

Columbia River Toxics Reduction Strategy Monitoring Subgroup Meeting  
June 22<sup>nd</sup>, 2006  
Toppenish, WA

### Attendees

Joe Rinella-USGS, Greg Fuhrer-USGS, John Sands-Department of Energy, Jeff Ward-PNNL, Linda Bingler-PNNL, Rachael Pecore-Columbia Riverkeeper, Mary Lou Soscia-EPA Bruce Duncan-EPA, Jill Leary-Lower Columbia River Estuary Partnership, Alec Maule-USGS, Lester Spencer-Yakama Nation, James Thomas-Yakama, Lyndal Johnson-NOAA, Jennifer Morace-USGS, Elena Nilsen- USGS, Jesse Schwarz-CTUIR

### **Goals for the meeting:**

Bruce-we can come with a list of target toxics to identify a baseline for 10% toxics reduction:

Potential options:

- Legacy contaminants: PCBs, DDT/DDE, Hg
- Current use contaminants: organophosphates, dioxins
- Emerging contaminants: wastewater compounds such as pharmaceuticals, PBDEs

James-this would help develop a desired future condition statement: what toxics levels were, what they are now, and what the goal is for the future.

Bruce-also agree on setting priorities for locations/monitoring data

James-focus on fish consumption as it relates to human health

Jeff-focus framework on risk to water and biota. The problem can be on a numerical vs. risk reduction goals. Bruce advised to not get hung up on the 10%, but focus more on the story that shows toxics reduction.

Greg Fuhrer-do we want to focus on data gaps or existing data to develop risk statements? Let's keep our scope to include ecosystem health.

Lyndal: I think human health and fish consumption are important end points but we should not lose sight of the sources of these toxins to fish.

Jesse: Columbia Basin Toxic Reduction Strategy could be the group's name. We need to look at 303 d list and modeling toxics in the marine and freshwater environment and keep a human health focus.

James: the report could start with phrases from CWA including fishable, swimmable, chemical, and physical integrity, with a focus on human health and ecosystem health.

John Sands: need to link with Upper Columbia group to follow their path to establish a baseline through the CERCLA process (risk assessment).

Mary Lou: the Upper Columbia will be involved in the toxics reduction and we will be coordinating. Portland Harbor is also going through a risk assessment.

Bruce-Teck Cominco will be involved and is putting up \$20 million for the risk assessment. **Bruce will send out work plan which should be complete by the end of the year.**

Joe-if we mine the data, will we know the sources? We need to put the pieces of the puzzle together to determine if we know the gaps and do we know enough to measure the 10% reductions. **We should put the story together to identify gaps in knowledge of sources such as putting together the data from the recent USGS/EP study and Ecology. This will help with water management position.**

Bruce: review State of the Sound report that cobbles together different group data to talk about trends. (format and content) **Bruce will send out report to the group**

### **Estuary Partnership Update:**

Estuary Partnership received a Regional Geographic Initiative to put together data related to toxics in the Lower Columbia River and will be working with Department of Energy to get access to their data. Estuary Partnership also received funding for some toxics monitoring projects including increased water quality data analysis, sediment sample analysis and resident fish (stickleback) analysis. Finally, the

Estuary Partnership agreed to put together a draft monitoring framework for the group to review. **Jill: send out monitoring strategy framework for the group by July 24<sup>th</sup>**

**DOE Hanford Monitoring work:**

John Sands: completing risk assessment for Hanford contaminants in the Columbia River. Contractor collected surface water (past 5 years), sediment, and biota from Grand Coulee to Astoria. Energy is putting together a data evaluation report that will be out next month that summarizes what contaminants exceeded benchmarks. The next step will be to conduct a risk assessment. DOE will need to conduct some basic sediment sampling and would like to coordinate other sediment sampling efforts. Timing would be to start planning in October. DOE is also taking numerous samples onsite at Hanford (sediment, clams, aquifer tubes, fish tissue, sculpin, bird nests). DOE also funded NOAA to put together another database on toxic studies on biota related to Hanford. **John will send the link to the report and PowerPoint presentation. John would like involvement from the group for the development of data quality objectives (DQOs).**

**Bruce: let's target what to call the areas for the report in terms of data management** (Could be similar to how Dept. of Energy broke up the river)

Alec: Jim Peterson collected deep core data that may be of interest to Hanford that were taken in the estuary.

**Bruce: have everyone identify available data in each organization and a data contact to create a data group.**

Jesse: does it make sense for the Umatilla Tribe to incorporate data into their site or should we have a centralized node? Mary Lou will talk about this...

**Bruce:** Proposes that EPA and others work with the Estuary Partnership to build off their existing work to develop our monitoring strategy.

**EPA Columbia River Monitoring Work:**

- Sediment work by Lorraine Edmonds (**Bruce will work with Lorraine to get an update on this work**)
- Clean-up work (sediment contamination studies with University students)
- Umatilla SWCD Toxics Reduction Project (nitrogen): putting together baseline monitoring right now.

**Presentation on EPA Monitoring Vision and Framework: (Mary Lou will send out handouts via email)**

EPA is committed to coordinate monitoring, research and assessment to help measure progress to their actions to reducing toxics in the Columbia Basin. EPA has set requirements in its strategic plan to reduce toxics. EPA is committed to provide support to with the development of this strategy, coordinate ongoing efforts like Dept. of Energy, help prioritize monitoring needs, establishing the baseline for the agency's accountability on reducing toxics in the Columbia, and to seek funding to fill monitoring gaps.

**(See Draft EPA Region 10 Columbia River Basin Toxics Reduction Monitoring Strategy Handout).**

Helen Rueda has been an advocate for having one web site where toxics monitoring data can be housed. EPA could put together an independent web site where toxics monitoring data could be accessed. EPA has a summer intern who will be working on this.

**See Columbia River Baseline Handout:**

Columbia River is a priority water body in the EPA Strategic Plan with three strategic measures: wetland restoration (Estuary Partnership goal related to their management plan), sediment cleanup (mainly Portland Harbor, and other sediments identified by States of Oregon and Washington) and the 10% toxics reduction in water and fish tissue. EPA is working on establishing the baseline for the measurement of this 10% reduction from five data sources derived from completed work by EPA, Oregon Department of

Environmental Quality, Washington Department of Ecology, and the Lower Columbia River Estuary Partnership.

Linda: there is no mention of sources or of monitoring sources so how will this be measured.

Mary Lou: established TMDLs identify ways to reduce toxics, such as in the Yakima River basin where sediment reduction correlated with pesticide reductions and related to the PCB reduction at Bradford Island by the Army Corps of Engineers.

Jesse: build out bioenergetic models to develop goals that do not set you up for failure in case the realistic reduction is less than 10%. Also, build a comprehensive model for wetland restoration for all partners instead of just the Estuary Partnership.

Mary Lou: the draft strategic plan is out for public comment right now so if you have comments please submit them.

John Sands: what is in this document will directly impact the monitoring group; probably nothing because this is an accounting document for EPA.

Mary Lou: this is a stepping stone towards more funding; this is for reporting and the development of baseline condition and will not impact other groups.

Jesse: USGS should exercise their power under the cooperative research  so that the group could be more empowered to answer the toxics reduction measures in future EPA plans.

Greg: we have a co-op with WA Department of Ecology.

James: Yakama Nation as well as Confederated Tribes of the Umatilla Indian Reservation and CRITFC could be potential cooperators.

**Greg and Alec: can get back to the group on this process**

Joe: the issue of high flow can alter trend analysis of data and could impact EPA's targets. This should not bog down the group, it will be problematic, but we should move forward.

Jesse: agrees and is interested in co-oping with USGS.

Jeff: need to establish a baseline to identify recontamination issues. We also need to develop mechanistic models to achieve toxics reduction.

Bruce: we really want to tell the story (data gaps, trends, etc.) because it is unrealistic to fix the baseline, identify the actions, implement the actions, monitor effectiveness and report on the results in the established timeline (2011). At that point (2011), we should have a more realistic approach to toxics reduction.

**Lunch Presentation:**

**Yakama Nation Environmental Management Program Sustainable Agriculture BMPs for water quality**

Contact James Thomas for copy of PowerPoint presentation showing how TSS runoff can be reduced

**Conceptual Model Presentation (Jesse Schwartz)**

Jesse collected different information pieces from the meeting in Lacey and from the group since then and developed the draft conceptual model.

Jesse also showed Performance Analysis for the Lower Snake River to determine the expected/observed response from actions at the population level. There are no mechanistic models for past monitoring efforts so that actions can be related to actions.

James: Could we use mercury, Total DDT, and PCBs to test this conceptual model?

Bruce: how do we want this tool to work for us? For example, we really need a planning tool to allow prioritization.

James: can we apply lessons learned in Yakama on Total DDT to PCBs and Mercury?

Joe: No matter what conceptual model we use, we need to know what the sources are of these toxics. Then the conceptual model is important because it will tell us if they levels identified in biota are important.

Jesse: Umatilla will be sampling fish and pursuing a co-op with USGS and would like to see the group support mainstem sampling efforts.

Jennifer: where are we going from here?

Mary Lou: monitoring subgroup members' presence here today is a commitment to toxics reduction. Here are our accomplishments thus far: EPA is setting up a website to house toxics data, Umatilla Tribe is committed to working on the conceptual model, Department of Energy's database are immediate accomplishments of this group, Estuary Partnership commitment to sending out draft monitoring strategy, Helen committed to seeking out further toxics monitoring data.

James: do we need to choose between the conceptual models?

Bruce: no, I think Jeff's is a great non-scientific format and Jesse's is a working tool.

James: can we develop an objective statement? Determine sources as part of our reduction strategy...

Jennifer: can we set priorities for toxics?

Greg: I have some areas of expertise that I could share on this model.

Jesse: As a team, it would be great to have the group comment on the model over the next two months (no longer than 2 pages). Sources could be a work group to help accomplish things as a team.

Bruce: how do we formalize this relationship? Bruce can propose a list of contaminants and have the group react.

**Also there needs to be a data management workgroup that will be lead by Helen Rueda.**

**Jesse offered to be the lead on the conceptual model development and wanted to reemphasize USGS' need to look into co-oping to develop a Columbia River monitoring objectives. Send comments by August 18<sup>th</sup>.**

**Need a source identification work group: Linda Bingler had completed research on this and can compile other agency source information and send it out to the list.**

Bruce: **compile everyone's goals and strategies**

Mary Lou: in the draft monitoring strategy Pat had listed out some management questions that everyone in the group could answer.

Bruce: we need a group document with a vision and objectives agreed upon for the group. **Jill will send out Lower Columbia River document.**

**Jill will serve as the lead on the monitoring strategy update (build baseline, etc...)**

**Mary Lou will share EPA strategic plan link for public comment, will work with Columbia River monitoring leads to get a summary out and will share an update on the website.**

Jeff: **will email link for the conceptual model.**

**John, Rachael and Jill will work on public outreach.**

#### **SUMMARY OF PROPOSED PATH FORWARD:**

**Based on discussion at the meeting, we would like everyone's buy-in on the following (particularly from those who were unable to attend)**

- 1. Build off of the Lower Columbia River Estuary Partnership's monitoring strategy (to expand to all of the Columbia R) using everyone's combined visions, goals, objectives, and strategies**
- 2. Build off of EPA's national strategic plan to demonstrate toxics reduction by 2001 (i.e., describe & develop baseline including database and GIS, set priorities for contaminants and areas, describe ongoing and planned actions, and monitor for reductions in response to actions.**
- 3. Develop data base**
- 4. Propose list of priority contaminants based on existing studies, lists, and strategies**
- 5. Propose list of subareas based on existing divisions**
- 6. Develop reporting structure using similar reports (e.g., Puget Sound Ambient Monitoring Program)**

**Action Items:**

**Bruce:**

- 1.) Send out work plan which should be complete by the end of the year.
- 2.) Send out the State of the Sound Report to the group
- 3.) Work with Lorraine to get an update on EPA's contaminated sediment work in the Mid-Columbia
- 4.) Compile everyone's goals and strategies

**Jill:**

- 1.) Send out monitoring strategy framework for the group by July 24<sup>th</sup>
- 2.) Send out Lower Columbia River document
- 3.) Serve as the lead on the monitoring strategy update (build baseline, etc...)

**John:**

- 1.) Send the link to the report and PowerPoint presentation.
- 2.) John would like involvement from the group for the development of data quality objectives (DQOs).

**Mary Lou:**

- 1.) Send out handouts via email on EPA's Monitoring Vision and Framework
- 2.) Share EPA strategic plan link for public comment, will work with Columbia River monitoring leads to get a summary out and will share an update on the website

**Helen**

- 1.) Form/Lead data management workgroup

**Greg and Alec:**

- 1.) Get back to the group on the cooperative process

**Jeff:**

- 1.) Will email link for the conceptual model

**Linda:**

- 1.) Compile other agency source information and send it out to the list (First step to start a source identification work group)

**Jesse:** Lead on the conceptual model development. Send him comments by August 18<sup>th</sup>.

**General Group;**

- 1.) Send to Helen: Your ideas on how to put the story together to identify gaps in knowledge of sources such as putting together the data from the recent USGS/EP study and Ecology. Also, identify available data in each organization and a data contact to create a data group by August 1<sup>st</sup>.
- 2.) Send to Bruce: Your ideas for next meeting on how to target what to call the areas for the report in terms of data management (current default is likely to be mix of Upper Columbia, Hanford, and Lower Columbia River Estuary Partnership existing subareas) by August 18<sup>th</sup>.
- 3.) Prepare idea on how to work with the Estuary Partnership to build off their existing work with the monitoring strategy.
- 4.) Send to Jesse: comments on conceptual model by August 18<sup>th</sup>.

5.) Send to Bruce/Mary Lou: vision, mission, objectives, and strategies by August 18<sup>th</sup>.

Next meeting:

**September 21, 2006 at Hanford with backup at USGS in Portland**

**The original meeting date conflicts with the Northwest Power and Conservation Council meeting which will have a focus on toxics.**

Potential Agenda Items:

Update on monitoring map

Update on priority solicitation from group members

Updates from work groups:

- Source
- Data Management
- Monitoring
- Modeling
- Public Outreach

THANKS JAMES AND DONALD FOR HOSTING!!!!!!

**TO DO LIST FOR SEPTEMBER MEETING:**

Bruce Duncan	<ul style="list-style-type: none"> <li>• Will send out Teck Cominco work plan which should be complete by the end of the year.</li> <li>• Will send out State of the Sound report to the group</li> <li>• Will work with Lorraine Edmonds to get an update on sediment work</li> <li>•</li> </ul>
Mary Lou Soscia	<ul style="list-style-type: none"> <li>• Will share EPA strategic plan link for public comment</li> <li>• Will work with Columbia River monitoring leads to get a summary out</li> <li>• Will share an update on EPA toxics website</li> </ul>
Jill Leary	<ul style="list-style-type: none"> <li>• Will send out monitoring strategy framework for the group by July 24<sup>th</sup></li> <li>• Will serve as lead for monitoring group</li> <li>• Will work with John Sands and Rachael Pecore on public outreach</li> </ul>
John Sands	<ul style="list-style-type: none"> <li>• Will send the link to the Hanford report and PowerPoint presentation.</li> <li>• Would like involvement from the group for the development of data quality objectives (DQOs)</li> <li>• Will work with Jill Leary and Rachael Pecore on public outreach</li> </ul>
Greg Fuhrer and Alec Maule	<ul style="list-style-type: none"> <li>• Will look into potential co-op opportunities with the tribes and other agencies</li> </ul>
Jesse Schwarz	<ul style="list-style-type: none"> <li>• Offered to be the lead on the conceptual model development</li> <li>• Requested comments by August 18<sup>th</sup>.</li> </ul>
Linda Bingler	<ul style="list-style-type: none"> <li>• Completed research on source identification and can compile other agency source information and send it out to the list</li> <li>•</li> </ul>
Jeff Ward	<ul style="list-style-type: none"> <li>• Will email link for PNNL conceptual model</li> </ul>
Rachael Pecore	<ul style="list-style-type: none"> <li>• Will work with John Sands and Jill Leary on public outreach</li> </ul>