Topics at the nexus of climate change, fisheries, and blue foods

A webinar series highlighting the impact of climate change on fisheries, aquaculture, and the communities who depend on them

March 2026: Data Discovery and Knowledge Networks to Support Informed Fisheries Management

Date and time: March 19, 2026 at 11:00am US Eastern Time (UTC-5)

Presentation 1: Salmon Data Discovery Tool

The Northwest Fisheries Science Center and Pacific States Marine Fisheries Commission are leading a collaborative effort to develop a Pacific Salmon Data Discovery Tool. The goals of this web-based database are to (1) provide annually updated summaries and visualizations of Pacific salmon data (e.g., population abundance estimates, productivity trends, age data) and the associations between salmon populations and environmental drivers (e.g., marine heat waves, abundance and survival rates of predator and prey species, freshwater habitat quality and quantity), and (2) serve as a data repository to publicly house salmon relevant data currently held by organizations (e.g., Pacific Fisheries Management Council), co-managers, and research scientists . The data discovery tool provides a single location to hold data across ecosystems (freshwater, estuary, marine) and data types (documents, data files, derived data products, spatial data, GitHub links) relevant to Pacific Salmon. Many of these datasets exist in agency reports or databases maintained by external agencies or groups (e.g., states, tribes, Pacific Salmon Commission, Pacific Fisheries Management Council), but are not centralized, or generally accessible to the public. Our focus will be to serve as an information clearinghouse for a broad user community - from casual data exploration through standardized data visuals, to comprehensive data downloading supporting regional harvest and conservation management analysis.

Webinar Presenter: **Katie Barnas (NOAA) and Monica Diaz (PSMFC). Katie** is a research fisheries biologist at NOAAs Northwest Fisheries Science. She has worked on salmon recovery related science questions since joining NWFSC in 2001. **Monica** is a Project Manager at PSMFC and has over 15 years of experience managing collaborative regional databases and addressing data requests from multiple partners including creating requested data visualizations. Monica has focused primarily on salmonid related data systems, supporting associated collaborative efforts, website content, and overseeing technical project management for data system / data query development and refinement.

Presentation 2: North Pacific Ocean Knowledge Network: Connecting Ocean Science to Support Informed Decision-Making

The North Pacific Ocean is undergoing rapid and measurable change. Warming ocean temperatures, shifting species distributions, intensifying marine heatwaves, and altered productivity regimes are challenging the ability of fisheries managers and researchers to keep pace with a dynamic system. While a wealth of relevant science, data, and management tools exists across the region, this information is fragmented across institutions, jurisdictions, and disciplines, making it difficult to access, compare, and apply at the scale transboundary decisions require.

The North Pacific Ocean Knowledge Network, developed through the Basin-scale Events and Coastal Impacts (BECI) project, is designed to address this gap. The network will build the infrastructure to link, collate, organize, and synthesize existing information, from ocean state indicators and ecosystem health assessments to species distribution data, ecological models, and management tools, into a single, accessible platform. Planned as a hybrid system combining federated discovery with strategic synthesis, the network will respect data sovereignty while reducing the time and effort required to find and use critical information.

The network is designed to serve a broad community: international, national, and regional fisheries managers and policy analysts integrating environmental change into planning and decision-making; researchers investigating links between environmental change and fish population dynamics; and Indigenous and coastal communities engaged in monitoring and stewardship. By making the connections between basin- and regional-scale environmental drivers and their coastal fisheries impacts more visible and accessible, the Knowledge Network aims to strengthen the scientific foundation for resilient management across the North Pacific.

Webinar Presenter: **Kathryn Berry** is the Science Director for the Basin-scale Events and Coastal Impacts (BECI) project, a multinational initiative that aims to make North Pacific ocean, ecosystem, and fisheries knowledge accessible, connected, and actionable. Before joining BECI, she managed the Applied Technology section at Fisheries and Oceans Canada (DFO). Kathryn holds a PhD from James Cook University and the Australian Institute of Marine Science, and has worked across research, environmental consulting, and both provincial and federal government. Her work is driven by a conviction that the gap between ocean science and the people who need it is not just a communication problem, it requires building the relationships, platforms, and institutional frameworks that make genuine knowledge exchange possible.

This webinar series is jointly hosted by the UN Ocean Decade Programs Blue Food Futures, Fisheries Strategies for Changing Oceans and Resilient Ecosystems (FishSCORE), Sustainability, Predictability, and Resilience of Marine Ecosystems (SUPREME), Sustainability of Marine Ecosystems through Global Knowledge Networks (SmartNet), and Fisheries and Marine Ecosystem Model Intercomparison Project (FishMIP) and endorsed project Basin Scale Events to Coastal Impacts (BECI). This webinar series highlights current efforts and challenges at the climate-fisheries nexus. Presentations and discussions will range from data-driven efforts to better understand oceanographic and biological changes affecting fisheries, to how the results can be used to inform fisheries management, aquaculture, and sustainable food decisions, to the many ways people and broader communities are being impacted by and adapting to changes in marine ecosystems and marine resource use.