

11.0 INFORMATION SOURCES

- Adams, N. S., D. W. Rondorf, S. D. Evans, J. E. Kelly, and R. W. Perry. 1998. Effects of surgically and gastrically implanted radio transmitters on swimming performance and predator avoidance of juvenile chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 55:781-787.
- Andreasen, J.K. 1975. Systematics and Status of the Family Catostomidae in Southern Oregon. Ph.D. Thesis. Oregon State University, Corvallis. 76 pp.
- Aquatic Resources Center. 1999. Standard Operating Procedures: Aquatic oligochaete sampling and processing, including habitat assessments. Aquatic Resources Center, College Grove, TN.
- Ardren, William. U.S. Fish and Wildlife Service, Abernathy Fish Technology Center.
- Auble, G.T., J.M. Friedman, and M.L. Scott. 1994. Relating riparian vegetation to present and future streamflows. *Ecol. Applications* 4(3):544-554.
- Ayres Associates 1999. Geomorphic and Sediment Evaluation of the Klamath River, California, Below Iron Gate Dam. Fort Collins, Colorado. Bartley, D.M. 1987. The genetic structure of Chinook and coho salmon populations in California, with a note on the genetic variability in sturgeon (Acipenseridae). Doctoral Dissertation. University of California, Davis.
- Bailey, R.M., J.E. Fitch, E.S. Herald, E.A. Lachner, C.C. Lindsey, C.R. Robins, and W.B. Scott. 1970. A List of Common and Scientific Names of Fishes From the United States and Canada. American Fisheries Society Special Publication No. 6. 150 pp.
- Baker, B.M. 1988. Genetic variability of steelhead trout populations in the South Fork of the Trinity River, California. M.S. Thesis. Humboldt State University, Arcata, California.
- Banks, M. A. and M. Bartron. 1999. Microsatellite DNA variation among Klamath River Chinook salmon sampled from fall and spring runs, Submitted to the Yurok Tribe Fisheries Program, Bodega Bay, California, 14 pp.
- Banks, M. A., M. Bartron, and P. Berrebi. 2000. Microsatellite DNA variation among Klamath River Chinook salmon. Final Report submitted to the Yurok Tribe Fisheries Program, Klamath, California, 17 pp.
- Banks, M.A., M.S. Blouin, B.A. Baldwin, V.K. Rashbrook, S. M. Blankenship, and D. Hedgecock. 1999. Isolation and inheritance of novel microsatellites in Chinook salmon (*Oncorhynchus tshawytscha*). *Journal of Heredity* 90: 281-288.
- Bartholomew, J. L., J. S. Rohovec and J. L. Fryer. 1989. *Ceratomyxa shasta*, a myxosporean parasite of salmonids. USFW, Fish Disease Leaflet 80.

- Bartholomew, J. L., M. J. Whipple, D. G. Stevens and J. L. Fryer. 1997. The life cycle of *Ceratomyxa shasta*, a myxosporean parasite of salmonids, requires a freshwater polychaete as an alternate host. *American Journal of Parasitology*. 83:859-868.
- Bartley, D., B. Bentley, J. Brodziak, R. Gomulkiewicz, M. Mangel, and G.A.E. Gall. 1992. Geographic variation in population genetic structure of Chinook salmon from California and Oregon. *Fishery Bulletin, U.S.* 90: 77-100 (authorship amended per errata, *Fishery Bulletin* 90 (3): iii).
- Bartley, D.M. 1987. The genetic structure of Chinook and coho salmon populations in California, with a note on the genetic variability in sturgeon (Acipenseridae). Doctoral Dissertation. University of California, Davis.
- Bartley, D.M. and G.A.E. Gall. 1990. Genetic structure and gene flow in Chinook salmon populations of California. *Transactions of the American Fisheries Society* 119: 55-71.
- Bartley, D.M., G.A.E. Gall, and B. Bentley. 1990. Biochemical Genetic Detection of Natural and Artificial Hybridization of Chinook and Coho Salmon in Northern California. *Transactions of the American Fisheries Society* 119: 431-437.
- Bauersfeld, K. 1977. Effects of peaking (stranding) of Columbia River dams on juvenile anadromous fishes below The Dalles Dam, 1974 and 1975. Technical Report No. 31. Washington Department of Fisheries, Olympia. WA.
- Bauersfeld. 1978. Stranding of juvenile salmon by flow reductions at Mayfield Dam on the Cowlitz River, 1976. Technical Report No. 36. Washington Department of Fisheries, Olympia, WA.
- Beak Consultants Inc. 1993. Aquatic Resources Status Report for the Upper Klamath River.
- Beck Associates, R.W. 1989. Skagit River salmon and steelhead fry stranding studies. Prepared for Seattle City Light Environmental Affairs Division, Seattle, WA.
- Becker, C.D. and D.A. Neitzel. 1985. Assessment of intergravel conditions influencing egg and alevin survival during salmonid redd dewatering. *Env. Biol. of Fishes*. 12:33-46.
- Becker, C.D., D.H. Fickeisen, and J.C. Montgomery. 1982. Effects of dewatering on chinook salmon redds: Tolerance of four developmental phases to daily dewaterings. *Trans. Amer. Fish. Soc.* 111:642-637.
- Beechie, T. and S. Bolton. 1999. An approach to restoring salmonid habitat-forming processes in Pacific Northwest watersheds. *Fisheries* 24(4): 6-15.
- Behnke, R.J. 1992. Native trout of western North America. American Fisheries Society Monograph No. 6. Bethesda Maryland.
- Bell, M. C. 1986. Fisheries Handbook of Engineering Requirements and Biological Criteria. Fish Passage Development and Evaluation Program. U. S. Army Corps of Engineers. Portland, Oregon.

- Bell, M.C. 1991. Revised Compendium on the Success of Passage of Small Fish Through Turbines. U.S. Army Corps of Engineers, North Pacific Division, Portland, Oregon.
- Bell, M.C., and K.J. Bruya. 1981. *Updated Compendium on the Success of Passage of Small Fish through Hydroelectric Turbines*. U.S. Army Corps of Engineers, North Pacific Division, Portland, Oregon.
- Bergstedt, R.A. and J.G. Seelye. 1995. Evidence for Lack of Homing by Sea Lampreys. *Transactions of the American Fisheries Societies*. 124:235-239.
- Beyer, J.M. 1984. Rainbow Trout Fishery and Spawning Stock in the Upper Klamath River Wild Trout Area, Copco, California. Masters Thesis. Humboldt State University. Arcata, California. 75 pp.
- Bond, C.E. 1989. Report on Identification of Juvenile Suckers (Catostomidae) From Upper Klamath Lake, Oregon. U.S. Bureau of Reclamation, Klamath Falls, Oregon. Report Order 9-PG-25-00370. January 31, 1989.
- Bovee, K.D. 1982. A guide to stream habitat analysis using the Instream Flow Incremental Methodology. Instream Flow Information Paper 12. United States Fish and Wildlife Service Report FWS/OBS-82/26. 248pp.
- Bovee, K.D. 1997. Data collection procedures for the Physical Habitat Simulation System. USGS Biological Resources Division, Ft. Collins, CO. 141pp.
- Bovee, K.D., and R.T. Milhous. 1978. Hydraulic simulation in instream flow studies: theory and techniques. Instream Flow Information Paper 5. United States Fish and Wildlife Service FWS/OBS-78/33. 129pp.
- Bovee, K.D., B.L. Lamb, J.M. Bartholow, C.B. Stalnaker, J. Taylor, and J. Henriksen. 1998. Stream habitat analysis using the instream flow incremental methodology. USGS Biological Resources Division Information and Technology Report USGS/BRD-1998-0004. viii + 131 pp.
- Bradford, M.J., G.C. Taylor, and J.A. Allan. 1995. An experimental study of the stranding of juvenile coho salmon and rainbow trout during rapid flow decreases under winter conditions. *N. Amer. J. Fish. Management*. 15:473-479.
- Bremm, D.J. 1988. Comparison of stream velocity simulations for the IFG-4 model three-flow, one-flow, and no-velocity options. M.S. Thesis, Humboldt State University. Arcata, California. 54pp.
- Brooker, M.P. 1981. The impact of impoundments on the downstream fisheries and general ecology of rivers. *Adv. Appl. Biol.* 6:91-152.
- Buchanan D.V., A.R. Hemmingson, D.L. Bottom, R.A. French, and K.P. Currens. 1990. Annual Progress Report. Oregon Department of Fish and Wildlife, Portland, Oregon.

- Buchanan D.V., A.R. Hemmingson, D.L. Bottom, R.A. French, K.P. Currens, and P.J. Howell. 1991. Annual Progress Report. Oregon Department of Fish and Wildlife, Portland, Oregon.
- Buchanan, D., A. Hemmingsen, D. Bottom, P. Howell, R. French, and K. Currens. 1991. Native Trout Project. Oregon Department of Fish and Wildlife, Fish Research Project F-136-R, Portland.
- Buchanan, D., A. Hemmingsen, D. Bottom, R. French, and K. Currens. 1989. Native Trout Project. Oregon Department of Fish and Wildlife, Fish Research Project F-136-R, Portland.
- Buchanan, D.V., A.R. Hemmingsen, D.L. Bottom, R.A. French, and K.P. Currens. 1989. Native Trout Project Annual Progress Report. Oregon Department of Fish and Wildlife.
- Buchanan, D.V., J.E. Sanders, J.L. Zinn, and J.L. Fryer. 1983. Relative susceptibility of four strains of summer steelhead to infection by *Ceratomyxa sShasta*. Transactions of the American Fisheries Society 122:541-543.
- Buettner, M. and G. Scopettone. 1990. Life History and Status of Catostomids in Upper Klamath Lake, Oregon. Completion Report, U.S. Fish and Wildlife Service, National Fisheries Research Center, Reno, Nevada. 108 pp.
- Burgner, R.L., J.T. Light, L. Margolis, T. Okazaki, A. Tautz, and S. Ito. 1992. Distribution and origins of steelhead trout (*Oncorhynchus mykiss*) in offshore waters of the North Pacific Ocean. International North Pacific Fisheries Commission Bulletin No. 51.
- Busby, P.J., T.C. Wainwright, and Robin S. Waples. 1994. Status Review for Klamath Mountains Province steelhead. National Marine Fisheries Technical Memorandum NMFS-NWFSC-19. Seattle Washington.
- Busby, P.J., T.C. Wainwright, G.J. Bryant, L.J. Lierheimer, R.S. Waples, F.W. Waknitz, and I.L. Lagomarsino. 1996. Status review of west coast steelhead from Washington, Idaho, Oregon, and California. National Marine Fisheries Technical Memorandum NMFS-NWFSC-27. Seattle Washington.
- Cada, G. F. 1990. A review of studies relating to the effects of propeller-type turbine passage on fish early life stages. North American Journal of Fisheries Management 10:418-426.
- Cada, G. F., and B. N. Rinehart. 2000. Hydropower R&D: recent advances in turbine passage technology. U.S. Department of Energy, Idaho Operations Office, DOE/ID-10753. April 2000.
- California Department of Fish and Game (CDFG (California Department of Fish and Game). 2002. Status Review of California coho salmon North of San Francisco. Report to the California Fish and Game Commission.

- California Department of Fish and Game (CDFG) (California Department of Fish and Game). 2001. "Final report on anadromous salmonid fish hatcheries in California." California Department of Fish and Game and National Marine Fisheries Service Southwest Region Joint Hatchery Review Committee. Review draft, June 27, 2001.
- California Department of Fish and Game (CDFG) (California Department of Fish and Game). 1992. Status Report: California salmon. Report to Fish and Game Commission, Sacramento, California.
- California Department of Fish and Game (CDFG). 1995. Klamath River fall Chinook salmon run-size, in-river harvest and spawner escapement – 1995. California Dept. of Fish and Game Klamath-Trinity Program. 8 p. (Available from Inland Fisheries Division, 1416 Ninth Street, Sacramento, CA 95814.)
- California Department of Fish and Game. 1991. County Population Estimate Report. Shovel, Siskiyou, Yreka, California. CDFG, Sacramento, CA.
- California Department of Fish and Game. 2000. Upper Klamath River Wild Trout Management Plan, 2000-2004. Northern California and North Coast Region, Wildlife and Inland Fisheries Division. California.
- Campton, D. E. and , F. M. Utter. 1985. Natural hybridization between steelhead trout (*Salmo gairdneri*) and coastal cutthroat trout (*Salmon clarki clarki*) in two Puget Sound streams. Canadian Journal of Fisheries and Aquatic Sciences 42: 110-119.
- Carlander, K.D. 1969. Handbook of Freshwater Fishery Biology. Volume I. Iowa State University Press, Ames.
- Carlander, K.D. 1981. Handbook of freshwater fishery biology. Volume I. Iowa State University Press, Ames.
- Cavalli-Sforza, L.L., and A.W.F. Edwards. 1967. Phylogenetic analysis: models and estimation procedures. Evolution 32: 550-570.
- Cell Tech: Research and Development and PacifiCorp Environmental Services. 2000. Link River Hydroelectric Project (Eastside and Westside Powerhouses) Final Entrainment Study Report: March 1997 - October 1999. Prepared by B. Gutermuth and C. Watson (Cell Tech) and J. Kelly (PacifiCorp). September 2000.
- CH2M HILL. 1985. Klamath River Basin Fisheries Resource Plan. Report to U.S. Department of Interior, Bureau of Indian Affairs. CH2M HILL, Redding, California. 404 pp.
- Chandler, J.A., M.A. Fedora, and T.R. Walters. 2001. Pre- and Post-spawn movements and spawning observations of resident bull trout in the Pine Creek Watershed, Eastern Oregon. In: Brewin, M.K., A.J. Paul, M. Monita (Eds.), Bull Trout II Conference Proceedings; Ecology and Management of Northwest Salmonids. Trout Unlimited, Canada, Calgary, Alberta, pp. 167-175.

- Chapman, D.W., D.E. Weitkamp, T.L. Welsh, M.B. Dell, and T.H. Schadt. 1986. Effects of river flow on the distribution of chinook salmon redds. *Trans. Amer. Fish. Soc.* 115:537–547.
- Close, D. A., M. Fitzpatrick, H. Li, B. Parker, D. Hatch, and G. James. 1995. Status Report of the Pacific Lamprey (*Lampetra tridentata*) in the Columbia River Basin. Prepared for Bonneville Power Administration.
- Coleman, M.E. and A.M. McGie. 1988. Annual Progress Report 1987, Fish Research Project, Oregon. Oregon Department of Fish and Wildlife, Portland, Oregon. Project No. E-2.
- Coots, M. 1955. The Pacific Lamprey, *Entosphenus tridentatus*, above Copco Dam, Siskiyou county, California. *California Fish and Game* 41:118-119.
- Cope, E.D. 1879. The Fishes of Klamath Lake, Oregon. *American Naturalist* 13:784-758. Fishes of the Recent and Pliocene Lakes of the Western Part of the Great Basin, and of the Idaho Pliocene Lake. *Proceedings of the Academy of Natural Sciences Philadelphia* 35(1883):134-167.
- Cope, E.D. 1881. A New Genus of Catostomidae. *American Naturalist* 15:59.
- Cope, E.D. 1884. On the Fishes of the Recent and Pliocene Lakes of the Western Part of the Great Basin, and of the Idaho Pliocene Lake. *Proceedings of the Academy of Natural Sciences Philadelphia* 35(1883):134-167.
- Council on Environmental Quality (CEQ). National Environmental Policy Act (NEPA). Regulations—Title 40 CFR 1500-1508.
- Council on Environmental Quality. 1981. Forty Most Asked Questions Concerning CEQs.
- Cox, B. CDFG pathologist. Personal communication, 2003.
- Cramer, F.K., and R.C. Olighter. 1964. “Passing Fish through Hydraulic Turbines.” *Transactions of the American Fisheries Society*, Volume 93, No. 3, 1964, pages 243-259.
- Currens, K.P. 1990. Genetic Variation of Rainbow Trout (*Oncorhynchus mykiss*) in Jenny Creek, Oregon. Oregon Cooperative Fish Research Unit Genetic Laboratory Report 90(1).
- Currens, K.P. 1997. Evolution and risk in conservation of Pacific salmon. Ph.D. Dissertation. Oregon State University, Corvallis, Oregon.
- Cushman, R.M. 1985. Review of ecological effects of rapidly varying flows downstream from hydroelectric facilities. *N. Amer. J. of Fish. Management.* 5:330–339.
- Davis, J.C. 1975. Waterborne Dissolved Oxygen Requirements and Criteria with Particular Emphasis on the Canadian Environment. National Research Council of Canada. Associate Committee on Scientific Criteria for Environmental Quality, NRCC No. 14100. 111 p.

- Dean, M. 1995. Trinity River Basin salmon and steelhead monitoring project 1992-1993 season: Job VII Life history, distribution, run size, and harvest of spring Chinook salmon in the South Fork Trinity River Basin. California Department of Fish and Game, Inland Fisheries Division, 187-226 p. (Available from Inland Fisheries Division, 1416 Ninth Street, Sacramento, CA 95814.)
- Desjardins, M. and D.F. Markle. 1999. Distribution and Biology of Suckers in Lower Klamath Reservoirs. 1999 Final Report. Submitted to PacifiCorp by Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR.
- Doudoroff, P. and D.L. Shumway. 1970. Dissolved Oxygen Requirements of Freshwater Fishes. Food and Agriculture Organization of the United Nations. FAO Tech. Paper 86. 291 p.
- Edison Electric Institute. 1984. Glossary of Electric Utility Terms.
- Eicher and Associates, Inc. 1987. Turbine-related fish mortality: review and evaluation of studies. Research Project 2694-4. Electric Power Research Institute, Palo Alto, California.
- Eigenmann, R.S. 1891. Description of a New Species Catostomus (C. rex) From Oregon. American Naturalist 25 (part 2):667-668.
- Electric Power Research Institute. 1992. Fish Entrainment and Turbine Mortality Review and Guidelines. EPRI TR-101231. September 1992.
- Elle, S. 1995. Annual Performance Report. Project 3; Subproject 1. Wild Trout Regulation Effects on Angler Displacement. Subproject 2. Steelhead Exploitation Studies. Project 6; Subproject 1. Rapid River Bull Trout Movement and Mortality Studies. Subproject 2. Bull Trout Aging Studies. Idaho Fish and Game, Boise, Idaho.
- Elle, S. 1998. Annual Performance Report. Project 3. Wild Trout Investigations, Subproject 1. Whirling Disease Studies, Subproject 2. Evaluations of Salmonid Restricted Harvest Regulations Permitting the Use of Bait, Project 6. Bull Trout Investigations, Subproject 1. Rapid River Bull Trout Movement and Mortality Studies. Project F-73-R-18. Idaho Department of Fish and Game, Coeur d'Alene, Idaho.
- Energy Information Administration (EIA)/Electric Power Monthly. No date available.
- European Inland Fisheries Advisory Commission (EIFAC). 1973. Water Quality Criteria for European Freshwater Fish. Report on Dissolved Oxygen and Inland Fisheries. EIFAC Tech. Paper No. 86.
- Federal Energy Regulatory Commission (FERC) Glossary. No date available. Printed in an Annual Report to Congress.
- Federal Energy Regulatory Commission (FERC) Regulations—18 Code of Federal Regulations (CFR).

- Federal Energy Regulatory Commission (FERC). 1990. Final EIS for Salt Caves Hydroelectric Project: FERC 10199-000. Washington, D.C.
- Federal Energy Regulatory Commission (FERC). April 1990. Hydroelectric Project Relicensing Handbook.
- Federal Energy Regulatory Commission. 1995. Preliminary assessment of fish entrainment at hydropower projects, a report on studies and protective measures, volumes 1 and 2 (appendices). FERC Office of Hydropower Licensing, Washington, D.C. Paper No. DPR-10. June 1995 (volume 1) and December 1994 (volume 2).
- Federal Energy Regulatory Commission. 1996a. Final environmental impact statement, Wisconsin River basin, Wisconsin. FERC/EIS-0089F. Prepared in cooperation with the U.S. Forest Service. FERC Office of Hydropower Licensing, Washington, D.C. June 1996.
- Federal Energy Regulatory Commission. 1996b. Menominee River multiple project final environmental impact statement, Little Quinnesec Falls Hydroelectric Project (FERC No. 2536), Chalk Hill Hydroelectric Project (FERC No. 2394), White Rapids Hydroelectric Project (FERC No. 2357), Grand Rapids Hydroelectric Project (FERC No. 2433). FERC Office of Hydropower Licensing, Washington, D.C. October 1996.
- Federal Energy Regulatory Commission. 1997. Final environmental impact statement for relicensing six existing hydroelectric projects in the Peshtigo River basin. FERC Project Nos. 2525 Caldron Falls, 2595 High Falls, 2522 Johnson Falls, 2546 Sandstone Rapids, 2560 Potato Rapids, 2581 Peshtigo. FERC Office of Hydropower Licensing, Washington, D.C. March 1997.
- Federal Power Act. 16 U.S. Code. 791a-825r.
- Fisher, R.J. 1963. Influence of Oxygen Concentration and its Diurnal Fluctuation on the Growth of Juvenile Coho Salmon. M.S. Thesis. Oregon State University, Corvallis. 48 p. (Cited In: EPA, 1986).
- FishPro. 1992. *Iron Gate Hatchery Evaluation*. Prepared for PacifiCorp by FishPro Inc., Port Orchard, Washington.
- FishPro. 2000. Fish Passage Conditions on the Upper Klamath River. Submitted to the Karuk Tribe and PacifiCorp by FishPro, Inc., Port Orchard, Washington. July 2000.
- Flosi, G., S, Downie, J. Hopelain, M. Bird, R. Coey and B. Collins. 1998. California salmonid stream habitat restoration manual. Third Edition. California Department of Fish and Game. 495 pp.
- Foott, J. S., J. D. Williamson and K. C. True. 1999. Health, physiology and migration characteristics of Iron Gate Hatchery Chinook, 1995 releases. USFWS, California-Nevada Fish Health Center, Anderson, CA.

- Foott, J. S., R. Harmon and R. Stone. 2003. FY2002 Investigational Report: Ceratomyxosis resistance in juvenile Chinook salmon and steelhead trout from the Klamath River. USFWS, California-Nevada Fish Health Center, Anderson, CA.
- Foott, J. S., T. Martinez, R. Harmon, K. True, B. McCasland, C. Glase and R. Engle. 2002. FY2001 Investigational Report: Juvenile Chinook Health Monitoring in the Trinity River, Klamath River ad Estuary. June-August 2001. USFWS, California-Nevada Fish Health Center, Anderson, CA.
- Ford, M. J., P. J. Thorton, and L. K. Park. 1999. Natural Selection promotes divergence of transferring among salmonid species. *Molecular Ecology* 8: 1055-1061.
- Fortune, J. Jr., A. Gerlach, and C. Hanel. 1966. A Study to Determine the Feasibility of Establishing Salmon and Steelhead in the Upper Klamath River. Prepared by Oregon State Game Commission and Pacific Power and Light Company. April 1966.
- Fortune, J.D. Jr., A.R. Gerlach, and C.J. Hamel. 1966. A study to determine the feasibility of establishing salmon and steelhead in the Upper Klamath Basin.
- Fowler, H.W. 1914. Notes on Catostomid Fishes. *Proceedings of the Academy of Natural Sciences Philadelphia* 65:45-71.
- Frankam, R., J.D. Ballou, and D.A. Briscoe. 2002. *Introduction to Conservation Genetics*. Cambridge University Press, Cambridge, United Kingdom.
- Garza, Carlos. NOAA Fisheries- Santa Cruz, California. Gatton, R. 2003. Hatchery design engineer, CH2M HILL
- Gilbert, C. H. 1912. Age at maturity of Pacific cast salmon of the genus *Oncorhynchus*. *Bulletin of the U.S. Fish Commission* 32: 57-70.
- Gilbert, C.H. 1897. The Fishes of the Klamath Basin. *Bulletin U.S. Fish Commission*, 17(4-1897):1-13.
- Gislason, J.C. 1980. Effects on flow fluctuation due to hydroelectric peaking on benthic insects and periphyton of the Skagit River, Washington. Doctoral dissertation. University of Washington, Seattle, WA.
- Golden, M.P. 1969. The Lost River Sucker, *Catostomus luxatus* (Cope). Oregon State Game Commission. Central Region Administrative Report No. 1-69.
- Gray-Owens, S. D. and, A. B. Schryvers. 1996. Bacterial transferrin and lactoferrin receptors. *Trends in Microbiology* 4: 185-191
- Groot, C. and L. Margolis (Eds.). 1991., *Life History of Pacific salmon*, p.311-393. University of British Columbia Press, Vancouver, British Columbia.
- Guerinot, M. L. 1994. Microbiol iron transport. *Annual Review of Microbiology* 48:743-772.
- Hall, Carl W. and George W. Hinman. 1983. *Dictionary of Energy*. Marcel Dekker, Inc.

- Hamilton, R. and J.W. Buell. 1976. Effects of modified hydrology on Campbell River salmonids. Technical Report No. Pac/T-76-20. Canada Department of the Environment, Fisheries, and Marine Service. Vancouver, BC, Canada. 156 pp.
- Hanal and Gerlach. 1964. Klamath River Flow Study at J.C. Boyle Project. Report prepared jointly for the Oregon Game Commission and Pacific Power and Light Company.
- Hanson, P.C., T.B. Johnson, D.E. Schindler and J.F. Kitchell. 1997. Fish Bioenergetics 3.0 for Windows. University of Wisconsin-Madison. 86 p.
- Hardin-Davis, Inc. 2000. *Ramping Below Iron Gate Dam*. Report prepared for PacifiCorp Environmental Services, Portland, OR, and the U.S. Bureau of Reclamation, Klamath Falls, OR.
- Hardin-Davis, Inc. 2002. Ramping below Iron Gate Dam. Study Report. Prepared for PacifiCorp Environmental Services, Portland, OR, and U.S. Bureau of Reclamation, Klamath Falls, OR. Corvallis, OR.
- Hardy, C.J. 1963. An examination of eleven stranded redds of brown trout (*Salmo trutta*) excavated in the Selwyn River during July and August 1960. *New Zealand J. Sci.* 6:106–119.
- Hardy, T.B. and R.C. Addley. 2001. *Evaluation of Interim Instream Flow Needs in the Klamath River. Phase II. Final Report*. Prepared for U.S. Department of the Interior. November 21, 2001.
- Harig, A.L., K.D. Fausch, and M.K. Young. 2000. Factors influencing success of Greenback cutthroat trout translocations. *Transactions of the American Fisheries Society* 20:994-1004.
- Hassler, T. J. 1987. Coho salmon. USFWS Series Biological Report 82 (11.70).
- Hassler, T.J., 1987. Species Profiles: Life Histories and Environmental Requirements of Coastal Fishes and Invertebrates (Pacific Southwest) – Coho Salmon. U.S. Fish and Wildlife Service Biological Report 82 (11.70).
- Hatch, K.M. 1990. A phenotypic comparison of thirty-eight steelhead (*Oncorhynchus mykiss*) populations from coastal Oregon. M.S. Thesis, Oregon State University, Corvallis, Oregon.
- Headrick, Michael R. 2001. "Predicting Fish Survival in Axial Flow Turbines." *Hydro Review*, July 2001, pages 114-119.
- Healey, M. C. 1983. Coast-wide distribution and ocean migration patterns of stream- and ocean-type Chinook salmon, *Oncorhynchus tshawytscha*. *Canadian Field-Naturalist* 97: 427-433.

- Healey, M. C. 1991. The life history of Chinook salmon (*Oncorhynchus tshawytscha*). In C. Groot and L. Margolis (eds), Life History of Pacific salmon, p.311-393. University of British Columbia Press, Vancouver, British Columbia.
- Hedgecock, D., M. Banks, K. Bucklin, C. Dean, W. Eichert, C. Greig, P. Siri, B. Nyden, and J. Watters. 2002. Documenting Biodiversity of Coastal Salmon (*Oncorhynchus* spp.) in Northern California. Final report to Sonoma County Water Agency, Contract #TW 99/00-110.
- Heifetz, J., M.L. Murphy, and K.V. Koski. 1986. Effects of Logging on winter Habitat of Juvenile Salmonids in Alaskan Streams. North American Journal of Fisheries Management. 6:52-58.
- Hemmingsen, A., R. French, D. Buchanan, D. Bottom, and K. Currens. 1992. Annual Progress Report Fish Research Project Oregon - native trout project. Oregon Department of Fish and Wildlife. Portland, Oregon.
- Hemmingsen, A.R., D.V. Buchanan, D.L. Bottom, R.A. French, K.P. Currens, and F.C. Shrier. 1988. Native trout project. Oregon Department of Fish and Wildlife. Fish Research Project F-136-R, Annual Progress Report, Portland, OR. R.A. Holt, and R.D. Ewing. 1986. Susceptibility of progeny from crosses among three stocks of coho salmon to infections by *Ceratomyxa shasta*. Transaction of the American Fisheries Society 115: 492-495.
- Hemmingsen, A.R., R.A. Holt, and R.D. Ewing. 1986. Susceptibility of progeny from crosses among three stocks of coho salmon to infections by *Ceratomyxa shasta*. Transaction of the American Fisheries Society 115: 492-495.
- Hendrickson, G. L., A. Carlton and D. Manzer. 1989. Geographic and seasonal distribution of the infective stage of *Ceratomyxa shasta* (Myxozoa) in Northern California. Diseases of Aquatic Organisms 7:165-169.
- Henriksen, J., C. Reese, S. Snedaker, S. Swanson, and M. Turaski. 2002. Instream Flow Analysis for the Bureau of Land Management Federal Reserved Water Right, Claim Number 376 for the Klamath Wild and Scenic River in Oregon. Prepared by U.S. Department of Interior, Bureau of Land Management. May 2002.
- Hepworth, D.K., M.J. Ottenbacher, and L.N. Berg. 1997. Distribution and abundance of native Bonneville cutthroat trout (*Oncorhynchus clarki utah*) in southwestern Utah. Great Basin Naturalist 57:11-20.
- Hill, M.O. 1979a. TWINSpan-A FORTRAN program for arranging multivariate data in an ordered two-way table by classification of the individuals and attributes. Cornell University. Ithaca NY.
- Hill, M.O. 1979b. DECORANA-A FORTRAN program for detrended correspondence analysis and reciprocal averaging. Cornell University. Ithaca NY.
- Hjort, R. C. and, C. B. Schreck. 1982. Phenotypic differences among stocks of hatchery and

- Hjort, R. C. and, C. B. Schreck. 1982. Phenotypic differences among stocks of hatcheries.
- Hobbs, D.F. 1937. Natural reproduction of quinnant salmon, brown, and rainbow trout in certain New Zealand waters. New Zealand Marine Department Fisheries Bulletin 6.
- Hockersmith, E. E., J. Vella, and L. Stuehrenberg. 1995. Yakima River radio-telemetry study – Rainbow trout, annual report 1993. Bonneville Power Administration, DOE/BP-00276-3, Portland, Oregon.
- Hoopa Valley Tribal Council (HVTC). 1997. Documents submitted to the ESA Administrative Record for west coast Chinook salmon. M. Orcutt, 31 March 1997 response to the November 22, 1996, co-manager's draft of the west coast Chinook salmon status review, 4 p. (Available from Environmental and Technical Service Division, National Marine Fisheries Service, 525 N.E. Oregon St., Suite 500, Portland, OR 97232.)
- Hopelain, J.S. 1998. Age, growth, and life history of Klamath River Basin steelhead (*Oncorhynchus mykiss irideus*) as determined from scale analysis. Inland Fisheries Administrative Report 98-3.
- Hubbs, C. L. 1955. Hybridization between fish species. Systematic Zoology. 4:1-12.
- Hummel, D. 1993. Distribution of Shortnose Suckers and Other Species in the Upper Klamath River. Klamath Falls, Oregon.
- Hunt, V. Daniel. 1979. Energy Dictionary. Litton Educational Publishing, Inc.
- Hunter, M.A. 1992. Hydropower flow fluctuations and salmonids: A review of the biological effects, mechanical causes, and options for mitigation. Technical Report No. 119. Washington Department of Fisheries, Olympia, WA.
- Hvidsten, N.A. 1985. Mortality of pre-smolt Atlantic salmon, *Salmo salar* L., and brown trout, *Salmo trutta* L., caused by fluctuating water levels in the regulated River Nidelva, central Norway. J. of Fish Biol. 1985:711–718.
- INSE (Institute for Natural Systems engineering), 1999. Evaluations of Interim Instream Flow Needs in the Klamath River. Phase I Final Report. August 1999. Logan, Utah.
- Integrated Hatchery Operation Team (IHOT). 1995. *Policies and Procedures for Columbia Basin Anadromous Salmonid Hatcheries*. Prepared for U.S. Department of Energy, Bonneville Power Administration, Portland, OR.
- Irvine, J.R. 1985. Effects of successive flow perturbations on stream invertebrates. Can. J. Fish. Aquat. Sci. 42:1922–1927.
- Irvine, J.R. 1986. Effects of varying discharge on the downstream movement of salmon fry, *Oncorhynchus tshawytscha* Walbaum. J. Fish Biol. 28:17–28.
- Irvine, J.R. 1987. Effects of varying flows in man-made streams on rainbow trout (*Salmo gairdneri* Richardson) fry. In: Regulated Streams, Advances in Ecology. Ed.: J.F. Craig and J.B. Kemper. Plenum Press, New York, NY.

- Johnson, O. W., T. A. Flagg, D. J. Maynard, G. B. Milner, and F. W. Waknitz. 1991. Status review for lower Columbia River coho salmon. U.S. Department of Commerce, NOAA Tech. Memo. NMFS-NWFSC-202.
- Johnson, O.W. 1988. Induced triploidy in Pacific salmon. Ph.D. Dissertation, University of Washington, Seattle, Washington, 137 p.
- Kan, T. T. 1975. Systematics, Variation, Distribution, and Biology of lampreys of the genus *Lampetra* in Oregon. Doctoral Dissertation, Oregon State University, Corvallis, Oregon.
- Kesner, W.D. and R.A. Barnhardt. 1972. Characteristics of the fall-run steelhead trout (*Salmo gairdneri gairdneri*) of the Klamath River system with emphasis on the half-pounder. California Fish and Game 58: 204-220.
- Kier Associates. 2000. Klamath Hydroelectric Project Annotated Bibliography of Aquatics and Wildlife. Prepared for PacifiCorp. May 2000.
- Klamath Falls, City of. 1986. Application for License, Salt Caves Hydroelectric Project, FERC Project No. 10199. Volume III: Exhibit E. Section 3.0. Report on Fish, Wildlife, and Botanical Resources. Submitted to the Federal Energy Regulatory Commission by the City of Klamath Falls.
- Klamath Falls, City of. 1986. Application for license: Salt Caves Hydroelectric Project. Volume II: Exhibit E. Submitted to the Federal Energy Regulatory Commission. November 1986.
- Klamath Falls, City of. 1989. Application for License, Salt Caves Hydroelectric Project, FERC Project No. 10199. Response to Additional Information Request.
- Klamath Falls, City of. 1990. Application for License: Salt Caves Hydroelectric Project. Project No. 10199. Response to license additional information requests. Submitted to the Federal Energy Regulatory Commission. March 1990.
- Klamath Resource Information System 2003 - <http://www.krisweb.com/krisweb.kt/shasta/poptrend/htm>, December 9, 2003.
- Klamath River Basin Fisheries Task Force (KRBFTF (Klamath River Basin Fisheries Task Force). 1991. Long range plan for the Klamath River Basin Conservation Area Fishery Restoration Program. U.S. Fish and Wildlife Service, Klamath River Fishery Resource Office, Yreka, California.
- Klamath River Basin Fisheries Task Force (KRBFTF (Klamath River Basin Fisheries Task Force). 1991. Long range plan for the Klamath River Basin Conservation Area Fishery Restoration Program. Prepared by the Task Force with assistance from William M. Kier Associates. January 1991. U.S. Fish and Wildlife Service, Klamath River Fishery Resource Office, Yreka, California.
- Klamath River Basin Fisheries Task Force (KRBFTF). 1992. *Long Range Plan for the Klamath River Basin Conservation Area Fishery Restoration Program*. Prepared by the Task Force with assistance from William M. Kier Associates. October 1992.

- Klamath River Stock Identification Committee (KRSIC (Klamath River Stock Identification Committee). 1993. Salmon and steelhead populations of the Klamath-Trinity basin. Report to the Klamath River Task Force.
- Klamath River Stock Identification Committee (KRSIC) 1993. Salmon and steelhead populations of the Klamath-Trinity basin. Stock Identification Committee Report to Klamath River Task Force. February 1993. 9 p
- Klamath Tribe. 1987. Quarterly reports (Spring and Summer), Upper Klamath Lake Sucker Investigations.
- Kondolf, G.M., and W.V.G. Matthews. Transport of tracer gravels on a coastal California river. *Journal of Hydrology*, 85:265-280. 1986.
- Kostow, Kathryn. 2002. Oregon Lampreys: Natural History, Status, and Analysis of Management Issues. Oregon Department of Fish and Wildlife.
- Kroger, R.L. 1973. Biological effects of fluctuating water levels in the Snake River, Grand Teton National Park, Wyoming. *Amer. Midland Naturalist*. 89:478-481.
- Lamson, H. 2002. Iron Gate Hatchery Steelhead Residualism Study, 2000-2001, Project 2b1 Annual Report. California Department of Fish and Game.
- Larson, Z. S. and m. R. Belchik. 1998. A Preliminary Status Review of Eulachon and Pacific Lamprey in the Klamath River Basin. Yurok Tribal Fisheries Program.
- Leidy, A. Robert and George R. Leidy. 1984. Life Stage Periodicities of Anadromous Salmonids in the Klamath River Basin, Northwestern California. U.S. Fish and Wildlife Service, Division of Ecological Services, Sacramento, California. 38 pp.
- Loehr, T. M. 1989. Iron Carriers and Iron Proteins. VCH, New York, USA.
- Marcus, M., M. Young, L. Noel, and B. Mullan. 1990. Salmonid Habitat Relationships in the Western United States: a Review and Indexed Bibliography. USDA-Forest Service General Technical Report RM-188. Rocky Mountain Forest and Range Experiment Station. 84 pp.
- McCain, M., D. Fuller, L. Decker, and K. Overton. 1990. Stream habitat classification and inventory procedures for northern California. FHR Currents No. 1, USDA, Forest Service, Region 5 Fish Habitat Relationship Technical Bulletin. Eureka, CA. 15pp.
- McGraw-Hill Dictionary of Scientific and Technical Terms. 1978. McGraw-Hill.
- McKinney, T., D.W. Speas, R.S. Rogers, and W.R. Persons. 2001. Rainbow trout in a regulated river below Glen Canyon Dam, Arizona, following increased minimum flows and reduced discharge variability. *N. Amer. J. of Fish. Management*. 21:216-222.

- McPhee, C. and M.A. Brusven. 1976. The effect of river fluctuations resulting from hydroelectric peaking on selected aquatic invertebrates and fish. September 1976. Submitted to the Office of Water Research and Technology, U.S. Department of Interior. Idaho Water Resources Research Institute, University of Idaho, Moscow, ID. 46 p.
- Milhous, R.T. and D.M. Schneider. 1985. Unpublished memorandum. Dated 4 October 1985. Cooperative Instream Flow Group, Ft. Collins, Colorado. 3pp.
- Milhous, R.T., D.L. Wegner, and T. Waddle. 1984. User's guide to the Physical Habitat Simulation System (PHABSIM). Instream Flow Information Paper 11. United States Fish and Wildlife Service Report FWS/OBS-81/43. v.p.
- Milhous, R.T., M.A. Updike, and D.M. Schneider. 1989. Physical Habitat Simulation System Reference Manual - Version II. Instream Flow Information Paper No. 26. United States Fish and Wildlife Service Biological Report 89(16). v.p.
- Miller, R.R. 1959. Origins and affinities of the Freshwater Fish Fauna of Western North America. Pages 187-222 in C.L. Hubbs, ed. Zoogeography. American Association of Advisory Science Publications 51.
- Miller, R.R. and G.R. Smith. 1967. New Fossil Fishes From Plio-Pleistocene Lake Idaho. Occasional Papers of the Museum of Zoology. University of Michigan No. 654. 24 pp.
- Miller, R.R. and G.R. Smith. 1981. Distribution and Evolution of *Chasmistes* (Pisces: Catostomidae) in Western North America. Occasional papers of the Museum of Zoology, University of Michigan, Ann Arbor. 696:1-46.
- Milner, G. B. 1993. Isozyme variation of coho salmon (*Oncorhynchus kisutch*) and its potential to estimate stock compositions of mixed stock fisheries. In L. Berg and P. W. Delaney (editors), Proceedings of the Coho Workshop, Nanaimo, B. C., May 26-28, 1992, p. 182-192. (Available from Canadian Department of Fisheries and Oceans, Habitat Management Sector, Policy and Information Unit, 327-555 W. Hastings St., Vancouver, B.C. V6B 5G3.)
- Mobrand Biometrics, Inc. 1999. *The EDT Method*. Mobrand Biometrics, Inc. Vashon Island, WA.
- Moffett, J.W., and S. H. Smith. 1950. Biological investigations of the fishery resources of Trinity River, California. U.S. Fish and Wildlife Service Special Scientific Report on Fisheries No. 12, 71 p.
- Monk, C.L. 1989. Factors that influence stranding of juvenile chinook salmon and steelhead trout. Master's thesis. University of Washington, Seattle, WA.
- Moore, K., K. Jones and J. Dambacher. 1998. Methods for stream habitat surveys. Aquatic Inventory Project. Oregon Department of Fish and Wildlife, Natural Production Program, Corvallis, OR. 36 pp.

- Morhardt, J.E., D.F. Hanson, and P.J. Coulston. 1984. Instream flow analysis: increased accuracy using habitat mapping. Ecological Analysts, Inc., Lafayette, California. 8pp.
- Moser, M. L. 2003. Personal Communication between Mary Moser, NOAA Fisheries, and Lynn Foster, CH2M HILL, regarding the upstream migration of adult Pacific lamprey past dams. February 3, 2003.
- Moser, M. L., P. A. Ocker, L. C. Stuehrenberg, and T. C. Bjornn. 2002. Passage Efficiency of Adult Pacific Lampreys at Hydropower Dams on the Lower Columbia River, USA. Transactions of the American Fisheries Society, Vol. 131(5): 956-965.
- Moyle, P.B. 2002. Inland Fishes of California, 2nd Edition. University of California Press: Berkeley, California, 502 pp.
- Moyle, Peter B. 1976. Inland Fishes of California. University of California Press, Berkeley and Los Angeles, California.
- Mundie, J.H. and D.E. Mounce. 1976. Effects of changes in discharge in the lower Campbell River on the transport of food organisms of juvenile salmon. Appendix Report in: Hamilton, R. and J.W. Buell. 1976. Effects of modified hydrology on Campbell River Salmonids. Technical Report Series No. Pac/T-76-20. Canada Department of the Environment, Fisheries, and Marine Service. Vancouver, BC, Canada.
- Myers, J. M., R.G. Kope, G. J. Bryant, D. Teel, L.J. Leirheimer, T.C. Wainwright, W. S. Grant, F. W. Waknitz, K. Neely, S. T. Lindley, and R. S. Waples. 1998. Status review of Chinook salmon from Washington, Idaho and California. 443 pp. U. S. Dept. Commerce. NOAA Technical Memorandum. NMFS-NWFSC-35.
- National Environmental Policy Act Regulations. Memorandum to Agencies. 46 Fed. Reg. 18026. <http://ceq.eh.doe.gov/nepa/regs/40/40p1.htm>;
<http://ceq.eh.doe.gov/nepa/regs/40/40p2.htm>;
<http://ceq.eh.doe.gov/nepa/regs/40/40p3.htm>.
- National Marine Fisheries Service (NMFS). 2003. Preliminary conclusions regarding the updated status of ESUs of West coast salmon and steelhead. Co-managers review draft (Feb 2003), NMFS, Northwest Fisheries Science Center, Seattle, Washington.
- National Marine Fisheries Service. 2000. Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act. Portland, OR.
- National Marine Fisheries Service. 2002. Biological Opinion regarding the Bureau of Reclamation's Klamath Project operations from June 1, 2002 through March 31, 2021 on Southern Oregon/Northern California Coasts (SONCC) coho salmon (*Oncorhynchus kisutch*).
- National Oceanic and Atmospheric Administration (NOAA). 1998. Proposed endangered status and critical habitat for chinook salmon...Federal Register Volume 63, No. 45, March 9, 1998.

- National Oceanic and Atmospheric Administration, Fisheries (NOAA Fisheries). Federal Register 64, no. 179.
- National Oceanic and Atmospheric Administration, Fisheries (NOAA Fisheries). Federal Register 62, no. 87.
- National Park Service, 1994. Not in Section 6.0. National Park Service. 1994. Klamath Wild and Scenic River, Eligibility Report and Environmental Assessment. August 1994.
- National Science Academy, 2003.
- National Weather Service. 1997. Glossary of Hydrologic-Related Terms. July 23, 1997.
- Nehlsen, W., J.E. Williams, and J.A. Lichatowich. 1991. *Pacific Salmon at the Crossroads: Stocks at Risk from California, Oregon, Idaho, and Washington*. Fisheries, Vol. 16, No. 2.
- Nei, M. 1972. Genetic distance between populations. *American Naturalist*. 106: 283-292.
- Nei, M. 1978. Estimation of average heterozygosity and genetic distance from a small number of individuals. *Genetics* 89: 583-590.
- Neitzel, D.A., C.D. Becker, and C.S. Abernathy. 1985. Proceedings of the Symposium on small hydropower and fisheries, May 1–3, 1985, Aurora, Colorado. Eds: F. Olson, R. White, and R.H. Hamre. American Fisheries Society.
- Nelson, F.A. 1986. Effect of flow fluctuations on brown trout in the Beaverhead River, Montana. *N. Amer. J. Fish. Management*. 6:551–559.
- Niemela, S. L. 1989. The influence of peaking hydroelectric discharges on habitat selection and movement patterns of rainbow trout (*Oncorhynchus mykiss*). Tennessee Technical College, Cookeville, Tennessee.
- Ocker, P. A., L. C. Stuehrenberg, M. L. Moser, A. L. Matter, J. J. Vella, and B. P. Stanford. 2001. Monitoring Adult Pacific Lamprey (*Lampetra tridentata*) Migration Behavior in the Lower Columbia River using Radiotelemetry, 1998-1999. U. S. Army Corps of Engineers. Portland, Oregon.
- Odeh, M. 1999. A summary of environmentally friendly turbine design concepts. U.S. Department of Energy, Idaho Operations Office, DOE/ID/13741. July 1999.
- ODFW (Oregon Department of Fish and Wildlife). 1995. “Biennial report on the status of wild fish in Oregon.” Oregon Department of Fish and Wildlife. Portland Oregon.
- Olin, P. G. 1984. Genetic variability in hatchery and wild populations of coho salmon, *Oncorhynchus kisutch*, in Oregon. M.S. Thesis, University of California, Davis.
- Olson, F. 2002. Technical Memorandum: Review of adult trout passage at J.C. Boyle dam. Submitted to PacifiCorp by CH2MHILL. June 26, 2002.

- Olson, F.W. 1990. Downramping regime for power operations to minimize stranding of salmon fry in the Sultan River. Prepared for Snohomish County Public Utility District No. 1. Prepared by CH2M HILL, Bellevue, WA. 70 pp.
- Oregon Department of Fish and Wildlife (NMFS (National Marine Fisheries Service). 2003. Preliminary conclusions regarding the updated status of ESUs of West coast salmon and steelhead. Co-managers review draft (Feb 2003), NMFS, Northwest Fisheries Science Center, Seattle, Washington.
- Oregon Department of Fish and Wildlife (ODFW) Progress Reports 1988 – 1993.
- Oregon Department of Fish and Wildlife (ODFW). 1997. Klamath River Basin, Oregon Fish Management Plan. August 22, 1997.
- Oregon Department of Fish and Wildlife. 1992. Annual Progress Report – Native Trout Project. Oregon Cooperative Fishery Research Unit, Corvallis. Project Number F-136-R
- Oregon Department of Fish and Wildlife. 1996. 1996 Klamath River Sampling file data.
- Ottaway, E.M. and A. Clarke. 1981. A preliminary investigation into the vulnerability of young trout (*Salmo trutta* L.) and Atlantic salmon (*S. salar* L.) to downstream displacement by high water velocities. J. Fish Biol. 19:135–145.
- Overton, C.K., Wollrab, S.P., Roberts, B.C. and M.A. Radko. 1997. R1/R4 (Northern/ Intermountain Regions) fish and fish habitat standard inventory procedures handbook. Gen. Tech. Rep. INT-GTR-346. Ogden, UT: USDA, Forest Service, Intermountain Research Station. 73pp.
- Pacific Fisheries Management Council (PFMC). 1994. Klamath River fall Chinook report: An assessment of the status of the Klamath River fall Chinook stock as required under the salmon fishery management plan. Pacific Fisheries Management Council, Portland, Oregon.
- PacifiCorp 2000. First Stage Consultation Document and Klamath Hydroelectric Project Information: Klamath Hydroelectric Project, FERC No. 2082. December 15, 2000.
- PacifiCorp 2002. Draft; Explanation of Facilities and Operational Issues Associated with PacifiCorp's Klamath Hydroelectric Project. FERC Project No. 2082. May 1, 2002.
- PacifiCorp. 2002. Explanation of facilities and operational issues associated with PacifiCorp's Klamath hydroelectric projects. PacifiCorp, Portland, Oregon.
- Palenzuela, O. and J. Bartholomew. 2002. Molecular tools for the diagnosis of *Ceratomyxa shasta* (Myxozoa) Pages 285-298 in C. Cunningham ed., Molecular Diagnosis of Fish Diseases, Kluwer Academic Publishers, Netherlands
- Papa, R., J.A. Israel, and B. May. 2003. Assessment of Genetic Variation between Coastal Steelhead Populations Associated with Different Run-timings. Draft report to the Klamath River Task Force.

- Payne, T.R. 1987. One flow IFG-4 - what it is and how it works. *Instream Flow Chronicle* 4:1-2.
- Payne, T.R. 1988a. PHABSIM analytical errors and implications for IFIM. *Instream Flow Chronicle*, Vol. V, No. 3. Ft. Collins, CO.
- Payne, T.R. 1988b. A comparison of weighted usable area calculations using four variations of the IFG4 hydraulic model. Paper presented at the Fisheries Bioengineering Symposium, Portland, Oregon. October 24-27, 1988.
- Payne, T.R. 1992. Stratified random selection process for the placement of Physical Habitat Simulation (PHABSIM) transects. Paper presented at AFS Western Division Meeting, July 13-16, 1992, Fort Collins, Colorado.
- Pert, E.J. and D.C. Erman. 1994. Habitat use by adult rainbow trout under moderate artificial fluctuations in flow. *Trans. Amer. Fish. Soc.* 123:913-923.
- Phinney, L.A. 1974. Report on the 1972 study of the effect of river flow fluctuations below Merwin Dam on downstream migrant salmon. Unpublished mss., Washington Department of Fisheries. 23 p.
- Poole, G.C., C.A. Frissel, and S.C. Ralph. 1997. In-stream habitat unit classification: inadequacies for monitoring and some consequences for management. *Journal of the American Water Resources Association* 33(4): 879-896.
- Powell, G.C. 1958. Evaluation of the effects of a power dam water release pattern upon the downstream fishery. Master's thesis. Colorado State University, Fort Collins, CO.
- Pratschner, G. A. 1978. The relative resistance of six transferring phenotypes of coho salmon (*Oncorhynchus kisutch*) to cytophagosis, furunculosis, and vibriosis. M.S. Thesis, University of Washington, Seattle, 71 pp.
- Quinn, T.P., M.T. Kinnison, and M.J. Unwin. 2001. Evolution of Chinook salmon (*Oncorhynchus tshawytscha*) population in New Zealand: pattern, rate, and process. *Genetica* 112-113: 493-513.
- Rantz, S.E. 1982. Measurement and computation of streamflow: Volume 1. Measurements of stage and discharge. United States Geological Survey Water Supply Paper 2175. 284p.
- Ratliff, D. E. 1983. *Ceratomyxa shasta*: longevity, distribution, timing, and abundance of the infective stage in central Oregon. *Canadian Journal of Fisheries and Aquatic Science* 40:1622-1632.
- Ray, E. 2003. Fish Health Specialist, Washington Department of Fish and Wildlife. Conversation on June 5, 2003, with Jerri Bartholomew, Oregon State University.
- Reeves, G. H., F. H. Everest, and T. E. Nickelson. 1989. Identification of physical habitats limiting the production of coho salmon in Western Oregon and Washington. U.S. Dept. of Agriculture Forest Service, Pacific Northwest Research Station, Portland, Oregon, 18 pp.

- Reid, S. 2003. Personal Communication between Stewart Reid, U. S. Fish and Wildlife Service Klamath Office, and Ian Chane, PacifiCorp, Regarding Lamprey Present in the Klamath Hydroelectric Project Area. February 2003.
- Reiman, B.E and F.W. Allendorf. 2001. Effective population size and genetic conservation criteria for Bull trout. *North American Journal of Fisheries Management*. 21:756-764.
- Reisenbichler, R. R. and, S. R. Phelps. 1987. Genetic variation in Chinook, and coho salmon from the north coast of Washington. *Fisheries Bulletin* 85: 681-701.
- Reisenbichler, R.R. J.D. McIntyre, M.F. Solazzi, and S.W. Landino. 1992. Genetic Variation in steelhead of Oregon and northern California. *Transactions of the American Fisheries Society* 121:158-169.
- Reisenbichler, R.R., F.M. Utter, and C.C. Krueger. 2003. Genetic concepts and uncertainties in restoring fish populations and species. Pages 149-183 In *Strategies for restoring river ecosystems: sources of variability and uncertainty in natural and managed systems*. American Fisheries Society, Bethesda, Maryland.
- Reiser, D.W. and R.G. White. 1983. Effects of complete redd dewatering on salmonid egg hatching and development of juveniles. *Trans. Amer. Fish. Soc.* 112:532-540.
- Ricker, W.E. 1975. *Computation and Interpretation of Biological Statistics of Fish Populations. Bulletin of the Fisheries Research Board of Canada No. 191*. Ottawa, Ontario. 382 pp.
- Rincon, P.A. and J. Lobon-Cervia. 1993. Microhabitat use by stream-resident brown trout: Bioenergetic consequences. *Trans. Amer. Fish. Soc.* 122:575-587.
- Robbins, C.R., R.M. Bailey, C.E. Bond, J.R. Brooker, E.A. Lachner, R.N. Lea, and W.B. Scott. 1991. *Common and Scientific Names of Fishes From the United States and Canada*. American Fisheries Society Special Publication No. 20. 183 pp.
- Robbins, C.R., R.M. Bailey, C.E. Bond, J.R. Brooker, E.A. Lachner, R.N. Lea, and W.B. Scott. 1980. *A List of Common and Scientific Names of Fishes From the United States and Canada*. American Fisheries Society Special Publication No. 12. 174 pp.
- Roelofs, T.D. 1983. "Current Status of California summer steelhead (*Salmo gairdnerii*) stocks and habitat, and recommendations for their management." Report to the U.S. Forest Service,
- Roper, B.B., and D.L. Scarnecchia. 1995. Observer variability in classifying habitat types in stream surveys. *North American Journal of Fisheries Management* 15:49-53.
- Rushton, K. 2003. Personal Communication Between Kim Rushton, Iron Gate Hatchery Manager, and Forrest Olson, CH2M HILL, Regarding the Occurrence of Pacific Lamprey. January 31, 2003.

- Sandercock, F. K. 1991. Life history of coho salmon. In C. Groot and L. Margolis (eds), *Life History of Pacific salmon*, p.395-446. University of British Columbia Press, Vancouver, British Columbia.
- Sandercock, F.K. 1991. Life History of Coho Salmon. Pp. 396-445 in C. Groot and L. Margolis, editors. *Pacific Salmon Life Histories*. UBC Press, University of British Columbia, Vancouver, B.C.
- Schill, D., P. Kline, R. Thurow, and S. Elle. 1994. Movement and natural mortality of large fluvial bull trout in Rapid River. Friends of the Bull Trout Conference Proceedings. pgs. 445-446. Calgary, Alberta, Canada, The Bull Trout Task Force c/o Trout Unlimited Canada.
- Scoppettone, G.G. 1988. Growth and Longevity of the Cui-ui and Longevity of Other Catostomids and Cyprinids in Western North America. *Transactions of the American Fisheries Society* 117:301-307.
- Scott, W. B. and E. J. Crossman. 1973. *Freshwater Fishes of Canada*. Bulletin 184, Fisheries Research Board of Canada.
- Seale, A. 1896. Note on Deltistes, a New Genus of Catostomid Fishes. *Proceedings of the California Academy of Science*. Series 2, 6:269.
- Shapovalov, L., and A. C. Taft. 1954. The life histories of the steelhead rainbow trout (*Salmo gairdneri gairdneri*) and silver salmon (*Oncorhynchus kisutch*) with special reference to Waddell Creek, California, and recommendations regarding their management. *Calif. Dep. Fish Game, Fish Bull.* 98, 375 p.
- Shasta River Weir Historic Coho Counts 2003 - <http://users.snowcrest.net/siskfarm/shastacoh1.html>, December 9, 2003.
- Shaw, T. C., C. Jackson, D. Nehler, and M. Marshall. 1997. Klamath River (Iron Gate Dam to Seiad Creek) life stage periodicities for Chinook, coho, and steelhead. Draft report, USFWS Coastal California Fish and Wildlife Office, Arcata, California.
- Shaw, Thomas, Chris Jackson, Dan Nehler, and Michael Marshall. 1998. Klamath River (Iron Gate Dam to Seiad Creek) Life Stage Periodicities for Chinook, Coho, and Steelhead. U.S. Fish and Wildlife Service, Coastal California Fish and Wildlife Office, Arcata, California.
- Shebley, W.H. 1922. A history of fishculture [sic] operations in California. *California Fish and Game* 8: 62-98.
- Simpson, J. C. and R. L. Wallace. 1978. *Fishes of Idaho*. the University Press of Idaho. Moscow, Idaho.
- Slatick, E. and L. R. Basham. 1985. The Effect of Denil Fishway Length on Passage of Some Nonsalmonid Fishes. *Marine Fisheries Review* 47:85-85.
- Smith, R. L. and T.M. Smith. 2001. *Ecology and field biology* 6th edition. Benjamin Cummings, imprint of Addison Wesley Longman, Inc.

- Sneath, P. and , R. Sokal. 1973. Numerical Taxonomy. W.H. Freeman, San Francisco.
- Snedaker, S. 2002. Preliminary draft fisheries section of the Wild and Scenic Klamath River Management Plan Draft Environmental Impact Statement. Bureau of Land Management.
- Snyder, J. O. 1931. Salmon of the Klamath River, California. California Department of Fish and Game Bulletin 34.
- Solazzi, M. F. 1986. Electrophoretic stock characterization of coho salmon populations in Oregon, Washington, and coastal Chinook salmon populations in Oregon. Oregon Dept. of Fish and Wildlife, Informational Report 86-5.
- Sonnevil, G. 1972. Abundance and Distribution of the Lost River Sucker (*Catostomus luxatus*) and the Shortnose Sucker (*Chasmistes brevirostris*) in Boles and Willow Creek, Modoc County. 19 pp.
- Steffler, P., and J. Blackburn. 2001. River 2D, two-dimensional depth averaged model of river hydrodynamics and fish habitat, introduction to depth averaged modeling and user's manual. University of Alberta, April 2001. 64pp.
- Stine, P.A. 1982. Preliminary Status Report on the Lost River Sucker. Report to Panel Members of the Endangered Species Office, USFWS. 23 pp.
- Stober, Q.J., S.C. Crumley, D.E. Fast, E.S. Killebrew, and R.M. Woodin. 1982. Effects of hydroelectric discharge fluctuation on salmon and steelhead in the Skagit River, Washington. Final Report to Seattle City Light. University of Washington, Fish. Res. Inst., Seattle, WA.
- Stone & Webster Environmental Services. 1992. Fish entrainment and turbine mortality review and guidelines. Prepared for Electric Power Research Institute, Palo Alto, California. TR-101231, Research Project 2694-01. Final Report, September 1992.
- Stuart, Amy. 2003. ODFW. Letter dated November 19, 2003, stating that ODFW does not want reservoir survival studies conducted in Oregon waters because of concerns about disease and impacts on resident fish populations.
- Sullivan, K., D.J. Martin, R.D. Cardwell, J.E. Toll, and S. Duke. 2000. An Analysis of the Effects of Temperature on Salmonids of the Pacific Northwest with Implications for Selecting Temperature Criteria. Technical Report. Sustainable Ecosystems Institute, Portland, Oregon.
- Summerfelt, R.C. and L.S. Smith. 1990. Anesthesia, Surgery and Related Techniques. Pages 213-263 in: C. B. Schreck and P. B. Moyle, editors. Methods for Fish Biology. American Fisheries Society, Bethesda, Maryland.
- Suzumoto, B. 2003. Brief on recent trends in fish returns to the Columbia Basin to the Northwest Power and Conservation Council. November 12, 2003.

- Suzumoto, B. K., C. B. Schreck, and J. D. McIntyre. 1977. Relative resistance of three transferring genotypes of coho salmon (*Oncorhynchus kisutch*) and their hematological responses to bacterial kidney disease. *Journal of the Fisheries Research Board Canada* 34: 1-8.
- Swanberg, T.R. 1997. Movements of and habitat use by fluvial bull trout in the Blackfoot River, Montana. *Transactions of the American Fisheries Society* 126, 735-746.
- Thorgaard, G.C. 1983. Chromosomal differences among rainbow trout populations. *Copeia* (3):650-662
- Toman, John V. 1983. Klamath River: Summary of Existing Physical and Biological Parameters. ODFW Central Region, Administrative Report No. 83-5. June 1983.
- Trihey, E.W., and D.L. Wegner. 1981. Field data collection for use with the physical habitat simulation system of the instream flow group. United States Fish and Wildlife Service Draft Report. 151pp.
- Turbak, S.C., D.R. Reichle, and C.R. Shriner. 1981. *Analysis of environmental issues related to smallscale hydroelectric development. IV: fish mortality resulting from turbine passage.* Oak Ridge National Laboratory, ORNL/TM-7521, Oak Ridge, Tennessee.
- Tuss, C., T. Kisanuki, J. Larson, J. Polos, and T. Frazer. 1987. Klamath River fishes investigation program. Annual Report. U.S. Fish and Wildlife Service, 93 p. (Available from U.S. Fish and Wildlife Service, Fisheries Assistance Office, Arcata, California 95521.)
- U. S. Fish and Wildlife Service (USFWS (United States Fish and Wildlife Service). 1979. Klamath River fisheries investigations: progress, problems, and prospects. Annual Report. Arcata, California.
- U. S. Fish and Wildlife Service (USFWS) (United States Fish and Wildlife Service). 1996. Policy regarding the recognition of distinct vertebrate population segments under the Endangered Species Act. *Federal Register* 61: 4722.
- U. S. Fish and Wildlife Service (USFWS). 1960. A Preliminary Survey of Fish and Wildlife Resources of Northwestern California.
- U. S. Fish and Wildlife Service (USFWS). 1979. Klamath River fisheries investigations: progress, problems, and prospects. Annual Report. Arcata, California.
- U.S. Army Corps of Engineers. Recognizing Wetlands. U.S. Department of Commerce, National Technical Information Service (NTIS).
- U.S. Bureau of Reclamation (USBR) 2001. Preliminary Investigation of the Movements and Habitat Use of the Lost River Sucker and the Shortnose Sucker in Keno Reservoir, Lake Ewauna and Link River, Klamath Basin, OR. (Draft).

- U.S. Bureau of Reclamation (USBR). 1997. Biological Assessment of the Klamath Project 1997 Operations Plan.
- U.S. Department of Energy. 2003. Pilot Scale Tests Alden/Concepts NREC Turbine. U.S. Department of Energy Advanced Hydropower Turbine Systems Program, DOE/ID/13733. Draft Final Report, June 2003.
- U.S. Department of the Interior (USDI). 1980. Trinity River Basin fish and wildlife management program. Appendix C. USDI, Washington, D.C.
- U.S. Environmental Protection Agency (EPA) 1986. Ambient Water Quality Criteria for Dissolved Oxygen. Criteria and Standards Division. US Environmental Protection Agency, Washington, D.C. EPA. 440/5-86-003.
- U.S. Environmental Protection Agency (EPA). 1977. "Common Environmental Terms—A Glossary." Compiled by Gloria J. Studdard, EPA Region IV, Atlanta, GA. Revised September 1977.
- U.S. Fish and Wildlife Service (USFWS). 1993. Recovery Plan for Lost River Sucker (*Deltistes luxatus*) and Shortnose Sucker (*Chasmistes brevirostris*). Region One, Portland, Oregon.
- U.S. Fish and Wildlife Service (USFWS). 1994. Annual Report: Klamath River Fisheries Investigation Program, 1992. Coastal California Fishery Resource Office, 63 p. (Available from U.S. Fish and Wildlife Service, Fisheries Assistance Office, Arcata, California 95521)
- U.S. Fish and Wildlife Service (USFWS). 2002. Biological/Conference Opinion Regarding the Effects of Operation of the U.S. Bureau of Reclamation's Proposed 10-year Operation Plan for the Klamath Project and Its Effect on the Endangered Lost River Sucker (*Delistes luxatus*), Endangered Shortnose Sucker (*Chasmistes brevirostris*), Threatened Bald Eagle (*Haliaeetus leucocephalus*) and Proposed Critical Habitat for the Lost River and Shortnose Suckers. U.S. Fish and Wildlife Service, Klamath Falls Fish and Wildlife Office, Klamath Falls, Oregon, May 31, 2002.
- Udey, L. R., J. L. Fryer, and K. S. Pilcher. 1975. Relation of water temperature to ceratomyxosis in rainbow trout (*Salmo gairdneri*) and coho salmon (*Oncorhynchus kisutch*). Journal of the Fisheries Research Board of Canada 32:1545-1551.
- USDI (U.S. Department of the Interior). 1980. Trinity River Basin fish and wildlife management program. Appendix C. USDI, Washington, D.C.
- Utter, F. M., G. Milner, G. Stahl, and D. Teel. 1989. Genetic population structure of Chinook salmon, *Oncorhynchus tshawytscha*, in the Pacific Northwest. Fishery Bulletin 87: 239-264.
- Utter, F. M., R. S. Waples, and D. J. Teel. 1992. Genetic isolation of previously indistinguishable Chinook salmon populations of the Snake and Klamath Rivers: Limitations of negative data. Fishery Bulletin 90: 770-777.

- Utter, F.M., W. E. Ames, and H.O. Hodgins. 1970. Transferrin polymorphism in coho salmon (*Oncorhynchus kisutch*). *Journal of the Fisheries Research Board Canada* 27: 2371-2373.
- Viola, A.E. and M.L. Schuck. 1995. "A method to reduce the abundance of residual hatchery steelhead in rivers." *North American Journal of Fisheries Management*. 15: 488-493.
- Von Raben, K. 1957. "Zur Frage der Beschädigung von Fischen durch Turbinen." *Die Wasserwirtschaft* 4: 97-100. (Fisheries Research Board of Canada Translation Series 448).
- Waddle, T.J., ed., 2001, PHABSIM for Windows: User's Manual and Exercises: Fort Collins, CO, U.S. Geological Survey, 288 p.
- Wade, M.G. 1987. The relative effects of *Ceratomyxa shasta* on crosses of resistant and susceptible stocks of summer steelhead. M.S. thesis, Oregon State University, Corvallis, Oregon.
- Wallace, M. and B. W. Collins. 1997. Variation in the use of the Klamath River Estuary by juvenile Chinook salmon. *California Fish and Game* 83:132-143.
- Wallace, M., B. W. Collins. 1997. Variation in the use of the Klamath River Estuary by juvenile Chinook salmon. *California Fish and Game* 83:132-143.
- Waples, R., D. Teel, and P. Abersold. 1991. A genetic monitoring and evaluation program for supplemented populations of salmon and steelhead in the Snake River Basin. Annual Research Report, Contract DE-A179-89BP00911, U.S. Department of Energy. Bonneville Power Administration, Portland, Oregon.
- Waples, R.D. 1991. Pacific salmon. *Oncorhynchus* spp., and the definition of "species" under the Endangered Species Act. *Marine Fisheries Review* 53:11022.
- Waporo. 1987. Fish passage studies at the Racine and New Martinsville hydroelectric projects, volume II. Prepared for the City of New Martinsville and the Ohio Power Company, New Martinsville, West Virginia.
- Warren, C.E., P. Doudoroff and D.L. Shumway. 1973. Development of Dissolved Oxygen Criteria for Freshwater Fish. US Environmental Protection Agency, Ecological Research Series Report. EPA-R3-73-019. Wash., D.C. 121 p.
- Weitkamp, L., T. C. Wainwright, G. J. Bryant, G. B. Milner, D. J. Teel, R. G. Kope, and R. S. Waples. 1995. Status review of Coho salmon from Washington, Oregon, and California. 258 pp. U. S. Dept. Commerce. NOAA Technical Memorandum National Marine Fisheries Service –Northwest Fisheries Science Center-24.
- wild coho salmon, *Oncorhynchus kisutch*, in Oregon, Washington, and California. *Fisheries Bulletin*, U.S. 80:105-119.

- Williams, J.E., D.B. Bowman, J.E. Brooks, A.A. Echelle, R.J. Edwards, D.A. Hendrickson, and J.J. Landye. 1985. Endangered Aquatic Ecosystems in North American Deserts with a List of Vanishing Fishes of the Region. *Journal of the Arizona-Nevada Academy of Science* 20:1-62.
- Williams, R.D. and R.N. Winget. 1979. Macroinvertebrate response to flow manipulation in the Strawberry River, Utah. *In: The ecology of regulated streams*. Eds: J.V. Ward and J.A. Stanford. Plenum Press, New York, NY. pp. 365–376.
- Williamson, J. D. and J. S. and Foott. 1998. FY98 Investigational Report: Diagnostic evaluation of moribund juvenile salmonids in the Trinity and Klamath Rivers (June-September 1998). USFWS, California-Nevada Fish Health Center, Anderson, CA.
- Winter, G. W., C. B. Schrek, and J. D. McIntyre. 1980. Resistance of different stocks and transferring genotypes of coho salmon, *Oncorhynchus kisutch*, and steelhead trout, *Salmo gairdneri*, to bacterial kidney disease and vibriosis. *Fisheries Bulletin*, U.S. 77:795-802.
- Winter, J. D. 1983. Underwater biotelemetry. Pages 371-395 in L. A. Nielsen and D. L. Johnson, editors. *Fisheries techniques*. American Fisheries Society, Bethesda, Maryland.
- Woodin, R.M. 1984. *Evaluation of Salmon Fry Stranding Induced by Fluctuating Hydroelectric Discharge in the Skagit River, 1980–1983*. Washington Department of Fisheries. Technical Report No. 83.
- Woodin, R.M., S.C. Crumley, Q.J. Stober, and G. Engman. 1984. Skagit River interim agreement studies, Volume II. Salmon and steelhead studies. Draft Report for City of Seattle, Department of Lighting, Office of Environmental Affairs, Seattle, WA.
- Zajanc, D. and D. Hankin. *A Detailed Review of the Annual Hatchery Production Cycle at Trinity River Hatchery: With Recommendations for Changes in Hatchery Practices that Would Improve Representativeness of Marking and Accuracy of Estimation of Numbers Released*. Humboldt State University. Arcata CA. 1998.
- Zaroban, D., M. Mulvey, T. Maret, R. Hughes, and G. Merritt. 1999. Classification of Species Attributes for Pacific Northwest Freshwater Fishes. *Northwest Science*, Vol. 73, No. 2, pp. 81-93.
- Zinn, J.L., K.A. Johnson, J.E. Sanders, and J.L. Fryer. 1977. Susceptibility of salmonid species and hatchery stocks of Chinook salmon (*Oncorhynchus tshawytscha*) to infections by *Ceratomyxa shasta*. *Journal of the Fisheries Research Board of Canada*. 34:933-936.