

KLAMATH RIVER NEWS

a publication of **KLAMATH RIVERKEEPER**.

Summer-Fall 09

Pollution stops here.

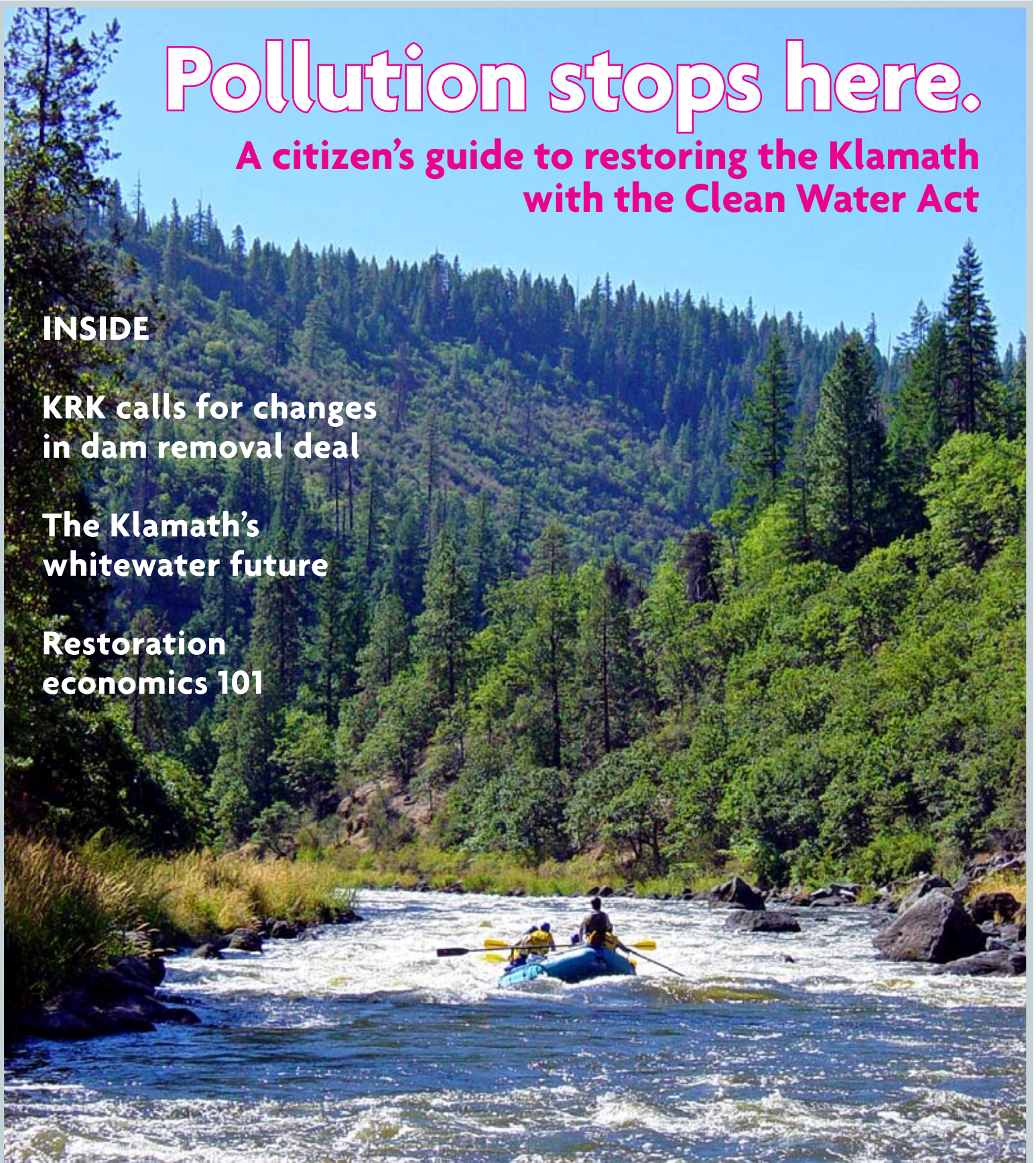
**A citizen's guide to restoring the Klamath
with the Clean Water Act**

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Early this summer, Klamath Justice Coalition activists hung banners from Hwy 101's Golden Bears Bridge over the Klamath River. The signs sent a message to dam removal negotiators touring the lower river by boat below the bridge: Un-Dam the Klamath Now! Enough is Enough, Bring the Salmon Home. Photo courtesy of Klamath Justice Coalition.

CALLING FOR A BETTER DAM REMOVAL DEAL

THIS SPRING, DAM REMOVAL SETTLEMENT NEGOTIATORS had a meeting on the lower Klamath, and toured the river on boats. Klamath Justice Coalition activists took the opportunity to lobby the negotiators, and unfurled banners on a bridge above the river demanding dam removal and restored salmon runs. We chanted: Open the river. Close the deal. Let the Klamath River heal!

Yet, negotiators gave themselves another two to three month extension in June, when they had promised a final dam removal deal, leaving most of us to wonder how long we can stall extinction and repeat our stories in government meetings with little to show for them.

To move the process along, Klamath Riverkeeper, as one of the few groups outside the settlement talks, is prepared to take a legal route before the year is up to resume the clean water permitting and challenge fish management agencies to do better if certain issues are not adequately addressed in the package of settlement agreements and authorizing legislation to follow.

In short, the deal must get the dams out by 2020, put the feds in charge of removal, base final federal approval in 2012 on the Federal Energy Regulatory Commission record we spent years building--not economic analysis, nix overly broad immunity for PacifiCorp, commit to explore California funding sources other than bond money, and eliminate sixty-day rights of withdrawal for the states of Oregon and California.

Most importantly, the package needs to show due diligence in planning for drought conditions in the Klamath basin, and that planning needs to protect fisheries and refuges. Equally important, the package has to preserve the integrity and authority of all clean water and endangered species laws.

Finally, the package needs to mandate compliance with the total maximum daily loads, or TMDLs, being shaped by California's North Coast Regional Water Board right now with public input from citizens like you (see page 6). Negotiators, members of Congress and

the Regional and State Water Boards need to hear from us that TMDL compliance is not optional, and must be required regardless of cost. Our river and its peoples have already paid the price of sanctioned non-compliance, with only toxic algae blooms and polluted, oxygen-starved water as a result.

All of these issues are still in play, but our calls for more drought planning and mandatory TMDL compliance will likely get the most pushback. Negotiators may say the sky is falling. PacifiCorp or the farmers may threaten to walk. And critics of the imminent settlement package may tell you that the deal puts too much risk on fish and wildlife refuges.

Just remember, when we started this fight, publicly calling for dam removal provoked eye rolls and laughter. But we know PacifiCorp and the irrigators would have left the negotiations long ago if they liked their alternatives better.

I believe the data shows that the biological and hydrologic benefits of dam removal plus the increased number of good flow years projected under this settlement are probably our best hope of restoring our Klamath River fisheries. And while the settlement won't flood farmlands and convert them permanently back into the wetlands they once were, for the first time ever, the Lower Klamath National Wildlife Refuge would get a water right and a fixed flow allocation.

If the settlement package adequately addresses our issues and offers a clear path to dam removal, we'll throw our support behind it. If not, we may have to take legal action. Either way, Klamath Riverkeeper is in a unique position to apply leverage and propel the campaign forward.

As always, we need your help to do it. Join us in this historic opportunity to ensure the largest dam removal project in history actually serves the Klamath and its communities. Please consider volunteering your unique skills, donating unneeded equipment, or contributing whatever you can afford so we can maintain the momentum and Un-Dam the Klamath River. Thanks for all you do.

- Erica Terence, Klamath Riverkeeper

“If the settlement package adequately addresses our issues and offers a clear path to dam removal, we’ll throw our support behind it. If not, we may have to take legal action.”

on the cover:

Rafters with Momentum River Expeditions enjoy another beautiful day on the Klamath River. They're floating just downstream of the Spring Island put-in and getting ready for a wild ride down the Upper Klamath. When PacifiCorp's four lower Klamath River dams are removed, this stretch will be part of one of the longest continuous whitewater rafting reaches in the Lower 48. Photo by Pete Wallstrom, www.momentumriverexpeditions.com

Let's make a dam removal deal

Issue list lays out KRK's concerns

A final dam removal deal is due this fall that will fold the *Klamath Basin Restoration Agreement* (KBRA) and the draft *Agreement in Principle* (AIP) into one final package of agreements that will remove the dams. In order for this final deal to set the stage for true progress on the Klamath, it must improve conditions for fish, people, and wildlife. To that end, KRK has developed the points below. If these issues are adequately addressed in the final deal, it can win our support. If not, KRK is prepared to take legal action to ensure the deal truly serves the Klamath.



Commercial fishermen rally for Klamath dam removal on San Francisco Bay after the salmon season was closed coastwide due to the Klamath's poor Chinook returns in 2006.

Four dams out by 2020 A final hydropower agreement that will remove the dams no later than 2020 must be publicly released and integrated into the KBRA.

Sufficient drought planning to prevent fish kills and protect refuges

The parameters of a drought plan must be outlined clearly and specifically in the package and must protect fisheries and refuges.

Mandatory compliance with clean water laws The agreement must uphold state and federal clean water laws and require compliance with mainstem and tributary pollution limits (TMDLs) mandated by the Clean Water Act.

Mandatory compliance with the Endangered Species Act The agreement should not undermine the integrity of the ESA or provide loopholes for non-compliance by any party.

California funding for dam removal by 2012 California must secure its financial commitment toward the costs of dam removal by 2012. The state must consider funding mechanisms other than general obligation bonds that may include environmentally damaging projects like a peripheral canal.

The federal government as removal agent The U.S. Department of the Interior must take absolute and final responsibility for removing the four dams.

No 60-day right of withdrawal for states

California and Oregon cannot back out of the agreement, and should take an active role in funding and supporting dam removal on the Klamath River as a necessary step toward river restoration.

A federal finding for dam removal based on FERC record The secretarial finding prescribed in the Agreement In Principle should rely on the existing FERC record. Additional studies should be limited to data gaps in the existing record and studies to ensure that removal is safe for downstream communities.

Limit PacifiCorp's immunity to dam removal The agreements and legislation should limit immunity to the act of dam removal. PacifiCorp should still be accountable for decades of damages its dams have caused to public health and fisheries in the Klamath basin.

Background on these terms, the KBRA, the AIP and final dam removal agreements can be found on our website www.klamathriver.org/dams

KLAMATH DAM REMOVAL an abbreviated timeline...

2004 PacifiCorp's operating license expires on the Klamath dams and they file for a new one with no provisions for fish passage. Tribes, fishermen and others travel to Scotland to demand dam removal from Scottish Power, the owner of PacifiCorp. Settlement negotiations begin.

2005 Karuk Tribe identifies dangerous toxic algae blooms on PacifiCorp's reservoirs. The algae spreads when nutrient-rich water warms and stagnates behind the dams. Public health warnings are posted near the reservoirs for the next 5 years. Tribes return to Scotland to disrupt Scottish Power's shareholder meeting.

2005 Klamath advocates rally in front of PacifiCorp's headquarters, returning annually for 3 years.

2006 Scottish Power sells PacifiCorp to Warren Buffett's Berkshire Hathaway.

2006 Low Klamath salmon returns close the commercial salmon season from Monterey, Ca to Newport, Or.

2006 Federal agencies file terms for relicensing including \$400 million in fish passage upgrades. PacifiCorp challenges the terms but judge's ruling upholds them.

2007 The California Energy Commission uses PacifiCorp's own data to show that dam removal would be cheaper than mandatory upgrades associated with relicensing.

2007 FERC releases a final EIS recommending the dams remain (with fish to be trucked around them) but also showing dam removal to be cheaper than relicensing. One week later NOAA & USFWS require volitional fish passage, ruling out the trap-and-haul option.

2007 Klamath delegation travels to Omaha to ask Warren Buffett to discuss dam removal options. He refuses. Delegation returns to Omaha the next 2 years.

Jan 2008 After years of negotiations, stakeholders release a Klamath Basin Restoration Agreement supported by over 20 agencies and organizations. The KBRA rests on a parallel dam removal agreement with PacifiCorp, which the utility refuses to comment on throughout settlement negotiations.

May 2008 After a successful lawsuit from KRK, US EPA lists PacifiCorp's reservoirs as impaired by dam-caused algal toxins. The listing potentially blocks the corporation's chance to acquire a 401 clean water permit needed to relicense the dams.

Nov 2008 PacifiCorp decides to work with the federal government, Oregon, and California on the hydropower agreement called for by settlement negotiators. The corporation announces publicly that dam removal is in the best interest of its customers. An Agreement in Principle (AIP) to remove the dams is released.

2009 A final dam removal agreement integrating the KBRA and the AIP is due in June, and then delayed until September.

See a detailed timeline at
www.klamathriver.org/dams



Pete Wallstrom

The Klamath's whitewater future

Restoring one of the nation's longest free-flowing rivers

We know that removing the Klamath dams will open up over 300 miles of river to spawning salmon and, with Clean Water Act enforcement, will vastly improve water quality. What doesn't get mentioned very often, however, is that these major restoration opportunities are also a boon for whitewater enthusiasts and businesses. Here's a few questions on post-dam whitewater we often hear.

Q: What will the river be like without the dams?

A: Like many rivers in the West, the Klamath was dammed prior to the advent of modern whitewater river travel. Nobody knows for sure what the river is like beneath Iron Gate, Copco, and JC Boyle reservoirs but a quick look at a topo map indicates that there is plenty of whitewater waiting to flow again after the dams come out. The biggest rapids will probably be found beneath Copco Lake, especially in the short, narrow gorge between the two Copco dams.

The river beneath Iron Gate Reservoir is lower gradient and will probably offer alternating pools and class II riffles, similar to the section of river downstream of Iron Gate Dam today. The best news is that once all four dams are removed, the Klamath will flow freely for 250 miles from the high desert of Southeast Oregon to the redwood rainforest along the Pacific. This will make the Klamath one of the longest free-flowing rivers in the US!

Q: How will dam removal affect the popular Upper Klamath raft run?

A: In addition to revealing inundated whitewater runs, dam removal will restore natural flows to the popular Upper Klamath run that straddles the Oregon-California state line. Each day in summer, PacifiCorp turns the river's water on and off according to their power generating needs. Paddlers use the river while the water is turned on. Removal of JC Boyle

Dam will restore natural flows and the Upper Klamath will no longer turn on and off like the lights it is now harnessed to power. This means that the Upper Klamath, like other wild rivers in the region, will be a spring and early summer run. It will have higher winter, spring and early summer flows than it currently does, however, by mid summer flows will be too low for rafting and kayaking. Some paddlers and outfitters understandably lament the loss of the dammed river's predictable summer flow schedule although most river enthusiasts are excited to see the Klamath wild and free once again. American Whitewater, the largest organization of whitewater paddlers in the country, strongly supports Klamath dam removal as do a number of outfitters and guides that raft this stretch frequently.

The removal of JC Boyle Dam will also revive six miles of currently dewatered class III-IV+ river immediately upstream of the Upper Klamath put-in. Dam removal will give paddlers the option of running this section in the spring and early summer and it could be paired with the Upper Klamath run to make a longer river trip.

Q: How does restoration improve rafting opportunities on the Klamath?

A: If you regularly paddle the Klamath, you know what's needed to improve the river's whitewater experience: better water quality. The Klamath's highly publicized toxic algae problem occurs when nutrient rich water flowing out of Oregon is trapped in PacifiCorp's reservoirs just inside California. The reservoirs

incubate the algae blooms, greatly amplifying the Klamath's water quality problems and eventually releasing toxic water downstream. Without the dams and reservoirs, the toxic stew turns into a much cleaner, free-flowing source of water.

Although dam removal is the single biggest step to improving water quality, additional steps need to be taken to reduce pollution

in the river. To this end, both Oregon and California are currently issuing new pollution limits known as Total Maximum Daily Loads (TMDLs), a requirement of the Clean Water Act (see page 4). With proper enforcement and citizen oversight, these new limits will substantially reduce water pollution throughout the river system. Expect to see vastly

cleaner water flowing out of Oregon and into California.

Mother Nature doesn't create whitewater rivers quickly but Klamath River paddlers may soon be lucky enough to paddle "new" whitewater if the dams are removed. Dam removal and strict pollution limits will vastly improve whitewater recreation on the Klamath. Join us in our efforts to remove the Klamath dams and restore the river's water quality.

Above: Rafters enjoy the world class Upper Klamath River, photo courtesy of Pete Wallstrom, www.momentumriverexpeditions.com.

Center: The Klamath River at Iron Gate Dam before the dam was constructed in 1962. From the 1967 book 50 Years on the Klamath by John C. Boyle.





RESTORATION ECONOMICS 101

How dam removal and river restoration can spark the Klamath's rural economy

Restoration puts people to work

Across the Klamath basin - and the US - environmental restoration is becoming big business. From local stream restoration projects to large-scale dam removal, restoration can help solve the Klamath's environmental problems and allow local businesses who benefit from recreation and tourism dollars to enjoy longterm success. Meanwhile, as older, inefficient hydro dams are phased out, the Klamath is an ideal place for truly renewable energy industries to thrive.

How to plan for a restoration economy during a recession? Our cities and counties must act as if clean water and healthy forests equal prosperity for our region. Local governments can invite restoration by supporting large-scale dam removal, lobbying for state and federal restoration dollars and helping local businesses re-tool for restoration jobs. Incentives for renewable energy could also help the Klamath - blessed with sun, wind and geothermal energy - become a leader in this sector.



Lomakatsi Restoration Project

Lomakatsi Restoration Project



Local groups get the job done

In the photo at left and above, work crews are replacing a disfunctional culvert and restoring a section of Cottonwood Creek near I-5. The \$240,000 project combined funding from several agencies and involved engineers, biologists, heavy equipment operators and on-the-ground work crews. Similar projects around the basin are being organized by tribes, resource conservation districts, and watershed groups.

- Working with landowners and agencies, the **Shasta Valley Resource Conservation District** has removed unnecessary barriers to fish passage on the Shasta River, like the Araujo Dam.
- The **Mid Klamath Watershed Council** has worked with the **Karuk Tribe** and others to help repair or remove outdated and sediment-contributing roads on the Six Rivers and Klamath National forests.
- In the upper Basin, the **Klamath Watershed Partnership** has worked with landowners, agencies and restoration specialists to restore streams and fence in riparian areas.
- This year, the **Yurok Tribe** will make use of \$500,000 in stimulus funding from NOAA fisheries to grow riparian plants for streamside revegetation on important tributaries in the lower watershed.
- The **Salmon River Restoration Council** has reduced fire risk and restored fisheries by manually eradicating noxious weeds in the Salmon River watershed.



Tom Bauer, The Missoulian

Large scale dam removal = large scale jobs

Residents in Missoula, Montana are seeing the economic benefits of a major dam removal project on the Clark Fork River (pictured above). An estimated \$120 million will be spent locally to remove the dam, clean up the site and begin restoration. Removing PacifiCorp's dams on the Klamath could cost ten times as much.

The two pending agreements involved in Klamath dam removal could together bring nearly a billion dollars to the area – much of that to Siskiyou County – to fund dam removal, restore the recovered reservoir beds, implement a new irrigation plan, restore fish habitat, and develop alternative power sources. This represents an injection of capital into the area that has not been seen since Interstate 5 was built. The particulars of how the money is spent are still being decided - now's the time for local businesses and governments to make sure this long-term restoration investment benefits local people.

Fish and clean water lure recreationalists, increase property values

Driving down the mid-Klamath on Hwy 96, reminders of the river's glorious fishing past are still present in faded signs for steelhead fishing resorts. Once the third largest salmon river in the Lower 48, our 90% salmon declines mean a lot of sport fishing dollars are now heading to other rivers. One study showed every sport-caught Chinook can bring up to \$200 to the local economy when cash spent on guides, food, lodging and supplies is factored in. If water quality problems and toxic algae blooms persist, whitewater boaters may also begin avoiding the Klamath. Coordinated and systemic restoration is needed if we want to keep our boating and sportfishing businesses growing.

We can also expect clean water and restored fisheries to boost riverfront property values. An economic study on Maine's Kennebec river shows property values steadily increasing after the removal of Edwards Dam. Given the Klamath reservoirs' toxic algae health warnings, a free-flowing river safe to fish and swim in is likely to boost our waterfront home values too.



Ken Morrish/FlyWater Travel

The Pollution Stops Here.

A citizen's guide to restoring the Klamath with the Clean Water Act

If dam removal is the cornerstone of Klamath River restoration, improved water quality is the foundation. And, while many actions are needed to clean up water quality - like improving live-stock, forestry, and wastewater treatment practices - it is ultimately the Clean Water Act that provides the regulatory impetus to ensure these important changes are made. Like many laws, the Clean Water Act works best when citizens breathe life into it. Our job is to get you past the intimidating acronyms and make it simple for citizens to restore the Klamath by using the Clean Water Act. Here's an intro, and, as with many of our articles, you'll find more info and helpful links on our website.



or only part of a river system, and each lake or stretch of river can have multiple listings. Getting a waterway on this list (and keeping it there!) is an important first step for water advocates, and we've been successful in listing some of the Klamath's more polluted stretches under the 303(d) section (though sometimes it has taken lawsuits to do it).

The North Coast Water Board completed their latest 303(d) list this June (see sidebar), and the State Water Board will need to approve the list before it is sent to the US EPA for federal approval in late 2009. Oregon will be reviewing their 303(d) list in 2010 and KRK will work to ensure that it will include the needed listings to help improve Klamath water quality. Links to Oregon and California's Klamath 303(d) lists can be found on our website.

Where the rubber hits the road: the TMDLs

Once a waterway makes the 303(d) list, state agencies need to come up with pollution limits and a plan for setting and enforcing them. The CWA uses TMDLs, or Total Maximum Daily Loads, to assign numeric pollution limits for 303(d)-listed waterways. A good TMDL should put a waterway on a strict pollution "diet" where discharges and land-use practices must be changed to achieve specific water quality goals.

In many cases, TMDLs become a battle between polluters and clean water advocates with under-funded agencies in the middle. In other cases, TMDLs become an educational process as people who may be unintentionally polluting improve practices and bring their activities into compliance with water quality standards. We have both situations on the Klamath. While many watershed groups, ranchers, tribes, and citizens are working to clean up the river, there are still many places where land use practices or pollution discharges (called "point-source" pollution) require serious regulation with dedicated citizen oversight.

We are currently in the middle of the largest TMDL development the Klamath has ever seen, with water quality officials from Oregon and California working with the EPA to develop and implement a major TMDL and action plan for the mainstem Klamath River. These TMDLs will also relate to interim water quality conditions in the final dam removal deal. Unfortunately, while strong TMDLs are in the works, without citizen support, they're vulnerable to opposition from entities like Siskiyou County who are hostile to environmental regulation. Because water-polluting habits are unlikely to shift without strong regulations, it is important that people who care about clean water speak up and support the Water Board and ODEQ in setting rock-solid TMDLs for the Klamath.

The Clean Water Act

In the 1970s the leaders of the United States realized it was time to make our nation's polluted waters fishable and swimmable once more, so they created the Clean Water Act. Its primary goal is "...to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Though one of the original objectives was to complete the clean-up by the mid-1980s, 30 years later we are still unable to safely swim and fish in over half of America's waterways - including much of the Klamath River. Despite this, the Clean Water Act remains our primary tool for cleaning up water quality on the Klamath River.

The states do the dirty work

Much of the permitting, regulation, and monitoring the CWA uses to restore water quality is regulated at the state level and implemented with local assistance. In our case, this is mainly the North Coast Regional Water Quality Control Board in California, and the Department of Environmental Quality (ODEQ) and other agencies in Oregon. So when these agencies have public meetings or comment periods on Klamath issues, you should participate.

Making the list - The 303(d) section

A waterbody can get protection only after it is listed as impaired under section 303(d) of the CWA, commonly called the 303(d) list. Every two years, the CWA requires each state to submit a detailed report on their state's water quality to the US Environmental Protection Agency. The list must include all waterbodies that are polluted or "impaired" by a wide array of pollutants such as heavy metals, bacteria, nutrients, toxic algae, sediment, or even high temperatures. Listings can be for all

Klamath Watershed TMDLs - in a nutshell

The Klamath Watershed has been staggering through the Clean Water Act's TMDL process for many years with mixed results. Many sub-basins, like the Shasta, Scott, Upper Klamath Lake drainage, and Salmon Rivers, are in some phase of TMDL development or implementation. The long-awaited mainstem Klamath River TMDLs are finally being released this year (see above and right). Others, like the Lost and Trinity Rivers, have not been properly regulated with TMDLs - KRK is part of a lawsuit to address this lack of action. Here's a few highlights, please visit our website www.klamathriver.org/TMDL for more info.

The **Shasta River** is widely known for its fall from grace as the most productive salmon river in California, mile for mile. With coho returns you can count on your fingers, the Shasta is now plagued by high temperatures, poor water quality, and tiny stream flows resulting from agricultural water diversions and Dwinnell Dam. Its TMDL went into effect

in early 2007, and rightly calls for increased water flows. While many land-owners are earnestly working toward meeting the TMDL objectives of lowering temperature and increasing flows, the State Water Board stipulated flows could not be increased through water right processes, which stymies total flow restoration. The TMDL's glaring omission of tributary impacts and those of the festering Dwinnell Reservoir/Lake Shastina also make it unlikely to rescue the Shasta from the 303(d) list.

The water quality disaster known as the **Scott River** TMDL went into effect in late 2006 and is criticized widely because it puts Siskiyou County and the Siskiyou County Resource Conservation District in charge of monitoring, implementation, and self-enforcement. It does not address cumulative impacts of timber harvest and roads, nor does it designate cold-water refugia needed by fish. Regularly dewatered and abused, the Scott needs a much stronger and objectively enforced TMDL.

Lying across the California/Oregon border, the **Lost River** basin was not historically connected to the Klamath River in a significant way. After last



Take Action for the Klamath!

California's mainstem Klamath TMDL has been released as a draft this summer and urgently needs your support and input. Public comments on the draft are due by August 17th. If you're reading this before that date, please take a moment to send a quick letter, fax, or email to the Water Board. After August 17th, check our website for updates about commenting on the equally important Oregon Klamath TMDL, due for release this fall.

Get more info and send a letter from our website:

www.klamathriver.org/TMDL

You can also submit comments directly to:

Katharine Carter
North Coast Regional Water Quality Control Board
5550 Skylane Blvd, Suite A
Santa Rosa, CA 95403
Phone: 707-576-2290 Fax: 707-523-0135
E-Mail: kcarter@waterboards.ca.gov

SAMPLE LETTER

Dear North Coast Regional Water Quality Control Board and staff,

I strongly support the draft Klamath TMDLs' aggressive dissolved oxygen requirements and nutrient, temperature and toxic algae limits and load allocations. I also support the links you have identified in Ch. 2 between nutrients, temperature, riparian vegetation, channel morphology, toxicity, dissolved oxygen, organic matter, algae, sediment, flows, fish health, disease and mortality as well as cultural, economic and recreational health. I also support the buffer zones proposed in Ch. 6 to protect thermal refugia used by coldwater fisheries, as well as tough load allocations for suction dredging and grazing practices in the basin.

However, polluters cannot and should not be expected to regulate themselves – please amend the TMDL to include specific mechanisms for holding individual polluters accountable for reducing pollution on set timelines. TMDL load allocations and numeric targets must also be integrated into all water quality permits issued for the mainstem Klamath River.

Similarly, the mainstem Klamath TMDL must include the strongest possible load allocations at the mouths of the Lost, Scott and Shasta Rivers for flow and nutrients. Previous TMDL implementation for these tributaries has shown that voluntary compliance is unrealistic, and therefore the Klamath TMDL must set numeric targets at these confluences and provide tenable enforcement mechanisms to ensure they are met in a timely fashion. The Klamath River cannot be restored until its tributaries provide adequate flows and water quality, which is unlikely to happen without basin-wide TMDL enforcement.

Lastly, while dam removal negotiations may affect how PacifiCorp complies with the TMDL, timely enforcement of the Clean Water Act is still critical in ensuring that pre-dam removal water quality conditions are adequate for fish, and that the dams are in fact removed by 2020. You are legally obligated to do everything in your power to ensure the terms of the agreement meet or exceed your strong TMDL pollution limits.

Sincerely,

Above: Sediment-laden tributary waters reach the clear Salmon River.

303 (d) UPDATES - Summer 09

Early this summer, California's North Coast Regional Water Board renewed all existing 303(d) listings in California's half of the Klamath watershed, added several new listings, and declined a petition to de-list one stream.

- New toxic algae data resulted in a downstream expansion of the **microcystin** listing on the mainstem Klamath from Iron Gate Dam to the **Trinity River** confluence. This completes KRK's 2008 legal victory that resulted in PacifiCorp's reservoirs and the stretch of river between them being listed for algal toxins. This expansion opens the door for action in eliminating the toxic algae problem throughout the river and not just in the reservoirs.
- New listings were made for **sediment** pollution on **tributaries to the Mid Klamath** and for **mercury** pollution in the Shasta River's **Lake Shastina** (an irrigation reservoir formed by Dwinell Dam).
- The **Salmon River Watershed** was listed for **temperature** pollution in 2002. In 2008, the Scott Valley's Siskiyou Resource Conservation District petitioned to have Salmon River tributary **Wooley Creek** removed from the list without sufficient scientific evidence. Siskiyou County and the US Forest Service jumped on the bandwagon, claiming that keeping Wooley on the list was an undue hardship even though no one lives on Wooley Creek and local restoration groups, not the USFS, handle the monitoring required by the 303(d) listing. After heated testimony from KRK, Siskiyou County and others, the Water Board agreed with us that Wooley Creek should stay on the 303(d) list and the Salmon River watershed should continue to be managed in an integrated manner.

century's extensive reworking of upper basin hydrology, the Lost is now the epicenter of Klamath Project irrigation lands. Not unlike someone taking your car for a joyride, the Lost is implicated both in "borrowing" Klamath flows, and in returning them in much worse condition. Fought with lawsuits and shuffled between agencies, the Lost TMDL process is a battleground between Project irrigators and Tribes and others interested in water quality. The draft released in 2007 was so bad, it was sent back to the drawing board. Though aspects of the plan have been incorporated into the mainstem Klamath TMDL, the full lower Lost River TMDL has yet to be completed and adopted.

The **Upper Klamath Lake** TMDL released in 2004 includes the Williamson, Sprague and Sycan Rivers, tributaries which send a heavy nutrient load into Upper Klamath Lake and in turn the Klamath River. The TMDL plan aims to reduce phosphorous in the lake through restoration and adaptive management but will likely need a tight mainstem TMDL that mandates strong pollution limits at the Lake's output to have a meaningful impact on Upper Basin land use. Ever contentious is the issue of what percentage of the system's nutrients are "natural" and what percentage are a result of poor forestry and agricultural practices.

Omaha 2009

Salmon's not in the smokehouse yet

With a draft dam removal deal on the table but not yet finalized, KRK helped organize a return trip to Omaha for dam-owner **Berkshire Hathaway's** annual shareholders' meeting this spring. Our 2009 message to **Warren Buffett** and his 30,000 followers at the week-long "Woodstock of Capitalism" was intended to keep the pressure on PacifiCorp: Open the river. Close the deal. The salmon's not in the smokehouse yet!

This spring marked the fifth year a Klamath delegation of tribal people, fishermen and conservationists has visited PacifiCorp's corporate parents, with activists traveling to Scotland in 2004 and 2005, and then on to Omaha when **Scottish Power** sold **PacifiCorp** to the Nebraska-based Berkshire Hathaway.

This year, the prospect of a gang of river activists crashing the party in Omaha yet again was so worrisome to PacifiCorp that three company executives flew their corporate jet to Klamath, California to meet face-to-face with activists before the trip. Young tribal activists and river advocates sat with the executives on a river bar, exchanging points of view, but the activists refused to cancel the trip.

In Omaha, the Klamath delegation passed out information on the Klamath dams to shareholders and worked with several other groups to advance a **shareholder's resolution for social justice** within the meeting. As promised, KRK and the Klamath delegation will be back to Omaha every year until the dams come down. Learn more at: www.klamathriver.org/Omaha.html.



The 2009 Omaha Shareholder's Resolution team, from left: Karuk Tribal Chairman Arch Super; Omaha Native John Pappen; Yurok Tribal Members and Klamath Justice Coalition activists Seafa Blount and Frankie Joe Myers; Honduran sweat shop worker and activist Norma Mejia Castellanos; Klamath Campaign Director Craig Tucker; Simon Billeness of International Labor Rights Forum. Photo by Doug Meigs, courtesy of Indian Country Today.

Taking LNG to court Lawsuit could stop the Pacific Connector pipeline

Despite formal opposition from a coalition of grassroots groups, not to mention Oregon's governor and natural resource agencies, the Federal Energy Regulatory Commission (FERC) has given liquified natural gas (LNG) the green light in southern Oregon. Our response? We'll see you in court.

KRK will join **Rogue Riverkeeper, Umpqua Watersheds, Oregon Wild** and others in suing FERC to stop the proposed **Jordan Cove port** in Coos Bay and the 230 mile **Pacific Connector pipeline**. The project would drill through the Klamath (and Rogue and Umpqua) to pipe a foreign fossil fuel to southern California energy markets. Why don't they just site the port at the point of need? Southern Californians don't want it - and have successfully opposed LNG ports on their shores due to environmental impacts and undue risk to human communities.

In fact, there are currently no LNG import facilities on the west coast of the U.S., but international energy companies are vying to build the first one, even though domestic natural gas sources bely the need for risky shipping import facilities and pipelines. "The Jordan Cove/Pacific Connector proposal is indicative of a flawed national energy policy that insufficiently analyzes proposals in isolation from each other and readily approves projects that increase our dependence on foreign fossil fuels," said **Lesley Adams** with Rogue Riverkeeper.

Our suit will be represented by the **Western Environmental Law Center**, who will bring cases on behalf of both public resources and private landowners.

If you own property near Spencer Creek or Keno Reservoir, this project could impact you too. Contact us to learn more:

www.klamathriver.org/LNG

Reservoirs posted toxic for 5th year

What's neon green, totally toxic, and just turned five years old? We won't fault you for forgetting the scientific name, **Microcystis aeruginosa**, but you should be familiar by now with the toxic algae that has prompted health officials to post PacifiCorp's reservoirs as toxic for the last five summers.

Water containing toxic algae can pose serious health risks for humans and pets when touched or ingested, and is also known to contaminate the flesh of reservoir game fish.



Toxic algae blooms take on epic proportions when the Klamath's nutrient-rich water hits the unnaturally warm, stagnant reservoirs behind PacifiCorp's dams. The corporation has tried unsuccessfully to curb the blooms since 2005, when scientists with the **Karuk Tribe** first identified a major public health problem. Officials with the California Water Board have publicly stated that removal of PacifiCorp's dams may be the only way to solve the Klamath's toxic algae problem.

KRK has launched several lawsuits aimed at cleaning up the algae, including one that forced the **U.S. EPA** to list the algal toxin as an official pollutant under the Clean Water Act. In 2009, the North Coast Water Board extended this 303(d) listing to mostly cover algae blooms that spill from the reservoirs and contaminate the Klamath for the 190 mile stretch from the dams to the ocean (see page 7).

Salmon 2, Suction dredgers 0 Courts and legislature halt harmful hobby gold mining

On August 6, California Gov. Arnold Schwarzenegger outlawed suction dredging on all of California's rivers when he signed SB 670 into law. KRK strongly supported this legislation and no doubt the 600 letters of support sent by KRK members and friends helped with this major legislative victory. Sen. Patricia Wiggins (D-Santa Rosa) introduced SB 670 earlier this year and it overwhelmingly passed the Senate and Assembly on bi-partisan lines.

The new law bans suction dredge mining in California's rivers until the California Department of Fish and Game completes an environmental review of the mining practice and institutes new regulations that properly protect fisheries, water quality, and public health. The law, which contained an urgency clause, went into effect immediately. Please report any suction dredges you see on California's rivers by calling us at (877) 307-3311 or report the illegal dredges directly to Fish and Game's CalTIP

ond...



A pipeline like this one is proposed to cross the Klamath watershed as it connects liquefied natural gas shipped from foreign shores to southern California. Besides introducing long-term sediment problems and razing riparian areas in Spencer Creek (already on the 303(d) list for sediment), the pipeline would cross the Klamath in endangered suckers' critical habitat. The Pacific Connector Pipeline would employ no local people, provide no local economic benefits, and would supply no natural gas to local residents.

at (888) DFG-CALTIP.

A few weeks prior to the ban, KRK and co-plaintiffs won a preliminary injunction blocking CDFG from issuing any further suction dredge permits. This injunction is still in effect, however the new ban on dredging outlaws all suction dredge mining including those that have already been permitted by CDFG. Interestingly, both the courts and legislature have had to step in to do CDFG's job of properly regulating the destructive practice of suction dredging.

Next we will be working to ensure that CDFG's review is thorough and that new regulations limit size and horsepower, limit access to thermal refugia and key habitat, reduce fuel spills, and create a plan for handling old mercury deposits. Sensitive rivers such as the Salmon, a key tributary to the Klamath, should be closed entirely to suction dredging.

Suction dredging is a motorized form of recreational gold mining in which a floating dredge sucks up the riverbed, sifts out gold flakes, and spits sediment back into the water. The hobby harms fish habitat, degrades water quality, and can release long buried mercury into the food chain.: www.klamathriver.org/actionalerts/sb670/index.html

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Become a member of Klamath Riverkeeper and we'll mail the **Klamath River News** to your door twice per year. See the back cover or www.klamathriver.org/join



Learning from Klamath Salmon Disease Research

OSU scientists are providing information on the parasites that can kill up to 99% of young Chinook

AS LATE SUMMER DESCENDS ON KLAMATH COUNTRY, conditions get tough for fish. The mainstem Klamath's high temperatures and low water levels - lethal problems in their own right - also fuel the proliferation of fish parasites associated with massive kills of both adult and juvenile salmon. Oregon State University research scientist Dr. Jerri Bartholomew has worked with several agencies to learn more about these parasites and the conditions that cause their outbreaks. (Read more on the Fish Heros that helped fund the research on page 11).

A PRIMARY CULPRIT BEHIND JUVENILE SALMON MORTALITY on the mainstem Klamath is the mysterious *Ceratomyxa shasta*, a tiny parasite whose life cycle requires two separate hosts, a worm and a fish. Though *C. shasta* evolved with salmon and is native to the Klamath, its infection rates directly below Iron Gate dam have become problematic in recent years, leading Dr. Bartholomew to believe the host-parasite balance has been disturbed. Her 2008 study results are informative:

- Chinook salmon suffered between 92-99% mortality from *C. shasta* after being held for only 3 days in the highly infectious area of the river in May and June.
- Mortality in endangered coho salmon held during that same period was 83-89%.
- Mortality in groups of salmon held at sites above and below the infectious zone was between 0-20% during these same periods, demonstrating that this area of the river is the source of the parasite.

A US Fish & Wildlife study showed that radio-tagged juvenile Chinook released from the Iron Gate Hatchery in June had a 65 percent apparent mortality rate before reaching the Trinity River confluence. Only 8% of the group reached the estuary.

RESULTS SHOW THAT THE INFECTIOUS ZONE, as Dr. Bartholomew's team has dubbed the reach of river between the Scott and Shasta confluences (downstream of Iron Gate Dam), is the deadly heart of the Klamath's somewhat unusual disease outbreaks. Why? The facts speak for themselves.

PacifiCorp's dams prevent natural river flows from "roughing up" the rocks and boulders on the river bed, resulting in the overgrowth of aquatic plants and algae in the river (especially the filamentous algae *Cladophora*). These plants happen to be ideal habitat for the polychaete worm that hosts *C. shasta* before the parasite makes the leap to salmon.

When you combine these factors with large numbers of hatchery fish and returning spawners confined below the fish-blocking dams, you get a perfect storm of fish disease factors. Much like a group of sick people crammed in a doctor's office waiting room, high numbers of Klamath salmon stressed by heat and poor water quality have become a breeding ground for ceratomyxosis infections.

DAM REMOVAL AND A STRONG TMDL POLLUTION PLAN may be the best long term solutions that address the root causes of the disease problem. In the short term, Dr. Bartholomew's research on the timing, locations, and pathways of infection is providing the information that may help river managers reduce mortality within the next few years.

More info:

Dr. Jerri Bartholomew and Oregon State University Fish Disease Lab http://microbiology.science.oregonstate.edu/Klamath_River_salmon

Klamath Basin Tribal Water Quality Work Group - Fish Health Info http://www.klamathwaterquality.com/fish_health.html

Above: A member of Dr. Bartholomew's team takes a sample from the Klamath.

Keepin' up with Klamath Riverkeeper...

KLAMATH RIVER FILM SERIES

Two high-quality films have recently been produced about the Klamath: **Upstream Battle** and **River of Renewal**. While these films have elicited praise and received awards at film festivals worldwide, we wanted to make sure they made it home to the Klamath basin. To this end, KRK organized screenings of the films in 11 communities in and around the basin this spring, with support from **Steven and Donna Meeks**. The **Klamath River Film Series** allowed over 500 people from Klamath, Hoopa, Orleans, Happy Camp, Yreka, Mt. Shasta, Ashland, Arcata, Klamath falls and Chiloquin to view and discuss the films with filmmakers **Stephen Most** and **Ben Kempas**. More info at www.klamathriver.org/films.



SALMONAID FESTIVAL 09

For the second year, KRK worked with salmon advocates, fishermen and restaurants to put on the SalmonAid Festival in Oakland, CA. The event drew people from around the Bay Area to learn more about salmon, hear great music, and enjoy amazing sustainable seafood and cold brews. If you're in the Bay Area and want to help out with next year's festival, or if you know some musicians who may want to play for fish, contact us or check out www.salmonaid.org.

KRK HELPS OUT WITH 7th SALMON RUN

Dozens of committed runners of all ages rose in the dark on May 29 this year to carry on a symbolic relay run founded by several visionary young Native



women from Hoopa.

From the mouth of the Klamath River in Yurok country to the Karuk center of the universe in Somes Bar, up the Trinity River to Hoopa and up the Salmon River to the cold-water refuge at the mouth of Wooley Creek, hundreds of volunteers carried the carved wooden fish, handing it off every few miles.

The beauty of this year's Salmon Run - the seventh annual - was that local people pulled together to make the traditional relay a success. Though we worried the run was doomed after agencies threatened to deny our permit at the last minute and several runners bailed out, a team of dedicated volunteers ensured the event was safe, inspiring, and unifying yet again. "With the fish, we carried renewed will to restore our fish and be the stewards of this place together. This year's run reminded me that whether we succeed or fail, we do it together," said **Riverkeeper Erica Terence**.

We have even higher aspirations for next year: send runners up the Scott and Shasta, even to Chiloquin! Help us get there. We're now signing up organizers and runners or Salmon Run 2010. E-mail erica@klamathriver.org.

THANK YOU KRK INTERN

We were lucky enough to get help from a talented legal intern this summer. Casey Gray visited from Vermont Law School's Environmental Law Center where he is pursuing a Master's in Environmental Policy as well as a law degree. Casey jumped in and helped us by researching the Klamath's Concentrated Animal Feedlot Operations (CAFOs) in both Oregon and California. Casey's research will inform our action plan for addressing cattle pollution through CAFO permitting.

Above: Onstage at SalmonAid 09 in downtown Oakland, commercial fisherman and SalmonAid founder Mike Hudson plays with Captain Mike and the Seaweeds; Ron Reed and family demonstrate a traditional Karuk song. Left: Craig Tucker and Matt Mais run up the Klamath River with the wooden fish that connected all the runners during the 7th annual Klamath Salmon Run.



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Mission

Klamath Riverkeeper restores water quality and fisheries throughout the Klamath watershed, bringing vitality and abundance back to the river and its people.

Waterkeeper Alliance

Klamath Riverkeeper is a local organization affiliated with the international Waterkeeper Alliance. A grassroots advocacy network with over 170 members, Waterkeeper Alliance connects and supports local Waterkeepers to provide a voice for waterways and their communities worldwide.

On the Klamath

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Fish Heroes: Mike Becker, Paul Merz & Jerri Bartholomew, PhD

Collaborating to support disease research for Klamath River salmon

Back in 2006, Mike Becker and fellow fishermen from Newport, Oregon attended a fish health conference in northern California. Towards the end of the event, the fishermen realized that fish diseases on the Klamath had a lot to do with the salmon declines putting them out of work, but support was needed to keep the research going.

The main presenter was Dr. Jerri Bartholomew, a fish pathogens scientist with Oregon State University who has been unraveling the Klamath's fish diseases for the past several years. What Dr. Bartholomew and her team have found is astounding: 40-99% of juvenile Chinook may die from the parasite *Ceratomyxa shasta* in the "infectious zone" downstream of Iron Gate dam (learn more on page 10).

Despite these compelling findings, Dr. Bartholomew insists that "it's just not a fish story" without the support she has received from fishermen. While her lab has excelled at identifying the complex set of ecological relationships driving Klamath fish diseases, they have not had the capacity to ensure their important work is prioritized in a competitive funding climate.

When fishermen see a problem, they usually find a direct and tangible way to fix it - after all, this is how you keep a boat on the ocean. True to form, Mike Becker and commercial fisherman Paul Merz began working to "fix" the disease problem right away. Three years and hundreds of thousands of dollars in congressional appropriations later, scientists are zeroing in on the Klamath's disease issues, and solutions are in sight.

Mike and Paul have put in the essential work organizing politicians, coastal communities and others to ensure Jerri's work is adequately funded. The fishermen hit the pavement from Coos Bay, Oregon to Washington DC, gathering 59 letters of support from coastal governments, resource agencies, watershed councils, environment and fishing groups.

The work paid off and in 2008, the legislature appropriated nearly \$640,000 in support of Dr. Bartholomew's work. This year, Mike talked to the heads of the United States Fish and Wildlife Service's Fisheries Division, the director of the national Endangered Species program, and the entire Oregon and California congressional delegations. The fishermen expect their efforts to net another \$600,000 in appropriations for 2010. When these appropriations are combined with several other grants and projects they've pulled for, Paul estimates they've raised \$1.6 million for the research.

Though Mike works with the Oregon Salmon Commission and Paul works under the auspices of the Klamath Common Ground Alliance, both men are essentially volunteers and have put in countless hours as individuals making a difference for coastal fishing communities. Thanks to these true Fish Heroes - and the dozens of great people working with them, we are gaining the scientific knowledge to give Klamath salmon - and commercial fishing communities - a shot at recovery.



Paul Merz has been a commercial fisherman since 1970. He is a founding member, director, or consultant to the: Klamath Common Ground Alliance, Project CROOS, PacificFishTrax, Coos River and Coquille Salmon Trout Enhancement Programs, the Coos Watershed Association, Southern Oregon Ocean Resource Coalition, Oregon Salmon Commission, Independent Troll Fishermen of Oregon, and the Oregon Fisheries Congress. Paul is a life member of the National Rifle Association.



Mike Becker is pictured here hooking a Chinook as a strapping young man in the 1970s. Now retired in Newport, Oregon, Mike has worked in the fishing insurance industry for decades, taking several months off to fish every summer. Though he now volunteers with the Oregon Salmon Commission, Mike sends himself to lobby the powers that be in Washington D.C. About this year's trip he says, "I got very good support everywhere I went."



Dr. Jerri Bartholomew leads OSU's research on fish diseases and has authored or co-authored nearly 40 articles on the subject.

THANK YOU!

Foundations: Public Health Institute, Common Counsel, Compton, Weeden, Environment Now, Resource Legacy Fund, Patagonia, Columbia, Richard and Rhoda Goldman Fund, Mackenzie River Gathering **Friends and Volunteers:** Thomas Dunklin, Tributary Rafting, Luna Latimer, Mid-Klamath Watershed Council, Rachel Lent, Maymi Preston, Marsha Small, SOU Native American Student Union, OIT Sustainability Club, Linda Riley, David She'om Rose, Sue Ghilotti, Full Circle Real Estate, Steven and Donna Meeks, Taylor David, Jennifer Lane, Matt Mais, Columbia Riverkeeper, The Phoenix Aveda Day Spa and Salon, the SalmonAid crew, Friends of the River, Stephen Most, Ben Kempas, Angelina Cook, Jim Hardy, Mark Dowdle and Trinity County RCD, Rogue Riverkeeper, William Casey Gray, Rob Gale, Phish, USF&WS Yreka, Josh Strange, Sam Stroich, Kari Norgaard, Susan and Malcolm Terence, Terence, Brian Tripp, Kathy McCovey, Dave Bitts, Vivian Helliwell, Sam Gensaw, Ron Reed, Jason Reed, Susan Corum, Will Harling, Leaf Hillman, Barbara Short, Lauren Alvarado, Laurissa Gough, Annalia Norris, Margo Robbins, Klamath Trinity Joint Unified School District, Teresa Cyr, JJ Reed, Frank Lake, Jennifer Lane, Lyra Cressey, Kokatat



KRK is happy to participate in 1% for the Planet, a great program that allows businesses to give back to the causes they care about.

This spring we received a 1% for the Planet donation from Full Circle Real Estate based in Ashland, Oregon. In return, we're featuring their logo in our newsletter, on our website, and sending all our friends their way. If you'd like to find out more about how your business can support our work, give us a call or email Scott Harding at scott@klamathriver.org.

MORE INFO:

www.klamathriver.org/Business.html
www.onepercentfortheplanet.org

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- Steelhead - \$100
- Send me the free book *River of Renewal*
- Spring Chinook - \$200
- Send me a free hooded sweatshirt, my size is ____
- Green Sturgeon - \$400
- I want to go rafting with KRK!
- Tributary - \$1000 and up



Kayaking the South Fork Salmon River Gorge - Scott Harding

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SAVE the DATE!

Harvest Dinner for the River

Join us for delicious dinner & dessert, multimedia presentation, short films, and great music.
6:30 pm, November 14th
Panamnik Building, Orleans, CA

Upper Klamath Lake Paddle

Check out autumn colors, birds, and water with KRK.
Saturday, October 10th

MORE EVENTS AT
www.klamathriver.org/events