

Elizabeth Murray

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Elizabeth Murray has worked as a wetland scientist for 20 years, specializing in wetland assessment, ecological restoration and resource management. Elizabeth currently works as a Research Biologist in the Wetlands and Coastal Ecology branch of the Environmental Laboratory (EL) of the U.S. Army Engineer Research and Development Center (ERDC). She has co-authored 8 Hydrogeomorphic (HGM) functional assessment regional guidebooks for wetlands in various parts of the country, covering over 40 regional subclasses. She has also developed spreadsheet Functional Capacity Index calculators and interactive data forms, as well as scientific illustrations, for many others. She has performed wetland functional assessments on large civil works projects. Although she is most involved in HGM assessment approaches she has also researched, helped develop or reviewed several other wetland assessment methods, including California Rapid Assessment Method (CRAM), Landscape Development Intensity (LDI) index approaches, and remote sensing techniques.

Elizabeth has been part of a team developing Potential Natural Vegetation maps of the Mississippi Alluvial Valley, which are useful for determining restoration goals on current farmland in the lower valley. She is co-author on one of the resulting atlases, as well as a *Wetlands* article on the techniques used in the mapping. She is co-PI on the Corps' national effort to investigate the potential for incorporating ecosystem goods and services in civil works and restoration planning. She has co-authored a technical report and technical note on the topic, and continues to help develop a framework which district planners might use to incorporate ecosystem goods and services assessment into their planning. Elizabeth is starting to work on projects addressing restoration and sea level rise in San Francisco Bay, both through the Systems Approach to Geomorphic Engineering program, which focuses on shoreline resilience, and Engineering with Nature, which researches restoration techniques that employ geomorphic processes.

Prior to coming to the Corps, she worked for 8 years as the Coordinator of the Arkansas Multi-Agency Wetland Planning Team, where she obtained EPA grant money to conduct research with ERDC scientists on HGM projects in Arkansas, ecological restorations, geomorphic studies to support wetland classification mapping, and GIS mapping of potential restoration sites.

Elizabeth's education includes her Bachelor's degree in Biology from the University of California, San Diego, and her M.S. in Environmental Science from the School of Public and Environmental Affairs, Indiana University. Her master's degree focused on conservation modeling, which combined ecological modeling with economic principles.

Elizabeth works from the San Francisco District offices, and frequently drags her husband and two daughters to the museums, theater, and dance performances that the city affords. She also enjoys writing, hiking, traveling, scuba diving and snorkeling. She donates her time in support of the science fair programs of her daughters' schools.