

STATEMENT OF QUALIFICATIONS

R. Craig Addley, PhD

EDUCATION

Ph.D., Civil and Environmental Engineering, 2006, Utah State University

M.S., Civil and Environmental Engineering 1993, Utah State University

B.S., Fisheries and Wildlife, 1989, Utah State University

EXPERIENCE

Dr. Addley has 30 years (1987 – Present) experience working on water supply and hydropower projects in the Western United States (California, Oregon, Washington, Alaska, Montana, Nevada, Arizona, and Utah). His expertise includes hydrology, ecohydrodynamics, instream flow, and water temperature modeling and aquatic ecology, including temperature ecology and bioenergetics of fish (particularly endangered fish species). He has worked many years designing, modeling, and analyzing water resource project operations that provide resource benefits to people (hydropower, agriculture, municipal and industrial water supply) and natural ecosystems. In California he has worked on various projects and river systems (e.g., American, Klamath, Pit, Stanislaus, Yuba, Santa Ynez, Kaweah, and Rush Creek rivers) and for the past 10 years he has worked extensively in the American and Yuba river basins related to water supply, hydropower, water rights, and endangered species. He has assisted Placer County Water Agency and the Water Forum analyze the hydrology and environmental effects of American River water resource operations on the Central Valley Project and State Water Project and vice versa.

Cardno Inc., Sacramento, CA, 2006–present, Senior Consultant

Responsible for all technical aspects of water supply, water rights, hydropower, hydrology, aquatic resources and endangered species projects. Example projects include PCWA’s American River Water Rights Extension project; Sacramento Water Forum modified Flow Management Standard; Folsom Reservoir and American River water temperature modeling; Middle Fork American River hydropower relicensing; Yuba-Bear and Drum-Spaulding hydropower relicensing; Yuba Salmon Forum Salmon, salmon habitat evaluations; analysis of the California WaterFix project; SCE hydropower relicensing and dam repair projects; and Santa Ynez River fish passage, CA. Also, Spokane river spawning habitat, WA; Susitna-Watana hydropower project; AK; and Washington State Federal Water rights, WA

Institute of Natural Systems Engineering, Utah Water Research Laboratory, Logan, UT, 1994-2006.

Acting Director.

Responsible for application, development, and testing of multi-disciplinary environmental modeling, impact assessment and mitigation methods in aquatic ecosystems related to water resource and hydropower projects, aquatic resources, and endangered species. Example projects include instream flows and endangered salmonids Klamath River, CA; instream flows, hydrology, and endangered species Nooksack Watershed, WA; federal water rights claims, hydrology, channel maintenance, endangered salmonids, Snake River Basin, ID; instream flows and hydropower, Flathead River, MT; Virgin River endangered cyprinids, water resources, hydropower and water temperature, UT-NV-AZ. Endangered cyprinid temperature and bioenergetics, UT; and teaching university classes and short-courses on instream flows, natural systems engineering, and multidisciplinary aquatic impact assessment methodologies.

Watershed Systems Group, Logan, UT, 1992-2006. Co-Principal.

Responsible for environmental consulting projects related to aquatic ecosystems and water resource projects. Example projects include national US Forest Service contract for relicensing of hydropower projects (hydrology, fish, riparian vegetation, invertebrates, amphibians, water temperature and sediment transport), CA and OR; instream flow studies Diamond Fork and Provo River (Central Utah Project); Uintah Basin Replacement Project (Central Utah Project) for the Ute Tribe; hydropower projects on the Snake River, for Idaho Power Company, ID; native species on Sonoita Creek, AZ; and various other projects involving aquatic resources.

Various Fisheries and Environmental Modeling Jobs, Utah Division of Wildlife Resources and Utah State University, 1987-1991.

Responsible for collecting, analyzing, and modeling instream flow, fisheries and aquatic ecology field data.