Jonathan Alan Rosenfield, Ph.D.

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PROFESSIONAL EXPERIENCE

LEAD SCIENTIST THE BAY INSTITUTE 2008-PRESENT

Represent a regional environmental non-profit in efforts to protect and restore the native biological diversity and ecosystem services of the San Francisco Estuary and its watershed. Advocate for integration of best available science into management plans for the Estuary and its watershed in order to protect imperiled and economically valuable species. Analyze datasets to uncover ecosystem dynamics and recommend management of vital aquatic resources. Collaborate with technical experts and managers from NGO, academic, and private sectors.

SOLE PROPRIETOR AQUATIC RESTORATION CONSULTING 2005-2008

Initiates and manages consulting projects focusing on fish, wildlife, and habitat restoration in and around the San Francisco Estuary and its watershed. Selected recent projects include:

DIRECTOR, SCIENTIFIC PEER-REVIEW CALFED ERP 2004-05

Managed peer-review of proposals for a multi-million dollar ecosystem restoration grant program. Collaborated on design of web-based proposal and reviewer management databases. Recruited and assigned scientists to review technical proposals for both, CalFED's ERP and Science programs. Planned, hosted, and managed review panels.

POST-DOCTORAL RESEARCHER UC DAVIS 2002-04

Explored long-term datasets to uncover causes of longfin smelt (*Spirinchus thaleichthys*) population decline in the San Francisco Estuary.

EDUCATION

UNIVERSITY OF NEW MEXICO PHD, BIOLOGY *2001*

Dissertation: Conservation of North American freshwater fish species: the micro and macro of speciation and extinction.

UNIVERSITY OF MICHIGAN MS, CONSERVATION BIOLOGY *1996*

CORNELL UNIVERSITY BS, NATURAL RESOURCES *1991*

PEER-REVIEWED PUBLICATIONS

Nobriga, M.L., and J.A. Rosenfield. 2016. Population dynamics of an estuarine forage fish: disaggregating forces driving long-term decline of longfin smelt in California's San Francisco Estuary. *Transactions of the American Fisheries Society* 145: 44-58.

Stanislaus River Scientific Evaluation Process Group. [multiple co-authors]. 2016. Conservation planning foundation for restoring Chinook Salmon (*Oncorhynchus tshawytscha*) and *O. mykiss* in the Stanislaus River. Anchor QEA. 400 pages + appendices.

The Bay Institute. 2016. San Francisco Bay: the freshwater starved estuary. 84 pages. Available at: https://bayecotarium.org/wp-content/uploads/freshwater_report.pdf

Weber-Stover, A. and J.A. Rosenfield. 2015.

(1) Fish. Pages 42-44 in *The State of the Estuary 2015, San Francisco Estuary Partnership* (Available at: http://www.sfestuary.org/wp-content/uploads/2015/10/SOTER_2.pdf).

(2) Technical Appendix: Fish assemblage health indicators for the upper San Francisco Bay Estuary, including Suisun Bay, Suisun Marsh, and Delta (Available at: http://www.sfestuary.org/wp-content/uploads/2015/11/0_Comprehensive_TA_Document_SOTER_2015.pdf). SFEP, Oakland, CA.

Rosenfield, J.A. 2010. Conceptual life-history model for longfin smelt (*Spirinchus thaleichthys*) in the San Francisco Estuary. *CBDA Delta Regional Ecosystem Restoration Implementation Plan*, Sacramento, CA.

Rosenfield, J.A. and R. Baxter. 2007. Population dynamics and distribution patterns of longfin smelt in the San Francisco Estuary. *Transactions of the American Fisheries Society* 136:1577-1592.

Rosenfield, J.A., S. Nolasco, S. Lindauer, C. Sandoval, and A. Kodric-Brown. 2004. The role of hybrid vigor in the replacement of Pecos pupfish by its hybrids with sheepshead minnow. *Conservation Biology* 18:1-10.

Kodric-Brown, A. and J.A. Rosenfield. 2004. Populations of Pecos pupfish (*Cyprinodon pecosensis*) differ in their susceptibility to hybridization with sheepshead minnow (*C. variegatus*). *Behavioural Ecology & Sociobiology* 56:116-123.

Rosenfield, J.A. and A. Kodric-Brown. 2003. Sexual selection promotes hybridization between Pecos pupfish, *Cyprinodon pecosensis* and sheepshead minnow, *C. variegatus*. *J Evol Biol* 16:595-606

Parker, T., R. Knapp, and J.A. Rosenfield. 2002. Social mediation of sexually selected ornamentation and steroid hormone levels in male junglefowl. *Animal Behaviour* 64:291-298.

Rosenfield, J.A. 2002. Pattern and process in the geographic ranges of freshwater fishes. *Global Ecology and Biogeography* 11:323-332.

Rosenfield, J.A., T. Todd, and R. Greil. 2000. Molecular evidence of unidirectional hybridization and introgression between pink and chinook salmon of the St. Mary's River, MI. *Transactions of the American Fisheries Society*, 129:670-679.

Rosenfield, J.A. 1998. Detection of natural hybridization between pink salmon (*Oncorhynchus gorbuscha*) and chinook salmon (*Oncorhynchus tshawytscha*) in the Laurentian Great Lakes using meristic, morphological, and color evidence. *Copeia* 1998:706-714.

Smith, G.R., J.A. Rosenfield, and J. Porterfield. 1995. Processes of origin and criteria for preservation of fish species. Pages 44-57 *in* J.L. Nielsen, P. Brouha, and D. Powers, eds. *Evolution and the aquatic ecosystem: Defining unique units in population conservation.* American Fisheries Society special publication #17. Bethesda, MD.

Rosenfield, J.A. 1991. *Municipal Compost Management: Study Guide.* Cornell University Home Study Program, Cornell University, College of Agriculture and Life Sciences. Ithaca, NY. 50 pp.

Cobb, K. and J.A. Rosenfield, eds. 1991. *Municipal Compost Management*. Cornell University Home Study Program, Cornell Univ., College of Agriculture and Life Sciences. Ithaca, NY. 250 pp.

PROFESSIONAL SERVICE

Committees: *Estuary News,* Editorial Board
Delta Science Program, Steering Committee for 2012-2016 Drought Management Synthesis Review
California Water Boards, Science Technical Advisory Group -- Nutrients
Central Valley Salmon Habitat Partnership, Science Committee

Manuscript/Grant Referee San Francisco Estuary Partnership, North American Journal of Fisheries Management, Journal of Heredity, Conservation Biology, Behaviour, Behavioral Ecology, Biological Invasions, Global Ecology & Biogeography, Transactions of the American Fisheries Society, Reviews in Fish Biology & Fisheries, CalFed, California Fish & Game

Doctoral Committee Member Dr. Andy Fields, University of the Pacific