

SPRING 2008

INside

Public Affairs Officer
Selected2
Lake Operations
2008 2
Legislation
Passes to Support
Withdrawing More
<i>Water</i> 3
Are Lake Roosevelt
Fish Safe to Eat?4
U.S. Supreme Court
Weighs In On
Superfund Case 6
Spring Fish Closure
to Support Redband Trout
110ut

SPONSORS

Bonneville Power
Administration
Bureau of
Reclamation
Ferry County
Lincoln County
National Park Service
Spokane Tribe of
Indians
Stevens County
Washington
Department of
Ecology

Lake Roosevelt RI/FS Remains

in Neutral

On June 2nd, 2006 the Environmental Protection Agency (EPA) signed an agreement with Teck Cominco to determine if historical waste releases from Canada adversely impact human health or the environment in Lake Roosevelt and the Columbia River behind Grand Coulee Dam. Teck Cominco agreed to carry out a Remedial Investigation and Feasibility Study (RI/FS) that would be overseen by EPA and meet standards set by Superfund law.

Two years later, studies to answer human health and environmental questions have yet to begin. The only new information now before the public is based on fish sampling activities that were initiated by EPA in 2005 (see page 4).

WORK PLAN

RI/FS protocols require completion of a work plan before commencing studies. The work plan provides a road map for completing a complex series of studies to fully address environmental and human health questions.

As per the agreement, Teck Cominco provided a work plan in December, 2006. After eight months of review and comments, EPA did not approve the work plan. An EPA fact sheet comments that, "In general, the plan did not adequately address several important requirements, such as how gaps in existing data will be evaluated and what new studies will be needed to fill those gaps."

Teck Cominco revised and resubmitted the draft work plan in September, 2007. After another eight months of extensive interagency review, the work plan remains under EPA review.

THE DECISION PROCESS

As part of the approval process EPA makes decisions in consultation with the Colville Confederated Tribes, the Spokane Tribe of Indians, the Washington Department of Ecology, and the U.S. Department of Interior. Interior agencies include the Bureau of Reclamation, the National Park Service, Bureau of Indian Affairs, the US Fish and Wildlife Service and the US Geological Survey. Collectively, they are referred to as "the participating parties" and are identified in the agreement between Teck Cominco and EPA.

CONTINUED ON PAGE 7

PUBLIC MEETING

MAY 29, 5-7PM COULEE DAM TOWN HALL

300 Lincoln Ave, Coulee Dam, WA

ARE THE FISH SAFE TO EAT? SUPERFUND & OTHER UPDATES

- WASHINGTON DEPT. OF HEALTH: Fish Tissue Sampling Results
 Fish Advisory Update
- EPA: Superfund Update
- BUREAU OF RECLAMATION:
 2008 Lake Operations

Brougher Selected as Public Affairs Officer for Grand Coulee Dam and grassroots coordina-

The Bureau of Reclamation hired Lynne Brougher as the new Public Affairs Officer for the Grand Coulee Project. Brougher replaces Craig Sprankle who recently retired from federal service, according to David Murillo, Grand Coulee Dam Power Plant Manager.

Brougher comes to Reclamation after a 20-year career with the National Park Service. She most recently worked for Lake Roosevelt National Recreation Area as the Chief of Resource Education. Here she supervised education and information programs and worked with community groups such as the Coulee Corridor and Ice Age Floods Institute.

"We are very fortunate to have Lynne join our team at Grand Coulee," Murillo said. "Her experience in public information tion activities will be a great asset to our communications effort."

"Each place in which I've worked has been a new learning experience for me," Brougher said. "I am excited to serve at Grand Coulee Dam and assist with needs at



Lynne Brougher

Hungry Horse Dam in Montana."

She is a native of Michigan and holds a Bachelor of Science Degree in Geology. She and her husband, Craig, have two children and reside in Wilbur, Washington. 🔇

Lake Operations 2008

LIKE GOLDILOCKS, trying to get springtime draw down and summer refill "just right" for Lake Roosevelt is difficult.

In April, the Army Corps of Engineers sets the final flood control elevation for Lake Roosevelt. The target elevation (the lowest point of the draw down) is set for April 30. The goal on April 30 is that the lake level be no higher than the flood control elevation, which assures space for the spring snowmelt. This year is just above average. In the Canadian Rockies, which is the source of water for Lake Roosevelt, snow pack levels are at 102% of normal

Observation over the past few years also shows that more draw down and cold weather in the spring results in less pond weed and Eurasian milfoil in August. August infestation is heaviest in shallow water areas with ample sunlight.

2008 LAKE LEVEL FORECAOST

Given the anticipated 62 foot draw down, Lake Roosevelt will refill rapidly between May and the beginning of July. As this occurs, boaters should be particularly aware that wood and other debris picked up from beaches can become part of the current and pose safety hazards.

Based on the Columbia River Biological Opinion, the lake level is brought back to the full pool elevation of 1290 ft. around the 4th of July. This assures water will be available for migrating fish down stream in August.

Through the middle of August, the lake level will vary between 1280 and 1290 feet. Expected non-drought

conditions this year means the lake will only drop to 1280 feet by late August. Managing lake levels in August is done to support downstream flow conditions for fish that are set in the Columbia River Biological Opinion.

In the fall, the water level is raised to 1283 feet or higher to assist resident Kokanee, which the Columbia River Biological Opinion requires. 🗘

Lake Roosevelt Water Levels January thru August ~ 2007 & 2008



Legislation Passes to Support Withdrawing More Water from Lake Roosevelt

WITH BIPARTISAN SUPPORT, the Washington State Legislature passed a bill that will see Lake Roosevelt summer draw downs of up to one foot in normal years and 1.8 feet in drought years. Sending millions of gallons of water downstream represents the largest delivery of "new" water in three decades. Annual delivery of water is slated as follows:

- 30,000 acre-feet of water will go to the Odessa subarea to irrigate 10,000 acres of land now using rapidly depleted ground water from the aquifer.
- 25,000 acre-feet of water will go to downstream municipal, industrial and agricultural water right applicants.
- 27,500 acre-feet will be used to support improved instream flows for endangered species, particularly salmon.

In drought years, an additional 33,000 acre-feet will be released for as many as 379 holders of "interruptible" water right holders, thus creating a drought insurance program. Further, drought years will see an additional 17,000 acre feet released to improve in-stream flows for endangered species.

This legislation is an outcome of the state's Columbia River Water Management Program, which also receives much press for investigating the possibility of building the first large dam and storage project along the Columbia River in decades. One possible location, Lake Roosevelt's Hawk Creek, has been removed from consideration.

PARTNERS AND COST

The legislation was made possible by Washington state receiving critical support from the Bureau of Reclamation, the Colville Confederated Tribes and the Spokane Tribe of Indians. The Bureau of Reclamation currently holds storage rights granted in 1938. The Bureau will apply to the State of Washington for a secondary permit that allows the water to be put to the beneficial uses described. This process should be complete by fall. The final outcome will be Washington State putting this water in "trust." Also, the secondary permits will carry the 1938 permit date, making them a senior water right that is more easily protected.

The tribes were equally important partners. With miles of shoreline on Lake Roosevelt, the tribes can claim a federal reserved water right. If the tribes claimed this right, the result would be years of costly and time consuming litigation. To avoid this, the state and tribes created an agreement that, after a first year payment, results in the Colville Confeder-

ated Tribes receiving 3.6 million dollars a year and the Spokane Tribe of Indians receiving 2.5 million dollars a year. In return, the tribes agree not to contest the proposed water withdrawal.

Tribal payments will increase annually to match inflation. Further, the payments do not change based on how much water is actually withdrawn.

There is also a one time payment of 2 million dollars to Okanogan, Ferry, Stevens, Lincoln and Pend Oreille counties to mitigate impacts of the water withdrawal. How this funding will be allocated between counties or the specifics of its use are not known.

Part of the bipartisan support for these payments is that it would be far more costly to purchase an equivalent amount of water at current market rates. Without this water, the State believes that continuing to meet in-stream flow needs of fish, increased water demand for growing populations and irrigation needs is all but impossible.

FROM LEGISLATION TO IMPLEMENTATION

To implement this legislation, Ecology still has hurdles to overcome.

First, additional environmental impact studies are required. This starts with Ecology completing a Supplemental Environmental Impact Statement (SEIS) to determine if proposed releases will add to or reduce existing impacts of reservoir operations. The Lake Roosevelt National Recreation Area (LRNA), a unit of the National Park Service, has consistently raised questions about cultural resources, impacts on boat launches, exposure of beach areas, and vegetation concerns. Ecology says these issues will be addressed in the SEIS. If not addressed to LRNA's or another parties satisfaction, the SEIS can be challenged.

Assuming successful completion of the SEIS, the Bureau must then enter into service contracts with the irrigation district serving the Odessa and the State of Washington. Washington will then subcontract with downstream municipalities, irrigation districts and others to withdraw water. When entering into a service contract, the Bureau will conduct a National Environmental Policy Act

Are Lake Roosevelt Fish Safe to Eat? Washington Department of Health Draft

Health Consultation Provide Anglers Guidance

IN THE FALL OF 2005, EPA conducted fish tissue sampling on Lake Roosevelt that was far more extensive than any previous effort. An essential public purpose was to provide an early indicator of potential human health concerns.

The lead agency in determining a potential health hazard is the Washington State Department of Health (DOH). DOH received the sampling results from EPA in late 2006. After extensive internal review and two rounds of feedback from federal, state and tribal agencies, the Department of Health issued a third draft of the health consult in March, 2008. Assemblyman Kretz shared this draft with the Forum in an effort to support open government.

This third draft is particularly important because it formed the basis for an update of the Lake Roosevelt fish advisory that takes effect May 1st.

FISH ADVISORY UPDATE

Walleye: Based on mercury levels, DOH recommends "that pregnant women, women of childbearing age and children under six years of age eat no more than 2 meals per month of walleye caught from Lake Roosevelt." This advisory remains unchanged.

Bass: Women who might become pregnant or are pregnant, nursing mothers, and young children under six should limit their consumption of freshwater bass (largemouth and smallmouth) to no more than 2 meals per month. This is a statewide advisory, and thus includes Lake Roosevelt.

Burbot and Largescale Suckers:

Women who might become pregnant or are pregnant, nursing mothers, and young children should eat no more than one meal per week (four meals per month) due to mercury concentrations. These species were not previously sampled for Lake Roosevelt and are a new element to the advisory.

WHAT FISH WERE SAMPLED AND WHERE

The target species sampled were walleye, rainbow trout (hatchery and wild), lake whitefish, largescale sucker and burbot. Fish were caught in one of six focus areas representing northern, middle and lower reaches.

As the lake is 150 miles in length, DOH notes that sampling areas were selected with an eye toward historical distribution of contaminants and the physical characteristics of the upper Columbia. An EPA report says that fish species selected for study "represent key species in the UCR fish community, and various potential exposure pathways."

Two popular sport species, kokanee and bass, were not sampled.

WHAT FISH WERE SAMPLED FOR

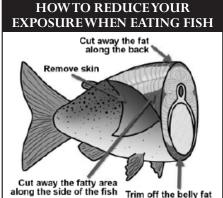
Each fish species was sampled for a suite of metals, e.g.—lead, cadmium and mercury, PCBs and dioxins/furans. Metals are of particular interest because of a legacy of upstream smelting operations that released slag and liquid effluent into Lake Roosevelt. Dioxins and furans may be the result of previous upstream pulp mill operations. A possible source of PCBs is not yet known.

GENERAL FINDINGS

DOH did not issue fish consumption recommendations for PCBs because data quality objectives were not met.

> DOH defines data quality objectives as a "... process designed to determine the type, quantity and quality of data needed to support a decision." The lab selected by EPA to test for the presence of PCBs in fish did not meet this standard.

> DOH also noted uncertainty with data collected for arsenic (all species) and lead concentrations in largescale



CANCER RISK

For the general population, the risk of cancer due to consumption is "very low" based on a DOH risk estimate. Looking across species, only 1 to 7 additional cancers per 100,000 people due to fish consumption while actual risks are likely to be much less, possibly zero. Risk increases from "very low" to "low" for non-tribal high end consumers. Looking across species, 1 to 5 additional cancers per 10,000 people is estimated.

The exact level of risk varies based on the type of fish and how it is consumed. Dioxins, PCBs and arsenic were identified as the primary contributors to cancer risk.

One way to think about the probability of developing cancer as a result of fish consumption is to think about cancer rates in general. For the population as a whole, 25 to 33 percent of Americans (one out of every three or four people) will develop cancer at some point in their lives.

NON CANCER RISK

Mercury was found to be of concern for non-tribal high end consumers of walleye (fillet with skin), hatchery and wild rainbow trout (fillet with skin) and burbot (whole fish). Children and pregnant women are considered more at risk because of mercury.

PCBs in whitefish (whole fish) and largescale sucker (whole fish) were also of concern for high-end consumers. As noted, meal limits based on the presence of PCBs (all tested species), arsenic (all tested species) and lead in large-scale suckers were not provided due to uncertain data quality.

MANAGING YOUR RISK

The DOH fish advisory, which provides meal limits, provides the simplest means of managing risk. The National Park Service will place 8-1/2x14 inch signs at boat launches and campgrounds advising the public about meal limit recommendations. They will also provide visitors "rack cards" $(3\text{-}1/2 \times 8\text{-}1/2 \text{ inches})$ with summary information in English, Russian and Spanish.

A second way to assess risk is to compare concentration levels to other products. In the case of mercury, DOH noted in a meeting with local county commissioners that concentration levels found in Lake Roosevelt fish are less than that found in a can of tuna or salmon.

A third risk assessment measure is to compare these results to previous studies. A report issued by EPA notes that a "... comparison of the current data to historical data from USGS, EVS Associates, and Ecology suggests the following:

- Mercury may be declining in walleye and rainbow trout (i.e., both wild and hatchery) fillets.
- 2,3,7,8 TCDF (dioxins/furans TEQs) continues to decline in lake whitefish.
- Metals appear to be unchanged in walleye and rainbow trout fillets and in largescale sucker whole body, with the exception of lead in the Northport area."

What these assessments do not consider is the combined effect of PCBs, metals or other chemicals in our fish. Nor do meal limits judge the effect of eating different fish, e.g.—two

DOH Draft Health Consultation Conclusions

The current DOH fish advisory for Lake Roosevelt (women who might become pregnant or are pregnant, nursing mothers, and young children eat no more than 2 meals per month of walleye) remains in place. Additionally, burbot and largescale sucker should be limited to 4 meals per month due to mercury concentrations.

Due to the high detection limit and the failure of DQOs for the PCB Aroclor data, there is too much uncertainty in the PCB data at this time for DOH to provide advice on fish consumption. Similarly, there are uncertainties with the arsenic speciation data and large-scale suckers lead concentration. There is an indeterminate public health hazard at the present time associated with ingestion of Lake Roosevelt fish contaminated with PCBs, arsenic, and/or lead due to the significant uncertainties in the data for these contaminants.

walleye and three rainbow trout per month. Nationally, research is starting to look at such very complex dynamics. National research is also underway to consider the impact of chemicals such as PBDE's (flame retardant), cosmetics and medications that are entering our groundwater and streams.

In the absence of clear information, assessing risk largely becomes a matter of individual choice and lifestyle. DOH's Lake Roosevelt health consultation and signage by the National Park Service become part of creating this context.

EATING FISH SAFELY

DOH also stresses the importance of fish in our diets. Among other things, fish is an excellent source of protein. Further, they provide unsaturated fats to our diet, which can help reduce the risk of coronary disease.

As such the DOH health advisories for fish are not intended to cut fish out of our diet, but to eat it wisely.

NEXT STEPS

Additional fish sampling will occur as part of the RI/FS. Filling gaps, such as missing data quality objectives for PCBs, and sampling of new species such as bass are likely to occur.

It is unlikely, however, that the public will receive new information before 2012. This forecast is based on expectations that the interagency review process will be as lengthy as the previous one and it's unclear whether new sampling will begin in 2008 or 2009.

U.S. Supreme Court Weighs in on Lake Roosevelt Superfund Case

THE U.S. SUPREME COURT DECIDED not to review a ninth circuit decision that Teck Cominco is subject to jurisdiction under the Superfund law for discharging pollutants into the Columbia River upstream of the border that ended up settling in the river downstream of the border (Lake Roosevelt). This leaves open the possibility of further litigation in the case of Pakootas et al v. Teck Cominco.

Superfund investigation and remedies for Lake Roosevelt has always been complicated by the fact that much of the slag and liquid effluent originated in Canada. Specifically, federal, state, tribal and local authorities have focused on the Teck Cominco lead-zinc smelting operations that took place ten miles north of the border from 1904 to 1995.

Teck Cominco maintained that their operations were not subject to Superfund law because they took place in Canada and were permitted, approved and complied with Canadian law. The legal question became how, or if, U.S. Superfund law for investigation and remediation of releasing hazardous substances into the Columbia River could be applied to Teck Cominco, a foreign company operating in a foreign country.

In December 2003, EPA decided it could enforce Superfund



THE LAWSUIT

of CERCLA (Superfund law).

In July, 2004 the Colville Tribes filed a citizen suit to force EPA to enforce, and Teck Cominco to comply, with the UAO. The wheels of justice began to move and the legal question proceeded to the ninth circuit court of appeals. Along the way, the State of Washington joined the Colville Tribes in the suit.

CONTINUED ON BACK PAGE

Legislation to Withdraw More Water CONTINUED FROM PAGE 3

(NEPA) assessment. NEPA, as defined by the Environmental Protection Agency, "requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions." Depending on how the Bureau conducts the NEPA, this assessment could be a lengthy and complex process.

Second, the Bureau will be responsible for delivery of water to the Odessa subarea. Farmers, however, will need to pay the expense of hooking up to this water. Likewise, downstream municipal and industrial users will need to pay for infrastructure costs to move water from the Columbia. When, how or if this will occur is not determined. Until these hook-ups occur, water may remain in Lake Roosevelt.

Third, new water right applicants must go through a public permitting process. Some or all of these applications may be challenged by individuals or groups concerned with the agreement as a whole or particular applications. Lastly, water withdrawals called for in the legislation are consistent with what the National Marine Fisheries Service has written in its last draft of the biologic opinion for the Columbia River. Until Judge Redden, however, approves the biologic opinion there is the possibility that he could rule against or ask for modification of the proposed water withdrawals.

2009 AND BEYOND

Because of uncertainties with implementation, when and how much water will be withdrawn from Lake Roosevelt is not certain. Put differently, the legislation authorizes the potential for withdrawing millions of gallons of water annually. Making this potential real, however, is a story just beginning to be written.

The Forum will track implementation developments. With our annual spring Lake Operations Report, the Forum will let readers know who is receiving water and likely effects on summer draw downs for 2009 and beyond.

Spring Fish Closure to Support Redband Trout

A NEW Washington Department of Fish and Wildlife (WDFW) regulation closes a northern section of Lake Roosevelt to fishing during part of the spring. The purpose of this closure is to support redband rainbow spawning needs.

The regulation reads as follows: "Closed waters from March 1 through the Friday before memorial day from the Little Dalles power line crossing upstream approximately one mile to marked rock point and from Northport power line crossing upstream to the most upstream point of Steamboat Rock."

The new regulation takes affect May 1, which is when the 2008-2009 WDFW sport fishing pamphlet is released.

CONSERVING REDBAND TROUT

Redband trout are native to the area. Wild populations still surviving in Lake Roosevelt are genetically linked to steelhead that inhabited the area before the building of Grand Coulee Dam. Like redband in other areas of the Northwest, they face

impacts from altered habitat conditions, dam operations and predators like walleye.

The closure area is unique in that it's a northern reach of the lake (approximately three miles up and downstream of Northport) where the upper Columbia still has free flowing characteristics. This reach, in conjunction with the Big Sheep Creek, Onion Creek and Deep Creek tributaries, are prime spawning areas.

Closure during the majority of the spawning season will help protect and conserve this species. Says John

Whalen,
WDFW
Regional
Fish Program
Manager, "This
is a tool to help



CONTINUED ON BACK PAGE

Lake Roosevelt RI/FS CONTINUED FROM PAGE 1

As per the agreement, Teck Cominco provides the Department of Interior six hundred thousand dollars per year. The Colville Tribes, Spokane Tribe and Washington Department of Ecology share five hundred thousand dollars per year to review plans, reports and otherwise participate in the RI/FS process.

Although not specifically identified in the agreement, The Washington Department of Health (DOH) is also consulted. DOH receives funding to participate via a stream of revenue that passes through ATSDR, a federal agency with a specific charge to address public health concerns stemming from hazardous substances in the environment.

Counties and local governments do not receive funding and are not provided a role in the participating agency review process. Their interests are to be served by the Department of Ecology and the Department of Health.

WHAT'S NEXT

When or if the draft work plan will be approved is presently not known. Given the length of previous reviews, approval of a work plan may not occur before 2009. EPA, participating agencies and Teck Cominco have initiated and conducted "workshops" to provide technical presentations related to upcoming sampling plans.

As a means of initiating some study work in the near term, EPA is considering approving interim studies to allow work to begin prior to Work Plan approval. Possible studies to be conducted include Phase 2 beach sampling, surface water sampling, and a recreational use survey. Says Marko Adzic, Teck Cominco's manager for the RI/FS, "We're developing sampling analysis plans and other documents so we can get on the ground as soon as possible."

The decision, however, on when to commence studies is EPA's. And EPA wants to ensure the studies are sound and appropriate, and would like as much consensus as possible from the participating agencies with which they consult.

Although studies could be initiated this summer, it's equally possible that agreement will not be reached to initiate studies before 2009.

After studies are initiated, the detailed participating agency review process means the public is unlikely to receive information on findings for one to two years. As such, further information about human health or environmental conditions are unlikely before 2010. That would be approximately four to five years after the original agreement was signed.

EPA and Teck Cominco will provide an update on this process at the Forum public meeting in Coulee Dam on May 29th. •



2206 S. Sherman St. Spokane, WA 99203 1-509-535-7084 email: info@lrf.org www.lrf.org

ADDRESS SERVICE REQUESTED

PRESORTED STANDARD
US POSTAGE
PAID
SPOKANE, WA

PERMIT #4

U.S. Supreme Court Cont. from pg. 6

In June, 2006 EPA withdrew the UAO when it entered into an agreement with Teck Cominco to carry out the RI/FS.

The court case, however, continued to move forward. The ninth circuit affirmed the district court finding that the UAO was enforceable against Teck Cominco. Specifically, the court held that superfund law can be used to hold a foreign company operating within a foreign country accountable for pollutant discharges that end up being deposited in the United States.

Teck Cominco then asked that the U.S. Supreme Court to hear the case. The Supreme Court declined to hear the case, leaving in place the ninth circuit ruling. The case is now returning to federal District Court for further litigation.

IMPACT ON LAKE ROOSEVELT

This ruling has no immediate impact on Lake Roosevelt. The agreement between Teck Cominco and EPA to conduct the RI/FS remains in place. Negotiations regarding possible clean-up or damages can be informed by findings of the RI/FS.

The Colville Tribes and State of Washington have indicated they will seek resource damages based on superfund law, and have amended their case in district court. No trial date has been set at the time of publication. •

Spring Closure CONT. FROM PG. 7

conserve and enhance self-sustaining populations of a native species that's been part of this area for thousands of years."

CITIZEN INVOLVEMENT

In 2007, WDFW held a public meeting to discuss the proposal. At the meeting and at a hearing with the Fish and Wildlife Commission, a number of concerns were raised. These included economic impacts to local business; lack of studies documenting the problem and possible remedies; the scope of area to be closed; and perceived biases against local fishing guides. There were also calls to allow for further harvesting of walleye, which is non-native and a significant predatory threat to redband.

Based on these comments, the proposal was modified and adopted to 1) enable fishing in the northern most reaches, and 2) lift the closure the Saturday before Memorial Day.

For more information, visit http://wdfw.wa.gov/fish/regs/rule_proposals/2008-2009ces.pdf, or contact the WDFW Eastern Regional Office at 509-892-1001.