Modeling San Francisco Bay/Estuary with SELF (Semi-implicit Eulerian-Lagrangian Finite Element): The San Francisco Estuary is the largest estuary on the Pacific coast of the United States and the largest wetland habitat in the western U.S. We are modeling San Francisco Bay/Estuary with SELF (Zhang, Y., and A. M. Baptista, SELFÉ: A semi-implicit Eulerian–Lagrangian finite-element model for cross-scale ocean circulation, Ocean Modelling, 21:3–4, 71-96, 2008), a state-of-the-art open-source community-supported modeling system, based on unstructured grids in the horizontal and hybrid terrain-following coordinates S-Z coordinates in the vertical, designed for the effective simulation of 3D baroclinic circulations across river-to-ocean scales. SELFE has been successfully applied to model the Columbia River estuary and plume circulation.