W. Bill Booth Chair Idaho

James A. Yost Idaho

Frank L. Cassidy Jr. "Larry" Washington

> **Tom Karier** Washington



Bruce A. Measure Vice-Chair Montana

Rhonda Whiting Montana

Melinda S. Eden Oregon

Joan M. Dukes Oregon

January 31, 2008

MEMORANDUM

TO: Council Members

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

SUBJECT: Appointment of Dr. Robert Naiman to the ISAB

DISCUSSION ITEM

Staff asks that the Council discuss the appointment of Dr. Robert Naiman to the Independent Scientific Advisory Board (ISAB). Council discussion should assist Chairman Booth in his capacity as the Council's representative on the ISAB's Administrative Oversight Panel, which will make the final ISAB appointment decision.

SIGNIFICANCE

The ISAB continues to provide the Council with independent reviews of critical scientific issues facing Columbia River Basin fish and wildlife mitigation and recovery efforts. With the addition of Naiman to the current set of ISAB members, the ISAB should maintain its ability to effectively review the science pertaining to topics likely to arise in the next few years such as regional research, monitoring, and evaluation plan development; mainstem fish passage modeling; NOAA recovery planning; and the Council's program amendments.

BUDGETARY IMPACTS

The ISAB operates on an annual budget, independent of the Council's budget, funded by the Bonneville Power Administration through the Fish and Wildlife Program. No additional funds are requested.

Steve Crow Executive Director

BACKGROUND

Independent Scientific Advisory Board

Unlike the Independent Scientific Review Panel (ISRP) that is solely under the Council's purview, the eleven-member ISAB serves the Council, the National Marine Fisheries Service, and the Columbia River Basin Indian Tribes. The ISAB provides general scientific advice on recovery efforts whereas the ISRP provides scientific review of specific project proposals. The ISAB is governed by an Administrative Oversight Panel consisting of the Council Chair; a senior representative of the Columbia Basin Indian Tribes (Olney Patt Jr.); and the Director of NOAA's Northwest Fisheries Science Center (Usha Varanasi) and the Regional Administrator of the National Marine Fisheries Service (D. Robert Lohn) as joint participants. The Oversight Panel's primary responsibilities are to appoint ISAB members and approve the ISAB's annual work plan.

The Appointment Process

The ISAB and ISRP appointments process follows three steps, of which the first two are complete for this appointment decision. First, in 2005 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 list of nominees and selected a pool of 52 highly qualified ISAB and ISRP nominees. In a May 23, 2005 letter,¹ the National Academy of Sciences provided their recommendations to the Council and the ISAB Administrative Oversight Panel. Third, based on the list of recommendations, the ISAB Oversight Panel appoints ISAB members. The Council appoints ISRP members.

ANALYSIS

Appointment of Dr. Robert Naiman

The ISAB's Ex Officio members and coordinators representing the Council, NOAA Fisheries, and Columbia River Indian Tribes recommend that the ISAB Oversight Panel appoint Dr. Robert Naiman to the ISAB. He is a professor in the College of Ocean and Fishery Sciences at the University of Washington and is an expert in stream ecology (see his full curriculum vitae attached below). This recommendation is based on Naiman's expertise, outstanding qualifications, ability to serve, lack of conflicts, and inclusion in the National Academy's pool of candidates. In sum, Naiman has been rigorously evaluated for his scientific qualifications by an independent national body and for his ability to contribute effectively as an ISAB member by the groups' administrators.

Naiman is among the 52 scientists recommended by the National Academy of Sciences. All the scientists recommended meet the ISAB and ISRP membership criteria, in that 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

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

integrity, independence and objectivity; ability to forge creative solutions to complex problems; and interest in and ability to work effectively in an interdisciplinary setting. 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. Naiman has an exceptional record of scientific accomplishments and has a reputation for being a productive and influential member of scientific committees.

In addition to the basic qualifications, all appointees must confirm 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. Naiman understands the ISAB's workload and has agreed to serve if appointed. He has confirmed that he does not have any conflicts of interest (BPA or Fish and Wildlife Program funding) or any public statements that could create the perception of undue bias that could jeopardize the ISAB's reputation for independence.

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 socio-economics. Pacific Northwest scientists with expertise in Columbia River anadromous fish and non-anadromous fish must be included. The current ISAB members cover this wide range of disciplines well, but expertise could be augmented in several areas. Specifically, the ISAB's Ex Officios and coordinators considered likely assignments over the next three years and identified that Naiman's expertise in stream ecology to be of highest priority for this current open position. Five other highly qualified scientists with expertise in stream ecology and habitat restoration were considered along with Naiman, but these scientists were unavailable. Regardless of the others' unavailability, Naiman is a top choice. In addition to stream ecology, the ISAB's range of expertise could be bolstered by adding members with expertise in hydrosystem fish passage, quantitative ecology, harvest, and resource economics.

Future Appointments

In addition to the position that Naiman will potentially fill, a second position recently opened when Dr. Michael Healey confirmed he could not serve his appointed term, and in October 2008 a third position will likely open (see the table of member terms below). For these positions, appointing individuals with expertise in fish passage and quantitative ecology will likely be a priority. The ISAB Ex Officios and coordinators are currently evaluating the National Academy's May 2005 pool for scientists with expertise in these areas. Although the pool likely contains enough high quality scientists to fill this open position and potentially other future appointments, the process to update the National Academy's 2005 pool is underway, and it may be wise to wait until we have an updated pool to fill the final open position on the ISAB.

To prepare for future appointments, last fall the Council, NOAA Fisheries, and the Columbia River Indian Tribes sent a letter to the region requesting nominations by January 31, 2008 for consideration by the National Academy. As of the writing of this memo, about 20 individuals have been nominated for consideration by the National

Academy. We hope the National Academy can provide an updated pool by May 2008. In the next month, the ISAB Ex Officios will confer with the Administrative Oversight Panel on a preferred approach to fill the open position.

In the meantime, ISAB ad hoc members will be used to augment the groups' expertise and workforce as needed, for example, on fish passage issues. In addition, recognizing that ISAB membership does not include a socio-economics expert, the ISAB intends to continue and increase its collaboration with the Council's Independent Economic Advisory Board.

Naiman would join the following nine current members to fill ten of the eleven ISAB membership positions:

- 1. Richard Alldredge, Ph.D., Professor of Statistics at Washington State University. He serves on the ISAB and ISRP.
- 2. Nancy Huntly, Ph.D., Professor of Wildlife Biology at Idaho State University.
- 3. Stuart Hurlbert, Ph.D., Professor of Biology and Director, Center for Inland Waters at San Diego State University, an expert in limnology and biostatistics.
- 4. Roland Lamberson, Ph.D., Professor of Mathematics and Director of Environmental Systems Graduate Program at Humboldt State University.
- 5. Colin Levings, Ph.D., Scientist Emeritus and Sessional Researcher, Centre for Aquaculture and Environmental Research, Department of Fisheries and Oceans, Canada. He serves on the ISRP and ISAB.
- 6. William Pearcy, Ph.D., Professor Emeritus of Oceanography at Oregon State University.
- 7. Dennis Scarnecchia, Ph. D., Professor of Fish and Wildlife Resources at the University of Idaho, an expert in large river fisheries population dynamics, and salmon, trout and char.
- 8. Peter Smouse, Ph.D., Professor of Ecology, Evolution, and Natural Resources at Rutgers University, an expert in biometrics and population theory.
- 9. Chris Wood, Ph.D., Conservation Biology Section Head, Department of Fisheries and Oceans, Canada, an expert in genetics and ecology of Pacific salmon and other marine fish.



Table 1. ISAB member terms and Naiman's potential term

CURRICULUM VITAE

October 2007

- NAME: Robert Joseph Naiman
- **TITLE**: Professor
- ADDRESS: University of Washington College of Ocean and Fishery Sciences Box 355020 Seattle, WA 98195-2100 (206) 685-2025 Fax (206) 685-7471 E-mail: naiman@u.washington.edu

DATE OF BIRTH: July 31, 1947

EDUCATION

B.S.	1969	California State Polytechnic University (Zoology)
M.A.	1971	University of California, Los Angeles (Zoology, Ichthyology)
Ph.D.	1974	Arizona State University (Zoology, Ecosystem Science)

PROFESSIONAL APPOINTMENTS

1988-present	Professor, College of Ocean & Fishery Sciences and College of Forest Resources, University of Washington
1984,1988, 2007	Visiting Scientist, Centre d'Ecologie, Centre National de la Recherche Scientifique, Toulouse, France
2001-2002	Sabbatical Fellow, National Center for Ecological Analysis and Syntheses (NCEAS), University of California, Santa Barbara and The Ecosystem Center, Woods Hole, Massachusetts
1988-1996	Director, Center for Streamside Studies, University of Washington
1995	Visiting Professor, University of the Witwatersrand, South Africa
1993-2000	Faculty Affiliate, Division of Biological Sciences, University of Montana
1985-1988	Director, Center for Water and the Environment, Natural Resources Research Institute, University of Minnesota
	Professor, Department of Fisheries and Wildlife, and Department of Ecology and Behavioral Biology, University of Minnesota
1978-1985	Director, Matamek Research Program, Woods Hole Oceanographic Institution
1983	Visiting Professor, University of Montana
1977-1978	Assistant Curator, Academy of Natural Sciences of Philadelphia
1976-1977	Research Associate, Oregon State University

1974-1976 Postdoctoral Fellow, Fisheries Research Board of Canada, Pacific Biological Station

PROFESSIONAL ACTIVITIES AND AWARDS

National Research Council (Canada) Postdoctoral Fellowship

Arizona State University Fellowships

Beta Beta Biological Honor Society and Sigma Xi

Kaiser Professor - University of Wisconsin (1995)

Associate Editor, Aquatic Conservation: Marine and Freshwater Ecosystems

Associate Editor, Landscape Ecology

Associate Editor, Ecosystems

Associate Editor, Frontiers in Ecology and the Environment

Distinguished Professor of Ecology - Colorado State University (1997)

Aldo Leopold Leadership Program (1999)

Distinguished Faculty Research Award – University of Washington (2000)

H.B.N. Hynes Lecturer, Canadian River Institute, University of New Brunswick (2004)

PROFESSIONAL SOCIETIES

American Institute of Biological Sciences Ecological Society of America

LANGUAGES

English, French

RESEARCH INTERESTS

Biophysical processes associated with lotic and riparian ecosystems, watershed management, and the role of animals in shaping ecosystem processes.

GRANTS AND CONTRACTS

During the past 20+ years I have been the Principal Investigator or Co-Principal Investigator on approximately 60 different projects with a total value greater than \$11.0

M. These projects include basic research on ecological systems and applied questions relating to natural resource viability. In addition, I have managed departmental funds in excess of \$6.0 M. Funding sources include:

Centre National de la Recherche Scientifique (France), Tai-Ping Foundation, UNESCO, Environmental Protection Agency, U.S. Department of State, Legislative Commission on Minnesota Resources, U.S. Fish and Wildlife Service, U.S. Forest Service Minnesota Department of Natural Resources, University of Minnesota, Minnesota Pollution Control Agency, University of Washington, National Science Foundation, Washington Department of Natural Resources, NOAA Sea Grant Program, Woods Hole Oceanographic Institution, Province of Quebec, A.W. Mellon Foundation, Weyerhaeuser Foundation, I.T.T. Rayonier, Simpson Investment Company

CURRENT COMMITTEE AND CONSULTING ACTIVITY

- Coastal Rivers Research Consortium (CRRC)
 - * Chair, Organizing Committee
- DIVERSITAS International (Paris, France)
 - * Chair, Freshwater BIODIVERSITY
 - * Member, Scientific Advisory Committee
 - * Member, U.S. National Committee

UNESCO International Hydrology Programme (Paris, France)

* Chair, IHP/MAB Ecohydrology Programme

Robert W. Woodruff Foundation - J.W. Jones Ecological Research Center

* Scientific Advisor

Global Water System Project (GWSP; Bonn, Germany)

* Member, Executive Committee

* Member, Scientific Advisory Committee

PAST COMMITTEE AND CONSULTING ACTIVITY

National Science Foundation:

- * Water and Watersheds panel
- * Long-term ecological research advisory panel
- * Ecosystem research advisory panel
- * Various NSF site reviews
- * Coordinating committee and chair various NSF sponsored workshops

Environmental Protection Agency:

- * Scientific advisor for surface waters program
- * Coordinating Committee stream ecosystems workshop, groundwater conference
- * Instructor, National Watershed Management Program
- * Watersheds '94 Symposium

Man and the Biosphere Program (UNESCO):

- * Chairman, UNESCO MAB-5 Program, Paris
- * UNESCO MAB-5 Science Advisory Committee, Paris
- * MAB-5 Directorate, U.S. State Department
- * Coordinator, various MAB workshops in France, Austria, and Hungary
- * Chairman, U.S. MAB Temperate Ecosystem Directorate

Centre National de la Recherche Scientifique (France):

- * Chair, Scientific Advisory Committee, Centre d'Ecologie (Toulouse)
- * Co-Chair, World Rivers Conference
- * Co-Chair, Rivers of the Future Conference
- Metropolitan Mosquito Control District (Minneapolis):

* Scientific Advisory Committee

- U.S. Forest Service:
 - * Copper River delta study, Alaska
 - * Riparian Forest Dynamics, Juneau
- Ecological Society of America:
 - * Corporate Award Committee, Chair
 - * Public Affairs Committee
 - * Organization and funding of symposia

Ecotrust

- * Science Advisory Board
- National Academy of Sciences:
 - * Panel member, Global Change
 - * Panel member, Federal R & D (water)
 - * Panel Member, Coastal Eutrophication
 - * Panel Member, Grand Challenges in Environmental Science
- Kruger National Park (South Africa)
 - * Science Advisor Rivers Programme
- American Rivers
 - * Scientific Advisor
- International Council of Scientific Unions (ICSU)
 - * Committee Member, SCOWAR
 - * Chair, SCOWAR
 - * DIVERSITAS Joint Water Project (ESSP)
 - * SCOPE UNEP Geo2005 Yearbook, Mariculture
- Tropical Rivers Alliance
 - * Member, Scientific Advisory Committee

ADMINISTRATIVE EXPERIENCE

1978-1985 Scientific director of the Woods Hole Oceanographic Institution's Matamek Research Program in Quebec. Developed and administered the scientific program, obtained research grants, coordinated efforts between the Province of Quebec, several universities, and the Institution, and managed a multinational and multilingual staff of up to 35 scientists, technicians and students from North America and Europe.

1985-1988 Director of the Center for Water and the Environment at the University of Minnesota. Coordinated and administered a research staff of up to 45 scientists, technicians, and students with an annual budget of about \$2.0 M. Obtained research funds, prepared departmental budgets, interacted with state legislators, governor and agencies on environmental issues, promoted coordination between Center and private industry, taught and advised graduate students and provided scientific leadership. I reported to the Director of the Natural Resources Research Institute who was appointed by the University Chancellor. 1988-1996 Director of the Center for Streamside Studies in Forestry, Fisheries, and Wildlife at the University of Washington. Coordinated and administered staff of up to 40 scientists, technicians, and students with an annual budget of about \$2.0 M; obtained research funds, prepared departmental budgets; interacted with State and Federal agencies on environmental issues; promoted coordination between the Center and private industry; taught and advised graduate students and provide scientific leadership. I reported to the Dean of the College of Forest Resources and the Dean of the College of Ocean and Fishery Sciences. Recently renamed The Water Center, it functions as a major research component of the University of Washington.

1995 – Present Nearly all of my administrative effort has been directed toward chairing national and international committees on fresh water and in establishing international research programs. In the 1990s I co-chaired a US effort on setting a research agenda for fresh water (Naiman et al. 1995, The Freshwater Imperative, Island Press). I also chaired the ICSU Scientific Committee on Water Research (SCOWAR) that identified ecological principles for water resource development (Environmental Management 2002, Vol. 30). In 1995, a period of great political change, I was instrumental in obtaining funding and organizing a decade-long international program on riparian ecology in South Africa's Kruger National Park. In recent years, I have chaired committees reviewing the state of the world's freshwater biodiversity (Dudgeon et al. 2005. Biological Reviews), detailing an international research program on freshwater biodiversity (Naiman et al. 2006), helping organize an international research program (GWSP) on all aspects of fresh water (Vörösmarty et al. 2004), and am currently re-organizing the research directions of UNESCO's Ecohydrology Programme. As ongoing endeavors, I have been assisting the Robert W. Woodruff Foundation in investing over \$100 Million in ecological research in Georgia and chairing a small consortium (CRRC) of industry, government, and academic scientists investigating coastal rivers in western North America. I have also prepared two textbooks for use in my classes at the University of Washington (Naiman and Bilby 1998, Naiman et al. 2005).

BOOKS AND MONOGRAPHS

- Soltz, D.L. and R.J. Naiman. 1978. The natural history of native fishes in the Death Valley system. Nat. Hist. Museum L.A. County, Science Ser. 30:1-76.
- Naiman, R.J. and D.L. Soltz (eds.). 1981. Fishes in North American Deserts. Wiley-Interscience. 552 p.
- Naiman, R.J. (compiler). 1988. Influence of large animals on ecosystem processes. Special Issue of BioScience, Vol. 38; No. 11.
- Naiman, R.J., H. Décamps and F. Fournier. 1989. Role of land/inland water ecotones in landscape management and restoration. MAB Digest 4, UNESCO, Paris.
- Naiman, R.J. and H. Décamps (eds.). 1990. Ecology and Management of Aquatic-Terrestrial Ecotones. UNESCO, Paris and Parthenon Publishing Group, Carnforth, UK.
- Holland, M.M., P.G. Risser and R.J. Naiman (eds). 1991. The Role of Landscape Boundaries in the Management and Restoration of Changing Environments. Chapman and Hall, New York.

- Naiman, R.J. (ed.). 1992. Watershed Management: Balancing Sustainability and Environmental Change. Springer-Verlag, New York.
- Naiman, R.J., J.J. Magnuson, D.M. McKnight, and J. A. Stanford (eds.). 1995. The Freshwater Imperative: A Research Agenda. Island Press, Washington, D.C.
- Stouder, D., P.A. Bisson, and R.J. Naiman (eds.). 1996. Pacific Salmon and Their Ecosystems. Chapman and Hall, New York.
- Naiman, R.J. and R.E. Bilby (eds). 1998. River Ecology and Management: Lessons from the Pacific Coastal Ecoregion. Springer-Verlag, New York.
- Naiman, R.J., J.J. Magnuson, and P.L. Firth. (Guest editors). 1998. Integrating Cultural, Economic, and Environmental Requirements for Fresh Water. Ecological Applications (Invited Feature) 8:569-630.
- Naiman, R.J., H. Décamps, and M.E. McClain. 2005. Riparia: Ecology, Conservation and Management of Streamside Communities. Elsevier/Academic Press, San Diego.
- Naiman, R.J., A-H. Prieur-Richard, A. Arthington, D. Dudgeon, M.O. Gessner, Z. Kawabata, D. Knowler, J. O'Keeffe, C. Lévêque, D. Soto, M. Stiassny, C. Sullivan. 2006. freshwaterBIODIVERSITY: Challenges for freshwater biodiversity research. DIVERSITAS Report No. 5. 48 pages.

PUBLICATIONS

- Naiman, R.J., S.D. Gerking, and T.D. Ratcliff. 1973. Thermal environment of a Death Valley pupfish. Copeia 1973 (2):366-369.
- Naiman, R.J. 1974. Bioenergetics of herbivorous pupfish population (*Cyprinodon*) and its algal food supply in a thermal stream. Ph.D. thesis, Arizona State University. 103 p.
- Naiman, R.J. and E.P. Pister. 1974. Occurrence of the tiger barb, *Barbus tetrazona*, in the Owens Valley, California. California Fish and Game 69:100-101.
- Naiman, R.J. and S.D. Gerking. 1975. Interrelationships of light, chlorophyll, and primary production in a thermal stream. Verh. Internat. Verein. Limnology 19:1659-1664.
- Naiman, R.J. 1975. Food habits of the Amargosa pupfish in a thermal stream. Trans. Am. Fish. Soc. 104(3):536-538.
- Naiman, R.J. 1976. Primary production, standing stock, and export of organic matter in a Mohave Desert thermal stream. Limnol. Oceanogr. 21(1):60-73.
- Naiman, R.J. 1976. Productivity of a herbivorous pupfish population (*Cyprinodon nevadensis*) in a warm desert stream. J. Fish Biol. 9(2):125-137.
- Naiman, R.J., S.D. Gerking, and R.E. Stuart. 1976. Osmoregulation in the Death Valley pupfish, *Cyprinodon milleri* (Pisces: Cyprinodontidae). Copeia (4):807-810.
- Sibert, J.R., T.J. Brown, M. C. Healey, B.A. Kask, and R.J. Naiman. 1977. Detritus based food webs: Exploitation by juvenile chum salmon (*Oncorhynchus keta*). Science 196:649-650.

- Naiman, R.J. and J.R. Sibert. 1977. Annual and diel variations in a small marine bay: Interpretation of monitoring data. J. Exp. Mar. Biol. Ecology 26:27-40.
- Sedell, J.R., R.J. Naiman, K.W. Cummins, G.W. Minshall, and R.L. Vannote. 1978. Transport of particulate organic material in streams as a function of physical processes. Verh. Internat. Verein. Limnol. 20:1366-1375.
- Naiman, R.J. and J.R. Sibert. 1978. Transport of nutrients and carbon from the Nanaimo River to its estuary. Limnol. Oceanogr. 23:1183-1193.
- Naiman, R.J. and J.R. Sedell. 1979. Characterization of particulate organic matter transported by some Cascade Mountain streams. J. Fish. Res. Bd. Canada 36:17-31.
- Naiman, R.J. and J.R. Sibert. 1979. Detritus and juvenile salmon production in the Nanaimo Estuary. III. Importance of detrital carbon to the estuarine ecosystem. J. Fish. Res. Bd. Canada 36:504-520.
- Deacon, J.E. et al. 1979. Fishes of North American Endangered, Threatened, or of Special Concern: 1979. Fisheries 4:29-44.
- Naiman, R.J. 1979. Preliminary food studies of *Cyprinodon macularius* and *Cyprinodon nevadensis*. Southwest. Natur. 24:538-541.
- Naiman, R.J. and J.R. Sedell. 1979. Benthic organic matter as a function of stream order in Oregon. Arch. Hydrobiol. 87:404-422.
- Naiman, R.J. and J.R. Sedell. 1980. Relationships between metabolic parameters and stream order in Oregon. Can. J. Fish. Aquat. Sci. 37:834-847.
- Richey, J.E., J.T. Brock, R.J. Naiman, R.C. Wissmar, and R.F. Stallard. 1980. Organic carbon: Oxidation and transport in the Amazon River. Science 207:1348-1351.
- Sibert, J.R. and R.J. Naiman. 1980. The role of detritus and the nature of estuarine ecosystems, p. 311-323. *In*: K. R. Tenore and B. C. Coull (eds.), Benthic Marine Dynamics. Univ. South Carolina Press.
- Whoriskey, F.G., R.J. Naiman, and P.H. Heinermann. 1981. Steelhead trout (*Salmo gardneri*) on the North Shore of the Gulf of St. Lawrence near Sept Iles, Quebec. Can. J. Fish. Aquat. Sci. 38:245-246.
- Soltz, D.L. and R.J. Naiman. 1981. Fishes in Deserts: Symposium Rationale, p. 1-9. *In*: R.J. Naiman and D.L. Soltz (eds.), Fishes in North American Deserts. Wiley-Interscience.
- Naiman, R.J. 1981. An ecosystem overview: Desert fishes and their habitats, p. 493-531. *In*: R.J. Naiman and D.L. Soltz (eds.), Fishes in North American Deserts. Wiley-Interscience.
- Whoriskey, F.G., R.J. Naiman, and W.L. Montgomery. 1981. Experimental sea ranching of brook trout, *Salvelinus fontinalis* Mitchill. J. Fish Biol. 19:637-651.
- Naiman, R.J. and J.R. Sedell. 1981. Stream ecosystem research in a watershed perspective. Verh. Internat. Verein. Limnol. 21:804-811.
- Naiman, R.J. 1981. Lotic ecosystem dynamics in xeric and mesic regions, p. 177. *In*: H. I. Shuval (ed.), Developments in Arid Zone Ecology and Environmental Quality. Balabon International Science Services (Abstract).

- Naiman, R.J. 1982. Characteristics of sediment and organic carbon export from pristine boreal forest watersheds. Can. J. Fish. Aquat. Sci. 39:1699-1718.
- Naiman, R.J. 1983. The annual pattern and spatial distribution of aquatic oxygen metabolism in boreal forest watersheds. Ecological Monographs 53:73-94.
- McDermid, K. and R.J. Naiman. 1983. Macrophytes: Freshwater forests of lakes and rivers. Am. Biol. Teach. 45:144-150.
- Naiman, R.J. 1983. Periphyton accumulation rates in five boreal forest rivers of Quebec. Le Naturaliste Canadien. 110:1-9.
- Binder, B.J. and R.J. Naiman. 1983. Decomposition of paper birch and speckled alder leaf litter in a seawater environment. Arch. Hydrobiol. 97:163-179.
- Melillo, J.M., R.J. Naiman, J.D. Aber, and K.N. Eshleman. 1983. The influence of substrate quality and stream size on wood decomposition dynamics. Oecologia 58:281-285.
- Naiman, R.J. 1983. The influence of stream size on the food quality of seston. Can. J. Zool. 61:1195-2010.
- Montgomery, W.L., S.D. McCormick, R.J. Naiman, F.G. Whoriskey, and G.A. Black. 1983. Spring migratory synchrony of salmonid, catastomid, and cyprinid fishes in Riviére a la Truite, Quebec. Can. J. Zool. 61:2495-2502.
- Naiman, R.J. 1983. A geomorphic approach for examining the role of periphyton in large watersheds, p. 191-198. *In*: R. G. Wetzel (ed.), Periphyton of Freshwater Ecosystems. Dr. W. Junk Publishers, The Hague.
- Naiman, R.J. and J.M. Melillo. 1984. Nitrogen budget of a subarctic stream altered by beaver (*Castor canadensis*). Oecologia 62:150-155.
- McCormick, S.D. and R.J. Naiman. 1984. Osmoregulation in the brook trout, *Salvelinus fontinalis*--I. Diel, Photoperiod and Growth Related Physiological Changes in Freshwater. Comp. Biochem. Physiol. 79A:7-16.
- McCormick, S.D. and R.J. Naiman. 1984. Osmoregulation in the brook trout, *Salvelinus fontinalis*. II. Effects of size, age, and photoperiod on sea-water survival and ionic regulation. Comp. Biochem. Physiol. 79A:17-28.
- Conners, E.M. and R.J. Naiman. 1984. Particulate allochthonous inputs: Relationships with stream size in an undisturbed watershed. Can. J. Fish. Aquat. Sci. 41:1473-1484.
- Naiman, R.J., D.M. McDowell, and B.S. Farr. 1984. The influence of beaver (*Castor canadensis*) on the production dynamics of aquatic insects. Verh. Internat. Verein. Limnol. 22:1801-1810.
- McCormick, S.D. and R.J. Naiman. 1984. Some determinants of maturation in brook trout, *Salvelinus fontinalis*. Aquaculture 43:269-278.
- Melillo, J.M., R.J. Naiman, J.D. Aber, and A.E. Linkins. 1984. Factors controlling mass loss and nitrogen dynamics of plant litter decaying in northern streams. Bull. Mar. Sci. 35:341-356.
- Caswell, H., R.J. Naiman, and R. Morin. 1984. Evaluating consequences of reproduction in complex salmonid life cycles. Aquaculture 43:123-134.

- Bott, T.L., J.T. Brock, C.S. Dunn, R.J. Naiman, R. Ovink, and R.C. Petersen. 1985. Benthic community metabolism in four stream systems: An interbiome comparison and evaluation of the river continuum concept. Hydrobiologia 123:3-45.
- Francis, M.M., R.J. Naiman, and J.M. Melillo. 1985. Nitrogen fixation in sub-arctic streams influenced by beaver (*Castor canadensis*). Hydrobiologia 121:193-202.
- McCormick, S.D. and R.J. Naiman. 1985. Hypoosmoregulation in an anadromous teleost: Influence of sex and maturation. J. Exp. Zool. 234:193-198.
- Zalewski, M. and R.J. Naiman. 1985. The regulation of riverine fish communities by a continuum of abiotic-biotic factors, p. 3-9. *In*: J. S. Alabaster (ed.), Habitat Modification and Freshwater Fisheries. Butterworths, London.
- McDowell, D.M. and R.J. Naiman. 1986. Structure and function of a benthic invertebrate stream community influenced by beaver (*Castor canadensis*). Oecologia 68:481-489.
- Naiman, R.J., J.M. Melillo, and J.E. Hobbie. 1986. Ecosystem alteration of boreal forest streams by beaver (*Castor canadensis*). Ecology 67:1254-1269.
- Johnston, C.A., and R.J. Naiman. 1987. Boundary dynamics at the aquatic-terrestrial interface: The influence of beaver and geomorphology. Landscape Ecology 1:47-57.
- Naiman, R.J., J.M. Melillo, M.A. Lock, T.E. Ford, and S.R. Reice. 1987. Longitudinal patterns of ecosystem processes and community structure in a subarctic river continuum. Ecology 68:1139-1156.
- Pastor, J., R.J. Naiman, and B. Dewey. 1987. A hypothesis of the effects of moose and beaver foraging on soil nitrogen and carbon dynamics, Isle Royale. Alces 23:107-124.
- Naiman, R.J., S.D. McCormick, R. Morin, and W.L. Montgomery. 1987. Anadromous brook charr (*Salvelinus fontinalis*): Opportunities and constraints for population enhancement. Marine Fisheries Review 49:1-13.
- Ford, T.E. and R.J. Naiman. 1988. Alteration of carbon cycling by beaver: Methane evasion rates from boreal forest streams and rivers. Canadian Journal of Zoology 66:529-533.
- Walsh, G., R. Morin, and R.J. Naiman. 1988. Daily rations, diel feeding activity and distribution of age-0 brook charr, *Salvelinus fontinalis*, in two subarctic streams. Environmental Biology of Fishes 21:195-205.
- Hansen, A.J., F. di Castri, and R.J. Naiman. 1988. Ecotones: What and why? Biology International 17:9-46.
- Naiman, R.J., M.M. Holland, H. Décamps, and P.G. Risser. 1988. A new UNESCO Programme: Research and management of land/inland-water ecotones. Biology International 17:107-136.
- Naiman, R.J., H. Décamps, J. Pastor, and C.A. Johnston. 1988. The potential importance of boundaries to fluvial ecosystems. J. North Am. Benthological Soc. 7:289-306.
- Pringle, C.M., R.J. Naiman, G. Bretschko, J. Karr, M. Oswood, J. Webster, R. Welcomme, and M.J. Winterbourn. 1988. Patch dynamics in lotic systems: The stream as a mosaic. J. North Am. Benthological Soc. 7:503-524.

- Pastor, J., R.J. Naiman, B. Dewey, and P. McInnes. 1988. Moose, microbes, and the boreal forest. BioScience 38:770-777.
- Naiman, R.J., C.A. Johnston, and J.C. Kelley. 1988. Alteration of North American streams by beaver. BioScience 38:753-762.
- Naiman, R.J. 1988. Animal influences on ecosystem dynamics. BioScience 38:750-752.
- Ford, T.E. and R.J. Naiman. 1989. Groundwater-surface water relationships in boreal forest watersheds: Dissolved organic carbon and inorganic nutrient dynamics. Canadian Journal of Fisheries and Aquatic Sciences 46:41-49.
- Décamps, H. and R.J. Naiman. 1989. L'Ecologie des fleuves. La Recherche 20:310-318.
- Broschart, M. R., C.A. Johnston, and R.J. Naiman. 1989. Predicting beaver colony density in boreal landscapes. Journal of Wildlife Management 53:929-934.
- Décamps, H., F. Fournier, R.J. Naiman, and R.C. Petersen, Jr. 1990. An international research effort on land/inland water ecotones in landscape management and restoration 1990-1996. Ambio 19:175-176.
- Décamps, H. and R.J. Naiman. 1990. Towards an ecotone perspective, p. 1-5. *In*: R.J. Naiman and H. Décamps (eds.), Ecology and Management of Aquatic-Terrestrial Ecotones. UNESCO, Paris, and Parthenon Publishing Group, Carnforth, UK.
- Naiman, R.J. and H. Décamps. 1990. Aquatic-terrestrial ecotones: Summary and recommendations, p. 295-301. *In*: R.J. Naiman and H. Décamps (eds.), Ecology and Management of Aquatic-Terrestrial Ecotones. UNESCO, Paris, and Parthenon Publishing Group, Carnforth, UK.
- Johnston, C.A. and R.J. Naiman. 1990. The use of a geographic information system to analyze long-term landscape modification by beaver. Landscape Ecology 4:5-19.
- Johnston, C.A. and R.J. Naiman. 1990. Aquatic patch creation in relation to beaver population trends. Ecology 71:1617-1621.
- Niemi, G.J., P. DeVore, N. Detenbeck, D. Taylor, A. Lima, J. Pastor, J.D. Yount, and R.J. Naiman. 1990. An overview of case studies on recovering of aquatic systems from disturbance. Environmental Management 14:571-587.
- Reice, S.R., R.C. Wissmar, and R.J. Naiman. 1990. Influence of spatial-temporal heterogeneity and background disturbance regime on the recovery of lotic ecosystems. Environmental Management 14:647-659.
- Ford, T. E., S.A. Ford, M.A. Lock, and R.J. Naiman. 1990. Dissolved organic carbon concentrations and fluxes in the Moisie River, Quebec. Freshwater Ecology 24:35-42.
- Johnston, C.A. and R.J. Naiman. 1990. Browse selection by beaver: Effects on riparian forest composition. Canadian Journal of Forest Research 20:1036-1043.
- Naiman, R.J., 1990. Influence of forests on streams, p. 151-153. *In:* 1991 McGraw-Hill Yearbook of Science and Technology, McGraw Hill Book Company, New York.
- Montgomery, W.L., S.D. McCormick, R.J. Naiman, F. G. Whoriskey, and G. Black. 1990. Utilization of marine resources by brook charr (*Salvelinus fontinalis*) in the Moisie River, Quebec. Pol. Arch. Hydrobiol. 37:43-61.

- Morin, R., and R.J. Naiman. 1990. The relation of stream order to fish community dynamics in boreal forest watersheds. Pol. Arch. Hydrobiol. 37:135-150.
- Naiman, R.J., T. Manning, and C.A. Johnson. 1991. Beaver population fluctuations and trophospheric methane emissions in boreal wetlands. Biogeochemistry 12:1-15.
- Naiman, R.J. and H. Décamps. 1991. Landscape boundaries in the management and restoration of changing environments, p. 130-137. *In*: M.M. Holland, P.G. Risser and R.J. Naiman (eds.), The Role of Landscape Boundaries in the Management and Restoration of Changing Environments. J. Chapman and Hall, New York.
- Pinay, G. and R.J. Naiman. 1991. Short-term hydrologic variations and nitrogen dynamics in beaver-created meadows. Archiv fur Hydrobiologie 123:187-205.
- Naiman, R.J., D.G. Lonzarich, T.J. Beechie and S.C. Ralph. 1992. General principles of classification and the assessment of conservation potential in rivers, p. 93-123. *In*: P. Boon, P. Calow, and G. Petts (eds.), River Conservation and Management. Wiley and Sons, Chichester, UK.
- Vervier, P. and R.J. Naiman. 1992. Spatial and temporal fluctuations of dissolved organic carbon in subsurface flow of the Stillaguamish River (Washington, USA). Archiv fur Hydrobiologie 123:401-412.
- Pastor, J. and R.J. Naiman. 1992. Selective foraging and ecosystem processes in boreal forests. American Naturalist 139:690-705.
- Naiman, R.J. 1992. New Perspectives for Watershed Management, p. 3-11. *In*: R.J. Naiman (ed.), Watershed Management: Balancing Sustainability and Environmental Change. Springer-Verlag, New York.
- Naiman, R.J., T.J. Beechie, L.E. Benda, D.R. Berg, P.A. Bisson, L.H. MacDonald, M.D. O'Connor, P.L. Olson, and E.A. Steel. 1992. Fundamental elements of ecologically healthy watersheds in the Pacific Northwest coastal ecoregion, p. 127-188. *In*: R.J. Naiman (ed.), Watershed Management: Balancing Sustainability and Environmental Change. Springer-Verlag, New York.
- Lee, R.G., R. Flamm, M.G. Turner, C. Bledsoe, P. Chandler, C. DeFerrari, R. Gottfried, R.J. Naiman, N. Schumaker, and D. Wear. 1992. Integrating sustainable development and environmental vitality: A landscape ecology approach, p. 499-521. *In*: R.J. Naiman (ed.), Watershed Management: Balancing Sustainability and Environmental Change. Springer-Verlag, New York.
- McInnes, P.F., R.J. Naiman, J. Pastor, and Y. Cohen. 1992. Effects of moose browsing on vegetation and litterfall of the boreal forest, Isle Royale, Michigan, USA. Ecology 73:2059-2075.
- Pastor, J., B. Dewey, R.J. Naiman, P.F. McInnes, and Y. Cohen. 1993. Moose browsing and soil fertility in the boreal forests of Isle Royale National Park. Ecology 74:467-480.
- Johnston, C.A., J. Pastor, and R.J. Naiman. 1993. Effects of beaver and moose on boreal forest landscapes, p. 237-254. *In*: R. Haines-Young, D. R. Green and S. H. Cousins (eds.), Landscape Ecology and Geographic Information Systems. Taylor and Francis, London.

- Naiman, R.J., H. Décamps, and M. Pollock. 1993. The role of riparian corridors in maintaining regional biodiversity. Ecological Applications 3:209-212.
- Pastor, J., J. Bonde, C.A. Johnston, and R.J. Naiman. 1993. A Markovian analysis of the spatially dependent dynamics of beaver ponds, p. 5-28 and 163-168. *In*: R. H. Gardner (ed.), Predicting Spatial Effects in Ecological Systems. Lectures on Mathematics in the Life Sciences. Volume 23. American Mathematical Society. Providence, Rhode Island
- Conquest, L.L., S.C. Ralph, and R.J. Naiman. 1994. Implementation of large-scale stream monitoring efforts: Sampling design and data analysis issues, p.69-90. *In:* S.L. Loeb and A. Spacie (eds.), Biological Monitoring of Aquatic Systems. Lewis Publisher, Ann Arbor, Michigan.
- Naiman, R.J., G. Pinay, C.A. Johnson, and J. Pastor. 1994. Beaver-induced influences on the long-term biogeochemical characteristics of boreal forest drainage networks. Ecology 75:905-921.
- Ralph, S.C., G.C. Poole, L.L. Conquest, and R.J. Naiman. 1994. Stream channel condition and in-stream habitat in logged and unlogged basins of western Washington. Canadian Journal of Fisheries and Aquatic Sciences 51:37-51.
- DeFerrari, C. and R.J. Naiman. 1994. A multi-scale assessment of exotic plants on the Olympic Peninsula, Washington. Journal of Vegetation Science 5:247-258.
- Lee, R.G., R. Flamm, R.R. Gottfried, R.J. Naiman, M. Turner, and D.N. Wear. 1994. A holistic approach to landscape management. Journal of Forestry 92:51.
- Fetherston, K.L., R.J. Naiman and R.E. Bilby. 1995. Large woody debris, physical process, and riparian forest development in montane river networks of the Pacific Northwest. Geomorphology 13:133-144.
- Johnston, C.A., G. Pinay, C. Arens, and R.J. Naiman. 1995. Influence of soil properties on the biogeochemistry of a beaver meadow hydrosequence. Soil Science Society of America Journal. 59:1789-1799
- Magnuson, J.J., Naiman, R.J., Firth, P., McKnight, D.M. and J.A. Stanford. 1995. The freshwater imperative: a research agenda and beyond. Water Resources Update: Universities Council on Water Resources. 98: 9-11
- Naiman, R.J., J.J. Magnuson, D.M. McKnight, J.A. Stanford and J.R. Karr. 1995. Freshwater ecosystems and management: A national initiative. Science 270:584-585.
- Pollock, M.M., R.J. Naiman, H.E. Erickson, C.A. Johnston, J. Pastor, and G. Pinay. 1995.
 Beaver as engineers: Influences on biotic and abiotic characteristics of drainage basins.
 Pages 117-126, *in:* C. G. Jones and J. H. Lawton (eds.), Linking Species and Ecosystems.
 Chapman and Hall, New York.
- Naiman, R.J. 1996. Water, society, and landscape ecology. Landscape Ecology 11:193-196.
- Planty-Tabacchi, A.-M., E. Tabacchi, R.J. Naiman, C. DeFerrari, and H. Dècamps. 1996. Invasibility of species-rich communities in riparian zones. Conservation Biology 10:598-607.

- Stouder, D.A., P.A. Bisson, and R.J. Naiman. 1996. Where are we? Resources at the brink. Pages 1-10, in: D. Stouder, P. A. Bisson and R.J. Naiman (eds.). Pacific Salmon and Their Ecosystems. Chapman and Hall, New York.
- Bisson, P.A., G.H. Reeves, R.E. Bilby, and R.J. Naiman. 1996. Watershed management and Pacific salmon: Desired future conditions. Pages 447-474, *in:* D. Stouder, P. A. Bisson and R.J. Naiman (eds.). Pacific Salmon and Their Ecosystems. Chapman and Hall, New York.
- Naiman, R.J. and E.C. Anderson. 1997. Streams and rivers: their physical and biological variability. Pages 131-148, in: P.K. Schoonmaker, B. von Hagen, and E.C. Wolf (eds.). The Rain Forests of Home: Profile of a North American Bioregion. Island Press, Washington, D.C.
- Naiman, R.J., P.A. Bisson, R.G. Lee, and M.G. Turner. 1997. Approaches to management at the watershed scale. Pages 239-253, in: K. Kohm and J.F. Franklin (editors), Creating A Forestry for the 21st Century: The Science of Ecosystem Management, Island Press, Washington, D.C.
- Naiman R.J. and G.L. Link. 1997. Organic matter dynamics in five sub-arctic streams, Quebec, Canada. Journal of North American Benthological Society 16:33-39.
- Poole, G.C., R.J. Naiman, J. Pastor, and J.A. Stanford. 1997. Uses and limitations of ground penetrating RADAR in two riparian systems. Pages 140-148, *in*: Gibert, J., Mathieu, J. and F. Fournier (eds.), Groundwater/Surface Water Ecotones Biological and Hydrological Interactions and Management Options. Cambridge University Press, Cambridge.
- Naiman, R.J., and H. Décamps. 1997. The ecology of interfaces -- riparian zones. Annual Review of Ecology and Systematics 28:621-658.
- Naiman, R.J. and K.H. Rogers. 1997. Large animals and the maintenance of system-level characteristics in river corridors. BioScience 47:521-529.
- Brosofske, K.D., J. Chen, R.J. Naiman and J.F. Franklin. 1997. Effects of harvesting on microclimate from small streams to uplands in western Washington. Ecological Applications 7:1188-1200.
- Melack, J.M., J. Dozier, C.R. Goldman, D. Greenland, A.M. Milner and R.J. Naiman. 1997. Effects of climate change on inland waters of the Pacific Coastal Mountains and Western Great Basin of North America. Hydrological Processes 11:971-992.
- Palmer, M.A., A.P. Covich, B. Finlay, J. Gibert, K.D. Hyde, R.K. Johnson, T. Kairesalo, P.S. Lake, C.R. Lovell, R.J. Naiman, C. Ricci, R.F. Sabater, and D.L. Strayer. 1997. Biodiversity and ecosystem processes in freshwater sediments. Ambio 26:571-577.
- Pollock, M.M., R.J. Naiman and T.A. Hanley. 1998. Plant species richness in forested and emergent wetlands A test of biodiversity theory. Ecology 79:94-105.
- Scientific Committee on Water Research (SCOWAR). 1998. Water resources research: trends and needs in 1997. Hydrological Sciences 43:19-46.
- Naiman, R.J. and R.E. Bilby. 1998. River ecology and management in the Pacific coastal ecoregion. Pages 1-10, in R.J. Naiman and R.E. Bilby (Editors). River Ecology and Management: Lessons from the Pacific Coastal Ecoregion. Springer-Verlag, New York.

- Naiman, R.J. 1998. Biotic stream classification. Pages 97-119, in R.J. Naiman and R.E. Bilby (Editors). River Ecology and Management: Lessons from the Pacific Coastal Ecoregion. Springer-Verlag, New York.
- Naiman, R.J., K.L. Fetherston, S. McKay, and J. Chen. 1998. Riparian forests. Pages 289-323, in R.J. Naiman and R.E. Bilby (Editors). River Ecology and Management: Lessons from the Pacific Coastal Ecoregion. Springer-Verlag, New York.
- Naiman, R.J., P.A. Bisson, R.G. Lee, and M.G. Turner. 1998. Watershed management. Pages 642-661, in R.J. Naiman and R.E. Bilby (Editors). River Ecology and Management: Lessons from the Pacific Coastal Ecoregion. Springer-Verlag, New York.
- Naiman, R.J., J.J. Magnuson, and P.L. Firth. 1998. Integrating cultural, economic and environmental requirements for fresh water. Ecological Applications 8:569-570.
- Wear D.N., M.G. Turner, and R.J. Naiman. 1998. Land cover along an urban-rural gradient: Implications for water quality. Ecological Applications 8:619-630.
- Belknap, W.C., and R.J. Naiman. 1998. A GIS and TIR procedure to detect and map wall-base channels in western Washington. Journal of Environmental Management 52:147-160.
- Dong, J., J. Chen, K.D. Brosofske, and R.J. Naiman. 1998. Quantifying air temperature gradients across managed small streams in western Washington. Journal of Environmental Management 53:309-321.
- Lock, P.A. and R.J. Naiman. 1998. Effects of stream size on bird community structure in coastal temperate forests of the Pacific Northwest, U.S.A. Journal of Biogeography 25:773-782.
- Elliott, S.R., T.A. Coe, J.M. Helfield, and R.J. Naiman. 1998. Atlantic salmon rivers: geomorphology, ecology and human impacts. Canadian Journal of Fisheries and Aquatic Sciences 55:267-280.
- Wilzbach, M., M.E. Mather, C.L. Folt, A. Moore, R.J. Naiman, A. Youngson, and J. McMenemy. 1998. Proactive responses to human impacts that balance development and Atlantic salmon (*Salmo salar*) conservation: an integrative model. Canadian Journal of Fisheries and Aquatic Sciences 55:288-302.
- Maridet, L., J.-B. Wasson, M. Philippe, C. Andros, and R.J. Naiman. 1998. Riparian and morphological controls in structuring the macroinvertebrate stream community. Archiv für Hydrobiologie 144:61-85.
- Turner, M. G., S. R. Carpenter, E. J. Gustafson, R. J. Naiman, and S. M. Pearson. 1998. Land use. Pages 37-61, In: M. J. Mac, P. A. Opler, P. Doran, and C. Haecker, editors. Status and Trends of Our Nation's Biological Resources. Volume 1. National Biological Service, Washington, D.C.
- Rapport, D.J., C. Gaudet, J.R. Karr, J.S. Baron, C. Bohlen, W. Jackson, B. Jones, R.J. Naiman, B. Norton, and M.M. Pollock. 1998. Evaluating landscape health: Integrating societal goals and bio-physical process. Journal of Environmental Management 53:1-15.
- Chen, J., S. Saunders, T. Crow, R.J. Naiman, K. Brosofske, G. Mroz, B. Brookshire, and J.F. Franklin. 1999. Microclimate in forest ecosystem and landscape ecology. BioScience 49:288-297.

- Steel, E.A., R.J. Naiman, and S.D. West. 1999. Use of woody debris piles by birds and small mammals in a riparian corridor. Northwest Science 73:19-26.
- Naiman, R.J. 1999. A perspective on interdisciplinary science. Ecosystems 2:292-295.
- Gosz, J.R., J. Asher, B. Holder, R. Knight, R. Naiman, G. Raines, P. Stine, and T.B. Wigley. 1999. An ecosystem approach to understanding landscape diversity. Pages 157-194.
- Pinay, G., H. Décamps, and R.J. Naiman. 1999. The spiraling concept and nitrogen cycling in large river floodplain soils. Archiv für Hydrobiologie Supplement 115(3):281-291.
- Décamps, H., G. Pinay, and R.J. Naiman. 1999. Trees along river banks. Pages 25-32, in A. Farina (ed), Perspectives in Ecology, INTECOL, Backhuys Publishers, Leiden.
- Naiman, R. J., S. R. Elliott, J. M. Helfield, and T. O'Keefe. 2000. Biophysical interactions and the structure and dynamics of riverine ecosystems: the importance of biotic feedbacks. Hydrobiologia 410:79-86.
- Rot, B.W., R.J. Naiman and R.E. Bilby. 2000. Stream channel configuration, landform, and riparian forest structure in the Cascade Mountains, Washington. Canadian Journal of Fisheries and Aquatic Sciences 57:699-707.
- Hood, W.G. and R.J. Naiman. 2000. Vulnerability of riparian zones to invasion by exotic vascular plants. Plant Ecology 148:105-114.
- Dale, V.H., S. Brown, R. Haeuber, N.T. Hobbs, N. Huntly, R.J. Naiman, W.E. Riebsame, M.G. Turner, and T. Valone. 2000. Ecological principles and guidelines for managing the use of land. Ecological Applications 10:639-670.
- Innis, S., R.J. Naiman, and S.R. Elliott. 2000. Indicators and assessment methods for measuring the ecological integrity of semi-aquatic terrestrial environments. Hydrobiologica 422/423:111-131.
- Naiman, R.J. and M.G. Turner. 2000. A future perspective on North America's freshwater ecosystems. Ecological Applications 10:958-970.
- Naiman, R.J., R.E. Bilby, and P.A. Bisson. 2000. Riparian ecology and management in the Pacific coastal rain forest. BioScience 50:996-1011.
- Drake, D.C. and R.J. Naiman. 2000. An evaluation of restoration in fishless lakes stocked with exotic trout. Conservation Biology 14:1807-1820.
- Hyatt, T.L. and R.J. Naiman. 2001. The residence time of large woody debris in the Queets River, Washington. Ecological Applications 11:191-202.
- Jackson, R.B., S.R. Carpenter, C.N. Dahm, D.M. McKnight, R.J. Naiman, S.L. Postel, and S.W. Running. 2001. Water in a changing world. Ecological Applications 11:1027-1045.
- Zalewski, M., J.E. Thorpe, and R.J. Naiman. 2001. Fish and riparian ecotones a hypothesis. Ecohydrology and Hydrobiology 1:11-24.
- Dale, V.H., S. Brown, R. A. Haeuber, N. T. Hobbs, N. Huntly, R. J. Naiman, W. E. Riebsame, M. G. Turner, and T. J. Valone. 2001. Ecological guidelines for land use and management.
 Pages 3-33, in V. H. Dale and R. A. Haeuber, editors, Applying Ecological Principles to Land Management. Springer-Verlag, New York.

- Helfield, J.M., and R.J. Naiman. 2001. Effects of salmon-derived nitrogen on riparian forest growth and implications for stream productivity. Ecology 82:2403-2409.
- Naiman, R.J., R.E. Bilby, D.E. Schindler, and J.M. Helfield. 2002. Pacific salmon, nutrients, and the dynamics of freshwater and riparian ecosystems. Ecosystems 5:399-417.
- Naiman, R.J., S.E. Bunn, C. Nilsson, G.E. Petts, G. Pinay, and L.C. Thompson. 2002. Legitimizing fluvial systems as users of water: an overview. Environmental Management 30:455-467.
- Pinay, G., J.C. Clément & R.J. Naiman. 2002. Basic principles and ecological consequences of changing water regimes on nutrient cycling in fluvial systems. Environmental Management 30:481-491.
- Clinton, S.M., R.T. Edwards, and R.J. Naiman. 2002. Subsurface metabolism and dissolved organic carbon dynamics in a floodplain terrace. Journal of the American Water Resources Association 38:619-631.
- Helfield, J.M. and R.J. Naiman. 2002. Salmon and alder as nitrogen sources to riparian forests in a boreal Alaskan watershed. Oecologia 133:573-582.
- Drake, D., R.J. Naiman, and J.M. Helfield. 2002. Reconstructing salmon abundance for rivers: an initial dendrochronological evaluation. Ecology 83:2971-2977.
- Naiman, R.J., E.V. Balian, K.K. Bartz, R.E. Bilby, and J.J. Latterell. 2002. Dead wood dynamics in stream ecosystems. Pages 23-48, in W.F. Laudenslayer Jr., P.J. Shea, B. Valentine, C.P. Weatherspoon, and T.E. Lisle (eds). Proceedings of the Symposium on The Ecology and Management of Dead Wood in Western Forests. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Albany, Calif. General Technical Report GTR-PSW-181.
- Bechtold, J.S., R.T. Edwards, and R.J. Naiman. 2003. Biotic versus hydrologic control over seasonal nitrate leaching in a floodplain forest. Biogeochemistry 63:53-72.
- Pinay, G., T.C. O'Keefe, R.T. Edwards, and R.J. Naiman. 2003. Potential denitrification activity in the landscape of a western Alaska drainage basin. Ecosystems 6:336-343.
- Latterell, J. J., R. J. Naiman, B. R. Fransen, and P. A. Bisson. 2003. Physical constraints on trout (*Oncorhynchus* spp.) distribution in the Cascade Mountains: A comparison of logged and unlogged streams. Canadian Journal of Aquatic and Fisheries Sciences 60:1007-1017.
- Strayer, D.L., R.E. Beighley, L.C. Thompson, S. Brooks, C. Nilsson, G. Pinay, and R.J. Naiman. 2003. Effects of land-cover change on stream ecosystems: roles of empirical models and scaling issues. Ecosystems 6:407-423.
- Naiman, R.J., L. Braack, R. Grant, A. Kemp, J.T. du Toit, and F. Venter. 2003. Interactions between species and ecosystem characteristics. Pages 221-241, in J.T. du Toit, K.H. Rogers, and H. Biggs (editors), The Kruger Experience: Ecology and Management of Savanna Heterogeneity. Island Press, Washington, D.C.
- Hungate, B.A., R.J. Naiman, M. Apps, J.J. Cole, B. Moldan, K. Satake, J.W.B. Stewart, R. Victoria, and P.M. Vitousek. 2003. Disturbance and elemental interactions. Pages 47-62, in J.M. Melillo, C.B. Field, and B. Moldan (editors), Interactions of the Major Biogeochemical Cycles, Island Press, Washington, D.C.

- Helfield, J.M. and R.J. Naiman. 2003. Effects of salmon-derived nitrogen on riparian forest growth and implications for stream productivity: Reply. Ecology 84:3399-3401.
- Décamps, H., G. Pinay, R.J. Naiman, and 11 others. 2004. Riparian zones: where biogeochemistry meets biodiversity in management practice. Polish Journal of Ecology 52:3-18.
- Elliott, S.R., R.J. Naiman, and P.A. Bisson. 2004. The effect of riparian disturbance on physicochemical parameters of seston at summer baseflow. Northwest Science 78:150-157.
- Vörösmarty, C., D. Lettenmaier, C. Lévêque, M. Meybeck, C. Pahl-Wostl, J. Alcamo, W. Cosgrove, H. Grassl, H. Hoff, P. Kabat, F. Lansigan, R. Lawford, and R.J. Naiman. 2004. Humans transforming the global water system. EOS, American Geophysical Union Transactions 85:509-514.
- Meyerson, L.A., J. Baron, J. Melillo, R.J. Naiman, R.I. O'Malley, G. Orians, M.A. Palmer, A.S.P. Pfaff, S.W. Running, and O.E. Sala. 2005. Aggregate measures of ecosystem services: Can we take the pulse of nature? Frontiers in Ecology and the Environment 3:56-59.
- Pettit, N.E., R.J. Naiman, K.H. Rogers, and J.E. Little. 2005. Post flooding distribution and characteristics of large woody debris piles along the semi-arid Sabie River, South Africa. River Research and Applications 21:27-38.
- Naiman, R.J., J.S. Bechtold, D. Drake, J.J. Latterell, T.C. O'Keefe, and E.V. Balian. 2005. Origins, patterns, and importance of heterogeneity in riparian systems. Pages 279-309, in G. Lovett, C.G. Jones, M.G. Turner, and K.C. Weathers (editors), Ecosystem Function in Heterogeneous Landscapes. Springer-Verlag, New York.
- Richardson, J.S., R.J. Naiman, F.J. Swanson, and D.E. Hibbs. 2005. Riparian communities associated with Pacific Northwest headwater streams: assemblages, processes, and uniqueness. Journal of the American Water Resources Association 41:935-947.
- Bartz, K.K. and R.J. Naiman. 2005. Impacts of salmon-borne nutrients on riparian soils and vegetation in southeast Alaska. Ecosystems 8:529-545.
- Drake, D.C., J.V. Smith and R.J. Naiman. 2005. Salmon decay and entropy: Nutrient contributions to riparian forest soils. Northwest Science 79:60-70.
- Pettit, N.E. and R.J. Naiman. 2005. Flood deposited wood debris and its contribution to heterogeneity and regeneration in a semi-arid riparian landscape. Oecologia 145:434-444.
- Balian, E.V. and R.J. Naiman. 2005. Abundance and production of riparian trees in the lowland floodplain of the Queets River, Washington. Ecosystems 8:841-861.
- Naiman, R.J. and J.J. Latterell. 2005. Principles for linking fish habitat to fisheries management and conservation. Journal of Fish Biology 67:166-185.
- Latterell, J.J., J.S. Bechtold, R.J. Naiman, T.C. O'Keefe, and R. Van Pelt. 2006. Dynamic patch mosaics and channel movement in an unconfined river valley of the Olympic Mountains. Freshwater Biology 51:523-544.
- Helfield, J.M. and R.J. Naiman. 2006. Keystone interactions: Salmon and bear in riparian forests of Alaska. Ecosystems 9:167-180.

- Naiman, R.J., K. Furuya, J.M. Melillo, M. Williams, R. Naylor, and D. Soto. 2006. Fish and shellfish farming in marine ecosystems. Pages 66-70, in Geo Year Book 2006, United Nations Environmental Programme, Nairobi, Kenya.
- Van Pelt, R., T.C. O'Keefe, J.J. Latterell, and R.J. Naiman. 2006. Structural development and stand evolution of riparian forests along the Queets River, Washington. Ecological Monographs 76:277-298.
- Dudgeon, D., A.H. Arthington, M.O. Gessner, Z. Kawabata, D. Knowler, C. Lévêque, R.J. Naiman, A-H. Prieur-Richard, D. Soto, M.L.J. Stiassny, and C.A. Sullivan. 2006. Freshwater biodiversity: importance, status, and conservation challenges. Biological Reviews 81:163-182.
- Drake, D.C., R. J. Naiman and J.S. Bechtold. 2006. Cycling and fate of salmon-derived N in riparian forest soils and trees a ¹⁵N tracer study. Ecology 87:1256-1266.
- Arthington, A.H., S.E. Bunn, N.L. Poff, and R.J. Naiman. 2006. The challenge of providing environmental flow rules to sustain river ecosystems. Ecological Applications 16: 1311-1318.
- Bechtold, J.S. and R.J. Naiman. 2006. Soil nitrogen mineralization potential across a riparian toposequence in a semi-arid savanna. Soil Biology and Biogeochemistry 38:1325-1333.
- Naiman, R.J., and J.J. Latterell. 2006. Comment: Restoring Rivers. Issues in Science and Technology, The National Academy of Sciences, 22(3):17-19 (Spring 2006).
- Bernhardt, E., S.E. Bunn, D.D. Hart, B. Malmqvist, T. Muotka, R.J. Naiman, C. Pringle, M. Reuss, and B. van Wilgen. 2006. The challenge of ecologically sustainable water management. Water Policy 8:475-479.
- Pettit, N.E. and R.J. Naiman. 2006. Flood-deposited wood creates regeneration niches for riparian vegetation on a semi-arid South African river. Journal of Vegetation Science 17:615-624.
- Pettit, N. E., J. J. Latterell and R. J. Naiman. 2006. Formation, distribution, and ecological consequences of flood-related wood accumulations in a bedrock confined river in semi-arid South Africa. River Research and Applications 22:1097-1110.
- O'Keefe, T.C. and R.J. Naiman. 2006. The influence of forest structure on riparian litterfall in a Pacific Coastal rainforest. Canadian Journal of Forest Research 36:2852-2863.
- Jacobs, S.M., N.E. Pettit, and R.J. Naiman. 2007. Nitrogen fixing habit of the savanna tree *Philenoptera violacea* (Klotzsch) Schrire (Apple leaf) of different ages on a semi-arid riparian landscape. South African Journal of Botany 73:163-167.
- Wipfli, M.S., J.S. Richardson and R.J. Naiman. 2007. Ecological linkages between headwaters and downstream ecosystems: transport of organic matter, invertebrates, and wood down headwater channels. Journal of the American Water Resources Association 43:72-85.
- Nilsson, C., R. Jansson, B. Malmqvist, and R.J. Naiman. 2007. Restoring riverine landscapes: the challenge of identifying priorities, reference states, and techniques. Ecology and Society 12: 16. [online] URL: http://www.ecologyandsociety.org/vol12/iss1/art16/
- Latterell, J.J. and R.J. Naiman. 2007. Sources and dynamics of large logs in a temperate floodplain river. Ecological Applications 17:1127-1141.

- Drake, D.C. and R.J. Naiman. 2007. Reconstruction of Pacific salmon abundance from riparian tree-ring growth. Ecological Applications 17:1523-1542.
- Pettit, N.E. and R.J. Naiman. 2007. Post-fire response of riparian vegetation and soils and the effect of flood-deposited wood in a semi-arid landscape. Ecology 88:2094-2104.
- Pettit, N.E. and R.J. Naiman. 2007. Fire in the riparian zone: Characteristics and ecological consequences. Ecosystems 10:673-687. DOI: 10.1007/s10021-007-9048-5
- Jacobs, S.M., J.S. Bechtold, H.C. Biggs, M.E. McClain, R.J. Naiman, S.S. Perakis, G. Pinay, M.C. Scholes, N.B. Grimm, and S. Lorentz. 2007. Nutrient vectors and riparian processing: A review with special reference to African semiarid savanna ecosystems. Ecosystems DOI: 10.1007/s10021-007-9092-1

IN PRESS

- Tockner, K., S. Bunn, G.P. Quinn, R.J. Naiman, J.A. Stanford, and C. Gordon. 2008. Flood plains: critically threatened ecosystems. Pages XXX, in N.V.C. Polunin (Editor), Aquatic Ecosystems: Trends and Global Prospects. Cambridge University Press, Cambridge, UK.
- Drake, D, B. Finney, I. Gregory-Eaves, and R.J. Naiman. 2007. Long-term perspectives on salmon abundance: Evidence from lake sediments and tree rings. Accepted pending revision.
- Jacobs, S.M. and R.J. Naiman. 2007. Large African herbivores decrease herbaceous plant biomass while increasing plant species richness. Journal of Arid Environments. Accepted pending revision.
- Venter, F.J., R.J. Naiman, H.C. Biggs, and D. Pienaar. 2007. The evolution of conservation management philosophy: Experiences from Kruger National Park related to science, environmental change and social adjustments. Ecosystems. Accepted pending revision.
- Alcamo, J., C. Vörösmarty, R. J. Naiman, D. Lettenmaier, and C. Pahl-Wostl. 2007. A grand challenge for freshwater research: Understanding the global water system. Environmental Research Letters.
- McClain, M.E. and R. J. Naiman. 2007. Andean influences on the biogeochemistry and ecology of the Amazon River. BioScience. (Accepted pending revision)

SUBMITTED

- Pinay, G., T.C. O'Keefe, R. Edwards, and R.J. Naiman. 2007. Potential denitrification in hyporheic zones of a salmon river in Alaska. Freshwater Biology
- Naiman, R.J., J.M. Helfield, K.K. Bartz, D.C. Drake, and J.M. Honea. 2007. Pacific salmon, marine-derived nutrients and the dynamics of aquatic ecosystems. American Fisheries Society Symposium.
- Naiman, R.J., J.J. Latterell, N.E. Pettit, and J.D. Olden. 2007. Flow variability and the vitality of river systems. Comptes Rendus Geosciences

- Décamps, H., R.J. Naiman, and M.C. McClain. 2008. Riparian systems as zones of pervasive anthropogenic stress. Pages XXX in, D. Arizpe, A. Mendes and J. Rabaça (editors), Sustainable riparian zones: a management guide. [Publisher]
- Décamps, H., R.J. Naiman, and M.C. McClain. 2009. Riparian zones. Pages XXX, in G. Likens (Editor in Chief), Encyclopedia of Inland Waters. Elsevier, New York.

UNPUBLISHED MANUSCRIPTS

- Latterell, J.J. and R.J. Naiman. 2008. Termites facilitate conifer regeneration on remnant logjams in riparian forests.
- Poff, N.L. and 17 Other Authors. 2007. The ecological limits of hydrologic alteration: A framework for developing regional environmental flow standards. Freshwater Biology
- Fisher, N.T., S.M. Jacobs, M. Scholes, and R.J. Naiman. 2007. Potential for denitrification and N₂O emissions along a savanna toposequence in semi-arid southern Africa.
- Moore, R.D., F.J. Swanson, R.J. Naiman and J.S. Richardson. 2005. Introduction to a special issue on small stream channels and their riparian zones in forested catchments of the Pacific Northwest. Journal of the American Water Resources Association
- Drake, D.C., P.R. Sheppard, and R.J. Naiman. 2005. Is salmon abundance reflected in tree-ring δ^{15} N? Two objective tests. Oecologia
- Bechtold, J.S., R.T. Edwards, and R.J. Naiman. 2004. Soil texture control of nitrogen accumulation and loss from a floodplain forest. Geoderma.
- Latterell, J.J., R. J. Naiman, and P. Bentzen. 2003. Coastal cutthroat trout genetic population structure and diversity in logged and unlogged streams of the Cascade Mountains. Transactions of the American Fisheries Society.
- Glauber, A. J., and R. J. Naiman. 2003. Landslide effects on litterfall to Amazonian montane riparian forests and headwater streams. Journal of Tropical Ecology.
- Balian, E.V. and R.J. Naiman. 2002. Comparison of measurement methods for estimating productivity of dominant trees in a lowland floodplain. Canadian Journal of Forest Research
- Palmer, MA, NL Poff, RJ Naiman, LJ Gross, C Nilsson, and L Benda. 2002. Ecological forecasting: hurdles and hopes for threatened landscapes. Proceedings of the National Academy of Sciences
- Naiman, R.J. and K.L. Fetherston. 2000. The role of floods in the establishment of riparian forests. Canadian Journal Fisheries and Aquatic Sciences
- Décamps, H., R.J. Naiman, and J.C. Lefeuvre. 1999. Landscape ecology and regional development, p.000-000. *In:* M. Hadley (ed.), Integrating Conservation, Development, and Research. UNESCO, Paris, France.
- Rot, B.W., and R.J. Naiman. 1998. Windthrow in managed riparian buffers of the Olympic Peninsula, Washington. Northwest Science.

- Morrill, D.C., M.L. McHenry, R.J. Naiman, and E. Currence. 1996. Spawning gravel quality, salmonid survival and characteristics of intensively managed watersheds, Olympic Peninsula, Washington.
- Naiman R.J., J.R. Sampson and M. Bryant. 1995. The geomorphic controls and habitat value of wetlands created by beaver (*Castor canadensis*) in Southeast Alaska.
- Pollock, M.M. and R.J. Naiman. 1995. A review of biodiversity theories and their applicability to the management of ecosystems. Annual Review of Ecology and Systematics.
- Pollock, M.M. and R.J. Naiman. 1995. Non-equilibrium dynamics and the co-existence of species in riparian corridors. The American Naturalist.

BOOK REVIEWS AND MISCELLANEOUS

- Stream Ecology: Application and Testing of General Ecological Theory. 1984. J.R. Barnes and G.W. Minshall (ed.), Plenum Press. The Quarterly Review of Biology 54:493. 1985.
- Introduction to Lewis H. Morgan's, The American Beaver and His Works (1868). Reprinted by Dover Publications, New York. 1986.
- Naiman, R.J. and J.J. Magnuson. 1992. The Freshwater Imperative: An invitation to participate. Bulletin of the North American Benthological Society 9:272-273. (also appeared in other professional bulletins).
- Naiman, R.J. and J.P. Collins. 1998. Resolution of respect: Shelby D. Gerking, 1918-1998. Bulletin of the Ecological Society of America 79:188.
- Naiman, R.J., S.E. Bunn, M.E. McClain, C.J. Vörösmarty, and M. Zalewski. 2006. The science of flow-ecology relationships: Clarifying key terms and concepts. 'White Paper' prepared for the ESSP Open Science Conference, November 2006, Beijing, China.

TECHNICAL REPORTS

- Naiman, R.J. (ed.). Matamek Annual Report for 1979. Woods Hole Oceanographic Institution Technical Report WHOI-80-31. 270 p.
- Naiman, R.J. (ed.). The Matamek Research Program: Annual Report for 1980.Woods Hole Oceanographic Institution Technical Report WHOI-81-49. 213 p.
- Montgomery, W.L. and R.J. Naiman. 1981. Implications of changes in Atlantic salmon populations from the Matamek River, Quebec. Internat. Coun. Explor. Sea. ICES C.M./9 p.
- Whoriskey, F.G. and R.J. Naiman. 1982. Effects of commercial fishing on adult Atlantic salmon (*Salmo salar*) in a Quebec River. Woods Hole Oceanographic Institution Technical Report WHOI-82-2. 17 p.
- Naiman, R.J. (ed.). The Matamek Research Program: Annual Report for 1981. Woods Hole Oceanographic Institution Technical Report WHOI-82-29. 234 p.
- Naiman, R.J. (ed.). The Matamek Research Program: Annual Report for 1982. Woods Hole Oceanographic Institution Technical Report WHOI-83-37. 176 p.

- Naiman, R.J. (ed.). The Matamek Research Program: Annual Report for 1983. Woods Hole Oceanographic Institution Technical Report WHOI-84-29. 150 p.
- Naiman, R.J., R. Morin, H. Caswell, W.L. Montgomery, E. Klopfer, and T. Kana. The Atlantic salmon (Salmo salar) population of the Matamek River, Quebec: 1967-1984 data report. Woods Hole Oceanographic Institution Technical Report WHOI-86-21. 119 p.
- Naiman, R.J. 1987. The role of ecotones in landscape management. UNESCO Man and the Biosphere Programme, Paris, France.
- Niemi, G., R.J. Naiman, and J. Pastor. 1988. Factors controlling the recovery of aquatic systems from disturbance, Final report. Environmental Protection Agency. 63 p.
- Naiman, R.J. and K. Raedeke. 1988. Opportunities for university-industry cooperation. NASCII Proceedings, Corvallis, Oregon.
- Naiman, R.J. and D. Berg. 1989. An evaluation of the effectiveness of the National Wild and Scenic Rivers Act in protecting the environmental quality of Rivers. Report to Senator Brock Adams, Washington, D.C.
- Steel, E.A., K.J. Raedeke, and R.J. Naiman. 1990. Forestry and fishery interactions: Case study of a landslide within the Deer Creek watershed. National Fish and Wildlife Foundation, Washington D.C.
- Ralph, S.C., T. Cardoso, G.C. Poole, L.L. Conquest, and R.J. Naiman. 1991. Status and trends of instream habitat in forested lands of Washington: The Timber-Fish-Wildlife Ambient Monitoring Project. 1989-1991. Biennial Progress Report to the Washington Department of Natural Resources.
- Alaback, P., R.J. Naiman, and J. Pastor. 1991. Plant ecology, p. 34-39. In: M. D. Bryant (ed.), The Copper River Delta Pulse Study: An Interdisciplinary Survey of the Aquatic Habitats. U.S. Forest Service, Pacific Northwest Research Station, Portland, Oregon. General Technical Report PNW-GTR-282.
- Naiman, R.J. 1992. Utiliser les connaisances ecologiques. In: Quel Fleuves pour demain?: Synth_se des D_bats. Minist_re de l'environnement, Paris, France.
- Wear, D.N. and R.J. Naiman. 1992. Implementing sustainability: U.S. MAB's comparative advantage. Report to the United States Man and the Biosphere Program, Department of State, Washington, D.C.
- Covich, A. and 21 working group members. 1992. Reports of the MABS FWI (Freshwater Imperative) Working Group. Bulletin of the North American Benthological Society 9:266-271.
- Likens, G.E., and 7 co-authors. 1992. Integrated regional models: Analysis of interactions between humans and their environment. Final Report to the National Science Foundation on a workshop held at the Institute of Ecosystem Studies, Millbrook, New York (4-8 October 1992).
- Naiman, R.J. and K.L. Fetherston. 1993. Restoration of watersheds and naturally spawning salmon populations in the Pacific Northwest. Testimony to the U.S. House of Representatives Subcommittee on Environment and Natural Resources, Committee on Merchant Marine and Fisheries, March 9, 1993.

- Naiman, R.J. and J.J. Magnuson. 1993. The Freshwater Imperative: A Research Agenda. Interim Report to the Committee on Earth and Environmental Sciences, Washington, D.C.
- Naiman, R.J. 1993. Integrated watershed management: Science or myth? p. 5-20. In: P.W. Adams and W.A. Atkinson (eds.), Watershed Resources: Balancing Environmental, Social, Political, and Economic Factors in Large Basins. Conference Proceedings, Oregon State University, Corvallis.
- Naiman, R.J. 1994. Integrated watershed management: Science or myth? p.11-20. In: Jeff Woled, (ed.), Overcoming Obstacles. Proceedings of the Fourth Annual Biennial Watershed Management Conference, University of California, Davis.
- Naiman, R.J. and G.L. Link. 1994. Proceedings of the International Workshop on The Ecology and Management of Aquatic-Terrestrial Ecotones. University of Washington, Seattle.
- Melack, J. M., J. Dozier, C. R. Goldman, D. Greenland, A. M. Milner and R. J. Naiman. 1994. Region 6. - Pacific Coast Mountains. Symposium Report: Regional Assessment of Freshwater Ecosystems and Climate Change in North America. Leesburg, Virginia.
- Chen, J. and R.J. Naiman. 1996. Quantifying Temperature Gradients Across Managed Small Streams in Western Washington. Final Report to the USDA Forest Service Pacific Northwest Forest Experimental Station PNW-94-0520.
- Rogers, K.H. and R.J. Naiman. 1997. The Ecology and Management of Riparian Corridors in Southern Africa. Final Report to the National Science Foundation (USA) and the South African Foundation for Research and Development.
- Glauber, A.J., and R.J. Naiman. 2000. Efectos de los deslizamientos desde las entradas aloctonas hasta las cabeceras de las quebradas amazonicas. Research Summary sunbitted to INRENA (Instituto los Recursos Naturales) Lima, Peru.
- Alcamo, J., H. Grassl, H. Hoff, P. Kabat, F. Lansigan, R. Lawford, D. Lettenmaier, C. Lévêque, M. Meybeck, R. Naiman, C. Pahl-Wostl, and C. Vörösmarty. 2005. The Global Water System Project: Science Framework and Implementation Activities. ESSP Report No. 3. Earth System Science Partnership, Stockholm, Sweden.
- Stolnack, S.A., R.J. Naiman and S.A. Harrington. 2005. Elwha Research Planning Workshop, February 14-15, 2005: Summary Report. School of Aquatic & Fishery Sciences and UW Earth Initiative, University of Washington, Seattle. 93 pages.
- Stolnack, S.A., and R.J. Naiman. 2005. Summary of research and education activities in the Elwha River watershed and adjacent coastal zone. School of Aquatic & Fishery Sciences and UW Earth Initiative, University of Washington, Seattle. 54 pages.
- Naiman, R.J. 2006. Developing a global perspective on fresh water. The Watershed Review 4 (2): 1-4. (The Water Center, University of Washington).

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