Meeting Materials

Materials for Presentation:

- CRBRP Monitoring Project Descriptions
- Map of CRBRP Project Areas to be Monitored
- CRBRP Monitoring Project Contaminants, Media, and Analytical Methods

Additional informational attachments include:

- 2010 Columbia River Basin Toxics Reduction Monitoring Action Plan Items
- Monitoring Literature references
- Columbia River Basin Long Term Monitoring Strategy Development Questions

Overview of Current Columbia River Basin Grant Projects

Lon Kissinger: EPA Region 10

Laboratory Services and Applied Science Division

Arthur Preston: MPH Candidate 2021 OHSU-PSU School of Public Health

Environmental Systems and Human Health

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Descriptions of Grantees and Projects

Summary of Current Columbia River Basin Toxics Reduction Workgroup Grantee Monitoring Work

Nez Perce Tribe in partnership with the University of Idaho and U.S. Fish and Wildlife Service

Work to be completed: Monitor current *Clearwater River (Idaho) watershed* conditions for toxics/pollutants, including several Columbia River Basin <u>priority</u> Tier I and II toxics in biota (i.e. fish, mussel, lamprey <u>ammocoetes</u>), water, and sediment.

Objectives:

- 1) Supplement Clearwater River watershed data
- 2) Fill data gaps for middle-upper Columbia River Basin
- 3) Provide baseline data for the Clearwater River watershed to inform future monitoring and trend evaluation

Regents of the University of Idaho

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Work to be completed: Monitor mercury in crayfish, in two sub-water sheds, the *Spokane River and Boise River basins*. Local citizens affiliated community group members will collect the organisms. Communicate results to local communities.

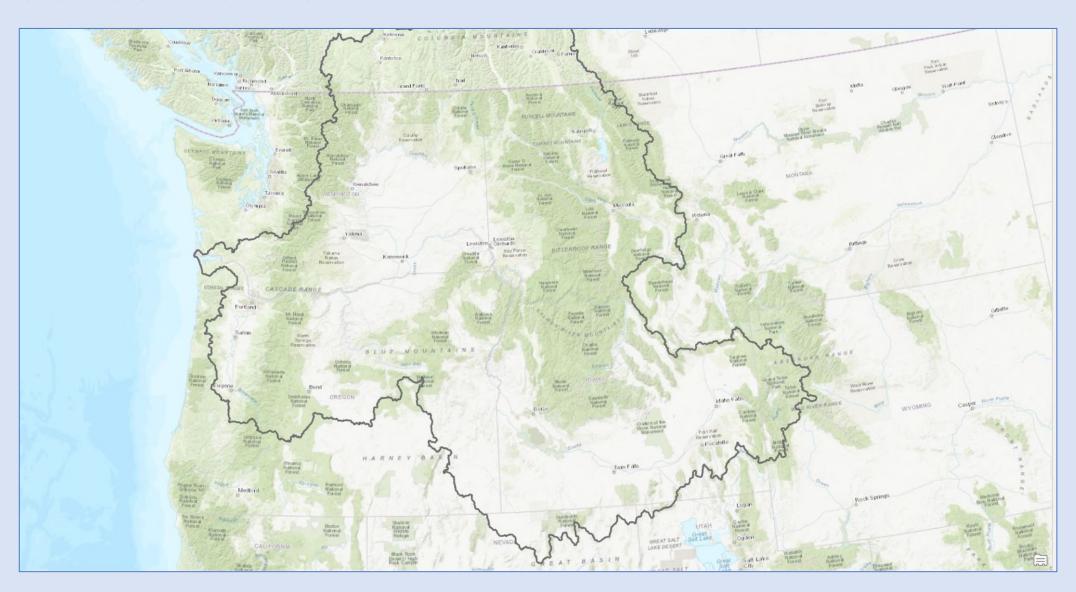
Objectives:

Support the following Columbia River Basin Research Priorities:

- 1) Increase monitoring data available for mercury, a priority pollutant in the Columbia River Basin, to support status and trends evaluation.
- 2) Facilitate community engagement and education regarding mercury's environmental health risks via community participation in monitoring mercury levels in crayfish, a charismatic invertebrate

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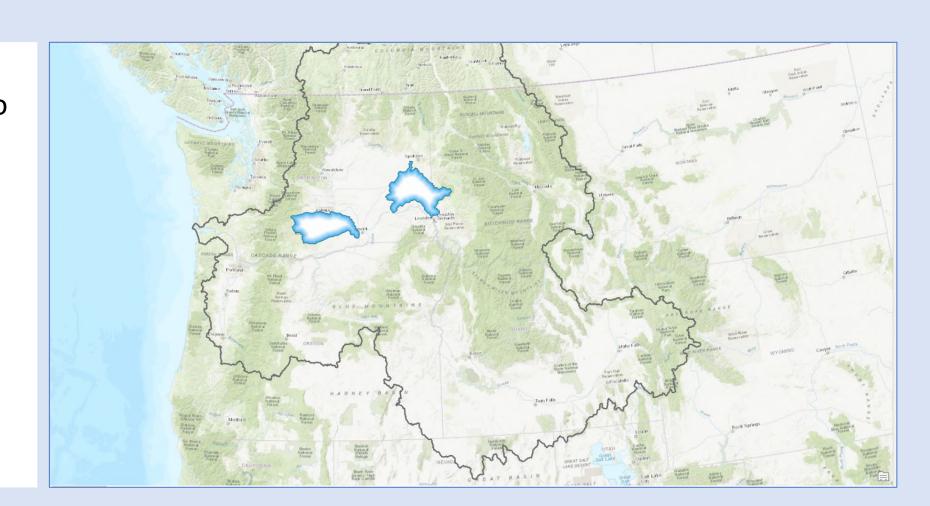
Columbia River Basin



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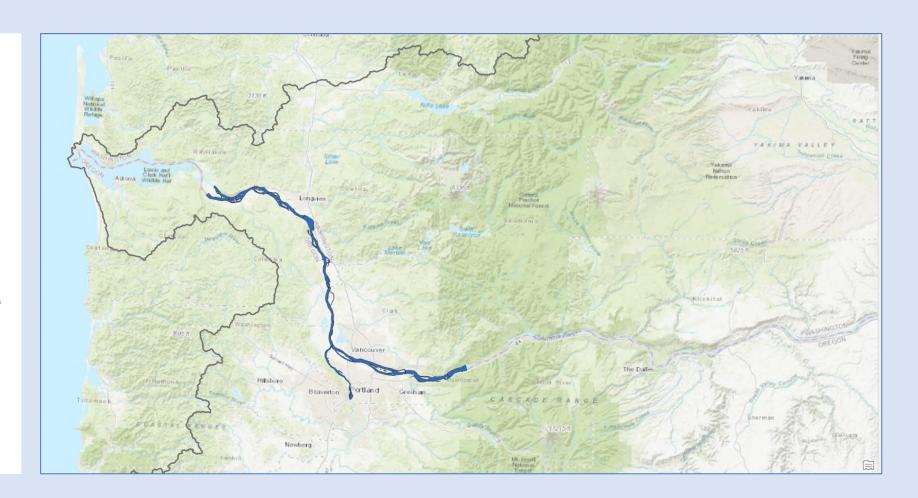
Washington State Department of Agriculture

Monitor pesticides in eastern Washington to support education and pesticide collection efforts.



University of WA Tacoma at the Center for Urban Waters

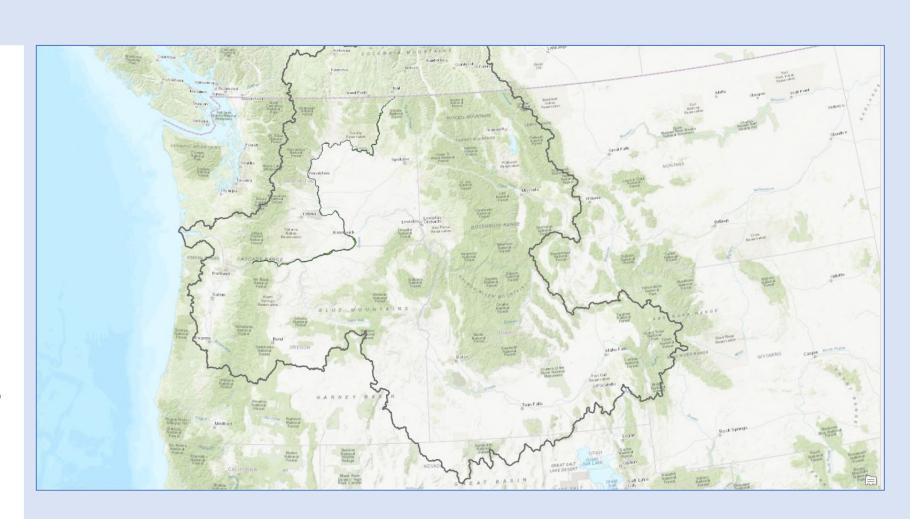
Characterize emerging chemicals of concern in *Columbia River waters* using non-targeted analysis with liquid chromatography/mass spectrometry. Compare levels to adverse effect levels.



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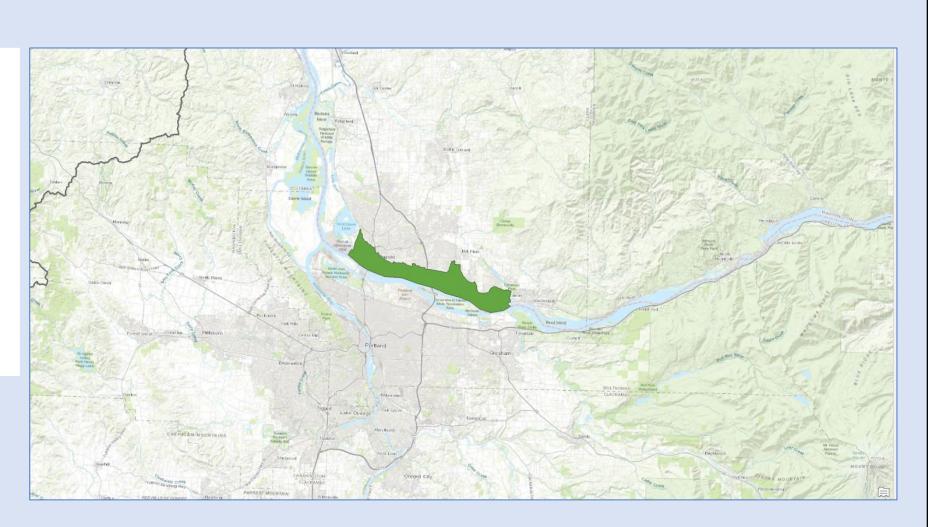
Confederated Tribes and Bands of the Yakama Nation

Pramework/
Community/
Engagement-Outreach
Long-term Monitoring
Plan to track toxics
status and trends of in
fish, water, sediments,
and invertebrates in the
Middle and Upper
Columbia River
mainstem.



City of Vancouver

Conduct water quality monitoring in the Columbia Slope subwatershed within Vancouver city limits to support storm water control infrastructure development.



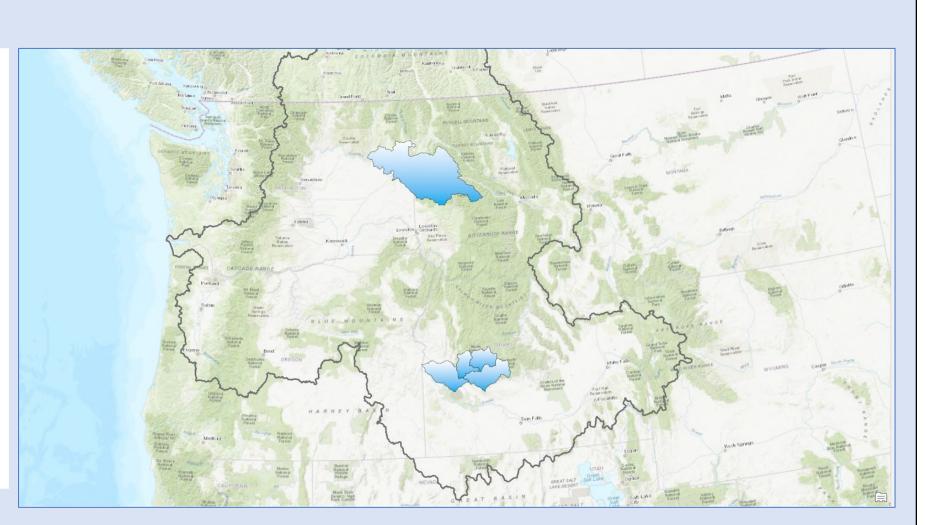
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University of Idaho

Monitor mercury in crayfish, in the Spokane River and Boise River basins.

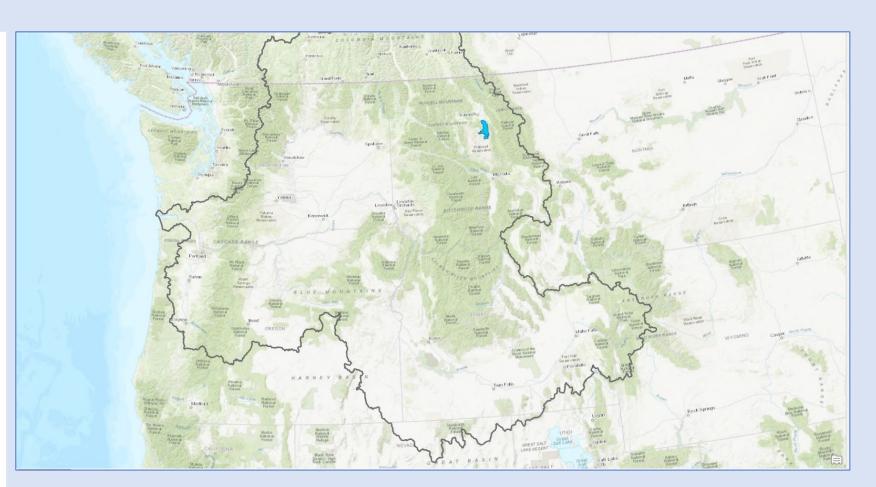
Local citizens affiliated community group members will collect the organisms.

Communicate results to local communities.



University of Montana

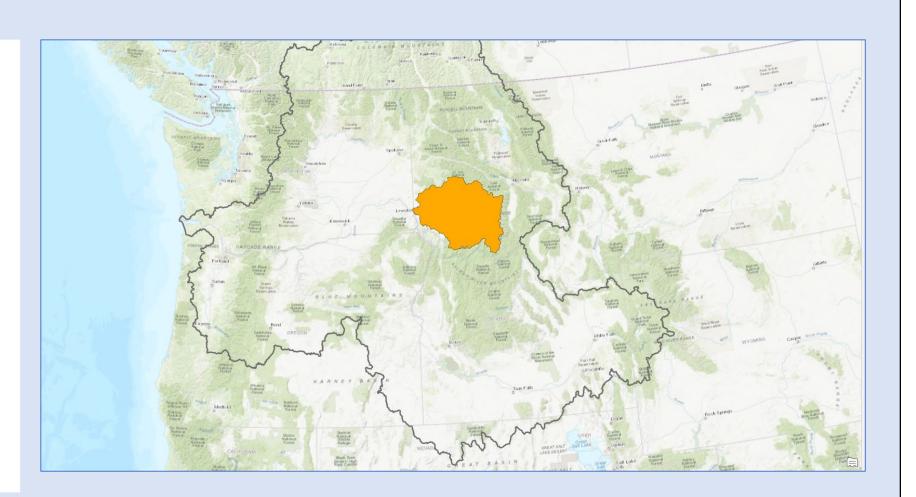
Monitor Flathead Lake mercury bioaccumulation and changes in the food web after culling 75% of lake trout. Characterize mercury levels in mountain whitefish. Survey food panty patron lake trout consumption and awareness of fish consumption advice. Use information to evaluate mountain white consumption advice and to discuss/develop a community engagement plan.



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Nez Perce

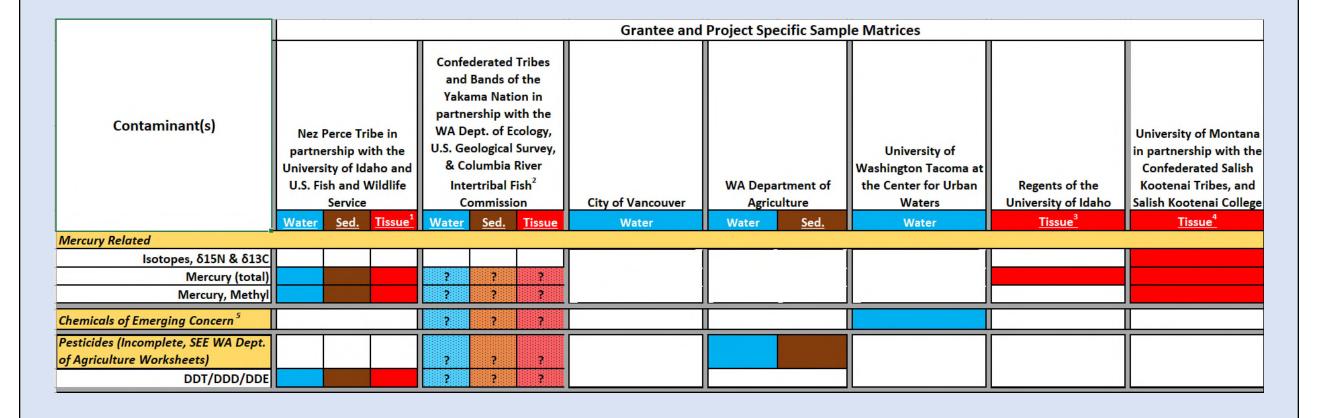
Clearwater River (Idaho)
watershed for
toxics/pollutants,
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in biota (i.e. fish, mussel,
lamprey ammocoetes),
water, and sediment.



Monitoring Areas for All Grantees

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Grantees-Contaminants-Media-Methods: *Chemicals, Grantees, Media*



Grantees-Contaminants-Media-Methods: *Chemicals, Media, Methods, Grantees*

	Matrices/Methods and Grantees Using Them									
Contaminant(s)	Water		Sediment		Tissue					
	Method	Grantee	Method	Grantee	Method	Grantee				
Mercury Related										
Isotopes, δ15N & δ13C										
Mercury (total)	1631	NPT	1631	NPT	1631	NPT, UId				
					EPA 7473	UMo				
Mercury, Methyl					1630 Mod	NPT, UMo				

Grantees-Contaminants-Media-Methods: WA Dept. of Agriculture Analytes in Sediment and Water

Pesticides to be Analyzed for in Water by the Washington State Dept. of Agriculture										
Chemical Name	RS_CHAR_NM ¹	RS_CHAR_CAS_NR	MEL_ANALYSIS_CD ²	Extraction Method	Analytical Method	Instrument				
1-(3,4-Dichlorophenyl)-3-methylurea	1-(3,4-Dichlorophenyl)-3-methylurea	3567-62-2	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				
Triazine HA Degradate	2-Hydroxyatrazine	2163-68-0	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				
Acephate	Acephate	30560-19-1	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				
Acetamiprid	Acetamiprid	135410-20-7	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				
Acetochlor ESA	Acetochlor ESA	187022-11-3	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				
Afidopyropen	Afidopyropen	915972-17-7	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				
Aldicarb Sulfoxide	Aldicarb Sulfoxide	1646-87-3	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				
Aminocyclopyrachlor	Aminocyclopyrachlor	858956-08-8	CARBAMQ3DI	NA	EPA SW8321BM	LC-MS/MS				