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July 1, 2010

TO: Council Members

FROM: Erik Merrill, ISRP and ISAB Coordinator, and Jim Ruff, ISAB Ex Officio

SUBJECT: Term Renewals for four ISRP members and two ISAB members

PROPOSED ACTION

Council staff asks that the Council approve the second three-year term of Bob Bilby for the Independent Scientific Review Panel (ISRP) through September 2013 and appoint Dennis Scarnecchia to the ISRP for a three-year term through September 2013.

Staff also asks that the Council advise Chairman Bruce Measure, in his capacity as the Council's representative on the Independent Scientific Advisory Board's (ISAB) Administrative Oversight Panel, to support:

- the appointment of Tim McDaniels for a three-year term through September 2013
- the second term of Chris Wood through September 2013 and
- the second terms of Richard Alldredge and Dennis Scarnecchia though September 2014.

The Columbia River Inter-Tribal Fish Commission and NOAA Fisheries Ex Officios and coordinators for the ISAB support the term renewals for Wood, Alldredge, and Scarnecchia and the appointment of Tim McDaniels. They are conferring with their representatives on the ISAB's Administrative Oversight Panel and hope to have further input on the membership decisions by the Council's July meeting.

SIGNIFICANCE

The ISAB continues to provide the Council, NOAA Fisheries, and Columbia River Indian Tribes with independent reviews of critical scientific issues facing Columbia River Basin fish and wildlife mitigation and recovery efforts. The ISRP provides 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 were carefully considered with the goal to establish independent science groups that foster a multi-disciplinary approach and offer fresh perspectives, while maintaining an institutional knowledge of independent scientific review and fish and wildlife management in the Columbia River Basin. With these appointments and renewals, the ISAB and ISRP can meet these goals. Specifically, the ISRP should continue constructive review of Fish

and Wildlife Program proposals and their results including the categorical, Step, and retrospective reviews. The ISAB should maintain its ability to effectively and efficiently review the science pertaining to topics likely to arise in the next few years such as life-cycle modeling and NOAA recovery planning. Together the ISRP and ISAB should assist in the development and implementation of an effective and efficient regional research, monitoring, and evaluation program.

BACKGROUND

The Council alone makes ISRP membership decisions. ISAB member appointments and term renewals are decided by the ISAB Administrative Oversight Panel consisting of the Council chair, the science director of NOAA-Fisheries Northwest Fisheries Science Center (in consultation with the NOAA Fisheries regional administrator), and a representative of the Columbia River Indian Tribes (at this time the executive director of the Columbia River Inter-Tribal Fish Commission). ISAB and ISRP members are eligible for two three-year terms with adjustments for continuity.

Renewals

All ISRP and ISAB members being considered for term renewal have been active, effective, and valuable members. Each member provides unique expertise making the ISRP and ISAB effective multi-disciplinary groups that are able to address the Fish and Wildlife Program's many scientific restoration and research issues. Members' and nominees' electronic resumes can be accessed by clicking the links connected with each scientist's name (below); resumes are also available on the ISRP and ISAB's web page at www.nwcouncil.org/fw/isab/members.htm.

Appointments

The ISAB and ISRP appointments process follows three steps, of which the first two are complete for this appointment decision. First, in 2008, the Council, NOAA Fisheries, and Columbia Basin Indian Tribes invited the region to nominate scientists to be considered for service on the ISAB and/or the ISRP. Second, the National Research Council of the National Academy of Sciences screened the lists of nominees based on their scientific credentials and selected a pool of 14 candidates for potential ISRP and ISAB appointment (see the <u>National Research Council's October 2008 memo¹</u>). These candidates augment an existing pool of 52 highly qualified ISAB and ISRP nominees who were screened in 2005.² Third, as stated above, based on the list of recommendations, the ISAB Administrative Oversight Panel appoints ISAB members. The Council alone appoints ISRP members.

General Considerations

The ISAB and ISRP's governing documents call for membership to include expertise in anadromous and resident fish ecology; statistics; modeling; wildlife ecology; genetics; fisheries; fish passage/bioengineering; fish husbandry; ocean and estuary ecology; geomorphology; and

¹ The National Academy of Sciences' 2008 letter is available at <u>www.nwcouncil.org/fw/isab/nrc2008.pdf</u>.

² The National Academy of Sciences' 2005 letter is available at <u>www.nwcouncil.org/fw/isab/nrc.pdf</u>

socio-economics. Pacific Northwest scientists with expertise in Columbia River anadromous fish and non-anadromous fish must be included. Expertise can rarely be pigeonholed in narrow categories, and thus many of the recommended nominees have broad backgrounds and can cover multiple disciplines.

All of the 66 scientists recommended by the National Academy of Sciences in 2008 or 2005 meet the criteria of membership to the ISAB and ISRP. Specifically, they have demonstrated high achievement in a relevant discipline; a strong record of scientific accomplishment documented by contribution to peer-reviewed literature or other evidence of creative scientific accomplishment; high standards of scientific integrity, independence and objectivity; ability to forge creative solutions to complex problems; and interest in and ability to work effectively in an interdisciplinary setting. It is important to note that ISAB and ISRP members participate as independent scientists and are not selected to represent the views of any organization or interest group. In fact, the scientists' reputation of providing sound independent advice is an important factor considered in the screening process. In addition, all appointees have confirmed their ability to commit sufficient time to effectively participate in review activities and to comply with the ISAB/ISRP conflict of interest standards for the duration of their appointment.

SPECIFIC RENEWALS AND APPOINTMENTS

A table of the current and recommended ISRP and ISAB members and their terms is included below on pages 6 and 7 following descriptions of the scientists recommended for renewal and appointment.

ISRP Member Renewal

<u>Bob Bilby</u> is an ecologist at Weyerhaeuser Company and an expert in riparian ecology. He has completed his first three-year ISRP term and previously completed two ISAB terms. During his ISAB service, he was lead author for several ISAB reports including the tributary habitat restoration and climate change reviews, and he has proved to be an efficient and insightful ISRP reviewer. Foremost, he provides valuable advice on the role of habitat in fish and wildlife recovery and the methods used to measure the contribution of recovery actions. With Fish and Wildlife Program and BiOp emphasis on habitat actions and off-site mitigation, this expertise is especially important.

ISRP Appointments

Dennis Scarnecchia, Ph. D., is a Professor of Fish and Wildlife Resources at the University of Idaho and an expert in large river fisheries population dynamics and salmon, trout, and char. He has effectively served on the ISAB since 2007 and is currently an ISAB executive committee officer. He effectively participated as an ISRP Peer Review Group member on the review of subbasin plans, fiscal years 2007-09 proposals, and recently Three-Step, new Accord, and BiOp proposals. He has experience with Columbia River fisheries and knowledge of fish passage behavior past dams. He began his career as a fisheries scientist in Oregon working with salmonids and ocean fisheries but also has extensive experience working with sturgeon and out-of-basin non-salmonid fish. Thus, he brings a multi-species perspective, which will be valuable for the ISRP given the wide spectrum of Fish and Wildlife Program work and the upcoming

review of resident fish projects in the area of the Columbia River Basin blocked to anadromous fish migration by Chief Joseph and Hells Canyon dams.

He would join Rich Alldredge and Colin Levings as joint members of the ISAB and ISRP. Having three joint members will increase coordination, communication, and consistency between the ISRP and ISAB.

Future ISRP Appointments

The ISRP has an additional position open that we are working on filling. We are specifically pursuing scientists with expertise in wildlife, terrestrial habitat restoration, modeling, and population genetics.

ISAB Members Renewals

<u>Rich Alldredge</u>, Ph.D., is a Professor of statistics at Washington State University. His statistical expertise allows him to lead many and participate in all ISAB reviews regardless of topic and to provide valuable comments on experimental design, monitoring, and evaluation. He serves as the ISAB Vice-Chair and is an ISRP member and officer. In those roles, he has demonstrated excellent communication and leadership skills. He has participated as a Columbia River Fish and Wildlife Program peer reviewer for over a decade and thus has a comprehensive understanding of the Program. His expertise and institutional knowledge is critical in providing scientific advice on the development and implementation of a regional research, monitoring, and evaluation plan.

<u>Dennis Scarnecchia</u>, Ph. D., is a Professor of Fish and Wildlife Resources at the University of Idaho and an expert in large river fisheries population dynamics and salmon, trout, and char. See details above under ISRP appointments.

<u>Chris Wood</u>, Ph.D., is a Research Scientist at the Pacific Biological Station, Department of Fisheries and Oceans, Canada and an expert in genetics and ecology of Pacific salmon and other marine fish. He has authored many sections of ISAB reports over the past three years, and his active research work in Canada translates well to informing scientific analysis of Columbia River fisheries. His knowledge of salmon genetics is especially applicable to reviews concerning wild and hatchery fish interactions and recovery planning. His expertise will be highly valuable for potential ISAB reviews of life cycle models and the steelhead kelt life history.

ISAB Appointments

For the past few rounds of ISAB appointments, the ISAB Ex Officios, coordinators, and members have emphasized the value of including a social scientist on the ISAB, especially after long-term ISRP and ISAB member Susan Hanna completed her terms. The ISAB Ex Officios and coordinators have planned that a social scientist be appointed in this round. We evaluated the potential candidates on the National Research Council's recommended list and recommend the appointment of Tim McDaniels.

<u>Tim McDaniels</u>, Ph.D., is a professor in the School of Community and Regional Planning, Institute of Resources and Environment, University of British Columbia, Canada. His work focuses on environmental policy, decision analysis, management of environmental risk, the role of evaluation in environmental choices, environmental economics, and strategic planning. He has worked extensively with B.C. Hydro; Forestry Canada; Energy, Mines, and Resources Canada; and other agencies. His publications include articles on valuing environmental resources, electric utility planning, fisheries management, water resources planning, and perceptions of ecological risk. His work with First Nations of Canada and Canadian sockeye salmon fisheries should allow him to bring a fresh, out of the basin perspective to similar issues facing the Columbia River Basin. His professional resume is attached below, see page 8.

The addition of McDaniels to the current ten ISAB members whose primary expertise are in biological and physical sciences should help the ISAB maintain and expand its ability to provide independent reviews of critical scientific issues facing Columbia River Basin fish and wildlife mitigation and recovery efforts. The addition of McDaniels should also help the ISAB continue and increase its collaboration with the Council's Independent Economic Advisory Board.

Alternatives

The Council for the ISRP and the ISAB Oversight Panel for the ISAB can request further consideration of alternative National Academy recommended candidates than those recommended in this memo for some or all of the open ISRP and ISAB positions.

Tables of ISRP and ISAB Members and Terms

ISRP Member	Affiliation	Expertise	Term
John Epifanio	Illinois Natural History Survey (currently on assignment with USGS in DC)	Conservation genetics	2010, 2 nd
Pete Bisson	U.S. Forest Service, Washington	Stream ecology and fish population dynamics	2011, 2 nd
Eric Loudenslager	Humboldt State University, California	Fish genetics and culture	2011, 2 nd
Katherine Myers	University of Washington	Fisheries - ocean and salmon ecology	2011, 2 nd
Bruce Ward	British Columbia's Ministry of Water, Land and Air Protection (retired)	Fisheries - tributary habitat restoration techniques, hatchery evaluations, and fish population dynamics	2011, 2 nd
Charles Henny	U.S. Geological Survey (emeritus), Oregon	Wildlife and environmental toxicology	2012, 2 nd
Colin Levings	Department of Fisheries and Oceans, Canada, BC (emeritus)	Fisheries - estuary ecology	2012, 2 nd
Tom Poe	Consulting fisheries scientist, formerly with U.S. Geological Survey, Washington	Fisheries - behavioral ecology and hydrosystem passage	2012, 2 nd
Rich Alldredge	Washington State University	Statistics	2013, 2 nd
Recommended	1	1	1
Robert Bilby	Weyerhaeuser	Riparian ecology and fish population dynamics	2013, 2 nd
Dennis Scarnecchia	University of Idaho	Fisheries - large river	2013, 1 st
Vacant			

ISAB Member	Affiliation	Expertise	Term
Nancy Huntly	Idaho State University	Wildlife	2010, 2 nd
Roland Lamberson	Humboldt State University, California	Mathematical modeling	2010, 2 nd
William Pearcy	Oregon State University (emeritus)	Oceanography	2011, 2 nd
Peter Smouse	Rutgers University, New Jersey	Biometrics and population theory	2011, 2 nd
Robert Naiman	University of Washington	River ecology	2011, 1 st
Colin Levings	Department of Fisheries and Oceans, Canada, BC (emeritus)	Fisheries - estuary ecology	2012, 2 nd
James Congleton	University of Idaho (emeritus)	Fisheries - hydrosystem passage	2012, 1 st
Bruce Rieman	U.S. Forest Service (emeritus), Montana	Fisheries and habitat management	2012, 1 st
Greg Ruggerone	Natural Resource Consultants, Washington	Fisheries - ocean and freshwater salmon ecology	2013, 1 st
Recommended			
Chris Wood	Department of Fisheries and Oceans, Canada, BC	Fisheries - genetics and ecology of salmon	2013, 2 nd
Rich Alldredge	Washington State University	Statistics	2014, 2 nd
Dennis Scarnecchia	University of Idaho	Fisheries - large river	2014, 2 nd
Tim McDaniels	University of British Columbia	Environmental risk assessment and planning	2013, 1 st

Attachment: Tim McDaniels' Professional Resume

Tim McDaniels, Ph.D. Professor, School of Community and Regional Planning, and Institute for Resources, Environment and Sustainability, University of British Columbia

Tim McDaniels is a specialist in decision sciences and policy analysis, particularly in the context of managing environmental and technology-related societal risks. His current research focuses on climate change adaptation in linked human/ ecological systems. He also has ongoing research projects concerned with building regional resilience in infrastructure systems.

Tim teaches in three graduate interdisciplinary programs at UBC. He formerly served as the Director of the Institute for Resources, Environment and Sustainability, as the Associate Director of the School of Community and Regional Planning, and also as the Acting Principal of the College for Interdisciplinary Studies. He is currently the Associate Director of the Bridge program, an interdisciplinary research training program linking public health, engineering and public policy.

Tim's research addresses issues of risk management based on societal values and expert understanding. His previous work has addressed issues of values, value elicitation, risk perception, eliciting judgments from experts, and characterizing more effective approaches for managing issues of global change that cross multiple scales of governance and impact. He has worked extensively on citizen involvement in complex policy decisions, and has designed and led successful stakeholder decision processes involving scientists, agency representatives and civil society groups. He has published articles and conducted practical research in forestry, fisheries, renewable energy, aquaculture, water management and infrastructure systems. An emerging interest is in linking ecosystem services concepts to strategic planning for poverty reduction.

Tim has published over 60 articles in leading interdisciplinary science journals, along with three books and over 50 technical reports. He also has served on expert panels for the US National Academy of Sciences, NOAA, the US EPA, Health Canada and other organizations. He has participated in advisory roles for several Canadian inquiries and panels regarding risk issues. His is a co-investigator in the Climate Decision making Center at Carnegie Mellon University in Pittsburgh, which is supported by the US National Science Foundation. In 2004, he was a co-author for a NAS panel report on Research Priorities for Improving Environmental Decision-making. In 2008, he appointed to the US National Academy of Science Committee on the Human Dimensions of Global Change.