

## Charles Seaton

Columbia River Inter-Tribal Fish Commission  
700 NE Multnomah St, Portland, OR 97232  
(503) 238-0667, cseaton@critfc.org

### RESEARCH INTERESTS

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- Numerical watershed-to-ocean modeling; long-term observation systems; data management; estuary dynamics; climate change; salmon conservation

### EDUCATION

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**University of Massachusetts – Amherst**, Amherst, MA:

- B.S., Botany 1995
- **Oregon Graduate Institute**, Hillsboro, Oregon
- M.S., Environmental Science and Engineering 2000

### PROFESSIONAL APPOINTMENTS

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- **CMOP Program Coordinator**, Columbia River Inter-Tribal Fish Commission (CRITFC) 2020-present
  - Coordinate operations for Coastal Margin Observation and Prediction (CMOP) program
  - Conduct strategic planning to integrate CMOP capabilities into CRITFC
  - Lead CMOP numerical modeling development for Columbia River estuary and Pacific Ocean basin
- **Research Associate**, Oregon Health & Sciences University (OHSU) 2001-2020
  - Led data management and data visualization at NSF STC-CMOP at OHSU
  - Supported and developed Columbia River estuary modeling within CMOP

### HONORS & AWARDS

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- NOS Team Member of the Year (for external collaborators) 2022

### SYNERGISTIC ACTIVITIES

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- Transition of CMOP from OHSU to CRITF: Coordinated daily operations, budgeting and strategic planning for Coastal Margin Observation and Prediction program during and after the transition of the program from an academic institution to a tribally-led governmental agency 2020
- Pacific ocean model: Calibrated, validated, and analyzed SCHISM simulations integrating the existing Columbia River model into a first-of-its-kind 3-d baroclinic tidal ocean model of the Pacific basin, with funding from NOAA-NOS. 2020-2022
- Northwest Association of Networked Ocean Observing Systems (NANOOS) Data Management and Cyberinfrastructure (DMAC): Participated in the development of NANOOS DMAC methods over more than a decade, developed pilot methods for archiving observational data with NCEI, and helping to serve observational data and modeling to the regional and national community, in order to benefit the economy, the environment, and public safety. 2003-2023

### SELECT PUBLICATIONS (3 OF 11)

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- Herfort L, **Seaton C**, Wilkin M, Roman B, Preston C, Marin R, Seitz K, Smith M, Haynes V, Scholin C, Baptista A, Simon H. Use of continuous, real-time observations and model simulations to achieve autonomous, adaptive sampling of microbial processes with a robotic sampler. *Limnology and Oceanography: Methods*. 2015; 14(1):50-67.
- Baptista A, **Seaton C**, Wilkin M, Riseman S, Needoba J, Maier D, Turner P, Kärnä T, Lopez J, Herfort L, Megler V, McNeil C, Crump B, Peterson T, Spitz Y, Simon H. Infrastructure for collaborative science and societal applications in the Columbia River estuary. *Frontiers of Earth Science*. 2015; 9(4):659-682.
- Roegner G, **Seaton C**, Baptista A. Climatic and Tidal Forcing of Hydrography and Chlorophyll Concentrations in the Columbia River Estuary. *Estuaries and Coasts*. 2010; 34(2):281-296.