

**Jennifer Anders**  
Chair  
Montana

**Bo Downen**  
Montana

**Guy Norman**  
Washington

**Patrick Oshie**  
Washington



## Northwest **Power** and **Conservation** Council

**Richard Devlin**  
Vice Chair  
Oregon

**Ted Ferrioli**  
Oregon

**Jim Yost**  
Idaho

**Jeffery C. Allen**  
Idaho

January 7, 2020

### **DECISION MEMORANDUM**

**TO:** Council members

**FROM:** Erik Merrill, Independent Science Manager, and Leslie Bach, ISAB Ex Officio

**SUBJECT:** ISRP Member and Peer Review Group Appointments

**PROPOSED ACTION:** Council staff asks that the Council:

1. Appoint Patrick Connolly and James Seeb to the Independent Scientific Review Panel (ISRP) for first terms of January 15, 2020 to September 30, 2022.
2. Appoint Alisa Wade to the ISRP for a first term of October 1, 2020 to September 30, 2023.
3. Appoint 26 scientists listed in Table 2 to the pool of potential ISRP Peer Review Group members.

**SIGNIFICANCE:** The eleven-member ISRP and its Peer Review Groups provide scientific review of Fish and Wildlife Program proposals and their results, improving program implementation and ensuring accountability. In developing these appointment and renewal recommendations, the experience and expertise of the scientists on the ISRP were considered with the goal to maintain a panel that fosters a multi-disciplinary approach and offers fresh perspectives, while preserving an institutional knowledge of independent scientific review and fish and wildlife management in the Columbia River Basin.

## **BUDGETARY/ECONOMIC IMPACTS**

The ISRP operates on an annual budget of \$500,000, independent of the Council's budget, funded by the Bonneville Power Administration through the Fish and Wildlife Program. No additional funds are requested for this appointment decision.

## **BACKGROUND**

ISAB and ISRP members are eligible to serve two consecutive three-year terms with adjustments in term duration to ensure continuity. Wade, Seeb, and Connolly have been evaluated and recommended by the National Academies of Science, Engineering, and Medicine for their scientific credentials. They meet the required scientific qualifications for ISAB and ISRP membership and do not have any conflicts of interest that would jeopardize the ISRP's independence. They have expertise needed to ensure the ISRP is an effective multi-disciplinary group that addresses the Fish and Wildlife Program's many scientific issues informing mitigation, restoration, recovery, and research.

### ***Appointment of Three ISRP Members***

[James Seeb](#) is an expert in salmon genetics and a Research Professor at the School of Aquatic and Fisheries Science at the University of Washington. His work focuses on identifying genetic differences between Pacific salmon populations and understanding the genetic mechanisms underlying how salmon respond to environmental change. His expertise fills a current gap on the ISRP and should be especially valuable to reviews of hatcheries, fish monitoring, and genetic technologies such as environmental DNA monitoring.

[Patrick Connolly](#) is a retired, emeritus Lead Research Fish Biologist at the United States Geological Survey's Columbia River Research Laboratory in Cook, Washington. His expertise and work span multiple topics that are highly relevant to ISRP reviews including food web dynamics, non-native predator research and management, dam passage approaches, response of fish to restoration efforts, and response of fish life history to climate change. With an influx of new ISRP and ISAB members, his experience with Columbia River Basin ecosystems and institutions will add needed context and facilitate a smooth transition of new members.

[Alisa Wade](#) is the research coordinator for the United States Geological Survey's North Central Climate Adaptation Science Center. She is also a [faculty affiliate](#) at the University of Montana. She is a conservation scientist, trained at the intersection of physical, ecological, and social science. She uses spatial models to inform conservation planning. Her expertise will be especially valuable in reviewing sets of aquatic and terrestrial habitat restoration projects in the context of social, climate, and ecological interactions.

### ***Pool of Potential ISRP Peer Review Group Members***

The 1996 amendment to the Power Act provides for the ISRP to be assisted by Peer Review Groups. Over the past two decades, the Council has appointed a Peer Review Group pool of around 200 scientists, a subset of who are used on an ad hoc basis to provide specific expertise and augment the capabilities of the ISRP. While not members

of the ISRP, Peer Review Group members are active and essential contributors to the review process. Over 50 Peer Review Group members have participated in ISRP project reviews.

Council staff recommends that the 26 scientists listed below (Table 2) be appointed to the ISRP's Peer Review Group. These scientists would bolster the ISRP's expertise and workforce and thus ability to participate in large-scale reviews such as the upcoming 2020-2021 Anadromous Fish Habitat Restoration and Artificial Production Category Review. The scientists are from those recommended for the ISRP in the [National Academies' February 1, 2019 memo](#) regarding the evaluation of ISAB and ISRP nominees. Several of these recommended scientists have current conflicts of interest and would only be eligible to serve after they no longer have conflicts.

This large pool of potential Peer Review Group members is needed because additional reviewers covering a wide range of expertise are sometimes needed on short notice to participate in time-intensive reviews. In addition, some of these scientists, at times, propose or have ongoing BPA funded projects, which constitutes a conflict of interest disallowing their participation in reviews. Finally, enlisting potential future ISAB and ISRP members as peer review group members for discrete, temporary review roles allows the scientists to gauge their interest in these groups and the ISRP and Council to gauge the scientists' suitability for full ISRP or ISAB membership.

**Table 1. ISRP Members and Terms**

<b>ISRP Member</b>	<b>Affiliation</b>	<b>Expertise</b>	<b>Term</b>
Alec Maule	Consultant, formerly with United States Geological Survey	Fisheries - physiological ecology of salmonids (mainstem fish passage)	2020, 2 <sup>nd</sup>
Desiree Tullos	Oregon State University	Ecohydraulics, river engineering, and restoration	2021, 2 <sup>nd</sup>
Wayne Hubert	Consultant, formerly with Wyoming Cooperative Fish and Wildlife Unit, University of Wyoming	Fisheries, ecology, and habitat	2021, 2 <sup>nd</sup>
Stan Gregory	Oregon State University, emeritus	Fisheries, ecology, and habitat	2023, 2 <sup>nd</sup>
Kurt Fausch	Colorado State University, emeritus	Fisheries - population and stream ecology	2021, 1 <sup>st</sup>
Thomas Quinn	University of Washington	Fisheries - salmonid ecology, behavior, and artificial propagation	2022, 1 <sup>st</sup>
Richard Carmichael	Consultant, formerly with Oregon Department of Fish and Wildlife	Fisheries, management, research, and recovery science	2022, 1 <sup>st</sup>
Kurt Fresh	Consultant, formerly with National Marine Fisheries Service	Fisheries, ocean and salmonid ecology	2022, 1 <sup>st</sup>
Josh Korman	Ecometric Research, Consultant, Vancouver, Canada	Biometrics and modeling	2022, 1 <sup>st</sup>

**Table 2. Twenty-six Recommended Peer Review Group Appointees**

Resumes and CVs available on BOX to Council members and staff ([link](#)).

Nominee	Affiliation	Expertise
Courtney Carothers	University of Alaska, Fairbanks	Environmental anthropologist, marine and fisheries systems
Thomas Cooney	National Marine Fisheries Service, retired	Fisheries, ecology and recovery science
Nancy Davis	Washington Department of Ecology	Fisheries, ocean and salmonid ecology
Michael Deas	Watercourse Engineering, Inc., Davis, CA, consultant	Hydrology and ecosystem modeling
John Dettmers	Great Lakes Fish Commission, Ann Arbor, Michigan	Fisheries, predation and non-natives
Robert Garrott	Montana State University	Wildlife ecology
Charles Hawkins	Utah State University	Fisheries, ecology and habitat
Mark Hudy	United States Geological Survey, Reston, Virginia	Fisheries, ecology and habitat
Dana Infante	Michigan State University	Ecosystem modeling, decision support
James Irvine	Department of Fisheries and Ocean, Canada, Nanaimo	Fisheries, ocean and salmonid ecology
Nicholas Johnson	United States Geological Survey, Millersburg, Michigan	Fisheries, lamprey
Gordon Luikart	University of Montana, Flathead Lake Biological Station	Population genetics
Jay Lund	University of California, Davis	Hydrology and ecosystem modeling
Thomas McMahon	Montana State University	Fisheries, ecology and habitat
Thomas Miller	University of Maryland, Chesapeake Biological Lab	Fisheries, estuary ecology, statistics, population biology
Yolanda Morbey	Western University, Ontario, Canada	Fisheries, avian and salmonid ecology
Gordon Reeves	United States Forest Service, retired	Fisheries, ecology and habitat
Daniel Roby	Oregon State University	Wildlife ecology
Paul Seelbach	University of Michigan	Habitat, freshwater and estuary
Dana Weigel Sheedy	Independent consultant	Ecology, wildlife genetics, habitat restoration
Michael Siefke	Great Lakes Fish Commission, Ann Arbor, Michigan	Fisheries, lamprey ecology

William Taylor	Michigan State University	Fisheries, freshwater fish ecology
Christian Torgersen	United States Geological Survey, Seattle, Washington	Fisheries, ecology and habitat
Thomas Wainwright	Oregon State University, Affiliate Facility, National Marine Fisheries Service, retired	Fisheries, ocean and salmonid ecology
Rose Wallick	United States Geological Survey, Corvallis, Oregon	Hydrology and geomorphology
Sang-Seon Yun	Independent consultant	Fisheries, physiology and migratory behavior, lamprey biology