Oregon Water Coalition
Member Newsletter

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Draft recommendations released on Columbia treaty renewal with Canada

The U.S. "Entity" — the Bonneville Power Administration administrator and the U.S. Army Corps of Engineers' Northwest Division commander/division engineer — announced Thursday the release of a draft recommendation for renewal of the Columbia River Treaty with Canada regarding flood control, hydro power, fish and wildlife and other issues that span the Columbia River basin the two countries share.

The recommendation development is part of a process to renew and/or amend a treaty first signed in 1961 and implemented in 1964. The Columbia River Treaty is an international agreement between Canada and the U.S. that called for the cooperative development of water resources regulation in the upper Columbia River basin.

A main component of the treaty called for Canada to develop reservoirs in the higher reaches of the Columbia Basin sufficient to provide 15.5 million acre-feet of water storage to help boost flood control capabilities and provide a controllable source to fuel hydro production in both countries.

It has resulted in doubled water storage capacity on the Columbia system with construction of three large storage projects (Duncan, Keenleyside and Mica) in Canada and Libby Dam in the United States.

Under the terms of the treaty, requirements for flood control provided by the treaty projects will change in 2024 from the current pre-determined operation plan to a "called upon" provision wherein the United States may request flood control assistance from Canadian projects.

The hitch is that flood control help can only be called upon if needs cannot be met by all related flood control facilities in the United States.

If the United States uses the called upon option, it must then pay Canada for its operating expenses and economic losses due to flood control operation.

The draft document released by the U.S. Entity is a result of a multi-year, collaborative process between the U.S. Entity, Sovereign Review Team and stakeholders.

For the purpose of sending this working draft out to stakeholders, the U.S. Entity says "it should be understood that, at this point, there is tentative alignment" among the U.S. Entity and Sovereigns on a number of key issues:

- The Treaty has substantial benefits for both the U.S. and Canada, but it should be modernized to reflect the current values and priorities of the Pacific Northwest region.
- A modernized Treaty will be flexible and resilient enough to adapt to the impacts of climate change and other factors.
- Ecosystem-based functions will be integrated into the Columbia River Treaty as a third primary purpose, or benefit, in the same way that hydropower and flood risk management benefits were developed in the original Treaty.
- A number of Treaty modifications are needed to improve ecosystem function, including augmentation of stream flows in spring and summer, a dry year strategy, and discussions with Canada on the feasibility of restoring fish passage on the main stem of the Columbia.
- The coordinated power benefits should be reasonably and fairly balanced between the U.S. and Canada and this should be reflected in the calculation of the Canadian Entitlement return.
- Continued flood risk management is an important component to protect public safety and the region's economy.
- Important river uses such as navigation and recreation should not be negatively impacted by Treaty operations.

There are also key areas where agreement is yet to be achieved, says the U.S. Entity. More discussion and input will be necessary to achieve alignment in these areas, it says, which include, but are not limited to:

- The correct balance for the use of any additional water supplies for both ecosystem flows and consumptive use through a modernized treaty remains a significant issue. Some Sovereigns, including the four Pacific Northwest states and several federal agencies, propose that a process be established whereby the states, tribes, and stakeholders will determine how the allocation of any additional spring/summer water from Canada will occur, while the Tribal perspective is that ecosystem needs and tribal reserved water rights must be fully met before any consideration is given to any additional out-of-stream uses.

- Columbia Basin Tribes and others have stated that achieving ecosystem-based functions such as stable reservoirs and additional downstream flows requires a modification to current flood risk management practices. Other Sovereigns have proposed that the current level of flood risk must be sustained unless modified by a formal public process. Therefore, the U.S. Entity has identified a post-2013 process to examine the level of flood risk management throughout the Basin. The U.S. Entity's position is that such an analysis cannot take place without more comprehensive involvement from a wider array of stakeholders, and that additional funding would be required to implement this process.

- Columbia Basin Tribes and others continue discussing the degree and extent to which both Canadian and U.S. hydropower production should be reduced or traded-off in order to provide increased ecosystem-based function. The U.S. Entity maintains that reductions in hydropower production would also result in reductions in system reliability. Columbia Basin Tribes think that reliability issues can be addressed through the integration of renewables and increased conservation measures.

- How future treaty operations will balance ecosystem-based function, flood risk management, and hydropower with other authorized purposes.

- How regional sovereigns will continue to participate in the treaty modernization process after the recommendation is delivered to the State Department, as well as post-2024 treaty governance structures.

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Hastings: Columbia River Treaty draft recommendation needs re-working

The chairman of the House Natural Resources Committee wants more focus on flood control and hydropower in a draft recommendation on whether the Columbia River Treaty should continue between the U.S. and Canada.

In a statement, Rep. Doc Hastings, R-Wash., said it is "vital" that any change to the treaty focus on providing flood control and ensuring that the U.S. receives balanced benefits from the hydropower produced from the Columbia and Snake River dams.

Hastings said a working draft of the regional recommendation released by the Bonneville Power Administration and U.S. Army Corps of Engineers devotes "significant attention to controversial issues" that are not germane to the treaty.

"That could seriously undermine other important ongoing regional collaboration relating to the operation of federal and non-federal hydropower dams and salmon recovery," Hastings stated.

The draft recommendation indicates the treaty should continue but needs to be modernized, said Amy Echols, assistant chief of the public affairs office for the Portland office of the Corps.

Modernization includes water management adjustments to improve ecosystem functions in the river, which were not a part of the original treaty, Echols said.

The U.S. and Canada are determining whether to continue the treaty, which expires in 2024. The treaty is designed to manage flood control and power generation on the river. The nations can terminate the treaty with 10 years advance notice.

The draft recommendation also seeks to rebalance power benefits between the two countries. According to the draft, Canada gets "substantially greater value" from coordinated power operations than the U.S.

The draft would maintain the current level of flood-risk management, and consider re-evaluation in the future, Echols said.

Matt Rea, program manager for the treaty review for the Corps, said the working draft focuses on water supply, but doesn't specifically address agriculture.

The draft says the treaty should allow storage and release of water from Canada in spring and summer for additional out-of-stream and in-stream uses to help meet

water supply needs in the United States, Rea said. That kind of an operation would likely mean the U.S. would have to pay Canada for the change in operation, he said.

It would fall to the states to allocate the additional water supply, Rea said.

He recommends agricultural stakeholders read the document to consider whether it adequately addresses their concerns.

It remains to be seen how closely the final recommendation will mirror the current working draft, Echols said. Feedback from stakeholders will help the agencies develop a consensus. "There's great alignment on some of the very strong issues," she said. "But there is notable discussion that still needs to happen on the details."

A draft recommendation endorsed by stakeholders will be available for public discussion in September. Echols said the final recommendation will go to the State Department in mid-December.

As chair of the House Natural Resources Committee, which has jurisdiction over Bonneville Power Administration and hydropower, Hastings intends to conduct oversight of the efforts relating to the treaty and its potential impacts.

Matthew Weaver, Capital Press

ODA designates two watershed areas to study new water quality regime

The Oregon Department of Agriculture has identified two pilot areas for studying a new method of applying its agricultural water quality program.

The department will focus on the Noyer Creek watershed in Clackamas County and the Mill Creek watershed in Wasco County in assessing an alternative to its existing program.

The department's current water quality program operates through what are known as Senate Bill 1010 plans. The regionally developed plans use a landscape-based approach to develop conditions that support clean water and healthy watersheds.

The program has been criticized in recent months for relying too much on voluntary participation and being too lax on enforcement.

Land owners involved in the plans, however, say the plans have done wonders for protecting the state's water quality, although they have no proof, given that conditions prior to the implementation of projects were not documented.

"(Senate Bill) 1010 has been tremendously effective," state Board of Agriculture member Jerome Rosa said at a board meeting June 6.

"Probably the biggest problem is we didn't measure (conditions at the start of projects)," Rosa said.

The method under study will include less reliance on complaints to trigger regulatory enforcement actions and more department-driven assessments of existing conditions through aerial photographs and other visual observations, said John Byers, a water quality specialist with the department.

The department sought two Strategic Implementation Areas that had different rainfall levels, cropping profiles and terrain to get an understanding of the effectiveness of different programs in Oregon's diverse range of climate and terrain, Byers said.

Stream conditions in both areas also are heavily agriculturally influenced, and show a need for improved water quality, Byers said.

The department also has identified what it is calling 43 "focus areas" where local soil and conservation districts will work with landowners on developing improvements in riparian habitat.

The Strategic Implementation Areas will be under a more regulatory microscope than the focus areas, Byers said.

In both areas, the department will conduct assessments of riparian conditions before and after the study to measure changes. The pre-assessments could start as early as August, Byers said.

The ODA is responsible for regulating agricultural water quality in the state under a memorandum of understanding with the Department of Environmental Quality, which has the state's lead role in enforcing the federal Clean Water Act.

Mitch Lies, Capital Press

Study: Certain damage caused by small dams worse than larger dams

Researchers conclude in a new report that a global push for small hydropower projects, supported by various nations and also the Kyoto Protocol to reduce greenhouse gas emissions, may cause unanticipated and potentially significant losses of habitat and biodiversity.

An underlying assumption that small hydropower systems pose fewer ecological concerns than large dams is not universally valid, scientists said in the report. A five-year study, one of the first of its type, concluded that for certain environmental impacts the cumulative damage caused by small dams is worse than their larger counterparts.

The findings http://bit.ly/14XWxBu were reported by scientists from Oregon State University in the journal Water Resources Research, in work supported by the National Science Foundation.

The conclusions were based on studies of the Nu River system in China but are relevant to national energy policies in many nations or regions -- India, Turkey, Latin America -- that seek to expand hydroelectric power generation. Hydropower is generally favored over coal in many developing areas because it uses a renewable resource and does not contribute to global warming. Also, the social and environmental problems caused by large dam projects have resulted in a recent trend toward increased construction of small dams.

"The Kyoto Protocol, under Clean Development Mechanism, is funding the construction of some of these small hydroelectric projects, with the goal of creating renewable energy that's not based on fossil fuels," said Desiree Tullos, an associate professor in the OSU Department of Biological and Ecological Engineering.

"The energy may be renewable, but this research raises serious questions about whether or not the overall process is sustainable," Tullos said.

"There is damage to streams, fisheries, wildlife, threatened species and communities," she said. "Furthermore, the projects are often located in areas where poverty and illiteracy are high. The benefit to these local people is not always clear, as some of the small hydropower stations are connected to the national grid, indicating that the electricity is being sent outside of the local region.

"The result can be profound and unrecognized impacts." This study was one of the first of its type to look at the complete range of impacts caused by multiple, small hydroelectric projects, both in a biophysical, ecological and geopolitical basis, and compare them to large dam projects.

It focused on the remote Nu River in China's Yunnan Province, where many small dams producing 50 megawatts of power or less are built on tributaries that fall rapidly out of steep mountains. There are already 750,000 dams in China and about one new dam is being built every day, researchers say.

Among the findings of the report as it relates to this region of China:

- The cumulative amount of energy produced by small hydroelectric projects can be significant, but so can the ecological concerns they raise in this area known to be a "hotspot" of biological diversity.
- Per megawatt of energy produced, small tributary dams in some cases can have negative environmental impacts that are many times greater than large, main stem dams.
- Many dams in China are built as part of a state-mandated policy to "Send Western Energy East" toward the larger population and manufacturing centers.
- Small dams can have significant impacts on habitat loss when a river's entire flow is diverted into channels or pipes, leaving large sections of a river with no water at all.
- Fish, wildlife, water quality and riparian zones are all affected by water diversion, and changes in nearby land use and habitat fragmentation can lead to further species loss.
- The cumulative effect on habitat diversity can be 100 times larger for small dams than large dams.

Policies encouraging more construction of small dams are often developed at the national or international level, but construction and management of the projects happen at the local level.

As a result, mitigation actions and governance structures that would limit social and environmental impacts of small hydropower stations are not adequately implemented.

"One of the things we found generally with small dams is that there was much less oversight and governance with the construction, operation and monitoring of small hydropower," Tullos said. "On the large, main stem dams, people pay attention to what's going on. On a small hydropower project, no one notices if minimum flows are being maintained. Or if a pump breaks, the hydropower station might sit idle for long periods of time."

Researchers said the key finding of the research, contrary to prevailing but unvalidated belief, is that "biophysical impacts of small hydropower may exceed those of large hydropower, particular with regard to habitat and hydrologic change."

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Oregon House votes to OK hike in water transaction fees

The Oregon House, by the narrowest of margins, has voted to increase water transaction fees.

The House on June 19 voted 31-29 in favor of House Bill 2259. The bill allows the Oregon Water Resources Commission to increase fees 13 percent in 2013 and 2 percent annually beginning in 2014.

The vote was preceded by floor speeches in opposition to the bill from three members of the House Agriculture and Natural Resources Committee.

"Our natural resource base ... they have been struggling for years," said Rep. Wayne Krieger, R-Gold Beach.

"They have had increased costs of electricity for irrigation that is astronomical," he said. "You saw what happened to diesel fuel.

"And we have had fertilizer prices go from $160 a ton to where urea now is between $600 and $700 a ton," he said.

"Those who use this resource, with the exception of one group, did not want any increase at all," Krieger said.

Rep. Ben Unger, D-Hillsboro, said the increase is needed to bring the department closer to a legislatively directed 50-50 funding split between general funds and fees.

HB2259 now goes to the Senate.

Mitch Lies, Capital Press

Oregon Water Resources Department budget draws two 'no' votes

The two Republicans on the six-member Ways and Means Natural Resources Subcommittee recently opposed the budget bill for the Oregon Water Resources Department.

Sen. Chuck Thomsen, R-Hood River, said he voted "no" because the budget bill is backed by fee increases that are unwarranted.

Thomsen, a Hood River pear grower, said the department's request for 13 percent increase in water transaction fees this year -- an increase that scales down to 2 percent in subsequent years -- will leave the department vulnerable to what are known as funding "sweeps" by lawmakers.

Lawmakers in the past have swept fee-generated funds to supplement the state's general fund when fee-funded packages build to excess.

Thomsen said that could happen to funds generated by OWRD's water transaction fees in the coming biennium, as an improved economy spurs more use of the transaction programs. "If they get a big pot of money, the Legislature can come in in two years and sweep those funds," Thomsen said.

"I just thought that (the 13-percent increase) was a real big reach," he said.

The subcommittee on June 10 advanced to the full Ways and Means Committee a department budget of $53.3 million.

The budget is a slight increase from the $51.6 million legislatively approved 2011-13 budget, and increases staff from 144 in the current biennium to 154 in 2013-15.

The budget includes $27.2 million in general funds, up from $20.6 million in 2011-13; $10.6 million in fees; and $13.6 million in grants for advancing water supply development projects.

An additional $10 million in lottery-backed loans for water supply development could be made available by the state, but is not included in the department's budget bill.

Thomsen said the department's budget packages are aimed more at protecting fish and water quality than benefiting farmers and ranchers.

"If you look at the new packages, they are for fish studies, they are for water studies, they are for water monitoring," Thomsen said. "It is not to benefit users.

"It is not how can we use less water, let's develop some sprinkler systems, let's do some innovative things to help conserve water," he said. "It is to monitor our water, to make sure it is clean, that kind of thing, instead of to help users."

Others contend the packages could provide several benefits for users in new water supply development funds and in a $750,000 grant fund that can be used to develop new water supply development feasibility studies. Phil Ward, director of the department, characterized the budget as "a good solid budget."

"It provides some strategic enhancements that will help us do our job better," he said.

Lawmakers this session scrapped a controversial new water right management fee that the department estimated would have generated $5 million annually once fully implemented.

The budget is scheduled to go before the full Ways and Means Committee June 14.

Mitch Lies, Capital Press

Water budget passes House, additional funds could come from lottery

The Oregon House of Representatives on June 20 passed a 2013-15 budget for the Oregon Water Resources Department that includes a slight increase from its legislatively approved 2011-13 budget.

The budget, passed by a vote of 35-24, increases the department's budget from $51.6 million in the current biennium to $53.3 million in the biennium that starts July 1.

Staff in the budget is increased from 144 in the current biennium to 154 in 2013-15.

The budget includes $27.2 million in general funds, up from $20.6 million in 2011-13, $10.6 million in fees; and $13.6 million in grants for advancing water supply development projects.

An additional $10 million in lottery-backed loans for water supply development could be made available by the state, but is not included in the department's budget bill. A controversial new water right management fee that the department estimated would have generated $5 million annually once fully implemented was scrapped earlier this session.

But the budget does include an increase in fee funding generated from a 13 percent increase in water transaction fees. That increase reverts to a 2 percent annual increase in subsequent years.

Phil Ward, director of the department, characterized the budget as "a good solid budget." "It provides some strategic enhancements that will help us do our job better," he said.

The budget is contained in Senate Bill 5547.

Mitch Lies, Capital Press

Corps moves to remove Sandy dam, modify delta channels to aid fish

The U.S. Corps of Engineers is set to reestablish the long-clogged main channel of northwest Oregon's Sandy River near its confluence with the Columbia River, thus restoring historic conditions that are expected to provide more habitat benefits for protected salmon and steelhead as well as other fish and wildlife species.

The federal agency will this summer commission work to establish a pilot channel down through the Sandy River delta's East Channel and remove a dam built in the 1930s that has since diverted the vast majority of the Sandy River's flows down a West Channel. "We expect to award a contract by the end of the month," said the Corps' Michelle Helms. Work on the project, which will include the removal of non-native plant species and the planting of native species, is scheduled to begin July 15. Dam removal will likely start Aug. 15. Project completion is scheduled by Oct. 15.

The restoration work would benefit juvenile salmonids, many of which are protected under the Endangered Species Act, spawned in the Sandy River system by allowing

access to the East Channel during a variety of flow conditions, by reducing stranding potential in that lower river reach during summer months when ponding occurs, by providing cooler water to the East Channel from the Sandy River during summer, and by providing additional area that meets appropriate depths and velocities for juvenile salmonids.

The addition of cooler water could also have benefits in that it could decrease use of the area by warm-water predators, including non-native species such as bass that are known to use the East Channel, according to an environmental assessment completed last week by the Corps. The federal agency, which operates dams in the Columbia-Snake basin, as well as elsewhere, is obliged to help improve conditions for federally protected fish and wildlife stocks.

By removing the dam, more shallow water habitat would exist and allow the river to reestablish a more natural flow pattern. The East Channel now dries to isolated pools during summer, while the West Channel flows year-round. The EA's development, part of a National Environmental Policy Act process, was capped with the signing June 10 of a "finding of no significant impact" by the Col. John W. Eisenhauer, the Corps' Portland District commander and district engineer.

"Significant impacts include both beneficial and harmful impacts: Only minor disturbances are expected from the construction of the proposed project. Benefits of the project will result primarily from increasing juvenile rearing and refuge habitat for federally threatened and endangered runs of salmon and trout," the FONSI said. Some recreationists protested the process because it would limit access to Sundial Island, the delta acreage framed by the two Sandy River channels, and the Columbia.

Water flow was changed in the Sandy River Delta in the 1930s when a dam was constructed across the East Channel in an effort to help perceived problems for smelt (or eulachon), and salmon entering the shallow Sandy River from the Columbia River on their upstream migrations to spawning grounds, the Corps EA says.

The dam was constructed with the efforts of local wildlife organizations and the Oregon State Game Commission (now the Oregon Department of Fish and Wildlife), and was considered part of the New Deal era of wildlife habitat conservation.

The East Channel dam is about 750 feet long, 45 feet wide and 8 feet high and was constructed with pilings in-filled with horizontal timbers. The dam was reinforced in 1938 with large basalt stones and a new channel was dredged.

"The result of dam construction was that water from two shallower channels was essentially funneled into one deeper channel. Flow was routed into what had been an overflow channel, known at that time as the Little Sandy River (now referred to as the West Distributary Channel). This channel is currently the main channel through the Sandy River Delta.

The Sandy River delta is located where the Sandy River connects to the Columbia River (river mile 121 and 123) near Troutdale, Ore., just north of Interstate 84. The land north of the original Sandy River channel is known as Sundial Island. Bonneville Dam at RM 146 on the Columbia River is located about 25 river miles upstream of the mouth of the Sandy.

"The East Channel dam has adversely impacted salmonid habitat by impeding access and limiting cool water flow from the Sandy River to the East Channel, resulting in summer-time ponding and increased potential for stranding and mortality, which will continue if improvements are not made. Before dam construction, the extensive braided shallow-water habitat in the East Channel and the abundance of backwater habitat throughout the delta area provided excellent habitat conditions for rearing juvenile salmonids," the EA says.

"Since dam construction, the East Channel has gradually silted in and has become a slough, while the delta area has lost much of its hydrologic complexity and contains greatly reduced areas of backwater habitat.

"Habitat restoration would improve rearing opportunities for juvenile salmon spawned in the Sandy River, including spring and fall chinook salmon, coho salmon and winter steelhead. It would also provide off-channel rearing and high flow refugia habitat for juvenile salmon migrating downstream in the Columbia River.

"The East Channel supports high-quality riparian habitat along much of its length, which increases potential for rearing due to high invertebrate production and opportunities for recruitment of woody debris," the EA says.

The FCRPS federal "action" agencies are the Corps and the Bureau Reclamation, which operate dams in the Columbia and Snake river systems, and BPA, which markets power generated in the hydrosystem.

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