

LEGALLY DRY

How Oregon's water laws fail our rivers



A river is more than an amenity . . . it is a treasure.

– OLIVER WENDELL HOLMES, JR.

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Oregon enjoys a national reputation as a leader in environmental protection efforts. From the bottle bill to land-use planning, we have often provided a model that other states seek to follow.

On the issue of river conservation, one achievement stands above all others—the 1987 passage of the Instream Water Rights Act. This pioneering legislation allows basic legal protections for river flows needed to preserve fish, wildlife, water quality, scenic values, and recreation.

Today this landmark legislation has protected flows in over 1,300 river reaches in Oregon. But the Instream Water Rights Act, along with other efforts to protect and restore our rivers, is often undermined by political pressure and an outdated system of water laws.

For over a century Oregon has been giving away “water rights”—permits which allow water to be diverted from the public's rivers and streams and put to private use. Often more water has been given away than nature can support, with tragic consequences for fish, wildlife, and people. These private rights to this invaluable public resource were given away forever and at no charge.

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.

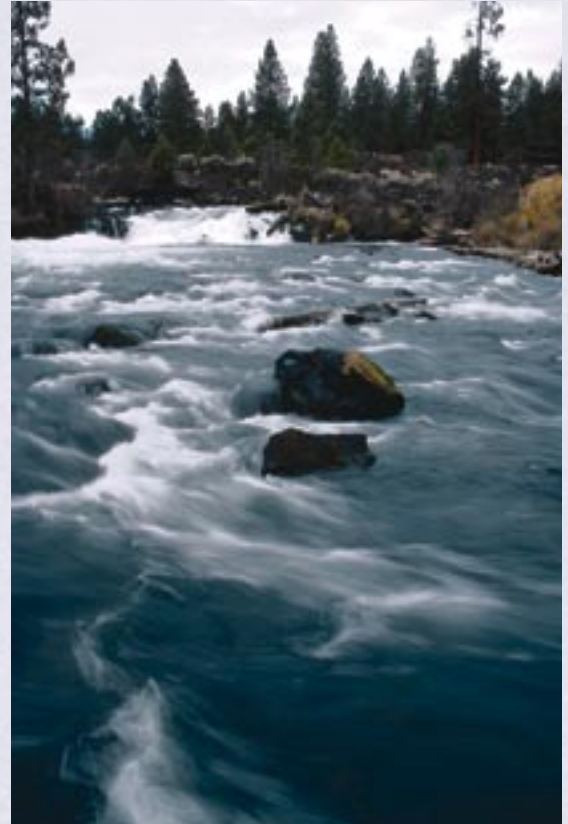
Because of our state's forward-thinking reputation, most Oregonians assume our rivers enjoy strong environmental protections. Unfortunately, this is not the case. The Instream Water Rights Act has helped to protect the last drops of water in some of our most beloved waterways, but it has been unable to do what the public expects—ensure that healthy flows are protected in our rivers year-round.

“Legally Dry: How Oregon's Water Laws Fail Our Rivers” demonstrates how our outdated water allocation system undermines efforts to restore and protect rivers. This report highlights 10 representative streams around the state that are safeguarded by river protection laws, but still suffer from chronic low flows.

OREGON: SOGGY REPUTATION CLOUDS A DRY REALITY

On a rainy March morning, if one were to ask the average Portland resident what Oregon's water problem was, they would likely say that there is too much of it. But while Northwestern Oregon receives large amounts of rain during winter and spring, overall the state is actually very dry. In fact, much of the land east of the Cascade Mountains is high desert, and during the summer months even soggy coastal areas receive little rain.

Oregon's fish and wildlife are well adapted to the natural pattern of rain, snowmelt, and drought. Millions of salmon and steelhead trout once returned to our rivers, weathering natural cycles of drought and flood to leap past huge rapids and swim through desert canyons to spawn in high mountain streams. Our rivers also provided habitat for an abundance of other species, from bald eagles to river otters.



Lana Young

The Deschutes River and its tributaries are among the most beloved—and threatened—waterways in Oregon.

But while fish and wildlife are well suited to the natural cycles of our rivers, they were ill prepared for the changes the last century has brought. Beginning with the earliest settlers, our rivers have been diverted and drained to spur development. Water use that began with pioneers using a trickle of water to irrigate a few acres has today grown to the point where sections of entire rivers are drained dry.

Today the lion's share of water used in Oregon continues to go to irrigated agriculture. According to the US Geological Survey, over 75% of the water taken from our rivers goes to agriculture.

RUNNING ON EMPTY

Oregon's century-old water laws have taken a heavy toll on many of our rivers and streams—as well as on the fish, wildlife, and people who depend on them.

FISH OUT OF WATER

Low river flows have been a major factor in the decline of salmon, steelhead, and other native fish. They need cool, clean water flows for spawning, rearing, and migration, but many streams simply do not have enough water left to support them. While there are a number of reasons for the decline of salmon and other native fish across the Northwest, excessive water withdrawals are a major cause that is often overlooked.

WORSENING POLLUTION WOES

Low river flows are also a major factor in some of our state's worst water quality problems. Chronic low flows in a river or stream means that pollution from industry, agriculture, and cities is more concentrated, and that it takes longer for rivers and streams to cleanse themselves of these pollutants. Irrigation water running off crop lands often returns to streams contaminated with pesticides, fertilizers, and animal wastes. Finally, low water flows mean higher water temperatures, and greater chances of bacteria outbreaks and algae blooms.

BOATERS AND ANGLERS LEFT HIGH AND DRY

Low water flows also pose serious problems for Oregonians who use our rivers for recreation. As water levels decrease, opportunities for boating and fishing decline. Agricultural diversions make large sections of recreation rivers, like the Deschutes, impassible and destroy habitat for trout and other sport fish. With tourism and outdoor recreation accounting for a sizable portion of Oregon's economy, dry rivers are a serious economic burden.



WaterWatch

Each summer, irrigation diversions reduce the Middle Deschutes to a 30 cfs trickle, while as much as 1,700 cfs flows in canals.

until there is nothing left to distribute. Under this system each water right has a "priority date", which refers to the date on which it was established: older rights always get their water first.

By the time Oregon formally adopted the doctrine of prior appropriation in 1909, many rivers were already running dry due to human activity. During the irrigation season, sections of the Umatilla and Walla Walla were sucked dry as early as 1900, and many other rivers and streams were reduced to a trickle. The needs of fish and wildlife, as well as Native Americans and downstream communities that depended on healthy rivers, were ignored.

STUCK IN REVERSE: OREGON'S BACKWARD-LOOKING WATER LAWS

For more than a century, Oregon has followed the same doctrine of water law as most other Western states—"prior appropriation".

This legal doctrine gives the first person to use water from a river or stream the legal right to do so forever, regardless of the effect on the river, the environment, or even other water users. The earliest water rights take precedence over all other uses—the first user gets as much as their right allows, the next person gets what is left, and so on

At several points during the last century efforts have been made to reduce the damage done by this one-sided system. In 1915, the Oregon legislature barred new water use on certain streams and waterfalls in the Columbia Gorge “to preserve the[ir] scenic beauty.” In 1955, Oregon for the first time legally recognized that leaving water instream for fish and wildlife was a “beneficial use” of the resource. In that same year Oregon became the first state in the region to pass a minimum streamflow law.

The Water Resources Commission set over 500 minimum flows under this statute, covering many key reaches of Oregon rivers, particularly in the western, and wetter, part of the state. These were not water rights but did give some protection to instream flows. However, many of these minimum flows were modified or undermined by later water management decisions, and were given priority dates according to the year they were established—meaning that older water rights still got their full amount before anything was protected in the river.

In 1987, WaterWatch and then-Senator, now Governor, John Kitzhaber pressed the Legislature to try a new and more ambitious approach to restoring and protecting streamflows. The Instream Water Rights Act created, for the first time, “instream” water rights on par with out-of-stream uses.

The law mandated that the state Water Resources Department convert all of the old minimum streamflows into instream water rights. Additionally, three state agencies, the Departments of Fish and Wildlife, Environmental Quality, and Parks and Recreation, were given authority to request new instream water rights to protect fish and wildlife habitat, water quality, recreation, and scenic values. It allowed old water rights for irrigation or industry to be converted into instream water rights, so that the water could be used to restore flows.

But while the Instream Water Rights Act was bold and forward thinking in 1987, like many other Oregon environmental laws, it has had mixed results. Because Oregon has only recently recognized the value of leaving water in rivers, most instream water rights are the last to be honored on a stream. It is perfectly legal for senior water right holders to drain the last drops from a waterway that has an instream water right—and they often do.

In addition, some of our state's most critical streams, such as the main stem of the Wild and Scenic Owyhee River in Eastern Oregon, do not have any instream water rights at all.

PARALYZED BY OPPOSITION

Political pressure is a huge roadblock to preserving what water is left in Oregon rivers. Again and again opposition from special interests has paralyzed efforts to establish instream water rights on critical rivers. Anti-environmental legislators, backed by these interests, have attempted to repeal the Instream Water Rights Act and have refused to adequately fund Oregon Department of Fish and Wildlife programs to apply for instream water rights and to support pending applications.

The Department of Environmental Quality and Department of Parks and Recreation have rarely applied for instream water rights. In addition, efforts to protect flows are often undercut by the Water Resources Department, which frequently limits the amount of the instream flow requested and grants exemptions from the instream water right.

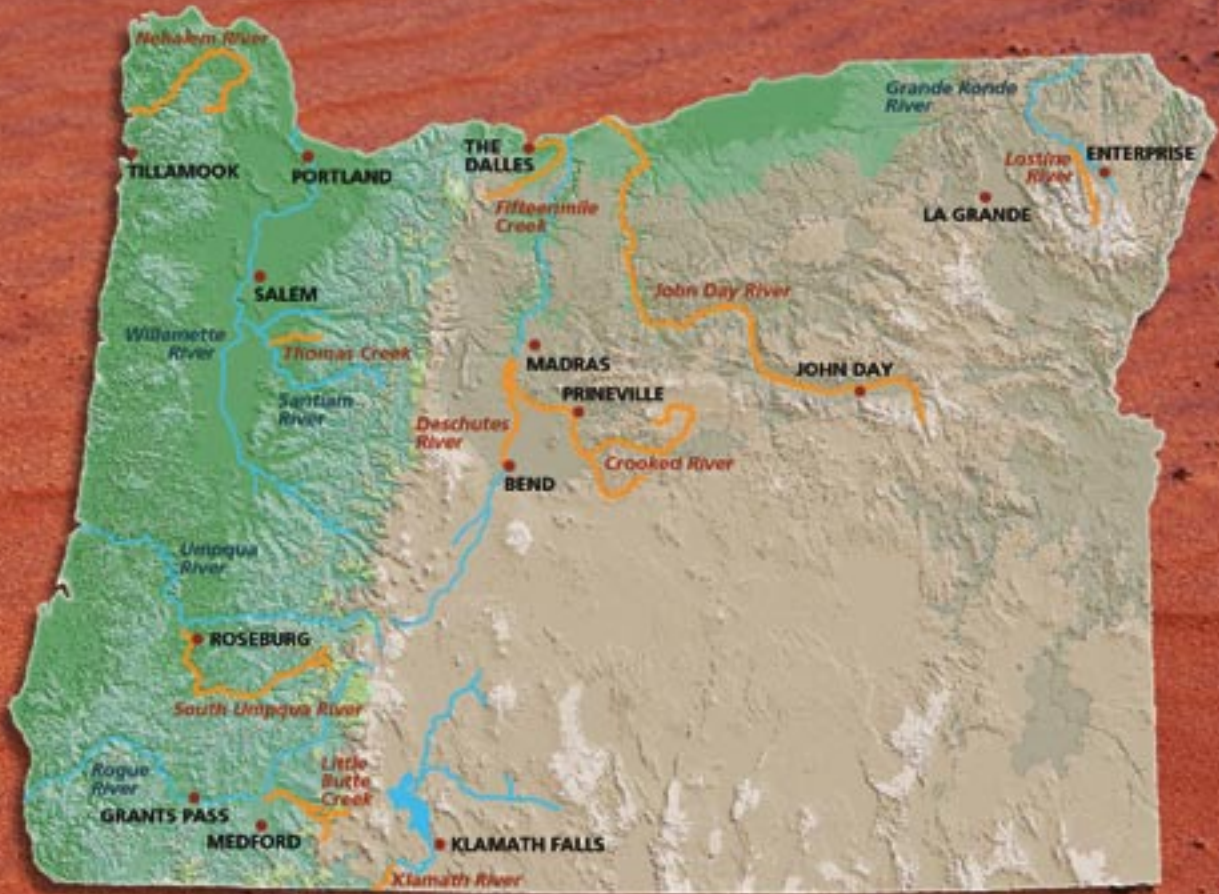
LOOKING TO THE FUTURE

Oregonians today treasure our rivers and streams as an important part of our state's natural heritage. Unfortunately, our water resources have been given away based on the values of a century ago and our water laws have not kept up with the times. If future generations are to enjoy healthy rivers, as well as the fish, wildlife, scenic beauty, and abundant recreational opportunities they provide, we must comprehensively reform Oregon's code of water laws.



A push up dam siphons water off the Wild and Scenic John Day River for irrigation in the high desert.

10 DESPERATE RIVERS



The ten waterways listed in “Legally Dry: How Oregon’s Water Laws Fail Our Rivers” are just a small sampling of Oregon rivers that are not being adequately protected by our state’s water laws.

The river reaches marked on the map are examples of many streams that fail to meet flow targets needed to protect fish, wildlife, and river recreation during at least part of the year. Data for the map and this report were drawn from the records of the Oregon Water Resources Department, interviews with Department staff and with Oregon Department of Fish and Wildlife biologists, and from the United States Geological Survey’s streamflow gauge data.

As shown on the map above, these rivers are found throughout the state, from the sagebrush of the high desert to the thick forests of the Oregon coast.

LEGALLY DRY

Ten Oregon rivers with nothing left to give

The 10 rivers highlighted in “Legally Dry: How Oregon’s Water Laws Fail Our Rivers” are examples of how river protection laws are being undermined by our outdated approach to water management. In every basin in the state, similar examples exist.

John Day River

Columbia Basin, Grant County

The John Day is one of Oregon’s wildest rivers. Along its 284 mile route from the Strawberry Mountains to the Columbia, this river flows free—it bears the unique distinction of having no major dams. It carves a path through an incredibly diverse landscape, flowing through forests of ponderosa pine, over basalt boulders, and down isolated red rock canyons. The John Day supports sizeable populations of chinook salmon, and is a major draw for anglers seeking to test their skills against powerful steelhead trout. Other rare and threatened fish, including bull and cutthroat trout, also call the river home.



WaterWatch

The John Day is one of the wildest rivers in Oregon, but it suffers from chronic low flows and poor water quality.

Despite its rugged character and outstanding recreational value, the John Day is in critical condition. During the summer irrigation diversions reduce some of the river’s lower sections to stagnant puddles, and severe water quality problems are common. There are instream water rights on the John Day, but on some sections they have been set too low to do much good. The Oregon Department of Fish and Wildlife has concluded that in August, 500 CFS of water flow is needed for fish in the main stem of the John Day. Yet the instream water right only protects 20 CFS. (1 CFS is equal to 646, 272 gallons of water per day.)

Lostine River

Snake River Basin, Wallowa County

Oregon has no shortage of beautiful streams, but the Lostine River is possibly the most scenic of them all. Born in the Eagle Cap Wilderness high in the Wallowa Mountains of Northeast Oregon, the Lostine flows through stunning alpine meadows and past a back drop of jagged, snow capped peaks. It joins the Wallowa River a few miles above the town of Minam. The Lostine provides a home for threatened salmon, steelhead, and bull trout. Its scenic beauty draws hikers, backpackers, and horseback riders from across the Northwest, and 16 miles of the Lostine bear the federal Wild and Scenic designation.

Though the Lostine’s spectacular scenic beauty is a major draw for the region, it is a sick river. For decades irrigation withdrawals left entire sections dry, though in recent years irrigators have agreed to leave a minimal amount of water in the stream. Still, instream water rights are routinely not met during the summer and fall months, and a substantial section of the river suffers from poor water quality due to low flows.



The breathtaking spires of Smith Rock State Park provide a backdrop for the sickly trickle of the Crooked River.

Crooked River

Deschutes River Basin, Crook County

Best known for the postcard beauty of Smith Rock State Park, the Crooked River flows wild from the Ochoco Mountains until it is captured by Prineville Reservoir. Below the reservoir the river flows through irrigated desert until it reaches Lake Billy Chinook. Some sections of the Crooked are popular with anglers, and the park is a mecca for sightseers and rock climbers.

Despite its beauty, the Crooked River suffers from chronic low water flows due to irrigation diversions. In this remarkable river, human activity has already reduced flows to a level

where the needs of fish, wildlife, and recreation are generally not met during the summer months. An instream water right for 75 CFS has been proposed below Prineville Reservoir, but an irrigation district that draws water from an important tributary is protesting this modest effort. Were the instream water right established today, it would seldom be met during the summer months because of the many older water rights on the Crooked.

Thomas Creek

Willamette River Basin, Linn County

Thomas Creek flows down the west slope of the Cascade Mountains, southeast of Salem, before joining the South Santiam River. When spring rains and snow melt raise water levels, the normally mild creek becomes a difficult whitewater kayaking run where boaters can test their skills on huge rapids. Thomas Creek also provides habitat for threatened steelhead trout.

In many ways Thomas Creek is an average Willamette Basin stream. It flows through one of the wettest regions of Oregon, but despite rainy winters and huge spring runoff, irrigation diversions leave Thomas Creek with too little water for fish and wildlife. The instream water right on the creek is typically not met during the late summer and early fall, and the creek has been designated a water quality limited stream.



State and federal authorities are pouring millions of dollars into restoring Fifteenmile Creek, but fish can't swim without water.

Fifteenmile Creek

Columbia Basin, Wasco County

Fifteenmile Creek flows northeast of Mount Hood, meandering through irrigated farmland before spilling into the Columbia River just east of The Dalles. Fifteenmile supports the easternmost population of wild winter steelhead trout in the Columbia River basin. No hatchery fish have ever been placed in the stream, making the run extremely important genetically.

Because of its special significance for wild steelhead, state and federal agencies are spending millions to restore the creek.

Work has focused on improving riparian habitat, screening water diversions, and getting fish past small dams. All of this effort could be undermined, however, by chronic low flows. Instream water rights on Fifteenmile are not met each summer due to large irrigation diversions, and low flows contribute to water quality problems.

Nehalem River

North Coast Basin, Tillamook, Clatsop, Columbia Counties

The Nehalem River is born in the mountains of the Coast Range in Northwest Oregon, where it flows for 118 miles through temperate rain forest before spilling into the Pacific Ocean at Nehalem Bay. The river system still supports threatened salmon and steelhead trout, though both have declined steeply in the last century. One tributary, the Salmonberry River, provides one of the last strongholds in the Coast Range for threatened steelhead, and is renowned for its scenic beauty and hiking opportunities.

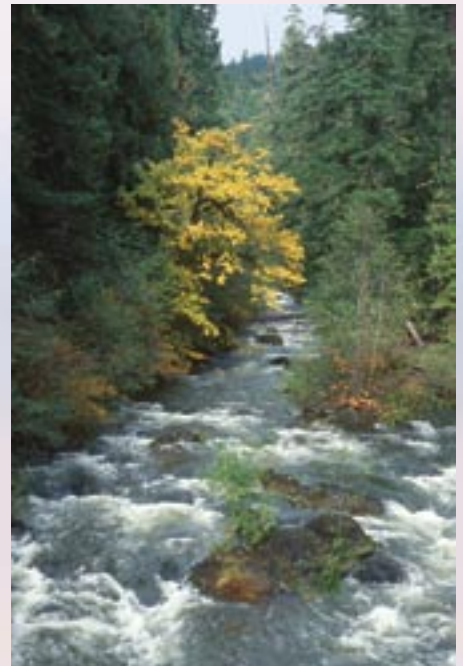
The rainy Coast Range would seem an unlikely place to find water shortages, but each summer fish in the Nehalem River do not get the water they need to survive. The river suffers from a death of a thousand cuts as numerous small diversions rob the river of critical flows. Water Resources Department data show that instream water rights on the Nehalem have not been met in the last 10 years during some portion of August, September, and October, and chronic low flows have led the state to declare it a water quality limited stream.

South Umpqua River

Umpqua River Basin, Douglas County

As it flows down from its headwaters in the Cascades, the Umpqua River carves out hundreds of valleys in the mountain foothills of Southwest Oregon. Gathering the flow of dozens of tributaries, the river punches west to spill into the Pacific Ocean near the town of Reedsport. The Umpqua has long been known as a paradise for anglers, and it still supports populations of threatened salmon and steelhead, as well as rare cutthroat trout. Its popularity with fishermen and rafters has created a strong recreation economy, supporting guides, campgrounds, tackle shops, and restaurants.

In theory, the Umpqua's south fork is protected by instream water rights, but in practice suffers from severe environmental problems. Far more water has been promised to irrigators in the basin than nature can actually support, exacerbating pollution woes. Water quality problems abound, including toxic pollutants, chronic low flows, high temperatures, bacteria, and sediments clogging spawning beds needed by salmon. During the month of August instream water rights call for at least 122 CFS of water to be left in the South Umpqua at its mouth, but during 2001, flows dropped as low as 38 CFS.



Oregon Trout

The South Umpqua and its tributaries support salmon and an important recreation economy, which both depend on healthy water flows.

Upper Klamath River

Klamath River Basin, Klamath County

The water woes of the Klamath Basin have grabbed headlines around the nation, but the scenic beauty of this river system is often overlooked. The Klamath's first tributaries rise near Crater Lake National Park, and after the waters gather in the largest lake in Oregon, the river cuts southwest through arid high desert, scenic canyon lands, and massive redwood trees. A century of irrigation, along with dams and poor logging practices, has had a severe effect on the entire river system, and today three species of fish in the basin are protected by the federal Endangered Species Act.

The section of the Klamath River between JC Boyle Dam and the Oregon-California border is a renowned whitewater rafting destination, and a federal Wild and Scenic River. Years ago, the Oregon Parks and Recreation Department applied for an instream water right of 1,500 CFS to preserve the river's scenic beauty and outstanding recreational opportunities, but protection has been held up by protests from irrigators and business interests.



Little Butte Creek is one of the most important salmon streams in the entire Rogue Basin, but it has been degraded by water diversions.

Little Butte Creek

Rogue River Basin, Klamath and Jackson Counties

Flowing down from their headwaters in the Southern end of the Cascade Mountains, Little Butte Creek's north and south forks meander through the foothills just south of Mt. McLoughlin, eventually joining to flow into the Rogue River north of Medford. Little Butte Creek is one of the most important spawning streams for salmon and steelhead in the entire Rogue River Basin.

However, Little Butte Creek suffers from chronic low flows due to water diversions. Little Butte Creek is overallocated, meaning

more rights to water have been issued than the stream can support. Although a number of instream water rights have been established on the creek, their junior priority date means they are typically not met from July through November. These low flows not only adversely impact the habitat of an important fishery, but also leave Little Butte Creek with serious water quality problems.

Middle Deschutes River

Deschutes River Basin, Deschutes, Jefferson, and Wasco Counties

When the average Oregonian thinks of the Wild and Scenic Deschutes River, images of roaring whitewater in the lower reach or scenic ponderosa pines lining the banks of the upper river often come to mind. But what most people do not know is that each summer a huge section of the Deschutes disappears because too much water is taken out for irrigation in the high desert.

The Middle Deschutes is a poster child for the failure of Oregon's river protection laws. Every summer this section of the river is reduced to a trickle. In June of 2002 flows dropped as low as 33 cubic feet per second (CFS) in the river, while irrigation canals roared with over 1,700. A minimal instream water right for 250 CFS has been proposed, but local ranchers have stalled its adoption. Today this parched river faces new threats from sprawl development.



Boaters could enjoy the Middle Deschutes year-round if irrigation diversions did not reduce it to a trickle each summer.

Sources of information used in this report.

Legally Dry: How Oregon's Water Laws Fail Our Rivers was developed with information from a variety of sources: instream water right information from the Oregon Water Resources Department; United States Geological Survey daily stream flow data (available at <http://waterdata.usgs.gov>); the Oregon Department of Environmental Quality's 303(d) list of water quality limited streams; and phone interviews with Water Resources Department staff and regional biologists with the Oregon Department of Fish and Wildlife.

For more information on any of the rivers and streams contained within this report, or other rivers around Oregon suffering from environmental problems, contact WaterWatch at (503) 295-4039 ext. 26, or email steve@waterwatch.org.

OVERHAULING OREGON'S WATER LAWS

Oregon has changed dramatically in the last hundred years, but our water laws have not kept pace. Today population growth, endangered species, and increasing public concern for healthy rivers are all on a collision course with an outdated system of water management.

Landmark laws like the Instream Water Rights Act have helped to preserve some of our state's rivers and streams from further degradation, but unfortunately they have not been able to provide the level of protection that Oregonians expect. If future generations are to enjoy the many benefits healthy rivers provide, we must bring balance to how our rivers and streams are managed.

1. IMPLEMENT AND ENFORCE EXISTING LAWS.

First, no Oregon river should go unprotected. Immediate steps should be taken by the responsible state agencies to establish instream water rights on all of our rivers and the necessary leadership and funding to accomplish this should be provided.

Second, no water users should be allowed to take more than their fair share. Illegal use of water is known to be a problem that can harm streamflows, yet most water right holders are not required to measure how much water they actually take from our rivers, and there is very little oversight of water use by the state. The Water Resources Department has the authority to require all users to measure and report their water use and should take immediate steps to do so. In addition, the Department should develop and implement an enforcement program that ensures that illegal water users are identified and held accountable, and that prevents wasteful water use. Aggressive enforcement of existing laws could make more water available for fish, wildlife, and recreation.

2. RETURN WATER TO RIVERS.

The Instream Water Rights Act allows water right holders to sell, lease, or donate their water to the State, which must protect that water for instream use. In addition, state law allows conserved water to be protected instream. Today, more and more water users are taking advantage of these opportunities, but they continue to face major obstacles. Removing those barriers and providing incentives for people to transfer water back instream and to conserve water 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. A significant portion of that money, as well as revenue from other sources, should be used to purchase water rights from willing sellers in order to return water to rivers and streams.

3. CHANGE THE SYSTEM.

Oregon has a proud tradition of bold, innovative action to protect our environment and quality of life. Forward-thinking legislation like the Instream Water Rights Act and the state scenic waterway program have protected dozens of beloved rivers and streams all over Oregon. But they have been unable to address the fundamental problem many waterways face—too much water has been promised to too many interests, and not enough has been set aside to preserve Oregon's natural heritage.

Ultimately, no plan to restore Oregon's rivers will succeed unless our basic 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 flow levels that provide basic, everyday protection for all our rivers. These "survival flows" should be met first, before any water is taken out for private uses, even in drought years. Ensuring that sufficient water is left instream to provide for healthy rivers should be the first goal, not an afterthought.

It is time to correct the mistakes of the past. We must take another step forward to keep water flowing in our streams—for fish and wildlife, for recreation, for clean water, and for future generations.

WaterWatch is the only
conservation organization
devoted exclusively to restoring
and protecting natural flows in
Oregon's rivers. We work with
the courts, state and federal
agencies, the legislature, and
the public 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.



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