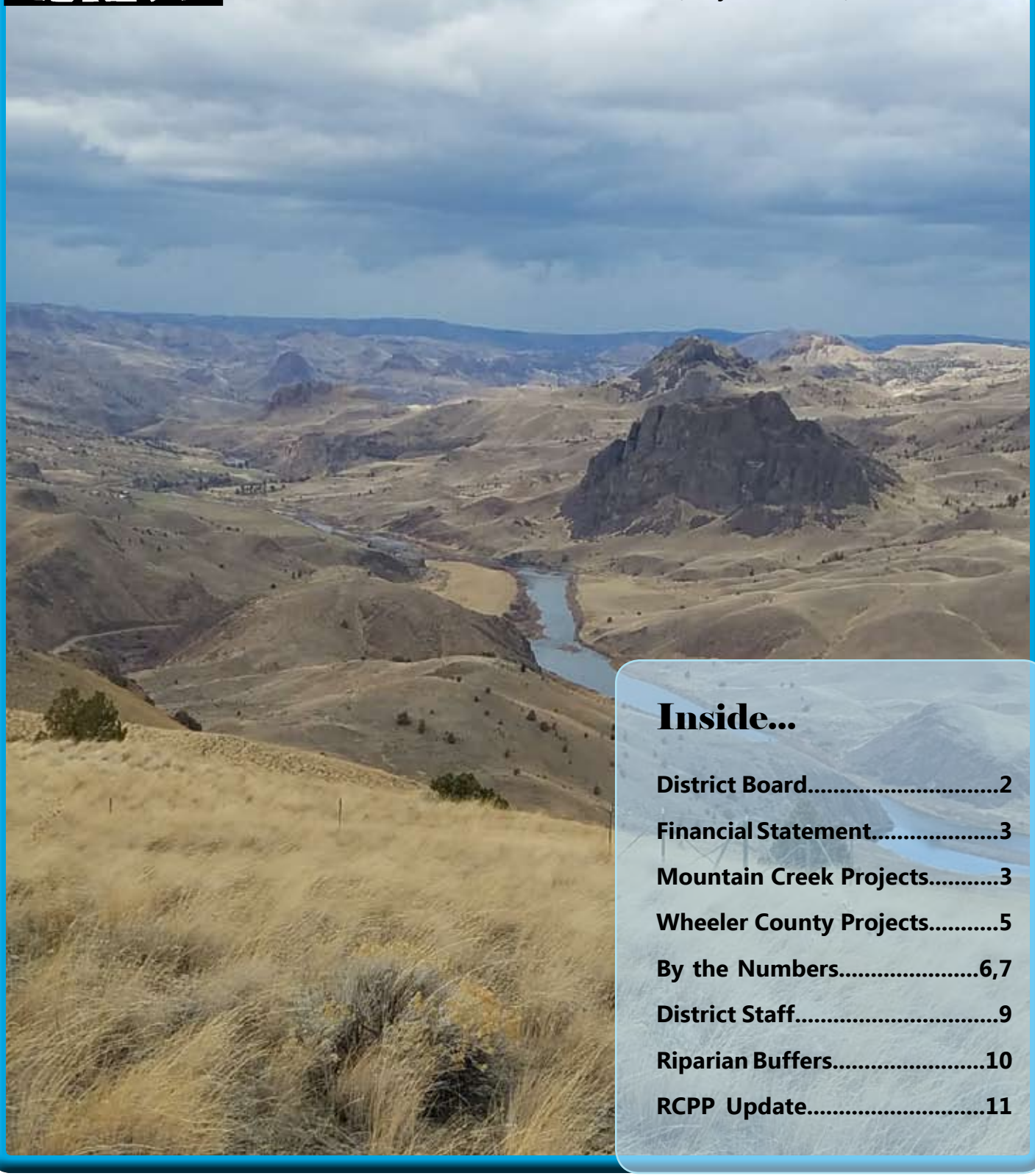
Wheeler Soil & Water Conservation District

Annual Report

July 1, 2018 - June 30, 2019



Inside...

Wheeler SWCD Board of Directors

Wheeler SWCD's Board of Directors had several changes in 2018-19. Matt Williams and Herb Jones resigned from the board after 32 and 11 years of service, respectively. They were honored at the 2018 Annual Meeting for their longstanding dedication to the work of the District and Wheeler County's agricultural community. Jason Davis, Dave Hunt, and Kale Haberman were newly appointed as Directors between October 2018 and March 2019.

At the January 2019 Wheeler SWCD Board meeting, Jeremiah Holmes was re-elected as Chairman. Jeremiah and his family have lived in the Spray area for eleven 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!

♦♦♦


Herb Jones


Matt Williams

From left: Dave Hunt, Jim Bob Collins, Kale Haberman, Jason Davis, Wayne Lindquist, Rusty Futherford, 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 Statues (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.

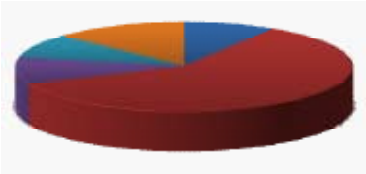
District Mission

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, 2018 - June 30, 2019

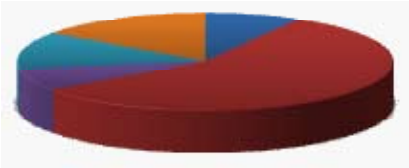
Revenues



- ODA Grants
- OWEB/OSWB Grants
- USFWS/USFS/BLM Contracts
- USDA NRCS
- BPA/CTWS Grants
- Other/Misc Income

Expenses

- ODA Grants
- OWEB Grants
- USFWS/USFS/BLM Contracts
- USDA NRCS
- BPA/CTWS Grants
- District Operating Costs



Beginning balance July 1, 2018	$702,629
REVENUES:	
Oregon Dept of Ag Grants	$78,488
OWEB/OSWB Grants	$524,640
USFWS/USFS/BLM Contracts	$0
USDA NRCS	$84,379
BPA/CTWS Contracts	$78,484
Other/Misc Income	$114,530
TOTAL REVENUES	$880,521
EXPENSES:	
ODA Grants	$78,488
OWEB/OSWB Grants	$530,463
USFWS/USFS/BLM Contracts	$0
USDA NRCS	$71,726
BPA/CTWS Contracts	$114,874
District Operating Costs	$143,271
TOTAL EXPENSES	$938,822
Ending balance June 30, 2019	$644,328

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.

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 seven open conservation projects, two technical assistance projects and several more that have been completed and are now in the monitoring stage. Three projects were completed between July 1, 2018 and June 30, 2019 and are described here.

Badger Creek Diversion #4

Badger Creek Diversion #4 Before

Badger Creek Diversion #4

The Badger Creek Diversion #4 project addressed a fish passage barrier and channel degradation caused by an irrigation diversion on Badger Creek. The existing metal diversion structure that required the installation of 12"-18" of boards to operate was removed and replaced with a stream simulation diversion that requires no instream work to allow the landowner to draw water. Stream features were added to improve the area around the diversion. The diversion site was also fenced. The project also installed 4,100ft of irrigation pipeline to allow better irrigation water control and reduce overland

Continued on page 4

Mountain Creek, continued

return flow to Badger Creek.

The project is located five and a half miles southeast of the town of Mitchell on Badger Creek, an important steelhead tributary of Mountain Creek in Wheeler County. This is the fourth highest diversion in the Mountain Creek watershed and is a significant barrier to fish passage. The diversion was identified during the Mountain Creek Reach Evaluation. The open ditch downstream of the diversion has been known to breach and dump sediment into the adjacent natural channel, causing negative water quality. The previous steel diversion required that 12"-18" of boards be installed to force water through the existing fish screen and into the irrigation ditch. Due to the elevation of the sill of the diversion in relationship to the fish screen, the boards were required to be installed at the start of the irrigation season. Without good control of the irrigation water the ditch often failed to contain the water and the overland flow returning to the creek caused erosion and negative inputs to Badger Creek.

The steel diversion was removed and replaced with a stream simulation diversion. This is the 5th similar diversion installed on Badger Creek and all diversions are continuing to perform well with little to no maintenance. The open ditch was replaced with a PVC pipeline which will allow for better water control. Only one open ditch remains of the landowner's original five. That remaining ditch will be converted to pipe in 2019. A measuring device was also installed as part of the project for better water control. Steel fencing was installed to protect the area surrounding the diversion and measuring device. The disturbed ground from the pipeline installation was reseeded.


Badger Creek Diversion #5

Badger Creek Diversion #5

The Badger Creek #5 diversion replaced a steel diversion, which required 12"-18" of channel spanning flashboards with a stream simulation diversion and steel headgate. The diversion served two separate landowners with a total of 2.6 cfs of water for 104 acres. The new diversion allows for fish passage of all life stages at all flows. The project installed two pipelines to convert 3,860 ft of open ditch. One is a conveyance pipeline to the second landowner and the other is a line for the first landowner to flood irrigate out of the risers which were installed every 40-60ft. The pipe installation will eliminate sediment breaches into the stream to improve water quality. A control box was installed which contains two separate weirs for flow monitoring of the two pipelines. The area around the diversion was fenced using approximately 600 ft of heavy duty fence and the area was planted with 50 caged trees/shrubs. 16 pieces of large wood were added for additional habitat.


Badger Creek Diversion #5


Badger Creek Diversion #5

The project is S-SE of the town of Mitchell on Badger Creek, a tributary of Mountain Creek in Wheeler County. This is the fifth-highest diversion in the Mountain Creek watershed and has been identified as being a barrier to fish passage during the Mountain Creek Reach Evaluation. The current diversion was replaced with a stream simulation diversion that allows for fish passage of all life stages at all flows. This design has proven to operate effectively in conditions found on Badger Creek. The area immediately around the diversion was fenced and the open ditch replaced with pipe. A measuring flume was installed at the back of the fish screen. Wheeler SWCD

Continued on page 10

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 2018-2019 fiscal year. The district is currently managing three open technical assistance grants and twelve open restoration project grants.

Middle Bear Creek Restoration

This restoration project, located on Bear Creek in SW Wheeler County, installed 21 beaver dam analogs (BDA) along a .37 mile stretch of Bear Creek that is subject to low and often intermittent surface flow during late summer/early fall, a period critical to the survival of juvenile steelhead. Project components included the installation of 21 beaver dam analog structures; providing a hands-on workshop for local restoration and contract implementers; monitoring water quality, quantity and fish presence; and a summary of monitoring information.

Being the largest tributary of Bridge Creek, Bear Creek represents an important spawning tributary for the summer run of steelhead that utilize the watershed. However, much of the main channel on Bear Creek is subject to low and often intermittent surface flow during summer, a period critical to the survival of rearing juvenile steelhead following emergence from gravel in the spring. Low and non-existent surface flows also contribute to high summer stream temperatures, lack of habitat quantity and complexity, and reduced riparian vegetation abundance and extent. These conditions render the Bear Creek watershed a population sink for threatened steelhead, in which a high rate of spawning adults produce few surviving juveniles capable of completing their life cycle.

Construction of 21 beaver dam analog (BDA) structures produced an immediate increase in surface water retention, surface discharge, and caused floodplain inundation that will result in riparian vegetation expansion. The project also monitored fish population and habitat to document the effectiveness of restoration actions in achieving desired hydrologic and biological responses. Wheeler SWCD hosted a restoration workshop which involved over 35 representatives from entities throughout central Oregon with the restoration implementation.

South Six Shooter Upland Restoration

This project is located in central Wheeler County, four miles north of the town of Mitchell. Historic encroachment of juniper has degraded native shrub and grass communities, increased overland erosion and reduced infiltration from rainfall in this semiarid ecosystem. The removal of western Juniper frees up valuable resources giving the native shrub and grass communities a chance to thrive. The OWEB project removed 400 acres of juniper, reseeded 40 acres of range, installed 2 upland livestock water developments, and protected one declining aspen stand. The reseeding of range ground will further promote the growth of bunchgrass communities, and the development of stockwater systems will distribute grazing patterns, reducing the risk of concentrated or overgrazing. Fencing was erected around one

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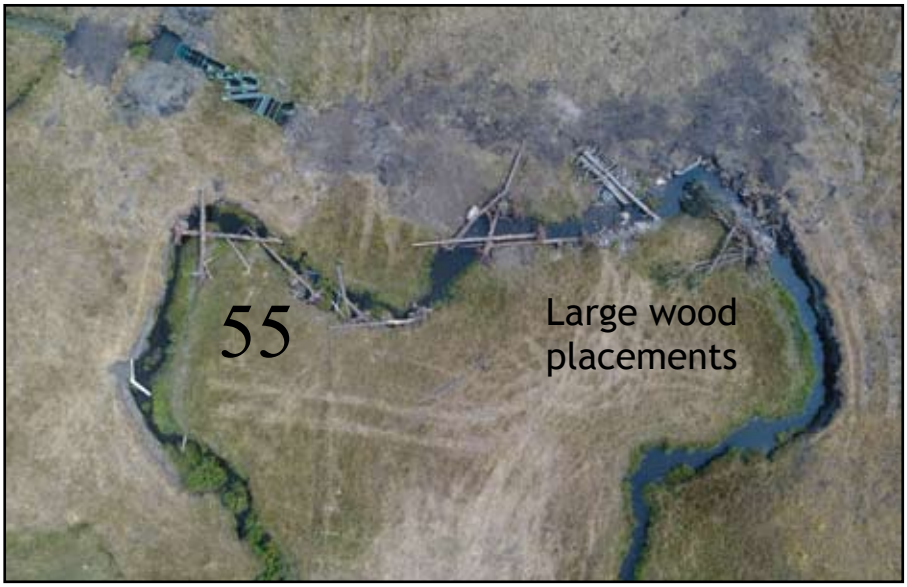
Wheeler Soil & Water Conservation District

2018-2019 Key Accomplishments
By the Numbers

21

Beaver Dam Analogs Installed



9

Conservation Plans Written

635

LANDOWNER
TECHNICAL
ASSISTANCE
CONTACTS

Wheeler County, continued

declining aspen stand to restrict woody browse from livestock and heavy duty caging was installed around existing saplings to restrict access to wildlife.

Treatment methods were selected using percent slope and juniper phase. The prescribed burn treatment of 90 acres was on old farm ground with less than 10% canopy cover and good herbaceous cover. The burn was performed by the landowner as in-kind. The mechanical treatment removed phase two juniper on slopes of less than 30%. A 'feller-buncher' was used on these sites, and a total of 700 acres were treated mechanically and piled, with 300 acres being funded by NRCS RCPP, and 400 being completed by the landowner as in-kind. The remaining 400 acres was all phase 2 juniper on slopes over 30%, and was treated by hand with chainsaws and funded by OWEB.


Bridge Creek Holistic Bridge

Bridge Creek Holistic Restoration

Bridge Creek is high quality steelhead spawning and rearing habitat located in Wheeler County. The section where work was performed had been bermed and the stream had been artificially confined with very limited floodplain access. There was a distinct lack of pools and holding water in this stretch with very little large woody debris. There was also a well-used ford crossing that was hazardous to the landowner at high water and detrimental to the in-stream habitat. The holistic aspect of this project involved the clearing of 80 acres of juniper trees. Many of the trees of sufficient size were used in-stream or within the floodplain in order to increase the habitat complexity of the nearby stream. There was an area of erosional concern at the upstream end of the project area. The stream was encroaching towards the road with very little buffer distance before vehicle passage would have been affected.

This project removed the berm and installed 90 logs within the stream and floodplain to provide enhanced habitat complexity. A total of 80 acres of juniper were cut as part of this project. The existing berm was removed and a new high flow channel was built through the floodplain. The erosional area was


South Six Shooter Juniper Removal

stabilized using a combination of rootwads and large rock as ballast. The ford crossing was replaced with a pre-fabricated steel bridge. 150 cuttings of cottonwood and willow were planted near the stream, mainly in disturbed areas, to enhance the recovery timeline and riparian area. The disturbed areas were treated for yellowstar thistle and seeded.

Bear Creek Juniper Removal

The project is located in the uplands of the Middle, and Lower Bear Creek watersheds, sub-watersheds of Bridge Creek, in Wheeler County. According to ODF&W, Bridge Creek and Bear Creek are two of the largest Steelhead producing streams within the region. These watersheds are heavily populated with the encroachment of Western Juniper, while the native bunchgrass understory remains relatively intact. The Juniper management sites were selected using NRCS Juniper priority criteria and treated using standard NRCS protocols. 89 acres of Western Juniper on slopes greater than 30% were selected to be hand fell using power saws, while 136.14 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.

Noxious Weeds

Wheeler SWCD, in cooperation with many landowners throughout the county, chemically treated over 380 acres, and placed biological controls (plant eating organisms) at 12 different sites on private lands, covering over 110 treatment acres. Noxious weeds that have been treated include- Russian knapweed, Scotch thistle, Yellow starthistle, Canada thistle, and Leafy Spurge. These species were chosen as the highest priority based on their financial burden and the infestation size throughout the entire county. Wheeler SWCD also hosted a county weed meeting where 15 landowners were present along with 5 weed control experts from various organizations.

As always, if you ever have any noxious weed questions or concerns, please call our office at 541-468-2990.

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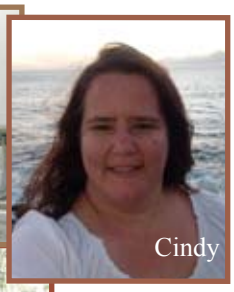
Wheeler SWCD Staff & Partners

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

For the 2018-19 fiscal year, **Judy Potter** served the Wheeler Soil & Water Conservation District as District Manager, overseeing all operational, personnel and fiscal components of the District.

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



Cindy Burlingame was the Administrative Assistant, and is responsible for WSWCD board meeting Director packets and minutes, quarterly and annual reports provided to the Oregon Department of Agriculture (ODA), Biennial Review and LMA oversight, and assists the District Manager and staff with a variety of 'business of the District' tasks.

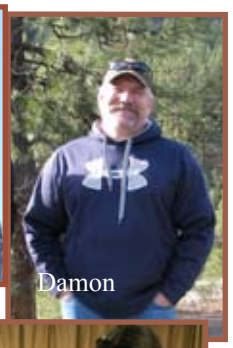
Chase Schultz was the Field Technician II. He works with landowners to navigate the Farm Service Agency Conservation Reserve Enhancement Program. He also serves as project manager for several district projects and the RCPP grant.

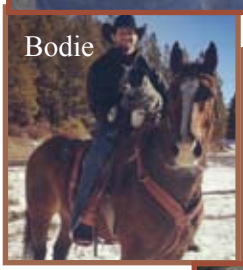
Bodie Brown was the District's Field Technician I. He manages the weed grants and is working with NRCS and landowners in the RCPP grant.

Debbi Bunch is the Watershed Technician for the Wheeler SWCD. Debbi serves as coordinator for the Mid-John Day-Bridge Creek Watershed Council, writing grants, managing projects, monitoring, managing the OWEB small grant program in Wheeler County and serving as the lead for the education and outreach program.

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

The 2019-20 fiscal year has already brought several changes to the staff. Judy Potter has retired, and Chase Schultz is the new District Manager. Bodie Brown has moved to the Field Tech II position and **Brook Moore** started as the new Field Tech I in August. Cindy Burlingame resigned as Administrative Assistant in October and **Cassi Newton** will fill that position in mid-December.





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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, 2018 to June 30, 2019.

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.

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Mountain Creek, continued

has previously corrected the four barriers upstream of the project site by replacing the four steel diversions with three 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.

Mountain Creek Passage-Marx Bridge

The project replaced a dual 48" culvert crossing on Mountain Creek with a 16'x 30' prefabricated steel bridge. Due to the culverts being undersized, velocities were higher than desired for fish passage. Velocities measured through the culvert during normal spring flows greatly exceeded natural stream velocities for similar flows. During low summer flows, the water depth through the cuvlerts measured less than 2 inches and made passage difficult to impossible.

The Wheeler SWCD has completed many passage projects on Mountain Creek and the dual culvert crossing represented one of the last barriers in the area. The project opened 4.3 miles of Mountain Creek to all life stages of salmonids.

The project installed a 16'x 30' prefabricated steel bridge with a stream simulation channel. The channel mimics the depths and velocities of the natural channel upstream and downstream of the bridge and as such, allows for full passage of all life stages of salmonids. This project is located directly below the landowner's diversion which was made fully fish passable through a previous project and is directly upstream of the multi-phased historic channel restoration project completed on the Table Mountain Cattle Company property.

Mountain Creek Fish Passage- Bridge

Mountain Creek Fish Passage- Hardened Crossing

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 4.89 miles and 127.63 acres were enrolled in the program in Wheeler County. Since CREP began in Oregon, over 9 miles and 2,114 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.

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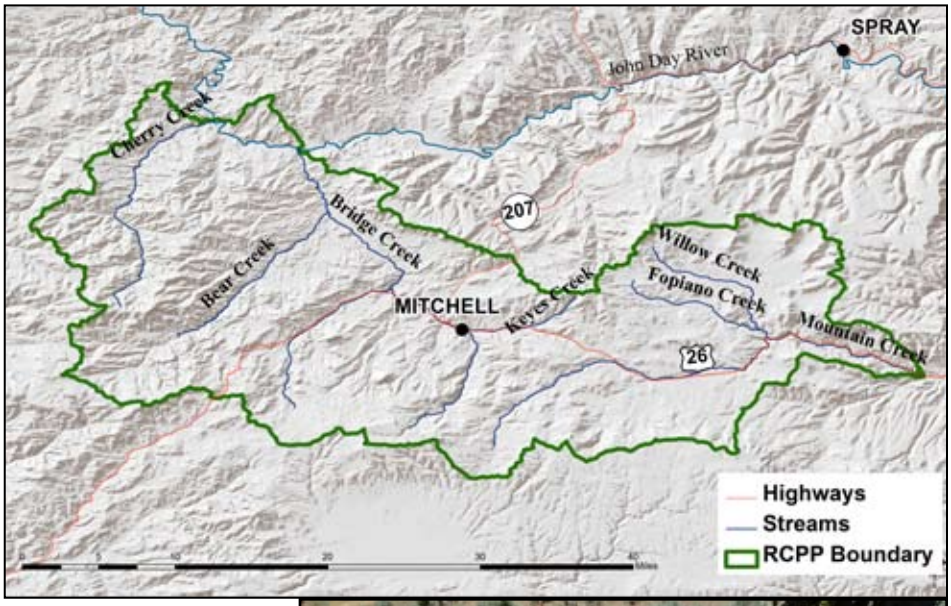
NRCS- Resource Conservation Partnership Program Grant Update

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 last year. The goal was to complete the project a year early and the hard work of all involved has accomplished that goal. 52 contracts have been approved by NRCS with a total obligation of about $3.4 million in project implementation cost-share.

Wheeler SWCD applied for a one year extension in December 2018 to close the Conservation Easement, and complete the technical assistance deliverables. Once those are met, the district will be eligible to compete in the renewal process for 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 Warms 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 Chase Schultz, at the Wheeler SWCD at 541-468-2990, or Damon Brosnan, NRCS at 541-384-2671, ext 107.

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From Top: Spring development, solar stock water development, and juniper removal

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, *Sec. Treasurer*

James Robert Collins

Rusty Rutherford

Jason Davis

Kale Haberman

DIRECTOR EMERITUS

Ted Molinari

ASSOCIATE BOARD MEMBERS

Amy Derby

Rob Wade

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