CALL FOR ABSTRACTS

2023 Columbia River Estuary Conference: Reconnection

May 16-18, 2023, at the Liberty Theater in Astoria, Oregon

Abstracts Due: February 8, 2023

The theme of the 2023 Columbia River Estuary Conference (CREC) is *reconnection*. After the cancelation of the 2020 CREC and so many other events over the past few years, CREC provides the ability to reconnect with each other to catch up, discuss our work and results, and seek out new ideas and collaborative opportunities. Additionally, so much of our work centers around reconnecting species to their historical habitats, hydrology to more historical flow patterns, and mindsets to managing resources while weaving in traditional ecological knowledge.

Reconnecting as a community is an important step in discussing our knowledge of ecological conditions in the lower Columbia and nearshore ocean, the implications of these conditions for native species, and our management approaches. Long-term and historical datasets are critical in identifying when shifts in ecological conditions or species abundances occur. Looking at ecological conditions of the lower Columbia River and nearshore ocean over time, how have conditions changed? The climate crisis is here, and we are seeing the ecosystem respond. How are we doing in detecting and tracking these changes, and can we do better? Are our research and management approaches sufficiently adaptive? Western science and natural resource management have historically disregarded indigenous ecological knowledge and management. How have we fused traditional ecological knowledge and management of First Foods into research and management approaches in this region? How have we integrated altered environmental conditions (e.g., increased temperatures, marine heatwaves, ocean acidification and hypoxia, earlier growing seasons, increased flooding from sea level rise and more intense storms) into our research, monitoring, and restoration? How do we better link the estuary and nearshore ocean research and management together, and then link this work with upriver and tributary efforts?

It has been almost 30 years since the lower Columbia River was designated an "estuary of national significance" and roughly the same since NOAA's Pacific Ocean transect monitoring and indicators system was established. What have we accomplished as a region and what have we learned?

Call for Presentations and Posters: Presentations that provide new scientific findings, contribute to a better understanding, describe innovative techniques, or discuss emerging issues, with management implications for the lower Columbia, plume, and nearshore ocean ecosystems or listed species are encouraged. Findings from outside this focal area are welcome if they provide context or broaden our comprehension of ecosystem processes, conservation practices or species recovery approaches within the focal area. All presentations should include a synthesis and interpretation of results and a discussion of the application of these findings to management. Below are some suggested topics for inclusion in the conference:

Suggested Topics:

- Status or trends of the lower Columbia River and nearshore ocean What is the present status of the lower Columbia and nearshore ocean and how have these ecosystems shifted?
 - What have we accomplished? What remains to be accomplished?

- How have we integrated shifting environmental conditions (e.g., warming water temperatures, ocean acidification and hypoxia, earlier growing seasons, sea level rise, more intense storms) into our research and restoration?
- Are we detecting these environmental shifts (food web, vegetation communities, hydrology) with our research and monitoring? How? What are the implications?
- How do we better link the estuary and nearshore ocean research and management together in the future?
- Changing environmental conditions How have we adapted our work to shifting conditions?
 - What specific steps have we taken to help species adapt or reduce impacts from predicted changes? How do we change our work to help species survive or recover?
 - How have we integrated climate change into restoration project design? How do we continue to integrate predicted impacts (more intense storms, warming temperatures, changes in flow, rising sea levels) into our work? Are we explicitly identifying and designing projects that restore thermal conditions of watersheds, or reduce further loss of floodplain habitats by keeping up with sea level rise?
- New understanding of ecosystem condition and function What are new findings and historically excluded perspectives to provide us with a better basic understanding of the lower Columbia, plume, and nearshore ocean? How does this information help us in designing ecosystem restoration or listed species recovery actions?
- **Communicating science and linking science to policy effectively** What are good examples of reaching the public or transferring our research and monitoring results to management and policy decisions? How can we do this better? How do we better involve local communities in our work?
- **Multi-species management and ESA listed species recovery -** How do we integrate multi-species conservation within restoration projects? Are we managing for change with shifting conditions?
- **Innovative technologies and new data products** What are innovative technologies or data products and how have they been applied? How do these improve our understanding or management activities?
- Columbia Basin issues, including Columbia River Treaty, toxic contaminants, invasive species, Snake River dam removal - What are the implications of these issues on the lower Columbia, plume, and nearshore ocean?

Abstracts should be submitted to Catherine Corbett by February 8, 2023 via email: <u>ccorbett@estuarypartnership.org</u>.

NEW to CREC: We encourage lightning presentations! We hope to integrate these within the traditional sessions and/or host a stand-alone lightning session(s). Lightning presenters will have no more than 5 minutes to present their topic. We hope to have sufficient interest to then host a panel of these presenters to then open it up for audience questions and participation with the presenters. Please consider submitting an abstract for a lightning presentation.

Abstract Format:

Please list presentation title, author (s) and contact information, including email for primary author. *Please denote presenting author with Italics font and asterisk (*)*. Please keep the text description of abstract to no more than 500 words. Please indicate your first and second choices for presentation formats: traditional oral, lightning, or poster presentation. Depending on time constraints, some presenters may be requested to modify their format from oral to lightning or poster presentation format.

Please submit no more than one abstract as a lead presenter for a traditional oral presentation. Authors can lead a separate lightning or poster presentation as well as serve as a co-author on multiple traditional oral presentations.

Example abstract format:

Results of Multi-Year Coordinated Fish, Food Web and Habitat Data Collection under the Ecosystem Monitoring Program

*Lyndal Johnson¹, Amy Borde², Jennifer Morace³, and Jina Sagar⁴

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² Coastal Ecosystem Research Group, Pacific Northwest National Laboratory, Sequim, WA
³USGS Oregon Water Science Center, Portland, OR
⁴Lower Columbia River Estuary Partnership, Portland, OR

*Presenting author (email: l_johnson@noaa.gov)

Since 2007, this most excellent monitoring program has provided key baseline information of the tidal freshwater section of the lower Columbia River. Results from this monitoring will be provided...

First choice: Oral presentation preferred. **Second Choice:** Lightning presentation.

Conference Format: The conference will be a three-day event with invited and contributed presentations. Traditional oral presentations will be allocated 20 minutes total, including audience questions. There will be a poster session during an evening social.