

PHOTO: UPPER DESCHUTES WATERSHED COUNCIL



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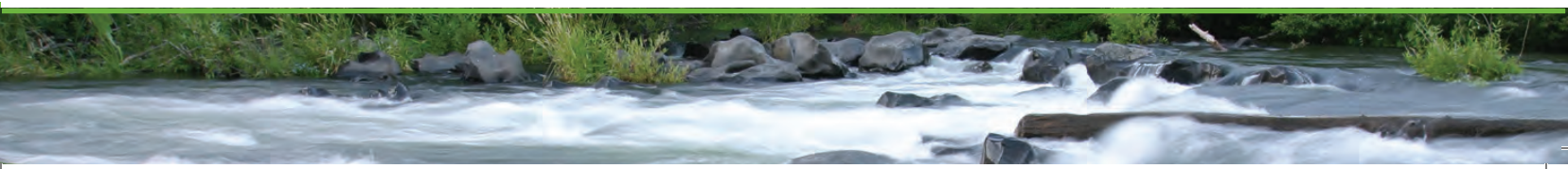
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FRONT COVER PHOTO: DESCHUTES LAND TRUST / RUSS McMILLAN



### THE REINTRODUCTION STORY

In the spring of 2007, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Oregon Department of Fish and Wildlife, and Portland General Electric launched the historic reintroduction of anadromous fish in the Upper Deschutes Basin by releasing 250,000 steelhead trout fry in Whychus Creek. These were the first steelhead to swim in the Upper Deschutes Basin since the mid-1960s, when PGE abandoned efforts to pass fish through the newly constructed Pelton-Round Butte hydropower complex. Supporting the newly reintroduced fish will require habitat restoration on a scale beyond anything previously contemplated in the Upper Deschutes Basin.

# Deschutes Partnership by the Numbers



**11,300**  
# OF LOCAL YOUTH INTERACTING WITH CREEKS



**93**

# OF CFS RESTORED BY DESCHUTES PARTNERSHIP PROJECTS



**26.8 OUT OF 38.8 MILES**

# OF MILES OF OPEN PASSAGE FOR FISH IN WHYCHUS CREEK



**39,606**

# OF VOLUNTEER HOURS DONATED



**4**

# OF MILES OF STREAM RESTORED IN WHYCHUS CREEK



**810**

# OF COMMUNITY TOURS OFFERED



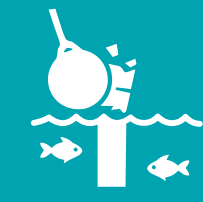
**963**

# OF ACRES OF LAND PRESERVED



**47**

# OF LANDOWNERS WORKED WITH



**30**

# OF FISH PASSAGE BARRIERS OR UNSCREENED DIVERSIONS RESOLVED



**362,800**

# OF NATIVE PLANTINGS PLANTED

## Our Goal

Restore habitat conditions to support the successful reintroduction of salmon and steelhead into the Upper Deschutes Basin.

PHOTO: DESCHUTES RIVER CONSERVANCY



PHOTO: DESCHUTES LAND TRUST / BYRON DUDLEY

*“After nearly a century, the return of the sockeye salmon to the Metolius River is a reflection of the cold clean water and abundant spawning habitat that is the foundation of salmon recovery in the watershed.”*

MIKE RIEHLE, US FOREST SERVICE



PHOTO: DESCHUTES PARTNERSHIP

## Metolius River

**THE METOLIUS WATERSHED** is relatively undeveloped, with large blocks of federal and tribal land comprising approximately 94% of the land base. The signature feature of the Metolius watershed is its dominant hydrology: cold, spring-fed streams recharged by constant snowmelt into highly permeable volcanic soils. The Metolius River and its tributaries support redband trout, bull trout, spring Chinook salmon, and kokanee/sockeye.

### LARGEST SOCKEYE RETURN SINCE REINTRODUCTION

In 2016, the Metolius River saw the biggest return of sockeye salmon since the historic reintroduction began a few short years ago. That year, the Pelton Round-Butte hydropower complex passed nearly 500 sockeye to spawn in the Metolius River and Lake Creek. Salmon reintroduction is a complex process, depending on the availability of quality spawning and rearing habitat in the high elevations of the upper basin, favorable conditions in the Pacific Ocean, and safe passage through the hundreds of river miles between the two. Given this complexity, long-term trends and not snapshots will be the best indicators of success as reintroduction efforts move forward. Nonetheless, this remarkable return of sock-eye to the Metolius is a welcome milestone.

### RESTORATION PROGRAMS

- Land Conservation
- Habitat Restoration
- Fish Passage/Screening
- Community Outreach
- Monitoring



## Deschutes Partnership Focus Area

The Deschutes Partnership is focusing on 226 miles of the Metolius River, Whychus Creek, and the Lower Crooked River.

### WHO WE ARE

The Deschutes Partnership formed in 2005 bringing together the Deschutes Land Trust, the Deschutes River Conservancy, the Upper Deschutes Watershed Council, and the Crooked River Watershed Council. Together these organizations have developed a strategic, integrated restoration program designed to change the pace and scale of watershed restoration efforts.

### WHAT WE DO

Within the Deschutes Partnership, each organization plays specific roles in the overall effort based on their unique expertise, capacity and areas of focus.

- Land Conservation
- Streamflow Restoration
- Stream Habitat Restoration
- Fish Passage and Screening
- Community Education and Outreach
- Monitoring and Evaluation

### WHY A PARTNERSHIP?

The ecological outcomes achieved by integrating land conservation, flow enhancement, and stream restoration on Whychus Creek encouraged the Partnership to develop a grand vision for the permanent protection, restoration, and stewardship of the most important habitat along other key stream reaches, including the Metolius River and the Lower Crooked River. By coordinating land purchases, water rights transfers, conservation projects, and habitat restoration, the Partnership has dramatically increased the pace, scale, and impact of restoration in the target stream reaches.



PHOTO: UPPER DESCHUTES WATERSHED COUNCIL



CROOKED RIVER

# Crooked River

## LOWER CROOKED RIVER

Older geology in the Crooked River watershed results in less permeable soil and thus less direct connection to groundwater. Water tends to flow over land and follows a more typical snowmelt pattern: high flows in the spring and low flows in the late summer. Restoring streamflow, removing fish barriers, and increasing floodplain habitat are critical to the success of reintroduced salmon and steelhead in the Lower Crooked River and its primary tributaries, McKay and Ochoco Creeks. Anadromous fish reintroduction is the primary focus of the Partnership in the Lower Crooked River watershed, which makes up about a quarter of the entire watershed.

**MCKAY CREEK** is a key tributary of the Lower Crooked River. The creek supports a robust population of redband trout, and is a critical subwatershed for the reintroduction of summer steelhead. Major restoration actions include restoring the natural hydro-graph to the middle reach and restoring habitat along the entire creek.

PHOTO: DESCHUTES RIVER CONSERVANCY

*"Fish passage at the Opal Springs Hydroelectric Project on the Crooked River is the Oregon Department of Fish and Wildlife's second highest passage project in the State, after the Hells Canyon project."*  
BRETT HODGSON, ODFW



OPAL SPRINGS

PHOTO: CROOKED RIVER WATERSHED COUNCIL



MCKAY CREEK

PHOTO: DESCHUTES RIVER CONSERVANCY

## OPAL SPRINGS

Providing fish passage at Opal Springs is a key action to support reintroduction in the Upper Deschutes Basin, and in particular the Lower Crooked River. It is the second highest priority passage project in Oregon, only behind the Hells Canyon complex. The 25-foot diversion structure is located near the bottom of a 600-foot deep, basalt-lined canyon near Culver. It currently blocks access to over 120 miles of Crooked River steelhead and Chinook salmon habitat.

## RESTORATION PROGRAMS

- Land Conservation
- Habitat Restoration
- Streamflow Restoration
- Fish Passage/Screening
- Community Outreach
- Monitoring



*"Whychus Creek is my forever place. This amazing and powerful creek flowing year round now is an incredible gift to us all."* CRIS CONVERSE, LANDOWNER

PHOTO: DESCHUTES LAND TRUST / TYLER ROEMER

# Whychus Creek

**WHYCHUS CREEK** is home to Chinook salmon, steelhead, and bull trout.

It is predominantly a snowmelt-driven system, but is also fed by significant springs including Alder Springs. As an over-appropriated creek, low flows and resulting high stream temperatures have long been a problem. Major restoration needs have included improving streamflows, protecting the floodplain from encroaching development, and restoring 18 miles of stream channel.

## PARTNERING WITH THREE SISTERS IRRIGATION DISTRICT

Since 2005, the Deschutes River Conservancy (DRC) and Three Sisters Irrigation District (TSID) have partnered to restore streamflow to Whychus Creek by piping TSID's main canal, reducing seepage and evaporation loss. TSID dedicates the conserved water to instream use through Oregon's conserved water statute. The resulting instream water helps meet DRC's flow target – the state instream water right – from April to October each year and improves conditions for steelhead and redband trout.

## RESTORATION PROGRAMS

- Land Conservation
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- Streamflow Restoration
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- Community Outreach
- Monitoring



PHOTO: DESCHUTES RIVER CONSERVANCY

LANDOWNER

## Cris Converse

Cris Converse and her family, the Sokols, own Pine Meadow Ranch, a 200-acre farm on Whychus Creek. Over the years, the Sokols have worked with the Deschutes Partnership to reopen 13 additional miles of fish habitat upstream of their old irrigation diversion as well as permanently transfer 1 cfs of senior water rights back in stream.