

DOCKET No. AD04-4-000, NOTICE REQUESTING APPLICATION FOR PANEL
MEMBER LIST FOR HYDROPOWER LICENSING STUDY DISPUTE
RESOLUTION

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References:

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Northwest Marine Technology
955 Malin Lane SW
Olympia, WA 98501
Phone: (360) 596-9400

Mr. Bruce Suzumoto
Northwest Power and Conservation Council
851 SW Sixth Avenue
Suite 1100
Portland, OR 97204-1348
Phone: (800) 452-5161

Mr. Jim Waldo
Gordon, Thomas, and Honeywell
First Interstate Building
PO Box 1157
Tacoma, WA 98401
Phone: (253) 752-5050

Lars E. Mobrand, Ph.D.

1. Technical expertise.

Aquatic Resources

General

Education: Ph.D in Biometrics, specializing in experimental design, study planning, fisheries population dynamics, and modeling.

Experience: Dr. Mobrand heads Mobrand Biometrics, Inc., a consulting firm specializing in population dynamics, experimental design, statistical analysis and modeling, and coordination of multi-agency projects—in support of the identification, separation, and resolution of technical issues in fisheries management. He plays a key role in the continued development, refinement, and application of the Ecosystem Diagnosis and Treatment (EDT) approach. His recent work involves ecosystem planning, resource restoration, cumulative impact analysis and facilitation of cooperative resource projects for several watersheds in the Pacific Northwest. Dr. Mobrand currently chairs the Hatchery Scientific Review Group (HSRG), an independent scientific panel established by Congress to provide guidance to policy makers implementing hatchery reform throughout the Puget Sound and coastal Washington.

2) Knowledge of the effects of construction and operation of hydroelectric projects.

Dr. Mobrand has been involved with the FERC re-licensing process for hydro projects on the Cowlitz River for over seven years. He has also done extensive modeling of passage survival on a number of rivers in the Pacific NW, including the Columbia/ Snake River mainstem.

3) Working knowledge of laws relevant to expertise.

Dr. Mobrand has had direct experience with laws governing water and fisheries resources in his capacity as Research Chief for Washington Department of Fisheries (e.g., with responsibility for hydraulic permitting), as advisor to the Court in *US v Washington*, and through his involvement in the Cowlitz relicensing process.

4) Ability to promote constructive communication about disputed a study.

Dr. Mobrand has on a number of occasions been called upon to serve as technical facilitator on very controversial issues, as Chairman of the Fisheries Advisory Board under *US v Washington*, as technical facilitator in the Intertribal Allocation process. He is currently serving as Chairman of the congressionally mandated Hatchery Scientific Review Group, which has had a great deal of success recently in resolving thorny and controversial issues regarding the role of hatcheries in the region.

RESUME

Lars Mobrand, Ph.D.

EDUCATION

Ph.D., Biomathematics, University of Washington, Seattle, WA 1977

B.S., Chemistry, University of Washington, Seattle, WA 1967

PROFESSIONAL HISTORY

President, Mobrand Biometrics, Inc., Vashon, WA, 1969-present.

Heads consulting firm specializing in population dynamics, experimental design, statistical analysis and modeling, and coordination of multi-agency projects—in support of the identification, separation, and resolution of technical issues in fisheries management. Plays a key role in the continued development, refinement, and application of the Ecosystem Diagnosis and Treatment (EDT) approach. Recent work involves ecosystem planning, resource restoration, cumulative impact analysis and facilitation of cooperative resource projects for several watersheds in the Pacific Northwest. Currently chairs the Hatchery Scientific Review Group (HSRG), an independent scientific panel established by Congress to provide guidance to policy makers implementing hatchery reform throughout the Puget Sound and coastal Washington.

Chairman, Fisheries Advisory Board, US vs. Washington Court Case, Seattle, WA, 1983-84.

Served as chairman of the Fisheries Advisory Board on appointment by the Federal Judge in the US vs Washington Court case regarding treaty/non-treaty harvest allocation (Boldt case); served as technical advisor to the judge.

Research and Development Chief, Wash. Dept. of Fisheries, Olympia, WA, 1981-83.

Managed salmon research programs and tagging operations for WDF, responsibilities included research planning, supervision and budget management.

Harvest Management Chief, Wash. Dept. of Fisheries, Olympia, WA, 1980-81.

Responsible for management of commercial and recreational salmon fisheries for the state of Washington including development of management objectives, implementation of harvest plans, and promulgation of harvest regulations.

Fish Biologist 4, Univ. of Wash., Seattle, WA, 1977-80.

Conducted post-doctoral research in fisheries population dynamics supported by grants from private, tribal, state, and federal sources.

Biometrician, Small Tribes Organization of Western Wash., Sumner, WA, 1976-77.

Served as fisheries management advisor to Washington Indian tribes.

Research Associate, University of Washington, Seattle, WA, 1973-74.

Developed stochastic run-prediction models for salmon.

Research Scientist, Inter-American Tropical Tuna Commission, La Jolla, CA, 1969-70.

Conducted research on mark-recapture methods for tuna.

SELECTED PROJECT EXPERIENCE

Hatchery Scientific Review Group (HSRG)

Serves as Chair of the Hatchery Scientific Review Group (HSRG), a team of independent scientists tasked by the US Congress with oversight and review of Puget Sound and coastal Washington salmon hatcheries.

Artificial Production Review and Evaluation (APRE)

Served as scientific lead on the Northwest Power and Conservation Council's Congressionally mandated Artificial Production Review and Evaluation (APRE) project, aimed at conducting a thorough review of all federally funded artificial production programs in the Columbia River Basin.

Nisqually Ecosystem Diagnosis and Treatment Analysis

Worked with the Nisqually Watershed Recovery Team for several years to develop a multi-species salmonid plan for the Nisqually watershed. This plan is being used to address recovery objectives for Chinook salmon within the basin. Project results have been used to prepare a recovery plan for the basin, which has been submitted to state and federal managers in the region for review.

Analysis and Development of Sandy River Basin Plans

Assists the Sandy River Technical Team to develop alternative strategies and evaluate their effectiveness. Workshops with policy and technical teams are being held to review technical analyses and alternative strategies.

Development of an Analytical Framework for Watershed Planning

Assists the City of Portland's Endangered Species Act Program in developing a management plan for watersheds within the city and urban growth boundary. The EDT model, developed by MBI, is being used to help identify actions and priorities for management and restoration of habitats within the city's jurisdiction.

Development of Salmonid Recovery Plans for the White, Puyallup, Chambers-Clover, and Hylebos Watersheds

Worked with Pierce County watershed groups on watershed assessments in the White, Puyallup, Chambers-Clover, and Hylebos watersheds and helped Pierce County develop salmonid recovery plans for these watersheds using the EDT method developed by MBI.

Columbia River Multi-Species Framework Project

Served as lead technical role in the Multi-Species Framework Project, a project intended to foster development of a regional vision for the Columbia River basin based on analyses of alternative visions. In the early stages of the project, a multitude

of stakeholders and managers participated from throughout the region and produced a range of visions and alternatives. Seven of the alternatives that emerged were further developed around the framework structure and analyzed for their ecological and economic impacts at the basin and ecoprovince scale. This project was a precursor to subbasin planning and established EDT as the tool of choice for analyzing specific habitat strategies for salmon.

Stillaguamish/Snohomish EDT Analysis for the Tulalip Tribes

Assisted the Tulalip Tribes and Snohomish County watershed groups in identifying limiting factors and analyzing alternative actions for chinook salmon recovery.

Ecosystem Diagnostic Treatment Method Application, Cowlitz Hydroelectric Project (1997 to present)

Played a lead role in a multi-year project to provide technical assistance to Tacoma Power, performing analyses of the Cowlitz watershed, and in particular, of alternative actions in a hydroelectric relicensing effort for several dams on the river. The project involved interacting with the technical work group responsible for formulating and analyzing alternatives for the needed relicensing analyses. Facilitated a series of workshops with the members of the technical work group to characterize the watershed, its stream reaches, and the operations of the dams and hydro system to be analyzed using the EDT model. Project results were incorporated into the FERC relicensing application by the city of Tacoma.

Technical Planning Support for Grande Ronde Model Watershed Basin

Assisted the Technical Advisory Committee (TAC) formed by the Grande Ronde Model Watershed Board of Directors (BOD) in their effort to identify and describe factors that inhibit achievement of fish recovery objectives--generally modeled after the planning process developed by the RASP and described in "Supplementation in the Columbia Basin: Summary Report Series" (RASP, 1992). A planning document was prepared to be a first edition of an annually revised and updated watershed recovery plan. A recommendations document was prepared to describe how the BOD would continue this iterative planning process in the future.

Regional Assessment of Supplementation Project

Served as technical lead and facilitator of the multi-agency Regional Assessment of Supplementation Project (RASP). The purpose of this project was to assess the scope, limitations, and possibilities for employing salmonid supplementation in the Columbia basin for improving the status of salmonid populations--providing for the participation of the fishery agencies and tribes and others having expertise in this area. Coordinated and facilitated the assessment, working closely with fish managers throughout the region, assisting managers and policy makers in making choices about investing in supplementation strategies versus other options such as harvest controls, passage improvements, and habitat.

Chairman, Fisheries Advisory Board, US vs. Washington Court Case, Seattle, WA, 1983-84.

Served as chairman of the Fisheries Advisory Board on appointment by the Federal Judge in the US vs. Washington Court case regarding treaty/non-treaty harvest allocation (Boldt case); served as technical advisor to the judge.

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Submission Contents

LEM_application_packet.doc..... 1-6