# Oregon Water Coalition
## Member Newsletter

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- Addressing NW climate issues
- Lower Snake sediment buildup
- DEQ: Columbia water 'good'


**December, 2012** **oregonwatercoalition.org** **Volume 19, Issue 12**

*We Wish You a Prosperous New Year from the*

# Oregon Water Coalition

Attend the Annual OWC Membership Meeting & Water Conference
Tuesday, January 22, 2013 • 8:30 am to 4:00 pm
Hermiston Conference Center

## 2013 Annual Membership Meeting & Water Conference
## Tuesday, January 22th, 2013

Hermiston Conference Center
415 S. Highway 395
Hermiston, Oregon

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Hermiston Chamber of Commerce
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| | | |
|---|---|---|
| 8:30 am | Presidents Message | Luke Maynard |
| 9:00 am to 10:00 am | Columbia Basin Aquifer Recharge Project | Craig Reeder & Martha Pagel |
| 10:00 am to 10:10 am | Coffee Break | |
| 10:10 am to 11:00 am | 2012-2013 Legislation<br><br>Water Rights and Related Bills<br>Federal Legislative or Rule-Making Efforts<br>Recent Opinions or Ongoing Litigation<br>Regarding Water in Oregon. | Attorney David Filippi<br>Martha Pagel |
| 11:00 am to 11:50 am | Columbia River Treaty | Stephan Greenwood |
| 11:50 am to 12:00 pm | Break | |
| 12:00 pm to 1:00 pm | Lunch and Annual Award Presentation to Dennis Doherty, Umatilla County Commisioner (1996-present) | Harmon Springer |
| | Issues & Updates | |

## Research urges plan to address climate impacts on western streams, fish

A research paper published this month urges both a consolidation and an expansion of the scientific understanding of a warming climate's potential effects on trout in the western United States, and makes a call to on-the-ground action.

"Despite the best intentions, we will not be able to preserve all populations of native trout in the Rocky Mountains this century," according to the article, "The Past as Prelude to the Future for Understanding 21st-Century Climate Effects on Rocky Mountain Trout" published in the December edition of Fisheries magazine.

"However, it should soon be possible to have the tools and information to know when and where resource commitments are best made under a given set of assumptions about future climate change," the article says.

"If broad coalitions of stakeholders can collaborate to effectively use this information, it will be possible to at least minimize the population losses that occur," the paper says. "Moreover, because we are relatively early in the trajectory of global climate change, management decisions in the next decade will have disproportionately large effects on the amount of native trout biodiversity that remains in Rocky Mountain streams a century from now."

Lead author of the article is Daniel J. Izaak, a fisheries research scientist at the U.S. Forest Service's Rocky Mountain Research Station in Boise. Co-authors include Clint C. Muhlfeld, Andrew S. Todd, Robert Al-Chokhachy, James Roberts and Steven W. Hostetler of the U.S. Geological Survey and James Roberts and Kurt D. Fausch of Colorado State University's Department of Fish, Wildlife and Conservation Biology.

Recorded evidence of a warming climate trend in recent decades indicates that trout in the western United States will increasingly be pinched into remaining cool refugia in which they can thrive. That means fish managers and researchers are likely to be left with the choice of prioritizing efforts to ward off warming climatic conditions, the research paper says.

To better understand the potential consequences, the researchers look at historical trends and the current state of knowledge in a series of retrospective case histories that include the Flathead River basin in northwest Montana and southeast British Columbia, the Boise River basin in central Idaho, the Greater Yellowstone Ecosystem, the Green River basin in western Wyoming, and the Rio Grande headwaters basin in southern Colorado.

"The areas selected for the case histories encompass a range of physiographic settings, species complexes, and contemporary management issues (e.g., hybridization, habitat degradation/fragmentation, wildfire, drought, nonnative species invasions) that managers of trout populations across the Rocky Mountains often address," the article says.

"Rather than focusing on predictions about the future, we describe historical patterns in streams across the Rocky Mountains that are already apparent because we've been living through climate change now for many decades," Izaac said of the research. "The hope is that this makes it seem more 'real' and we try to also articulate an action plan for the 21st Century based on what we do/don't know."

"Stream environments across the Rocky Mountains have been changing in ways that have important implications for trout populations. Trends in temperature and stream hydrology consistent with a warming climate are common in long-term monitoring records across the region and within case history areas.

"Biological implications include upstream advances in thermally suitable habitats, nonnative species and zones of hybridization, greater risk of egg scour for fall-spawning species, increased incidence of wildfires, and declining summer habitat volumes," the paper says.

Many actions can be taken to "enhance the resistance and resilience of native trout populations to the effects of climate change," including "the maintaining or restoring in-stream flows and increasing riparian vegetation to shade streams and maximizing summer habitat volume. Where small streams are significantly degraded, these actions alone might offset significant amounts of future climate effects."

When climate impacts are combined with pressures from a growing human population and imposed on stream ecosystems already significantly degraded from their natural potential, conservation needs will be daunting and informed management more crucial than ever," the article concludes.

*Columbia Basin Bulletin, 12/7/2012*

## Corps releases plan to deal with sediment buildup in lower Snake River

The U.S. Army Corps of Engineers is now offering for public review its preferred plan for managing – in large part through dredging – sediment buildup on the lower Snake River that it says interferes with navigation and other federally authorized purposes of four dams on the river.

The draft "Lower Snake River Draft Programmatic Sediment Management Plan Environmental Impact Statement" for the lower Snake and Clearwater rivers in southeast Washington and central Idaho has just been released. Public comment will be accepted beginning Dec. 21. The public comment period ends Feb. 8.

The draft EIS and related documents can be found at the Corps' Walla Walla District web site:

**http://www.nww.usace.army.mil/Missions/Projects/ProgrammaticSedimentManagementPlan.aspx**

A public meeting is tentatively scheduled to be held Jan. 24 in the Lewiston/Clarkson area to explain and discuss the proposal. For more information, go to:

**http://www.nww.usace.army.mil/**

The Corps plans to release a final EIS for public review in July and an official "record of decision" by Sept. 17. That would allow emergency actions – the dredging of four sites to improve navigation safety – during a winter 2013-2014 work window.

Winter work schedules are planned to minimize impacts on migrating salmon and steelhead, which move up and down the Columbia/Snake river system primarily in spring and summer.

"We're going to go into a heavy listening mode," the Corps' Bruce Henrickson said of the comment period on an issue that has in the past prompted litigation, and rethinking.

A lawsuit was filed in 2002 by conservation and fishing groups who feared potential impacts of dredging on fish. They asked that a full environmental analysis be conducted. Fish migrating through the lower Snake include four salmon and steelhead species that are listed under the Endangered Species Act.

As part of a legal settlement reached in 2005, dredging was allowed during the winter of 2005-2006 based on a pledge by the Corps to develop a "Programmatic Sediment Management Plan" for reducing sedimentation and the need for dredging.

Prior to that time, navigation and port maintenance dredging had not been conducted since 1997-98. Such dredging had previously been deemed necessary every 3-5 years.

In the settlement the Corps agreed that, following completion of the 2005-2006 work, it would limit further routine dredging activities to those deemed necessary because of emergency conditions (hazard to human life or significant loss of property and/or severe economic hardship), when sediment impairs access to ports and navigation locks at four lower Snake River dams, or when Lewiston's levee system might be threatened.

Since then only one relatively isolated dredging operation, in Ice Harbor pool, has occurred to relieve a navigation hazard.

As a hedge against barge grounding or shoaling in the sediment-degraded navigation channel, the reservoir behind Lower Granite Dam has at times in recent years been held above "minimum operating pool."

That goes against NOAA Fisheries' 2008/2010 Federal Columbia River Power System biological opinion, which prescribes measures intended to improve the survival of listed stocks such as Snake River steelhead, fall and spring/summer chinook salmon and sockeye salmon.

The goal of holding reservoir at its lowest possible elevation is to minimize the surface area, which results in reduced water particle travel time. The intent is to minimize water travel time for juvenile fish headed downstream, which is believed to improve their survival.

The Corps is legally obligated to try to achieve BiOp objectives. But the NOAA Fisheries document does say that "slight deviations from these levels, based on navigation needs, load following, and operational sensitivity, may be required on occasion."

As a part of its authorization from Congress the Corps operates and maintains the lower Snake River navigation system, which is part of an inland navigation system that stretches from Lewiston, Idaho on the Idaho-Washington border west to the Columbia River and then the Pacific Ocean.

The ports of Lewiston, Idaho, and Clarkston, Washington, are dependent on the navigation channel.

That navigation system includes the four lower Snake River dams, and their reservoirs, that buoy boat and barge traffic. Ice Harbor, Lower Monumental, Little Goose, and Lower Granite dams were constructed by the Corps in southeast Washington between 1961 and 1975.

The Corps' authorized purposes in operating the four lower Snake projects include commercial navigation, hydroelectric power generation, recreation, and fish and wildlife conservation.

Sediment accumulation in the lower Snake River can interfere with these authorized project purposes – which include the maintenance of a navigation channel that allows commercial shipping from the Pacific to the inland Columbia basin. The Snake feeds into the Columbia below Ice Harbor, the lowermost dam in the Snake system.

The Corps EIS evaluates a long-term plan for management of sediment accumulation that affects authorized purposes of the lower Snake River projects and an immediate need action, consistent with the plan, to reestablish the navigation channel.

Since that most recent dredging, sediment has been accumulating in the navigation channel and reduced the navigation channel depth in some locations to as shallow as seven to nine feet at MOP and is impairing navigation, the draft EIS says.

"Therefore, immediate action is needed to reestablish the navigation channel to its authorized dimensions at the following locations:

- Ice Harbor Navigation Lock downstream approach
- Federal navigation channel at confluence of Snake and Clearwater Rivers
- Port of Clarkston berthing area
- Port of Lewiston berthing area

"The need for the PSMP is to manage, reduce and prevent if possible, sediment accumulation in areas of the lower Snake River reservoirs that interfere with federally authorized purposes. Sediment accumulation interferes with the following authorized purposes of the LSRP:

- "Commercial navigation by reducing the depth of the federal navigation channel to less than the authorized depth (14 feet) when operating at minimum operating pool, or MOP, thereby impairing access to port berthing areas, access to navigation locks, and safe movement of tug and multibarge tows"
- "Recreation by limiting water depth at boat basins to less than original design dimensions"
- "Fish and wildlife conservation by sediment accumulation interfering with irrigation water intakes at Habitat Management Units (HMUs), juvenile ESA-listed fish barge access to loading facilities, and fish barge passage through the reservoirs and locks within the lower Snake River hydro projects."

"Through the PSMP EIS, the Corps identified dominant sediment sources within the watershed and evaluated the potential for reducing sediment input from upland sources rather than focusing solely on sediment management within the lower Snake River reservoirs," the draft says.

"Therefore, in developing and evaluating alternatives, the Corps identified and evaluated methods of managing sediment through structures or reservoir operations in addition to dredging, as well as methods for reducing sediment entering the reservoirs from tributaries and upland sources."

Under the plan dredged sediments would be moved to and placed in areas where they would no longer interfere with the authorized purposes, either in-water within the reservoirs or on upland sites. The goal of such dredged material placement would be to enhance shallow water habitat for fall chinook salmon.

The draft PSMP EIS identifies and evaluates the environmental effects of a range of seven sediment management strategies or "alternatives" developed by the Corps. The draft EIS identifies "Alternative 7, Comprehensive (Full System and Sediment Management Measures)," as the preferred alternative. It provides the Corps with a comprehensive "toolbox" of measures for addressing sediment that interferes with authorized project purposes.

The draft also proposes the immediate need action to re-establish the navigation channel to congressionally-authorized dimensions -- 14 feet deep and 250 feet wide—at the four locations. The Corps EIS aims for compliance with the National Environmental Policy Act.

*Columbia Basin Bulletin, 12/14/2012*

## Oregon DEQ study finds Columbia River water 'generally good'

An Oregon Department of Environmental Quality study of a 150-mile stretch of the Columbia River found water quality is "generally good" for recreational use.

But the study shows that the lower-middle section of the Columbia suffers from fish-habitat degradation, and fish samples contained contaminants, including PCBs, mercury and banned pesticides such as DDT.

The five-year study is the first of its kind for the lower-middle section of the Columbia between Cascade Locks and Bonneville Dam on the west and Umatilla and McNary Dam on the east.

"It helps us better understand general water quality conditions in the Columbia and the extent of contamination in fish in the river," said Aaron Borisenko, manager of DEQ Laboratory's water quality monitoring program, which produced the study.

The study involved collecting water and fish tissue samples at 31 locations. Findings released Nov. 26 include:

- Legacy contaminants that are no longer manufactured, such as DDT, persist in the environment and were evident in fish tissue samples at concentrations exceeding DEQ's human health criteria.
- Every fish tissue sample failed to meet DEQ's standard for mercury.
- All water samples met DEQ's recreational contact criteria for E. coli bacteria.
- The river's habitat suffers from degraded streamside areas, while the river's banks are relatively stable due to riprap and natural basalt.

DEQ plans to use the study's findings to assist local, state and federal agencies, as well as tribes to address Columbia River pollution.

The study also will help DEQ target follow-up monitoring in areas of co*ncerns.*

*Mitch Lies, Capital Press, 11/27/2012*

## NW power supply adequate next five years with new generation or efficiency

Wind power and developments outside the Northwest are changing the character of the Northwest electricity system, but the power supply will remain adequate over the next five years with the addition of new generation and/or additional energy-efficiency equal to the output of a single, medium-size power plant, according to an analysis by the Northwest Resource Adequacy Forum.

The Forum is a committee of electricity experts including utility planners, state utility commission staff and other interested parties.

The Northwest Power and Conservation Council and the Bonneville Power Administration created the Forum following the 2000-01 West Coast energy crisis, when a diminished power supply brought the region to the brink of blackouts during the winter and caused electricity prices to soar.

The Forum developed a method to measure future power supply adequacy, which the Council has used annually since 2005 to look five years ahead. Adequacy is measured by the risk that power resources will not meet electricity loads. The Council has set a maximum limit on that probability of 5 percent. The Forum's analysis shows that for 2017, the probability would be 6.6 percent if the region relies only on existing generating plants and new energy-efficiency savings outlined in the Council's Northwest Power Plan, which dates to 2010.

However, the analysis suggests that a number of actions by utilities -- new generation, new energy efficiency or a combination -- would bring adequacy to the minimum acceptable level by 2017.

What's important is that the result is 350 megawatts of new capacity at times of peak load, according to the Forum. Demand response, in which customers agree to reduce their consumption during periods of high use, also may be an option but was not included in the analysis.

According to the analysis, one reason the Northwest will need additional resources is the uncertainty arising from changes in California's energy market. As that state attempts to meet more of its growing summer loads with solar energy and demand response, and as new environmental regulations lead to the retirement of some generating plants, there may be less power available for export to the Northwest in the future, particularly in winter.

Another recent analysis by the Council shows that the region is making good progress improving energy ef-

ficiency and that efficiency improvements will help the power system become more flexible as new variable-output renewable resources, like wind power, are added. According to that analysis, low prices for natural gas and continuing low prices for wholesale electricity are signs that the regional power system is changing. Historically, planning for new power supplies was driven by anticipated annual deficits. Now the focus is shifting to ensure that the power supply is adequate to meet winter and summer peaks in demand -- particularly winter peaks -- and also flexible enough to respond to variable output from renewable resources throughout the year.

*Columbia Basin Bulletin, 12/7/2012*

## Council launches review of Columbia fish habitat projects funded by BPA

The Northwest Power and Conservation Council and Bonneville Power Administration planned this week to launch a review of about 87 habitat-based projects proposed for continued funding in "anadromous" – salmon, steelhead, lamprey – areas of the Columbia/Snake river basin.

The project portfolio targeted by the so-called "geographic review" represents about 30 percent Bonneville's annual expense budget for Columbia River basin fish and wildlife restoration work. That spending amounted in fiscal year 2012 to about $249 million, according to Bonneville.

The federal power-marketing entity funds basin fish and wildlife restoration work as mitigation for impacts caused by the construction and operation of the Federal Columbia River Power System, a system of 31 federal dams that provide nearly 40 percent of the region's electric power supply as well as flood control, irrigation, navigation and recreation.

The NPCC and the Independent Scientific Review Panel review project funding proposals for adherence with the Council's Columbia River Fish and Wildlife Program goals and objectives and for scientific credibility.

The Council was set to launch the review with an e-mailed announcement to project proponents with a packet of information on the process, schedule, instructions and guidance.

Most of these projects have an FCRPS biological opinion association – actions that answer BiOp "reasonable and prudent alternatives." The 10-year BiOp, completed in May 2008 and updated in 2010, includes research and on the ground efforts aimed at improving the survival of 13 wild Columbia and Snake river salmon and steelhead stocks that are now listed for protections under the Endangered Species Act.

About half of the projects to be reviewed in the coming months are specified for implementation through "Fish Accords" between federal agencies and states and tribes that promise funding for specific purposes. Most of those Accords were signed in 2008 on the heels of the BiOp's completion.

All of the proposals in the geographic review are for the continuation of ongoing projects.

The deadline for the submittal of work proposals for the geographical review is midnight, Feb. 28.

The reviews include five general steps. The first is for project sponsors to develop proposals on the work they intend to accomplish over the next five years and to report the results of their past work. Second, the ISRP reviews these proposals and results of the projects to date. The ISRP review includes site visits, presentations, and a response loop.

Third, the public is invited to comment on the ISRP's review. Fourth, the Council staff will use the information from the proposals, science reviews, and public comment to draft recommendations for the Council. Fifth, the Council will make final recommendations to Bonneville for project implementation. The Council's recommendations will span from fiscal year 2014 through 2018.

"This review focuses on ongoing habitat projects, including some that have been the subject of numerous reviews in the past," according to the NPCC staff announcement sent to project sponsors.

"An important function of these reviews is to evaluate project results and how well the projects have adapted proposed future work based on those results. The review will also evaluate how well the project sponsors have responded to the scientific and management issues identified in previous reviews."

Another primary focus of the review is to understand how the projects fit into the context of other work in the subbasin, i.e., how they align with subbasin plans, recovery plans, limiting factors, artificial production activities,

and other work within the same subbasin or watershed, according to a Nov. 27 staff memo from NPCC program coordinator Lynn Palensky to the Council.

The Council periodically scrutinizes projects proposals, new and ongoing. The most recent covered projects proposed for funding for the 2007-2009 percent. The geographic review is the last conducted in the most recent cycle. The first, a review of wildlife projects, was completed in 2009. Completed since have been reviews of resident fish/data management/regional coordination and research, monitoring and evaluation/artificial production projects.

For more information geographic review go to:

**http://www.nwcouncil.org/fw/budget/2014/**.

*Columbia Basin Bulletin, 12/7/2012*

## 2012 Columbia fishing nets mostly lower returns, decent angler success

"Preliminary" results released this week by the Washington Department of Fish and Wildlife indicate that lower Columbia River anglers did well this year despite 2012 salmon and steelhead runs that, for the most part, returned in fewer numbers than had been expected.

The exception of course was sockeye salmon. A record number of sockeye, most bound for the Okanogan River drainage, were counted this year climbing up and over the lower Columbia's Bonneville Dam. The 515,700 total far exceeded the preseason forecast of 462,000 fish.

The sockeye return also included fish bound for the Wenatchee River basin and the Snake River. The Wenatchee and Okanogan join the Columbia in central Washington. The Snake River fish, listed as endangered under the Endangered Species Act, swim up the Columbia, Snake and Salmon rivers on their way to spawning grounds in central Idaho.

Not surprisingly, a record 3,400 sockeye were caught by anglers during the summer season in Columbia River reaches below Bonneville, which is located at river mile 146.

A total of 180,500 sockeye are predicted to return to the Columbia River basin in 2013, including 1,250 Snake River fish, according to preseason estimates.

Recreational fishers also caught a record number -- 14,400 – of steelhead in the lower Columbia during the May-July period, according to the preliminary data.

The fall season (Aug. 1 and thereafter) on the lower Columbia was also fruitful. A total of 128,800 angler trips were made to the lower Columbia, which was the second highest total on record. And they caught 22,400 fall chinook salmon, the third highest total in fish managers' charts. Anglers also bagged 900 coho and 5,600 steelhead after Aug. 1 in the lower river.

Upriver bright and tule fall chinook runs both returned in lower numbers than expected, as did coho.

The upriver (fish bound for tributaries upstream of Bonneville) steelhead run totaled 230,800 as counted at Bonneville's' fish ladders, which was below the 10-year average. A return of 380,300 adult fish had been expected.

The Willamette River spring chinook return in 2012 totaled 65,100, well below the preseason forecast of 83,400. Anglers did make 108,300 trips to the Willamette during the spring season, and caught and kept the fourth highest total since 1991 – 15,500 spring chinook. The Willamette feeds into the Columbia River at Portland.

During that spring season anglers made 114,700 trips to the lower Columbia River in pursuit of spring chinook. They caught and kept 13,300 adult chinook, and 2,000 steelhead. The March 1-June 15 season was open to chinook 50 out of 107 days.

The catch included Willamette and upriver fish. The 2012 upriver spring chinook return to the mouth of the Columbia totaled 203,100 adult fish, as compared to the preseason forecast of 314,200. The 2013 upriver spring chinook forecast is for a return of 141,400 adult fish.

Anglers caught and kept 2,900 summer chinook in season (June 16-Aug. 1) during 34,600 trips to the lower river.

The lower Columbia gill-net fleet caught 6,100 chinook during 18 hours of fishing in April on the lower Columbia mainstem.

The commercial fleet also caught 1,700 summer chinook in June, and 37,400 fall chinook during "early" and "late" fall outings.

*Columbia Basin Bulletin, 12/14/2012*

**Oregon Water Coalition**
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# Oregon Water Coalition

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