

To: David Turner, FERC

From: Doug Whittaker, Ph.D.

Re: Docket No. AD04-4-000, Notice requesting applications for panel member list for hydropower study dispute resolution.

Date: Sep 23, 2004

This document provides application materials related to Douglas Whittaker, who is applying as a potential panel member on Recreational Resources issues (both whitewater boating and general recreation). It includes a summary of expertise related to the four questions detailed in your application, and an abbreviated list of his publications related to river and reservoir recreation in support of my claims of expertise.

Overview of qualifications:

Doug Whittaker is a research and planning consultant for Confluence Research and Consulting. He has nearly 20 years of experience working on natural resource management issues, with much of that focused on recreation. Dr. Whittaker has been an outdoor recreation planner with the Bureau of Land Management and the National Park Service. In those positions and as a consultant, he has conducted or participated in over 50 research or planning projects for over a dozen federal, state, local, non-profit, or private agencies or organizations, including all of the major federal land managing agencies, state land managing agencies in Alaska and Oregon, several non-profit river and trail groups, and private utilities. Dr. Whittaker has published 14 refereed journal articles, over 40 other technical reports, and has made over 25 presentations at national symposia or conferences.

Ph.D. Human Dimensions of Natural Resources, Colorado State University, 2000
M.S., Forest Management, Oregon State University, 1987
B.A., Geography, University of Vermont, 1983

Question 1: Area of expertise

Dr. Whittaker only wishes to be considered an expert related to recreational resources, and he has expertise conducting or reviewing both whitewater boating and general recreation studies. His expertise includes the following:

Flow-recreation research, including whitewater boating and fishability studies:

- Has been involved in flow-recreation studies since 1989.

- Co-organizer of first national conference on flow-recreation studies. Corvallis, Oregon (1991).
- Lead author of 1993 NPS publication (see list below) summarizing flow recreation study concepts and methods.
- Co-lead researcher on 11 FERC flow-recreation studies (see list below).
- Co-lead researcher on 15 other flow-recreation studies (navigability studies, water rights studies; see list below).
- Author on six peer-reviewed articles on flow-recreation issues (see list below).

Recreation management and visitor impact issues:

- Involved in general river recreation research since 1985.
- Co-lead researcher on at least 30 river recreation studies, with most focused on visitor impact and conflict issues (see illustrative list below).
- Author on at least eight peer-reviewed publications related to recreation use impacts or management.

Question 2: Knowledge of hydroelectric project impacts on recreation:

All of the FERC studies listed below have involved assessing impacts from construction or operation of hydroelectric projects. Studies that I have been involved with have included reviewing impacts in both bypass and downstream reaches, with annual, seasonal, and daily fluctuating flow regimes. While I am not a hydrologist or operational modeler, we have integrated complex hydrology and hydrology modeling information in several FERC study analyses.

Question 3: Working knowledge of applicable laws

Dr. Whittaker has familiarity with all of the laws listed in your question, but he has particular expertise related to the Wild and Scenic Rivers Act. He was lead author on a Congressionally authorized Wild and Scenic River study on the Lower Sheenjek in Alaska), and has been an expert witness for the US Forset Service on a water rights case for five Wild and Scenic rivers in Idaho. He has also worked on other water rights cases for federally-designated rivers. Whittaker also has extensive expertise with NEPA, having been a planner with the BLM and NPS, and having worked on several research projects that fed directly into NEPA planning.

Question 4: Ability to promote constructive communication

Dr. Whittaker has been involved in several contentious research or planning projects that required strong communication, mediation, and facilitation skills. As a planner for five years with the NPS Rivers, Trails, and Conservation Assistance

program, he received annual training in many collaboration techniques. These have helped him be a positive force for consensus in many situations, or assisted in clarifying opposing positions so that decision-makers, stakeholders, or the public could draw their own conclusions based on fair and balanced information.

List of relevant FERC projects:

Effective River Recreation Flow Studies: Concepts, Protocols, Responsibilities, and Products. Co-lead on report to Western Caucus of the Hydropower Reform Coalition. Project sponsored by the Hewlett Foundation. Due in Winter 2005.

Lower Kern River Whitewater Boating Study. Co-lead on research designed to determine instream flow needs for whitewater boating on this California river. The research is sponsored by Southern California Edison as part of its relicensing efforts for a dam and associated bypass reach. 2003 to present.

Hamilton Branch of the Upper North Fork Feather Instream Flow Study. Co-lead on research designed to determine instream flow needs for recreation on this California river. The research is sponsored by Pacific Gas & Electric as part of its relicensing efforts for two dams and associated bypass reaches. 2001 to 2002.

Upper Klamath River Instream Flow Study. Co-lead on research designed to determine instream flow needs for recreation on six reaches of this California river. The research is sponsored by PacifiCorp as part of its relicensing efforts for several dams and associated facilities. 2001 to present.

Upper North Fork Feather River Instream Flow Study. Co-lead on research designed to determine instream flow needs for recreation on two reaches of this California stream. The research is sponsored by Pacific Gas and Electric as part of its relicensing efforts for two dams and associated facilities. 2000 to 2003.

Clackamas River Instream Flow Studies. Co-lead on research designed to determine instream flow needs for recreation on several reaches of this Oregon river. Studies included a review of information related to kayaking demand and an assessment of opportunities to develop kayak “playboating” in the basin through channel modifications. The research was sponsored by Portland General Electric as part of its relicensing efforts for four dams and associated facilities and river reaches. 2000 to present.

Pit River and Lake Britton Recreation Studies. Co-lead on research designed to determine instream flow needs for recreation on three reaches of this California stream. Lead on analyzing use and visitor survey data to identify recreation opportunities and management issues on the river and associated reservoirs. The

research is sponsored by Pacific Gas and Electric as part of its relicensing efforts for three dams and associated facilities. 1999 to 2003.

Hells Canyon Complex Relicensing and Instream Flow Study. Co-lead on research designed to determine instream flow needs for recreation on the Snake River through Hells Canyon and to explore reservoir level effects on recreation on three upstream reservoirs. Co-lead on analysis of visitor survey data focused on general recreation use and impacts for both the river and reservoirs. The research is sponsored by Idaho Power as part of its relicensing efforts for the three Hells Canyon Complex dams. 1998 to present.

Chelan River Instream Flow Study. Co-lead on research exploring whitewater boating feasibility on the 4-mile bypassed segment of the Chelan River, a tributary of the Columbia in Washington State. The research is sponsored by Chelan Public Utilities District as part of its FERC relicensing efforts for an upstream dam at the outlet of Lake Chelan. 1999 to 2000.

Recreation Flows on Pit River 1, California. Review of flow-recreation reports by WRC-Environmental for Shelby Research and Consulting. 1995 to 1996.

Recreation flows on North Umpqua River, Oregon. Consultant on study conducted through Shelby Research and Consulting and EDAW for Pacific Power. 1992 to 1993.

List of other flow-recreation projects:

Recreation Flows on Cispus River, Washington. Data analysis in preparation for legal proceedings for Shelby Research and Consulting. 1995 to 1996.

Resource Values and Instream Flow Needs on Virgin River, Utah/Arizona/Nevada. Team member responsible for assessing recreation flow needs for Bureau of Land Management (BLM). 1992 to 1995.

Idaho Snake River Basin Adjudication Studies. Co-lead on research designed to determine instream flow needs for recreation on several rivers, lakes, and hot springs managed by the Forest Service. The research is expected to be used to support federal water rights claims in the Snake River Basin Adjudication, which is currently in state court. Retained as an expert witness by the Forest Service and the Department of Justice in this adjudication. 1996 to present.

Recreation Flows on North Fork of the Virgin River in Zion National Park, Utah. Data analysis and co-author on paper written for Shelby Research and Consulting. 1995 to 1997.

Recreation Flows on Eagle River, Alaska. Principal investigator for study conducted for National Park Service Rivers, Trails, and Conservation Assistance (RTCA) program. 1993 to 1996.

Shepaug River Instream Flow Study. Co-lead on research designed to determine instream flow needs for recreation on Connecticut's Shepaug River. The research was sponsored by the Shepaug River Association and other related parties involved in a water rights litigation with the City of Waterbury, which operates upstream dams on the Shepaug. Retained as an expert witness in the litigation. 1999 to January 2000.

John Day Navigability Adjudication. Co-lead on research exploring recreation use and navigability on the John Day River from Kimberly, Oregon to the mouth. The research was used as part of an expert witness report in a trespass and navigability adjudication trial in state court. 2001 to 2002.

Clear Creek Whitewater Park Instream Flow Study. Co-lead on research exploring relationship between flows and recreation on human-built whitewater park in Golden, Colorado. The research was used as part of an expert witness report in a water rights case before the State of Colorado Water Division 1 court. 2000 to 2001.

Resource Values and Instream Flow Needs on Gulkana National Wild River, Alaska. Team member responsible for assessing recreation flow needs for BLM. 1988 to 1990.

Resource Values and Instream Flow Needs on Birch Creek National Wild River, Alaska. Team member responsible for assessing recreation flow needs for BLM. 1991 to 1996.

Resource Values and Instream Flow Needs on Delta National Wild River, Alaska. Team member responsible for assessing recreation flow needs for BLM. 1990 to 1991.

Instream Flows for Recreation: Handbook and Workshops/Conferences: Co-author of a handbook for the National Park Service RTCA program. Co-organizer of first national conference and short course (given on three occasions). 1990 to 1996.

Instream Flow Assessment on Dolores River, Colorado. Team member responsible for assessing recreation flow needs for BLM. 1989 to 1990.

List of other river or recreation projects:

Delta National Wild and Scenic River user survey. Co-lead on research examining visitor impacts and management preferences on this Alaska river. Research was sponsored by Bureau of Land Management. 2004 to present.

Kodiak Island Road-Accessible Trails: Survey of Residents and Trail Enthusiasts. Lead on this two part survey of residents and trail enthusiasts about trail system improvements. Research sponsored by Kodiak Island Borough.

Situk River Recreational User Survey. Advisor and supplemental analyst on this survey of visiting anglers to this popular southeast Alaskan river. Research sponsored by US Forest Service, Alaska Department and Fish and Game, and City of Yakutat; research conducted with scientists at Aldo Leopold Institute.

Gulkana River Recreation Use Study. Lead on research examining visitor impacts on this National Wild River in Alaska. Research was sponsored by Bureau of Land Management. 1999 to present.

Colorado River Management Plan (Grand Canyon). Consultant on major NPS planning effort to examine all aspects of boating use in the canyon. Major contributions are expected to focus on motorized use issues, allocation between commercial and non-commercial uses, and crowding or related social impacts issues. 2002 to present.

National Survey on National Park Issues. Project manager for national telephone survey conducted through the Human Dimensions Unit at CSU for National Parks and Conservation Association. 1995 to 1996.

Customer Satisfaction Survey for Colorado State Forest Service. Project manager conducted through the Human Dimensions Unit at CSU for Colorado State Forest Service. 1995 to 1996.

Recreation Use and Impacts on Kanektok, Goodnews, and Togiak Rivers, Alaska. Principal investigator for study conducted for U.S. Fish and Wildlife Service (Togiak National Wildlife Refuge). 1995-1996.

Anchorage Wildlife Plan. Planning team meeting facilitator and lead consultant assisting Alaska Department of Fish and Game with Anchorage Wildlife Plan. Worked with multi-agency and interest group team to complete this plan. 1998 to 2000.

Lower Sheenjek Wild and Scenic River Study. Project lead for a Congressionally authorized study of the Lower Sheenjek River for potential inclusion in the National Wild and Scenic River System. Conducted fieldwork and was lead author for Study Report/Legislative Environmental Impact Statement being

prepared with the U.S. Fish and Wildlife Service (Yukon Flats NWR) and the National Park Service. Contracted through Colorado State University. 1996 to 1999.

Carrying Capacity Issues at Brooks River, Katmai National Park, Alaska.

Principal investigator for study on social carrying capacity issues for National Park Service Development Concept Plan and Environmental Impact Statement. 1992 to 1995.

Kenai River Carrying Capacity Study: Co-leader for study conducted by Alaska State Parks with assistance from Shelby Research and Consulting and the National Park Service RTCA program. 1992 to 1993.

Ketchikan Trails Plan, Alaska. Lead planner for effort to develop and prioritize trail options in Ketchikan. Conducted through National Park Service RTCA program for City of Ketchikan, USDA Forest Service, and Alaska State Parks. 1991-1993.

Juneau Trails Plan, Alaska. Lead planner for effort to develop and prioritize trail options in Juneau. Conducted through National Park Service RTCA program for City and Borough of Juneau, USDA Forest Service, and Alaska State Parks. 1990-1992.

Susitna Basin Recreation Rivers Management Plan. Lead investigator on impacts and management study for six state-managed rivers. Conducted through National Park Service RTCA program for Alaska Department of Natural Resources. 1989 to 1991.

Nenana River Corridor Planning. Lead investigator on impacts and management study. Conducted through National Park Service RTCA program for Alaska Department of Natural Resources. 1990 to 1991.

Southcentral District Resource Management Plan. Team member responsible for organizing recreation information for Glennallen District, Bureau of Land Management. 1988 to 1989.

Recreation Impacts Study on Deschutes River, Oregon. Project assistant on study conducted through Oregon State University for Oregon State Parks Division. 1985 to 1987.

List of relevant peer-reviewed publications

2004 Shelby, B., Whittaker, D., and Mazza, R. *Assessing controlled whitewater flows on Washington State's Chelan River.* Hydro Review Vol. 23(2): 36-45. April.

- 2002 Whittaker, D. & Shelby, B. *Evaluating instream flows for recreation: Applying the structural norm approach to biophysical conditions*. *Leisure Sciences* 24(3-4): 363-374.
- 2000 Whittaker, D. and Shelby B. *Managed flow regimes and resource values: Traditional vs. alternative strategies*. *Rivers* 7(3): 233-244.
- 1998 Shelby, B., Whittaker, D., and Roppe, J. *Controlled flow studies for recreation: A case study on Oregon's North Umpqua River*. *Rivers* 6(4): 259-268.
- 1998 Whittaker, D., & Knight, R.L. *Understanding wildlife responses to humans: A need for greater clarity in research and management*. *Wildlife Society Bulletin*, 26: 312-317.
- 1997 Shelby, B., Whittaker, D., & Hansen, W.R. *Stream flow effects on hiking in Zion National Park, Utah*. *Rivers*, 6(2): 80-93.
- 1997 Whittaker, D. *Capacity norms on bear viewing platforms*. *Human Dimensions of Wildlife* 2(2): 37-49.
- 1995 Shelby, B., & Whittaker, D. *Flows and recreation quality on the Dolores River: Integrating overall and specific evaluations*. *Rivers* 5(2), 121-132.
- 1991 Whittaker, D. *Recreation allocation issues in Alaska: Use limits in the Last Frontier*. *Western Wildlands: A Natural Resource Journal*, 16(4): 28-32.
- 1989 Shelby, B., Whittaker, D., & Danley, M. *Allocation currencies and perceived ability to obtain permits*. *Leisure Sciences*, 11(2): 137-144.
- 1989 Shelby, B., Whittaker, D., & Danley, M. *Idealism versus pragmatism in user evaluations of allocation systems*. *Leisure Sciences*, 11(1): 61-70.
- 1988 Whittaker, D., & Shelby, B. *Types of norms for recreation impacts: Extending the social norms concept*. *Journal of Leisure Research*, 20(4): 261-273.
- 1993 Whittaker, D., Shelby, B., Jackson, W., & Beschta, R. *Instream flows for recreation: A handbook on concepts and research methods*. Anchorage, Alaska: U.S. National Park Service, RTCA project. 104 p.
- 1993 Whittaker, D., & Shelby, B. *Developing good standards: Criteria, characteristics, and sources*. In *Defining wilderness quality: The role of standards in wilderness management*. USDA Forest Service, Pacific

Northwest Research Station General Technical Report No. PNW-GTR-305: 6-12. Portland, Oregon.

- 1993 Whittaker, D. *Selecting indicators: Which impacts matter more?* In *Defining wilderness quality: The role of standards in wilderness management*. USDA Forest Service, Pacific Northwest Research Station General Technical Report No. PNW-GTR-305: 13-22. Portland, Oregon.

References:

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Submission Contents

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