



AMERICAN FISHERIES SOCIETY
Annual Meeting of the Washington-
British Columbia Chapter
March 19-22, 2018
at the Coast Capri Hotel, Kelowna, BC

<http://wa-bc.fisheries.org/next-meeting/>

<https://www.coasthotels.com/hotels/bc/kelowna/coast-capri-hotel/>

FIRST CALL FOR PAPERS

The Washington-British Columbia Chapter of the American Fisheries Society invites you to submit your abstracts for presentations at the 2018 Annual General Meeting in Spokane, Washington, March 19-22, 2018. The theme this year is:

“40 Years of Fish and Fisheries in the Pacific Northwest”

We have organized several exciting and informative symposia for our meeting this year and we encourage you to submit your abstracts associated with any one of our session topics. To date, we have organized sessions focused on:

- 1) Methods for communicating results, probability, risk, and uncertainty to managers and the general public
- 2) The future of bull trout populations and management in British Columbia and Washington
- 3) 40 years of change in Pacific Northwest fisheries management
- 4) River connectivity: Technical, cultural and biological aspects of fish passage and reintroduction
- 5) Hatchery reform progress and innovation
- 6) The water use planning experience and lessons learned at BC Hydro facilities
- 7) Sockeye salmon in the Okanagan Basin
- 8) Sockeye salmon in the Pacific Northwest
- 9) General submissions/contributed papers
- 10) Poster session

You may request your abstract be considered for any of these symposia topics, or as a general submission if you wish. We encourage early submission, but will accept abstracts until **February 15, 2018**. Abstracts can be submitted online at: <http://wa-bc.fisheries.org/next-meeting/abstract-submission/>

Contact Vice-President Brittany Jenewein with questions or concerns (btjenewein@gmail.com). See next page for specific symposium information.

Symposium: Methods for communicating results, probability, risk, and uncertainty to managers and the general public

Chair: Ann-Marie Huang, Fisheries & Oceans Canada

The general public does not think of probability in the same way as people with a technical background. If they did, casinos would not be so plentiful. This symposium will be a venue for people to share methods used for communicating results to people making decisions and/or feeding into the decision making process – both methods that worked (and why) and that didn't work (and why). Methods can include, but are not limited to: choice of language, figures, and/or meeting process.

Symposium: The future of bull trout populations and management in British Columbia and Washington

Chair: Nikolaus Gantner (FLNRORD) and WA-based Co-Chair (TBD)

Environmental and anthropogenic stressors pose threats to Bull Trout (*Salvelinus confluentus*) populations in both British Columbia and Washington. Climate change is one major stressor, as water temperature is often the most important environmental parameter delineating the distribution of Bull Trout. In addition, land use practices, such as hydroelectric dams, forestry practices, and fisheries management practices can further affect Bull Trout populations directly and indirectly.

Bull Trout are federally listed with some level of conservation concern throughout their range. If the species is to thrive, it is necessary to examine causes for decline and evaluate pathways to recovery in the face of existing and emerging threats. This includes studying recovery initiatives currently underway as well as emerging technologies and policies. For example applications such as the *Cold-Water Climate Shield* model by the United States Geological Survey and the advances in the utility of environmental DNA have been successfully employed to identify shifts in stream water temperatures and subsequent effects on salmonids, including Bull Trout. The promising method of environmental DNA appears to provide an alternative to traditional approaches.

This symposium is welcoming submissions from academia, government agencies, and the private sector on both sides of the border to share lessons learned and success stories from the past, as well as to jointly discuss future strategies to assess and manage Bull Trout populations. Submissions as platform presentations and poster presentations are welcome and a wrap-up panel discussion may be held to conclude the symposium. A summary report may be written with contributions from all participants

Symposium: 40 years of change in Pacific Northwest fisheries management

Chair: Brittany Jenewein, Fisheries & Oceans Canada

“Those who do not remember the past are condemned to repeat it.” – George Santanaya

Should anyone really care about the history of Pacific fisheries management? The answer is a qualified yes. History is a valuable tool for placing management decisions in context, viewing things that have gone before, assessing why they happened, and determining how the present state of affairs came to be. This symposium invites speakers to champion the progress made in Pacific Northwest fisheries management in recent decades, discuss fundamental issues still outstanding, and suggest areas to focus improvements over the next 40 years. A group discussion will follow presentations.

Symposium: River connectivity: Technical, cultural and biological aspects of fish passage and reintroduction

Chair: Andy Peters, Pacific Netting Products

Fish passage and river connectivity barriers could be considered to be anything that hinders any life stage of fish and other aquatic organisms, energy and inert matter from moving through a waterway. Physical barriers include dams and deteriorating culverts. Environmental and biological barriers include water velocity, water temperature, quality, an increase in number of predators and deterioration of upstream habitat. Cultural barriers are comprised of the attitudes, customs and practices of people and industry. Technical barriers involve a lack of supporting or facilitating technologies, materials, engineering and know-how to address or implement solutions.

Restoring connectivity will increase habitat diversity, population resilience and restore important cultural and societal customs. While most barriers have the same general impact on fish—blocking migrations, the interactions of these barriers are complex and interdependent. Restoration of connectivity of freshwater habitats throughout the historic range of anadromous fish requires a coordinated approach.

In this symposium speakers will discuss various barriers and / or the methodologies to overcome them. Speakers will include those from industry, community, designers and developers of the passage systems, biologists and engineers responsible for designing and conducting evaluation study plans, researchers responsible for evaluating performance and project owners/operators. Presentations will include case-studies and lessons learned from other river connectivity projects.

This symposium will help attendees understand the complex and interdependent nature of fish passage and river connectivity barriers and how site specific, coordinated approaches can restore connectivity.

Symposium: Hatchery reform progress and innovation

Chair: Todd Pearsons, Grant County Public Utility District

Hatchery reform recommendations of salmon and steelhead hatcheries in Washington and the Columbia Basin were made by the Hatchery Scientific Review Group some time ago. The intent of those recommendations was to align hatchery practices with hatchery goals. Although it is premature to evaluate the biological performances of some of the reform recommendations, the progress towards implementation of the recommendations can be evaluated. This symposium will emphasize progress towards achieving hatchery reform, and more specifically, targets of an index of domestication selection (i.e., Proportionate Natural Influence) and stray rates. Furthermore, additional concepts and refinements of hatchery reform and unconventional uses of hatcheries will also be explored. The talks in this symposium will provide examples of: 1) how reform recommendations are being implemented, 2) how well hatcheries are achieving recommendations, 3) if available, how reforms have changed biological performance, and 4) alternative concepts for hatchery reform and innovation.

Symposium: The water use planning experience and lessons learned at BC Hydro facilities

Chair: Todd Hatfield, Ecofish Research Ltd.

Water Use Planning was initiated in the late 1990s to enhance water management at hydroelectric power and other water control structures in British Columbia. A Water Use Plan (WUP) is a technical document that defines the detailed operating parameters to be used by facility managers; thus, directly influencing the quantity and quality of fish habitat and other biological, social and cultural values. From the mid-1990s to mid-2000s, WUPs were developed for every BC Hydro facility except Kootenay Canal, and since then about 25 non-BC Hydro WUPs have been completed and others are underway. The BC Hydro WUP process followed 13 steps and explicitly sought to achieve a balance among environmental, social and economic values in the operation of BC Hydro facilities. The WUPs relied on a Consultative Committee (CC) to represent the important interests in each watershed and make final recommendations for the WUP. Choices made by the CC during development of each WUP were based on an assessment of implications across multiple objectives using the best available information and knowledge of participants. Inevitably, this knowledge was imperfect, and an important component of most WUPs was a set of specific steps to address key uncertainties (e.g., hydrologic, biological, social, economic). Final recommendations therefore often included monitoring to address uncertainties through the collection of additional information: a total of 228 monitoring studies were implemented as part of WUP outcomes, many of which were expansive, multi-year programs. This symposium focuses on the Water Use Planning experience and lessons learned at BC Hydro facilities, from the initial need for the plans, to completing the plans, implementation and monitoring, and the institutional requirements to support this ambitious program. The symposium will provide a series of talks that draw from experiences on the full range facility sizes and operational, biological and social complexity. Talks will be provided by BC Hydro staff and consultants involved in developing and

implementing the WUPs. Talks may include the following topics, but will be modified to ensure a diverse and interesting array of presentations:

1. What are Water Use Plans and why were they needed?
2. Results from effectiveness monitoring studies.
3. System-wide review of effectiveness monitoring studies.
4. Entrainment studies.
5. Adaptive management flow trials.
6. Sturgeon conservation on the Columbia and Kootenay rivers.
7. Cautionary tales: what does it take institutionally to sustain, and what are the cautions and lessons-learned for others embarking on the same journey?

Symposium: Okanagan Basin Sockeye salmon

Chair: Chad Fuller, Okanagan Nation Alliance

Description to come soon!

Symposium: Sockeye salmon in the Pacific Northwest

Chair: Jeff Fryer, Columbia River Inter-Tribal Fish Commission

Description to come soon!