

JACK A. STANFORD

Flathead Lake Biological Station
 The University of Montana
 32125 Bio Station Lane
 Polson, MT 59860-6815 USA
 406-982-3301- office ; 509-997-0365 - home
 jack.stanford@umontana.edu
www.umt.edu/flbs

PERSONAL INFORMATION

U.S. citizen; born, February 18, 1947 (Delta, Colorado); married to Bonnie K. Ellis; 2 children (Jack A., Jr., Christian F.); avid skier, fly fisherman, conservationist. Home address: 36 Tuckaway Road, Twisp, WA. 98856

EDUCATION

| | | | |
|-------|-------------------|--|------|
| B.S. | Fisheries Science | Colorado State University, Ft. Collins | 1969 |
| M.S. | Limnology | Colorado State University | 1971 |
| Ph.D. | Limnology | University of Utah, Salt Lake City | 1975 |

PROFESSIONAL POSITIONS

Professor Emeritus, Flathead Lake Biological Station, University of Montana (2016-)

Director, Flathead Lake Biological Station, University of Montana (1980–2016). Administrative responsibility for all Biological Station activities including academic, research and community service programs. The Station is a center of excellence for hypothesis-oriented ecological, limnological and fisheries research conducted worldwide but focused on the Crown of the Continent region of Montana and British Columbia.

Jessie M. Bierman Professor of Ecology, University of Montana (1986–2016). Distinguished chair with permanent endowment, includes Directorship of the Flathead Lake Biological Station.

Associate Professor (1979–1980) and Assistant Professor (1974–1978), Department of Biological Sciences, North Texas State University (NTSU–now University of North Texas), Denton. Taught graduate and undergraduate ecology, biometrics and limnology. Studied primary and secondary production in southwestern reservoirs (H. H. Moss Reservoir, North Lake and Lake Texoma) and life history strategies of aquatic insects in the Brazos River, Texas. Also developed the Analytical Water Quality Laboratory in the Institute of Applied Sciences, NTSU, and continued limnological research on the Flathead River - Lake Ecosystem in Montana.

Chairman, Ecology Division, Department of Biological Sciences, NTSU (1975–1977). Coordinator for development of academic programs and joint research projects (8 faculty).

Research Biologist and Instructor in Limnology, University of Montana Biological Station (1972–1974). Directed a limnological investigation of phytoplankton dynamics in response to nutrient input in Flathead Lake, while also completing doctoral research on ecology of stoneflies (Insecta:Plecoptera) in the Flathead River. Professor Arden R. Gaufin (deceased) – dissertation advisor, University of Utah, Department of Biology.

Graduate Teacher and Research Fellow in Zoology, Colorado State University, Fort Collins, Colorado (1969–1971). Developed an improved quantitative sampling procedure for use in an ecological study of the macrobenthic community of the Cache la Poudre River, Colorado. Dr. Edward B. Reed (deceased) – thesis advisor.

Fisheries Biologist, Alaska Department of Fish and Game, Dillingham, Alaska (1968–1969). Studied spawning habits of Pacific herring in Nunavarchuk Bay, Alaska, and escapement and reproductive ecology of five species of Pacific salmon in the Nushagak River, Bristol Bay, Alaska.

Curator of Ichthyology Collection, Department of Fisheries and Wildlife, Colorado State University (1966–1969). Collected fishes throughout Colorado; conducted taxonomic study and cataloging for Professors Robert Behnke and Harold Hagen; prepared Ichthyology teaching materials for graduate TAs.

RESEARCH GOAL

To achieve a holistic understanding of natural (biophysical) and cultural (social) controls on biodiversity and bioproduction in large river and lake ecosystems.

CURRENT RESEARCH

- Linkages between river ecology and the phenology, distribution and productivity of wild steelhead trout and salmon and their relationships to and interactions with other biota and human interventions; work active in Kamchatka, Alaska, Washington and British Columbia.
- Biogeochemistry, conservation and restoration of rivers and their floodplains, emphasis on role of ancient methane as subsidy to riverine food webs.
- Ecology and population genetics of aquatic insects, with focus on amphibitic Plecoptera
- Limnology of Flathead Lake, Montana.

TEACHING (See FLBS web site www.flbs/umt.edu for FLBS academic programs.)

Graduate – Various seminars and thesis/dissertation topics

Undergraduate – Field Ecology

HONORS

Fellowship, Nordic Council for Ecology, Universities of Oslo, Bergen and Trondheim, Norway (1980); Awarded distinguished and endowed Jessie M. Bierman professorship, University of Montana (1986); Fellowship, Foundation for Research Development, Republic of South Africa (1989); Golden Trout Award for Professional Service, Trout Unlimited (1991); Nominated for PEW Scholarship in Conservation and the Environment (1995); Recipient of the Merzhon Award of the Montana Academy of Science for Outstanding Scholarship (1996); Elected President of the Society for Freshwater Science (1996–1997); Elected President of the Organization of Biological Field Stations (1996–1998); Distinguished Scholar Award of The University of Montana (1997); Elected Fellow of the American

Association for Advancement of Science (2000); Award of Merit issued by the Society for Technical Communication for a paper in Fisheries titled “Return to the River: Scientific issues in the restoration of salmonid fishes in the Columbia River,” (2001); Award of Excellence of the Society for Freshwater Science (2004); All time “Grizzly Great” - The University of Montana (2005); Lifetime Achievement Award of the International Society of River Science (2011); Federation of Fly Fishers’ Leopold Conservation Award (2011); Conservationist of the Year (with B.K. Ellis) of the Montana Environmental Information Center (2012); Lifetime Achievement Award – Whitefish Institute (2015); Lifetime Achievement Award - Flathead Lakers (2015); Elected Fellow of the Society for Freshwater Science (2017)

PROFESSIONAL MEMBERSHIPS

Society for Freshwater Science - Executive Committee 1979, 1987, 1988; Program Chair 1996, President 1996–97.

American Society for Limnology and Oceanography – President candidate 2000 (Bill Lewis won)

Ecological Society of America - Public Affairs Committee 1993–1996

American Association for the Advancement of Science

EDITORIAL AND PEER REVIEW DUTIES

PeerJ (Board of Editors, 2013-now); River Research and Applications (Regional Editor, 1986–2016); Ecological Applications (Board of Editors, 1996–99); Academic Press (Board of Editors, Aquatic Series, 1994–2003); Freshwater Invertebrate Biology (Board of Editors, 1982–84); National Science Foundation (Ecology Panel, 1985–88; Facilities for Field Stations and Marine Labs Panel, 1989–90; LTER site reviewer, 1992–93; LTER Supplementation Panel, 1993–94; Water and Watersheds Panel, 1995; Biocomplexity in the Environment Panel, 2001; National LTER Advisory Board, 2003–07); Independent Scientific Advisory Board for Fish and Wildlife Programs, Bonneville Power Administration and National Marine Fisheries Service (1990–98); National Academy of Science (National Research Council Panel on Watershed Science, 1996–97; Panel on Riparian Ecology 1999–00); U.S. Fish and Wildlife Service (review of Trinity River Flow Evaluation, 1998); Science Technical Committee, Alaska Sustainable Salmon Initiative (2005–08); US EPA (Panel on River Habitat Connectivity, 2014; Panel on Connectivity of Streams and Wetlands to Downstream Waters, 2015). Ad hoc reviewer for: National Academy of Science, National Science Foundation, American Fisheries Society, Science, Nature, Ecology, Canadian Journal of Fisheries and Aquatic Sciences, Conservation Biology, Oikos, Freshwater Science, Freshwater Biology, BioScience, Copea and other international journals in ecology.

SYMPOSIA ORGANIZED

First International Symposium on Regulated Streams (NSF), 1979 (with J. V. Ward); Community Structure and Function in Temperate and Tropical Streams (NSF), 1987 (with A. P. Covich); Workshop on Groundwater Limnology, 24th Congress of the International Association of Theoretical and Applied Limnology, Munich, West Germany, 1989 (with J. Gibert, G. Bretschko); Fifth International Symposium on Regulated Streams, Flathead Lake Biological Station, 1991 (with F. R. Hauer); National Workshops on Groundwater Ecology, Flathead Lake Biological Station (1995–2000); 1996 Annual Meeting of the North American Benthological Society (Program Chair), International Workshop on Riparian and Groundwater Ecology, Kastanienbaum, Switzerland, 1996 (with T. Gonser); Workshop on Data Bases and Networking, Organization of Biological Field Stations, National Center for Ecological Synthesis, Santa Barbara, CA., 1998 (with A. McKee), XI International Conference on Ephemeroptera XV

International Symposium on Plecoptera 2004 Joint Meeting (with F. R. Hauer); 2006 Annual Meeting of the Organization of Biological Field Stations, Flathead Lake Biological Station, Polson, MT (with A. McKee); NSF Research Coordination Network – Workshops on Ecological Processes in Mountain Landscapes 2013- 2016 (with J. Gosz and others).

BOOKS AND MONOGRAPHS (16)

1. Ward, J. V. and J. A. Stanford (eds.). 1979. Ecology of Regulated Streams. Plenum Press, New York, New York, USA.
2. Ward, J. V. and J. A. Stanford. 1982. Thermal responses in the evolutionary ecology of aquatic insects. *Annual Review of Entomology* 27:97–117.
3. Stanford, J. A. and J. V. Ward. 1986. The Colorado River system, pp. 353–402. IN: Davies, B. R. and K. F. Walker (eds.), *The Ecology of River Systems*. Dr. W. Junk Publishers, Dordrecht, The Netherlands.
4. Stanford, J. A. and A. P. Covich (eds.). 1988. Community Structure and Function in Temperate and Tropical Streams. Proceedings of a Symposium, April 24–28, 1987, Flathead Lake Biological Station, The University of Montana. North American Benthological Society, Lawrence, Kansas. 261–529 pp.
5. Stanford, J. A. and J. J. Simons (eds.). 1992. Proceedings of the First International Conference on Groundwater Ecology. American Water Resources Association, Bethesda, Maryland. 420 pp.
6. Gibert, J., D. Danielopol and J. A. Stanford (eds.). 1994. Groundwater Ecology. Academic Press, San Diego, California, USA. 571 pp.
7. Stanford, J. A. and H. M. Valett (eds.). 1994. Proceedings of the Second International Conference on Groundwater Ecology. American Water Resources Association, Herndon, Virginia. 390 pp.
8. Naiman, R. J., J. J. Magnuson, D. M. McKnight and J. A. Stanford. 1995. The Freshwater Imperative: A Research Agenda. Island Press, Washington, DC. 165 pp.
9. Stanford, J. A. and T. Gonser. (eds.). 1998. Rivers in the Landscape: Riparian and Groundwater Ecology. Special Issue. *Freshwater Biology* 40(3):401–585.
10. Graf, W. L., C. J. Aichinger, B. P. Anderson, G. Benoit, P. A. Bisson, M. W. Garcia, J. P. Heaney, C. A. Johnston, L. J. Lane, C. H. Olsen, G. W. Petersen, M. J. Pfeffer, L. Shabman, J. A. Stanford and S. W. Trimble. 1998. New Strategies for America's Watersheds. National Research Council, National Academy Press, Washington, DC.
11. Brinson, M. M., L. J. MacDonnell, D. J. Austen, R. L. Beschta, T. A. Dillaha, D. L. Donahue, S. V. Gregory, J. W. Harvey, J. M. D. Molles, E. I. Rogers and J. A. Stanford. 2002. Riparian Areas: Functions and Strategies for Management [book online]. National Academy Press, Washington, District of Columbia, 444 pp. Available from: <http://www.nap.edu/books/0309082951/html/>.

12. Hauer, F. R., J. A. Stanford and R. L. Newell (eds.). 2008. International Advances in the Ecology, Zoogeography and Systematics of Mayflies and Stoneflies. UC Publications in Entomology, 128. University of California Press, Berkeley, California. 412 pp.
13. Pavlov, D. S., K. A. Savvaitova, K. V. Kuzishchin, M. A. Gruzdeva and J. A. Stanford. 2009. The Status and Monitoring of the Salmonid Biodiversity and Their Environments on Kamchatka (on the Territory of the "River Kol" Protected Area). KMK Scientific Press, Moscow, Russian Federation. 156 pp. (in Russian).
14. Stanford, J. A., F. R. Hauer, S. V. Gregory and E. B. Snyder. 2010. Columbia River Basin, pp. 258–283. IN: Benke, A. C. and C. E. Cushing (eds.), Field Guide to Rivers of North America. Elsevier, San Diego, California. 459 pp.
15. Stanford, J.A., Alexander, L.C., Whited, D.C., 2017. Riverscapes. IN: Hauer, F.R., Lamberti, G.A. (Eds.), Methods in Stream Ecology: Volume 1: Ecosystem Structure. Elsevier, Academic Press, pp. 3–19.
16. Lichatowich, J., R. Williams, B. Bakke, J. Myon, D. Bella, B. McMillan, J. Stanford and D. Montgomery. 2017. Wild Pacific Salmon: A Threatened Legacy. Bemis Printing, St Helens, OR. 40pp. (for copies contact jalich@comcast.net).

PEER-REVIEWED PUBLICATIONS IN PROFESSIONAL JOURNALS (193,*MOST NOTED)

1. Stanford, J. A. 1973. A centrifuge method for determining live weights of aquatic insect larvae with a note on weight loss in preservative. **Ecology** 54(2):449–451.
- 2*. Stanford, J. A. and A. R. Gaufin. 1974. Hyporheic communities of two Montana rivers. **Science** 185(4152):700–702.
3. Stanford, J. A. and E. B. Reed. 1974. A basket sampling technique for quantifying riverine macrobenthos. **Water Resources Bulletin** 10(3):470–477.
4. Potter, D. S. and J. A. Stanford. 1975. Influences on plankton communities of oligotrophic Flathead Lake. **Verh. Internat. Verein. Limnol.** 19:1790–1797.
5. Stanford, J. A. and D. S. Potter. 1976. The Flathead Lake-River ecosystem: A perspective. pp. 241–250. IN: Soltero, R. (ed.), Proceedings of ESA Symposium on Aquatic and Terrestrial Research in the Pacific Northwest. Cheney, Washington. 397 pp.
6. Stanford, J. A., J. T. Boswell, D. P. Wilcox and W. B. Perry. 1977. Limnological application of the ATP assay in a mesotrophic Texas reservoir, pp. 311–328. IN: Borun, G. (ed.), Second Biannual ATP Methodology Symposium. SAI Technology Company, San Diego, California. 657 pp.
7. Sams, B. L., J. K. G. Silvey and J. A. Stanford. 1978. Comparative chemistry of a Texas cooling-water reservoir and its water source. **Journal Water Pollution Control Federation** 50:193–202.
8. Silvey, J. K. G. and J. A. Stanford. 1978. An historical overview of reservoir limnology in the Southwestern USA, pp. 1–18. IN: Cairns, J., E. Benfield and J. Webster (eds.), Current Perspectives on River-Reservoir Ecosystems. North American Benthological Society, Columbia, Missouri. 85 pp.

9. Stuart, T. J. and J. A. Stanford. 1978. A case of thermal pollution limited primary production in a southwestern USA reservoir. **Hydrobiologia** 58(3):199–211.
10. Perry, W. B., J. T. Boswell and J. A. Stanford. 1979. Critical problems with adenosine triphosphate (ATP) assays of planktonic biomass. **Hydrobiologia** 65(2):155–163.
11. Stanford, J. A. 1979. Proliferation of river deltas in reservoirs: A "natural" mitigative process? IN: Swanson, G. A. (ed.), **The Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats**. General Technical Report RM-65, Rocky Mountain Forest Range Experimental Station, USDA. Fort Collins, Colorado.
12. Stanford, J. A. and J. V. Ward. 1979. Stream regulation in North America, pp. 215–236. IN: Ward, J. V. and J. A. Stanford (eds.), **The Ecology of Regulated Streams**. Plenum Press, New York. 398 pp.
13. Ward, J. V. and J. A. Stanford. 1979. Ecological factors controlling stream zoobenthos with emphasis on thermal modification of regulated streams, pp. 35–56. IN: Ward, J. V. and J. A. Stanford (eds.), **The Ecology of Regulated Streams**. Plenum Press, New York. 398 pp.
14. Ward, J. V. and J. A. Stanford. 1979. Limnological considerations in reservoir operation: Optimization strategies for the protection of aquatic biota in the receiving stream. IN: Swanson, G. A. (ed.), **The Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats**. General Technical Report RM-65, Rocky Mountain Forest Range and Experimental Station, USDA. Fort Collins, Colorado.
15. Boswell, J. T., W. B. Perry and J. A. Stanford. 1980. Analysis of plankton dynamics in a southwestern USA reservoir using ATP assays. **Internationale Revue der Gesamten Hydrobiologie** 65(1):155–167.
16. Hauer, F. R., E. G. Zimmerman and J. A. Stanford. 1980. Preliminary investigations of distributional relationships of aquatic insects and genetic variation of a fish population in the Kintla drainage, Glacier National Park, Montana, pp. 41–85. IN: **Proceedings of the Second Conference on Scientific Research in the National Parks**, Volume 2, American Institute of Biological Sciences, Arlington, Va.
17. Hauer, F. R. and J. A. Stanford. 1981. Larval specialization and phenotypic variation in *Arctopsyche grandis* (Trichoptera: Hydropsychidae). **Ecology** 62(3):645–653.
18. Prete, P. J., T. L. Beitinger and J. A. Stanford. 1981. Behavioral avoidance of acidic lakewater by bluegill, *Lepomis macrochirus* (Centrarchidae). **Southwestern Naturalist** 26(4):433–436.
19. Stanford, J. A. and J. V. Ward. 1981. Preliminary interpretations on the distribution of Hydropsychidae in a regulated river, pp. 323–328. IN: Moretti, G. P. (ed.), **Proceedings of the Third International Symposium on Trichoptera**. Dr. W. Junk Publishers, The Hague.
20. Ward, J. V. and J. A. Stanford. 1981. Tailwater biota: Ecological response to environmental alterations, pp. 1516–1525. IN: Stefan, H. G. (ed.), **Proceedings of the Symposium on Surface-Water Impoundments**, American Society of Civil Engineers, New York.

- 21*. Ellis, B. K. and J. A. Stanford. 1982. Comparative photoheterotrophy, chemoheterotrophy and photolithotrophy in a eutrophic reservoir and an oligotrophic lake. **Limnology and Oceanography** 27(3):440–454.
22. Hauer, F. R. and J. A. Stanford. 1982. Bionomics of *Dicosmoecus gilvipes* (Hagen) (Trichoptera: Limnephilidae) in a large montane river. **American Midland Naturalist** 108(1):81–87.
23. Hauer, F. R. and J. A. Stanford. 1982. Ecological responses of hydropsychid caddisflies to stream regulation. **Canadian Journal of Fisheries and Aquatic Sciences** 39(9):1235–1242.
24. Hauer, F. R. and J. A. Stanford. 1982. Ecology and life histories of three net-spinning caddisfly species (Hydropsychidae: *Hydropsyche*) in the Flathead River, Montana. **Freshwater Invertebrate Biology** 1(4):18–29.
25. Perry, W. B. and J. A. Stanford. 1982. Algal growth stimulus by phosphorus in Flathead Lake (Montana) sediments. **Northwest Science** 56(1):48–52.
26. Ward, J. V. and J. A. Stanford. 1982. Effects of reduced and perturbed flow below dams on fish food organisms in Rocky Mountain trout streams, pp. 493–501. IN: Grover, J. H. (ed.), **Allocation of Fishery Resources**. FAO, Rome, Italy.
27. Stanford, J. A. and J. V. Ward. 1983. Insect species diversity as a function of environmental variability and disturbance in stream systems, pp. 265–278. IN: Barnes, J. and G. Minshall (eds.), **Stream Ecology - Applications of General Ecological Theory**. Plenum Press, New York.
28. Stanford, J. A. and J. V. Ward. 1983. The effects of mainstream dams on physicochemistry of the Gunnison River, Colorado, pp. 43–56. IN: Adams, V. D. and V. A. Lamarra (eds.), **Aquatic Resources Management of the Colorado River Ecosystem**. Ann Arbor Science, Ann Arbor, Michigan.
- 29*. Ward, J. V. and J. A. Stanford. 1983. The serial discontinuity concept of lotic ecosystems, pp. 29–42. IN: Fontaine, T. D. and S. M. Bartell (eds.), **Dynamics of Lotic Ecosystems**. Ann Arbor Science, Ann Arbor, Michigan. 494 pp.
- 30*. Ward, J. V. and J. A. Stanford. 1983. The intermediate disturbance hypothesis: An explanation for biotic diversity patterns in lotic ecosystems, pp. 347–356. IN: Fontaine, T. D. and S. M. Bartell (eds.), **Dynamics of Lotic Ecosystems**. Ann Arbor Science, Ann Arbor, Michigan. 494 pp.
31. Short, R. A., S. L. Smith, D. W. Guthrie and J. A. Stanford. 1984. Leaf litter processing rates in four Texas streams. **Journal of Freshwater Ecology** 2(5):469–474.
32. Stanford, J. A. and J. V. Ward. 1984. The effects of regulation on the limnology of the Gunnison River: A North American case history, pp. 467–480. IN: Lillehammer, A. and S. Saltveit (eds.), **Regulated Rivers**. Oslo University Press, Norway.

33. Ward, J. V. and J. A. Stanford. 1984. The regulated stream as a testing ground for ecological theory, pp. 23–38. IN: Lillehammer, A. and S. Saltveit (eds.), **Regulated Rivers**. Oslo University Press, Norway.
34. Hauer, F. R. and J. A. Stanford. 1986. Ecology and coexistence of two functionally independent species of *Brachycentrus* (Trichoptera) in a Rocky Mountain river. **Canadian Journal of Zoology** 64(7):1469–1474.
35. Perry, S. A., W. B. Perry and J. A. Stanford. 1986. Effects of stream regulation on density, growth, and emergence of two mayflies (Ephemeroptera: Ephemerellidae) and a caddisfly (Trichoptera: Hydropsychidae) in two Rocky Mountain rivers, USA. **Canadian Journal of Zoology** 64(3):656–666.
36. Perry, S. A., W. B. Perry and J. A. Stanford. 1987. Effects of thermal regime on size, growth rates and emergence of two species of stoneflies (Plecoptera: Taeniopterygidae, Pteronarcyidae) in the Flathead River, Montana, USA. **American Midland Naturalist** 117(1):83–93.
37. Valett, H. M. and J. A. Stanford. 1987. Food quality and hydropsychid caddisfly density in a lake outlet stream in Glacier National Park, Montana (USA). **Canadian Journal of Fisheries and Aquatic Sciences** 44(1):77–82.
38. Ward, J. V. and J. A. Stanford. 1987. The ecology of regulated streams: Past accomplishments and directions for future research, pp. 391–409. IN: Craig, J. F. and J. B. Kemper (eds.), **Regulated Streams: Advances in Ecology**. Plenum Press, New York.
39. Benke, A. C., C. A. S. Hall, C. P. Hawkins, R. H. Lowe-McConnell, J. A. Stanford, K. Suberkropp and J. V. Ward. 1988. Bioenergetic considerations in the analysis of stream ecosystems. **Journal of the North American Benthological Society** 7(4):480–502.
40. Ellis, B. K. and J. A. Stanford. 1988. Phosphorus bioavailability of fluvial sediments determined by algal assays. **Hydrobiologia** 160:9–18.
41. Ellis, B. K. and J. A. Stanford. 1988. Nutrient subsidy in montane lakes: fluvial sediments versus volcanic ash. **Verh. Internat. Verein. Limnol.** 23:327–340.
42. Stanford, J. A., F. R. Hauer and J. V. Ward. 1988. Serial discontinuity in a large river system. Benthic faunal patterns along the longitudinal gradient of a Rocky Mountain river system. **Verh. Internat. Verein. Limnol.** 23:1114–1118.
43. Stanford, J. A. and G. W. Prescott. 1988. Limnological features of a remote alpine lake in Montana, including a new species of *Cladophora* (Chlorophyta). **Journal of the North American Benthological Society** 7(2):140–151.
- 44*. Stanford, J. A. and J. V. Ward. 1988. The hyporheic habitat of river ecosystems. **Nature** 335(6185):64–66.

46. Hall, C. A. S., J. H. Jourdonnais and J. A. Stanford. 1989. Assessing the impacts of stream regulation in the Flathead River Basin, Montana, U.S.A. I. Simulation modeling of system water balance. **Regulated Rivers: Research and Management** 3(1):61–77.
46. Hauer, F. R., J. A. Stanford and J. V. Ward. 1989. Serial discontinuities in a Rocky Mountain river. II. Distribution and abundance of Trichoptera. **Regulated Rivers: Research and Management** 3(1):177–182.
47. Jeffers, J., J. A. Stanford and 15 others. 1989. Theoretical considerations of the ecotone concept, pp. 55–59. IN: Naiman, R. J., H. Decamps and F. Fournier (eds.), **Role of Land/Inland Water Ecotones in Landscape Management and Restoration**. Man and Biosphere Digest 4. United Nations Educational, Scientific and Cultural Organization, Paris, France.
48. Stanford, J. A. and J. V. Ward. 1989. Serial discontinuities in a Rocky Mountain river. I. Distribution and abundance of Plecoptera. **Regulated Rivers: Research and Management** 3(1):169–175.
49. Ward, J. V. and J. A. Stanford. 1989. Riverine ecosystems: the influence of man on catchment dynamics and fish ecology, pp. 56–64. IN: Dodge, D. P. (ed.), **Proceedings of the International Large River Symposium**. Special Publication of Canadian Journal of Fisheries and Aquatic Science 106.
50. Ward, J. V. and J. A. Stanford. 1989. Groundwater animals of alluvial river systems: a potential management tool, pp. 393–399. IN: Grigg, N. S. (ed.), **Proceedings of the Colorado Water Engineering and Management Conference**. Colorado Water Resources Research Institute, Fort Collins, Colorado.
51. Jourdonnais, J. H., J. A. Stanford, F. R. Hauer and C. A. S. Hall. 1990. Assessing options for stream regulation using hydrologic simulations and cumulative impact analysis: Flathead River Basin, U.S.A. **Regulated Rivers: Research and Management** 5(3):279–293.
52. Sedell, J. R., G. H. Reeves, F. R. Hauer, J. A. Stanford and C. P. Hawkins. 1990. Role of refugia in recovery from disturbances - modern fragmented and disconnected river systems. **Environmental Management** 14(5):711–724.
53. Ward, J. V. and J. A. Stanford. 1990. Ephemeroptera of the Gunnison River, Colorado, U.S.A., pp. 215–220. IN: Campbell, I. C. (ed.), **Mayflies and Stoneflies**. Kluwer Academic Publishers.
54. Hauer, F. R. and J. A. Stanford. 1991. Distribution and abundance of Trichoptera in a large regulated river. **Verh. Internat. Verein. Limnol.** 24:1636–1639.
55. Reid, J. W., E. B. Reed, J. V. Ward, N. J. Voelz and J. A. Stanford. 1991. *Diacyclops languidoides* (Lilljeborg, 1901) s. l. and *Acanthocyclops montana*, new species (Copepoda, Cyclopoida), from groundwater in Montana, U.S.A. **Hydrobiologia** 218(2):133–150.
- 56*. Spencer, C. N., B. R. McClelland and J. A. Stanford. 1991. Shrimp stocking, salmon collapse and eagle displacement: cascading interactions in the food web of a large aquatic ecosystem. **BioScience** 41(1):14–21.

57. Stanford, J. A. and J. V. Ward. 1991. The limnology of Lake Powell and the chemistry of the Colorado River, pp. 75–101. IN: **Colorado River Ecology and Dam Management**. National Academy Press, Washington, D.C.
58. Ward, J. V. and J. A. Stanford. 1991. Benthic faunal patterns along the longitudinal gradient of a Rocky Mountain river system. **Verh. Internat. Verein. Limnol.** 24:3087–3094.
59. Ward, J. V. and J. A. Stanford. 1991. Research directions in stream ecology, pp. 121–132. IN: Menon, J. (ed.). **Advances in Ecology**. Council of Scientific Research Integration, Trivandrum, India.
- 60*. Hall, C. A. S., J. A. Stanford and F. R. Hauer. 1992. The distribution and abundance of organisms as a consequence of energy balances along multiple environmental gradients. **Oikos** 65(3):377–390.
61. Plenet, S., P. Marmonier, J. Gibert, J. A. Stanford, A. Bodergat and C. M. Schmidt. 1992. Groundwater hazard evaluation: A perspective for the use of interstitial and benthic invertebrates as sentinels of aquifer metallic contamination, pp. 319–329. IN: Stanford, J. A. and J. J. Simons (eds.), **Proceedings of the First International Conference on Groundwater Ecology**. American Water Resources Association, Bethesda, Maryland. 420 pp.
62. Stanford, J. A. and F. R. Hauer. 1992. Mitigating the impacts of stream and lake regulation in the Flathead River catchment, Montana, U.S.A.: An ecosystem perspective. **Aquatic Conservation: Marine and Freshwater Ecosystems** 2(1):35–63.
63. Stanford, J. A. and J. V. Ward. 1992. Emergent properties of groundwater ecology: Conference conclusions and recommendations for research and management, pp. 409–415. IN: Stanford, J. A. and J. J. Simons (eds.), **Proceedings of the First International Conference on Groundwater Ecology**. American Water Resources Association, Bethesda, Maryland. 420 pp.
64. Stanford, J. A. and J. V. Ward. 1992. Management of aquatic resources in large catchments: Recognizing interactions between ecosystem connectivity and environmental disturbance, pp. 91–124. IN: Naiman, R. J. (ed.), **Watershed Management: Balancing Sustainability with Environmental Change**. Springer-Verlag, New York, New York.
65. Lorang, M. S., P. D. Komar and J. A. Stanford. 1993. Lake level regulation and shoreline erosion on Flathead Lake, Montana: A response to the redistribution of annual wave energy. **Journal of Coastal Research** 9(2):494–508.
66. Lorang, M. S. and J. A. Stanford. 1993. Variability of shoreline erosion and accretion within a beach compartment of Flathead Lake, Montana. **Limnology and Oceanography** 38(8):1783–1795.
67. Lorang, M. S., J. A. Stanford, F. R. Hauer and J. H. Jourdonnais. 1993. Dissipative and reflective beaches in a large lake and the physical effects of lake level regulation. **Ocean and Shoreline Management** 19(3):263–287.
- 68*. Stanford, J. A. and J. V. Ward. 1993. An ecosystem perspective of alluvial rivers: connectivity and the hyporheic corridor. **Journal of the North American Benthological Society** 12(1):48–60.

69. Ward, J. V. and J. A. Stanford. 1993. Research needs in regulated river ecology. **Regulated Rivers: Research and Management** 8(1–2):205–209.
70. Gibert, J., J. A. Stanford, M-J. Dole-Olivier and J. V. Ward. 1994. Basic attributes of groundwater ecosystems and prospects for research, pp. 7–40. IN: Gibert, J., D. L. Danielopol and J. A. Stanford (eds.), **Groundwater Ecology**. Academic Press, San Diego, California, USA. 571 pp.
71. Stanford, J. A. 1994. Instream flows to assist the recovery of endangered fishes of the Upper Colorado River Basin. **Biological Report 24. National Biological Survey**, U.S. Department of Interior. Washington, D.C., USA. 47 pp.
72. Stanford, J. A. and J. Gibert. 1994. Conclusions and perspective, pp. 543–547. IN: Gibert, J., D. L. Danielopol and J. A. Stanford (eds.), **Groundwater Ecology**. Academic Press, San Diego, California, USA. 571 pp.
73. Stanford, J. A., J. V. Ward and B. K. Ellis. 1994. Ecology of the alluvial aquifers of the Flathead River, Montana (USA), pp. 367–390. IN: Gibert, J., D. L. Danielopol and J. A. Stanford (eds.), **Groundwater Ecology**. Academic Press, San Diego, California, USA. 571 pp.
74. Ward, J. V., J. A. Stanford and N. J. Voelz. 1994. Spatial distribution patterns of Crustacea in the floodplain aquifer of an alluvial river. **Hydrobiologia** 287(1):11–17.
75. Naiman, R. J., J. J. Magnuson, D. M. McKnight, J. A. Stanford and J. R. Karr. 1995. Freshwater ecosystems and their management: A national initiative. **Science** 270(5236):584–585.
76. Ward, J. V. and J. A. Stanford. 1995. The serial discontinuity concept: Extending the model to floodplain rivers. **Regulated Rivers: Research and Management** 10(2–4):159–168.
- 77*. Ward, J. V. and J. A. Stanford. 1995. Ecological connectivity in alluvial river ecosystems and its disruption by flow regulation. **Regulated Rivers: Research and Management** 11(1):105–119.
78. Imbert, J. B. and J. A. Stanford. 1996. An ecological study of a regulated prairie stream in western Montana. **Regulated Rivers: Research and Management** 12(6):597–615.
79. Stanford, J. A. 1996. Landscapes and catchment basins, pp. 3–22. IN: Hauer, F. R. and G. A. Lamberti (eds.), **Methods in Stream Ecology**, 1st Edition. Academic Press, New York. 674 pp.
80. Stanford, J. A. and G. C. Poole. 1996. A protocol for ecosystem management. **Ecological Applications** 6(3):741–744.
- 81*. 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(4–5):391–413.

82. 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, pp. 50–59. IN: Mahoney, D. J. (ed.), **Proceedings of the 1997 International Conference on Hydropower**. American Society of Civil Engineers, New York.
83. Hauer, F. R., J. S. Baron, D. H. Campbell, K. D. Fausch, S. W. Hostetler, G. H. Leavesley, P. R. Leavitt, D. M. McKnight and J. A. Stanford. 1997. Assessment of climate change and freshwater ecosystems of the Rocky Mountains, U.S. and Canada. **Hydrologic Processes** 11(8):903–924.
84. Poole, G. C., R. J. Naiman, J. Pastor and J. A. Stanford. 1997. Uses and limitations of ground penetrating RADAR in two riparian systems, pp. 140–148. IN: Gibert, J., J. Mathieu and F. Fournier (eds.), **Groundwater/Surface Water Ecotones: Biological and Hydrological Interactions and Management Options**. Cambridge University Press, Port Chester, NY.
85. Wissmar, R. C., J. A. Stanford and B. K. Ellis. 1997. Stable nitrogen isotope tracing of trophic relations in food webs of river and hyporheic habitats, pp. 166–171. IN: Gibert, J., J. Mathieu and F. Fournier (eds.), **Groundwater/Surface Water Ecotones: Biological and Hydrological Interactions and Management Options**. Cambridge University Press, Port Chester, NY.
86. Chess, D. W. and J. A. Stanford. 1998. Comparative energetics and life cycle of the opossum shrimp (*Mysis relicta*) in native and nonnative environments. **Freshwater Biology** 40(4):783–794.
87. Ellis, B. K., J. A. Stanford and J. V. Ward. 1998. Microbial assemblages and production in alluvial aquifers of the Flathead River, Montana, USA. **Journal of the North American Benthological Society** 17(4):382–402.
88. 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** 28:503–518.
89. Stanford, J. A. 1998. Rivers in the landscape: Introduction to the Special Issue on Riparian and Groundwater Ecology. **Freshwater Biology** 40(3):402–406.
- 90*. Tardiff, S. E. and J. A. Stanford. 1998. Grizzly bear digging: Effects on subalpine meadow plants in relation to mineral nitrogen availability. **Ecology** 70(7):2219–2228.
91. Ward, J. V. and J. A. Stanford. 1998. Changing perspectives in the ecology of regulated rivers. **Proceedings Australian Society of Limnology**, Spec. Publ. 12:37–51 (Plenary Lecture).
92. 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. Return to the River: Scientific issues in the restoration of salmonid fishes in the Columbia River. **Fisheries** 24(3):10–19.

93. Spencer, C. N., D. S. Potter, R. T. Bukantis and J. A. Stanford. 1999. Impact of predation by *Mysis relicta* on zooplankton in Flathead Lake, Montana, U.S.A. **Journal of Plankton Research** 21(1):51–64.
94. Chess, D. W. and J. A. Stanford. 1999. Experimental effects of temperature and prey assemblage on growth and lipid accumulation by *Mysis relicta* loven. **Hydrobiologia** 412(1):155–164.
95. Hauer, F. R., J. A. Stanford, J. J. Giersch and W. H. Lowe. 2000. Distribution and abundance patterns of macroinvertebrates in a mountain stream: An analysis along multiple environmental gradients. **Verh. Internat. Verein. Limnol.** 27(3):1485–1488.
96. Ward, J. V., F. Malard, J. A. Stanford and T. Gonser. 2000. Interstitial aquatic fauna of shallow unconsolidated sediments, particularly hyporheic biotopes, pp. 41–58. **IN:** Wilkens, H., D. C. Culver and W. Humphreys (eds.), **Subterranean Ecosystems of the World 30**. Elsevier, Amsterdam.
97. Stanford, J. A. and J. V. Ward. 2001. Revisiting the serial discontinuity concept. **Regulated Rivers: Research and Management** 17(4–5):303–310.
98. Craft, J. A., J. A. Stanford and M. Pusch. 2002. Microbial respiration within a floodplain aquifer of a large gravel-bed river. **Freshwater Biology** 47(2):251–261.
99. Poole, G. C., J. A. Stanford, C. A. Frissell and S. W. Running. 2002. Three-dimensional mapping of geomorphic controls on flood-plain hydrology and connectivity from aerial photos. **Geomorphology** 48(4):329–347.
100. Stafford, C. P., J. A. Stanford, F. R. Hauer and E. B. Brothers. 2002. Changes in lake trout growth associated with *Mysis relicta* establishment: a retrospective analysis using otoliths. **Transactions of the American Fisheries Society** 131(5):994–1003.
101. Stanford, J. A. and B. K. Ellis. 2002. Natural and cultural influences on ecosystems processes in the Flathead River Basin (Montana, British Columbia), pp. 269–284. **IN:** Baron, J. S. (ed.), **Rocky Mountain Futures: An Ecological Perspective**. Island Press, Covelo, California, USA.
- 102*. Tockner, K. and J. A. Stanford. 2002. Riverine flood plains: present state and future trends. **Environmental Conservation** 29(3):308–330.
103. Webster, J. R., J. A. Stanford, J. L. Chaffin and F. E. Class. 2002. Large wood jam in a fourth-order Rocky Mountain stream. **Verh. Internat. Verein. Limnol.** 28(1):93–96.
104. Whited, D. C., J. A. Stanford and J. S. Kimball. 2002. Application of airborne multi-spectral digital imagery to characterize riverine habitats at different base flows. **River Research and Applications** 18(6):583–594.
105. Ellis, B. K., J. A. Stanford, J. A. Craft, D. W. Chess, F. R. Hauer and D. C. Whited. 2003. Plankton communities of alpine and subalpine lakes in Glacier National Park, Montana, U.S.A., 1984–1990. **Verh. Internat. Verein. Limnol.** 28(3):1542–1550.

106. Harner, M. J. and J. A. Stanford. 2003. Differences in cottonwood growth between a losing and a gaining reach of an alluvial flood plain. **Ecology** 84(6):1453–1458.
107. Hauer, F. R., C. N. Dahm, G. A. Lamberti and J. A. Stanford. 2003. Landscapes and ecological variability of rivers in North America: factors affecting restoration strategies, pp. 81–105. **IN:** Wissmar, R. C. and P. A. Bisson (ed.), **Strategies for Restoring River Ecosystems: Sources of Variability and Uncertainty in Natural and Managed Systems**. American Fisheries Society, Bethesda.
108. Hauer, F. R., D. B. Fagre and J. A. Stanford. 2003. Hydrologic processes and nutrient dynamics in a pristine mountain catchment. **Verh. Internat. Verein. Limnol.** 28(3):1490–1493.
109. Poff, N. L., J. D. Allan, M. A. Palmer, D. D. Hart, B. D. Richter, A. H. Arthington, J. L. Meyer, K. H. Rogers and J. A. Stanford. 2003. River flows and water wars: Emerging science for environmental decision making. **Frontiers in Ecology and the Environment** 1(6):298–306.
110. Savvaitova, K. A., K. V. Kuzishchin, M. A. Gruzdeva, D. S. Pavlov, J. A. Stanford and B. K. Ellis. 2003. Long-term and short-term variation in the population structure of Kamchatka steelhead *Parasalmo mykiss* from rivers of western Kamchatka. **Journal of Ichthyology** 43(9):757–768.
111. Snyder, E. B., C. P. Arango, D. J. Eitemiller, J. A. Stanford and M. L. Uebelacker. 2003. Floodplain hydrologic connectivity and fisheries restoration in the Yakima River, U.S.A. **Verh. Internat. Verein. Limnol.** 28 (4):1653–1657.
112. Stanford, J. A., N. J. Gayeski, D. S. Pavlov, K. A. Savvaitova and K. V. Kuzishchin. 2003. Biophysical complexity of the Krutogorova River (Kamchatka, Russia). **Verh. Internat. Verein. Limnol.** 28(3):1354–1361.
113. Savvaitova, K. A., K. V. Kuzishchin, M. A. Gruzdeva, D. S. Pavlov, J. A. Stanford and B. K. Ellis. 2003. Long-term and short-term variation in the population structure of Kamchatka steelhead *Parasalmo mykiss* from rivers of western Kamchatka. **Journal of Ichthyology** 43(9):757–768.
114. Zimmerman, C. E., K. V. Kuzishchin, M. A. Gruzdeva, D. S. Pavlov, J. A. Stanford and K. A. Savvaitova. 2003. Experimental determination of the life history strategy of the Kamchatka *Mykizha Parassalmo mykiss* (Walb.) (Salmonidae, Salmoniformes) on the basis of analysis of the Sr/Ca Ratio in otoliths. *Doklady Biological Sciences* (Translated from **Doklady Akademii Nauk**, Vol. 389, No. 2, 2003, pp. 274–278) 389:138–142.
115. Whited, D. C., J. A. Stanford and J. S. Kimball. 2003. Application of airborne multispectral digital imagery to characterize riverine habitat. **Verh. Internat. Verein. Limnol.** 28(3):1373–1380.
116. Poole, G. C., J. A. Stanford, S. W. Running, C. A. Frissell, W. W. Woessner and B. K. Ellis. 2004. A patch hierarchy approach to modeling surface and subsurface hydrology in complex floodplain environments. **Earth Surface Processes and Landforms** 29(10):1259–1284.
117. Stafford, C. P., B. Hansen and J. A. Stanford. 2004. Mercury in fishes and their diet items from Flathead Lake, Montana. **Transactions of the American Fisheries Society** 133:349–357.

118. Johnson, A. N., B. R. Boer, W. W. Woessner, J. A. Stanford, G. C. Poole, S. A. Thomas and S. J. O'Daniel. 2005. Evaluation of an inexpensive small-diameter temperature logger for documenting ground water—river interactions. **Ground Water Monitoring and Remediation** 25(4):1–7.
119. Lorang, M. S., D. C. Whited, F. R. Hauer, J. S. Kimball and J. A. Stanford. 2005. Using airborne multispectral imagery to evaluate geomorphic work across floodplains of gravel-bed rivers. **Ecological Applications** 15(4):1209–1222.
120. Savvaitova, K. A., M. A. Gruzdeva, K. V. Kuzishchin, D. S. Pavlov, J. A. Stanford, S. G. Sokolov and B. Ellis. 2005. "Half-Pounders" of *Parasalmo mykiss*—A Special Element of the Species Structure: On the Formation of Various Life Strategies. **Journal of Ichthyology** 45(9):768–777.
121. Stanford, J. A., F. R. Hauer, S. V. Gregory and E. B. Snyder. 2005. The Columbia River, pp. 591–653. IN: Benke, A. C. and C. E. Cushing (eds.), **Rivers of North America**. Elsevier/Academic Press, Boston, Massachusetts. 1168 pp.
- 122*. Stanford, J. A., M. S. Lorang and F. R. Hauer. 2005. The shifting habitat mosaic of river ecosystems. **Verh. Internat. Verein. Limnol.** 29(1):123–136.
123. Eby, L. A., W. J. Roach, L. B. Crowder and J. A. Stanford. 2006. Effect of stocking-up freshwater food webs. **TRENDS in Ecology and Evolution** 21(10):576–584.
124. Haskell, C. A. and J. A. Stanford. 2006. Ecology and upstream invasion of an estuarine mysid shrimp in the Columbia River (USA). **River Research and Applications** 22(7):739–753.
125. Lichatowich, J. A., W. E. McConnaha, W. J. Liss, J. A. Stanford and R. N. Williams. 2006. The Conceptual Foundation, Chapter 2, pp. 29–50. IN: Williams, R. N. (ed.), **Return to the River: Restoring Salmon to the Columbia River**. Elsevier Academic Press, Amsterdam. 720 pp.
126. Liss, W. J., J. A. Stanford, J. A. Lichatowich, R. N. Williams, C. C. Coutant, P. R. Mundy and R. R. Whitney. 2006. A Foundation for Restoration, Chapter 3, pp. 51–98. IN: Williams, R. N. (ed.), **Return to the River: Restoring Salmon to the Columbia River**. Elsevier Academic Press, Amsterdam. 720 pp.
127. Poole, G. C., J. A. Stanford, S. W. Running and C. A. Frissell. 2006. Multiscale geomorphic drivers of groundwater flow paths: subsurface hydrologic dynamics and hyporheic habitat diversity. **Journal of the North American Benthological Society** 25(2):288–303.
128. Stanford, J. A. 2006. Landscapes and riverscapes, pp. 3–21. IN: Hauer, F. R. and G. A. Lamberti (eds.), **Methods in Stream Ecology**, 2nd Edition. Academic Press/Elsevier, San Diego, California. 877 pp.
129. Stanford, J. A., C. A. Frissell and C. C. Coutant. 2006. The Status of Freshwater Habitats, Chapter 5, pp. 173–248. IN: Williams, R. N. (ed.), **Return to the River: Restoring Salmon to the Columbia River**. Elsevier Academic Press. 720 pp.

130. 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. A. Powell. 2006. Conclusions and Strategies for Salmon Restoration in the Columbia River Basin, Chapter 13, pp. 629–666. **IN**: Williams, R. (ed.), **Return to the River: Restoring Salmon Back to the Columbia River**. Elsevier Academic Press, Amsterdam. 720 pp.
131. Hauer, F. R., J. A. Stanford and M. S. Lorang. 2007. Pattern and process in Northern Rocky Mountain headwaters: Ecological linkages in the headwaters of the Crown of the Continent. **Journal of the American Water Resources Association** 43(1):104–117.
132. Hauer, F. R., J. A. Stanford, M. S. Lorang, B. K. Ellis and J. A. Craft. 2007. Aquatic ecosystem health, pp. 117–134. **IN**: Prato, A. and D. Fagre (eds.), **Sustaining Rocky Mountain Landscapes: Science, Policy and Management of the Crown of the Continent Ecosystem**. RFF Press, Washington, District of Columbia. 310 pp.
133. Kucheryavyi, A. V., K. A. Savvaitova, D. S. Pavlov, M. A. Gruzdeva, K. V. Kuzishchin and J. A. Stanford. 2007. Variations of life history strategy of the Arctic lamprey *Lethenteron camtschaticum* from the Utkholok River (Western Kamchatka). **Journal of Ichthyology** 47(1):37–52.
134. Kuzishchin, K. V., A. Y. Mal'tsev, M. A. Gruzdeva, K. A. Savvaitova, D. S. Pavlov and J. A. Stanford. 2007. On joint spawning of anadromous and resident mykiss *Parasalmo mykiss* in rivers of Western Kamchatka. **Journal of Ichthyology** 47(5):348–352.
135. McPhee, M. V., F. Utter, J. A. Stanford, K. V. Kuzishchin, K. A. Savvaitova, D. S. Pavlov and F. W. Allendorf. 2007. Population structure and partial anadromy in *Oncorhynchus mykiss* from Kamchatka: relevance for conservation strategies around the Pacific Rim. **Ecology of Freshwater Fishes** 16(4):539–547.
136. Thorp, J. H., J. A. Stanford, M. C. Thoms and G. E. Petts. 2007. Editorial: Global partnerships and the new International Society for River Science (ISRS). **River Research and Applications** 23(1):1–5.
- 137*. Whited, D. C., M. S. Lorang, M. J. Harner, F. R. Hauer, J. S. Kimball and J. A. Stanford. 2007. Climate, hydrologic disturbance, and succession: drivers of floodplain pattern. **Ecology** 88(4):940–953.
138. Rieman, K. Savvaitova, J. Stanford, E. Taylor and S. Yamamoto. 2008. Evolution, ecology and conservation of Dolly Varden, White-spotted char, and bull trout. **Fisheries** 33(11):537–550.
139. Jones, K. L., G. C. Poole, S. J. O'Daniel, L. A. K. Mertes and J. A. Stanford. 2008. Surface hydrology of low-relief landscapes: assessing surface water flow impedance using LIDAR-derived digital elevation models. **Remote Sensing of Environment** 112:4148–4159.
140. Kuzishchin, K. V., A. Yu. Malt'sev, M. A. Gruzdeva, K. A. Savvaitova, J. Stanford and D. S. Pavlov. 2008. Reproduction of mykiss *Parasalmo mykiss* in the Kol River (Western Kamchatka) and its controlling factors. **Journal of Ichthyology** 48(1):45–56. Original Russian Text Voprosy Ikhtiologii, 2008, Vol. 48, No. 1, pp. 50–61.

141. Newell, R. L., R. W. Baumann and J. A. Stanford. 2008. Stoneflies of Glacier National Park and Flathead River Basin, Montana, pp. 173–186. IN: Hauer, F. R., J. A. Stanford and R. L. Newell (eds.), **International Advances in the Ecology, Zoogeography, and Systematics of Mayflies and Stoneflies**. University of California Press, Berkeley, California. 412 pp.
142. Pavlov, D. S., K. A. Savvaitova, K. V. Kuzishchin, M. A. Gruzdeva, A. Y. Mal'tsev and J. A. Stanford. 2008. Diversity of life strategies and population structure of Kamchatka mykiss *Parasalmo mykiss* in the ecosystems of small salmon rivers of various types. **Journal of Ichthyology** 48:37–44. Original Russian text *Voprosy Ikhtiologii*, 2008, Vol. 48, No. 1 pp. 42–49.
143. Poole, G. C., S. J. O'Daniel, K. L. Jones, W. W. Woessner, E. S. Bernhardt, A. M. Helton, J. A. Stanford, B. R. Boer and T. J. Beechie. 2008. Hydrologic spiralling: the role of multiple interactive flow paths in stream ecosystems. **River Research and Applications** 24:1018–1031.
144. Stanford, J. A. 2008. Foreword, pp. ix. IN: Thorp, J. H., M. C. Thoms and M. D. DeLong (eds.), **The Riverine Ecosystem Synthesis: Towards Conceptual Cohesiveness in River Science**. Academic Press–Elsevier, San Diego. 232 pp.
145. Tockner, K., S. E. Binn, C. Gordon, R. J. Naiman, G. P. Quinn and J. A. Stanford. 2008. Flood plains: critically threatened ecosystems, pp. 45–61, Chapter 4. IN: Polunin, N. V. C. (ed.), **Aquatic Ecosystems Trends and Global Prospects**. Cambridge University Press, Cambridge. 512 pp.
146. Camacho, A. I., J. A. Stanford and R. L. Newell. 2009. The first record of *Syncarida* in Montana: A new genus of Parabathynellidae (Crustacea, Bathynellacea) family in North America. **Journal of Natural History** 43(5–6):309–321.
147. Harner, M. J., D. L. Mummey, J. A. Stanford and M. C. Rillig. 2009. Arbuscular mycorrhizal fungi enhance spotted knapweed growth across a riparian chronosequence. **Biological Invasions** 12:1481–1490.
148. Harner, M. J., J. S. Piotrowski, Y. Lekberg, J. A. Stanford and M. C. Rillig. 2009. Heterogeneity in mycorrhizal inoculum potential of flood-deposited sediments. **Aquatic Sciences** 71:331–337.
149. Hill, A. C., J. A. Stanford and P. R. Leavitt. 2009. Recent sedimentary legacy of sockeye salmon (*Oncorhynchus nerka*) and climate change in an ultraoligotrophic, glacially-turbid British Columbia nursery lake. **Canadian Journal of Fisheries and Aquatic Sciences** 66(7):1141–1152.
150. Lowell, J. L., N. Gordon, D. Engstrom, J. A. Stanford, W. E. Holben and J. E. Gannon. 2009. Habitat heterogeneity and associated microbial community structure in a small-scale floodplain hyporheic flow path. **Microbiology of Aquatic Systems** 58:611–620.
151. McPhee, M. V., T. H. Tappenbeck, D. C. Whited and J. A. Stanford. 2009. Genetic diversity and population structure in the Kuskokwim River drainage support the 'recurrent evolution' hypothesis for sockeye salmon life histories. **Transactions of the American Fisheries Society** (138):1481–1489.
152. Mouw, J. E. B., J. A. Stanford and P. B. Alaback. 2009. Influences of flooding and hyporheic exchange on floodplain plant richness and productivity. **River Research and Applications** 25(8):929–945.

153. Boulton, A. J., T. Datry, T. Kasahara, M. Mutz and J. A. Stanford. 2010. Ecology and management of the hyporheic zone: stream–groundwater interactions of running waters and their floodplains. **Journal of North American Benthological Society** 29(1):20–40.
154. Eberle, L. C. and J. A. Stanford. 2010. Importance and seasonal availability of terrestrial invertebrates as prey for juvenile salmonids on the in floodplain spring brooks of the Kol River (Kamchatka, Russian Federation). **River Research and Applications** 26:682–694.
156. Harner, M. J., D. L. Mummey, J. A. Stanford and M. C. Rillig. 2010. Arbuscular mycorrhizal fungi enhance spotted knapweed growth across a riparian chronosequence. **Biological Invasions** 12(6):1481–1490 doi:10.1007/s10530-009-9559-4).
157. Hill, A. C., T. S. Bansak, B. K. Ellis and J. A. Stanford. 2010. Merits and limits of ecosystem protection for conserving wild salmon in a northern coastal British Columbia river. **Ecology and Society** 15(2):20 [online] URL: <http://www.ecologyandsociety.org/vol15/iss2/art20/>.
159. Kuzishchin, K. V., M. A. Gruzdeva, K. A. Savvaitova, D. S. Pavlov and J. A. Stanford. 2010. Seasonal races of chum salmon *Oncorhynchus keta* and their interrelations in Kamchatka rivers. **Journal of Ichthyology** 50(2):159–173
160. Luck, M., N. Maumenee, D. Whited, J. Lucotch, S. Chilcote, M. Lorang, D. Goodman, K. McDonald, J. Kimball and J. Stanford. 2010. Remote sensing analysis of physical complexity of North Pacific Rim rivers to assist wild salmon conservation. **Earth Surface Processes and Landforms** 35(11):1330–1343.
161. Morris, M. R., B. O. Brouwer, J. K. Caves, M. J. Harner and J. A. Stanford. 2010. Successional changes in soil and hyporheic nitrogen fertility on an alluvial flood plain: implications for riparian vegetation. **Aquatic Sciences** 72:519–532.
162. Tockner, K., M. S. Lorang and J. A. Stanford. 2010. River floodplains as model ecosystems to test general hydrogeomorphic and ecological concepts. **River Research and Applications** 26(1):76–86.
- 163*. Ellis, B. K., J. A. Stanford, D. Goodman, C. P. Stafford, D. L. Gustafson, D. A. Beauchamp, D. W. Chess, J. A. Craft, M. A. Deleray and B. S. Hansen. 2011. Long-term effects of a trophic cascade in a large lake ecosystem. **Proceedings of the National Academy of Sciences USA** 108(3):1070–1075.
164. Helton, A. M., G. C. Poole, J. L. Meyer, W. M. Wollheim, B. J. Peterson, P. J. Mulholland, E. S. Bernhardt, J. A. Stanford, C. Arango, L. R. Ashkenas, L. W. Cooper, W. K. Dodds, S. V. Gregory, R. O. H. Jr, S. K. Hamilton, S. L. Johnson, W. H. McDowell, J. D. Potter, J. L. Tank, Suzanne M Thomas, H. M. Valett, J. R. Webster and L. Zeglin. 2011. Thinking outside the channel: modeling nitrogen cycling in networked river ecosystems. **Frontiers in Ecology and Environment** 9(4):229–238.
165. Morris, M. R. and J. A. Stanford. 2011. Floodplain succession and soil nitrogen accumulation on a salmon river in southwestern Kamchatka. **Ecological Monographs** 81(1):43–61.

166. O'Neal, S. L. and J. A. Stanford. 2011. Partial migration in a robust brown trout population of a Patagonian river. **Transactions of the American Fisheries Society** 140(3):623–635.
167. Wu, H., J. S. Kimball, N. Mantua and J. Stanford. 2011. Automated upscaling of river networks for macroscale hydrological modeling. **Water Resources Research** 47(3):W03517.
168. Helton, A. M., G. C. Poole, R. A. Payn, C. Izurieta, and J. A. Stanford. 2012. Relative influences of the river channel, floodplain surface, and alluvial aquifer on simulated hydrologic residence time in a montane river floodplain. **Geomorphology** 205:17-26.
<https://doi.org/10.1016/j.geomorph.2012.01.004>
169. Helton, A. M., G. C. Poole, R. A. Payn, C. Izurieta, and J. A. Stanford. 2012. Scaling flow path processes to fluvial landscapes: An integrated field and model assessment of temperature and dissolved oxygen dynamics in a river-floodplain-aquifer system. **Journal of Geophysical Research**. 117: G00N14 (13pages). <https://doi.org/10.1029/2012JG002025>
170. Whited, D. C., J. S. Kimball, J. A. Lucotch, N. K. Maumenee, H. Wu, S. D. Chilcote, and J. A. Stanford. 2012. A Riverscape Analysis Tool developed to assist wild salmon conservation across the North Pacific Rim. **Fisheries** 37:305–314.
171. Mouw, J. E. B., J. L. Chaffin, D. C. Whited, F. R. Hauer, P. L. Matson, and J. A. Stanford. 2013. Recruitment and successional dynamics diversify the shifting habitat mosaic of an Alaskan floodplain. **River Research and Applications** 29: 671–685.
172. Whited, D. C., J. S. Kimball, M. S. Lorang and J. A. Stanford. 2013. Estimation of juvenile salmon habitat in Pacific Rim rivers using multiscalar remote sensing and geospatial analysis. **River Research and Applications** 29: 135–148.
173. Price, M.H.H., Gayeski, N., and Stanford, J.A. 2013. Abundance of Skeena River chum salmon during the early rise in commercial fishing. **Transactions of the American Fisheries Society** 142: 989-1004.
174. Whited, D.C., Kimball, J.S.,Lorang, M.S., and Stanford, J.A. 2013. Estimation of juvenile salmon habitat in Pacific Rim Rivers using multiscalar remote sensing and geospatial analysis. **River Research and Applications** 29:135-148.
175. Beechie, T., H. Imaki, J. Greene, A. Wade, H. Wu, G. Pess, P. Roni, J. Kimball, J. Stanford, P. Kiffney, and N. Mantua. 2014. Restoring salmon habitat for a changing climate. **River Research and Applications** 29(8):939-960. <https://doi.org/10.1002/rra.2590>
176. Helton, A. M., G. C. Poole, R. A. Payn, C. Izurieta, and J. A. Stanford. 2014. Scaling flow path processes to fluvial landscapes: An integrated field and model assessment of temperature and dissolved oxygen dynamics in a river-floodplain-aquifer system. **Journal of Geophysical Research – Biogeosciences** <https://doi.org/10.1029/2012JG002025>.

177. Mouw, J.E.B., T.H.Tappenbeck and J. A. Stanford. 2014. Spawning tactics of summer chum salmon *Oncorhynchus keta* in relation to channel complexity and hyporheic exchange. **Environmental Biology of Fishes**. 97(10):1095- 1107. <https://doi.org/10.1007/S10641-013-0200-0>
178. Valett, H. M., F. R. Hauer, and J. A. Stanford. 2014. Landscape influences on ecosystem function: Local and routing control of oxygen dynamics in a floodplain aquifer. **Ecosystems** 17:195–211.
179. Appling, A. P., E. S. Bernhardt, and J. A. Stanford. 2014. Floodplain biogeochemical mosaics: A multidimensional view of alluvial soils, **Journal of Geophysical Research: Biogeosciences**. 119: 1538–1553.
180. Malison, R. L., M. S. Lorang, D. C. Whited, and J. A. Stanford. 2014. Beavers (*Castor canadensis*) influence habitat for juvenile salmon in a large Alaskan river floodplain. **Freshwater Biology** 59:1229–1246.
181. Ellis, B.K., Craft, J.A. and Stanford, J.A. 2015. Long-term atmospheric deposition of nitrogen, phosphorus and sulfate in a large oligotrophic lake. **PeerJ**, 3, p.e841.
182. Malison, Rachel L., Lisa A. Eby, and Jack A. Stanford. 2015. Juvenile salmonid growth, survival, and production in a large river floodplain modified by beavers (*Castor canadensis*). **Canadian Journal of Fisheries and Aquatic Sciences** 72: 1639-1651.
183. Stanford, J. A., M. L. Anderson, Brian L. Reid, Samantha D. Chilcote and Thomas S. Bansak. 2016. Thermal diversity and the phenology of floodplain aquatic biota. Pages 259-278. IN: Gilvear, D., M. Greenwood, M. Thoms and P. Wood (eds.), **River Science: Research and Applications for the 21st Century**. John Wiley & Sons, UK. 392 p.
- 184*. DelVecchia, A.G., J. A. Stanford and Xu, X. 2016. Ancient and methane-derived carbon subsidizes contemporary food webs. **Nature Communications** 7, Article number: 13163. (Hynes Award paper, Society for Freshwater Science, 2017).
185. Deacy WW, Leacock WB, Eby LA, Stanford JA. 2016. A time-lapse photography method for monitoring salmon (*Oncorhynchus spp.*) passage and abundance in streams. **PeerJ** 4:e2120 <https://doi.org/10.7717/peerj.2120>
186. Malison, R.L., K.V. Kuzishchin and J. A. Stanford. 2016. Do beaver dams reduce habitat connectivity and salmon productivity in expansive river floodplains? **PeerJ** 4:e2403. <https://doi.org/10.7717/peerj.2403>
- 187*. Deacy, W., W. Leacock, J. Armstrong and J. Stanford. 2016. Kodiak brown bears surf the salmon red wave: direct evidence from GPS collared individuals. **Ecology**, 97(5): 1091–1098. (cover article)
188. Devlin, S. B., S. K. Tappenbeck, J. A. Craft, T. H. Tappenbeck, D. W. Chess, D. C. Whited, B. K. Ellis and J. A. Stanford. 2017. Spatial and temporal dynamics of invasive Freshwater shrimp (*Mysis diluviana*): long-term effects on ecosystem properties in a large oligotrophic lake. **Ecosystems** 20: 183-197. <https://doi.org/10.1007/s10021-016-0023-x>

189. Deacy, W., J. Armstrong, J. Stanford and 4 others. 2017. Phenological synchronization disrupts trophic interactions between Kodiak brown bears and salmon. **Proceedings of the National Academy of Science**. 114 (39) 10432-10437. (cover article) <https://doi.org/10.1073/pnas.1705248114>.
190. Hand, Brian K., Jack A. Stanford and 8 others. 2018. A social–ecological perspective for riverscape management in the Columbia River Basin. **Frontiers of Ecology and Environment**. 16(S1): S23–S33. <https://doi.org/10.1002/fee.1752>.
191. Gayeski, N, M. McDuffie and J. Stanford. 2018. Criteria for a good catch: a conceptual framework to guide sourcing of sustainable salmon fisheries. **Facets**. 3: 300–314. <https://doi.org/10.1139/facets-2016-0078>.
192. Gayski, N.J., J. A. Stanford, D. R. Montgomery, J. Lichatowich, R. M. Peterman and R. N. Williams. 2018. Salmon management: Need for a place-based conceptual foundation. **Fisheries** DOI: 10.1002/fsh.10062
193. Deacy, W. W, J. A. Erlenbach, W. B. Leacock, J. A. Stanford, C. T. Robbins, and J. B. Armstrong. 2018. Quantifying the benefits of resource waves: phenological tracking increases salmon consumption by Kodiak brown bears. *Scientific Reports* 8(1):11008. DOI:10.1038/s41598-018-29425-3

TECHNICAL REPORTS AND PUBLISHED ABSTRACTS (115)

- Stanford, J. A. 1968. Observations on spawning habits of Pacific herring in Nunavarchuk Bay, Alaska. Alaska Department of Fish and Game, Dillingham, AK. 5 pp.
- Stanford, J. A. 1971. Comparison of two methods quantitatively sampling benthic stream macroinvertebrates. *Journal Colorado-Wyoming Academy of Science* 7(2):87. Abstract.
- Stanford, J. A. 1971. Quantitative sampling of macrobenthos in the Cache la Poudre River, Colorado. M.S. Thesis. Colorado State University, Fort Collins. 68 pp.
- Stanford, J. A. 1975. Ecological studies of Plecoptera in the upper Flathead and Tobacco Rivers, Montana. Ph.D. Dissertation. University of Utah, Salt Lake City. 214 pp.
- Stanford, J. A. and A. R. Gaufin. 1975. The structure and function of the hyporheic communities of the Flathead and Tobacco Rivers, Montana. *Verh. Internat. Verein. Limnol.* 19:1639. Abstract.
- Tibbs, J. F., A. R. Gaufin and J. A. Stanford. 1975. Distribution and biotic effects of nutrients in Flathead Lake, Montana. Report to Environmental Protection Agency and State of Montana Department of Health and Environmental Sciences. 45 pp.
- Fitzpatrick, L. C., T. R. Hays, J. A. Stanford, B. J. Venables, J. R. Glidewell, J. L. Hughes and R. E. Filson. 1976. Environmental assessment study of the planned retarding structures and channel work in the Pilot Grove Creek (Texas) watershed. Report to U.S. Conservation Service, Temple, Texas. 66 pp.
- Stanford, J. A., L. C. Fitzpatrick and S. A. Zimmerman. 1977. A water quality study on Lake Texoma. 1976 Annual Report. U.S. Army Corps of Engineers, Tulsa, Oklahoma. 450 pp.

- Stanford, J. A. and F. R. Hauer. 1978. Preliminary observations on the ecological effects of flow regulation in the Flathead Rivers, Montana. Report to U.S. Bureau of Reclamation, Boise, Idaho. 55 pp.
- Stanford, J. A. and S. A. Zimmerman. 1978. A water quality study on Lake Texoma. 1977 Annual Report. U.S. Army Corps of Engineers, Tulsa, Oklahoma. 390 pp.
- Stanford, J. A. 1979. Relation between plankton dynamics and riverine turbidity in Flathead Lake, Montana. Verh. Internat. Verein. Limnol. 20:1574. Abstract.
- Wilcox, D. P. and J. A. Stanford. 1979. The relation between carbon assimilation and biomass dynamics in a phytoplankton community. Verh. Internat. Verein. Limnol. 20:1575. Abstract.
- Perry, W. B. and J. A. Stanford. 1980. Temporal and spatial distribution of dissolved solids in Lake Texoma with reference to water treatment processes required for municipal use. Report to U.S. Army Corps of Engineers, Tulsa, Oklahoma. 65 pp.
- Stanford, J. A. 1980. The Foothills project: Comments on inadequacies of environmental impact analyses and evaluation of alternative actions. EPA Research Series. (Open file report).
- Short, R. A., J. A. Stanford and E. G. Zimmerman. 1981. Environmental survey of the Big Pine Creek Basin, Texas. Report to U.S. Army Corps of Engineers. Department of Biological Sciences, North Texas State University, Denton, Texas. 127 pp.
- Henry, R. L. and J. A. Stanford. 1983. A simulation study of Flathead Lake phosphorus dynamics: Final report. U.S. Environmental Protection Agency. Flathead Lake Biological Station, The University of Montana, Polson.
- Stanford, J. A. 1983. Groundwater quality and nutrient loads in springbrooks of western Montana. Report to Montana Universities Joint Water Resources Research Center, Bozeman.
- Stanford, J. A., T. J. Stuart, and B. K. Ellis. 1983. Limnology of Flathead Lake. Final report. Flathead River Basin Environmental Impact Study. U.S. Environmental Protection Agency, Helena, Montana.
- Golnar, T. F. and J. A. Stanford. 1984. Limnology of Whitefish Lake, Montana. Report to Whitefish Sewer District and Board of County Commissioners, Flathead County, Montana.
- Stanford, J. A. 1984. Land use and groundwater quality in western Montana: The impact on nutrient budgets for surface waters. Report to Montana Water Resources Research Center, Montana State University, Bozeman. 33 pp.
- Ellis, B. K., J. A. Stanford and R. T. Bukantis. 1985. Monitoring limnology of Flathead Lake. Flathead Lake Biological Station, University of Montana, Polson.
- Jourdonnais, J. H. and J. A. Stanford. 1985. Verification of shoreline sewage leachates in Flathead Lake, Montana. Report to Montana Water Resources Research Center, Bozeman.

Kicklighter, D. W. and J. A. Stanford. 1985. The use of riffle community metabolism as a measure of water quality degradation in the Clark Fork River, Montana. Final Report to Montana Water Quality Bureau, Helena. Flathead Lake Biological Station, University of Montana, Polson.

Stanford, J. A. 1985. Monitoring surface water quality in the Flathead Basin: Master Plan. Prepared for the Flathead Basin Commission with cooperation of technical representative of the various agencies concerned with protection of water quality in the Flathead Basin. Flathead Lake Biological Station, University of Montana, Polson.

Stanford, J. A. and B. K. Ellis. 1985. Nutrient subsidy in montane lakes: Mount St. Helen's ash versus fluvial sediments. Report to U.S. Geological Survey, U.S. Department of the Interior, Washington, DC.

Stanford, J. A., B. K. Ellis, G. R. Gregory and L. F. Marnell. 1985. Monitoring water quality of selected lakes in Glacier National Park, Montana. 1984 Annual Report. National Park Service, West Glacier, MT. Flathead Lake Biological Station, University of Montana, Polson.

Stanford, J. A., L. E. Hughes and J. H. Jourdonnais. 1985. Analytical methodology and quality control procedures used in the Freshwater Research Laboratory (2nd Edition). Flathead Lake Biological Station, University of Montana, Polson.

Ellis, B. K. and J. A. Stanford. 1986. Bio-availability of phosphorus fractions in Flathead Lake and its tributary waters. Report to U.S. Environmental Protection Agency, Duluth, Minnesota.

Ellis, B. K., J. A. Stanford, G. R. Gregory and L. F. Marnell. 1986. Monitoring water quality of selected lakes in Glacier National Park, Montana. 1985 Annual Report. National Park Service, West Glacier, MT. Flathead Lake Biological Station, University of Montana, Polson.

Hauer, F. R., C. A. S. Hall, J. H. Jourdonnais, M. S. Lorang and J. A. Stanford. 1986. Assessing the effects of water regulation on aspects of the ecology of Flathead Lake. Progress report to Montana Power Company, Butte.

Hauer, F. R., J. A. Stanford and J. H. Jourdonnais. 1986. Evaluation of water quality and shoreline septic leachates in Echo Lake, Montana. Flathead Lake Biological Station, University of Montana, Polson.

Jourdonnais, J. H., J. A. Stanford, F. R. Hauer and R. A. Noble. 1986. Investigation of septic contaminated groundwater seepage as a nutrient source to Whitefish Lake, Montana. Flathead Lake Biological Station, University of Montana, Polson.

Noble, R. A. and J. A. Stanford. 1986. Groundwater resources and water quality of the unconfined aquifers in the Kalispell Valley, Montana. Report to Montana Department of Natural Resources and Conservation, Helena.

Ellis, B. K., J. A. Stanford, C. N. Spencer, G. R. Gregory and L. F. Marnell. 1987. Monitoring water quality of selected lakes in Glacier National Park, Montana. 1986 Annual Report. National Park Service, West Glacier, MT. Flathead Lake Biological Station, University of Montana, Polson.

- Hall, C. A. S. and J. A. Stanford. 1988. Simulation modeling of water levels in Flathead Lake, Montana. Report to Montana Power Company, Butte.
- Hauer, F. R., M. S. Lorang, J. H. Jourdonnais, J. A. Stanford and A. E. Schuyler. 1988. The effects of water regulation on the shoreline ecology of Flathead Lake, Montana. Final report to Montana Power Company, Butte.
- Lorang, M. S. and J. A. Stanford. 1988. Causes and consequences of nearshore sediment resuspension on the north shore of Flathead Lake. Report to Montana Power Company, Butte.
- Stanford, J. A. and B. K. Ellis. 1988. Water quality: status and trends, pp. 11–32. IN: Our Clean Water - Flathead's Resource of the Future. Proceedings of a conference held April 25–26, 1988, Kalispell, Montana. Flathead Basin Commission, Governor's Office, Helena, Montana.
- Stanford, J. A. (ed.). 1988. Monitoring water quality in the Flathead. Biennial report to the Flathead Basin Commission, Governor's Office, Helena, Montana.
- Ellis, B. K., J. A. Stanford, G. R. Gregory and L. F. Marnell. 1989. Monitoring water quality of selected lakes in Glacier National Park, Montana. 1988 Annual Report. Open File Report 106-89. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 67 pp.
- Lorang, M. S. and J. A. Stanford. 1989. Sediment dynamics on the north shore of Flathead Lake, Montana. Open File Report 107-89. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 36 pp.
- Stanford, J. A. 1989. Flow alteration and ecosystem stability in the Gunnison River, Colorado: a perspective. Open File Report 105-89. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 8 pp.
- Ellis, B. K., J. A. Stanford, J. A. Craft, K. A. Selivanoff, G. R. Gregory and L. F. Marnell. 1990. Monitoring quality of selected lakes in Glacier National Park, Montana. 1989 Annual Report. Open File Report 114-90. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 34 pp. + appendices.
- Stanford, J. A. 1990. Mitigating the impacts of stream and lake regulation in the Flathead River Basin, Montana: An ecosystem perspective. Open File Report 113-90. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 71 pp.
- Stanford, J. A., J. A. Craft and A. Acheson. 1990. Chemistry of selected lakes in the Big Salmon and Gordon Creek drainages of the Bob Marshall Wilderness, Montana. Open File Report 110-90. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 16 pp.
- Stanford, J. A., B. K. Ellis and C. N. Spencer. 1990. Monitoring water quality in Flathead Lake, Montana. 1990 Progress Report. Open File Report 115-90. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 19 pp.

Brabrand, A., S. J. Saltveit, F. R. Hauer, C. N. Spencer and J. A. Stanford. 1991. The study of fish distribution and density using quantitative echosounding in Flathead Lake, Lake McDonald and Swan Lake, Montana, USA. Open File Report 119-91. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 12 pp.

Ellis, B. K., J. A. Stanford, J. A. Craft, D. W. Chess, G. R. Gregory and L. F. Marnell. 1991. Monitoring water quality of selected lakes in Glacier National Park, Montana. 1990 Annual Report. Open File Report 117-91. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 28 pp.

Hauer, F. R., J. A. Stanford and J. T. Gangemi. 1991. Effects of stream regulation in the Upper Missouri River. Open File Report 116-91. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 61 pp.

Ellis, B. K., J. A. Stanford and A. Acheson. 1992. Limnology of two subalpine lakes in the Bob Marshall Wilderness, Montana: A benchmark water quality study with emphasis on sensitivity to acidic precipitation. Progress Report for the period July, 1990 to May, 1991. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 42 pp. + appendix.

Ellis, B. K., J. A. Stanford and D. Chess. 1992. Limnology of two subalpine lakes in the Bob Marshall Wilderness, Montana: A benchmark water quality study with emphasis on sensitivity to acidic precipitation. Progress Report for the period July, 1991 to September, 1992. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 41 pp. + appendix.

Ellis, B. K., J. A. Stanford, J. A. Craft, D. W. Chess, G. R. Gregory and L. F. Marnell. 1992. Monitoring water quality of selected lakes in Glacier National Park, Montana: Analysis of data collected, 1984–1990. In Conformance with Cooperative Agreement CA 1268-0-9001, Work Order 6. National Park Service, Glacier National Park, West Glacier, Montana. Open File Report 129-92. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 32 pp.

Stanford, J. A., B. K. Ellis, D. W. Chess, J. A. Craft and G. C. Poole. 1992. Monitoring water quality in Flathead Lake, Montana. 1992 Progress Report. Open File Report 128-92. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 31 pp.

Stanford, J. A. 1993. Instream flows to assist the recovery of endangered fishes of the Upper Colorado River Basin: Review and synthesis of ecological information, issues, methods and rationale. Report prepared for the Instream Flow Subcommittee of the Recovery Implementation Program for Endangered Fish Species of the Upper Colorado River Basin and U.S. Fish and Wildlife Service, Denver, Colorado. Open File Report 130-93. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 89 pp. + appendix.

Stanford, J. A. 1993. The ecology of surface and groundwater interactions: Ramifications for re-authorization of the Clean Water Act. A Congressional Briefing Paper presented June 11, 1993, Washington, D.C. Sponsored by Environmental and Energy Study Institute, Washington, D.C. Open File Report 131-93. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 4 pp.

Hauer, F. R., J. T. Gangemi and J. A. Stanford. 1994. Long-term influence of Hungry Horse Dam operation on the ecology of macrozoobenthos of the Flathead River. Report prepared for the Montana Department of Fish, Wildlife and Parks. Open File Report 133-94. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 64 pp.

Stanford, J. A., B. K. Ellis, D. G. Carr, G. C. Poole, J. A. Craft and D. W. Chess. 1994. Diagnostic analysis of annual phosphorus loading and pelagic primary production in Flathead Lake, Montana. Flathead Lake Clean Lakes Project, Phase One. Open File Report 132-94. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 54 pp.+ appendices.

Butler, N. M., J. A. Craft and J. A. Stanford. 1995. A diagnostic study of the nutrient loading at Swan Lake, Montana. Swan Lake Clean Lakes Project, Phase One. Open File Report 138-95. Flathead Lake Biological Station, The University of Montana, Polson. 80 pp. + appendix. Report prepared for the Water Quality Bureau, MDHES, Helena, Montana and USEPA, Denver, Colorado.

Ellis, B. K. and J. A. Stanford. 1995. Analysis of methods for estimating winter deposition of solutes in the Bob Marshall Wilderness. Open File Report 137-95. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 17 pp.

Frissell, C. A., J. Doskocil, J. T. Gangemi and J. A. Stanford. 1995. Identifying priority areas for protection and restoration of aquatic biodiversity: A case study in the Swan River Basin, Montana, USA. Open File Report 136-95. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 51 pp.

Lohr, S. A., P. G. Connors, J. A. Stanford and J. S. Clegg. 1995. A new horizon for biological field stations and marine laboratories. Report of a workshop held in Santa Fe, New Mexico, March 9–12, 1995, by the Organization of Biological Field Stations and the National Association of Marine Laboratories. Sponsored by the Biological Research Resources Program of the National Science Foundation.

Stanford, J. A. 1995. The Flathead Basin, Montana, pp. 59–64. IN: Wagner, F. H. (ed.), Ecosystem Management of Natural Resources in the Intermountain West. Natural Resources and Environmental Issues, Volume V. College of Natural Resources, Utah State Univ., Logan, Utah.

Stanford, J. A., B. K. Ellis and G. C. Poole. 1995. Influences of nitrogen and phosphorus loading on water quality in Flathead Lake, Montana. Open File Report 134-95. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 31 pp. + appendices.

Tardiff, S. E. and J. A. Stanford. 1995. Influence of flooding on riparian plant communities of the Nyack Floodplain, Glacier National Park, Montana. Report to National Park Service, Rocky Mountain Region Water Resources Division, Fort Collins, Colorado. Open File Report 135-95. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 8 pp.

Frissell, C. A., J. L. Ebersole, W. J. Liss, B. J. Cavallo, G. C. Poole and J. A. Stanford. 1997. Potential effects of climate change on thermal complexity and biotic integrity of streams: seasonal intrusion of nonnative fishes. Open File Report 144-97. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 278 pp.

- Hauer, F. R. and J. A. Stanford. 1997. Long-term influence of Libby Dam operation on the ecology of macrozoobenthos of the Kootenai River, Montana and Idaho. Open File Report 141-97. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 63 pp. + figures.
- Shakarjian, M. J. and J. A. Stanford. 1997. Effects of trampling by hikers on zoobenthos of the North Fork of the Virgin River, Zion National Park, Utah. Open File Report 145-97. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 16 pp.
- Stanford, J. A. 1997. Providing improved flows and habitat for anadromous fishes in the Teanaway River, Washington: An approach and ecosystem perspective. Open File Report 146-97. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 17 pp.
- Stanford, J., A. Acheson, D. Brakke, S. Eversman, K. Savig and J. Eilers. 1997. A screening procedure to evaluate air pollution effects in Region 1 wilderness areas, 1991. U. S. Forest Service General Technical Report RM-GTR-294 and Open File Report 143-97, Flathead Lake Biological Station, The University of Montana, Polson, Montana. 34 pp.
- Stanford, J. A., B. K. Ellis, J. A. Craft and G. C. Poole. 1997. Water quality data and analyses to aid in the development of revised water quality targets for Flathead Lake, Montana. Open File Report 142-97. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 154 pp. + appendices.
- Ellis, B. K., J. A. Craft and J. A. Stanford. 1998. Baseline water quality study of Little Bitterroot, Mary Ronan, Ashley and Lindbergh Lakes, Montana. Open File Report 148-98. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 93 pp. + appendices.
- Ellis, B. K., J. A. Craft and J. A. Stanford. 1998. Monitoring water quality in Flathead Lake, Montana: 1998 Progress Report. Open File Report 149-98. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 22 pp.
- Ellis, B. K. and J. A. Stanford. 1998. Water quality in headwater streams in the Flathead National Forest: 1998 Biennial Report. Open File Report 151-98. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 19 pp.
- Craft, J. A., B. K. Ellis and J. A. Stanford. 1999. Water quality monitoring of Lion Creek, Swan River Basin, Montana. Open File Report 154-99. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 36 pp.
- Ellis, B. K., J. A. Craft and J. A. Stanford. 1999. Monitoring water quality in Flathead Lake, Montana: 1999 Progress Report. Open File Report 155-99. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 23 pp.
- Ellis, B. K. and J. A. Stanford. 1999. Influences of forest harvest on water quality in Goat Creek, Swan River Basin, Montana. Open File Report 152-99. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 38 pp.

Ellis, B. K., J. A. Stanford and J. A. Craft. 1999. Determination of nutrient and carbon loading in the Swan River, Montana. Open File Report 153-99. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 38 pp.

Stanford, J. A., A. McKee, T. Allison, J. Brunt, T. Callahan, P. Cohen, B. Dalglish, J. Helly, M. Holland, J. Kennedy, W. Michener, M. Stromberg, H. Swain, D. White and R. Wyman. 1999. Field Station 2000 Initiative. Rationale and action plan for networking the Organization of Biological Field Stations (OBFS) to empower demonstration of national environmental conditions and trends. Report of the OBFS Working Group on Networking. 25 pp. + appendix.

Stanford, J. A. 2000. River Ecological Studies of the North Fork of the Flathead River, Montana and British Columbia. Report prepared for the Transboundary Organizing Project, Montana Wilderness Society. 31 pp.

Bansak, T. S., J. A. Craft and B. K. Ellis. 2000. Water quality in Cat and Dog Creeks, Swan River Basin, Montana. Open File Report 160-00. Flathead Lake Biological Station, The University of Montana, Polson, Montana.

Ellis, B. K., J. A. Craft and J. A. Stanford. 2000. Monitoring water quality in Flathead Lake, Montana: 2000 Progress Report. Prepared for Montana Department of Environmental Quality, Helena, Montana. Open File Report 158-00. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 30 pp.

Wicklum, D. W. and J. A. Stanford. 2000. The ecology of *Mysis relicta* in Flathead Lake, Montana. Prepared for Confederated Salish and Kootenai Tribes, Pablo, Montana. Open File Report 157-00. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 46 pp.

Ellis, B. K., J. A. Craft and J. A. Stanford. 2001. Monitoring water quality in Flathead Lake, Montana: 2001 Progress Report. Prepared for Montana Department of Natural Resources and Conservation and Montana Department of Environmental Quality, Helena, Montana. Open File Report 166-01. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 34 pp.

Ellis, B. K. and J. A. Stanford. 2001. Pollution of Flathead Lake by atmospheric fallout: analyses of loads, comparison to other sites and potential sources. Prepared for Flathead Basin Commission, Kalispell, Montana. Open File Report 167-01. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 39 pp.

Snyder, E. B. and J. A. Stanford. 2001. Review and synthesis of river ecological studies in the Yakima River, Washington, with emphasis on flow and salmon habitat interactions. Prepared for Bureau of Reclamation, Yakima, Washington. Open File Report 163-01. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 118 pp. + 1 appendix.

Stafford, C. P., B. Hansen and J. A. Stanford. 2001. Mercury in the food web of Flathead Lake, Montana, U.S.A. Prepared for the Confederated Salish and Kootenai Tribes, Pablo, Montana. Open File Report 164-01. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 29 pp. + 3 appendices.

Stanford, J. A., J. S. Kimball and D. C. Whited. 2001. Analysis of flow and habitat relations in the Lower Yakima River, Washington, associated with proposed water exchange. Prepared for the Bureau of Reclamation, Yakima, Washington. Open File Report 165-01. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 11 pp. + 4 appendices.

Ellis, B. K., J. A. Craft and J. A. Stanford. 2002. Monitoring water quality in Flathead Lake, Montana: 2002 Progress Report. Open File Report 173-02. Submitted to Montana Department of Environmental Quality, Helena, Montana by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 19 pp.

Haskell, C. A. and J. A. Stanford. 2002. Diet, distribution and life history of *Neomysis mercedis* in John Day Reservoir. Open File Report 169-02. Prepared for Bonneville Power Administration, Portland, Oregon by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 41 pp.

Hauer, F. R., B. J. Cook, M. S. Lorang and J. A. Stanford. 2002. Review and synthesis of riverine databases and ecological studies in the Upper Snake River, Idaho. PART A: Relationships of flow, geomorphology and river habitat interactions. Open File Report 175-02. Prepared for Bureau of Reclamation, US Department of the Interior, Boise, Idaho by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 58 pp.

Stanford, J. A., E. B. Snyder, M. N. Lorang, D. C. Whited, P. L. Matson and J. L. Chaffin. 2002. The Reaches Project: ecological and geomorphic studies supporting normative flows in the Yakima River Basin, Washington. Open File Report 170-02. Prepared for Yakima Office, Bureau of Reclamation, US Department of the Interior, Yakima, Washington by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 152 pp.

Stanford, J. A., B. K. Ellis and N. Gayeski. 2002. Kamchatka Steelhead Project: Report of Work Accomplished During 1999–2001 by the Flathead Lake Biological Station of The University of Montana, USA. Open File Report 174-02. Flathead Lake Biological Station, The University of Montana, Polson, Montana, USA. 33 pp.

Stanford, J. A. and F. R. Hauer. 2003. Coalbed methane (CBM) in Montana: problems and solutions. Open File Report 176-03. Prepared for Montana State Legislature, Helena, Montana by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 13 pp.

Craft, J. A., J. A. Stanford and B. E. Jackson. 2003. Whitefish Lake Water Quality 2003. Open File Report 177-03. Prepared for Whitefish County Water and Sewer District, Whitefish, Montana by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 43 pp.

Anderson, M. A. and J. A. Stanford. 2003. Ptarmigan and control lakes assessment. Open File Report 178-03. Prepared for Glacier National Park, Cooperative Ecosystem Study Unit, Park Headquarters Science Center, West Glacier, Montana by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 46 pp.

Ellis, B. K., J. A. Craft, S. L. Relyea and J. A. Stanford. 2003. Monitoring water quality in Flathead Lake, Montana: 2003 Progress Report. Open File Report 179-03. Prepared for Montana Department of Environmental Quality by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 29 pp.

Ellis, B. K., J. A. Craft and J. A. Stanford. 2004. Monitoring water quality in Flathead Lake, Montana: 2004 Progress Report. FLBS 181-04. Prepared for Montana Department of Environmental Quality, Kalispell, Montana by Flathead Lake Biological Station, Polson, Montana. 20 pp.

Craft, J. A. and J. A. Stanford. 2004. Investigating water quality in Lake McDonald: Progress report for work completed in 2003. FLBS Report 182-04. Glacier National Park, West Glacier, Montana by Flathead Lake Biological Station, Polson, Montana. 17 pp.

Ellis, B. K., L. Marnell, M. A. Anderson, J. A. Stanford, C. Albrecht and T. Wilke. 2004. Status and ecology of a glacial relict mollusk, the Rocky Mountain capshell limpet (*Acroloxus coloradensis*), in relation to the limnology of Lost Lake, Glacier National Park, Montana (USA). FLBS Report 186-04. Prepared for National Park Service, Glacier National Park, West Glacier, Montana by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 48 pp.

Chilcote, S. D. and J. A. Stanford. 2005. Evaluating the suitability of the Samarga River, Russian Far East, for inclusion in the Salmonid River Observatory Network (SaRON). SaRON Project Assessment. Prepared for Wild Salmon Center by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 23 pp.

Chilcote, S. D., J. A. Stanford and K. V. Kuzishchin. 2005. Salmonid fishes and their habitats in rivers of Tierra del Fuego, Chile. FLBS Report 189-05. Prepared for Wildlife Conservation Society, Bronx, New York by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 44 pp.

Craft, J. A., J. A. Stanford and C. Relyea. 2005. Investigating water quality in Lake McDonald, Final Report. FLBS Report 190-05. Report prepared for Glacier National Park, National Park Service, West Glacier, Montana by Flathead Lake Biological Station, Polson, Montana. 22 pp.

Ellis, B. K., J. A. Craft and J. A. Stanford. 2005. Monitoring water quality in Flathead Lake, Montana: 2005 Progress Report. FLBS Report 188-05. Prepared for Montana Department of Environmental Quality by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 17 pp.

Stanford, J. A., D. S. Pavlov, X. Augerot, K. V. Kuzishchin and others. 2005. SaRON Field Protocols for Cross-Site Comparison. Flathead Lake Biological Station, The University of Montana, Polson, Montana; Department of Ichthyology, Moscow State University, Moscow, Russia; The Wild Salmon Center, Portland, Oregon. 80 pp.

Ellis, B. K., J. A. Craft and J. A. Stanford. 2006. Monitoring water quality in Flathead Lake, Montana: 2006 Progress Report. FLBS Report 192-06. Prepared for Montana Department of Environmental Quality by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 17 pp.

- O'Neal, S. and J. A. Stanford. 2006. Population status and ecology of brown trout: Rio Grande, Tierra del Fuego, Argentina. FLBS Report 193-06. Submitted to Nervous Waters of Argentina and Estancia Maria Behety, Tierra del Fuego, Argentina by Flathead Lake Biological Station, The University of Montana, Polson, Montana, USA. 18 pp.
- Ellis, B. K., J. A. Craft and J. A. Stanford. 2007. Monitoring water quality in Flathead Lake, Montana: 2007 Progress Report. FLBS Report 197-07. Prepared for Montana Department of Environmental Quality, Helena, MT by Flathead Lake Biological Station, Polson, MT. 25 pp.
- Ellis, B. K., J. A. Craft and J. A. Stanford. 2008. Monitoring water quality in Flathead Lake, Montana: 2008 Progress Report. FLBS Report 202-08. Flathead Lake Biological Station, The University of Montana, Polson, Montana. 26 pp. FLBS Report 202-08. Prepared for, Polson, Montana. 26 pp.
- Malison, R. L., J. A. Stanford and S. L. O'Neal. 2008. Population status and ecology of brown trout: Rio Grande, Tierra del Fuego, Argentina, 2008 season. FLBS Report 201-08. Prepared for Nervous Waters of Argentina and Estancia María Behety by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 15 pp.
- Mantua, N., N. G. Taylor, G. T. Ruggione, K. W. Myers, D. Preikshot, X. Augerot, N. D. Davis, B. Dorner, R. Hilborn, R. M. Peterman, P. Rand, D. Schindler, J. Stanford, R. V. Walker and C. J. Walters. 2008. The salmon MALBEC project: a North Pacific-scale study to support salmon conservation planning. Submitted to North Pacific Anadromous Fish Commission by School of Aquatic and Fishery Sciences, University of Washington, Seattle, Washington, USA. 49 pp.
- Ellis, B. K., J. A. Craft and J. A. Stanford. 2009. Monitoring water quality in Flathead Lake, Montana: 2009 Progress Report. FLBS Report 203-09. Flathead Lake Biological Station, The University of Montana, Polson, MT. 26 pp.
- Lucotch, J. A., N. K. Maumenee, D. C. Whited, S. D. Chilcote, J. S. Kimball and J. A. Stanford. 2009. A Geographic Information Systems (GIS) Manual for the Development and Programming of the Riverscape Analysis Project (RAP) Data base and Interface. FLBS Report No. 204-09. Prepared for Gordon and Betty Moore Foundation, Palo Alto, California by Flathead Lake Biological Station, The University of Montana, Polson, Montana. 52 pp.
- Ellis, B. K., J. A. Craft and J. A. Stanford. 2010. Monitoring water quality in Flathead Lake, Montana: 2010 Progress Report. FLBS Report 205-10. Flathead Lake Biological Station, The University of Montana, Polson, MT. 26 pp.
- Stanford, J. A., W. Duffy, E. Asarian, B. Cluer, P. Detrich, L. Eberle, S. Edmondson, S. Foott, M. Hampton, J. Kann, K. Malone, and P. Moyle. 2011. Conceptual model for restoration of the Klamath River. Pages 151–174 in L. Thorsteinson, S. VanderKooi, and W. Duffy, editors. Proceedings of the Klamath Basin Science Conference, Medford, Oregon, 1–5 February 2010. U.S. Geological Survey Open-File Report 2011-1196.

Izurieta, C., S. Cleveland, I. Judson, P. Llovet, G. Poole, B. McGlynn, L. Marshall, W. Cross, G. Jacobs, B. Kucera, D. White, F. R. Hauer and J. Stanford. 2011. A cyber-infrastructure for a virtual observatory and ecological informatics systems - VOEIS, pp. Pages 76–81. IN: National Center for Ecological Analysis and Synthesis NCEAS Environmental Information Management EIM 2011, 29–30 September 2011, Santa Barbara, CA.

PAPERS PRESENTED BY INVITATION (75)

Stanford, J. A. 1974. Ecology of Montana stoneflies (Plecoptera). Institute of Water Research, Michigan State University, East Lansing. Host: Dr. Thomas G. Bahr.

Stanford, J. A. 1977. Thermal ecology of Rocky Mountain (USA) stoneflies (Plecoptera). Zoologish Museum, University of Oslo, Oslo, Norway. Host: Dr. Albert Lillehammer.

Stanford, J. A. 1977. Limnology of North Texas reservoirs and its interpretive value in studies of natural lakes. Texas Christian University, Fort Worth, Texas. Host: Dr. Ray Drenner.

Stanford, J. A. and J. K. G. Silvey. 1977. An historical overview of reservoir limnology in the Southwestern USA. Symposium on Problems Associated with River Impoundments, North American Benthological Society, Roanoke, Virginia. Host: Dr. John Cairns.

Stanford, J. A. 1979. Ecology of aquatic insects in the Flathead Rivers, Montana. Special Symposium on Ecology of Rocky Mountain Aquatic Insects. Entomological Society of America, Denver, Colorado. Hosts: Drs. J. V. Ward and R. K. Baumann.

Ward, J. V. and J. A. Stanford. 1980. The serial discontinuity concept of lotic ecosystems. Plenary Paper. Symposium on Dynamics of Lotic Ecosystems. Savannah River Ecology Laboratory and the University of Georgia, Athens, Georgia. Hosts: Drs. S. M. Bartell and T. D. Fontaine.

Stanford, J. A. 1981. Distribution of macroinvertebrates along heterogeneous gradients. American Geographical Society, Los Angeles, California. Host: Dr. Thomas Foggin.

Stanford, J. A. 1981. The role of limnological research in addressing critical water quality issues. Plenary Paper. Symposium on Montana's Water Future in the Decade of the '80's. Montana Academy of Science, Missoula, Montana. Host: Dr. A. Silverman.

Ward, J. V. and J. A. Stanford. 1981. The intermediate-disturbance hypothesis: An explanation for biotic diversity patterns in streams. Plenary Paper. Symposium on the Testing of General Ecological Theory in Stream Ecosystems. North American Benthological Society, Provo, Utah. Host: Dr. James Barnes.

Ward, J. V. and J. A. Stanford. 1982. The regulated stream as a testing ground for ecological theory. Plenary Paper. Second International Symposium on Regulated Streams, Oslo, Norway. Hosts: Drs. A. Lillehammer and S. Saltveit.

Stanford, J. A. 1984. The effects of the Cabin Creek mine on water quality in the Flathead Basin. Sigma Xi lecture. Montana College of Mineral Science and Technology, Butte, Montana. Host: Dr. D. Coe.

Stanford, J. A. and J. V. Ward. 1984. The Colorado River System. Symposium on Western Rivers. Ecological Society of America, Fort Collins, Colorado. Host: White House Staff

Ward, J. V. and J. A. Stanford. 1985. The ecology of regulated streams: Past accomplishments and directions for future research. Plenary paper. Third International Symposium on Regulated Streams, Edmonton, Alberta, Canada.

Ward, J. V. and J. A. Stanford. 1986. Riverine ecosystems: The influence of man on catchment dynamics and fish ecology. Plenary paper. International Large River Symposium. Honey Harbour, Ontario, Canada.

Stanford, J. A. 1989. Ecosystem science and management of natural resources in the Flathead Basin, Montana. Keynote address. Perspectives and Opportunities: Integrated Management of the Yakima River Basin. Central Washington University, Ellensburg, Washington. Host: Dr. Curt Wiberg. (Honorarium)

Stanford, J. A. 1989. Consequences of stream regulation on biodiversity and ecosystem stability and new approaches to management. Keynote address. Fourth South African National Hydrological Symposium, Pretoria, South Africa. Host: South African Foundation for Research Development. (Honorarium)

Stanford, J. A. 1990. Lake Powell and Colorado River water chemistry. Plenary paper. Symposium on Colorado River Ecology and Dam Management, Santa Fe, New Mexico. Host: Water Science and Technology Board of the National Research Council. (Honorarium)

Stanford, J. A. 1990. Ecosystem management in large watersheds regulated by dams and diversions. Plenary paper. New Perspectives for Watershed Management: Balancing Long-Term Sustainability with Cumulative Environmental Change. Seattle, WA. Host: University of Washington, Oregon State University, U.S. Forest Service and the Environmental Protection Agency.

Stanford, J. A. and B. K. Ellis. 1991. Non-native species as strong interactors controlling food web dynamics in oligotrophic lakes. Oregon State University. Corvallis, Oregon. Host: Dr. S. Gregory. (Honorarium)

Stanford, J. A. 1991. Distribution of groundwater organisms along geomorphic gradients in gravel bed rivers. Northern Arizona University, Flagstaff, AZ. Host: Dr. Dean Blinn. (Honorarium).

Stanford, J. A. 1991. Ecology of hyporheos in gravel bed rivers. Special Workshop Presentation. Annual Meeting of the North American Benthological Society. Santa Fe, NM. Host: Dr. Maurice Valett.

Stanford, J. A. and F. R. Hauer. 1991. The rivers of Lewis and Clark, then and now. Plenary Paper. Fifth International Symposium on Regulated Streams, Polson, Montana.

- Stanford, J. A. 1992. Demonstrating the ecological connectivity between the channel and floodplain aquifers in gravel-bed rivers. Plenary Paper. First International Conference on Groundwater Ecology. Tampa, Florida. Hosts: EPA and AWRA.
- Stanford, J. A. 1992. Reconnecting attributes of river ecosystems: A dynamic catchment approach to river conservation. Ernest O. Salo Seminar Series. Seattle, WA. Hosts: Dr. Robert Naiman and University of Washington. (Honorarium)
- Stanford, J. A. 1993. Hyporheic insects of the Flathead River. Montana State University, Bozeman, Montana. Host: Florence Dunkel.
- Stanford, J. A. 1993. Ecosystem function of springbrooks occurring on floodplains of alluvial rivers. Centre D'Ecologie Des Ressources Renouvelables - CNRS, Toulouse Cedex, France. Host: Prof. Henri DéCamps.
- Stanford, J. A. 1994. Keynote Address. Ecosystem management of natural resources in the intermountain west, Logan, Utah. Host: Utah State University. (Honorarium)
- Stanford, J. A. 1994. Watershed classification and analysis. Watersheds '94 Expo sponsored by the Environmental Protection Agency and the University of Washington Center for Streamside Studies. Bellevue, Washington. Host: Prof. R. J. Naiman. (Honorarium)
- Stanford, J. A. 1995. Restoration of entire river catchments - a landscape perspective. Plenary Paper. International Workshop on Remedial Strategies in Regulated Rivers, Lycksele, Sweden. Host: John Britain.
- Stanford, J. A. 1995. Flow dynamics, endangered fishes and floodplain ecology in the Colorado River. Symposium on the Colorado River. Ecological Society of America Annual Meeting, Snowbird, Utah. Host: Ray Hermann.
- Stanford, J. A. 1996. River resources of the USA inland west: influences on cultures, economies and environments. Symposium on Fresh water: linking social, economic and environmental vitality. Ecological Society of America Annual Meeting, Providence, Rhode Island. Organized by Robert Naiman, John Magnuson and Penelope Firth.
- Stanford, J. A. 1997. Conservation of fresh water: using our science to make a difference. Presidential Address. North American Benthological Society Annual Meeting, San Marcos, Texas.
- Stanford, J. A. 1997. Rivers are more than what you see: hyporheic ecology of alluvial flood plains. Plenary Address. American Fisheries Society Annual Meeting, Monterey, California. Organized by Charles Coutant.
- Stanford, J. A. 1998. To burrow or not to burrow: The ecology of mayflies and stoneflies at the interface between surface and ground waters. Plenary Address. IX International Conference on Ephemeroptera and XIII International Symposium on Plecoptera, Tucuman, Argentina. Host: Hugo Fernandez.

- Stanford, J. A. 1998. Protocol for integrated management of watershed ecosystems. Plenary Address. Toward ecosystem-based management in the Upper Columbia River Basin. An International Conference and Workshop, Castlegar, British Columbia.
- Stanford, J. A. 1998. Role of science in conservation and restoration of river ecosystems. Invited Seminar. EAWAG-ETH Swiss Institute for Science and Technology, Zurich, Switzerland. Host: Dr. James V. Ward. (Honorarium).
- Stanford, J. A. 1998. Flathead Lake as a natural-cultural ecosystem. Invited presenter at the International Fellows Meeting(IF – VIP Military leaders from 31 countries), Flathead Lake Lodge, Montana. Host: Doug Averill.
- Stanford, J. A. 1999. One hundred years of ecological research at the Flathead Lake Biological Station. Invited Address. Beyond the NSF LTER Network: Lesser Known Long-Term Ecological Research. Ecological Society of America Annual Meeting. Spokane, Washington.
- Stanford, J. A. 1999. Achieving a comprehensive aquatic conservation strategy on public lands: What scientists bring to developing sound policy. Ecological Society of America Annual Meeting, Spokane, Washington. Host: James Karr.
- Stanford, J. A. 2000. The Normative River Concept. American Association for Advance of Science. Washington, DC. Hosts: Andy Rosenberg and Usha Varanasi.
- Stanford, J. A. 2000. Rationale, criteria and documentation for normative flows in regulated rivers. Invited paper at the 8th International Symposium on Regulated Streams. Toulouse, France. Host: Henri Décamps
- Stanford, J. A. 2000. Concepts and practices of the normative river concept and stream restoration. Invited Address for the National Research Council Committee on Missouri River Science Conference, July 9–10, 2000, Bismarck, ND. Host: Jeff Jacobs.
- Stanford, J. A. and R. J. Naiman. 2001. Linking aquatic and terrestrial landscapes. Invited Paper at the Riverine Landscape Symposium, Ascona, Switzerland. Host: K. Tockner
- Stanford, J. A. 2001. Mysids and other food web scourges. Congressional Briefing. The Organization of Biological Field Stations and National Association of Marine Laboratories Briefing on Invasive Species, February 20, 2001, Washington, DC.
- Stanford, J. A. 2001. The need for ecosystem-level salmon conservation: Management lessons from salmon research in large floodplain river systems. Invited Paper at Pacific Wild Salmon and Steelhead Conference, November 5–6, 2001. Portland, Oregon.
- Stanford, J. A. 2002. Biostation initiatives. Invited presentation at Scientific Oversight Committee Meeting, Center for Applied Biodiversity Science, Conservation International, February 25, 2002. Washington, DC
- Stanford, J. A. 2002. The shifting habitat mosaic of flood plains and its importance to salmonid fishes. Plenary Paper. American Fisheries Society, Spokane, WA.

- Stanford, J. A. 2002. Habitat condition and restoration potential of Columbia River flood plains: a critical, missing element of fisheries recovery science and policy. Invited seminar for Bonneville Power Administration, July 17, 2002. Portland, OR.
- Stanford, J. A. 2003. Variability in Salmon River Landscapes: Factors Affecting Restoration Strategies. The World Summit on Salmon, June 12, 2003. Vancouver, BC, Canada.
- Stanford, J. A. 2003. Long-term ecosystem science at Flathead Lake, Montana: The key to conservation of water quality. Keynote Address at Washington State Lake Protection Association. Chelan, WA.
- Stanford, J. A. 2003. River Surna – Atlantic salmon: Effect of river regulation and management strategies. Seminar paper at the University of Oslo, Norway. Host: Svein Saltveit. (Honorarium)
- Stanford, J. A. 2004. Reconciling fisheries with conservation in freshwater montane habitats. Keynote Address at 4th World Fisheries Congress. Vancouver, BC, Canada.
- Stanford, J. A. 2004. Floodplain biocomplexity: Dynamic controls on emergent properties of river ecosystems. Plenary Lecture. International Association of Theoretical and Applied Limnology (Societas Internationalis Limnologiae, SIL), XXIX Congress. Lahti, Finland.
- Stanford, J. A. 2005. Assessing real and potential productivity of salmon habitat in freshwater. State of the Salmon Conference, Anchorage, AK.
- Stanford, J. A. 2006. Regulated river ecology: Three decades of regulated river research: Coherence of theory and practice. Keynote Paper. Tenth (and last) Symposium on Regulated Rivers. Stirling, Scotland.
- Stanford, J. A. 2007. Sustaining wild salmon: Lessons from Kamchatka. Invited Presentation. Bevan Series on Sustainable Fisheries, University of Washington, School of Aquatic and Fishery Sciences, 22 February 2007, Seattle, WA.
- Stanford, J. A. and M. S. Lorang. 2008. Self-organization of biophysical complexity in riverscapes. Invited Oral Presentation, North American Benthological Society (NABS) 56th Annual Meeting, 25–30 May 2008, Salt Lake City, UT.
- Stanford, J. A. 2008. Salmon riverscapes: role of marine derived nutrients in the shifting habitat mosaic of river ecosystems. Keynote Address. Inland Northwest Aquatic, Riparian, and Wetland Symposium. Eastern Washington University 22–23, February 2008, Riverpoint Campus, Spokane, WA.
- Stanford, J. A. 2008. Invited Speaker. “LeRoy’s River: Using science to mediate environment protection.” Aquatic Conservation Science: Merging Theory and Application Symposium. Odum School of Ecology, University of Georgia, 3–4 October 2008, Athens, GA.
- Stanford, J. A. 2009. Keynote Speaker. “Self-organization of biophysical complexity in riverscapes: a fundamental tenet for ecohydrology.” Universidad de Concepción, 7th International Symposium on Ecohydraulics, 12–16 January 2009, Concepción, Chile.

- Stanford, J. A. 2009. Oral Presentation. “Three decades of regulated river research: coherence of theory and practice.” Universidad de Concepción, 7th International Symposium on Ecohydraulics, Special Session on Dams, 12–16 January 2009, Concepción, Chile.
- Ellis, B. E. and Stanford, J. A. 2009. Oral Presentation. “Marine derived nutrients in riverine food webs.” First Triennial Symposium for the International Society of River Science (ISRS), 12–17 July 2009, St. Pete Beach, FL.
- Stanford, J. A. Oral Presentation. 2009. “Efficacy and selection of riverine protected areas to conserve wild pacific salmon.” First Triennial Symposium for the International Society of River Science (ISRS), 12–17 July 2009, St. Pete Beach, FL.
- Stanford, J. A. 2009. Invited Speaker. “Climate change effects on Skeena River, British Columbia.” Skeena Salmon Habitat Conference, Bulkley Valley Centre for Natural Resources Research and Management, 15 September 2009, Smithers, BC, Canada.
- Stanford, J. A. 2009. Invited Speaker. “Importance of Estuary-River linkages in salmon productivity.” Estuary Habitat Expert Group (EHEG) Meeting. Tracey Yerxa, BPA, 8–10 October 2009, Portland, OR.
- Stanford, J. A. 2009. Invited Speaker. “Aquatic Ecosystem Impacts of River Diversion for Hydro Power.” Building a Vision for Green Energy in British Columbia, Simon Fraser University, 3 November 2009, Vancouver (done via electronic connection).
- Stanford, J. A. 2009. Invited Speaker. “Climate warming, megamines and the energy glut: Can river, people, and their food webs adapt?” at Flathead Lake Biological Station, Polson, MT and Rudbach Lecture, Sigma Xi Lecture, The University of Montana, 7 December 2009, Missoula, MT.
- Stanford, J. A. 2010. Invited Speaker. “A Conceptual Foundation for Ecosystem Restoration.” Klamath Basin Science Conference, USGS, 2 February 2010, Medford, OR.
- Stanford, J. A. 2010. Invited Speaker. “The Riverscape Analysis Project” Wild Salmon Ecosystems Initiative Partner’s Workshop, Moore Foundation, 7–8 April 2010, Palo Alto, CA.
- Stanford, J. A. 2010. Keynote Address. “Importance of wild salmon rivers.” National Symposium on Ecological Interactions Between Wild and Hatchery Salmon, 4–7 May 2010, Portland, OR.
- Stanford, J. A. 2011. Keynote Address. “Corridors and boundaries: rivers, their floodplains and biota.” 2nd Biennial Symposium of the International Society of River Science (ISRS), 8-12 August 2011, Berlin, Germany.
- Stanford, J. A. 2014. Plenary Address. “The shifting habitat mosaic of river ecosystems.” International Society of River Science (ISRS), 8-12 August 2014, LaCrosse Wisconsin.
- Stanford, J. A. 2016. “What makes a great salmon river?” G. Wayne Minshall Annual Lecture. October 27-28. Department of Biology, Idaho State University, Pocatello Host: Colden Baxter.

Stanford, J. A. 2018. Structure and function of hyporheic zones. U. S. Environmental Protection Agency. May 17. EPA Regional Office, Seattle. Host: Ted Repasky

Several contributed papers have been presented or coauthored at annual meetings of professional societies each year since 1973.

COMPETITIVE RESEARCH GRANTS AND CONTRACTS (\$43M)

Stanford, J. A. Ecological Studies of Texas Temporary Pools. NTSU Faculty Research Grant. \$2,500. (1974)

Stanford, J. A. Plankton-Nutrient Dynamics in a North Texas Reservoir. NTSU Faculty Research Grant. \$23,471. (1974, 1975)

Silvey, J. K. G., Director; J. A. Stanford, Associate Director. Training Grants in Water Supply, Water Quality and Pollution Control. U.S. Environmental Protection Agency. \$180,000. (1975–1979)

Stanford, J. A. Lake Texoma Water Quality Study. U.S. Army Corps of Engineers, Tulsa, Oklahoma. \$162,062. (1976–1979)

Stanford, J. A. Benthic Ecology in the South Fork of Flathead River, Montana, below Hungry Horse Dam. U.S. Bureau of Reclamation, Boise, Idaho. \$7,100. (1977)

Tibbs, J. and J. A. Stanford. Construction of the Freshwater Research Laboratory, Flathead Lake Biological Station. The University of Montana, Fleishman Foundation. \$1,000,000. (1978–1980).

Stanford, J. A. The Formation and Influence of Clay-Detritus Complexes in Relation to Temporal Carbon Dynamics in Three River-Lake Systems. NTSU Faculty Research Grant. \$2,500. (1979)

Stanford, J. A. Limnology of the Flathead Lake-River Ecosystem, Montana. U.S. Environmental Protection Agency, Helena, Montana. \$565,132. (1978–1983)

Stanford, J. A. and E. G. Zimmerman. Ecology of Big Pine Creek, Texas, with Emphasis on Temporal Carbon Dynamics. U.S. Army Corps of Engineers, Tulsa, Oklahoma. \$55,000. (1979–1981)

Stanford, J. A. and T. L. Beitinger. Effects of Chronic pH Stress on Limnology and Fishery of an East Texas Lake. Ferndale Lake Club, Leesburg, Texas. \$4,740. (1979)

Stanford, J. A. and J. V. Ward. First International Symposium on Regulated Streams. National Science Foundation. \$15,220. (1979)

Stanford, J. A. and F. R. Hauer. Clean Lakes Study. Montana Department of Health and Environmental Sciences, Helena, Montana. \$38,533. (1980–1981)

Stanford, J. A. and J. V. Ward. Evaluation of the Effects of Stream Regulation on the Limnology of the Gunnison River, Colorado. U.S. Environmental Protection Agency, Denver, Colorado. \$40,098. (1979–1982)

- Stanford, J. A., F. R. Hauer and J. N. Moore. Nutrient Subsidy in Alpine Lake Ecosystems by Volcanic Ash Import. U.S. Department of the Interior, Office of Water Research and Technology. \$70,341. (1981–1982)
- Stanford, J. A. Limnology of Whitefish Lake, Montana. Flathead County. \$32,965. (1982–1983)
- Stanford, J. A. Groundwater Resources Connected to Flathead Lake: Impact on Nutrient Mass Balance. Montana Department of Natural Resources. \$100,000. (1983–1985)
- Stanford, J. A. Verification of Sewage Leachates in Glacial Moraine Lakes. Office of Water Policy. U.S. Department of the Interior. \$54,000. (1983–1985)
- Stanford, J. A. A Water Quality Monitoring Program for Evaluating Management Options in the Flathead River Basin, Montana, with Emphasis on Determination of Phosphorus Bioavailability. Montana Department of Health and Environmental Sciences, Water Quality Bureau. \$49,198. (1984–1985)
- Stanford, J. A. and D. Kicklighter. The Use of Riffle Community Metabolism as a Measure of Water Quality in the Clark Fork River, Montana. Montana Department of Health and Environmental Sciences, Water Quality Bureau. \$17,250. (1984–1985)
- Stanford, J. A. Verification of Sewage Leachates in Whitefish Lake, Montana. Whitefish County Water and Sewer District. \$26,106. (1984–1985)
- Stanford, J. A. Bioavailability of Phosphorus Fractions in Tributary Waters of Flathead Lake, Montana. U.S. Environmental Protection Agency. \$108,000. (1984–1985)
- Stanford, J. A. Systems Analysis of the Cumulative Effects of Lake and Stream Regulation by Kerr Dam. Montana Power Company. \$31,000. (1984–1987)
- Stanford, J. A. Periphyton Dynamics in Flathead Lake. Bitterroot Fund, San Francisco. \$12,000. (1985–1986)
- Stanford, J. A. and F. R. Hauer. Aquatic Insect Ecology in the Lower Flathead River, Montana. Bureau of Indian Affairs. \$50,000. (1985–1988)
- Stanford, J. A. Limnology of Lakes in Glacier National Park. National Park Service. \$114,400. (1982–1991)
- Noble, R. A. and J. A. Stanford. Characterization of Suspended Sediment and Baseline Conditions - Proposed Cabin Creek Coal Mine - North Fork of Flathead River. Montana Bureau of Mines and Geology. \$36,176. (1985–1988)
- Stanford, J. A. and A. P. Covich. Workshop on Factors Controlling Community Structure and Function in Tropical and Temperate Streams. National Science Foundation. \$59,900. (1987–1988)
- Stanford, J. A. and F. R. Hauer. Research Vessel for Flathead Lake Biological Station. National Science Foundation. \$88,000. (1987–1988)

- Stanford, J. A. and J. V. Ward. Ecology of Riverine Hyporheos. National Science Foundation. \$220,000. (1987–1989)
- Stanford, J. A. and M. S. Lorang. Sediment Dynamics on the North Shore of Flathead Lake, Montana. Montana Power Company. \$29,600. (1988)
- Hauer, F. R., J. A. Stanford and C. N. Spencer. Water and Stream Ecosystem Quality as Effected by Forest Management Practices. Flathead Basin Commission. \$72,501. (1989–1990)
- Stanford, J. A. Independent Scientific Group. Pacific States Marine Fisheries Commission and Columbia Basin Fish and Wildlife Foundation. \$402,228. (1989–1999)
- Stanford, J. A. Analysis of the Interrelationship of Ecological Studies to Proposed Fish, Wildlife and Erosion Mitigation Plans in the Flathead Lake Area. Montana Power Company. \$35,000. (1989–1991)
- Stanford, J. A. and B. K. Ellis. Monitoring the Limnology of Two Subalpine Lakes in the Bob Marshall Wilderness, Montana: Quantifying Sensitivity to Acidic Precipitation. USDA Forest Service. \$72,447. (1989–1995)
- Stanford, J. A. and F. R. Hauer. Effects of Stream Regulation in the Upper Missouri River. Montana Power Company. \$188,000. (1989–1994)
- Spencer, C. N. and J. A. Stanford. Differential Impacts of *Mysis relicta* on the Plankton of Flathead and Swan Lakes. Montana Department of Fish, Wildlife and Parks. \$50,000. (1990–1991)
- Stanford, J. A., F. R. Hauer, L. F. Marnell, S. W. Running, A. L. Sheldon and C. N. Spencer. Complex Interactions in Large Oligotrophic Lakes: Nonnative Species as Strong Interactors Controlling Spatial and Trophic Linkages. National Science Foundation (EPSCoR). \$204,421. (1990–1994)
- Stanford, J. A., F. R. Hauer, C. N. Spencer and B. K. Ellis. Data Acquisition and Management System for Flathead Lake Biological Station. National Science Foundation. \$82,640. (1990–1993)
- Stanford, J. A. and B. K. Ellis. Relation Between Discharge and Distribution of Hyporheic Habitat within Selected Stream Segments in Glacier National Park, Montana. National Park Service. \$114,500. (1990–1994)
- Spencer, C. N., F. R. Hauer and J. A. Stanford. Comparative Effects of Wildfire on Pristine Streams in Glacier National Park Versus Streams on Managed Timber-Harvest Lands. National Park Service. \$50,000. (1990–1994)
- Stanford, J. A. and B. K. Ellis. Analyses of Long-Term Limnological Data Collected on Lakes in Glacier National Park. National Park Service. \$6,500. (1991–1992)
- Stanford, J. A. A Diagnostic Study of the Nutrient Loading in Flathead Lake, Montana (Phase I Project, Clean Lakes Program of the USEPA). Montana Water Quality Bureau. \$100,000 (1991–1993)

Stanford, J. A. Complex Interactions in Large Oligotrophic Lakes: Nonnative Species as Strong Interactors Controlling Spatial and Trophic Linkages. National Park Service (CPSU). \$9,500. (1991 – 1993)

Hauer, F. R. and J. A. Stanford. Long-Term Influence of Hungry Horse Dam Operation on the Ecology of Macrozoobenthos of the Flathead River. Montana Department of Fish, Wildlife and Parks. \$25,000. (1992–1994)

Hauer, F. R. and J. A. Stanford. Effects of Climate Change on Hydrologic Systems and Associated Aquatic Biotas. National Park Service (CPSU). \$504,000. (1992–1999)

Stanford, J. A. A Diagnostic Study of the Nutrient Loading and Sediment Bioavailability at Swan Lake, Montana (Phase I Project, Clean Lakes Program of the USEPA). Montana Water Quality Bureau. \$142,909. (1992–1995)

Stanford, J. A. Review of Instream Flow Methods and Recommendations for the Endangered Fishes of the Upper Colorado River Basin. U.S. Fish and Wildlife Service. \$120,821. (1992–1993)

Stanford, J. A. Review and Synthesis of Lotic Studies in Zion National Park. National Park Service (CPSU). \$36,000. (1992–1994)

Frissell, C. A. and J. A. Stanford. Potential Effects of Climate Change in Thermal Complexity and Biotic Integrity of Streams: Seasonal Intrusion of Nonnative Fishes. U.S. Environmental Protection Agency. \$370,000. (1993 –1995)

Frissell, C. A. and J. A. Stanford. A Strategy for Conservation of Aquatic Biodiversity in the Northern Rocky Mountains Ecosystem. Pacific Rivers Council. \$82,764. (1993–1995)

Stanford, J. A. Expert Witness for Virgin River Adjudication. U.S. Department of Justice, Environment and Natural Resources Division. \$15,301. (1993)

Stanford, J. A. Development of a Guidance Document for States to Protect Critical Zones of GW/SW Interaction. National Park Service (CPSU). \$150,000. (1993–1999)

Hauer, F. R. and J. A. Stanford. Effects of Stream Regulation on the Macrozoobenthos of the Kootenai River. Montana Department of Fish, Wildlife and Parks. \$37,517. (1994–1996)

Stanford, J. A. Review of Experimental Instream Flows to Protect and Enhance Riverine Resources in the Grand Canyon. Arizona State University. \$15,269. (1994)

Stanford, J. A. Expert Witness Research and Testimony: Snake River Adjudication. U.S. Department of Justice, Environment and Natural Resources Division. \$68,312. (1994–1998)

Stanford, J. A. Identification of Specimens of Invertebrates Collected in Zion National Park, Utah. Zion National Park, Utah. \$1,500. (1994–1995)

Stanford, J. A. Workshop on Research Agenda for Sustainability of Montana Ecosystems. Bureau of Reclamation. \$35,000. (1994–1995)

Stanford, J. A. Peer Review Recovery Implementation Program: Upper Colorado River Endangered Fishes. U.S. Fish and Wildlife Service. \$4,418. (1994–1995)

Stanford, J. A. and B. K. Ellis. Flathead Lake Total Maximum Daily Loads. Montana Department of Health and Environmental Sciences. \$15,000. (1994–1995)

Stanford, J. A. and F. R. Hauer. Monitoring of Surface Water Quality in the Flathead Basin: A Proposal for Modification of the Master Plan of the Flathead Basin Commission. Flathead Basin Commission. \$52,686. (1994–1996)

Stanford, J. A., F. R. Hauer, N. M. Butler and B. K. Ellis. Lake Water System, Boat Dry Dock and Replacement of Obsolete Instruments at the Flathead Lake Biological Station. National Science Foundation. \$130,000. (1994–1996)

Ellis, B. K. and J. A. Stanford. Developing a Lake-Specific Water Quality Target for Flathead Lake. Flathead Basin Commission. \$115,000. (1995–1997)

Stanford, J. A. Review of Science Pertaining to the Fish and Wildlife Plan. Northwest Power Planning Council. \$127,600. (1995–1996)

Stanford, J. A. Instream Flow Needs of Aquatic Biota of the Gunnison River, Black Canyon National Monument, Colorado. National Park Service (CPSU). \$12,631. (1995–2000)

Stanford, J. A. and A. D. Barnosky. Determinants of Biodiversity, Social and Economic Patterns in Montane Ecosystems. National Science Foundation, EPSCoR. \$1,806,639. (1995–1999)

Stanford, J. A. and J. Pastor. Grizzly Bear Digging in Subalpine Meadows: Influences on Plant Distributions and Nitrogen Availability. National Science Foundation. \$259,478. (1995–1999)

Stanford, J. A. The Impact of River Recreation on the North Fork of the Virgin River, Zion National Park: A Comparative Analysis of Zoobenthos Biomass. National Park Service (CPSU). \$15,389. (1996–1997)

Ellis, B. K. and J. A. Stanford. Baseline Water Quality Study of Little Bitterroot, Mary Ronan, Ashley and Lindburgh Lakes, Montana. Plum Creek Timber Company. \$78,842. (1996–1998)

Ellis, B. K. and J. A. Stanford. Determination of Nutrient and Carbon Loading in the Swan River, Montana. Montana Department of Environmental Quality. \$30,224. (1997–1999)

Ellis, B. K. and J. A. Stanford. Water Quality of Goat and Lion Creeks. Friends of the Wild Swan, Inc. \$17,905. (1997–1998)

Stanford, J. A. Independent Scientific Review Panel (ISRP). Northwest Power Planning Council. \$30,750. (1997)

Stanford, J. A. The Teanaway River Enhancement Project. Bureau of Reclamation. \$57,000. (1997–2000)

Stanford, J. A. Ongoing Peer Review of Effort to Produce a Report that Defines a Process for Establishing Biologically-Based Instream Flow Recommendations for the Yakima River Basin. Bureau of Reclamation. \$20,580. (1997–1998)

Ellis, B. K. and J. A. Stanford. Water Quality of Selected Headwater Streams of the Flathead National Forest. Swan Ecosystem Center. \$500. (1998–1999)

Ellis, B. K., J. A. Craft and J. A. Stanford. Water Quality of Selected Headwater Streams of the Flathead National Forest. USDA Forest Service, Flathead National Forest. \$38,675. (1998–2000)

Stanford, J. A. Ground Water-Surface Water Interaction Training Workshop. U.S. Environmental Protection Agency. \$24,900. (1998)

Stanford, J. A. Review and Synthesis of Data Related to Instream Flow Provision in the Yakima River Ecosystem, Washington. Bureau of Reclamation. \$149,541. (1998–2000)

Stanford, J. A. Ground Water-Surface Water Interaction Training Workshop. U.S. Environmental Protection Agency. \$25,000. (1999)

Stanford, J. A. Study of Surface and Groundwater Interactions in Five Reaches of the Yakima River. Bureau of Reclamation. \$767,719. (1999–2001)

Wicklum, D. and J. A. Stanford. Ecology of *Mysis relicta* on Flathead Lake. Confederated Salish and Kootenai Tribes. \$53,968. (1999)

Ellis, B. K., T. S. Bansak and J. A. Stanford. Effects of Wildfire on Nutrient and Sediment Transport in Skyland and Dodge Creeks, Flathead National Forest. USDA Forest Service, Flathead National Forest. \$2,981. (1999–2000)

Stanford, J. A. Snake River Resources Review - Biologically Based River/Reservoir Systems Management Assessment Strategy. Bureau of Reclamation. \$8,000. (1999–2000)

Stanford, J. A. Yakima Basin Side Channel Survey and Rehabilitation. Yakama Indian Nation. \$154,255. (1999–2001)

Stanford, J. A. and F. R. Hauer. FSML: Equipment to Enhance Research and Electronic Data Management at Flathead Lake Biological Station. National Science Foundation. \$99,205. (1999–2001) (with cost share)

Stanford, J. A. and J. S. Kimball. Analysis of Flow and Habitat Relations in Yakima River Associated with Proposed Water Exchange. Bureau of Reclamation. \$300,000. (1999–2001)

Hauer, F. R., M. S. Lorang and J. A. Stanford. Floodplain Ecology of the Snake River, Idaho and Wyoming: Development of Biologically-Based System Management. Bureau of Reclamation. \$431,284. (2000–2003)

- Stanford, J. A. Ground Water-Surface Water Interaction Training Workshop. U.S. Environmental Protection Agency. \$25,000. (2000)
- Stanford, J. Impact of Flow Regulation on Riparian Cottonwood Ecosystems. Bioquest International Consulting, Ltd. \$16,000. (2000–2001)
- Stanford, J. A. Diet, Spatial Distribution and Life History of *Neomysis mercedis* in John Day Pool. Bonneville Power Administration. \$180,539. (2000–2002)
- Stanford, J. A. Biocomplexity Incubation Activity: Dynamic Controls on Emergent Properties of River Flood Plains. National Science Foundation. \$101,010. (2000–2003)
- Stanford, J. A. Limnological Survey of Ptarmigan Lake. National Park Service. \$18,000. (2000–2003)
- Wicklum, D. and J. A. Stanford. The Productivity of Flathead Lake. Confederated Salish and Kootenai Tribes. \$59,402. (2000–2001)
- Ellis, B. K. and J. A. Stanford. Analysis of Potential Sources of Nutrient Pollution Reaching Flathead Lake from Atmospheric Fallout. Flathead Basin Commission. \$10,000. (2001)
- Stanford, J. A. Ground Water-Surface Water Interaction Training Workshop. U.S. Environmental Protection Agency. \$25,000. (2001).
- Stanford, J. A. Flathead Lake TMDL. Montana Department of Environmental Quality. \$10,000. (2001)
- Stanford, J. A. Critical Lands Project. Flathead Lakers. \$5,829. (2001)
- Stanford, J. A. Yakima River Water Enhancement Project. Bureau of Reclamation. \$10,000. (2001–2004)
- Stanford, J. A. Continuing American Participation in the Kamchatka Wild Salmon Sanctuary Project. Trust For Mutual Understanding. \$30,000. (2001–2002)
- Stanford, J. A. and J. Craft. Revisit the Limnology of Whitefish Lake. Whitefish County Water and Sewer District. \$75,000. (2001–2003)
- Stanford, J. A., F. R. Hauer, J. S. Kimball and M. S. Lorang. Biocomplexity-Dynamic Controls on Emergent Properties of River Flood Plains. National Science Foundation. \$2,600,000. (2001–2005)
- Stanford, J. A., F. R. Hauer, J. S. Kimball and M. S. Lorang. REU Supplement: Biocomplexity – Dynamic controls on emergent properties of river flood plains. National Science Foundation. \$15,750. (2001–2005)
- Stanford, J. A., F. R. Hauer, J. S. Kimball and M. S. Lorang. REU Supplement: BCP cost share. National Science Foundation. \$2,250. (2001–2005)

Stanford, J. A., F. R. Hauer, J. S. Kimball and M. S. Lorang. REU Supplement: FSML cost share. National Science Foundation. \$1,500. (2001–2005)

Stanford, J. A. Ground Water-Surface Water Interaction Training Workshop. U.S. Environmental Protection Agency. \$25,000. (2002)

Hauer, F. R., M. S. Lorang and J. A. Stanford. Floodplain Ecology of the Snake River, Idaho and Wyoming: Development of Biologically-Based System Management. Bureau of Reclamation. \$191,000. (2000–2003)

Stanford, J. A. Continuing American Participation in the Kamchatka Wild Salmon Sanctuary Project. Trust For Mutual Understanding. \$35,000. (2003)

Stanford, J. A. and B. K. Ellis. Groundwater quality assessment and monitoring plan for the North Flathead Valley and Flathead Lake perimeter. Flathead Basin Commission (regrant of Environmental Protection Agency funds). \$26,946. (2003)

Stanford, J. A. Ground Water-Surface Water Interaction Training Workshop. U.S. Environmental Protection Agency. \$25,000. (2003)

Stanford J. A. and F. R. Hauer. FSML: Site improvement and equipment enhancement to secure long-term research capabilities at Flathead Lake Biological Station. National Science Foundation. \$171,451. (2002–2005) (with cost share)

Stanford, J. A. and F. R. Hauer. REU Supplement to FSML: Site improvement and equipment enhancement to secure long-term research capabilities at Flathead Lake Biological Station. National Science Foundation. \$12,000. (2003–2005)

Relyea, S. E. and J. A. Stanford. Water quality monitoring of the Whitefish River and its tributaries. Montana Department of Environmental Quality. \$50,000. (2003–2005)

Stanford, J. A. Ground Water-Surface Water Interaction Training Workshop. U.S. Environmental Protection Agency. \$25,000. (2004)

Stanford, J. A. and J. S. Craft. Limnological studies of Fish Creek, Glacier National Park. National Park Service CESU. \$2,350. (2004–2005)

Gannon, J., W. Holben, M. Rellig, W. Woessner and J. A. Stanford. Nyack microbial observatory project. National Science Foundation Microbial Observatory Program. \$1,126,154. (2004–2006)

Stanford, J. A. Rapid assessment of salmonid ecology in the headwater rivers of Tierra del Fuego with emphasis on lands managed by the Wildlife Conservation Society. Wildlife Conservation Society. \$29,000. (2005)

Stanford, J. A. Modeling studies to support Pacific salmon conservation planning. University of Washington. \$109,223. (2006–2007).

Stanford, J. A.. Nyack microbial observatory project MCB-0348773. National Science Foundation Microbial Observatory Program. \$288,959. (2004–2010)

Stanford, J. A. Population status and ecology of brown trout Rio Grande, Tierra del Fuego, Argentina. Nervous Waters of Argentina. \$145,000. (2006–2008)

Stanford, J. A. The Salmonid Rivers Observatory Network (SaRON): Relating habitat and quality to salmon productivity for Pacific Rim rivers. Gordon and Betty Moore Foundation. \$4,620,000. 2007–2010

Stanford, J. A. and S. Chilcote. Remote analysis of aquatic habitat areas – Pebble Mine. The Nature Conservancy. \$20,000. (2008)

Stanford, J. A. Kamchatka Salmon and Biodiversity Project (KSBP). Wild Salmon Center. \$796,916. (2003–2008).

Stanford, J. A. Ecology of North American salmon rivers. Gordon and Betty Moore Foundation. \$1,600,842. (2003–2008)

Stanford, J. A. Crown of the Continent REU program. National Science Foundation. \$220,575. (2004–2008)

Stanford, J. A. AYK sustainable salmon initiative research and restoration plan. Bering Sea Fishermen’s Association. \$41,760. (2004–2007)

Stanford, J. A. Hierarchical typology of north Pacific Rim rivers and application to wild salmon conservation. Gordon and Betty Moore Foundation. \$1,659,533. (2005–2008)

Stanford, J. A. Modeling studies to support Pacific salmon conservation planning. University of Washington. \$63,504. (2006–2009).

Stanford, J. A. AYK sustainable salmon initiative. Bering Sea Fishermen’s Association. \$30,992. (2006–2008)

Stanford, J. A. The Salmonid Rivers Observatory Network (SaRON): Relating habitat and quality to salmon productivity for Kamchatka rivers. Gordon and Betty Moore Foundation. \$992,160. (2007–2010)

Rillig, M. C., D. L. Mummey and J. A. Stanford. Succession and changing roles of arbuscular mycorrhizal fungal communities in a floodplain chrono-sequence model system. National Science Foundation. \$200,000. (2006–2008)

McPhee, M. V., T. P. Quinn and J. A. Stanford. Ecotypic variation in AYK sockeye stocks. Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative (AYK-SSI). \$242,403. (2008–2010)

Ellis, B. K., J. A. Stanford and J. A. Craft. Flathead Monitoring Project. Flathead Basin Commission, Montana Department of Environmental Quality, Bureau of Reclamation and Agency Consortium. \$2,672,200. (1984–2012)

Stanford, J. A., B. K. Ellis and F. R. Hauer. Collaborative research: FSML-enhanced cooperative research and education at Flathead Lake Biological Station and Taylor Wilderness Research Station (in collaboration with University of Idaho, James R. Gosz, PI). National Science Foundation. \$155,377. (2009–2012)

Hauer, F. R., A. J. Hansen, J. A. Stanford and M. J. Young, Collaborative Research: Cyberinfrastructure for a virtual observatory and ecological informatics system (VOEIS). National Science Foundation. \$2,998,589. (2009–2012)

Stanford, J. A. Columbia River Estuary Science Panel Work Session. PC Trask & Assoc., Inc. \$3,679. (2009–2010)

Stanford, J. A. Icicle Creek *Mykiss* sample analysis. Wild Fish Conservancy. \$1,263. (2009–2010)

Stanford, J. A. Kuskokwim River tributary biological baseline production assessment. U.S. Fish and Wildlife Service, Yukon Delta National Wildlife Refuge. 12/09 – 6/10 = \$10,637. (2009–2010)

Stanford, J. A. Development of a series of salmon science white papers. Gordon and Betty Moore Foundation. \$21,000. (2010–2011)

Stanford, J. A. Kuskokwim River tributary biological baseline production assessment. U.S. Fish and Wildlife Service, Yukon Delta National Wildlife Refuge. \$40,137. (2010–2011)

Stanford, J. A. Linking salmon portfolios to geomorphology of Pacific Rim rivers. University of Washington. \$284,016. (2010–2015)

Stanford, J. A. Consulting services for restoration of the Colorado River Delta. Walton Family Foundation. \$28,336. (2011)

Stanford, J. A. Expert report in relation to potential impacts on fish and water of the Enbridge Northern Gateway Pipelines project. West Coast Environmental Law. \$16,000. (2011)

Stanford, J. A. Columbia River Estuary Science Panel Work Session. PC Trask & Assoc., Inc. \$6,685. (2011)

Stanford, J. A. Enbridge impact mapping project., NW Institute for Bioregional Research. \$25,000. (2011–2012)

Stanford, J. A. Columbia River Estuary Science Panel Work Session. PC Trask & Assoc., Inc. \$2,408. (2012)

Stanford, J. A. Planning a Consortium for Systems Ecology Research and Applications, Walton Family Foundation. \$370,239. (2012-14)

Stanford, J. A. RiverNet expertise for the Taylor Wilderness Research Station, University of Idaho. \$2,472. (2012)

Stanford, J. A. Chinook salmon expert panel process, Bering Sea Fishermen's Association. \$6,500. (2012).

Luikart, G. J. Stanford and B. Hand. Dimensions of Biodiversity - Predicting Biodiversity Vulnerability to Climate Change: Integrating Phylogenetic, Genomic, and Functional Diversity of River Floodplains. National Science Foundation. \$2,000,000. (2016-2020).

Taylor, B. W. and J. A. Stanford. EAGER: Discovering how geologic and fossil methane sources support a contemporary river ecosystem. National Science Foundation. \$296,472 (2018-2020). Proposal solicited by the DEB Ecosystem Science Cluster. Funded to North Carolina State University.

Stanford also received grants for development of infrastructure at the Flathead Lake Biological Station Murdock, Walton Family, McKnight Foundations and numerous private donors totaling over \$4M during 2005-2015.

ENDOWMENTS OBTAINED FOR FLBS

Jessie M. Bierman Professorship in Ecology – \$1.3M (1986, 1995)

McKnight Foundation Professorship in Limnology – \$1M (2001)

Scholarships – \$1.1M (ongoing)

Flathead Lake Research and Monitoring – \$1.2M (ongoing)

GRADUATE STUDENTS MENTORED (16 PH.D., 30 M.S.)

1. Comparative chemistry of thermally stressed North Lake and its water source, Elm Fork Trinity River. M.S. Thesis by Barry L. Sams, 1976. (NTSU)
2. Limitation of primary productivity in a southwestern reservoir due to thermal pollution. M.S. Thesis by Tom J. Stuart, 1977. (NTSU)
3. The use of ATP assays in describing the limnology of H. H. Moss Reservoir, Texas. Ph.D. Dissertation by James T. Boswell, 1977. (NTSU)
4. Relation between carbon assimilation and biomass dynamics in a phytoplankton community. M.S. Thesis by Douglas P. Wilcox, 1977. (NTSU)
5. Seasonal and vertical distribution of organic carbon and biomass in H. H. Moss Reservoir, Texas. M.S. Thesis by William B. Perry, 1978. (NTSU)
6. Phytoplankton-salinity relationships in Lake Texoma. M.S. Thesis by William C. McCullough, 1978. (NTSU)
7. Distribution and population dynamics of zooplankton in Lake Texoma. M.S. Thesis by Larry B. Crist, 1979. (NTSU)
8. Size fractionation of metabolically active phytoplankton and bacteria in three diverse lake systems. M.S. Thesis by Bonnie K. Ellis, 1980. (NTSU)

9. Population dynamics of benthic macroinvertebrates in response to altered thermal and salinity regimes in the Brazos River, Texas. M.S. Thesis by James D. Coulter, 1981. (NTSU)
10. Ecological studies of Trichoptera in the upper Flathead Rivers, Montana. Ph.D. Dissertation by F. Richard Hauer, 1980. (NTSU)
11. The effects of freshet turbidity on selected aspects of biogeochemistry and trophic status of Flathead Lake, Montana. Ph.D. Dissertation by Thomas J. Stuart, 1983. (NTSU)
12. Consequences of fluctuating discharges from Hungry Horse Reservoir on benthic and larval fish ecology in the Flathead River, Montana. Ph.D. Dissertation by Sue A. Perry, 1985. (NTSU)
13. Limnology of Whitefish Lake, Montana. M.A. Thesis by Thomas Golnar, 1985. (University of Montana - OBE)
14. Trophic ecology of net-spinning caddisflies (Hydropsychidae) in the Flathead Rivers, Montana. M.A. Thesis by Maurice Valett, 1986. (University of Montana - OBE)
15. The use of riffle community metabolism as a measure of water quality in the Clark Fork River, Montana. M.S. Thesis by David Kicklighter, 1987. (University of Montana - EVST)
16. Effects of nutrient enrichment and lake level fluctuation on the shoreline periphyton of Flathead Lake, Montana. M.A. Thesis by Carolyn Hooper-Bauman, 1988. (University of Montana - OBE)
17. An ecological study of a regulated palouse prairie stream. M.S. Thesis by Juan Bosco Imbert, 1990. (University of Montana - OBE)
18. Ecology of an impacted northern Rocky Mountain stream. M.S. Thesis by Darlene Nardi, 1993. (The University of Montana - EVST)
19. Ecology of juvenile yellow perch in Lolo Bay, Flathead Lake, Montana. M.S. Thesis by Michael Pol, 1993. (The University of Montana - OBE)
20. Distribution and abundance of zoobenthos in channel, springbrook and hyporheic habitats of an alluvial flood plain. M.A. Thesis by Georgia Case, 1995. (The University of Montana - OBE)
21. Phenologies of Plecoptera in the Virgin River, Zion National Park, Utah. M.S. Thesis by Mikel Shakarjian, 1997. (The University of Montana - EVST)
22. Phenology of *Mysis relicta* and influences on zooplankton of Flathead Lake. Ph.D. Dissertation by Dale Chess, 1998. (The University of Montana - OBE)
23. Grizzly bear digging in subalpine meadows: plant distributions and nitrogen availability. Ph.D. Dissertation by Sandra Tardiff, 1998. (The University of Montana - OBE)
24. Metabolism of hyporheos of the Flathead River, Montana. M.S. Thesis by James Craft, 1998. (The University of Montana - OBE)

25. Controls on seston dynamics alpine lakes. Ph.D. Dissertation by Dan Wicklum, 1998. (The University of Montana - OBE)
26. Determinants of primary production hot spots on alluvial flood plains. M.S. Thesis by Thomas Bansak, 1998. (The University of Montana - OBE)
27. Experimental fertilization of disturbance plots associated with grizzly bear digging in subalpine meadows. M.S. Thesis by Allison Young, 1998. (The University of Montana - OBE)
28. Analysis and dynamic simulation of morphologic controls on surface- and ground-water flux in a large alluvial flood plain. Ph.D. Dissertation by Geoffrey Poole, 2000. (The University of Montana -Forestry)
29. Ecology and population structure of cottonwoods on the Nyack Flood Plain, Montana. M.S. Thesis by Mary Harner, 2001. (The University of Montana - EVST)
30. Introduced *Mysis relicta*: Implications for pelagic food web structure and function. Ph.D. Dissertation by Craig P. Stafford, 2002. (The University of Montana - OBE)
31. The ecology of an invasive estuarine Mysid, *Neomysis mercedis*, in John Day Reservoir, Columbia River. M.S. Thesis by Craig Haskell, 2003. (The University of Montana - OBE)
32. Long-term osprey (*Pandion haliaetus*) population dynamics in relation to food web change at Flathead Lake, Montana. M.S. Thesis by Brandon Jackson, 2003. (The University of Montana - OBE)
33. Ecology of parafluvial ponds. Ph.D. Dissertation by Samantha Chilcote, 2004. (The University of Montana - OBE)
34. The importance and seasonal variation of terrestrial invertebrates as prey for juvenile salmonids on the Kol River Floodplain, Kamchatka, Russian Federation. M.S. Thesis by Lorri Eberle, 2007. (The University of Montana - OBE)
35. Sedimentary legacy of sockeye salmon (*Oncorhynchus nerka*) and climate change in an ultra-oligotrophic, glacially-turbid British Columbia nursery lake. M.S. Thesis by Aaron Hill, 2007. (The University of Montana - OBE)
36. Amphipods are strong interactors in the food web of a brown water salmon river. M.S. Thesis by Audrey Thompson, 2007. (The University of Montana - OBE)
37. Lessons to learn from all out invasion: life history of brown trout (*Salmo trutta*) in a Patagonian river. M.S. Thesis Sarah O'Neal, 2008. (The University of Montana – OBE)
38. The edge effect: lateral habitat ecology of an alluvial river flood plain. Ph.D. Dissertation by Michelle Anderson, 2008. (The University of Montana - OBE)

39. The contribution of spawning Pacific-salmon to nitrogen fertility and vegetation nutrition during riparian primary succession on an expansive flood plain of a large river. Ph.D. Dissertation by Michael Morris, 2008. (The University of Montana - OBE)
40. Ecology of riverine sockeye in the Kwethluk River, Alaska. M.S. Thesis by Tyler Tappenbeck, 2008. (The University of Montana - OBE)
41. History, ecology and restoration potential of salmonid fishes in the Umpqua River, Oregon. M.S. Thesis by Kelly Crispen. 2011. (The University of Montana - OBE)
42. The ecology of parafluvial ponds on a salmon river. M.S. Thesis by Zachary J. Crete, 2012. (The University of Montana – Environmental Studies)
43. Ecology of Beaver and Salmon in a large Floodplain River. Ph.D. Dissertation by Rachel Malison. 2013. (The University of Montana – Systems Ecology)
44. Salmon Dynamics and Brown Bear Behavior, Kodiak Island, Alaska, Ph.D. Dissertation by William Deacy. 2016. (The University of Montana – Systems Ecology)
45. Food web ecology of the Nyack Aquifer. Ph.D. Dissertation by Amanda Delvecchia. 2016. (The University of Montana – Systems Ecology).
46. Reconstructions of Historic Salmon Runs using Bayesian Inference. Ph.D. Dissertation by Nick Gayeski. 2016. (The University of Montana – Systems Ecology)

POST DOCTORAL SCHOLARS SPONSORED AT FLBS AND CURRENT AFFILIATION

Thomas M. Gonser – Professor, Swiss Institute of Science and Technology, Zurich
 Martin Pusch – Professor, Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin
 Eric M. Snyder – Professor, Grand Valley State University, Michigan
 Maria Laura Miserendino – Professor, Centro Nacional Patagónico University, Esquel, Argentina
 Hugo M. Fernandez – Professor, Nacional University, Tucuman, Argentina
 Samantha D. Chilcote – Ecological Consultant, Weaverville, California
 Megan V. McPhee – Professor, University of Alaska, Juneau
 Matt Luck – Scientist, Rubenstein School of Natural Resources and Environment, University of Vermont
 Huan Wu – Scientist, University of Maryland Goddard Earth Sciences and Technology Center
 Meredith Wright – Scientist, USDA, Albany, California
 Ashley Helton – Assistant Professor, University of Connecticut, Storrs
 Alison Appling – Research Scientist. Duke University, Durham, N.C.
 Rachel Malison – current post doc FLBS

EXTRAMURAL COLLEAGUES OF LONG ASSOCIATION

James V. Ward – Swiss Institute of Technology (ETH), Zurich. (retired)
 Svein J. Saltveit – University of Oslo, Norway
 Klement Tockner – Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany
 Charles A. S. Hall – State University of New York, Syracuse
 Dmitry S. Pavlov – Russian Academy of Science, Moscow

Kirill V. Kuzishchin – Department of Ichthyology, Moscow State University, Russian Federation
Geoff Poole – Montana State University, Bozeman
Dan Goodman – Montana State University, Bozeman. (deceased)

SYNERGISTIC ACTIVITIES

- › Public Speaker on local-national environmental issues
- › Board Member, Wild Fish Conservancy, Duval, Washington (2013-). Conservation NGO dedicated to preservation of wild fish and wild fish habitat in the Pacific Northwest.
- › Board Member. National Ecological Observatory Network. National Science Foundation. (2013-2016)
- › Frequent participant in national and international colloquia on strategic research agendas to sustain ecosystem goods and services (e.g., The Freshwater Imperative; Long-Term Ecological Research network; National Research Council).
- › Gratis Consultant to The Nature Conservancy, Trout Unlimited, Gunnison River (Colorado) Coalition.
- › Board Member of the Wild Salmon Center, Portland, Oregon (2003–2011). Conservation NGO dedicated to preservation of wild salmon and wild salmon rivers.
- › Board Member of the Flathead Lakers, a conservation organization dedicated to the protection of Flathead Lake (1986–1990).
- › Member of Finley Point (Montana) Volunteer Fire Department (1985–1994).
- › Expert Witness, US Senate Committee on Environment and Public Works (hearings on clean water and endangered species legislation); US Senate Subcommittee on Science and Technology (hearings on salmon restoration).
- › Co-operator (with B. K. Ellis) of Duckhaven Ranch, an intermountain prairie wetlands restoration and education site located adjacent to the Ninepipes National Waterfowl Production Area, Ronan, Montana (1990–).
- › Expert Witness in successful adjudication of virgin river flows as permanent Federal reserve water rights for Glacier, Yellowstone and Zion National Parks.
- › Founder of Nyack Flood Plain Research Natural Area, Middle Flathead River, Montana.
- › Board Member of the Skeena Wild Conservation Trust (2016-). Terrace, British Columbia. Dedicated to conservation the natural and social resources of the Skeena and adjacent River ecosystems.