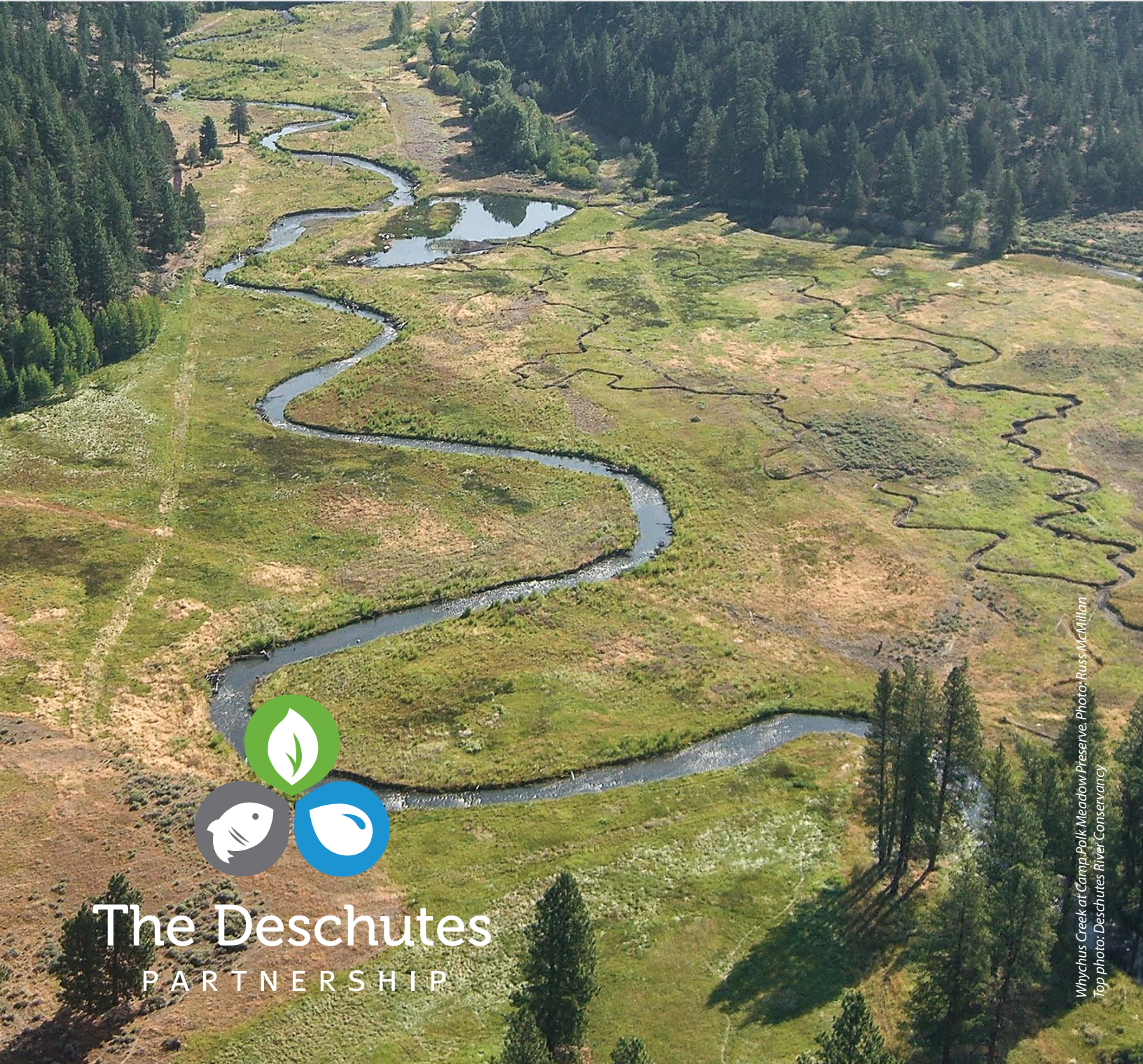




PROTECTING LAND & RESTORING RIVERS FOR SALMON & STEELHEAD



The Deschutes
PARTNERSHIP

Whychus Creek at Camp Polk Meadow Preserve. Photo: Russ McMillan
Top photo: Deschutes River Conservancy

Photo: Byron Dudley



A Unique Collaboration

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 small fish, barely two inches in length, were the first steelhead to swim in Whychus Creek since the mid 1960's, when efforts to pass fish through the newly constructed Pelton-Round Butte hydropower complex proved unsuccessful and were abandoned. The ultimate goal of the reintroduction program was to restore self-sustaining runs of salmon and steelhead to 226 miles of habitat in the Metolius River, Whychus Creek and the Lower Crooked River.

A significant barrier to achieving this goal was that as of 2007, much of the habitat in the reintroduction reaches could not support successful spawning, rearing and migration. Dozens of small diversions blocked migration routes, low summer flows contributed to excessive water temperatures, and miles of channelized streams lacked important spawning and rearing habitat. The scale of required restoration was beyond anything previously contemplated in the upper Deschutes Basin.

Recognizing that this scale of restoration would not be possible under a traditional project-by-project implementation model, the members of the Deschutes Partnership developed a strategic, integrated restoration program designed to change the pace and scale of watershed restoration efforts. This approach - leveraged, scalable, and tightly coordinated - is built upon collaboration, strategic integration, and the open sharing of organizational resources.

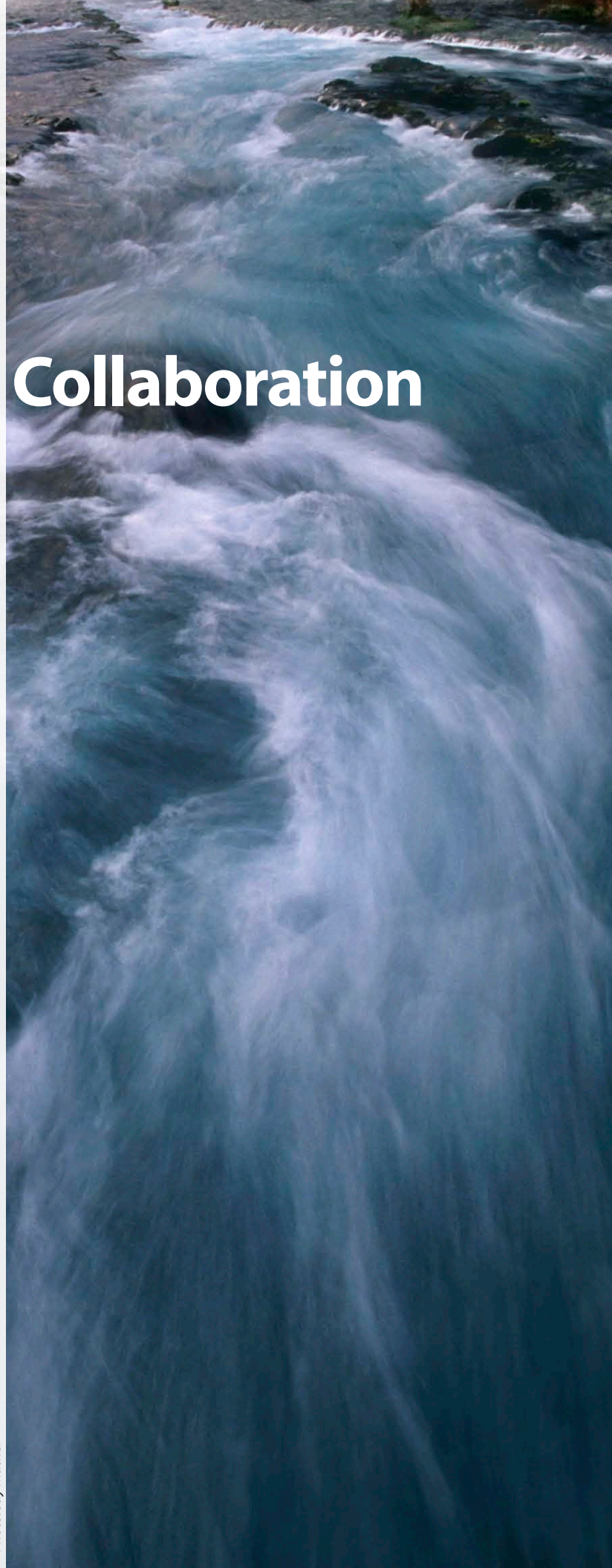




Photo: Brian Quimette

Whychus Creek...

A Success Story

While the Deschutes Partnership was formalized in 2005, its collaborative approach to restoring salmon and steelhead habitat was by that time well established in Whychus Creek, where strong land acquisition, water acquisition and habitat restoration programs of three organizations demonstrated the power of complementary programs implemented strategically. The integration of land conservation and stream restoration on Whychus Creek enabled the partnership to develop a grand vision for the permanent protection, restoration and stewardship of the most important habitat along the creek. The collaborative work at Camp Polk Meadow is an excellent example of this approach.

The Deschutes Land Trust purchased Camp Polk Meadow in 2000 with an eye toward protecting and restoring this critical stream for steelhead. Understanding the high ecological value of the wet meadow habitat at Camp Polk and seeing the real threat of subdivisions there, the Land Trust and funding partner Portland General Electric worked for two years to purchase it. At the same time, the Deschutes River Conservancy was launching a major program to restore streamflow in Whychus Creek through a series of water transfers and irrigation efficiency projects with Three Sisters Irrigation District, the City of Sisters and local landowners. With the land and water permanently protected, the Upper Deschutes Watershed Council then had the opportunity to partner with the Land Trust in a historic effort to reestablish the wet meadow by restoring Whychus Creek to its historic channels.



Photo: Deschutes River Conservancy

This integrated approach was piloted at Camp Polk Meadow Preserve and has since grown to include a vision for nearly 11 miles of restoration over the next two decades. This strategic integration has allowed the Partnership to move beyond the more traditional “dots on a map” approach to restoration and toward a watershed-scale series of integrated investments.

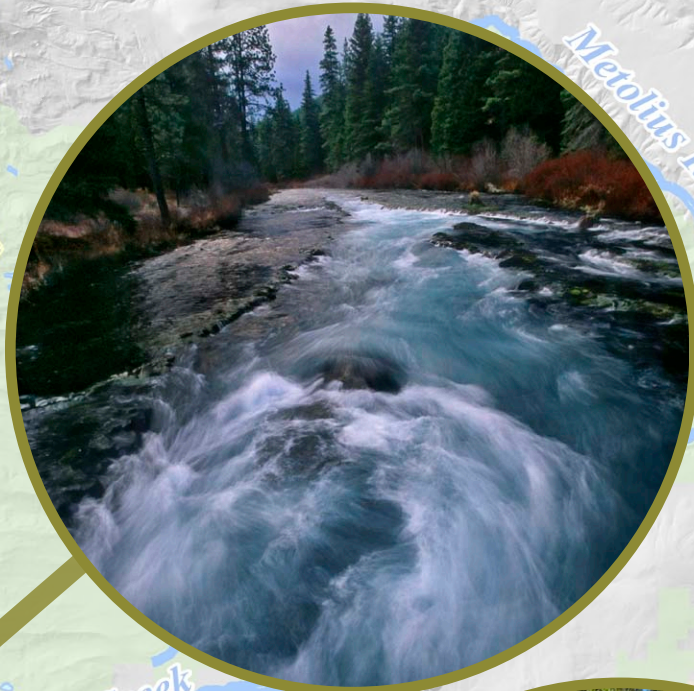
In Whychus Creek, this model has produced these outcomes:

- Conserved 2,200 acres and nearly 8 miles of Whychus Creek, including 6 contiguous miles. These conservation efforts focus on low-gradient, wet-meadow reaches where restoration actions will provide the greatest benefit for salmon and steelhead. Linking protected lands also provides efficiencies of scale in large stream restoration efforts, and helps ensure the long-term security of restoration investments.
- Restored minimum streamflows in Whychus Creek from 0 to 32 cubic feet per second, creating one of most successful flow restoration programs in the West and bringing Whychus Creek into compliance with Oregon’s instream flow standard for the creek. Importantly for salmon and steelhead, these flow restoration efforts have helped reduce summer water temperatures an average of 3.5°F since 2002.
- Removed 5 barriers to fish passage, opening 26 miles of historic spawning and rearing habitat, and screened 4 irrigation diversions to reduce the risk of juvenile salmon and steelhead entrainment.
- Restored 3 miles of previously channelized stream and floodplain habitat, including the addition of more than 250,000 native plants and 4.5 miles of side channels, a critical need for rearing salmon and steelhead given Whychus Creek’s flashy hydrograph. Restoring function to floodplains has rehydrated historic wet meadows, expanded riparian areas and helped mitigate stream temperature peaks.
- Engaged hundreds of students, community leaders, and volunteers in restoration, stewardship, and interpretive/educational activities relating to the reintroduction effort.

When the Deschutes Partnership completes its Whychus Creek restoration program, the majority of the habitat in the lower watershed will be protected and restored. This transformed stream will once again provide the quality habitat necessary to support self-sustaining runs of salmon and steelhead.



The Deschutes
PARTNERSHIP



Warm Springs
Reservation

Metolius River

Photo: Jay Mather

Metolius River

The Metolius watershed is relatively undeveloped, with large blocks of federal and tribal land comprising approximately 94% of the land base. Cold, spring-fed streams characterize the watershed. The Metolius River and its tributaries support redband trout, bull trout, spring chinook salmon, and kokanee. Notably, one of Oregon's two historic sockeye salmon runs originated in Suttle Lake, which connects to the Metolius River via Lake Creek. Overarching goals here are to protect existing high-quality habitat, remove barriers to fish migration, and restore riparian areas impacted by residential development.



Photo: Jay Mather

Whychus Creek

Whychus Creek, which originates in the Cascades and flows north through the town of Sisters and joins the Deschutes River near Terrebonne, is bounded by Forest Service lands in its upper reaches and a mix of residential and agricultural properties along its arid lower reaches. Whychus Creek is home to chinook salmon and steelhead, and bull trout in its lowermost reach, which is fed by significant springs including Alder Springs. Major restoration needs include improving instream flows, protecting the floodplain from encroaching development, and restoring 18 miles of stream channel straightened by bulldozer following the Christmas 1964 flood. Camp Polk Meadow Preserve is a signature project where these restoration strategies first converged.

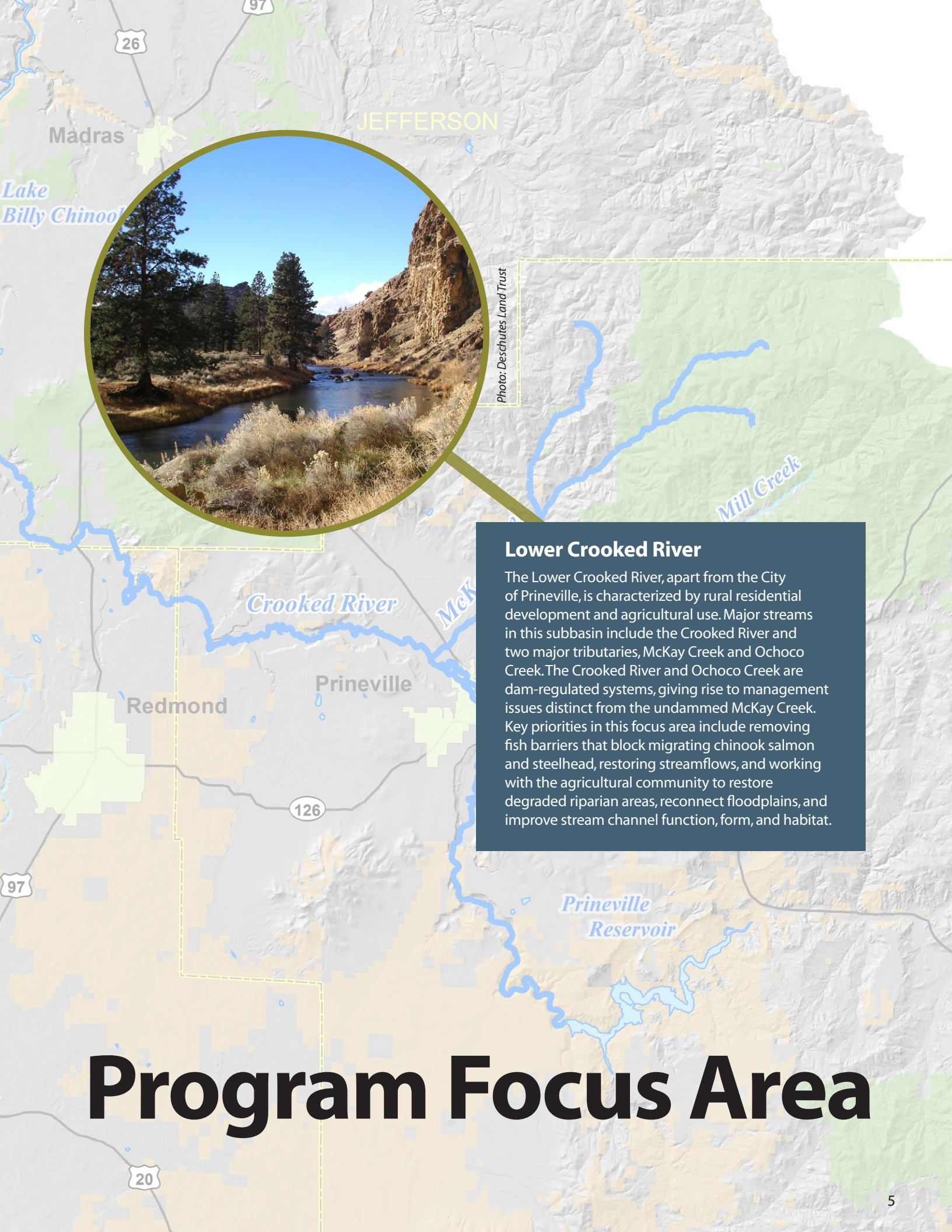


Photo: Deschutes Land Trust

Lower Crooked River

The Lower Crooked River, apart from the City of Prineville, is characterized by rural residential development and agricultural use. Major streams in this subbasin include the Crooked River and two major tributaries, McKay Creek and Ochoco Creek. The Crooked River and Ochoco Creek are dam-regulated systems, giving rise to management issues distinct from the undammed McKay Creek. Key priorities in this focus area include removing fish barriers that block migrating chinook salmon and steelhead, restoring streamflows, and working with the agricultural community to restore degraded riparian areas, reconnect floodplains, and improve stream channel function, form, and habitat.

Program Focus Area

Accomplishments to Date

Notable early dates



Photo: Fish Eye Guy Photography

The list of collaborative accomplishments is lengthy and includes successes in fish passage, habitat protection and restoration, increased streamflow and improvements in water quality. The collaborative process itself has strengthened each organization and achieves necessary restoration outcomes more efficiently and effectively than traditional approaches.

2012



Photo: Brian Quimette

1994 - 1996: Formation Period
Crooked River Watershed Council ('94),
Deschutes Land Trust ('95),
Deschutes River Conservancy ('96), and
Upper Deschutes Watershed Council ('96)

2000
Conserved Camp Polk Meadow Preserve

2007
Reintroduced Steelhead fry in Whychus Creek

2008
Launched Oregon Watershed Enhancement
Board's Special Investment Partnership program
Installed Fish screen at North Unit Irrigation
District pump station on lower Crooked River

2010
Conserved Whychus Canyon Preserve

2011
Completed Fish passage and screening at
Three Sisters Irrigation District diversion

**Redirected Whychus Creek into restored
channel at Camp Polk Meadow Preserve**

**Completed engineering designs for
fish ladder at Opal Springs on the
Crooked River**

**Completed engineering designs for
floodplain reconnection on Lower
Crooked River near Ochoco and
McKay Creeks**

2013

2014



Main photo: Byron Dudley



Photo: River Designs Group



Photo: Upper Deschutes Watershed Council

Removed Stearns Dam on the Crooked River

Restored fish passage at Suttle Lake Dam

Removed unscreened diversion at Uncle John Ditch, restoring streamflow and ensuring safe passage

Increased streamflow in Whychus Creek to 32 cfs

Removed concrete dam at Pine Meadow Ranch on Whychus Creek, increasing habitat and streamflow

Restored riparian and in-stream habitat at Spring Creek

Conserved an additional 480 acres and 2 miles, more than doubling the size of Whychus Canyon Preserve

Collaboration & Community

Individual conservation projects rarely achieve watershed results; that scale is generally impacted only by an accumulation of projects. The Deschutes Partnership model recognizes the necessity of cumulative results, and aims to create efficiencies in achieving this scale of outcomes by bringing strategy, program integration, and leverage to bear in all aspects of its work.

The Deschutes Partnership posits that complex undertakings like reintroducing salmon and steelhead after a fifty-year absence require complex solutions. These solutions may require organizations to redefine past approaches and accept that strategies developed in isolation cannot achieve goals that require an integrated approach. A nationally-recognized model for collaborative conservation, the Deschutes Partnership has embraced the challenge of watershed-scale restoration and dramatically increased the production of meaningful ecological outcomes across a diverse project area. Together, our accomplishments will have a lasting and positive impact on the ecological health and well being of the upper Deschutes Basin, for salmon and steelhead, for our regional economy, and for our local communities.

The Deschutes Partnership's efforts are bolstered and supported by a myriad of partners too numerous to list in this brochure. These partners include natural resource managers, key implementing partners in the governmental, quasi-governmental, and non-profit sectors, private foundations, generous individuals, dedicated volunteers, and visionary community leaders. While each and every one of these partners is integral to the Partnership's restoration work, the Deschutes Partnership wishes to acknowledge the key, long-term capital funding commitments made by the Oregon Watershed Enhancement Board, the Pelton-Round Butte Mitigation Fund, and the Bureau of Reclamation's WaterSmart program, along with the 10 year commitment of the Bonneville Environmental Foundation to help the Partnership monitor ecological outcomes. These significant and predictable investments have been instrumental in dramatically increasing the pace and scale of watershed restoration in the upper Deschutes Basin.

This publication was developed by the Crooked River Watershed Council, Deschutes Land Trust, Deschutes River Conservancy and the Upper Deschutes Watershed Council, with special thanks to the Oregon Watershed Enhancement Board.

