



# Lake County Umbrella Watershed Council Annual Report 2018



Lake County Umbrella WSC  
17482 Tunnel Hill Rd.  
Lakeview, OR. 97630  
541-219-0830  
[schreder@centurytel.net](mailto:schreder@centurytel.net)

## 2017 Board & Staff

- Tom O’Leary – Silver Lake Community Watershed
- Pete Talbott – Goose Lake Basin Watershed
- John Taylor – Warner Valley Watershed
- Roger Linton – Crooked Creek Watershed
- Matt Withers – Upper Sycan Watershed
- Jack O’Leary – Upper Chewaucan Watershed

Watershed Council Program & Project Manager: *Marci Schreder*

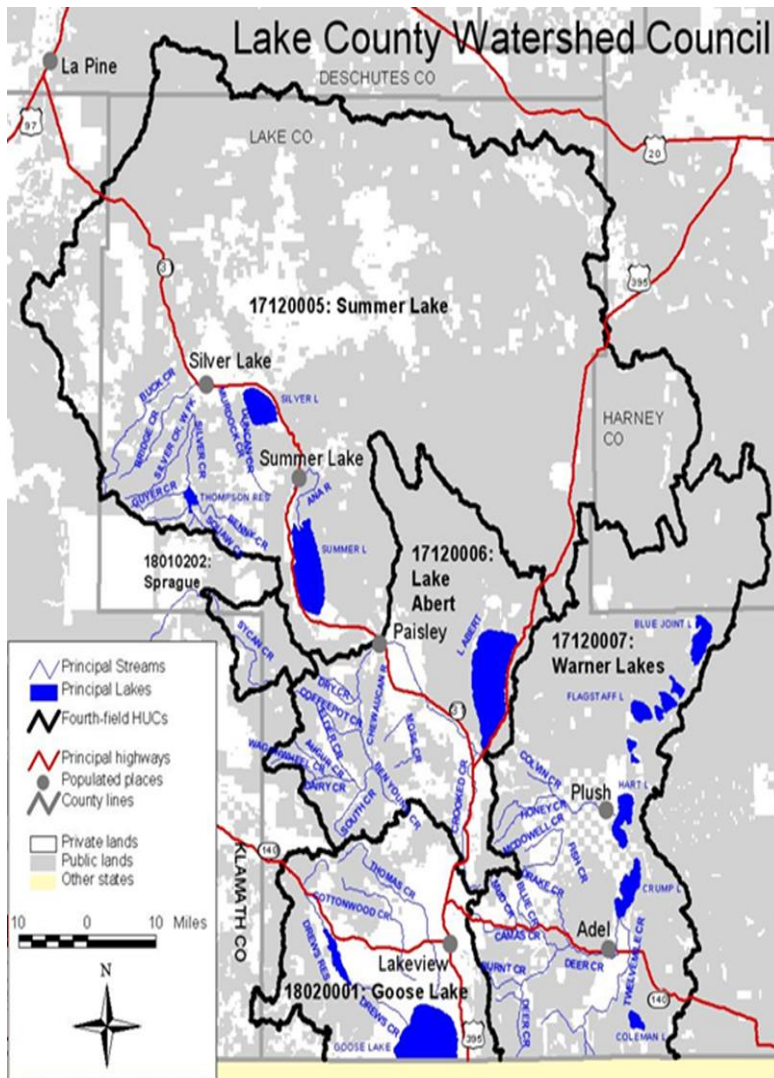
Fiscal Manger & Education Coordinator: *Colleen Withers*

### TECHNICAL ASSISTANCE MEMBERS

- Bureau of Land Management
- Oregon Department of Fish and Wildlife
- Lakeview Soil and Water Conservation District
- US Forest Service
- Oregon Department of Forestry
- Oregon State University
- US Fish and Wildlife
- Natural Resource Conservation District



## 2018 Projects & Mission Statement



### Mission Statement

The Lake County WSC strives to promote cooperative watershed restoration across jurisdictional boundaries, to better Lake County's watersheds and people.

SINCE 1996, THE LAKE COUNTY WSC HAS COMPLETED OVER 150 RESTORATION PROJECTS COUNTY WIDE. THE FOCUS FOR 2018 HAS BEEN RESTORATION ACTIVITIES INCLUDING PLANNING, PARTNERSHIP COLLABORATION, DESIGN, IMPLEMENTATION AND MONITORING.

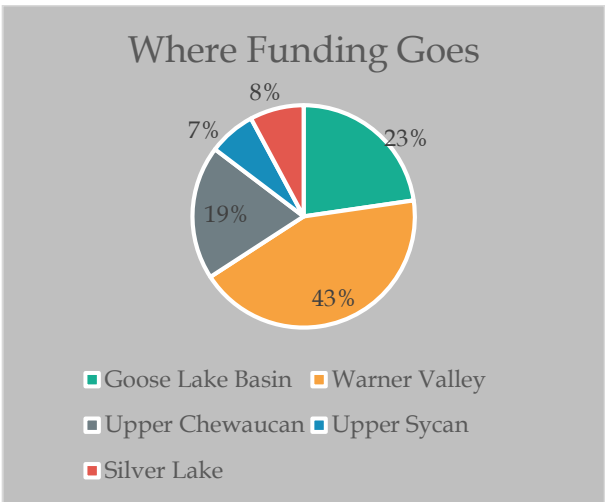
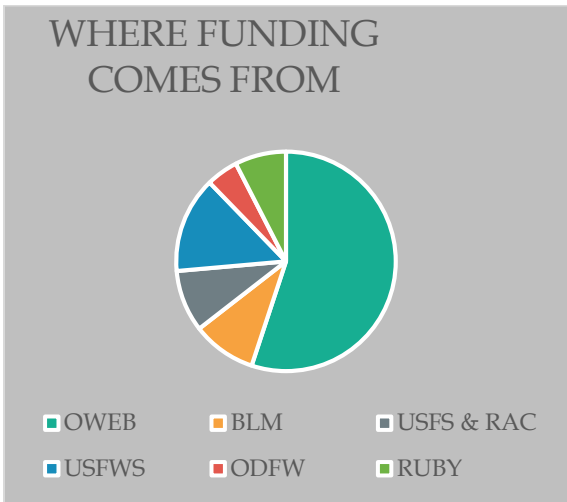
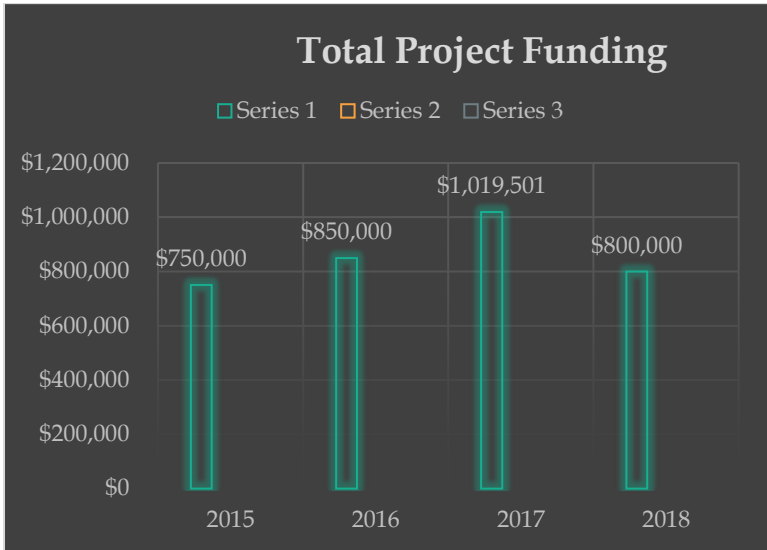
### Implementation

- 1) Warner Basin Aquatic Habitat & Fish Passage
- 2) North Warner Forest Health
- 3) Crooked Creek Stream Restoration Phase IV
- 4) Upper Thomas Creek Stream Restoration
- 5) Cox Flat Spring Development
- 6) Camp Creek Streambank Stabilization
- 7) Westside Juniper Removal
- 8) Muddy Creek Aspen Stand Enhancement
- 9) Upper Sycan Upland Enhancement Phase III
- 10) Silver Creek Riparian Fencing
- 11) Upper Sycan Juniper Removal
- 12) Dog Creek Upland Enhancement
- 13) Paisley Town Weir Baffle Install
- 14) Chandler State Park Kiosk

### Planning & Design

- 15) Thomas Creek Fish Passage
- 16) North Warner Forest Health II
- 17) Warner Basin Aquatic Habitat Strategic Action & Design Plan
- 18) Cogswell Creek Recon & Design

# 2018 Funding





# Upland Forest Health Treatments

2018

## NORTH WARNER FOREST HEALTH PROJECT

Managing landscapes from ridgetop to ridgetop is a successful strategy to improve overall watershed function. Everything that occurs in the uplands affects water release, capture, and storage throughout the landscape. This type of management benefits timber stands, habitat for fish and wildlife, and working landscapes. Ridgetop-to-ridgetop restoration is possible through collaborative partnerships and quality planning followed by implementation. Because of this strategy, we can meet multiple resource objectives from the top of the watershed to the meadows and water bodies below. This trickle-down effect benefits natural resources, protects private and public lands, and positively impacts the economy.

### 1. North Warner Forest Health:

The North Warner Landscape covers 410,000 acres where private landowners and agencies are working across ownership boundaries to promote forest health and fire resiliency. Within this larger landscape, the North Warner Multi-Ownership Forest Health Project encompasses approximately 150,000 acres and focuses on dry forest restoration. This Project is unique due to the extensive stands of old legacy ponderosa pine intermixed with aspen and meadows, with greater sage grouse focal habitat immediately adjacent to the north and east. The landscape is at a severe risk of uncharacteristically intense disturbance due to heavy fuel loading and stand densities.

### 2. 2017-2018 Treatments:

Partnership collaboration between ODF, USFS, NRCS, OSU Extension, Lake County Watershed Council and 20 private landowners has led to forest health thinning on 5,082 acres private land, and 21,351 acres in the National Forest. Slash pile burning will begin this winter as conditions are appropriate.

### 3. North Warner Phase II:

The NRCS and Lake County Watershed Council were both awarded funding for a second phase

of forest health thinning for 2019 - 2021. Ten new property owners will be participating in these efforts, with a goal of thinning another 5,000 acres. This funding and treatment area ties directly into the Fremont Winema's project focal area, which is the Crooked, Mud and Honey Creek watersheds. The National Forest plans to treat another 12,800 acres within this unit.

### 4. Aspen Stand Enhancement:

Aspen stands provide valuable habitat for mule deer and other wildlife. To keep these stands healthy thinning out encroaching conifer and juniper trees is valuable for future recovery and sustainability of the aspen stand. This project removed 40 acres of juniper from within and around the aspen stand perimeter. This project was funded by OWEB and the property owner.

### 5. Upland Juniper Treatment:

The Lake County Watershed Council in partnership with two private landowners in the Sycan and Goose Lake Watersheds treated 70 acres of juniper this season. This project will improve vegetation condition, remove dense canopy cover, and increase available water resources.



# Stream Restoration 2018

The Watershed Council's in-stream projects focus on enhancing stream condition, improving fish habitat, and providing fish passage for native species. These projects are implemented in collaboration with numerous local property owners and state and federal partners. Focal projects are highlighted below.




Design Set-Deep Creek Rock Ramp Fishway/Diversion Dam

The Warner Basin Aquatic Habitat Partnership (WBAHP) which includes the Lake County Watershed Council, SWCD, BLM, ODFW, USFWS, and USFS is focused on improving fish passage and habitat for Warner sucker and Warner Lakes redband trout. The WBAHP has identified specific projects to improve fish passage and habitat on Twentymile, Deep and Honey Creeks. The WBAHP will be placing grant funding into these projects over the next 6 years. Species recovery for Warner sucker, a T&E listed species is the overall all goal of these projects.

**WARNER BASIN AQUATIC HABITAT PARTNERSHIP**  
 WARNER BASIN FISH PASSAGE AND HABITAT IMPROVEMENT INITIATIVE

**INITIATIVE GOAL:**  
 RECOVER WARNER SUCKER AND RESTORE WARNER LAKES REDBAND TROUT POPULATIONS BY IMPROVING FISH PASSAGE AND STREAM CORRIDOR HABITAT IN THE WARNER BASIN.

- ONGOING COORDINATION WITH 35 WATER USERS IN THREE IRRIGATION DISTRICTS
- SUCCESSFUL PROJECT RECORD WITH COMPLETION OF 10 FISH PASSAGE AND SCREENING PROJECTS
- SECURED PARTNER MATCH FUNDING INCLUDING UP TO \$2.6M FROM OPEN RIVERS FUND
- IMPROVED FISH ACCESS TO 30+ MILES OF HIGH QUALITY HABITAT
- COLLABORATE WITH RURAL COMMUNITIES TO PRESERVE WORKING LANDSCAPES




Twentymile, Deep and Honey Creek Projects Head Towards Species Recovery



Deep Creek Town Diversion Fish Passage and Irrigation Efficiency Project

**Meadow Hydrology**  
**Mule Deer & Water Bird Benefits**




Pre-Project: 2016      Post-Project: 2017

**2. Thomas Crk. Restoration**

Multiple restoration projects have been completed in the last 4 years in the Upper Thomas Creek Watershed on private and National Forest land. Restoration treatments improved habitat diversity, stabilized headcuts, provided opportunity for stream and floodplain connection, expanded fish passage, and improved grade control.


**Upper Thomas Creek Stream Restoration**



**1. Crooked Creek Stream Restoration**

Extensive restoration efforts have been conducted within the Crooked Creek Watershed in the past three years, with over 30 projects completed on private land to improve overall watershed health. Project focus is stream channel function, meadow hydrology, and fish passage. Flood irrigation improvement projects were also conducted.

**Camp Creek Streambank Stabilization**



**3. Camp Creek Restoration**

Healthy streams promote aquatic life, and nurture surrounding lands. A healthy stream dissipates energy, holds water during a drought, and helps recharge underground aquifers. This project stabilized eroding streambanks, added stream channel diversity, habitat, & large wood for complexity.

HAND ON ACTIVITIES & DUTCH OVEN COOKING!

NATURAL RESOURCE OUTDOOR SCHOOL



TAKE IT TO THE WOODS - EDUCATION

The Lake County Umbrella Watershed Council actively pursues opportunities to work with Lake County youth. We seek to educate the next generation of watershed stewards through meaningful educational experiences. Our goal is to enhance education and provide students with hand-on knowledge of their local watersheds.

# Watershed Education



Lake County Fair & Roundup

FAST FACTS

200+

Students participate in Watershed Programs in 4 Days!

- Coordinated education programs for 2 local schools.
- Provided educational materials, programs, presentations for each outdoor school.
- Coordinated over 20 local volunteers to assist with education programs. (USFS, OSU Extension, Local talent, ODA, Badger Creek Wildlife Rescue, ODFW).
- Partnered with Lakeview High School Field Biology class to conduct hands on monitoring activities for students on Cox Creek.
- Recruited local high school students to assist with willow planting along Lake County streams.
- Created a Watershed display at the Lake County Fair to demonstrate the type of opportunities the Watershed Council offers. The display showcased restoration work taking place throughout the county.



**2018** brought several educational workshops, tours, and speaking opportunities for the Lake County Umbrella Watershed Council to participate in. This series of events kicked off in January and continued through the summer months. Because Lake County is so diverse there are multiple opportunities to share experiences, knowledge, and science. The result is a shared understanding of how these unique landscapes function while we maintain our rich heritage in ranching, timber management, and hay/alfalfa production. These events included the following:

- **OWEB Review Team Tour**
- **Connect Conference Forest Health Presentation**
- **County Commissioners Presentation**
- **Partner Presented Pile Burning Workshop**



## OUTREACH & EDUCATION

Restoration and management improvement projects have occurred across the Crooked Creek Watershed.

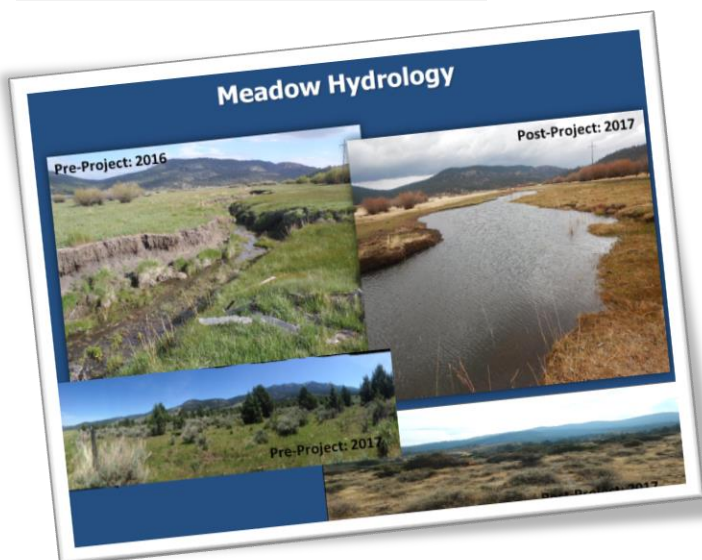
Although each project focuses on one resource and a small corner of the watershed, collectively these projects provide a working landscape with healthy wildlife habitat throughout the watershed system.

Multiple projects have and will continue to be completed within this watershed. This large landscape level project addresses upland timber stands to the

# Watershed Monitoring

### PRE -AND- POST PROJECT RESULTS

Valuable information is gathered through monitoring efforts.





### Planning Strategies for 2019:

- Landscape Projects
- Quality Collaboratives to reach conservation goals for Lake County
- Maintain Working Landscapes
- Address Issues Associated with Drought
- Water Storage
- Forest Health
- Water, Fish & Wildlife
- Reduce Noxious Weed

### Conservation Challenges -Lake County:

- Desert Fish
- Juniper Encroachment & Forest Health
- More Catastrophic Fire
- Drought
- Sage Grouse
- Rangelands – Grasses – Grazing
- Sonec Region - Wetland Water Birds
- Water Storage
- New Regulations

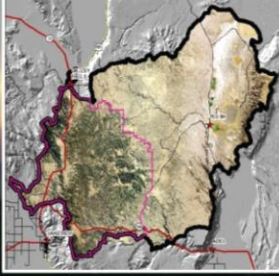
Our goal is to improve restoration practices so that complex issues are resolved. To do this restoration must be flexible and long lasting.

#### MANAGEMENT CONSIDERATIONS

**Landscape Scale Restoration for Conservation, Restoration & Utilization**

**Management Considerations:**

- Fish Habitat & Passage
- Stream Temperature
- Stream Channel Instability
- Streambanks
- Fires
- Noxious Weeds
- Habitat for Mule Deer
- Climate – Drought
- Forest Health
- Wetlands & Waterfowl
- Riparian Vegetation
- Declining Sage – Steppe Habitats
- Working Landscapes



#### HIGH PRIORITIES

**Priorities of Significance to the State - Limiting Factors**



Aquatic Habitat for Native Fish Species      Dry-type Forest Habitat

Sagebrush/Sage-steppe Habitat      Closed Lakes Basin Wetland Habitat

#### Watershed Council Goals

**LCUWC's Goal: Planning Followed by Action**

1. Collaborative Working Groups
2. Scale – Landscape Size – Large Enough to Make a Difference
3. Science Based Restoration
4. Monitoring – Evaluation of Success or Failure
5. Adaptive – Every Project is Different




## To Learn More About the Lake County Umbrella Watershed Council:

**Visit:** [lakecountywsc.com](http://lakecountywsc.com)

**Write:** 17482 Tunnel Hill Rd., Lakeview, OR. 97630

**Call:** Marci Schreder – Program & Project Manager at 541-219-0830

Colleen Withers – Fiscal Manager & Education Coordinator at 541-610-3134

**E-Mail:** [schreder@centurytel.net](mailto:schreder@centurytel.net) or [lakecountywscedu@yahoo.com](mailto:lakecountywscedu@yahoo.com)



# Project Planning

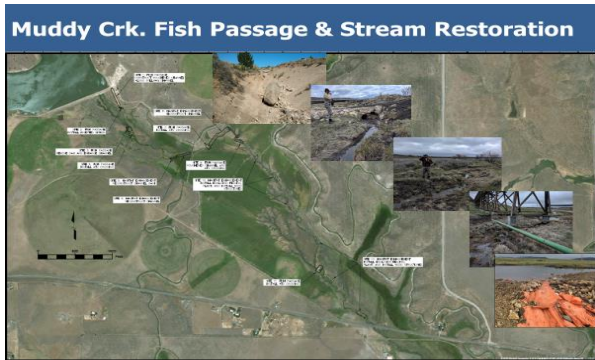
## Cogswell Creek Reconnaissance:

In partnership with local property owners, the Lakeview SWCD and Lake County Watershed Council recently completed a stream reconnaissance and design plan for a variety of projects in this sub-watershed. This project will be implemented in 2019, with the overall goal being irrigation efficiency, fish passage and habitat enhancement.



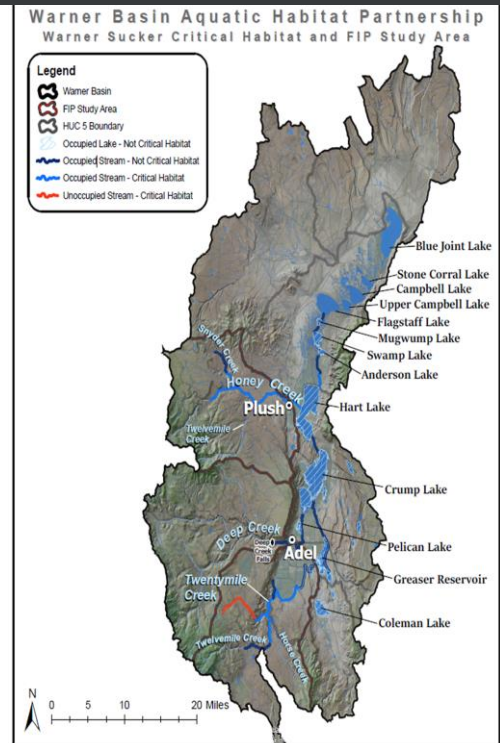
## Muddy Creek Fish Passage & Stream Restoration:

The Muddy Creek Fish Passage and Habitat Enhancement project focuses on restoring fish passage for Goose Lake redband trout. In addition, this project will improve habitat conditions throughout the stream reach by improving stream flow conveyance by adding sinuosity to the stream and defining the creek bed, stabilizing headcuts, and installing woody material for shade, stability, and complexity. Implementation will occur in 2019.



## Thomas Creek Fish Passage:

Restoring fish passage for 8 native Goose Lake Fish species in the Goose Lake Watershed is the focus of this project. Thomas Creek, the largest tributary to Goose Lake is a high priority for area resource managers as 8 native fish species utilize this stream system. Designs are currently underway to determine the best alternative for fish passage and flood irrigation activities. Implementation will occur 2019.



## Warner Basin Aquatic Habitat Partnership:

With the goal of improving Aquatic habitat and passage for Warner Sucker and Warner Redband trout, design plans are in the development phase for Deep, Twentymile and Honey Creeks. A series of irrigation diversions will be improved for fish passage, Screening, and irrigation efficiency. These projects will result in improved connectivity and access to quality habitat in the headwaters of these systems for native fish.



Recently this project team (SWCD, BLM, ODFW, USFWS, USFS, RDG, and Lake County Watershed Council) was recommended for a large Focused Investment Project through the Oregon Watershed Enhancement Board. This award will follow actions outlined in their strategic action plan for future recovery of the Warner sucker species. 10 fish passage and irrigation improvement projects will be designed and implemented in the next 6 years. These projects will benefit irrigation districts as well as native fish species.