



Nuclear Regulatory Commission  
Exhibit # - SNC000012-00-BD01  
Docket # - 05200011  
Identified: 03/16/2009

Admitted: 03/16/2009  
Rejected:

Withdrawn:  
Stricken:

## **Exhibit SNC 000012**

# **Dr. Charles C. Coutant**

## **Curriculum Vitae**

## RESUME

**CHARLES C. COUTANT**

December 2008

Present Position

Oak Ridge National Laboratory, retired. Private consultant. (October 1, 2005-present)

Born

Jamestown, New York, August 2, 1938

Education

Ph. D.	Lehigh University, Bethlehem, Pennsylvania	Biology 1965
M. S.	Lehigh University, Bethlehem, Pennsylvania	Biology 1962
B. A.	Lehigh University, Bethlehem, Pennsylvania	Biology 1960

Previous Positions

Distinguished Research Ecologist, Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831-6036 (2003-2005)

Senior Research Ecologist, Environmental Sciences Division, Oak Ridge National Laboratory, (1982-1985; 1986-1988; 1992-2003)

Manager, ORNL Exploratory Studies Program, Central Management, and Senior Research Ecologist, Oak Ridge National Laboratory (1989-1992)

Manager, DOE Global Carbon Cycle Program, and Senior Research Ecologist, Environmental Sciences Division, Oak Ridge National Laboratory (1985-1986)

Team Leader, Multi-Media Modeling Project and Senior Research Ecologist, Environmental Sciences Division, Oak Ridge National Laboratory (1979-1982)

Manager, Thermal Effects Program, and Research Ecologist, Environmental Sciences Division, Oak Ridge National Laboratory (1970-1979)

Research Scientist, Biology Department (later Ecosystems Department), Battelle-Pacific Northwest Laboratories, Richland, Washington 99352 (1965-1970)

U. S. Public Health Service Predoctoral Fellow, Lehigh University, Bethlehem, Pennsylvania, 18015 (1963-1965)

Professional Societies

American Association for the Advancement of Science (Fellow)  
 American Institute of Fishery Research Biologists (Fellow)  
 American Fisheries Society (numerous offices, including President)

American Society for Limnology and Oceanography  
 American Society for Testing and Materials (lapsed)  
 Ecological Society of America  
 Sigma Xi  
 Water Pollution Control Federation (lapsed)

Professional and Academic Honors

2002 Distinguished Scientist of the Year, UT-Battelle (manager of ORNL)  
 2001 Distinguished Publication Award, American Society for Information Science (E. TN Chapter)  
 1999 Scientific Achievement Award, Southern Division, American Fisheries Society  
 1997 Distinguished Service Award, American Fisheries Society  
 1996-97 President, American Fisheries Society  
 1993-1996 Progression from Second Vice Pres., First Vice Pres., Pres. Elect, American Fisheries Society  
 1993 Elected as Second Vice President, American Fisheries Society  
 1991-1994 Coeditor, *Transactions of the American Fisheries Society*  
 1990-1991 President, Oak Ridge Chapter, Sigma Xi  
 1987-1989 President, Water Quality Section, American Fisheries Society  
 1987 Distinguished Publication Award, American Society for Information Science  
 1986-1988 Editorial Board, *Transactions of the American Fisheries Society*  
 1986-1987 President, Southern Division, American Fisheries Society  
 1986 President, Tennessee Chapter, American Fisheries Society  
 1986 Outstanding Publication Award, Martin Marietta Energy Systems, Inc.  
 1985 Present-Elect, Southern Division, American Fisheries Society  
 1984 Achievement Award for Excellence in Fisheries, Tennessee Chapter American Fisheries Society  
 1983 Fellow, American Association for the Advancement of Science  
 1980 Southeast Regional Lecturer, Sigma Xi  
 1978-1979 Editorial Board, *Environmental Science and Technology*  
 1978 Fellow, American Institute for Fishery Research Biologists  
 1975-1982 Editor, Underwater Telemetry Newsletter  
 1968 Best Award, Battelle-Northwest, Richland, Washington (Power Plant Siting Study)  
 1968 Director's Award, Battelle-Northwest (Power Plant Siting Study)  
 1963 U.S. Public Health Service Predoctoral Fellowship in Water Pollution Control  
 1963 Darbaker Prize, Pennsylvania Academy of Science (Excellent Microbiology Paper)

Professional Experience

Water Quality

Research and analysis on interactions between water quality and the biological integrity of water, including pollution monitoring and field studies for industry through Lehigh University (graduate assistant) and in private consulting (1960-1965) and annual literature reviews on thermal effects of Water Pollution Control Federation (1967-1978).

Member of National Academy of Sciences Committee on Water Quality, Panel on Freshwater Aquatic Life and Wildlife, and coauthor of the "Blue Book" on water quality, Water Quality Criteria 1972 (National Academy of Sciences/National Academy of Engineering 1973).

American Society for Testing and Materials (ASTM) Task Group Chairman for developing standard practice for evaluating transport/fate models for chemicals in the environment (1981-1984).

### Aquatic Ecology and Fisheries

Ph.D. dissertation research on effects of dam discharges on stream ecology; Masters and Postdoctoral research on aquatic macroinvertebrate community responses to pollutants.

Research and analysis on aquatic resources of the middle Columbia River (1965-1970), particularly their responses to thermal effluents. Member, Independent Scientific Advisory Board (previously called the Scientific Review Group and Independent Scientific Group) overseeing the Columbia River Fish and Wildlife Program for Bonneville Power Administration, Northwest Power Planning Council, National Marine Fisheries Service and Columbia River Tribes (1989-2005). Member, Independent Scientific Review Panel for the Northwest Power and Conservation Council (formerly called the Northwest Power Planning Council) for evaluating proposals for the BPA-funded Columbia River Basin Fish and Wildlife Program (1997-2005).

Research and analysis on thermal, entrainment, and impingement effects of thermal power station cooling systems on aquatic organisms, principally fishes.

Thermal ecology of the striped bass (*Morone saxatilis*) and Chinook salmon (*Oncorhynchus tshawytscha*).

Thermal niche partitioning of lakes and estuaries.

Management of power station thermal discharges for environmental benefits.

Introduction of the concept of turbulent attraction flow (simulation of stream turbulence) for guiding migrating fish.

### Environmental Impact Assessment

Environmental impact assessments (NEPA EISs) and hearing testimony on impacts of nuclear and fossil-fuel power stations on water quality and aquatic ecology and fisheries for Bonneville Power Administration, Atomic Energy Commission, Nuclear Regulatory Commission, and Department of Energy (Nuclear Power Plant Siting in the Pacific Northwest, Palisades Nuclear Plant, Shoreham Nuclear Plant, Indian Point Nuclear Plant, Kyger Creek Power Plant). Involved aquatic impacts of construction (e.g., dredging) and operation (e.g., thermal, entrainment, impingement, chlorination).

Environmental impact assessments (NEPA EISs) for the Federal Energy Regulatory Commission on two hydroelectric dams in Alaska (Susitna Project), hydropower development in the upper Ohio River basin (cumulative impacts of 19 projects), nine hydropower projects in the Skagit River basin (Washington),

and existing hydropower projects on the Mokelumne and Tuolumne rivers, California. Mentored ORNL staff for other FERC EIS projects.

### Project Management

Technical direction and budgetary management for power station cooling systems research and multimedia (air, land, water) modeling projects, each with funding in the \$0.5-1 million per year range (1970s dollars), including supervision of up to 20 staff.

Development of a project evaluation process for the Bonneville Power Administration's Columbia River Fish and Wildlife Program.

Management (from ORNL) of the Department of Energy's \$4 million/year national research program on environmental determinants of carbon dioxide in the atmosphere as related to CO<sub>2</sub>-induced global climate change.

Management of Oak Ridge National Laboratory's \$8-12 million per year Exploratory Studies Program to support innovative new research ideas.

### Advisory Capacity

Research coordination projects, including book preparation, for United Nations Educational, Scientific and Cultural Organization (UNESCO) and International Atomic Energy Agency (IAEA).

Research consultation with governmental agencies: Sweden, Federal Republic of Germany, United Nations Food and Agriculture Organization (FAO), Province of Ontario (Canada), and numerous review boards.

National Advisory Council for Electric Power Research Institute (EPRI).

Regulatory guideline preparation and review for implementation of Section 316(a) of the Clean Water Act for the Environmental Protection Agency (EPA).

Member or chair of several technical advisory committees for resolution of specific energy-environment conflicts.

Program reviewer for USGS Biological Resources Division, USEPA Western Ecology Laboratory (chair), South Carolina Water Department of Natural Resources, NOAA Fisheries' Northwest Fisheries Science Center

Member, Scientific Review Group for Bonneville Power Administration's Columbia River Fish and Wildlife Program.

Member, Independent Scientific Advisory Board for Northwest Power and Conservation Council, National Marine Fisheries Service, and Columbia River Tribes

Member, Independent Scientific Review Panel for Northwest Power and Conservation Council for scientific review of funding proposals to Bonneville Power Administration Fish and Wildlife Program.

Advisor to Environment Canada on thermal effects on aquatic life.

### Industrial Technical Assistance

Environmental consulting and testimony for power station environmental impact assessments, including thermal effects studies (Virginia Power Company, Commonwealth Edison Company, Electricity Corporation of New Zealand, Georgia Power Company, Carolina Power & Light Co., Public Service Electric and Gas Co., Pacific Gas and Electric Company, Dynegy, Dominion Power, Vermont Yankee, Southern Nuclear Company), hydropower development (Beak Associates, Puget Power), and water diversions (Sacramento County, California; City of Newport News, Virginia). Author of thermal effects 316(a) Demonstration for Blue Ridge Paper Products. Technical advisor to a stakeholder group evaluating revision of Colorado temperature standards.

### Publications

- Coutant, C. C. 1962. The effect of a heated water effluent upon the macro-invertebrate riffle fauna of the Delaware River . Proceedings of the Pennsylvania Academy of Science 36: 58-71.
- Coutant, C. C. 1963. Steam plankton above and below Green Lane Reservoir. Proceedings of the Pennsylvania Academy of Science 37 :122-126.
- Coutant, C. C. 1964. Insecticide Sevin: Effect of aerial spraying on drift of stream insects. Science 146:420-421.
- Coutant, C. C. 1966. Bacteria in an impounding reservoir. Journal of the American Water Works Association 58:1275- 1277.
- Coutant, C. C. 1966. Positive phototaxis in first instar caddis larvae. pp. 122-123. IN Pacific Northwest Laboratory Annual Report for 1965. BNWL-280. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1967. Biological considerations in water management. pp. 75-84, IN The Use of Simulation in Water Research. Water Resources Research Institute, Oregon State University, Corvallis, Oregon.
- Coutant, C. C. 1967. Upstream dispersion of adult caddis flies, pp. 186-187. IN Pacific Northwest Laboratory Annual Report for 1966. BNWL-480, Vol. 1. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1967. Retention of radionuclides in Columbia River bottom organisms. pp. 170-171. IN Pacific Northwest Laboratory Annual Report for 1966. BNWL-480, Vol. 1. Battelle-Northwest Laboratories, Richland, Washington.

- Coutant, C. C., D. G. Watson, C. E. Cushing, and W. L. Templeton. 1967. Observations on the life history of the limpet snail *Fisherola nutalli* Haldeman. pp. 190-191. IN Pacific Northwest Laboratory Annual Report for 1966. BNWL-480, Vol. 1. Battelle-Northwest Laboratories, Richland, Washington.
- Cushing, C. E., D. G. Watson, R. B. Hall, and C. C. Coutant. 1967. Environmental effects of extended reactor shutdown fish. pp. 71 -75. IN The Environmental Effects of an Extended Hanford Plant Shutdown, BNWL-CC-1056. Battelle-Northwest Laboratories, Richland, Washington.
- Harty, H., R. F. Corlett, C. C. Coutant, R. E. Brown, J. F. Fletcher, H. E. Hawthorn, R. T. Jaske, C. L. Simpson, W. L. Templeton, W. A. Watts, M. A. Wolf, J. B. Burnham, J. G. Rake, and G. L. Wilfert. 1967. Final report on nuclear power siting in the Pacific Northwest to Bonneville Power Administration, Portland, Oregon. Battelle-Northwest Laboratories, Richland, Washington. 545 pp.
- Watson, D. G., C. E. Cushing, and C. C. Coutant. 1967. Environmental effects of extended reactor shutdown - plankton and invertebrates. pp. 67-70. IN The Environmental Effects of an Extended Hanford Plant Shutdown. BNWL-CC-1056. Battelle-Northwest Laboratories, Richland, Washington.
- Watson, D. G., C. E. Cushing, C. C. Coutant, and W. L. Templeton. 1967. Radionuclides in Columbia River organisms. pp. 164-169. IN Pacific Northwest Laboratory Annual Report for 1966. BNWL-480, Vol. 1. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1968. Responses to elevated temperature of fishes near Prescott, Oregon important to the commercial or sport fisheries of the Columbia River. Report to Portland General Electric Company, Portland, Oregon. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1968. Behavior of adult salmon and steelhead trout migrating past Hanford thermal discharges. p. 9.10. IN Pacific Northwest Laboratory Annual Report for 1967. BNWL-714, Vol. 1, Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1968. Effect of temperature on the development rate of bottom organisms. p. 9.13. IN Pacific Northwest Laboratory Annual Report for 1967. BNWL-714, Vol. 1. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1968. Thermal pollution - biological effects. A review of the literature of 1967. Journal of the Water Pollution Control Federation 40:1047-1052.
- Coutant, C. C., and C. R. Cole. 1968. Modeling of aquatic systems. p. 9.30. IN Pacific Northwest Laboratory Annual Report for 1967. BNWL-714, Vol. 1. Battelle Northwest Laboratories, Richland, Washington.
- Coutant, C. C., and C. D. Becker. 1968. Information on timing and abundance of fishes near Prescott, Oregon, important to the commercial and sport fisheries of the Columbia River. Report for the Portland General Electric Company, Portland, Oregon. Battelle Northwest Laboratories, Richland, Washington.
- Coutant, C. C., and R. G. Genoway. 1968. An exploratory study of interaction of increased temperature and nitrogen supersaturation on mortality of adult salmonids. Contract No. 12-17-0001-1785. U.S. Bureau of Commercial Fisheries. Battelle-Northwest Laboratories, Richland, Washington.

- Coutant, C. C. 1969. Debate on thermal issue continues. *Environmental Science and Technology* 3(5):425-427.
- Coutant, C. C. 1969. Responses of salmonid fishes to acute thermal shock. pp. 2.19-2.26. IN Pacific Northwest Laboratory Annual Report for 1968. BNWL-1050, Vol. 1, Part 2. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C., C. D. Becker, and E. F. Prentice. 1969. Passage of downstream migrants. pp. 2.27-2.30. IN Pacific Northwest Laboratory Annual Report for 1968. BNWL-1050, Vol. 1, Part 2. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1969. Behavior of sonic-tagged chinook salmon and steelhead trout migrating past Hanford thermal discharges. pp. 2.39-2.44. IN Pacific Northwest Laboratory Annual Report for 1968. BNWL-1050, Vol. 1, Part 2. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1969. Temperature, reproduction and behavior. *Chesapeake Science* 10(3-4):261-274.
- Coutant, C. C. 1969. Effects of thermal loading: The Columbia River story. pp. 34-39. IN *Nuclear Power and the Environment: An Enquiry*. Conservation Society of Southern Vermont, Bondville, Vermont.
- Coutant, C. C. 1969. Thermal pollution - biological effects. A review of the literature of 1968. *Journal of the Water Pollution Control Federation* 41(6): 1036-1053.
- Becker, C. D., and C. C. Coutant. 1969. Experimental drifts of juvenile salmonids through effluent discharges at Hanford. Part 1. 1968 Drifts. BNWL-1499. Battelle-Northwest Laboratories, Richland, Washington. 35 pp.
- Cushing, C. E., D. G. Watson, C. C. Coutant, and W. L. Templeton. 1969. Effect of Hanford reactor shutdown on Columbia River biota. pp. 291-299. IN *Symposium on Radioecology*, D. J. Nelson and F. C. Evans (editors). CONF-670503 U.S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia.
- Jaske, R. T., W. L. Templeton, and C. C. Coutant. 1969. Thermal death models. *Industrial Water Engineering* 6(10):24-27.
- Coutant, C. C. 1970. Thermal resistance studies on salmonid fish. pp. 3.19-3.20. IN Pacific Northwest Laboratory Annual Report for 1969. BNWL-1306, Vol. 1, Part 2. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1970. Thermal pollution - biological effects. A review of the literature of 1969. *Journal of the Water Pollution Control Federation* 42(6):1025- 1057.
- Coutant, C. C. 1970. Relative vulnerability of thermally shocked salmonids to predation. p. 3.11. IN Pacific Northwest Laboratory Annual Report for 1969. BNWL-1306, Vol. 1, Part 2. Battelle-Northwest Laboratories, Richland, Washington.



- Coutant, C. C. 1970. Thermal resistance of adult coho and jack chinook salmon and steelhead trout from the Columbia River. BNWL-1508. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1970. Behavior of sonic-tagged Chinook salmon and steelhead trout migrating past Hanford thermal discharges (1967). BNWL-1531. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1970. Exploratory studies of the interactions of gas supersaturation and temperature on mortality of juvenile salmonids. BNWL-1529. Battelle Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1970. Biological aspects of thermal pollution. I. Entrainment and discharge canal effects. *Critical Reviews in Environmental Control* 1(3):341-381.
- Coutant, C. C. 1970. Biological limitations on the use of waste heat in aquaculture. pp. 51-61. IN Conf. Beneficial Uses of Thermal Discharges. New York State Dept. of Environmental Conservation, Albany, New York.
- Auerbach, S. I., D. J. Nelson, S. V. Kaye, D. E. Reichle, and C. C. Coutant. 1970. Ecological considerations in reactor power plant siting. pp. 804-820. IN Environmental Aspects of Nuclear Power Stations. International Atomic Energy Agency Symposium 146/53, Vienna, Austria.
- Coutant, C. C., and C. D. Becker. 1970. Growth of Columbia River limpets, *Fisherola nuttalli* (Haldeman), in normal and reactor-warmed water. BNWL-1537. Battelle Northwest Laboratories, Richland, Washington. 12 pp.
- Coutant, C. C., J. M. Dean, and C. R. Cole. 1970. Modeling thermal death of fishes in fluctuating lethal temperatures. pp. 3.9-3.11. IN Pacific Northwest Laboratory Annual Report for 1969. BNWL-1306, Vol. 1, Part 2. Battelle Northwest Laboratories, Richland, Washington.
- Becker, C. D., C. C. Coutant, and E. F. Prentice. 1970. Plume drifts with juvenile salmon. pp. 3.18-3.19. IN Pacific Northwest Laboratory Annual Report for 1969. BNWL-1306, Vol. 1, Part 2. Battelle-Northwest Laboratories, Richland, Washington.
- Jaske, R. T., W. L. Templeton, and C. C. Coutant. 1970. Methods of evaluating effects of transient conditions in heavily loaded and extensively regulated streams. *Chemical Engineering Progress Symposium Series* 67(107):31-39.
- Nelson, J. L., V. Bruns, C. C. Coutant, and R. Carlile. 1970. Behavior and reactions of copper sulfate in an irrigation canal. *Pesticide Monitoring Journal* 3(3):186.
- Templeton, W. L., and C. C. Coutant. 1970. Studies on the biological effects of thermal discharges from nuclear reactors to the Columbia River at Hanford. pp. 491-614. IN Environmental Aspects of Nuclear Power Stations. International Atomic Energy Agency Symposium 146/53, Vienna, Austria.
- Watson, D. G., C. E. Cushing, C. C. Coutant, and W. L. Templeton. 1970. Radioecological Studies on the Columbia River, Parts I and II. BNWL-1377. Battelle-Northwest Laboratories, Richland, Washington. 46 pp. + appendices.

- Coutant, C. C. 1971. Thermal pollution - biological effects. *Journal of the Water Pollution Control Federation* 43(6):1292-1334.
- Coutant, C. C. 1971. Effects on organisms of entrainment in cooling water: Steps toward predictability. *Nuclear Safety* 12(6):600-607.
- Coutant, C. C. 1971. Great Lakes ecology. pp. 93-123, IN F. A. Butrico, C. J. Touhill, and I. L. Whitman (editors), *Resource Management in the Great Lakes Basin*. Heath Lexington Books, Lexington, Massachusetts.
- Becker, C. D., and C. C. Coutant. 1971. Bionomics of Columbia River limpets in normal and reactor-warmed water. pp. 2.27-2.28. IN *Pacific Northwest Laboratory Annual Report for 1970*. BNWL-1550, Vol. 1, Part 2. Battelle-Northwest Laboratories, Richland, Washington.
- Becker, C. D., C. C. Coutant, and E. F. Prentice. 1971. Experimental drifts of juvenile salmonids through effluent discharges at Hanford. Part II. 1969 drifts and conclusions. BNWL-1527. Battelle-Northwest Laboratories. Richland, Washington. 61 pp.
- Templeton, W. L., and C. C. Coutant. 1971. A Bibliography of Ecological Publications Supported by the U.S. Atomic Energy Commission Related to Columbia River Thermal Effects Studies. BNWL-1543. Battelle-Northwest Laboratories, Richland, Washington.
- Watson, D. G., C. E. Cushing, C. C. Coutant, and W. L. Templeton. 1971. Cycling of radionuclides in Columbia River biota. pp. 144-157. IN D. D. Hemphill (editor), *Trace Substances in Environmental Health - IV*. University of Missouri, Columbia, Missouri.
- Coutant, C. C. 1972. Index for annual reviews 1967-1970. Thermal pollution-biological effects. ORNL/EIS-71/25. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 120 pp.
- Coutant, C. C. 1972. Successful cold branding of nonsalmonids. *Progressive Fish-Culturist* 34(3):131-132.
- Coutant, C. C. 1972. Ecological effects of power plant cooling. *Interdisciplinary Seminar for the Water Resources Development Program*. Report No. 17:23-44. Water Resources Research Center, The University of Tennessee, Knoxville, Tennessee.
- Coutant, C. C. 1972. Effect of thermal shock on vulnerability to predation in juvenile salmonids, I. Single shock temperature. BNWL-1521. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1972. Effect of thermal shock on vulnerability to predation in juvenile salmonids, II. A dose response by rainbow trout to three shock temperatures. BNWL-1519. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C. 1972. Biological aspects of thermal pollution. II. Scientific basis for water temperature standards at power plants. *Critical Reviews in Environmental Control* 3(1):1-24.

- Coutant, C. C. 1972. Some biological considerations for the use of power plant cooling water in aquaculture. pp. 104-113. IN J. L. Gaudet (editor), Report of the 1970 Workshop on Fish Feed Technology and Nutrition. U.S. Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife, Resource Publication 102. Superintendent of Documents, Washington, D.C.
- Coutant, C. C., and J. M. Dean. 1972. Relationships between equilibrium loss and death as responses of juvenile chinook salmon and rainbow trout to acute thermal shock. BNWL-1520. Battelle-Northwest Laboratories, Richland, Washington.
- Coutant, C. C., and C. P. Goodyear. 1972. Thermal effects. Journal of the Water Pollution Control Federation 44(6):1250-1294.
- Coutant, C. C., E. E. Huber, and H. A. Pfuderer. 1972. Thermal effects on aquatic organisms: Annotated bibliography of 1971 literature. ORNL/EIS-72/28. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 155 pp.
- Mattice, J. S., and C. C. Coutant. 1972. AIF topical conference on water quality problems. Nuclear News 15(11):122-126.
- Coutant, C. C. 1973. Effect of thermal shock on vulnerability of juvenile salmonids to predation. Journal of the Fisheries Research Board of Canada 30:965-973.
- Coutant, C. C. 1973. Heat and temperature. pp. 151-171. IN Water Quality Criteria 1972. Environmental Studies Board, National Academy of Sciences/National Academy of Engineering. U.S. Environmental Protection Agency, EPA.R3.73.033. Washington, D.C.
- Becker, C. D., C. C. Coutant, and E. F. Prentice. 1973. Ecological evaluation: Migration of juvenile salmon in relation to heated effluents in the central Columbia River. pp. 528-536. IN D. J. Nelson (editor), Radionuclides in Ecosystems. Third National Symposium on Radioecology. CONF-710501 U.S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia. 1268 pp.
- Bowen, S. H., and C. C. Coutant. 1973. Thermal effect on feeding competition between rainbow trout and bluegill. pp. 1029-1033. IN D. J. Nelson (editor), Radionuclides in Ecosystems. Third National Symposium on Radioecology. CONF-710501 U.S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia.
- Coutant, C. C., and C. D. Becker. 1973. Growth of the Columbia River limpet, *Fisherola nutalli* (Haldeman), in normal and reactor-warmed water. pp. 564-568. IN D. J. Nelson (editor), Radionuclides in Ecosystems. Third National Symposium on Radioecology. CONF-710501 U.S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia. 1268 pp.
- Coutant, C. C., and H. A. Pfuderer. 1973. Thermal effects on aquatic organisms. ORNL/EIS-73/28. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 183 pp.
- Coutant, C. C., and H. A. Pfuderer. 1973. Thermal effects. Journal of the Water Pollution Control Federation 45(6):1331-1369.

- Rochelle, J. M., and C. C. Coutant. 1973. Temperature sensitive ultrasonic fish tag, Q-5099. ORNL/TM-4438. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 26 pp.
- Coutant, C. C. 1974. Physiology for the fishery ecologist. *Ecology* 55(3):686-687.
- Coutant, C. C., H. M. Ducharme, Jr., and J. R. Fisher. 1974. Effects of cold shock on vulnerability of juvenile channel catfish (*Ictalurus punctatus*) and largemouth bass (*Micropterus salmoides*) to predation. *Journal of the Fisheries Research Board of Canada* 31(3):351-354.
- Coutant, C. C., and H. A. Pfuderer. 1974. Thermal effects. *Journal of the Fisheries Research Board of Canada* 46(6):1476-1540.
- Coutant, C. C., H. A. Pfuderer, and B. N. Collier. 1974. Thermal effects on aquatic organisms: An annotated bibliography of 1973 literature. ORNL/EIS-74/28. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 241 pp.
- Goodyear, C. P., C. C. Coutant, and J. R. Trabalka. 1974. Sources of potential biological damage from once-through cooling systems of nuclear power plants. ORNL/TM-4180. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 43 pp.
- Rochelle, J. M., and C. C. Coutant. 1974. Ultrasonic tag for extended temperature monitoring from small fish. *Underwater Telemetry Newsletter* 4(1):1, 4-7.
- Coutant, C. C. 1975. Responses of bass to natural and artificial temperature regimes. pp. 272-285. IN R. H. Stroud and H. Clepper (editors), *Black Bass Biology and Management*. Sport Fishing Institute, Washington, D.C.
- Coutant, C. C. 1975. Temperature and organisms. *Ecology* 56(2):499.
- Coutant, C. C. 1975. Evaluation of entrainment effect. pp. 1-10. IN L. D. Jensen (editor), *2nd Entrainment and Intake Screening Workshop*. The Johns Hopkins University Water Research Project Report No. 15. Baltimore, Maryland.
- Coutant, C. C. 1975. Temperature selection by fish -- A factor in power-plant impact assessments. pp. 575-597. IN *Environmental Effects of Cooling Systems at Nuclear Power Plants*. IAEA-SM-187/11. International Atomic Energy Agency, Vienna, Austria.
- Coutant, C. C. 1975. Effects of power plants (book review). *Science* 189:132-133.
- Coutant, C. C., and R. J. Kedl. 1975. Survival of larval striped bass exposed to fluid-induced and thermal stresses in a simulated condenser tube. ORNL/TM-4695. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 37 pp.
- Coutant, C. C., and S. S. Talmage. 1975. Thermal effects: A review of the literature of 1974 on wastewater and water pollution control. *Journal of the Water Pollution Control Federation* 47(6):1656-1711.

- Coutant, C. C., S. S. Talmage, R. F. Carrier, and B. N. Collier. 1975. Thermal effects on aquatic organisms -- Annotated bibliography of the 1974 literature. ORNL/EIS-75/28. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 168 pp.
- Coutant, C. C. 1976. Physical and ecological consequences of power plant cooling. Working draft paper for UNESCO International Hydrological Programme - Man and the Biosphere Working Group Meeting, Paris. 23-26 March 1976.
- Coutant, C. C. 1976. Syntheses of recommendations. pp. 23-34. IN Sigma Research, Inc. (editor), Workshop on the Impact of Thermal Power Plant Cooling Systems on Aquatic Environments. Special Report 38, Vol. I. Working Group Results. Electric Power Research Institute, Palo Alto, California.
- Coutant, C. C. 1976. Impact of power plants on aquatic systems: A social perspective. pp. 14-20. IN Sigma Research, Inc. (editor), Workshop on the Impact of Thermal Power Plant Cooling Systems on Aquatic Environments. Special Report No. 38, Vol. II. Electric Power Research Institute, Palo Alto, California.
- Coutant, C. C. 1976. Thermal effects on fish ecology. pp. 891-896. IN Encyclopedia of Environmental Engineering, Volume 2. W & G. Baird, Ltd., Northern Ireland.
- Coutant, C. C. 1976. How to put waste heat to work. Environmental Science and Technology 10(9):868-871.
- Bowles, R. R., C. C. Coutant, and J. S. Griffith. 1976. Effects of water velocity on activity of juvenile striped bass. ORNL/TM-5368. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 73 pp.
- Coutant, C. C., and D. K. Cox. 1976. Growth rates of subadult largemouth bass at 24 to 35.5°C. pp. 118-120. IN G. W. Esch and R. W. McFarlane (editors), Thermal Ecology II. CONF-750425 U. S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia.
- Coutant, C. C., and S. S. Talmage. 1976. Thermal effects. Journal of the Water Pollution Control Federation 48(6):1487-1544.
- Coutant, C. C., S. S. Talmage, R. F. Carrier, B. N. Collier, and N. S. Dailey. 1976. Thermal effects on aquatic organisms. Annotated bibliography of the 1975 literature. ORNL/EIS-88, Oak Ridge National Laboratory, Oak Ridge, Tennessee. 323 pp.
- Coutant, C. C., D. K. Cox, and K. W. Moored, Jr. 1976. Further studies of cold shock effects on susceptibility of young channel catfish to predation. pp. 154-158. IN G. W. Esch and R. W. McFarlane (editors), Thermal Ecology II. CONF-750425 U. S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia.
- Cox, D. K., and C. C. Coutant. 1976. Acute cold-shock resistance of gizzard shad. pp. 159-161. IN G. W. Esch and R. W. McFarlane (editors), Thermal Ecology II. CONF-750425 U. S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia.
- Kedl, R. J., and C. C. Coutant. 1976. Survival of juvenile fishes receiving thermal and mechanical stresses in a simulated power plant condenser. pp. 394-400. IN G. W. Esch and R. W. McFarlane (editors),

Thermal Ecology II. CONF-750425 U. S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia.

- Wolters, W. R., and C. C. Coutant. 1976. The effect of cold shock on the vulnerability of young bluegill (*Lepomis macrochirus*) to predation. pp. 162-164. IN G. W. Esch and R. W. McFarlane (editors), Thermal Ecology II. CONF-750425 U. S. Atomic Energy Commission. National Technical Information Service, Springfield, Virginia.
- Coutant, C. C. 1977. Representative species concept. pp. 149-154. IN R. K. Ballentine and L. J. Guawaia (editors), The Integrity of Water. U. S. Environmental Protection Agency, Washington, D.C.
- Coutant, C. C. 1977. Physiological considerations of future thermal additions for aquatic life. pp. 251-266. IN M. Marois (editor), World Conference Towards a Plan of Actions for Mankind, Volume 3, Biological Balance and Thermal Modifications. Pergamon Press, Oxford.
- Coutant, C. C. 1977. Ecological successes of the freshwater black basses (book review). Ecology 58(1):218.
- Coutant, C. C. 1977. The Connecticut River ecological study: The impact of a nuclear power plant (book review). Transactions of the American Fisheries Society 106(1): 115-116.
- Coutant, C. C. 1977. Cold shock to aquatic organisms - Guidance for power plant siting, design, and operation. Nuclear Safety 18(3):329-342.
- Coutant, C. C. 1977. Compilation of temperature preference data. Journal of the Fisheries Research Board of Canada 34:739-745.
- Beall, S. E., C. C. Coutant, M. Olszewski, and J. S. Suffern. 1977. Energy from cooling water. Industrial Water Engineering 14(6):8-14.
- Coutant, C. C., and S. S. Talmage. 1977. Thermal effects. Journal of the Water Pollution Control Federation 49(6):1369-1425.
- Stevens, A. R., R. L. Tyndall, C. C. Coutant, and E. Willaert. 1977. Isolation of the etiologic agent of primary amoebic meningoencephalitis from artificially heated waters. Journal of Applied Environmental Microbiology 34(6): 701-705.
- Coutant, C. C. 1978. Determining the ecological effects of power plant cooling. pp. 173-200. IN Fifth FAO/SIDA Workshop on Aquatic Pollution in Relation to Living Resources. TF-RAS 34 (SWE), Suppl. 1. Food and Agricultural Organization of the United Nations, Rome, Italy.
- Coutant, C. C. 1978. A working hypothesis to explain mortalities of striped bass, *Morone saxatilis*, in Cherokee Reservoir. ORNL/TM-6534. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 36 pp.
- Coutant, C. C., C. S. Wasserman, M. S. Chung, D. B. Rubin, and M. Manning. 1978. Chemistry and biological hazard of a coal ash seepage stream. Journal of the Water Pollution Control Federation 50(4):747-753.

- Olszewski, M., J. S. Suffern, C. C. Coutant, and D. K. Cox. 1979. An overview of waste heat utilization research at the Oak Ridge National Laboratory. pp. 2299-2320. IN S. S. Lee and S. Sengupta (editors), Waste Heat Management and Utilization. Hemisphere Publishing Corporation, Washington, D.C.
- Schubel, J. R., C. C. Coutant, and P. M. J. Woodhead. 1978. Thermal effects of entrainment. pp. 19-93. IN J. R. Schubel and B. C. Marcy (editors), Power Plant Entrainment. A Biological Assessment. Academic Press, New York, New York.
- Suffern, J. S., S. M. Adams, B. G. Blaylock, C. C. Coutant, and C. A. Guthrie. 1978. Growth of monosex hybrid Tilapia in the laboratory and sewage oxidations ponds. pp. 65-82. IN Symposium on Culture of Exotic Fishes. Fish Culture Society, American Fisheries Society, Auburn, Alabama. 257 pp.
- Talmage, S. S., and C. C. Coutant. 1978. Thermal effects. Journal of the Water Pollution Control Federation 50(6):1514-1553.
- Tyndall, R. L., E. Willaert, A. R. Stevens, and C. C. Coutant. 1978. Isolation of pathogenic *Naegleria* from artificially heated waters. pp. 117-123. IN Symposium on Microbiology of Power Plant Thermal Effluents. University of Iowa Press, Iowa City, Iowa.
- Coutant, C. C. 1979. Count kilowatts for fun, profit. Nuclear Division News (Union Carbide Corporation) 10(13):3,81.
- Coutant, C. C., R. B. McLean, and D. L. DeAngelis. 1979. Influence of physical and chemical alterations on predator-prey interactions. pp. 57-68. IN R. H. Stroud and H. Clepper (editors), Predator-Prey Systems in Fisheries Management. Sport Fishing Institute, Washington, D.C.
- Coutant, C. C., D. S. Vaughan, and H. McLain. 1979. Scientific review, analysis and critique of section 316( a) thermal demonstrations and section 316(b) intake demonstrations. For Public Service of Indiana, Cayuga and Wabash Generating Stations. Oak Ridge National Laboratory, Oak Ridge, Tennessee for U.S. Environmental Protection Agency, Region V, Chicago, Illinois. 38 pp.
- Coutant, C. C., and J. S. Suffern. 1979. Temperature influences on growth of aquatic organisms. pp. 113-124. IN S. S. Lee and S. Sengupta (editors), Waste Heat Management and Utilization. Hemisphere Publishing Corp., Washington, D.C.
- DeAngelis, D. L., and C. C. Coutant. 1979. Growth rates and size distributions of first-year smallmouth bass populations: Some conclusions from experiments and a model. Transactions of the American Fisheries Society 108:137-141
- DeAngelis, D. L., D. K. Cox, and C. C. Coutant. 1979. Cannibalism and size dispersal in young-of-the-year largemouth bass: Experiment and model. Ecological Modelling 8:133-148.
- Majewski, W., D. C. Miller, and C. C. Coutant. 1979. Chapter I. Introduction. pp. 13-19. IN W. Majewski and D. C. Miller (editors), Predicting Effects of Power Plant Once-through Cooling on Aquatic Systems. Technical Papers in Hydrology 10, UNESCO, Paris, France .

- Miller, D. C., and C. C. Coutant. 1979. Chapter II. Potential and observed ecological effects of once-through cooling systems. pp. 20-52. IN W. Majewski and D. C. Miller (editors), Predicting Effects of Power Plant Once-through Cooling on Aquatic Systems. Technical Papers in Hydrology 10, UNESCO, Paris, France.
- Coutant, C. C. 1979. Chapter III. A conceptual format for cooling system environmental impact assessment projects. pp. 53-67. IN W. Majewski and D. C. Miller (editors), Predicting Effects of Power Plant Once-through Cooling on Aquatic Systems. Technical Papers in Hydrology 10, UNESCO, Paris, France.
- Miller, D. C., and C. C. Coutant. 1979. Chapter VII. Preoperational cooling system impact assessment: Physical and biological information requirements. pp. 118-136. IN W. Majewski and D. C. Miller (editors), Predicting Effects of Power Plant Once-through Cooling on Aquatic Systems. Technical Papers in Hydrology 10, UNESCO, Paris, France.
- Miller, D. C., and C. C. Coutant. 1979. Chapter VIII. Operational monitoring of cooling system impacts. pp. 137-145. IN W. Majewski and D. C. Miller (editors), Predicting Effects of Power Plant Once-through Cooling on Aquatic Systems. Technical Papers in Hydrology 10, UNESCO, Paris, France.
- Coutant, C. C. 1979. Chapter IX. Beneficial uses of discharge heat. pp. 146-155. IN W. Majewski and D. C. Miller (editors), Predicting Effects of Power Plant Once-through Cooling on Aquatic Systems. Technical Papers in Hydrology 10, UNESCO, Paris, France.
- Talmage, S. S., and C. C. Coutant. 1979. Thermal effects. Journal of the Water Pollution Control Federation 51(6) :1517-1554.
- Coutant, C. C. 1980. Critical choices: Energy conservation in power plant cooling. pp. 188-190. IN Environmental Effects of Cooling Systems, Technical Reports Series No. 202, International Atomic Energy Agency, Vienna, Austria.
- Coutant, C. C. 1980. Adaptation capability. pp. 134-141. IN Environmental Effects of Cooling Systems. Technical Reports Series No. 202. International Atomic Energy Agency, Vienna, Austria.
- Coutant, C. C. 1980. Pathogenic amoeba. pp. 121-124. IN Environmental Effects of Cooling Systems. Technical Reports Series No. 202, International Atomic Energy Agency, Vienna, Austria.
- Coutant, C. C. 1980. Beneficial uses of reject heat. pp. 190-192. IN Environmental Effects of Cooling Systems. Technical Reports Series No. 202, International Atomic Energy Agency, Vienna, Austria.
- Coutant, C. C. 1980. Abortive tagging makes sense. Underwater Telemetry Newsletter 10(1) :13.
- Coutant, C. C. 1980. Environmental quality for striped bass. pp. 179-187. IN H. Clepper (editor), Marine Recreational Fisheries 5, Sport Fishing Institute, Washington, D.C.
- Coutant, C. C., and D. S. Carroll. 1980. Temperatures occupied by ten ultrasonic-tagged striped bass in freshwater lakes. Transactions of the American Fisheries Society 109: 195-202 .



- Coutant, C. C., H. R. Waddle, and B. A. Schaich. 1980. Temperature and habitat selection by striped bass. Underwater Telemetry Newsletter 10(1):1, 3 -4 .
- Schaich, B. A., and C. C. Coutant. 1980. A biotelemetry study of spring and summer habitat selection by striped bass in Cherokee Reservoir, Tennessee, 1978. ORNL/TM-7127. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 226 pp.
- Spigarelli, S., and C. C. Coutant. 1980. Ecosystem stress and cooling systems. pp. 175-184. IN Environmental Effects of Cooling Systems, Technical Reports Series No. 202, International Atomic Energy Agency, Vienna, Austria.
- Talmage, S. S., and C. C. Coutant. 1980. Thermal effects. Journal of the Water Pollution Control Federation 52(6) :1575-1615.
- Van Winkle, W., C. C. Coutant, J. W. Elwood, S. G. Hildebrand, J. S. Mattice, and R. B. McLean. 1980. Comparative reservoir research at Oak Ridge National Laboratory. pp. 1432-1447. IN Symposium on Surface Water Impoundments. Paper No. 7-23. American Society of Civil Engineers, Minneapolis, Minnesota.
- Waddle, H. R., C. C. Coutant, and J. L. Wilson. 1980. Summer habitat selection by striped bass, *Morone saxatilis*, in Cherokee Reservoir, Tennessee, 1977. ORNL/TM-6927. Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Coutant, C. C. 1981. Foreseeable effects of CO<sub>2</sub>-induced climate change: Freshwater concerns. Environmental Conservation 8(4):285-297.
- Cox, D. K., and C. C. Coutant. 1981. Growth dynamics of juvenile striped bass as functions of temperature and ration. Transactions of the American Fisheries Society 110:226-238.
- Coutant, C. C. 1982. Effects of CO<sub>2</sub>-induced climate change on freshwater ecosystems. IN Report by American Association for the Advancement of Science on the CO<sub>2</sub> Problem. U.S. Department of Energy, Washington, D.C.
- Coutant, C. C. 1982. Evidence for upstream dispersion of adult caddisflies (Trichoptera:Hydropsychidae) in the Columbia River. Aquatic Insects 4(2):61-66.
- Coutant, C. C. 1982. Positive phototaxis in first instar *Hydropsyche cockerelli* Banks. Aquatic Insects 4(1):55-59.
- Conway, L., G. Chapman, C. C. Coutant, E. Crecelius, B. Jaslow, L. Thorne, and R. Vocke. 1982. Environmental mobility of toxic substances released from photovoltaic-associated processes: Aquatic systems. pp. 139-161. IN G. R. Hendrey, P. D. Maskowitz, D. Patten, W. Berry, and H. L. Conway (editors), Potential Environmental Problems of Photovoltaic Energy Technology. BNL-51431, Brookhaven National Laboratory, Upton, New York.
- DeAngelis, D. L., and C. C. Coutant. 1982. Genesis of bimodal size distributions in species cohorts. Transactions of the American Fisheries Society 111:384-388.

- Coutant, C. C. 1983. Striped bass and the management of cooling lakes. pp. 389-396. IN S. S. Lee and S. Sengupta (editors), Waste Heat Utilization and Management. Hemisphere Publishing Corp., Washington, D.C.
- Cheek, T. E., M. J. Van den Avyle, and C. C. Coutant. 1983. Distribution and habitat selection of adult striped bass, *Morone saxatilis* (Walbaum), in Watts Bar Reservoir, Tennessee. ORNL/TM-8447. Oak Ridge National Laboratory, Oak Ridge, Tennessee. 288 pp.
- Coutant, C. C. 1983. Thermal pollution by power plants. pp. 846-868. IN Encyclopedia of Chemical Technology. Vol. 22, Third Edition. John Wiley & Sons, Inc., New York.
- Coutant, C. C., and D. L. DeAngelis. 1983. Comparative temperature-dependent growth rates of largemouth and smallmouth bass fry. Transactions of the American Fisheries Society 112:416-423.
- Coutant, C. C., and W. Van Winkle. 1983. Paradox of the striped bass: ORNL fishes for answers. ORNL Review 16(3):2-10. Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Wetzel, R. G., J. B. Grace, E. A. D. Allen, J. W. Barko, S. Beer, G. Bowes, M. Briston, C. C. Coutant, B. G. Drake, J. E. Hobbie, O. Holm-Hanse, H. B. A. Prins, and J. H. Peverley. 1983. Aquatic plant communities. pp. 223-280. IN E. R. Lemon, (editor) C02 and Plants: The Response of Plants to Rising Levels of Atmospheric Carbon Dioxide. AAAS Symp. No. 84. Westview Press, Boulder, Colorado.
- Coutant, C. C., K. L. Zachmann, D. K. Cox, and B. L. Pearman. 1984. Temperature selection by juvenile striped bass in laboratory and field. Transactions of the American Fisheries Society 113:666-671.
- Patterson, M. R., R. J. Sworski, A. L. Sjoreen, M. G. Browman, C. C. Coutant, D. M. Hetrick, B. D. Murphy, R. J. Raridon. 1984. A user's manual for UTM-TOX, the Unified Transport Model. ORNL-6064. Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Weller, D. E., D. J. Anderson, D. L. DeAngelis, and C. C. Coutant. 1984. Rates of heat exchange in largemouth bass: Experiment and model. Physiological Zoology 57:413-427.
- Coutant, C. C. 1985. Striped bass, temperature, and dissolved oxygen: A speculative hypothesis for environmental risk. Transactions of the American Fisheries Society 114(1):31-61.
- Coutant, C. C. 1985. Striped bass: Environmental risks in fresh and salt water. Transactions of the American Fisheries Society 114:1-2.
- Cheek, T. E., M. J. Van den Avyle, and C. C. Coutant. 1985. Influences of water quality on distribution of striped bass in a Tennessee River impoundment. Transactions of the American Fisheries Society 114(1):67-76.
- Coutant, C. C., and G. F. Cada. 1985. Analysis and development of a project evaluation process. Bonneville Power Administration, DOE/BP-391, Portland, Oregon.
- Coutant, C. C. 1986. Thermal niches of striped bass. Scientific American 254(8):98-104.

- Coutant, C. C. 1987. Thermal preference: When does an asset become a liability? *Environmental Biology of Fishes* 18(3) :161-172.
- Coutant, C. C. 1987. Poor reproductive success of striped bass from a reservoir with reduced summer habitat. *Transactions of the American Fisheries Society* 116(2):154-160.
- Coutant, C. C., and D. L. Benson. 1988. Linking estuarine water quality and impacts on living resources: Shrinking striped bass habitat in Chesapeake Bay and Albermarle Sound. U.S. Environmental Protection Agency, EPA 503/3-88-001, Washington, D.C.
- Coutant, C. C., and C. L. Heckman. 1988. A review of state regulations that exceed those of the Federal Resource Conservation and Recovery Act (RCRA). DOE/HWP-40, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Sale, M. J., S. F. Railsback, S. Y. Chang, C. C. Coutant, R. E. Spath, and G. H. Taylor. 1989. Balancing hydropower development in the Ohio River basin. pp. 886-896 in A. J. Eberhardt (editor), *Proceedings of an International Conference on Hydropower*. American Society of Civil Engineers, New York.
- Coutant, C. C. 1990. Temperature-oxygen habitat for freshwater and coastal striped bass in a changing climate. *Transactions of the American Fisheries Society* 119:240-253.
- Railsback, S. F., C. C. Coutant, and M. J. Sale. 1990. Improving the effectiveness of fisheries agencies in developing hydropower mitigation. *Fisheries (Bethesda)* 15:3-8.
- Coutant, C. C., and D. L. Benson. 1990. Summer habitat suitability for striped bass in Chesapeake Bay: reflections on a population decline. *Transactions of the American Fisheries Society* 119:757-778.
- Coutant, C. C. 1990. Microchemical analysis of fish hard parts for reconstructing habitat use: Practice and promise. *American Fisheries Society Symposium* 7:574-580.
- Coutant, C. C. 1992. Testing the Waters. *Electric Perspectives* 16(4):32-40.
- Coutant, C. C., and C. H. Chen. 1993. Strontium microstructure in scales of freshwater and estuarine striped bass (*Morone saxatilis*) detected by laser ablation mass spectrometry. *Canadian Journal of Fisheries and Aquatic Sciences* 50: 1318-1323.
- Rose, K. A., J. H. Cowan, jr., E. D. Houde, and C. C. Coutant. 1993. Individual-based modeling of environmental quality effects on early life stages of fishes: a case study using striped bass. *American Fisheries Society Symposium* 14:125-145.
- Sale, M. J., and C. C. Coutant. 1994. Hydropower: licensed to protect the environment (edited interview). *ORNL Review* 26(3/4):2-19.
- Coutant, C. C., T. W. H. Backman, G. R. Bouck, E. M. Dawley, L. E. Fidler, and W. Krise. 1994. Panel on Gas Bubble Disease. Working Group Meeting June 21-22, 1994. National Marine Fisheries Service, Northwest Fisheries Science Center, Seattle, Washington.

- Coutant, C. C., T. W. H. Backman, E. M. Dawley, W. J. Ebel, L. E. Fidler, A. Nebeker, and R. G. White. 1995. Panel on Gas Bubble Disease. Second Working Group Meeting November 1-3, 1994. National Marine Fisheries Service, Northwest Fisheries Science Center, Seattle, Washington.
- Coutant, C. C. 1995. Thermal Pollution, Power Plants. Pages 2607-2620. IN: Encyclopedia of Energy Technology and the Environment, John Wiley & Sons, New York.
- Coutant, C. C., T. W. H. Backman, G. R. Bouck, E. M. Dawley, W. J. Ebel, L. E. Fidler, J. O. T. Jensen, W. Krise, and R. G. White. 1996. Summary Report. Panel on Gas Bubble Disease. Third Working Group Meeting February 1-3, 1996. National Marine Fisheries Service, Northwest Fisheries Science Center, Seattle, Washington.
- Coutant, C. C. 1996. Comment: Effects of instream brush on juvenile coho salmon. Transactions of the American Fisheries Society 125:150-151.
- Stanford, J. A., J. V. Ward, W. J. Liss, C. A. Frissell, R. N. Williams, J. A. Lichatowich, and C. C. Coutant. 1996. A general protocol for restoration of regulated rivers. Regulated Rivers: Research and Management 12:391-413.
- Dickerman, J., and C. C. Coutant. 1996. Oceans, energy, and environmental policy: a primer. Oak Ridge National Laboratory for U. S. Department of Energy, Washington, DC.
- Coutant, C. C. 1996. A new year! Fisheries (Bethesda) 21(9): 24.
- Coutant, C. C. 1996. Interfaces. Fisheries (Bethesda) 21(10): 40.
- Coutant, C. C. 1996. Let's talk. Fisheries (Bethesda) 21(11): 32.
- Coutant, C. C. 1996. Can we afford it? Fisheries (Bethesda) 21(12):26.
- Coutant, C. C., P. A. Bisson, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford, and R. N. Williams. 1997. Review of the National Marine Fisheries Service' "1996 Annual Report to the Oregon Department of Environmental Quality" related to waiver of dissolved gas standard. ISAB-97-1, Independent Scientific Advisory Board, Northwest Power Planning Council and National Marine Fisheries Service, Portland, Oregon.
- Williams, R. N., L. D. Calvin, C. C. Coutant, M. W. Erho, jr., J. A. Lichatowich, W. J. Liss, W. E. McConnaha, P. R. Mundy, J. A. Stanford, R. R. Whitney, D. L. Bottom, and C. A. Frissell. 1996. Return to the River: Restoration of Salmonid Fishes in the Columbia River Ecosystem. Northwest Power Planning Council, Portland, Oregon.
- Coutant, C. C. 1996. Juvenile migration. Chapter 6 in R. N. Williams, L. D. Calvin, C. C. Coutant, M. W. Erho, jr., J. A. Lichatowich, W. J. Liss, W. E. McConnaha, P. R. Mundy, J. A. Stanford, R. R. Whitney, D. L. Bottom, and C. A. Frissell. Return to the River: Restoration of Salmonid Fishes in the Columbia River Ecosystem. Northwest Power Planning Council, Portland, Oregon.

- Coutant, C. C. 1996. Monitoring and evaluation. Chapter 9 in Williams, R. N., L. D. Calvin, C. C. Coutant, M. W. Erho, jr., J. A. Lichatowich, W. J. Liss, W. E. McConnaha, P. R. Mundy, J. A. Stanford, R. R. Whitney, D. L. Bottom, and C. A. Frissell. Return to the River: Restoration of Salmonid Fishes in the Columbia River Ecosystem. Northwest Power Planning Council, Portland, Oregon.
- Cada, G. F., C. C. Coutant, and R. R. Whitney. 1997. Development of biological criteria for the design of advanced hydropower turbines. DOE/ID-10578. U. S. Department of Energy, Idaho Falls, Idaho.
- Williams, R. N., P. A. Bisson, Coutant, C. C., D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford and R. R. Whitney. 1997. Report of the Independent Scientific Advisory Board regarding a research proposal for inclusion in the 1997 Smolt Monitoring Program. Comparative Survival Rate Study of Hatchery PIT Tagged Chinook. ISAB-97-2, Northwest Power Planning Council and National Marine Fisheries Service, Portland, Oregon.
- Coutant, C. C. 1997. What do we believe? Fisheries (Bethesda) 22(1):30.
- Coutant, C. C. 1997. Who's in charge here? Fisheries (Bethesda) 22(2):28.
- Williams, R. N., P. A. Bisson, Coutant, C. C., D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford and R. R. Whitney. 1997. Ecological impacts of the flow provisions of the Biological Opinion for endangered Snake River salmon on resident fishes in the Hungry Horse and Libby systems in Montana, Idaho, and British Columbia. ISAB 97-3, Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon, and the National Marine Fisheries Service, Seattle, Washington.
- Williams, R. N., P. A. Bisson, Coutant, C. C., D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford and R. R. Whitney. 1997. Report of the Independent Scientific Advisory Board regarding a research proposal for inclusion in the Columbia River Basin Fish and Wildlife Program: Lake Pend Oreille Fishery Recovery Project. ISAB 97-4, Northwest Power Planning Council and National Marine Fisheries Service, Portland, Oregon.
- Coutant, C. C. 1997. An interface: Council of Aquatic Sciences. Fisheries (Bethesda) 22(3):33.
- Williams, R. N., P. A. Bisson, Coutant, C. C., D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford, R. R. Whitney and S. S. Hanna. 1997. Review of a draft programmatic environmental impact statement: Impacts of Artificial Salmon and Steelhead Production Strategies in the Columbia River Basin. ISAB Report 97-5. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Coutant, C. C. 1997. When is artificial good? Fisheries (Bethesda) 22(4):36.
- Coutant, C. C. 1997. Do we have it all together? Fisheries (Bethesda) 22(5):28.
- Coutant, C. C. 1997. Taken for Granted. Fisheries (Bethesda) 22(6):32.

- Coutant, C. C. 1997. Dumber every day: Fighting the stupidity complex. *Fisheries* (Bethesda) 22(7):24.
- Coutant, C. C. 1997. Thermal Pollution. Pages 963-984, In: Kirk-Othmer Encyclopedia of Chemical Technology, Fourth Edition, Volume 23. John Wiley and Sons, Inc.
- Williams, R. N., J. A. Lichatowich, P. A. Bisson, Coutant, C. C., R. Francis, D. Goodman, N. Huntly, L. McDonald, B. Riddell, J. A. Stanford, and S. S. Hanna. 1997. Review of the Columbia River Basin Fish and Wildlife Program as directed by the 1996 amendment to the Power Act. ISRP Report 97-1, Report of the Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- Van Winkle, W., C. C. Coutant, H. I. Jager, J. S. Mattice, D. J. Orth, R. G. Otto, S. F. Railsback, and M. J. Sale. 1997. Essay--Uncertainty and instream flow standards: Perspectives based on hydropower research and assessment. *Fisheries* (Bethesda) 22(7):21-22.
- Mulholland, P. J., G. R. Best, C. C. Coutant, G. M. Hornberger, J. L. Meyer, P. J. Robinson, J. R. Stenberg, R. E. Turner, F. Vera-Herrera, and R. G. Wetzel. 1997. Effects of climate change on freshwater ecosystems of the Southeastern United States and the Gulf Coast of Mexico. *Hydrological Processes* 11:949-970.
- Coutant, C. C., P. Bisson, and P. Brouha. 1997. Management audit gives AFS headquarters good marks, makes suggestions for improvements. *Fisheries* (Bethesda) 22(8):16-18.
- Coutant, C. C., L. D. Calvin, M. W. Erho, Jr., J. A. Lichatowich, W. J. Liss, W. E. McConnaha, P. R. Mundy, J. A. Stanford, R. R. Whitney, R. N. Williams, D. L. Bottom, and C. A. Frissell. 1997. The normative river: an ecological vision for the recovery of the Columbia River salmon. Pages 50-59, in D. J. Mahoney, editor. *Waterpower '97. Proceedings of the 1997 International Conference on Hydropower*. American Society of Civil Engineers, New York.
- Whitney, R. R., L. D. Calvin, M. W. Erho, Jr., and C. C. Coutant. 1997. Downstream passage for salmon at hydroelectric projects in the Columbia River Basin: Development, installation, and evaluation. ISAB 97-15, Independent Scientific Advisory Board, Northwest Power Planning Council and National Marine Fisheries Service, Portland, Oregon.
- Coutant, C. C. 1998. What is "Normative" for fish pathogens? A perspective on the controversy over interactions between wild and cultured fish. *Journal of Aquatic Animal Health* 10:101-106.
- Williams, R. N., P. A. Bisson, C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford, and R. R. Whitney. 1997. Review of the August 8, 1997 Draft of the Snake River Salmon Recovery Plan. ISAB Report 97-6, Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Williams, R. N., P. A. Bisson, C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford, and R. R. Whitney. Review of the National Marine Fisheries Services' "1997 Draft Annual Report to the Oregon Department of Environmental Quality" Related to Waiver of Dissolved Gas Standard. Report ISAB 97-7. Independent Scientific Advisory Board for the

Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.

- Williams, R. N., P. A. Bisson, C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford, and R. R. Whitney. 1998. Review of the 1998 Work plan for the Comparative Survival Rate Study of Hatchery PIT Tagged Chinook. ISAB Report 98-1. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Coutant, C. C. 1998. Expert Review of Thermal Effects of Richard B. Russell Pumped Storage Project on Striped Bass in J. Strom Thurmond Reservoir. Report for U.S. Department of Justice, Washington, DC. Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Coutant, C. C., R. Best, P. Bloom, D. Boesch, J. Grassle, D. Grigal, R. Houghton, J. Klopatek, W. Lewis, H. Regier, T. Sharik, and D. Sprugel. 1998. Review of U. S. Environmental Protection Agency's National Health and Environmental Effects Research Laboratory Western Ecology Division. Unnumbered report. Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Williams, R. N., P. A. Bisson, C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford, and R. R. Whitney. 1998. Response to Questions of the Implementation Team Regarding Juvenile Salmon Transportation in the 1998 Season. ISAB Report 98-2. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Williams, R. N., P. A. Bisson, C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, J. A. Stanford, and R. R. Whitney. 1998. Independent Scientific Advisory Board 1997 Annual Report. ISAB Report 98-3. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Williams, R. N., P. A. Bisson, C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, and R. R. Whitney. 1998. The Scientific Basis for Juvenile Fish Passage Improvements in the Federal Columbia River Power System: John Day Dam Extended Length Turbine Intake Screens and Bonneville Dam Bypass System Outfalls. First Report: The ISAB Corps Capital Construction Project Review. ISAB Report 98-4. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1998. Recommendation for Stable Flows in the Hanford Reach During the Time When Juvenile Fall Chinook are Present Each Spring. Report ISAB 98-5. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1998. Independent Scientific Advisory Board Review of "Development of a Regional Framework for Fish and Wildlife Restoration in the Columbia River

Basin". Report ISAB 98-6. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.

Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1998. Report of the Independent Scientific Advisory Board Review of the U.S. Army Corps of Engineers' Capital Construction Program. Part II. A. Development and Testing of Surface Bypass. Report ISAB 98-7. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.

Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1998. Report of the Independent Scientific Advisory Board Review of the U.S. Army Corps of Engineers' Capital Construction Program. Part II. B. Dissolved Gas Abatement Program. Report ISAB 98-8. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.

Williams, R. N., J. A. Lichatowich, P. A. Bisson, C. C. Coutant, R. Francis, D. Goodman, N. Huntly, L. McDonald, B. Riddell, and S. Hanna. 1998. Review of the Columbia River Basin Fish and Wildlife Program for Fiscal Year 1999 as Directed by the 1996 Amendment of the Northwest Power Act. ISRP Report 98-1. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.

Coutant, C. C. 1998. Fisheries Delegation to the People's Republic of China. Citizen Ambassador Program of People to People International, Spokane, Washington.

Independent Scientific Group (R. N. Williams, chair; P. A. Bisson; D. L. Bottom; L. D. Calvin; C. C. Coutant; M. W. Erho, jr.; C. A. Frissell; J. A. Lichatowich; W. J. Liss; W. E. McConnaha; P. R. Mundy; J. A. Stanford; and R. R. Whitney). 1998. Return to the River: An ecological vision for the recovery of the Columbia River salmon. *Environmental Law* 28(3):503-518.

Coutant, C. C. 1998. Turbulent Attraction Flows for Juvenile Salmonid Passage at Dams. ORNL/TM-13608. Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Coutant, C. C., M. S. Bevelhimer, and W. Van Winkle. 1998. Brayton Point Station Section 316(a) and 316(b) Review. Prepared for Region 1, U.S. Environmental Protection Agency, Boston, Massachusetts by Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Independent Scientific Group (R. N. Williams, chair; P. A. Bisson; D. L. Bottom; L. D. Calvin; C. C. Coutant; M. W. Erho, jr.; C. A. Frissell; J. A. Lichatowich; W. J. Liss; W. E. McConnaha; P. R. Mundy; J. A. Stanford; and R. R. Whitney). 1999. Scientific Issues in the restoration of salmonid fishes in the Columbia River. *Fisheries* 24(3):10-19.



- Coutant, C. C. 1999. Think like a fish! Emphasizing the behavior in behavioral guidance systems. *Hydro Review* 18(3) :18-24.
- Coutant, C. C. 1999. Perspectives on temperature in the Pacific Northwest's fresh waters. ORNL/TM-1999/44. Report for U.S. Environmental Protection Agency, Region 10, Seattle, Washington. Oak Ridge National Laboratory , Oak Ridge, Tennessee.
- Coutant, C. C., D. Goodman, S. S. Hanna, N. Huntly, D. Lettenmaier, J. Lichatowich, L. McDonald, B. Riddell, W. Smoker, R.R. Whitney, and R. N. Williams. 1999. Review of the BPA Reimbursable Account Programs in the Columbia River Basin as Requested in the Senate-House Conference Report on FY99 Energy and Water Development Appropriations Bill. Report ISRP-99-1. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- Coutant, C. C., D. Goodman, S. S. Hanna, N. Huntly, D. Lettenmaier, J. Lichatowich, L. McDonald, B. Riddell, W. Smoker, R.R. Whitney, and R. N. Williams. 1999. Review of the Columbia River Basin Fish and Wildlife Program for Fiscal Year 2000 as Directed by the 1966 Amendment of the Northwest Power Act. A Report of the Independent Scientific Review Panel for the Northwest Power Planning Council. (2 volumes). Report ISRP 99-2. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- Coutant, C. C., D. Goodman, S. S. Hanna, N. Huntly, D. Lettenmaier, J. Lichatowich, L. McDonald, B. Riddell, W. Smoker, R.R. Whitney, and R. N. Williams. 1999. Response review of fiscal year 2000 proposals. Report ISRP 99-4. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1999. ISAB Review of "1998 Draft Annual Report to the Oregon Department of Environmental Quality" (December 1, 1998). Report ISAB 99-1. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1999. Report of the Independent Scientific Advisory Board Review of the U.S. Army Corps of Engineers' Capital Construction Program. Part I. Adult Passage. Report ISAB 99-2. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1999. Independent Scientific Advisory Board Work-In-Progress Report: Looking for Common Ground: Comparison of Recent Reports Pertaining to Salmon Recovery in the Columbia River Basin. Report ISAB 99-3. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.

- Bisson, P. A., C. C. Coutant, D. Goodman, J. A. Lichatowich, W. J. Liss, L. McDonald, P. Mundy, B. Riddell, R. R. Whitney, and R. N. Williams. 1999. Report of the Independent Scientific Advisory Board Review of the U.S. Army Corps of Engineers' Capital Construction Program. Part III. Overview of the U.S. Army Corps of Engineers' Capital Construction Program. Report ISAB 99-4. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Bisson, P. A., C. C. Coutant, D. Goodman, R. Gramling, J. Lichatowich, E. Loudenslager, W. Liss, L. McDonald, D. Phillip, B. Riddell, and R. R. Whitney. 2000. Review of studies of fish survival in spill at The Dalles Dam. Report ISAB 2000-1. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Bisson, P. A., C. C. Coutant, D. Goodman, R. Gramling, J. Lichatowich, E. Loudenslager, W. Liss, L. McDonald, D. Phillip, and B. Riddell. 2000. Review of the draft performance standards and indicators for artificial production in the Northwest Power Planning Council's Artificial Production Review. Report ISAB 2000-2. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Bisson, P. A., C. C. Coutant, D. Goodman, R. Gramling, J. Lichatowich, E. Loudenslager, L. McDonald, D. Phillip, and B. Riddell. 2000. The Columbia River Estuary and the Columbia River Basin Fish and Wildlife Program. Report ISAB 2000-5. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISAB. 2000. Consistency of the Council's artificial production policies and implementation strategies with multi-species framework principles and Scientific Review Team guidelines. Report ISAB 2000-3. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISRP (Independent Scientific Review Panel). 2000. Review of Coeur d'Alene Tribe trout production facility master plan. Report ISRP 2000-1. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2000. Review of the Tucannon River captive broodstock Master Plan. Report ISRP 2000-2. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2000. Review of databases funded through the Columbia River Basin Fish and Wildlife Program. Report ISRP 2000-3. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2000. Review of "Restoration plan for Pacific lamprey (*Lampetra tridentata*) in the Umatilla, River, Oregon." Report ISRP 2000-4. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.

- ISRP. 2000. Review of the master plan for feasibility assessment of a white sturgeon ‘put and take’ consumptive fisheries in Oxbow and Hells Canyon reservoirs, Snake River. Report ISRP 2000-6, Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP 2000. Final review of fiscal year 2001 project proposals for the Columbia River Gorge and Intermountain provinces. Report ISRP 2000-9. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- Coutant, C. C. 2000. Cool refuges for big striped bass: Twenty years of testing the thermal squeeze hypothesis. Proceedings of the Gulf Coast Striped Bass Management Workshop (Nov. 1998). U.S. Fish and Wildlife Service, Mobile, Alabama.
- Coutant, C. C. 2000. What is ‘normative’ at cooling water intakes? Defining normalcy before judging adverse. *Environmental Science & Policy* 3:S37-S42.
- Coutant, C. C., and R. R. Whitney. 2000. Fish behavior in relation to passage through hydropower turbines: a review. *Transactions of the American Fisheries Society* 129:351-380.
- Coutant, C. C., and M. S. Bevelhimer. 2000. Technical evaluation of the utility of intake approach velocity as an indicator or potential adverse environmental impact under Clean Water Act Section 316(b). Technical Report 1000731. EPRI, Palo Alto, California.
- Bisson, P. A., C. C. Coutant, D. Goodman, R. Gramling, D. Lettenmaier, J. Lichatowich, E. Loudenslager, W. Liss, L. McDonald, D. Phillip, and B. Riddell. 2000. Model synthesis report. An analysis of decision support tools used in Columbia River Basin salmon management. Report ISAB 2001-1. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISAB. 2001. Research and monitoring in a low-flow year. Report ISAB 2001-2. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISAB. 2001. Hatchery surplus review. Report ISAB 2001-3. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISAB. 2001. Recommendations on Council staff’s draft issue paper “Analysis of 2001 Federal Columbia River Basin System Operations on Fish Survival.” Report ISAB 2001-4. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISAB. 2001. Review of Lower Snake River flow augmentation studies. Report ISAB 2001-5. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.

- ISAB. 2001. Review of the Biological Objectives in the 2000 Fish and Wildlife Program. Report ISAB 2001-6. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Coutant, C. C. (editor). 2001. Behavioral technologies for fish guidance. American Fisheries Society Symposium 26. Bethesda, Maryland.
- Coutant, C. C. 2001. Turbulent attraction flows for guiding juvenile salmonids at dams. Pages 45-65. In C. C. Coutant, editor. Behavioral technologies for fish guidance. American Fisheries Society Symposium 26. Bethesda, Maryland.
- Coutant, C. C. 2001. Integrated, multi-sensory behavioral guidance systems for fish diversions. Pages 105-113. In C. C. Coutant, editor. Behavioral technologies for fish guidance. American Fisheries Society Symposium 26. Bethesda, Maryland
- Committee on Environment and Natural Resources, National Technology Council. 2000. From the Edge: Science to support restoration of Pacific salmon. Office of Science and Technology Policy, Washington, DC. (C. C. Coutant, principal author).
- Independent Scientific Group. 2000. Return to the River 2000. Restoration of salmonid fishes in the Columbia River ecosystem. Report 2000-12. Northwest Power Planning Council, Portland, Oregon.
- ISAB. 2001. A review of salmon recovery strategies for the Columbia River Basin. Report ISAB 2001-7. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISRP. 2001. Review of FY High Priority proposals for the Columbia River Basin Fish and Wildlife Program. Report ISRP-2001-1. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2001. Preliminary review of FY 2002 project proposals for the Mountain Columbia Province. Report ISRP-2001-2. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2001. Final review of FY 2002 project proposals for the Mountain Columbia Province. Report ISRP-2001-3. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2001. Preliminary review of fiscal year 2002 project proposals for the Columbia Plateau province. Report ISRP-2001-6. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2001. Review of Fiscal Year 2001 Action Plan proposals. Report ISRP-2001-7. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.

- ISRP. 2001. Final review of Fiscal Year 2001 Action Plan proposals including responses to ISRP comments. Report ISRP-2001-7a. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2001. Final review of Fiscal Year 2002 proposals for the Columbia Plateau Province. Report ISRP-2001-8. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2001. Preliminary review of the United States Army Corps of Engineers' Bonneville Decision Document Juvenile Fish Passage Recommendation October 2001. Report ISRP-2001-11. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISAB. 2002. Review of Giorgi et al. report: "Mainstem Passage Strategies in the Columbia River System: Transportation, Spill, and Flow Augmentation." Report ISAB-2002-1. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISRP. 2002. ISRP comments on Corps' response to Document ISRTP 2001-11. Report ISRP-2001-11a. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Final review: Arrowleaf/Methow River Conservation Project. Report ISRP-2002-1. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Preliminary review of Fiscal Year 2003 proposals for the Upper and Middle Snake, Columbia Cascade, and Lower Columbia and Estuary provinces. Report ISRP-2002-2. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Review of protocols for the inventory and monitoring of fish, wildlife, and their habitats in the Pacific Northwest; statement of work by David H. Johnson, Washington Department of Fish and Wildlife. Report ISRP-2002-3. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Review of Council staff's draft research plan for fish and wildlife in the Columbia River basin. Report ISRP-2002-4. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Review of March 27, 2002 Draft Guidelines for Action Effectiveness Research Proposals for FCRPS Offsite Mitigation Measures. Report ISRP-2002-5. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Review of 2002 Innovative Proposals. Report ISRP-2002-8. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Review of revised Moses Lake Recreational Facility proposal. Report ISRP-2002-9. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.

- ISRP. 2002. Review of project 200101500 – Echo Meadow Project. Report ISRP-2002-10. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Final review of Fiscal Year 2003 proposals for the Upper and Middle Snake, Columbia Cascade, and Estuary provinces. Report ISRP-2002-11. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Preliminary review of Fiscal Year 2003 Mainstem and Systemwide proposals. Report ISRP-2002-13. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Final review of Fiscal Year 2003 Mainstem and Systemwide proposals. Report ISRP-2002-14. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISRP. 2002. Review of criteria for evaluating proposals to secure tributary water. Report ISRP-2002-15. Independent Scientific Review Panel for the Northwest Power Planning Council, Portland, Oregon.
- ISAB. 2003. Review of flow augmentation: update and clarification. Report ISAB-2003-1. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISAB. 2003. Review of strategies for recovery of tributary habitat. Report ISAB-2003-2. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- ISAB. 2003. Review of salmon and steelhead supplementation. Report ISAB-2003-3. Independent Scientific Advisory Board for the Northwest Power Planning Council, Portland, Oregon and the National Marine Fisheries Service, Seattle, Washington.
- Williams, M. A., and C. C. Coutant. 2003. Modification of schooling behavior in larval atherinid fish *Atherina mochon* by heat exposure of eggs and larvae. Transactions of the American Fisheries Society 132:638-645.
- ISRP. 2003. Summary of ISRP reviews and interactions with the Action Agencies' RM&E effort. Report ISRP-2003-2. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2003. Review of draft Clearwater Subbasin Plan. Report ISRP-2003-3. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2003. Review of BPA's draft Request for Proposals for RM&E. Report ISRP-2003-4. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2003. Review of revised mainstem/systemwide proposals for research, monitoring and evaluation. Report ISRP-2003-6. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.

- ISRP. 2003. Review of proposals for BPA's request for studies on RPAs 182 and 184. Report ISRP-2003-7. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2003. Final review of proposals submitted in response to Bonneville Power Administration's March 14, 2003 request for studies for Reasonable and Prudent Alternative Actions 182 and 184 of the 2000 Federal Columbia River Power System Biological Opinion. Report ISRP-2003-9. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2003. Review of the Umatilla Fish Hatchery monitoring and evaluation project (19900500) document, "Comprehensive Assessment of Salmonid Restoration and Enhancement Efforts in the Umatilla River Basin." Report ISRP-2003-10. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2003. Review of protocols for counting salmonids, resident fish, and lampreys in the Pacific Northwest. Report ISRP-2003-11. Independent Scientific Review Panel for the Northwest Power and Conservation Council, Portland, Oregon.
- Bevelhimer, M. S., and C. C. Coutant. 2003. Impacts of volumetric flow rate of water intakes on fish populations and communities. Technical Report 1005178. EPRI, Palo Alto, California.
- Coutant, C. C. 2004. A riparian habitat hypothesis for successful reproduction of white sturgeon. *Reviews in Fisheries Science* 12:23-73.
- Coutant, C. C., D. Goodman, S. Hanna, L. McDonald, B. Riddell, N. Huntly, W. Liss, W. Smoker, R. R. Whitney, R. Williams, R. Bilby, P. A. Bisson, E. J. Loudenslager, and D. P. Philipp. 2004. A Joint ISAB and ISRP Review of the Draft Research, Monitoring & Evaluation Plan for the NOAA Fisheries 2000 Federal Columbia River Power System Biological Opinion. Independent Scientific Advisory Board and Independent Scientific Review Panel Report ISAB & ISRP 2004-1. Northwest Power and Conservation Council, Northwest Indian Tribes, and NOAA Fisheries, Portland, Oregon. 66 pages.
- Bilby, R. E., P. A. Bisson, C. C. Coutant, D. Goodman, S. Hanna, E. Loudenslager, L. McDonald, D. Philipp, and B. Riddell. 2003. ISAB Comments on Draft NOAA Technical Recovery Team Documents Identifying Independent Salmonid Populations Within Evolutionarily Significant Units. Independent Scientific Advisory Board Report ISAB 2003-4. NOAA Fisheries, Northwest Indian Tribes, and Northwest Power and Conservation Council, Portland, Oregon. 12 pages.
- Coutant, C. C., S. Hanna, N. Huntly, W. Liss, L. McDonald, B. Riddell, W. Smoker, R. Whitney, R. N. Williams, J. D. McIntyre, T. Poe, and E. Merrill. 2004. Final Review of the United States Army Corps of Engineers' Anadromous Fish Evaluation Program for Fiscal Year 2004. Independent Scientific Review Panel Report ISRP 2004-8. Northwest Power and Conservation Council, Portland, Oregon. 106 pages.
- Coutant, C. C., S. Hanna, N. Huntly, W. Liss, L. McDonald, B. Riddell, R. R. Whitney, R. N. Williams, J. Griffith, and R. White. 2004. Review of Draft Clearwater Subbasin Plan

(November 2003 version). Independent Scientific Review Panel Report ISRP 2004-4. Northwest Power and Conservation Council, Portland, Oregon. 33 pages.

- Coutant, C. C., S. Hanna, N. Huntly, W. Liss, L. McDonald, B. Riddell, W. Smoker, R. Whitney, R. N. Williams, J. D. McIntyre, T. Poe, and E. Merrill. 2003. Review of Fiscal Year 2004 Pre-proposals for the United States Army Corps of Engineers' Anadromous Fish Evaluation Program. Independent Scientific Review Panel Report ISRP 2003-14. Northwest Power and Conservation Council, Portland, Oregon. 47 pages
- Coutant, C. C., D. Goodman, S. Hanna, L. McDonald, B. Riddell, N. Huntly, W. Liss, W. Smoker, R. R. Whitney, R. Williams, R. Bilby, P. A. Bisson, E. J. Loudenslager, and D. P. Philipp, R. Aldridge, S. Gregory, J. Griffith, L. Hardesty, J. Karr, J. Lichatowich, J. McIntyre, T. Poe, D. Scarnecchia, B. Ward, E. Merrill, D. Spear, and E. Schrepel. 2004. Scientific Review of Subbasin Plans for the Columbia River Basin Fish and Wildlife Program. Independent Scientific Review Board and Independent Scientific Advisory Board Report 2004-13, NOAA Fisheries, Northwest Indian Tribes and Northwest Power and Conservation Council, Portland Oregon. 152 pages.
- ISAB. 2004. ISAB Findings from the Reservoir Operations / Flow Survival Symposium. Report ISAB 2004-2. Northwest Power and Conservation Council, Portland, Oregon.
- ISAB. 2005. Review of the Pacific Northwest Aquatic Monitoring Partnership's "Study Design for Comparing Monitoring Protocols". Report ISAB 2005-1. Northwest Power and Conservation Council, Portland, Oregon.
- ISAB. 2005. Viability of ESUs Containing Multiple Types of Populations. Report ISAB 2005-2. Northwest Power and Conservation Council, Portland, Oregon.
- ISAB. 2005. Recommendation to Study Effects of Load Following on Juvenile Salmon Migratory Behavior and Survival. Report ISAB 2005-3. Northwest Power and Conservation Council, Portland, Oregon.
- ISAB. 2005. Report on Harvest Management of Columbia River Salmon and Steelhead. Report ISAB 2005-4. Northwest Power and Conservation Council, Portland, Oregon.
- ISAB. 2005. Review of the All-H Analyzer (AHA). Report ISAB 2005-5. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2004. Review of Captive Propagation Program Elements: Programmatic Issue 12 for the Mountain Snake and Blue Mountain Provinces. Report ISRP 2004-14. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2004. Estuary and Lower Columbia Habitat Monitoring and RME Plan Reviews. Report ISRP 2004-16. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2004. Review of Umatilla RM&E Plan. Report ISRP 2004-17. Northwest Power and Conservation Council, Portland, Oregon.



- ISRP. 2005. Review of Criteria and Checklist for Evaluating Proposals to Secure Riparian Easements to Protect Tributary Habitat. Report ISRP 2005-1. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2005. Combined Step Review for Re-introduction of Lower Columbia River Chum Salmon into Duncan Creek. Report ISRP 2005-3. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2005. Review of Select Area Fishery Evaluation Project. Report ISRP 2005-8. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2005. Review of Updated Proposed Action (UPA) Habitat Projects to Improve Survival of Upper Columbia River Spring Chinook and Steelhead. Report ISRP 2005-9. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP and ISAB. 2005. Preliminary Review of Draft Research Plan. Report ISRP/ISAB 2005-13. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2005. Retrospective Report 1997-2005. Report ISRP 2005-14. Northwest Power and Conservation Council, Portland, Oregon. 150 pages.
- ISAB. 2006. Review of the 2005 Comparative Survival Studies' Annual Report and Applicability of Comparative Survival Studies' Analysis Results. Report ISAB 2006-3. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2006. Preliminary Review of FY 2007-09 Proposals for the Columbia River Basin Fish and Wildlife Program. Report ISRP 2006-4. Northwest Power and Conservation Council, Portland, Oregon.
- ISRP. 2006. ISRP Final Review of Proposals Submitted for Fiscal Year 2007-2009 Funding Through the Columbia River Basin Fish and Wildlife Program. Report ISRP 2006-6. Northwest Power and Conservation Council, Portland, Oregon.
- Coutant, C. C., R. Mann, and M. J. Sale. 2006. Reduced Spill at Hydropower Dams: Opportunities for More Generation and Increased Fish Protection. Report ORNL/TM-2005/179. Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Liss, W. L., J. A. Stanford, J. A. Lichatowich, R. N. Williams, C. C. Coutant, P. R. Mundy, and R. R. Whitney. 2006. Chapter 3: A foundation for restoration. Pages 51-98. IN: R. N. Williams, editor. Return to the River: Restoring Salmon to the Columbia River. Elsevier Academic Press, Amsterdam.
- Stanford, J. A., C. A. Frissell, and C. C. Coutant. 2006. Chapter 5: The status of habitats. Pages 173-248. IN: R. N. Williams, editor. Return to the River: Restoring Salmon to the Columbia River. Elsevier Academic Press, Amsterdam.

- Coutant, C. C., and R. R. Whitney. 2006. Chapter 6: Hydroelectric systems and migration. Pages 249-324. IN: R. N. Williams, editor. Return to the River: Restoring Salmon to the Columbia River. Elsevier Academic Press, Amsterdam.
- Whitney, R. R., C. C. Coutant, and P. R. Mundy. 2006. Chapter 7: Sources of mortality and effectiveness of mitigation. Pages 325-416. IN: R. N. Williams, editor. Return to the River: Restoring Salmon to the Columbia River. Elsevier Academic Press, Amsterdam.
- McDonald, L. L., C. C. Coutant, L. D. Calvin, and R. N. Williams. 2006. Chapter 11: Monitoring and evaluation. Pages 571-600. IN: R. N. Williams, editor. Return to the River: Restoring Salmon to the Columbia River. Elsevier Academic Press, Amsterdam.
- Bisson, P. A., J. A. Lichatowich, W. J. Liss, D. Goodman, C. C. Coutant, L. L. McDonald, D. Lettenmeier, E. J. Loudenslager, and R. N. Williams. 2006. Chapter 12: The federal approach to salmon recovery at the mellinium. Pages 601-628. IN: R. N. Williams, editor. Return to the River: Restoring Salmon to the Columbia River. Elsevier Academic Press, Amsterdam.
- Williams, R. N., J. A. Stanford, J. A. Lichatowich, W. J. Liss, C. C. Coutant, W. E. McConnaha, R. R. Whitney, P. R. Mundy, P. A. Bisson, and M. S. Powell. 2006. Chapter 13: Conclusions and strategies for salmon restoration in the Columbia River Basin. Pages 629-666. IN: R. N. Williams, editor. Return to the River: Restoring Salmon to the Columbia River. Elsevier Academic Press, Amsterdam.
- McDonald, L. L., R. Bilby, P. A. Bisson, C. C. Coutant, J. M. Epifanio, D. Goodman, S. Hanna, N. Huntly, E. Merrill, B. Riddell, W. Liss, E. J. Loudenslager, D. P. Philipp, W. Smoker, R. R. Whitney, and R. N. Williams. 2007. Research, monitoring, and evaluation of fish and wildlife restoration projects in the Columbia River basin. *Fisheries* 32(12):582-590.
- Bevelhimer, M. S., and C. C. Coutant. 2008. Light tags for observing behavior of surface-oriented migrating salmonids. *American Fisheries Society Symposium* 61:231-239.
- Bevelhimer, M. S., A. M. Fortner, C. C. Coutant, and B. A. Fost. 2008. Evaluation of strobe lights for reducing fish impingement at cooling water intakes. Tests in Alabama and Tennessee. Report No. 1015577 Electric Power Research Institute, Palo Alto, California.
- Coutant, C. C., S. McDougall, and J. Young. 2008. Establishing alternative numerical limits for rate of temperature change. Report No. 1016470, Electric Power Research Institute, Palo Alto, California.
- Coutant, C. C. 2008. Sixty years of trying to set temperature criteria and standards to protect aquatic life. Pages 2-1 to 2-11, In: C. Lew and W. Mills, editors. Proceedings: Second thermal ecology and regulation workshop. Report No. 1016809, Electric Power Research Institute, Palo Alto, California.

Notes:

1. Some ISAB and ISRP reports are listed as ISAB or ISRP authorship, without all board members' names. ISRP reports are listed only when I was a coauthor; other ISRP numbered reports did not include me as part of the review team. Short letter reports are not included.
2. Proprietary consulting reports are not included.