

Trinity River Restoration Program
Science Advisory Board

Robin Schrock
Executive Director
Trinity River Restoration Program

March 27, 2015

Dear Robin,

We have considered your recent inquiry about term duration for SAB members in general, Clair Stalnaker's soon-to-end term, and recommendations for Clair's replacement.

As you know, the Implementation Plan recommends rotating, 4-year terms to ensure enough time to gain experience with the Program, yet bring in new ideas and perspectives with new members. This strategy makes sense, although the rotation schedule is not specified. So far, cessation of SAB membership has been the member's choice and largely circumstantial. From the SAB's beginning (around 2004) to date, there have been eight members, with two long-term members remaining on the board (Clair Stalnaker and Mike Merigliano). Although a ten-year membership appears long as compared to the specified 4-year term, the longest-serving member's term would normally be eight years if all five members start at the same time, all serve at least a four-year term, and if one member per year is replaced after the first four years; this scenario is similar to what has actually happened.

In the future, we recommend scheduling the rotation so that member terms overlap, thus providing maintenance of institutional knowledge and continuity for TRRP initiatives. Ideally, no more than two new members would be brought on in a given year.

We understand that a solicitor wants the TRRP to follow the rotational aspect of the SAB membership, and due to an unusual, rigid, and fiscally awkward contractual arrangement, Clair Stalnaker's term is to end soon. Clair has served the longest (and far longer if his pre-SAB experience with the Trinity River is considered), and we appreciate that his tenure's ending is logical. But what we appreciate even more is Clair's extensive knowledge of fisheries research and general institutional knowledge within and beyond the Trinity River. As such, we strongly recommend that if there is any way Clair can be retained, the Program would benefit greatly from Clair's direct participation over the next year. The Program is implementing a fish production model and Clair's input would be invaluable. Perhaps, if he cannot be retained as an SAB member (our strong preference), he can serve as an emeritus member, or brought in as a technical reviewer.

If Clair's SAB membership cannot be retained, we suggest the following list of candidates, in no particular order:

Mary C. Freeman, Aquatic Ecologist, USGS, University of Georgia, mary@tttrout.ecology.uga.edu

Mary has extensive work on stream ecology, flow issues and adaptive management. One current SAB member, Jim Peterson, has worked with her.

Andrew Paul, Aquatic Ecologist, Alberta Environment and Sustainable Resource Development, Alberta, Canada, Andrew.paul@gov.ab.ca

Over 20 years working in conservation biology, community restoration, fish population ecology and river ecology. Of particular relevance is his experience in using quantitative techniques to aid in understanding riverine ecological patterns and processes, having worked with the Theoretical Population Group (University of Amsterdam) and the Fisheries Centre (University of British Columbia).

Terry Waddle, Water Resource/Environmental Engineering, USGS (retired) Fort Collins, CO, Telephone 970-484-3608

Terry has extensive experience in modeling of riverine processes. He developed water routing models (e.g., TRNMOD, the hydrology driver for original SALMOD on Trinity River), water temperature models, worked with University of Alberta in developing 2-D hydraulic/habitat model (River 2D), and Decision Support Systems (DSS) that tied these and other models together. He has experience in applications on big rivers and streams on both east and west coasts.

John Bartholow, Aquatic ecologist, USGS (retired) Fort Collins, CO, Telephone 970-223-6488

John has extensive experience with modeling of river systems, DSS development and adaptive management. He was a principal designer of SALMOD and more recent applications to salmonids on the east and west coasts (including the Sacramento and Klamath Rivers). He was one of the FWS-team first employing Adaptive Environmental Assessment and Management in workshops with collaboration with C. S. Holling and others of University of British Columbia. He has served on city and county advisory water resource boards and continues to be an advocate for environmental flows and maintaining healthy streams in Colorado.

Tammy Newcomb, Fisheries Biologist, Michigan Department of Natural Resources Fisheries Division, Lansing, MI, newcomb@michigan.gov

Tammy has extensive experience with riverine ecology, river flow issues and modeling. She has conducted research on salmonid population dynamics, stream habitat and flow management, and stream temperature modeling, and has served on two National Research Council committees on the Klamath River. She is presently in charge of salmonid management in Lake Michigan.

Tracy Hillman, Fisheries Biologist, BioAnalyst Inc. Boise, ID, tracy.hillman@bioanalysts.net, 208-321-0363

Dr. Hillman is an Ecological Society of America board-certified senior ecologist and has been with BioAnalysts since 1991. He has studied the effects of land-use activities such as forestry, grazing, mining, and hydroelectric development on streams and fish resources. He has authored more than 100 reports, including biological assessments, hatchery evaluations, recovery plans, experimental and statistical design, and technical reports for habitat conservation plans.

Nick Bouwes, Fisheries Biologist, Eco Logical Research Inc., Logan, UT, nbouwes@gmail.com, 435-760-0771

Nick received his BS at University of Wisconsin, Madison, and his MS and PhD at Utah State University. After that he was employed as a fish population analyst and a biometrician/modeler for Oregon Department of Fish and Wildlife. Nick started Eco Logical Research in 2000, and has since been working collaboratively with state, federal, tribal fisheries agencies and NGOs to review and develop status and effectiveness monitoring programs addressing NOAA and USFWS Biological Opinions and Recovery Plans and the Northwest Power Planning Councils Fish and Wildlife Program throughout the Columbia River Basin.

George Pess, Fisheries Biologist, NOAA/Northwest Fisheries Science Center. Seattle, WA,
George.pess@noaa.gov, 206-860-3450

George has worked in the fisheries science and management field since 1989. His primary research interest during that time has been the examination of natural and land-use effects on salmon habitat and production. George has conducted research on historic and current land use impacts on salmon habitat and production, the influence of wood in forested stream channels, the development of a wood recruitment model to determine the relative influence of forestry activities, what role watershed analysis plays in ecosystem management, and how landscape characteristics and land use affect salmon abundance and distribution.

Don Orth, Professor, Fish and Wildlife Conservation, Virginia Tech, Blacksburg VA, dorth@vt.edu

Donald Orth teaches and conducts research on all aspects of river and stream fisheries. Numerous states, including Virginia, have incorporated Don's findings and recommendations into their own water-withdrawal policies. He firmly believes that the optimal scientific basis for management relies on sound theory, interdisciplinary thinking, good field data and mediated modeling approaches.

His principal interests are in the management of human uses of rivers to enhance or protect fish populations and sustainable rivers. He served for seven years as Department Head where he lead a progressive fisheries and wildlife program and improved coordination with USGS Cooperative Fisheries and Wildlife Research Unit, USFS Coldwater Fisheries Research Unit, and NMFS Cooperative Recruiting, Training, and Research Unit. He has served on numerous University Committees and Commissions, including the Faculty Senate and the Commissions on Graduate Studies and Policy and Faculty Affairs. He has done research on stream fish habitat, population analyses, and the biological mechanisms controlling fish populations and organizing aquatic communities since 1977. His doctoral research was a critical examination of the key assumptions of the Instream Flow Incremental Methodology.

Jason Dunham, Fisheries Biologist, USGS FRESC, Corvallis OR, jdunham@usgs.gov, (541) 750-0990

Jason's research focusses on landscape ecology of aquatic ecosystems, conservation biology and life histories of focal species, ecology of natural disturbance, biological invasions, management of aquatic ecosystems, and monitoring.

Bruce Rieman, Fisheries Biologist, USFS (retired), brieman@blackfoot.net

Bruce's research has focused on: larger patterns in species distributions and the processes relevant to the dynamics and persistence of populations at watershed and larger scales. He has been particularly interested in metapopulation processes and in the expression of life histories as mechanisms potentially stabilizing populations in spatially and temporally variable environments. He believes this kind of knowledge will be key to effective prioritization of limited conservation management resources in the face of climate change, changing disturbance regimes and non-native species invasions.

Sincerely,

John M. Buffington
Chris Jordan
Mike Merigliano
James Peterson



Trinity River Restoration Program

Scientific Advisory Board 2015 Nomination

Name: _____

Title: _____

Affiliation: _____

Address:

Telephone: Work _____ **Cell** _____

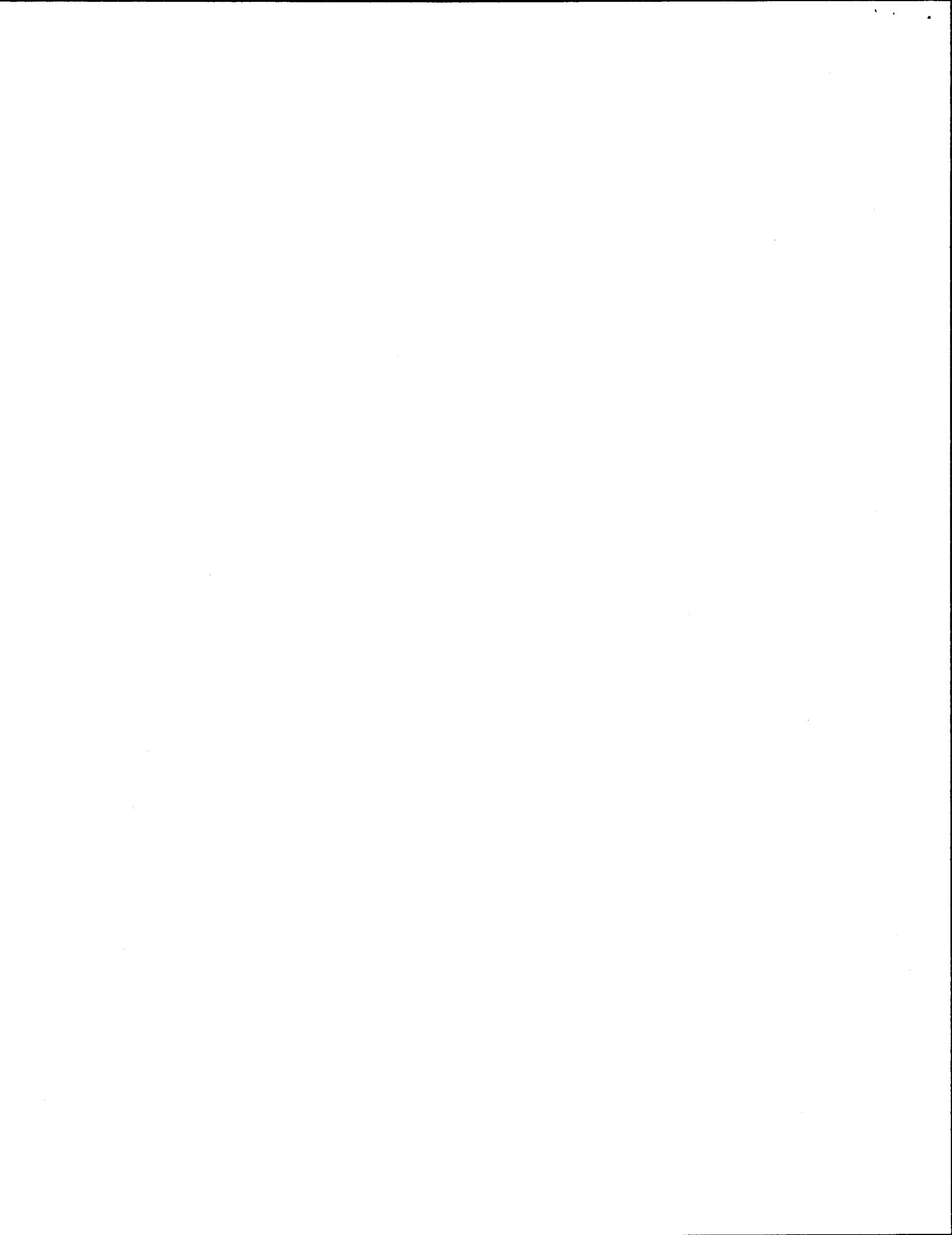
Email: _____

FAX: _____

Areas of Expertise:

SAB criteria addressed (see attached): _____

Please provide Curriculum Vitae and other relevant journal articles or achievements.



Evaluation criteria for a Science Advisory Board member having a fisheries emphasis:

The Trinity River Restoration Program manages stream flow, temperature, sediment supply, and instream salmonid habitat via fluvial processes and engineered construction. Program activities are evaluated through a combination of monitoring and modeling. Therefore, the SAB member to replace Clair Stalnaker, and whose term will likely extend beyond James Peterson's or Chris Jordan's, should have as many of the following skills as possible:

Primary skills:

1. Strong foundation in fish biology, stream ecology, and natural history.
2. Strong practical experience with developing empirical fish-habitat models for juvenile and adult salmonids.
3. Expertise in modeling salmon populations in an adaptive management context (e.g., decision support systems and population models for management scenarios).
4. Experience working with interdisciplinary groups of scientists and managers.

Secondary skills:

5. Familiarity or experience with instream flow techniques, including water temperature modeling.
6. Expertise in designing and evaluating statistical surveys for monitoring stream fish habitat and populations.
7. Expertise in making design- and model-based inferences.
8. Familiarity or experience with mechanistic modeling of biophysical interactions.

