Bruce A. Measure Chair Montana

Rhonda Whiting Montana

W. Bill Booth Idaho

**James A. Yost** Idaho



Joan M. Dukes Vice-Chair Oregon

Bill Bradbury Oregon

**Tom Karier** Washington

Phil Rockefeller Washington

January 3, 2012

**TO:** Council Members

FROM: Erik Merrill, ISRP/ISAB Program Manager, and Jim Ruff, ISAB Ex Officio

SUBJECT: ISRP, PRG and ISAB Appointments

# **PROPOSED ACTION**

Council staff requests Council actions and discussion pertaining to Independent Scientific Review Panel (ISRP), ISRP Peer Review Group, and Independent Scientific Advisory Board (ISAB) appointments.

Staff asks that the Council:

1) Appoint Steve Schroder, Dave Heller, Carl Schwarz, and Chris Wood to the ISRP.

2) Appoint 14 scientists to the pool of ISRP Peer Review Group Members.

Council staff also asks for discussion and feedback on three ISAB appointments. This discussion should assist the Council Chair as the Council's representative on the ISAB's Administrative Oversight Panel, which will make the final ISAB appointment decisions. As top candidates for ISAB appointment, Council staff has identified Kate Myers, Kurt Fausch, and Laurel Saito.

### SIGNIFICANCE

The eleven-member ISRP provides scientific review of Fish and Wildlife Program proposals and their results, improving program implementation and ensuring accountability. Complementing the ISRP, the ISAB (also eleven members) provides the Council, NOAA Fisheries, and the Columbia River Indian Tribes with independent reviews of critical scientific issues facing Columbia River Basin fish and wildlife mitigation and recovery efforts. In developing this appointment recommendation, the experience and expertise of the scientists on the ISRP and ISAB were considered with the goal to maintain groups that foster a multi-disciplinary approach and offer fresh perspectives, while preserving an institutional knowledge of independent scientific review and fish and wildlife management in the Columbia River Basin. With a broad range of expertise, the groups should be configured to effectively review the science pertaining to topics, plans, and projects likely to arise in the next few years such as life-cycle modeling,

mainstem fish passage survival, ocean research, habitat restoration, artificial production, and research, monitoring and evaluation (RME).

# BACKGROUND

The Council alone makes ISRP and Peer Review Group 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 terms of usually three years per term with adjustments to ensure that turnover of membership each year is limited to no more than four members.

# **Appointments**

The ISAB and ISRP appointments process follows three steps, of which the first two are complete for this appointment decision. First, in March 2011, 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 Academy of Sciences screened the lists of nominees based on their scientific credentials and selected a pool of 19 candidates for potential ISRP and ISAB appointment (see the <u>National Academy's December 2011 memo</u><sup>1</sup>). These candidates augment an existing pool of about 70 highly qualified ISAB and ISRP nominees who were screened in 2008 and 2005. Third, as stated above, from the list of recommended candidates, the ISAB Administrative Oversight Panel appoints ISAB members and the Council 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; marine ecology; geomorphology; and 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 ISAB and ISRP members have broad backgrounds and can cover multiple disciplines. The scientists recommended for appointment below were selected to fill the spectrum of expertise needed to review the wide range of projects, programs, and topics that come before the ISAB and ISRP.

All of the scientists recommended by the National Academy of Sciences 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.

<sup>&</sup>lt;sup>1</sup> The National Academy of Sciences' 2011 letter is available at <u>www.nwcouncil.org/fw/isab/members2011.pdf</u>.

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 scientists recommended for appointment in this memo 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.

### **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.

Resumes of the scientists recommended below or included in the National Academy's pool of candidates are available on request. Resumes available on the web are hyperlinked below.

# **ISRP APPOINTMENTS**

Four ISRP positions are currently open, and three more become open on October 1, 2012. With the Geographic reviews beginning in 2012 and the ongoing reviews of artificial production efforts through the Lower Snake River Compensation Plan and Council Step reviews, expertise in habitat restoration and artificial production (fish culture) are especially needed.

**Steve Schroder**, Ph.D., is a fisheries consultant and former Fisheries Research Scientist at the Washington Department of Fish and Wildlife. He has over 30 years of fisheries research experience ranging from developing fish marking tools, to examining juvenile salmon ecology in freshwater and estuarine areas, to studying recovery of depressed or ESA listed salmonids via habitat restoration and fish cultural methods. With the loss of many long time ISRP members, he would provide excellent knowledge of Columbia River Basin fish and wildlife recovery efforts. Some of his *past* projects were funded through the Fish and Wildlife Program so care would be taken in making assignments to avoid the appearance of conflicts or bias. His perspective of being reviewed by the ISRP would add a new perspective to the ISRP and facilitate constructive reviews.

**David Heller**, M.S., is an expert in aquatic resource management and restoration. He is a retired Pacific Northwest Regional Fish Program Leader, U.S. Forest Service. Among many accomplishments at the Forest Service, he managed the development of a comprehensive Fish and Aquatic Resource Program for 17 National Forests, in Oregon and Washington. His expertise, experience, and institutional knowledge of the Columbia Basin would be especially valuable in the review of habitat restoration projects and the development of a regional habitat restoration effectiveness monitoring plan.

<u>Carl Schwarz</u>, Ph.D., is a Professor of Statistics and Actuarial Science at Simon Fraser University, Canada. His statistical and modeling research and consulting experience covers a wide range of topics but is directly applicable to Columbia River Basin fish and wildlife management. For example, he has developed methods to estimate salmon escapement, smolt runs, and fish populations. His expertise in experimental design and analyzing results would be especially useful for ISRP reviews of projects that include a research, monitoring and evaluation component.

<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 is currently an ISAB member. He has authored many sections of ISAB reports over the past four 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 habitat restoration and artificial production projects. He would join Rich Alldredge, Greg Ruggerone, and Dennis Scarnecchia as joint members of the ISAB and ISRP. Having four joint members will increase coordination, communication, and consistency between the ISRP and ISAB. *Chris Wood has requested that his term begin in October 2012, due to other commitments.* 

Steve Schroder, David Heller, and Carl Schwarz are recommended to begin their terms immediately. If the Council approves these recommended appointments, one current position will remain open on the ISRP and two others will need to be filled by October. We hope to have recommendations to fill these positions over the next few months.

| Table 1. | Current | ISRP | members | and | terms |
|----------|---------|------|---------|-----|-------|
|----------|---------|------|---------|-----|-------|

| ISRP Member        | Affiliation   | Expertise  | Term                  |  |
|--------------------|---|--|-----------------------|--|
| Pete Bisson        | U.S. Forest Service, Washington   | Stream ecology and fish population dynamics  | Complete              |  |
| Eric Loudenslager  | Humboldt State University,<br>California  | 7, Fish genetics and culture   |                       |  |
| Katherine Myers    | University of Washington  | Fisheries - ocean and salmon ecology   | Complete              |  |
| Bruce Ward         | British Columbia Ministry of<br>Water, Land and Air Protection<br>(retired)   | Fisheries - tributary habitat<br>restoration, hatchery<br>evaluations, and fish population<br>dynamics | Complete              |  |
| Charles Henny      | U.S. Geological Survey<br>(emeritus), Oregon  | Wildlife and environmental toxicology  | 2012, 2 <sup>nd</sup> |  |
| Colin Levings      | Department of Fisheries and<br>Oceans, Canada, BC (emeritus)  | Fisheries - estuary ecology  | 2012, 2 <sup>nd</sup> |  |
| Tom Poe            | Consulting fisheries scientist,<br>formerly with U.S. Geological<br>Survey, WashingtonFisheries - behavioral ecology<br>and hydrosystem passage |  | 2012, 2 <sup>nd</sup> |  |
| Rich Alldredge     | Washington State University   | Statistics   | 2013, 2 <sup>nd</sup> |  |
| Robert Bilby       | Weyerhaeuser  | Riparian ecology and fish population dynamics  | 2013, 2 <sup>nd</sup> |  |
| Dennis Scarnecchia | University of Idaho   | Fisheries - large river  | 2013, 1 <sup>st</sup> |  |
| Greg Ruggerone     | Natural Resource Consultants,<br>Washington   | Fisheries - ocean and freshwater salmon ecology  | 2015, 1 <sup>st</sup> |  |

### **ISRP PEER REVIEW GROUP APPOINTMENTS**

The 1996 amendment to the Power Act provides for the ISRP to be assisted by Peer Review Groups. The Council has appointed a Peer Review Group pool of over 168 scientists, a subset of whom 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 the past fifteen years, over 50 Peer Review Group members have participated in ISRP project reviews.

Council staff recommends that the 14 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 Category and Geographic Reviews. The scientists include those nominated and considered in the 2011 ISRP and ISAB member selection process by the National Research Council of the National Academy of Sciences. In 2011, the National Research Council did not develop a list of recommended scientists for the Peer Review

Groups. As in the past, they decided not to take an active role in the appointment of the Peer Review Groups and felt that this was better handled as a matter between the ISRP and the Council. These appointees would join the current pool of 168 potential Peer Review Group reviewers.

This large number of potential Peer Review Group members is needed because significant numbers of reviewers covering a wide range of expertise are often needed on short notice to participate in time-intensive reviews. In addition, some of these scientists, at times, propose or have 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 and the ISRP and Council to gauge the scientists' suitability for full ISRP or ISAB membership.

| Nominee           | Affiliation  | Expertise                                       |  |
|-------------------|--|---|--|
| Robert Anthony    | Oregon State University  | Wildlife ecologist                              |  |
| Virginia Butler   | Portland State University  | Social science                                  |  |
| Dennis Dauble     | Consultant (formerly with Pacific<br>Northwest National Labs)                | Fisheries, mainstem fish passage                |  |
| Douglas DeHart    | Consultant (formerly with Oregon<br>Department of Fish and Wildlife)         | Fisheries - hatcheries, passage, and management |  |
| Greg Hood         | Skagit River System Cooperative  | Fisheries, ecology and habitat                  |  |
| Robert Hughes     | Oregon State University  | Biometrics and modeling                         |  |
| Mike Jones        | University of Michigan   | Biometrics and modeling                         |  |
| Steven Kolmes     | University of Portland   | Fisheries, ecology and habitat                  |  |
| Alec Maule        | United States Geological Survey, Cook<br>Labs, Washington (current conflict) | Fisheries - physiological ecology of salmonids  |  |
| Stephen McCormick | United States Geological Survey,<br>Massachusetts                            | Fisheries - physiology, Atlantic salmon         |  |
| Vaughn Paragamian | Consultant (formerly with Idaho Fish and Game)                               | Fisheries - resident fish research              |  |
| Randall Peterman  | Simon Fraser University, BC, Canada  | Quantitative biology                            |  |
| Laurel Saito      | University of Nevada Reno  | Hydrology and ecosystem modeling                |  |
| Steve Schroder    | Consultant (formerly with Washington<br>Department of Fish and Wildlife)     | Fisheries - research scientist                  |  |

#### Table 2. Fourteen recommended Peer Review Group appointees

## **ISAB APPOINTMENTS**

Three ISAB positions are currently open (see Table 3). Over the next three years, it is anticipated the ISAB will review life-cycle survival models and RME plans and continue its ongoing role reviewing analyses of fish survival through the hydrosystem. Additional expertise beyond that currently represented on the ISAB and needed for these and other reviews includes marine ecology, quantitative biology, ecosystem modeling, and statistics. The three scientists recommended below would meet these needs on the ISAB. In addition, input from social scientists has benefited ISAB reviews. The ISAB plans to enlist social scientists on an ad hoc basis for specific reviews and to coordinate efforts with the Council's Independent Economic Advisory Board.

**Kate Myers,** Ph.D., is an expert in ocean fisheries, an increasingly important area of interest for the Fish and Wildlife Program and NOAA's recovery planning. She recently retired as the Principal Investigator of the High Seas Salmon Research Program at the School of Aquatic and Fishery Sciences, University of Washington. She also recently completed two full terms on the ISRP. She was a lead reviewer of ocean and estuary projects, and she also effectively and constructively reviewed freshwater habitat projects, hatchery programs, and research plans.

**Kurt Fausch**, Ph.D., is a Professor of Fish, Wildlife, and Conservation Biology at Colorado State University. He is an expert in population ecology, and his research has focused on the ecology and management of streams and stream fishes. He has effectively participated as a Peer Review Group member on a range of ISRP reviews. He also has special experience in communicating scientific information to non-scientists, which is an important ISAB function. His documentary film <u>*RiverWebs*</u> has been distributed through PBS and broadcast to over 100 million homes.

Laurel Saito, Ph.D., P.E., is the Deputy Director of the Graduate Program of Hydrologic Sciences at the University of Nevada Reno. She is a civil engineer and has expertise in interdisciplinary modeling of aquatic ecosystems and water quality management. This expertise and her experience in the Sierra Nevada region would add a fresh perspective to the ISAB, for example, to inform NOAA's life-cycle model development.

| Table 3 | <b>ISAB</b> | Members | and Terms |
|---------|-------------|---------|-----------|
|---------|-------------|---------|-----------|

| ISAB Member        | Affiliation  | Expertise                                       | Term                  |  |
|--------------------|--|---|-----------------------|--|
| Nancy Huntly       | Idaho State University                                       | Wildlife  | Complete              |  |
| William Pearcy     | Oregon State University (emeritus)                           | Oceanography                                    | Complete              |  |
| Peter Smouse       | Rutgers University, New Jersey                               | Biometrics and population theory                | Complete              |  |
| Colin Levings      | Department of Fisheries and<br>Oceans, Canada, BC (emeritus) | Fisheries - estuary ecology                     | 2012, 2 <sup>nd</sup> |  |
| James Congleton    | University of Idaho (emeritus)                               | Fisheries - hydrosystem<br>passage              | 2012, 1 <sup>st</sup> |  |
| Bruce Rieman       | U.S. Forest Service (emeritus),<br>Montana                   | Fisheries and habitat management                | 2012, 1 <sup>st</sup> |  |
| Greg Ruggerone     | Natural Resource Consultants,<br>Washington                  | Fisheries - ocean and freshwater salmon ecology | 2013, 1 <sup>st</sup> |  |
| Chris Wood         | Department of Fisheries and<br>Oceans, Canada, BC            | Fisheries - genetics and<br>ecology of salmon   | 2013, 2 <sup>nd</sup> |  |
| Rich Alldredge     | Washington State University                                  | Statistics                                      | 2014, 2 <sup>nd</sup> |  |
| Dennis Scarnecchia | University of Idaho  | Fisheries - large river                         | 2014, 2 <sup>nd</sup> |  |
| Robert Naiman      | University of Washington                                     | River ecology                                   | 2015, 2 <sup>nd</sup> |  |