



*R*IVERS WITHOUT WATER
OREGON'S UNNATURAL DISASTER

WaterWatch

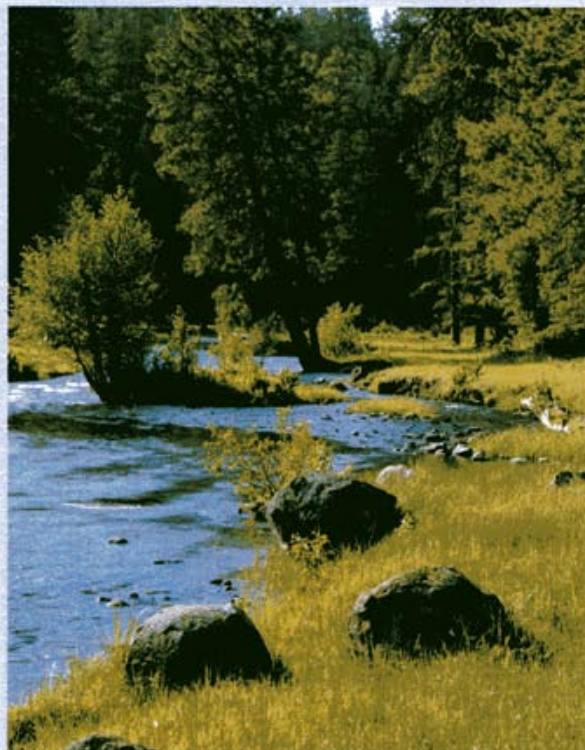
RIVERS NEED WATER

“*Across Oregon, many streams are dry in the summer and fall months... Put very simply, there is not enough water where it is needed, when it is needed, to satisfy both existing and future water uses. This situation jeopardizes the high level of livability that Oregonians enjoy. It seriously limits the ability of Oregon’s economy to grow and threatens existing users’ water supplies and the sustainability of the natural systems which our economy relies on.*”

OREGON WATER RESOURCES DEPARTMENT, 1999-2001 STRATEGIC PLAN

“*When the well’s dry, we know the worth of water.*”

BENJAMIN FRANKLIN, POOR RICHARD’S ALMANAC



Malheur River

PHOTO CREDITS

Cover: Morning on the Wild and Scenic John Day River; Malheur River (above); Rogue River (page 4) © Larry Olson. Dry Walla Walla River bed (page 3), courtesy American Rivers. All other photographs from collection of WaterWatch.

RIVERS WITHOUT WATER

OREGON’S UNNATURAL DISASTER

On a rainy day in western Oregon it is hard to imagine rivers running dry. If anything, most people would say the problem is we have too much water, not too little.

The truth is dry rivers are a serious issue for Oregon.

From tiny streams in the high desert to major coastal waterways, our rivers are drained to supply agriculture and development. This is not a new practice; water has been diverted from many of them for over a century. But today these diversions have grown so large—roughly eight billion gallons of water each day—that numerous streams are sucked dry in the summer and fall. Even major rivers like the Grande Ronde, Umatilla, and John Day can be reduced to a trickle.



The bone-dry Walla Walla River near the town of Milton-Freewater. For over a century water has been taken from the river for irrigation, often leaving nothing behind for fish and wildlife.

According to the Oregon Water Resources Department, every one of our state’s 18 river basins suffers from water shortages due to human activities. All over the state, many streams are left with no water for endangered salmon, no water for fishing and boating, no water to abate pollution.

Part of the problem is natural. Oregon generally has very dry summers, causing rivers to run low until the arrival of autumn rains. But we have made the situation dramatically worse by taking vast amounts of water for irrigation and other consumptive uses. Farm crops and city lawns use the most water in the hot, dry summer months when rivers and creeks are running lowest. Demand exceeds supply, and rivers begin to dry up.

In Oregon, rivers and streams belong to the public, but no law stops private water users from completely draining a stream. It is often perfectly legal to take the last drops from a river, and our state agencies do little to correct, or even document, the problem.

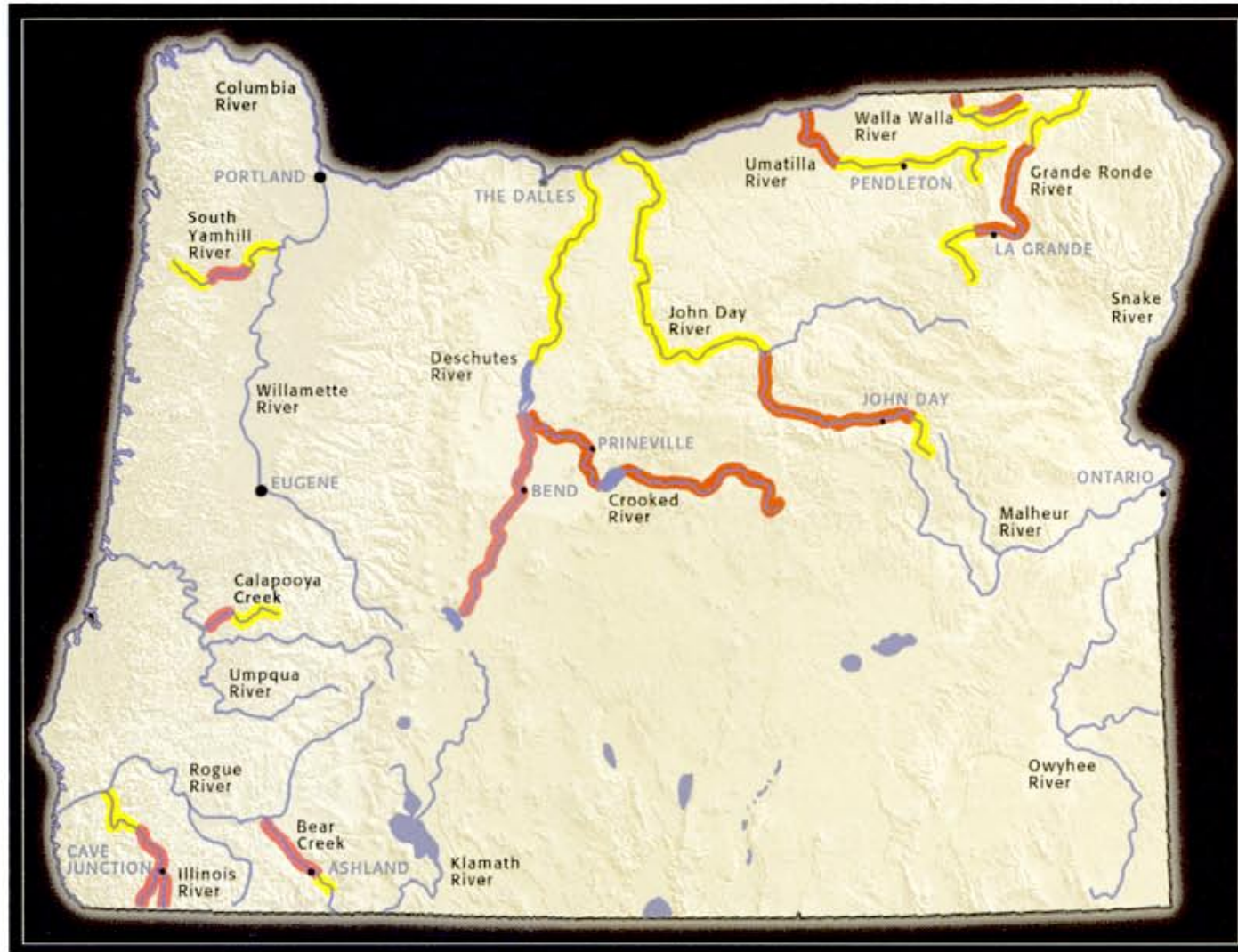
To educate the public about this growing environmental threat and promote efforts to solve it, WaterWatch has produced “Rivers Without Water: Oregon’s Unnatural Disaster”. Based on data from the Oregon Water Resources Department, the Oregon Department of Environmental Quality, the United States Geological Survey, and other sources this document provides samples of the rivers and streams around our state that are harmed by excessive water diversions.

OREGON: IT’S NOT AS WET AS YOU THINK

Despite Portland’s soggy reputation, most of Oregon is very dry. Much of the land east of the Cascades is desert, and even coastal areas often get little rain during the summer months.

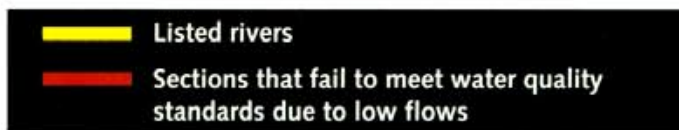
Over thousands of years fish and wildlife adapted to thrive in these environments. Each year hundreds of thousands of salmon and steelhead trout once returned

OREGON RIVERS WITH NOTHING LEFT TO GIVE



The ten waterways listed in “Rivers Without Water: Oregon’s Unnatural Disaster” are just a small sampling of rivers and streams in our state that suffer from chronic low water flows. As shown in the map above, they range from large rivers to small creeks and can be found throughout the state.

With the exception of the lower Walla Walla, all river stretches marked red on the map appear on the Oregon Department of Environmental Quality’s “303(d)” list of streams not meeting water quality standards because of low flows. DEQ lists these streams on the basis of water quality problems,



evidence that streamflows fall below minimum levels set to protect fish or water quality, and indications that water withdrawals are a cause of these low flows.

The lower Walla Walla did not make the 303(d) list for flows because there are no established minimum water flow targets on the river, though, like the other rivers, it fails to meet state water quality standards.

The waterways listed in “Rivers Without Water” are just a small sampling of the rivers around the state that are harmed by excessive water use. Dozens of streams are similarly depleted, but the list of ten illustrates the problems rivers and major creeks all across Oregon are facing.

UMATILLA RIVER Columbia Basin, Umatilla County

The Umatilla River flows out of the Blue Mountains and down to the Columbia River near Hermiston. Along the way it winds through the Umatilla Indian Reservation, passes through the home of the Pendleton Round-Up, and provides water to thousands of acres of agricultural land. The basin has been heavily irrigated for a century, and irrigation diversions wiped out the Umatilla River’s salmon runs by 1920, leaving only a small but hardy run of wild steelhead.



In some stretches of the middle Deschutes, it is hard to spot the river. Chronic low flows due to irrigation have allowed brush and weeds to colonize the natural riverbed.

The Umatilla is one of the driest big rivers in Oregon. Every summer, flows near the mouth drop to around 2 cubic feet per second (cfs) because of upstream irrigation diversions. One cubic foot per second of water amounts to 646.272 gallons per day. This condition persists despite a massive pumping project, built and operated by the federal government at a cost of about \$100 million, that provides Columbia River water to lands formerly irrigated from the Umatilla. The project helped restore flows in the spring and fall months, and salmon are now returning to the river for the first time in decades. In the summer months, however, the Umatilla is still no place for a fish.

DESCHUTES RIVER Deschutes, Jefferson and Wasco Counties

Fed by underground springs, the Deschutes flows due north through the rain shadow of the

Cascades, cutting through the arid heart of Central Oregon. “Stunning” might be the best word to describe the river, as is documented by its designation as both a state scenic waterway and a federal Wild and Scenic River. The Deschutes is one of Oregon’s premier recreation rivers, with its lower section drawing tens of thousands of whitewater rafters, hikers, and fly anglers each year. The river is also home to countless species of rare plants and animals, including endangered salmon and steelhead trout.

But the Deschutes is a river of contrasts. Water storage by several large reservoirs above the city of Bend robs the upper river of critical flows during the winter, and the summer irrigation season reduces its middle section to a trickle. Irrigation districts have the right to pull up to 2800 cubic feet per second of water from the river at diversions just below Bend, enough to dry it up during dry years. They have agreed to voluntarily

allocations for consumptive uses, primarily irrigation. The South Yamhill basin covers over 500 square miles, but summer flows are reduced to a trickle—sometimes below 10 cubic feet per second. Both the South and North Yamhill fail to meet water quality standards because of water withdrawals, according to Oregon's Department of Environmental Quality.

JOHN DAY RIVER

Grant County

From its headwaters in the Strawberry Mountains, the main stem of the John Day flows wild for 284 miles until it reaches the Columbia. It is one of Oregon's most striking rivers, traveling through a diverse landscape of ponderosa pine, basalt and red rock canyons, and desert sagebrush. The John Day is also longest free-flowing river in the Columbia basin, flowing undammed for its entire length. It supports sizeable populations of wild summer steelhead and chinook salmon. For part of its length the John Day is designated as Wild and Scenic.

But in the summer months irrigation diversions reduce some stretches of the wild John Day to stagnant puddles, and the entire river system is plagued by chronic low flows. Flows sometimes slip below 20 cubic feet per second around the town of Dayville, causing serious problems for threatened bull trout and steelhead, as well as harming water quality. Even though irrigation takes nearly all of the John Day's water in the summer months, the Oregon Department of Agriculture is seeking even more of the river's flow for farming and ranching use.

CALAPOOYA CREEK

Umpqua River Basin, Douglas County

Calapooya Creek flows out of the wooded hills northeast of Roseburg and through rolling farmland before joining the Umpqua River west of Sutherlin.

A historic covered bridge spans the creek below the town of Oakland. The creek is not to be confused with the Willamette Valley's Calapooia River, which also suffers from low flows due to water withdrawals.

Calapooya Creek nearly dries up each year in the late summer, largely because of water withdrawals. The towns of Oakland and Sutherlin both use the creek for municipal water supply, and irrigation takes out much of the remaining water. The average flow in the creek is over 450 cubic feet per second (cfs), but in recent years it has repeatedly dropped below 1 cfs in the late summer. Oregon state agencies, acting under the Oregon Plan, have listed Calapooya Creek as a high priority for restoring streamflows to benefit salmon and steelhead trout.

*“Whether we like it or not,
the West doesn't have enough water
for everyone to do everything...”*

BRUCE BABBITT, U.S. SECRETARY OF THE INTERIOR

SOURCES OF INFORMATION USED FOR THIS REPORT.

In developing our list of Oregon streams with serious flow problems, WaterWatch reviewed information on more than a hundred rivers and creeks all over the state. We primarily used information from three government sources.

First, we reviewed daily flow data from gauges maintained by the US Geological Survey, obtained from their web site at <http://waterdata.usgs.gov>. Second, we analyzed Oregon Water Resources Department reports on the activities of their field staff. These reports show which streams do not have enough water to satisfy all water rights. Finally, we drew upon the Oregon Department of Environmental Quality's list of stream and river reaches that fail to meet clean water standards due to low flows because of water use.

For a full list of 40 Oregon rivers and creeks with low flow problems, and a more detailed explanation of how we compiled the list, please see our web site at:

www.waterwatch.org

send email to: steve@waterwatch.org,

or call: (503) 295-4039 ext.26

SOLVING OREGON'S WATER CRISIS

Population growth, endangered species, and increasing public concern for healthy rivers are all on a collision course in Oregon with a system of water laws developed over a century year ago.

Though the public views our rivers and streams as precious natural resources that need to be preserved, actual efforts to protect and restore them are lagging far behind. If future generations are to enjoy the many benefits healthy rivers provide, we must bring more balance to how our rivers and streams are managed.

ENFORCE THE LAWS THAT ALREADY EXIST

Despite having the legal authority to do so, the Water Resources Department fails to require most water right holders to measure how much water they actually take from our rivers and streams. Worse, on many rivers illegal water use is believed to be a major problem, with people who do not have a water right taking water anyway. And WRD has never really enforced the law preventing excessive water use, or “waste.”

Requiring anyone that takes water from a stream or river in Oregon to measure how much they take would represent a modest but important reform in current management. It could also help pinpoint which rivers suffer from illegal use and waste. An aggressive policy of tracking and punishing those who use water illegally could also result in major improvements in the health of our waterways.

RETURN WATER TO RIVERS

For over a century Oregon's state government has been encouraging citizens to take water out of rivers. With rivers running dry and salmon nearing extinction, it is time for our government to encourage people to put it back.

Since 1987, Oregon law has allowed water right holders to sell, lease, or donate their water to the State, which must protect that water for instream use. Today, more and more water users

are taking advantage of this opportunity, but they continue to face major restrictions. Removing those barriers and providing incentives for people to transfer water back into the stream could help promote effective, voluntary action to restore flows to depleted rivers.

In addition to incentives, the state needs to back up its promises on salmon restoration with real dollars. In 1998, Oregon voters approved a special fund to pay for salmon recovery. State officials need to spend a significant portion of that money to purchase water rights from willing sellers and return their water to rivers and streams.

CHANGE THE SYSTEM

Ultimately, no plan to restore Oregon's rivers will succeed unless our water laws are changed. After one hundred years of favoring agriculture and development above all other uses, it is high time that we bring balance to the system.

Oregon should establish minimum flow levels that provide basic, everyday protection for all our rivers, even if users have old water rights. In drought years these “survival flows” need to be met first, before any water is taken out for private uses. Insuring that sufficient water is left instream to provide for fish, wildlife, and recreation should be the first goal, not an afterthought.

Oregon has a proud tradition of bold, innovative action to protect our environment and quality of life. Our bottle bill, the first in the nation, has promoted recycling and reduced litter. Our statewide land use laws have helped preserve farms and forests while limiting sprawl. Our scenic waterway program has protected dozens of beloved rivers and streams all over Oregon, but hasn't solved the oldest and toughest problem they face. It is time to take another step forward to keep water flowing in our streams—for fish and wildlife, for recreation, for clean water, and for future generations. Oregon shouldn't have dry rivers.

WATERWATCH IS THE
ONLY CONSERVATION
ORGANIZATION DEVOTED
EXCLUSIVELY TO RESTORING
HEALTHY FLOWS TO
OREGON'S RIVERS.

FOR OVER FIFTEEN YEARS
WE'VE WORKED IN THE
COURTS, STATE AGENCIES
AND LEGISLATURE, AND THE
MEDIA TO ENSURE THAT
THERE IS ENOUGH WATER
LEFT IN OUR RIVERS AND
STREAMS TO SUSTAIN THE
FISH, WILDLIFE, AND PEOPLE
WHO DEPEND ON THEM.

To find out more about the
actions you can take to help our
rivers, or to join WaterWatch,
please contact us.

Water Watch
RIVERS NEED WATER

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