

**COLLABORATIVE WATER
MANAGEMENT IN THE
DESCHUTES BASIN HELPS
KEEP THE REGION AFLOAT**

written and photographed by Daniel O'Neil

**ALL AROUND THE
WATER
TABLE**

Agriculture and ranching in Central Oregon owe their existence to water from rivers like the Deschutes and Crooked.

COLLABORATION COMES NATURALLY TO CENTRAL OREGON. WITH A WALL OF MOUNTAINS TO THE WEST, AND RELATIVE ISOLATION HEADING IN ALL OTHER DIRECTIONS, THE DESCHUTES BASIN HAS TO FEND FOR ITSELF. IN SUCH AN ARID LANDSCAPE, ONE THAT'S ALSO KNOWN FOR AGRICULTURE, ECOSYSTEMS AND FAST-GROWING CITIES, NEGOTIATION AND COMPROMISE BECOME ESPECIALLY CRITICAL WHEN WATER IS INVOLVED.

“WHISKEY’S FOR DRINKING, AND WATER’S FOR FIGHTING,” OR SO THEY SAY IN THE WORLD OF WATER RESOURCE MANAGEMENT. WHILE CENTRAL OREGON HAS FOUGHT OVER WATER IN THE PAST, DURING THE LAST THREE DECADES THE REGION HAS DISCOVERED THAT WATER, TOO, MAKES FOR A FINE DRINK BETWEEN FRIENDS. **SUCH AN APPROACH TO WATER SERVES THE DESCHUTES BASIN AND ALL OF ITS INHABITANTS, MAKING SURE THERE’S JUST ENOUGH TO GO AROUND FOR TODAY AND TOMORROW.**

IN 1987, a group of leaders representing environmental, tribal and irrigation interests converged to address stream flow and water quality concerns in the Deschutes Basin. Leaving their agendas aside, they agreed to work together to find solutions for the common good of the entire watershed. From here, a consensus-based, collaborative group formed, now called the Deschutes River Conservancy.

Today, the DRC is one of more than forty parties involved in the ongoing, everyday collaboration, negotiation and management of water resources in the Deschutes Basin. Like a watershed uniting a number of tributaries, those involved formed the Deschutes Basin Water Collaborative, a multi-stakeholder table with a charter but no regulatory power.

“The DBWC is a bunch of stakeholders who wanted to come together to find ways to

get over their disagreement, and to see if they can build some common ground so they’re not just fighting each other in the courts or in the court of public opinion,” said Scott Aycock, who until recently served as facilitator for the DBWC, under the auspices of the Central Oregon Intergovernmental Council.

The DBWC is nearing the completion of its first comprehensive management plan. For now, efforts will focus on the Upper

Deschutes, meaning Bend and upstream. From water conservation, achieved through efficiency and piping, to leasing unneeded irrigation water for the benefit of fish and endangered frogs, to assuring delivery to irrigation districts and cities, the collaborative effort is as massive as the Cascade Range that collects all that water in the first place.

“Once the plan is published, if someone is trying to do something that’s consistent with

that plan—get money, change policy, whatever—they’ll have the support of the full crew,” Aycock said. “The value proposition is to create a means for folks to say, ‘Well, I want to do this thing for my district, or my city, or the river,’ and if it’s consistent with the shared plan, they’ll have the support of all those diverse interests, which means they’ll have a much better chance of success and achieving their goals.”

Water diverted from the Deschutes River at the North Canal dam heads as far away as Madras, supplying irrigation districts throughout the basin.



“WE NOW HAVE A ROAD MAP FOR THE NEXT THIRTY YEARS ON IMPLEMENTING PROJECTS. THE HABITAT CONSERVATION PLAN WITH THE COLLABORATIVE TABLE HAS ALLOWED US TO GET OVER \$100 MILLION WORTH OF FUNDING FOR PROJECTS THAT GENERATE CONSERVED WATER, SO THAT CONSERVED WATER CAN BE SHARED WITH THE JUNIOR DISTRICT, NORTH UNIT, AS WELL AS RELEASED FOR OREGON SPOTTED FROG HABITAT. THESE PROJECTS NOT ONLY HELP THE FARMERS STAY IN BUSINESS, THEY HELP THE ENDANGERED SPECIES MOVING FORWARD.”

— Craig Horrell, Central Oregon Irrigation District managing director



WATER SCARCITY need not be an issue along the eastern flank of the Central Cascades. Snow-melt here feeds a rare geologic feature in Central Oregon, a series of underground aquifers in the lava rock bed that store water and release it to groundwater wells and as the Deschutes River itself. The trouble is that water rights in the Deschutes Basin were overallocated by 1913, meaning more than all of the surface (river and stream) water had been legally awarded to claimants, leaving some irrigation patrons without enough in drought years. Meanwhile, up until the 1980s, the Middle Deschutes and Whychus Creek lay dry as an empty bottle in summer.

“When you look at the whole water budget for the basin, 86 percent of the water goes to irrigated agriculture, and 2 percent goes to municipalities, which includes most of the golf courses, parks and breweries,” said Kate Fitzpatrick, executive director of the DRC. “Volumetrically, it’s agriculture that’s using the vast majority of water. So if you’re looking to solve the problem at scale, working with agriculture on conservation is the most important thing.”

Collaboration in the basin has helped mitigate disparities without betraying “senior” water rights, typically held by long-standing irrigation districts. Efforts by the DBWC have ensured delivery of water to “junior” water rights holders even in drought years. And through market-based tools like leasing, groups like the DRC have arranged for some senior water rights to remain in-stream. Today, Whychus Creek in Sisters and the Deschutes River below the North Canal Diversion Dam, in central Bend, flow year-round again, to the benefit of riverine plant and animal species, humans included.

Manifesting these measures and plenty more, the Deschutes Basin Habitat Conservation Plan stands as testimony to the water-saving and water-sharing collaborative feats in Central Oregon. Signed in late 2020 by the U.S. Fish and Wildlife Service, eight Central Oregon irrigation districts and the city of Prineville, the plan requires enough year-round flow in the Deschutes to support the endangered Oregon spotted frog. To meet these targets, open, leaky canals will be piped, and releases from Wickiup Dam into the Deschutes River will follow strict

timelines. In return, the irrigation districts are allowed to divert water without the threat of Endangered Species Act-related lawsuits.

For Central Oregon Irrigation District managing director Craig Horrell, the habitat conservation plan demonstrates the benefits of a proactive collaborative approach. “We now have a road map for the next thirty years on implementing projects,” he said. “The habitat conservation plan with the collaborative table has allowed us to get over \$100 million worth of funding for projects that generate conserved water, so that conserved water can be shared with the junior district, North Unit, as well as released for Oregon spotted frog habitat. These projects not only help the farmers stay in business, they help the endangered species moving forward.”

While some farmers question the proactive agenda of their irrigation districts, Dan Keppen, executive director of the Family Farm Alliance, a nonprofit advocate for farming, ranching and irrigation interests across the West, said he believes most Central Oregon farmers do support the habitat conservation plan.

“All you’ve got to do is look at the recent drought, when water supplies were stretched super thin, because in the absence of the habitat conservation plan, some of that water that ultimately helped agriculture might have been reallocated for other uses away from agriculture,” Keppen said. “Ultimately, the irrigation districts are the entities that provide the water to the farms, and if they can’t deliver water to 100 percent capacity, you’re going to have economic impacts that affect folks on the ground, the farmers and the people that work for the farmers.”

Although Oregon has finally escaped drought status so far this year, previous years and climate predictions point toward a hotter, hydrologically unpredictable future across the High Desert and beyond. Yet as the habitat conservation plan proves, collaboration works to avoid shutoffs to junior rights holders like in North Unit, where 95 percent of patrons are full-time farmers. Also showcased in the habitat conservation plan, collaboration helps secure funding, perhaps the most crucial component to saving water besides the collaboration itself.

Converting open canals to underground pipes, some of which are 12 feet in diameter,



for tens to hundreds of miles, is incredibly costly. But, in an arid region like Central Oregon where every drop counts, it's worth the expense and the effort—some 30 percent of water carried by canals is lost to seepage in the ground, while piped conveyance creates pressurized, sprinkler irrigation that saves water and can be used to generate hydroelectricity. With nearly 1,000 miles of canals throughout Central Oregon, and only about 100 miles of it piped, much work remains, with much water to be gained.

Such projects are typically funded by state and federal sources. Grants can be competitive, but when members of the DBWC apply for money to pipe more canals, or to implement habitat restoration projects, funders are pleased to see a united front with broad community support. "It's really attractive to pitch a conservation project where you have the conservation groups in alignment with irrigators and municipalities," said Spencer Sawaske, Habitat Division deputy administrator and Water Program manager for the Oregon Department of Fish and Wildlife. "It benefits everyone, including the ecosystem. That's a good sell."

"It takes a long time to collaborate, way longer than going it alone," Aycock said. "But the idea is it's more durable and, frankly, more wise, too, because you're not just pursuing your own interests. I really think it's the only way forward to do the heavy lift that's

going to be needed to modernize the system and meet everyone's needs in the basin."

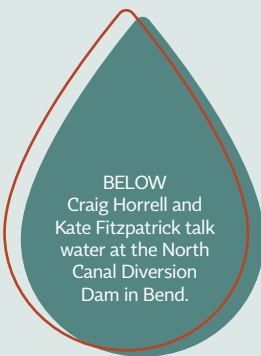
Beyond securing funding, the collaborative effort impresses on the policy-making level as well. For one thing, a collective of disparate groups takes the pressure off of elected officials who might otherwise receive heated phone calls from lobbyists and constituents. And when irrigation districts, conservation groups, cities and other related entities show up in Salem, all testifying together to demand the same changes to water policy, such broad support can reach across the political divide.

"I don't think the legislators in Salem see that very often around water," Fitzpatrick said. "It's usually pretty partisan. It can get pretty heated. So that's the fun part, when you can come and say, 'Hey, we have a solution for you that's a little out of the box. It's supported by all the sides. Let us give this a shot.'"

AS WITH collaboration, it's easy to list the rewards of a steady, secure water supply in Central Oregon. Water grows food, provides a home for denizens like fish and frogs, keeps society hydrated and clean, greens fairways and rages rapids that attract tourist dollars, and so on. What would happen, then, if the Deschutes Basin chose not to work together for the hydrologic benefit of all?

"North Unit Irrigation District would've been out of business three to five years ago," Horrell said. He, and others, credit the habitat conservation plan with preventing shut-offs in North Unit during the recent drought years. In the Upper Deschutes Basin, the outlook for the river itself would not look good. Degraded river systems and unnatural streamflow fluctuations would continue to put pressure on native trout populations. The Oregon spotted frog would be nearing extinction, despite Oregon's Instream Water Rights Act of 1987 that granted rivers and fish equal rights to water as those held by farmers and cities.

"Even though we do have instream water rights, senior water holders have the right to the water before instream flow and fish benefits," said Danette Faucera, ODFW water policy coordinator. "So, without this collaboration and having these partnerships with senior water rights holders, we wouldn't have much luck in meeting those targets."



BELOW
Craig Horrell and
Kate Fitzpatrick talk
water at the North
Canal Diversion
Dam in Bend.



Oregon offers an unfortunately clear example of what water resource management looks like without collaboration. The Klamath Basin chose not to adopt a habitat conservation plan, for example, and it remains mired by lawsuits, mistrust and fallow fields. "What's happened in the Deschutes Basin, with this collaboration and foresight, not only are they solving their problems, they're working together as neighbors," Keppen said. "Right now in lots of parts of the West, you don't have that."

Yet, like the Deschutes itself, water resource collaboration in the basin does not always flow smoothly. Challenges meet the DBWC at every turn, but trust and experience have equipped the group with ways around conflict



FROM TOP
Upstream
of Bend, the
Deschutes
flows like a
full river. On
the same day
in May, the
Deschutes
River flowed at
90 cubic feet
per second
immediately
below the
North Canal
Diversion Dam,
compared
to 1,450 CFS
above the dam.



“We all represent related stakeholders, but sometimes different interests, so that’s the hard part, finding consensus,” said Mike Buettner, water services director for the City of Bend. “I think just being sensitive to those other interests is the challenging part. And that comes with time and building relationships with those other groups.”

“We don’t disagree that we are where we’re at today, and we don’t disagree on where we need to be at the end of the day—we disagree on how we’re going to get there,” Horrell said. “They’re family arguments that are kept within the family, for the most part.”

For Fitzpatrick, the family extends to include all of Central Oregon, whether the topic is water or not. “I think one of the strongest legacies of the collaboration is that not only are we solving the problem of the day, but we’re equipping the community to know how to talk to each other and work together and look towards problems that are coming in the future.”

COLLABORATION is not a one-and-done endeavor. New challenges have recently surfaced, and existing problems still need remediation. Collaborative projects like the DBWC therefore have no expiry date.

In caring for the river system that provides all of this water, entities like the DRC, the Upper Deschutes Watershed Council, the U.S. Forest Service and ODFW are working to keep more water instream, and to restore habitat and the Upper Deschutes stream channel that has suffered from decades of service as a conveyance channel. While the Crooked River still requires much effort, the Upper Deschutes will at least see its flow triple by 2028 as more water is allowed to stay instream.

Other, subterranean parts of Central Oregon have recently come into view of water managers. Groundwater has emerged as a topic of concern as cities, which rely on groundwater, continue to grow while water levels decline. Due to the region’s complex hydrogeology, surface and groundwater are deeply related, meaning that all parties around the collaborative table must work toward solutions to keep streams and underground aquifers whole.

“It’s pretty clear the cities are going to have to come up with their own solutions, their own creative ideas, and work with their partners at the basin level, and then eventually at the state level to figure out what the future looks like in terms of using both surface water and groundwater,” Buettner said.

Collaboration will once again be required for forward-moving current. The need for an updated groundwater study for Central Oregon will demand participation by state and federal agencies, municipalities and nonprofits. Beyond this, collaborative partners in the Deschutes Basin are looking for ways to share water easier. The DRC has presented a bill to the Oregon legislature that would authorize basinwide water banking—moving water around through voluntary, incentive-based mechanisms. Such a scheme relies on the participation of diverse players, and has the potential to influence other regions.

“It’s not common statewide to have municipal water users, irrigation and conservation groups all working collaboratively and making real, significant, meaningful strides,” Sawaske said. “What’s occurring in the Deschutes Basin can be used as a model for the remainder of the state where we have these competing demands for water. And some of the innovative things that they’re doing are hopefully going to be adopted by other basins within Oregon and across parts of the West in general.”

Keppen, of Family Farm Alliance, said that when giving written testimony before Congress, his group uses the Deschutes Basin’s collaborative approach as a template for success for overcoming challenging water problems. But the exemplar provided by the region’s collaborative efforts transcends funding, management and legislation. It’s as ubiquitous and universally needed as water itself. “Especially right now with how polarized everything is, I think people are just yearning for success stories or examples of folks working together when they could be fighting.” ■

Editor’s note: Despite their foundational role and continued involvement in both the DRC and the DBWC, the Confederated Tribes of Warm Springs declined to comment for this piece.

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— Kate Fitzpatrick, Deschutes River Conservancy executive director

AT FAR LEFT Deschutes River water enters a section that carries it over the Crooked River, under Smith Rock State Park, and on toward Madras.