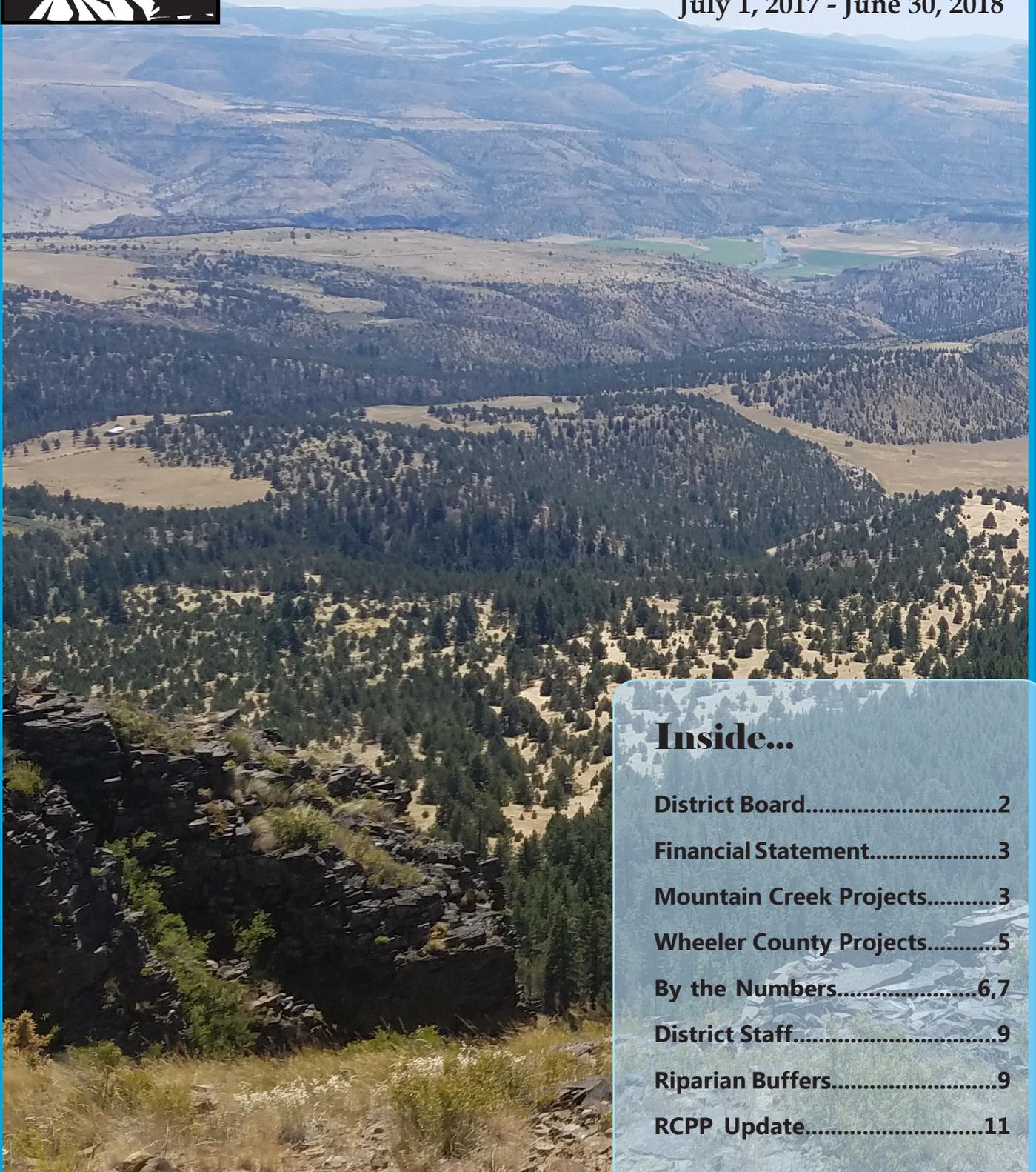




Wheeler Soil & Water Conservation District

Annual Report

July 1, 2017 - June 30, 2018



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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.

The District's Board of Directors

At the January 2018 Wheeler SWCD Board meeting, Jeremiah Holmes was re-elected as Chairman of the Wheeler Soil & Water Conservation District. Jeremiah and his family have lived in the Spray area for ten 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.

Matt Williams is the District's Secretary-Treasurer. He grew up in Twickenham, where he still lives and ranches today. Matt has served on the SWCD Board for 31 years.

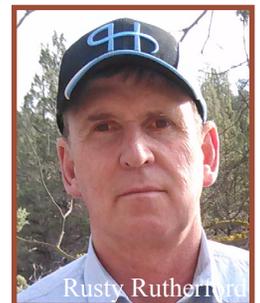
Ted Molinari and his wife have lived outside of Fossil for the past 27 years. Ted has served on the SWCD board for 20 years. Ted resigned from the Board in December 2017 and was appointed Director Emeritus.

Herb Jones has ranched east of Mitchell for 20 years, and served on the Board for ten years.

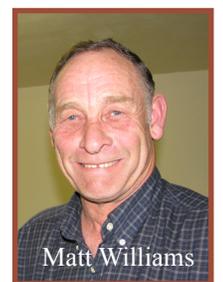
Jim Bob Collins ranches east of Mitchell and joined the Wheeler SWCD Board of Directors in 2011. Jim Bob's family has a long history with the Wheeler SWCD with his father and two uncles serving on the Board in the past.

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

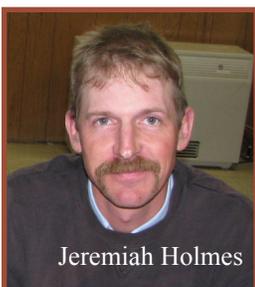
The District appreciates the service and dedication of the current Directors. Thank you for your service!



Rusty Rutherford



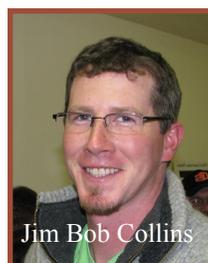
Matt Williams



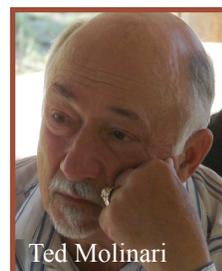
Jeremiah Holmes



Herb Jones



Jim Bob Collins



Ted Molinari

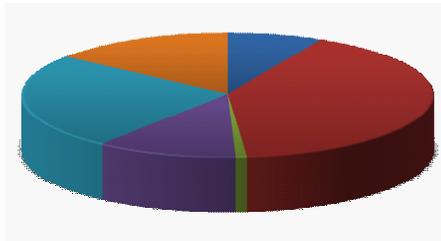


Wayne Lindquist

Wheeler SWCD Financial Statement

July 1, 2017 - June 30, 2018

Revenues



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

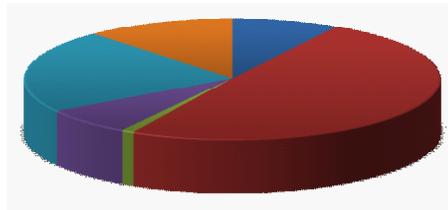
Beginning balance July 1, 2017..... \$593,086

REVENUES:

Oregon Dept of Ag Grants \$78,488
 OWEB/OSWB Grants \$424,962
 USFWS/USFS/BLM Contracts \$9,023
 USDA NRCS \$113,659
 BPA/CTWS Contracts \$260,397
 Other/Misc Income \$151,062
TOTAL REVENUES..... \$1,037,591

Expenses

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



EXPENSES:

ODA Grants \$78,488
 OWEB/OSWB Grants \$458,162
 USFWS/USFS/BLM Contracts \$9,023
 BPA/CTWS Contracts \$207,798
 District Operating Costs \$109,111
TOTAL EXPENSES..... \$928,048
 Ending balance June 30, 2018 \$702,629

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. Two projects were completed between July 1, 2017 and June 30, 2018 and are described here.

Badger Creek Diversion #3

The Mountain Creek watershed is listed within the John Day Basin Recovery Plan as a high priority watershed for the spawning and rearing of steelhead. Some of the key limiting factors for steelhead recovery as listed in that plan are fish passage, water quality, habitat complexity, and water quantity. To date, numerous projects have been conducted within the Mountain Creek watershed to address these limiting factors.

The Wheeler SWCD has completed the draft of the Mountain Creek Stream Reach Evaluation Project (OWEB grant #208-922). This evaluation process combined ODFW's Aquatic Inventories Project stream assessment criteria as well as NOAA and ODFW's fish passage criteria to determine the location and severity of Mid-Columbia Steelhead Recovery Plan



Badger Creek Diversion #3

limiting factors within the Mountain Creek Watershed. Due to the reach evaluation work, the Wheeler SWCD now knows



Badger Creek Diversion #3

the severity and location of all restoration needs on the primary flow reaches of the Mountain Creek Watershed. This knowledge will not only allow the Wheeler SWCD to

Continued on page 4

Mountain Creek, continued

efficiently direct restoration efforts, but will also help focus funding towards the holistic restoration of Mountain Creek.

This is the third highest diversion in the Mountain Creek watershed and was identified as being a barrier during the Mountain Creek Reach Evaluation. The diversion is not designed for fish passage when flashboards are in place.

There is also a complete lack of significant riparian shading along this reach of Badger Creek. Erosion of the stream banks through the project reach is also a concern. The data collected through the Mountain Creek Stream Reach Evaluation identified the restoration needs and severity at the proposed project site.

The project replaced the existing diversion on Badger Creek with a concrete encased steel headgate structure approximately 60 ft upstream of the old diversion location. Additionally 55 ft of the stream channel was regraded with a stream simulation consisting of large rock and cobbles for long-term channel stability. The stream bank was lined with rootwads, rocks and willow clumps for bank stabilization. The 120 ft. section between the new diversion and the fish screen was piped using 18” Hancor. This eliminated the ditch loss caused by the shallow ditch gradient, porous soils, and evaporation.

Indian Creek Diversion & Pipeline

This section of Indian Creek is a highly productive system providing cool water refugia with consistent cool flows throughout the year. Site visits showed a high density of salmonids present in the system. The previous ditch system had several problem areas along steep slopes that would wash out periodically, flushing a large amount of sediment into Indian Creek. Additionally a large portion of water was being withdrawn at the upper diversion. With the new system the majority of this withdrawal was relocated to the middle diversion thus keeping the water in-stream for a greater distance. Fish passage was also an issue at all of the diversion sites due to the gated pipe setups as well as a vertical drop off the back of the pipe at the upper diversion.

The project is located at three water diversion sites along Indian Creek. The sites are located 1-2 miles above the confluence of Badger and Indian Creeks, which combine to form Mountain Creek. Mountain Creek flows into Rock Creek, which in turn flows into the John Day River.

The streamside vegetation is in very good condition and large wood is extremely prevalent, particularly at the upper diversion. There is an abundance of pools, spawning size gravels, and very high habitat complexity. The land is primarily used for agriculture with a moderate cattle presence at certain times of the year.

The lower diversion site was decommissioned. The middle diversion site was replaced with a dual concrete headwall with two fish screens. The upper diversion site was replaced with a single concrete headwall and an accompanying fish screen.

Pipelines were installed from the middle diversion site – 2,500 ft. of 18” PVC was installed on the western pipeline and 2,200 ft of 21” PVC was installed on the eastern pipeline.

The upper diversion had 400 ft of 12” PVC installed out the back of the fish screen to allow for the measuring device to be installed.



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 2017-2018 fiscal year. The district is currently managing two open technical assistance grant and nine open implementation project grants.

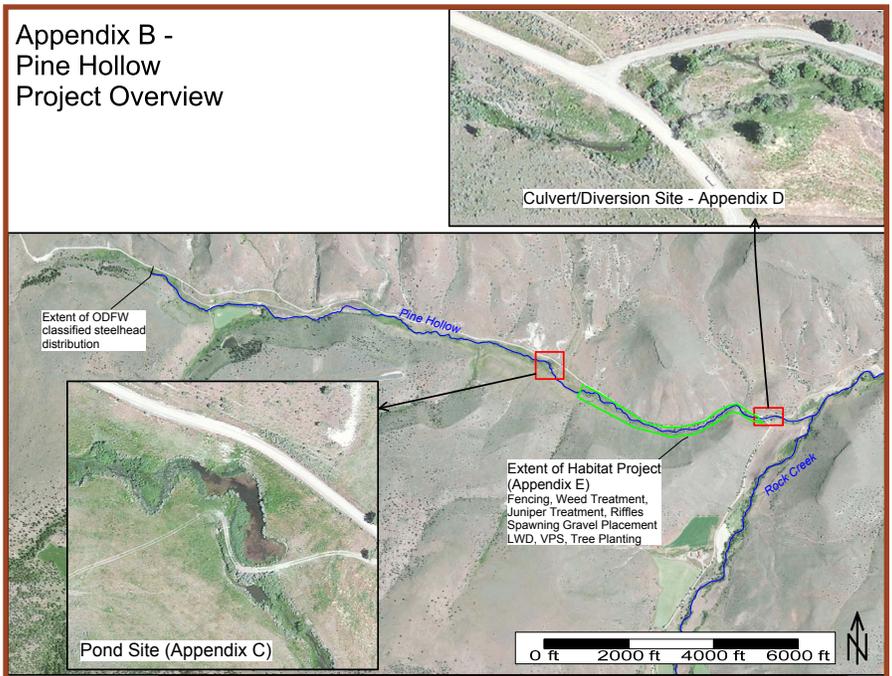
Pine Hollow Technical Assistance

Pine Hollow is one of the largest tributaries to Rock Creek and has a large amount of high quality steelhead habitat in its upper reaches including Shingle Creek. This TA grant served to produce a set of 90% designs that correct two passage barriers, provide for a fish-friendly (and screened) diversion structure on a previously unscreened point of diversion, and improve habitat throughout the reach. The designs are structured into three sets; Lower - includes the new diversion and a culvert replacement with a bridge, Middle - includes habitat improvements in a degraded reach, and Upper - restructures an inline dam and large jump barrier into a more natural stream system with full fish passage through a new culvert.

Rock Creek is a high priority steelhead stream system in the Lower John Day Basin. Pine Hollow is a listed steelhead tributary to Rock Creek located within Antone Ranch. The stream is highly visible as the main ranch road parallels it for over a mile. There are several issues in the lower reaches of Pine Hollow that are detrimental to steelhead production in the system: 1) a push-up dam diversion that is unscreened and unmetred, 2) a double perched culvert at the main road crossing, 3) an in-line pond with a perched culvert is a complete upstream fish passage barrier, 4) degraded in-stream habitat with a lack of complexity, and 5) unrestricted cattle access to the stream and riparian areas. This project sought to develop designs that would alleviate all of these issues on Pine Hollow and return the stream to full functionality.

Work Done

For this project Wheeler SWCD contracted with the District's engineering firm (RSI) to develop 90% designs that would address the concerns previously identified in Pine Hollow. The project area was divided into three distinct project zones, Lower, Middle, and Upper. Ninety percent engineering designs were developed for each of the project zones.



LOWER

The Lower Pine Hollow design set addresses the road-stream crossing and the diversion located just downstream. The existing road-stream crossing consists of dual four foot culverts. The culverts are perched and present partial passage barriers in terms of step height as well as velocity through the culverts. The design calls for the culverts to be replaced with a 24' wide by 25' long prefabricated steel bridge. The channel will be constructed at a 3% slope and will incorporate a low flow channel and habitat stones for added stream complexity. The diversion will be replaced with a concrete headwall style diversion which will use large stones to direct the water in a manner that will keep the point of diversion scoured out and maintenance free. This design has been used successfully on several neighboring stream systems of similar size. The water will be piped ~250' to the site of the new fish screen. The fish screen

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Wheeler Soil & Water Conservation District

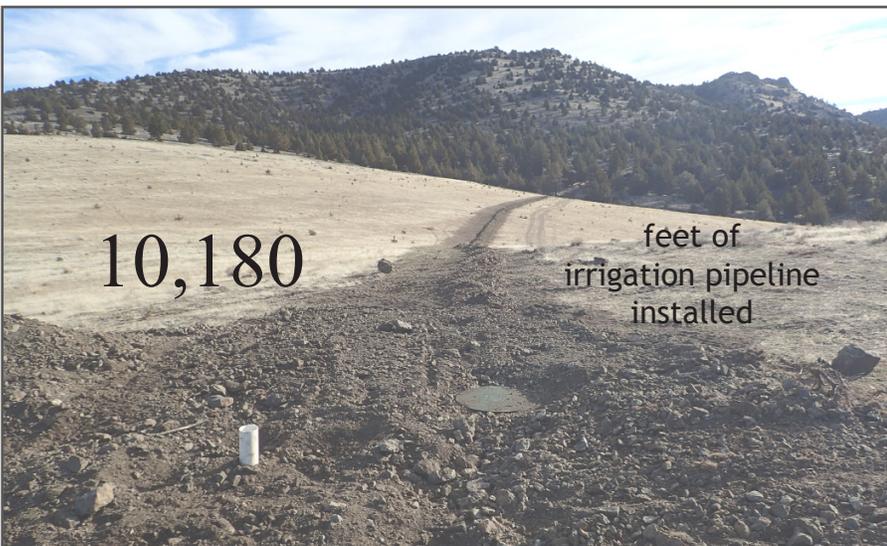
2017-2018 Key Accomplishments By the Numbers



Water troughs installed

2

Conservation Plans Written



10,180

feet of irrigation pipeline installed



Funding applications submitted



1

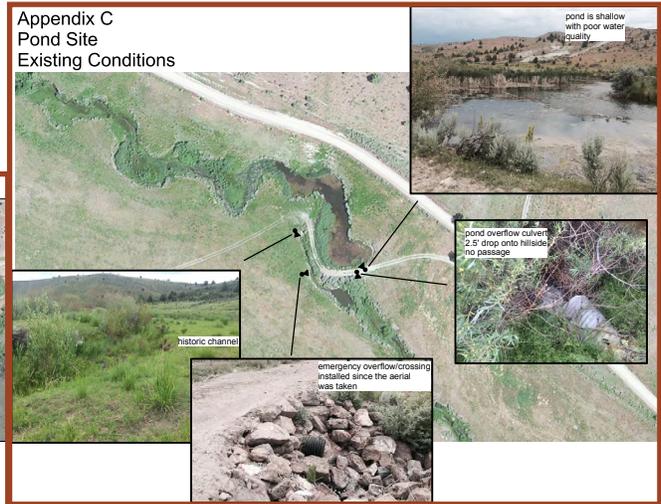
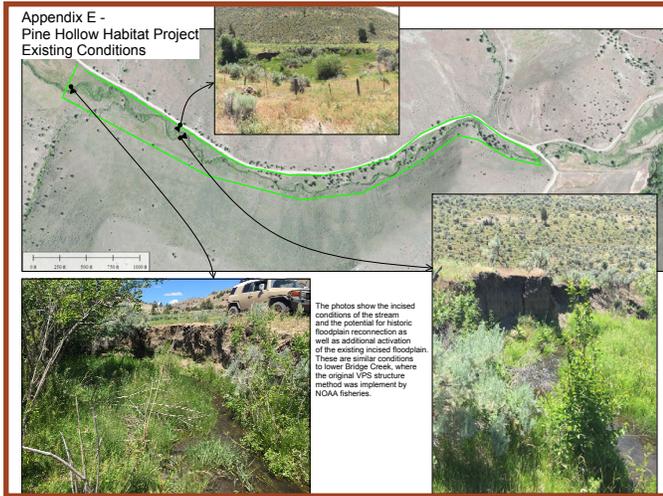
Agricultural Water Quality
Management Plan Biennial
Review Meeting



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LANDOWNER
TECHNICAL
ASSISTANCE
CONTACTS

will incorporate a flow measuring device in order to monitor and regulate the withdrawal rate. Eighteen rootwads are incorporated into the design for channel complexity, habitat, and bank stability. Exclusion fencing as well as caged riparian plantings are specified for site rehabilitation.



MIDDLE

The Middle Pine Hollow design set addresses degraded in-stream conditions on a 4100' section of Pine Hollow in between the road crossing at the lower end and the pond at the upper end. This section of stream is highly incised with tall vertical actively eroding banks. There is an inset floodplain in portions of this section but for the most part the stream has become disconnected from the floodplain. The design for this section prescribes the installation of 43 vertical post structures and 61 trees with rootwads (in 25 structures). The vertical posts will be installed such that the maximum height difference between neighboring structures is no more than one foot. There will be a minimum of one foot between posts and the posts located in the center of the channel will be 2-3" lower than the neighboring posts. There will be a total of 1038 six-foot fir posts that will be sharpened on one end. The posts outside of the main wetted channel will be cross drilled and willow whips will be inserted and installed with the posts. There is a substantial amount of juniper in the riparian area, these trees will be removed with their rootwads and used in-stream. No riparian planting is specified for this section besides the willow whips as there is a healthy riparian community through the majority of the section. Upon project completion ODFW will fence the riparian area. The design and layout of the fencing is being worked on by ODFW.

UPPER

The Upper Pine Hollow design set addresses the passage barrier at the existing pond located approximately one mile upstream from the road crossing addressed in the Lower Pine Hollow design. The existing outlet from pond runs through a culvert underneath a road and is perched several feet in the air resulting in no upstream fish passage. The design calls for

dropping the pool elevation of the pond and converting some of the currently inundated area into wetland. The small perched culvert will be replaced with a 15' wide, 5'8" high, 40' long bottomless plate arch culvert in order for the landowner to maintain their crossing. The stream channel will be regraded incorporating large habitat stones, a low flow channel, and pool habitat. A total of 550' of stream channel will be constructed in order to smoothly match the upstream and downstream channel elevations. The pond/wetland area will be augmented with whole trees and rootwads in order to enhance the habitat complexity. Part of the site restoration will include planting and caging 100 riparian trees. The final design will include a layout and specifications for a riparian exclusion fence.

Yellow Starthistle Treatment Project

This project treated Leafy Spurge above the high water mark along the banks of the John Day River. Coordinated treatment between multiple landowners (including the Bureau of Land Management) will protect the relatively uninfested lower stretches of the John Day. This is the third year of treatment for the area between Kimberly and Service Creek. On the 12 miles between Spray and Service Creek leafy spurge infestations remain small and isolated. The upriver 13 mile stretch from Spray to Kimberly has larger and more frequent patches. The goal of this project is to protect as relatively spurge free the lower Spray to Service Creek section of the project area by relieving propagation pressure from the Kimberly to Spray section of the river corridor. This will be accomplished by reducing both the density and extent of leafy spurge patches throughout the project area. It is intended that this and previous projects will keep the leafy spurge population at a minimal level for another ten years.

Three landowners participated in the cost share project with the district purchasing the herbicides and the landowners doing the application work. A total of thirty net acres was sprayed at three separate locations along the John Day River in the fall of 2016. One landowner had to retreat the leafy spurge site on her property again

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.

Judy Potter serves the Wheeler Soil & Water Conservation District as the 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 is 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

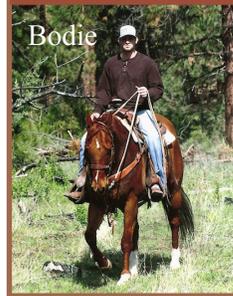
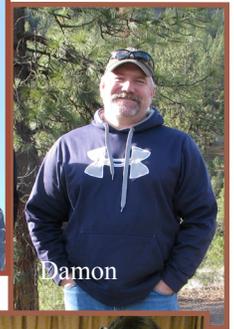


(ODA), Biennial Review and LMA oversight, and assists the District Manager and staff with a variety of 'business of the District' tasks.

Chase Schultz is 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 hired as the Field Technician I in April. He is managing the weed grants and working with NRCS and landowners in the RCPP grant.

Debra Bunch is the Watershed Technician for the Wheeler SWCD. Debbi serves as coordinator for the Mid-John Day-Bridge Creek Watershed Council, as well as writing grants, project management, 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.



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 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, Chase Schultz. Responsibilities include helping landowners navigate the program paperwork, assessing the property to see if it qualifies and writing the conservation plan.

This year 8.99 miles and 184.3 acres were enrolled in the program in Wheeler County. Since CREP began in Oregon, over 104 miles and 1,986 acres of riparian exclusion buffers have been enrolled in Wheeler County.

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



Wheeler, continued

in the spring of 2017. Each landowner received 2.5 gallons of MSO Concentrate, one gallon Plateau and one quart Blue Dye. The respray landowner received one gallon Plateau, one quart Blue Dye, one gallon Phase, one quart Milestone and 2.5 gallons of E2. The first spray application covered 30 net acres and the respray area covered 11 net acres.

This project treated leafy spurge above the high water mark along the banks of the John Day River from Kimberly to Service Creek. Leafy spurge has been encroaching onto valuable recreational lands in the area along the John Day River corridor. Coordinated treatment with multiple landowners and BLM will help protect the relatively uninfested lower stretches of the John Day between Spray and Service Creek.

Early Detection Rapid Response

The Wheeler SWCD has developed an Early Detection Rapid Response (EDRR) program within its borders with OSWB funding utilized from 2013-2017 to help fund survey, monitoring and weed database creation. This project will help fund the continuing effort to prevent new infestations of invasive species through monitoring, timely treatment, and database maintenance. There is currently no local mandate for invasive species control within Wheeler County. This has been the political situation historically, and will be for the foreseeable future. This lack of enforcement combined with a demographic shift away from agriculture towards recreational/retirement land use has led to a situation ripe for establishment of new invasive species. Funding for EDRR materials provides an incentive for landowners to treat newly discovered sites quickly.

Twenty eight sub-watersheds have been monitored for EDRR weeds under this project. Monitoring was achieved utilizing public roadways, on private lands as permission was granted and floating specific sections of the John Day River. Monitoring of the sub-watersheds was conducted beginning in March 2016 thru November 2016 and finished in March thru April 2017.

Currently in Wheeler County, we have two grants ongoing that focus on treating, surveying, monitoring, outreach, and technical assistance for noxious weed species.

- The 2018 Early Detection Rapid Response grant



Saltcedar



Yellow Starthistle



Mediterranean Sage



Yellow Starthistle

focused on surveying and locating high priority weed species that are “A” listed weeds. Noxious species on this list are considered a weed of known economic importance (highly invasive), while not currently being known to exist or occurs in small infestations. Several species were mapped throughout the county, which will allow us to rapidly develop a plan to manage and eradicate these species.

- The 2018 Tri-County Yellow Starthistle Grant is funded through the Oregon State Weed Board. For this grant, Wheeler SWCD identified 11 project sites that had large infestation of yellow star totaling in 400 acres of weeds to be treated, surveyed and monitored. Matt Wenick, from Grant County SWCD, is our contract applicator for this grant. To date, 60 acres have been sprayed with the remaining acreage to be treated this winter or early spring, weather depending.

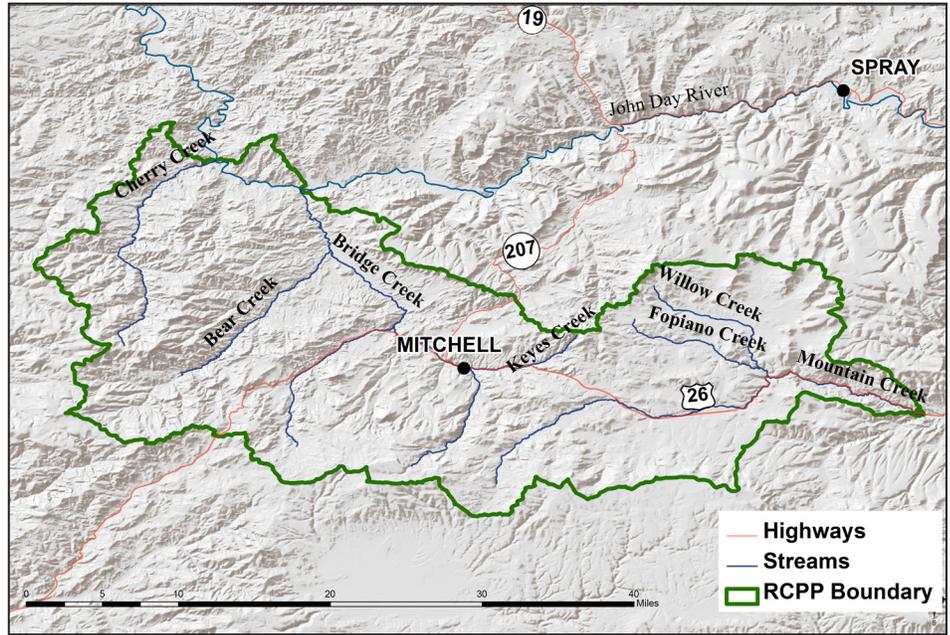
Current grants being submitted for 2019 cycle include:

- Biocontrol grant that will focus on releasing insects to limit the spread and establishment of Russian Knapweed, Canada Thistle, and Leafy Spurge. This grant, if funded, will have 15-20 site releases throughout Wheeler County
- Phase Two of Tri-County Yellow Starthistle Grant: This grant will be a continuation of the current Yellow Starthistle grant and will expand our current treatment areas and expand to other private lands that have Yellow Starthistle present.



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 will use 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.



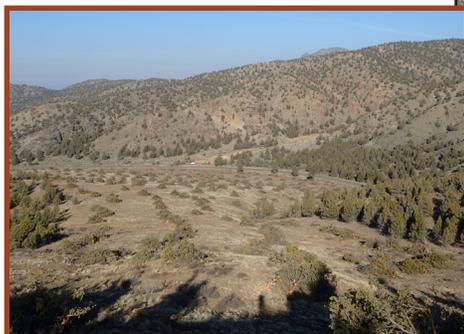
The Wheeler Soil and Water Conservation District and USDA Natural Resources Conservation Service continue to implement the North Slope Ochoco Holistic Restoration Project with four years of the five year project ended. The goal was to complete the project a year early and the hard work of all involved has accomplished that goal. To date 52 contracts have been approved by NRCS with a total obligation of about \$3.4 million in project implementation cost-share.

The 2018 contracted conservation elements in the North Slope Ochoco Holistic Restoration Project include approximately:

- 15,377 feet of irrigation efficiency and improvement
- 1,434 acres juniper removal
- 19 spring developments

The Wheeler Soil and Water Conservation District has spent the last four years seeking match funding for the project and has successfully secured approximately \$3 million in non-federal funds. These funds are 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 Chase Schultz, at the Wheeler SWCD at 541-468-2990, or Damon Brosnan, NRCS at 541-384-2671, ext 107.



From Top: Spring development and juniper removal site, solar stock water development, and juniper removal site in Bear Creek



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

Matt Williams,
Sec. Treasurer

Herb Jones

James Robert Collins

Rusty Rutherford

DIRECTOR EMERITUS

Ted Molinari

ASSOCIATE BOARD MEMBERS

Amy Derby

Rob Wade

Dave Hunt

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