## STATEMENT OF QUALIFICATIONS

#### **Christopher Earle**

## EDUCATION

Ph.D. Forest Ecology. 1993. University of Washington, Seattle.

M.S. Geosciences. 1986. University of Arizona, Tucson.

B.A. Biology and Geology. 1978. Whitman College, Walla Walla.

## **PROFESSIONAL HISTORY**

- 2007 Present Senior Ecologist, ICF
- 1999 2007 Senior Ecologist, Jones & Stokes Associates
- 1993 1999 Ecologist, Beak Consultants

## **RELATED PROFESSIONAL EXPERIENCE**

**California WaterFix 2081(b) Permit—DWR, Sacramento, California, 2015-2017.** Served as project manager for the California WaterFix 2081(b) permit application. In early 2015 DWR sought a 2081(b) incidental take permit under the California Endangered Species Act. I lead the ICF team that produced draft and final versions of the 2081(b) application, including many analyses considering construction, operation and mitigating environmental consequences of California WaterFix. The final application addressed the needs of five CESA-protected species.

**California WaterFix BA—Bureau of Reclamation (Reclamation), Sacramento, California, 2015-2017**. Served as the senior author for the California WaterFix Biological Assessment. In early 2015 U.S. Bureau of Reclamation initiated a biological assessment under ESA Section 7. I coordinated the ICF team produced draft and final versions of the biological assessment, including many analyses considering construction, operation, and mitigating the environmental consequences of the California WaterFix. I also prepared much of the text of all chapters other than Chapters 5 and 6 (i.e., the effects analysis). The biological assessment addressed the needs of 19 ESA-protected species.

**Bay-Delta Conservation Plan (BDCP)—California Department of Water Resources (DWR), Sacramento, California, 2011-2014.** Served as project manager. The Bay Delta Conservation Plan was the most ambitious Habitat Conservation Plan ever attempted, seeking to reconcile the ecological needs of 60 species and 14 natural communities in the Sacramento-San Joaquin Delta with two large water projects that provide water supply for 25 million Californians. ICF prepared the conservation plan in close collaboration with numerous public agencies and private and public stakeholders, and also prepared the EIR/EIS for the plan.

**BDCP Effects Analysis Revision—DWR/SAIC, Sacramento, California, 2010-2011.** Served as task leader for the Bay Delta Conservation Plan Effects Analysis Revision. Assisted in

developing overall effects analysis strategy for the Bay Delta Conservation Plan and coordinated a team of biologists in preparation of the complete effects analysis for the 49 wildlife and plant species covered in the plan.

# RELATED PUBLICATIONS AND PRESENTATIONS

Oestman, R. and **C. J. Earle**. Effects of pile-driving noise on Oncorhynchus mykiss (steelhead trout). Pp. 263-265 in A. Hawkins (ed.), The Effects of Noise on Aquatic Life. Springer-Verlag. 2012.

**Earle, C.J**. Asynchronous droughts in California streamflow as reconstructed from tree rings. Quaternary Research 39:290-299. 1993.