

Citizens for a Clean Columbia

Our mission: to advocate for a clean Columbia River ecosystem
NEWSLETTER JANUARY 2025

Who are we?

Citizens for a Clean Columbia (CCC) is a volunteer organization advocating for the health of the Upper Columbia River (UCR), Lake Roosevelt and associated human and non-human communities.

Visit our website:

<https://citizensforacleancolumbia.org> or

[https://www.facebook.com/groups/3152304424](https://www.facebook.com/groups/315230442457913/)

[57913/](https://www.facebook.com/groups/315230442457913/) or contact us at

citizensforacleancolumbia@gmail.com.

News in Brief

National Priorities Listing Accomplished!

- The UCR site has been added to the Superfund National Priorities List (NPL). The EPA announced this in a news release on Dec. 13, 2024, which can be found on our website. As stated by Governor Inslee, this decision will “strengthen and boost our collective efforts to address a legacy of contamination at the site.” Being listed on the NPL provides access to EPA’s enforcement and other tools and provides EPA ability to request additional funds for more thorough remediation.
- Details about this process can be found in the Support Document for the Revised National Priorities List Final Rule Upper Columbia River December 2024 on CCC’s website. (no accompanying article)

Residential Soil Sampling and Cleanup

- The next round of residential soil sampling will happen this coming spring/summer following successful negotiations with TAI. EPA will lead this effort and began reaching out to eligible property owners in February.

Aquatic Portion of Baseline Ecological Risk Assessment (BERA)

- The Aquatic BERA assesses risks from hazardous substances in sediment, surface water, porewater,

and biota tissues to plants and animals. TAI submitted the draft Aquatic BERA to EPA for review in April 2024.

- EPA provided comments on the draft Aquatic BERA to TAI in December 2024. EPA and TAI are in discussions regarding the comments and the schedule for revisions and submittal of the draft final Aquatic BERA. (no accompanying article)

Disputes between EPA and TAI

- Resolution of TAI’s request for Technical Review of EPA’s Final Upland BERA is in progress.
- The dispute regarding additional sampling at upland lakes and wetlands was resolved in December 2024 and TAI has been directed to complete the study. (no accompanying article)

Progress made on Geostatistical Modeling

- Based on work presented by TAI subcontractor RedDot3D, progress has been made on creating geostatistical maps that show the predicted concentrations of lead in surface soil in the upland portion of the UCR site. Similar maps will be created for cadmium and zinc.
- The maps and other analyses conducted in support of map development will be presented in the revised draft final Upland Remedial Investigation Report.

Washington State University Student Visit

- This winter, WSU landscape architecture seniors will work with Citizens for a Clean Columbia and the Northport Project to generate design ideas that support the region's future needs.

Columbia River Treaty (CRT) Update

- Sessions were held on the CRT Agreement in Principle (AIP) at the Columbia River Transboundary Water Governance and Ethics Symposium held in Spokane, WA in November. These included updates and continued concerns.

Technical Advisor Update

- Joe focused his review over the past 6 months on the draft Aquatic BERA, dated April 2024.

Residential Soil Sampling and Cleanup

Residential soil sampling and cleanup of contaminated soil in the vicinity of the Northport/LeRoi smelter has been ongoing since 2004. Initial cleanups in the Northport area focused on properties with concentrations of lead greater than 1000 ppm.

Following the 2014 and 2016 residential soil studies that were part of the UCR RI/FS, 18 additional properties located outside of Northport with lead concentrations near or above 700 ppm were remediated. Because of the discrepancy between cleanup thresholds for Northport and for the non-Northport locations, EPA, under the leadership of Monica Tonel, reviewed the 2004 data reports to identify properties within Northport town limits with lead levels near or above 700 ppm; these became eligible for cleanup.

In 2020, cleanup occurred at 15 of the previously sampled Northport properties and at several common use areas in Northport including the Lyn Kaste Gould Memorial Park and the play area at the Northport Community Garden (see our January 2021 newsletter for details).

In 2021, EPA conducted additional sampling within Northport targeting properties that had not been previously sampled. Sampling was completed at 43 properties; in 2022, EPA remediated 15 Northport residential properties and one common-use area with lead concentrations above 700 ppm.

In early 2024, the EPA conducted additional limited cleanup at 9 residential properties within the Northport area. This latest round of cleanups prioritized residential properties with lead or arsenic concentrations above 200 ppm and 90 ppm,

respectively, on properties where children and/or women of childbearing age had unrestricted access to contaminated soils.

2025 Residential Soil Sampling

Additional residential soil sampling is planned for the upland area potentially impacted by aerial releases from the Teck smelter. Robert Tan leads this effort and has already been in touch with many residents who have yet to have their properties sampled. EPA plans to engage others through fliers and targeted door-to-door canvassing beginning in February. Sampling is expected to begin in spring.

Owners of residential properties within the expanded area (Figure 1) will be eligible for sampling. Residents who are interested in signing up to have their property sampled are encouraged to reach out to Robert Tan (tan.robert@epa.gov).

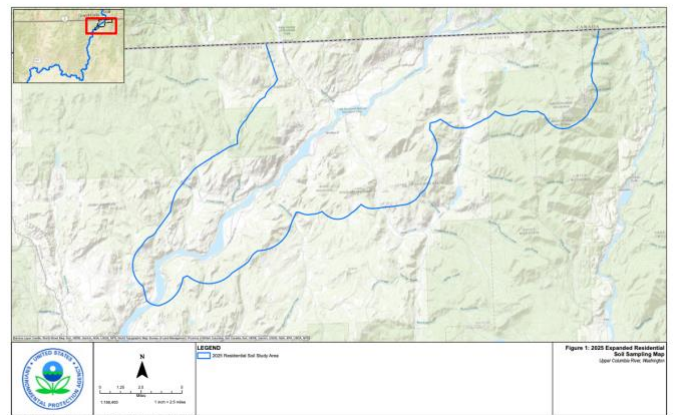


Figure 1. Expanded sampling area

While EPA has not yet finalized plans for additional cleanup actions at this time, they will continue to evaluate options for targeted cleanups based on previous removal thresholds that were used in 2024.

Mindy Smith, CCC secretary and Robert Tan, EPA (Special thanks to Marilyn Gauthier for editing)

Progress on Geostatistical Modeling

The EPA-TAI Geostatistics Working Group has been working steadily to agree over methodological assumptions and estimation parameters to create accurate models of the predicted nature and extent of soil contamination from lead, cadmium, and zinc. Lead modeling was developed using Sequential Gaussian Simulation which is a statistical interpolation method using a limited set of data points (in this case through approximately 1400 soil samples collected in the UCR) to estimate values at unsampled locations and help understand data gaps.

The maps are color coded to indicate areas with higher and lower predicted concentrations of lead as shown in Figure 2 below.

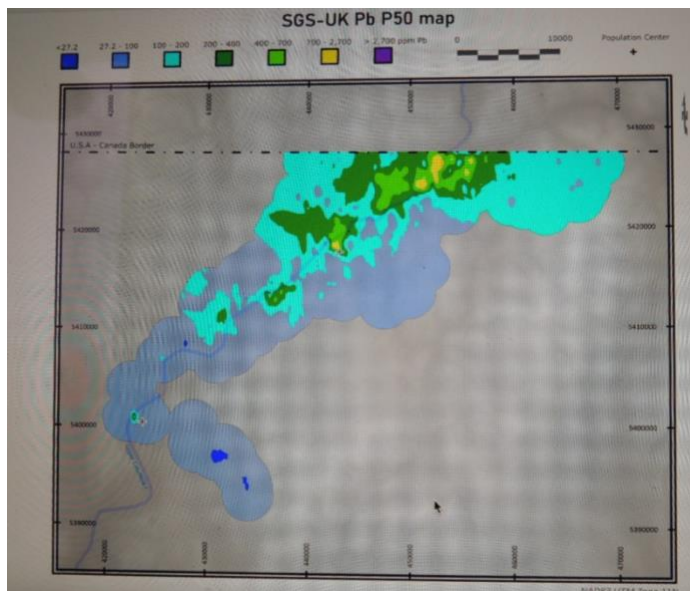


Figure 2. Example of geostatistical map

The new model performs well showing a high correlation coefficient above 0.71, and low false positive (7%) and false negative (1%) rates. The SGS-UK model is now recommended for use in the Revised Draft Final Upland RI. TAI will provide additional maps for cadmium and zinc in January 2025 and the full results of the modeling effort will be documented in the revised Draft Final Upland RI that is expected April 25, 2025.

Mindy Smith, CCC secretary

Washington State University Student Visit

This winter, 23 WSU landscape architecture seniors will work with Citizens for a Clean Columbia and the Northport Project to generate design ideas that support the region's future needs. Students will broadly consider the chronic industrial pollution in the UCR Basin, its consequences for the communities of Northport, WA and the Colville Confederated Tribes, and how designers can respond to these complex matters.

Enrolled in courses with overlapping emphases, the students will generate two projects related to the region. For their planning course, students will work collectively on a community identified topic. This could potentially take the form of model ordinances, design recommendations, or planning strategies that respond to climate change, food security, housing needs, or transportation issues. For their capstone studio course, students will develop independent design projects that pertain to the interrelated issues of remediation, resilience, adaptation, and land-use planning. Their capstone projects may span physical scales and contexts. In the projects for both classes, students will contemplate the overlap of global and local issues and strengthen their capacity for “ecological understanding” – defined as “the expectation and awareness that human actions have consequences and that an intricate web of relationships connects patterns and processes in the physical, biological, and social environments” (*Ecology and Design*, Johnson and Hill).

All student work will be informed by an immersive study tour that will be conducted from January 28 to 30th, 2025. The tour will provide opportunities for students to experience the landscape outside of the classroom and to interact with the people who live

in, work in, and care about this landscape. The tour additionally serves as a venue for open-ended conversations about the design needs, opportunities, hopes, and challenges in the region.

During this trip, students and their professors will tour the Grand Coulee Dam, visit with Colville Confederated Tribe members in Inchelium, explore various sites along the river in Kettle Falls, see the Sherman Fish Hatchery, and spend a day in Northport. In Northport, they will visit with the mayor, members of the historical society, business owners, and CCC members and will meet with WA Dept. of Ecology staff to learn more about the waterfront cleanup.

After the journey north, students will begin to define and develop the topic of their individual projects, and their group project. Throughout their design process, it is expected that students conduct further research, and as appropriate, sustain connections with and seek input from community partners and interested parties. There is a work-in-progress review —held via Zoom—during the semester and all are welcome. On April 22, students will present and share their final work to invite community response and dialog. Zoom details forthcoming and Mindy Smith will send out a CCC member alert with the link that will also be posted on CCC’s website.

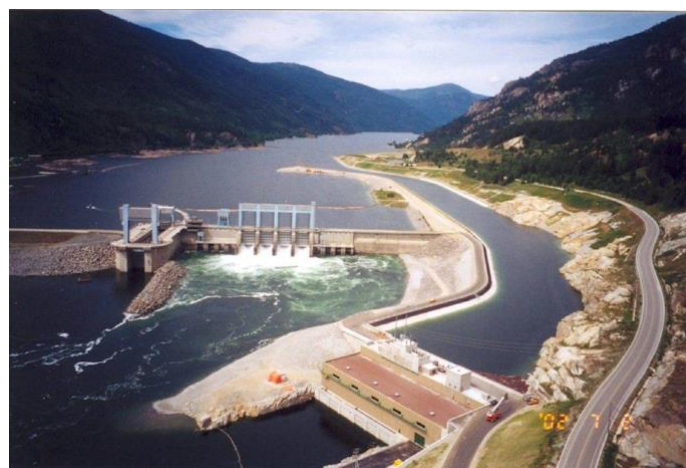
Jolie Kates, Professor & Landscape Architecture Program Head, School of Design and Construction Washington State University

Columbia River Treaty (CRT) Update

In our July 2024 newsletter, I reviewed the progress of negotiations for a modernized CRT and the reaching of an agreement in principle (AIP). The AIP is a legally-binding document that represents the culmination of 6 years of negotiations (since 2018) between the United States (US) and Canada (CA).

This document is a critical first step in the process of modernizing the original 1964 CRT.

The original treaty, while a historic example of binational cooperation, focused exclusively on flood risk management and hydropower to the exclusion of ecosystem concerns, tribal and first nations rights, local community input, salmon passage, and compensation for those affected by the three CA dams (Duncan, Keenleyside, Mica) and one US dam placed for water management resulting in loss of salmon passage, permanent flooding of some areas and dramatic water fluctuation in others.



BC Hydro’s Hugh Keenleyside Dam near Castlegar

In November, I attended two sessions about the AIP at the Columbia River Transboundary Water Governance and Ethics Symposium (<https://columbiabasingovernance.org/>) held in Spokane, WA. The first panel presentation included key members of the negotiating teams. Representatives from the US were: Jill Smail (US Negotiating Team Lead, US Department of State), Hub Adams (Bonneville Power Administration), Pete Dickerson (US Army Corp of Engineers), William Barquin (Kootenai Tribe of Idaho), Michael Tehan (National Oceanic and Atmospheric Administration), and Roland Springer (Dept. of Interior Reclamation). Representatives from Canada were: Stephen Gluck (CA Negotiating Team Lead, Global Affairs Canada),

Kathy Eichenberger (executive director and provincial lead of the CA Negotiating Team, Government of British Columbia [BC]), Jeremy Benson (BC Hydro), Jay Johnson (Syilx Okanogan Nation Alliance), Nathan Matthew (Secwépemc Nation representative), Troy Hunter (Ktunaxa Nation representative) and Maureen DeHaan (Ktunaxa Nation representative).

Of note is that the US tribal representatives have an advisory role and First Nations on the Canadian side are part of the negotiating team (since 2019). Jill Smail, however, noted that the 2013 Regional recommendations (<https://www.bpa.gov/-/media/Aep/projects/columbia-river-treaty/crt-regional-recommendation-12-13-13.pdf>) developed by the US entity in consultation with the region's sovereign states, federally recognized tribes and other stakeholders was the guide used during negotiations. The BC provincial government has been meeting with local governments and residents in the Basin since 2012 to learn about and address their priorities during this process.

I was very pleased to see a strong sense of cooperation and respect displayed during the presentations. Stephen Gluck commented that while the negotiations began in a traditional way with each side representing their respective countries positions and interests, multiple meetings and the iterative process gave way to much deeper listening and a change in perspectives leading to this AIP reached on July 11, 2024. Both sides talked about “win/win” results from the negotiations.

The CRT remains in place and can be terminated as in the original treaty with 10 years notice by either the US or CA. The AIP can best be seen as a framework or skeleton for the 20-year treaty agreement. The next step will be to put the “flesh on the bones” details. The main AIP elements are:

- **Flood Risk Management:** The 3 dams (Duncan, Keenleyside and Mica) on the Canadian side will continue to provide flood control at the 3 respective reservoirs (Duncan, Arrow Lakes and Kinbasket), but the amount of preplanned, assured storage has been decreased from 8.95 million acre-feet (1 acre, 1-foot-deep times one million) to 3.6 million acre-feet, stored in the Arrow Lakes Reservoir. The US called-upon assistance from Canada for flood control in the event of extreme flood risk remains, although this provision in the original treaty has never been activated. The US will pay Canada \$37.6 million USD annually (indexed to inflation) with a fee paid for called-upon assistance; this latter part of the agreement is under discussion. The US will consequently need to manage their own reservoirs more conservatively.
- **Power generation:** The original treaty required annual coordination of 15.5 million acre-feet of storage space behind the Canadian dams for hydropower generation. The Canadian Entitlement in the original treaty was half of the additional hydropower that could be produced in the US from operation of the Canadian Treaty dams (sent as electricity by the US to BC and sold to BC hydro, with a portion shared with Canadian Columbia Indigenous Nations, or US utilities). The new agreement allows Canada energy security with increased flexibility in dam operation with up to 4-5 million acre-feet to manage annually for domestic priorities (ecosystem, indigenous cultural values and community interests such as recreation, transportation and flood mitigation) over the next 20 years. Canada can unilaterally change the original amount to a minimum of 11.5 million acre-feet (about one third of treaty storage) in each year for the first 15 years and 10.5 million acre-feet for the next 5 years. The new

Canadian Entitlement energy decreases by 33% in year 1 to 50% by year 20, with an additional reduction of 6.5% for every million acre-feet used for Canadian domestic flexibility.

○ Decisions about flows and reservoir levels will be made throughout the year based on ongoing river research and modeling currently underway by cooperative efforts from First Nations, federal and provincial governments, the Canadian CRT local government committee, and environmental non-governmental organizations and technical consultants. This will happen once the modernized treaty is in place.

○ Additional opportunities to expand the ability to import and export power between the 2 countries are provisioned in the AIP.

● **Ecosystem:** An additional payment of \$16.6 million USD annually from the US to BC are included in the AIP to compensate Canada for downstream benefits to irrigation, recreation, navigation and fisheries (vs. none in the original treaty). The AIP guarantees that Canada will provide at least one million acre-feet of guaranteed water for flow augmentation to support salmon survival and migration, and 4 million acre-feet could be available for research-related environmental operations to address riparian areas, wetlands, flood plains, and salmon reintroduction with plans for fish passage over the Chief Joseph and Grand Coulee Dams.

○ If the AIP is implemented in a way that ensures First Nations' role in decision-making, the new provisions allow flexibility based on a One River adaptive management framework and will support indigenous cultural values, salmon reintroduction, and ecosystem health.

▪ **New advisory group:** Kootenay Transboundary Working Group (KTWG) – is a committee that

will inform the US Army Corp of Engineers that own and operate the Libby Dam about ecosystem considerations and needs. The group includes members of the Ktunaxa Nation on both sides of the border.

▪ **New advisory group:** Indigenous-led (US tribes and BC First Nations) ecosystem and cultural values group (Joint Ecosystem and Indigenous and Tribal Cultural Values Body or JEB) will make annual recommendations by consensus on ecosystem and cultural needs.

The CA provincial government has promised to continue with robust public engagement as decisions are made about dam/reservoir operations for additional feedback.

The next panel included Joseph Bogaard (Save our Wild Salmon), Dr. Martin Carver (Upper Columbia Basin Environmental Collaborative), Stan Doehle (BC Local Govt Committee), Wes McCart (County Commissioner and US Govt Committee), Bob Heinith (Climate Hydrologist), Jim Heffernan (Columbia River, Intertribal Fisheries Commission) and DR Michel (Upper Columbia United Tribes).

Concerns voiced by this panel included the following:

- Lack of details demonstrating integration of ecosystem into the operations of power and flood control, including ecosystem protections during called-upon storage (ecosystem will appear in the preamble to the Modernized Treaty under domestic considerations but is not recognized as a third treaty arm in its own right)
- Making fish passage over the dams a reality
- Limitation of the advisory groups to direct change (the operations group remains the same with no authoritative voice for the river)
- Guaranteed funds to research operational solutions

- The need for inclusion of climate scientists to address global warming using adaptive water management
- Additional attention to domestic needs of irrigation and transportation along with salmon reintroduction as part of food security, and greater transparency and opportunity for public participation on the US side.

There is no set date for when the modernized CRT will come into effect. However, next steps include:

- Development of interim changes in treaty operations such as flow augmentation
- Additional public meetings in both US and CA
- Drafting the text with public consultation on the Canadian flexibility portions
- Approval by the BC government and ratification by the US and Canadian Federal Governments

Additional information is available on the US Army Corp of Engineers website

(<https://www.nwd.usace.army.mil/CRWM/Columbia-River-Treaty>), the US State Department

(<https://www.state.gov/columbia-river-treaty/>), and on the BC Columbia River Treaty website

(ColumbiaRiverTreaty@gov.bc.ca). Additional

information from the Canadian team can be

obtained through listening to the following YouTube presentations

<https://www.youtube.com/watch?v=uUd07IzEd8>

(30 minutes) and

<https://www.youtube.com/watch?v=FmBedYBfeNQ>

(longer presentation).

Ways to participate:

<https://engage.gov.bc.ca/govtogetherbc/engagement/columbia-river-treaty-agreement-in-principle/>.

Questions and feedback can be sent online to email

at ColumbiaRiverTreaty@state.gov or

columbiarivertreaty@gov.bc.ca.

Watch for opportunities to attend community meetings in the Canadian Columbia Basin in the fall and winter of 2024-25.

Mindy Smith, CCC secretary

Technical Advisor Report

My formal document review over the past six months was entirely devoted to the more than 14,000-page “Draft Aquatic BERA, dated, April 2024”

I provided CCC with individual comments on two of the five sections of the aquatic BERA on June 18, 2024, and August 13, 2024. Comments on the third and fourth sections were discussed with the EPA on the September 17, 2024, and October 16, 2024 EPA-CCC conference calls. I skimmed the fifth section after the comment period had closed. I had a few editorial comments on the Executive Summary. My main concerns were the evaluation of only mercury and selenium for fish risk assessment, the lack of a sediment transport study, the use of the floating plant greater duckweed for toxicity benchmarks for floating and rooted aquatic plants, and the cursory discussion of the issues regarding the poor quartz sand control results for bioassay studies.

I also reviewed several PowerPoint presentations on the aquatic BERA and “Draft Final Remedial Investigation Report for OU 3, October 2023” for discussion on EPA-CCC conference calls.

Joe Wichmann, PhD; CCC Technical Advisor

Be More Involved

CCC welcomes new members and is seeking new members for our board – please contact us if interested. Our next General Member Meeting will be in the fall. Please join us. We will post updated information on our website and on Facebook <https://www.facebook.com/groups/315230442457913/>.

Contact Robert Tan for information on Human Health Risk Assessment or Soil Amendment Technology Evaluation Study (SATES) at Tan.Robert@epa.gov and Bonnie Arthur for information on ecological studies at Arthur.Bonnie@epa.gov. Concerns may also be directed to the EPA Region 10 Acting Regional Administrator Dan Opalski (Opalski.dan@epa.gov).

Community Outreach coordinators are: Kristin Ching (Ching.Kristin@epa.gov) and Julie Congdon (Congdon.Julie@epa.gov).