FRONTIERS

RESUME

RUSSELL H. BOUDREAU, PE, D.CE, D.PE

PRINCIPAL

B.A., Applied Mechanics (University of California, San Diego, 1978) M.Eng., Coastal and Ocean Engineering (University of California, Berkeley, 1980)

Mr. Boudreau is a Principal with nearly 40 years of experience as both project engineer and project manager on a wide range of coastal and offshore projects involving coastal processes, environmental restoration, shore protection, navigation improvement, and port and marina design. His engineering experience includes beach nourishment, harbor and beach water quality studies, wave hindcasts and transformations, prototype and numerical studies of estuarine hydrodynamics, wave prediction and wave force studies for fixed and floating structures, dredging, and coastal structures design, including shoreline protection and sand retention structures. Mr. Boudreau's experience in these areas ranges from planning and design through permit acquisition, preparation of final design documents, construction management and post-construction monitoring.

Recent projects have focused on the development and implementation of planning strategies to adapt to sea level rise. Mr. Boudreau served as the lead engineer for the development of effective living shoreline solutions to protect critical coastal infrastructure adjacent to Pacific Coast Highway in north San Diego County, California and at the Wailuku-Kahului Wastewater Reclamation Facility in Maui, Hawaii. The latter project was recognized as an effective *Nature-Based Solution for Coastal for Coastal Highway Resilience* by the U.S. Federal Highway Administration.

Professional Background

1986 – 2020 Vice President / Principal Coastal Engineer, Moffatt & Nichol (Long Beach, CA) Representative project experience includes:

- Port of Coos Bay Navigation Channel Improvement Project
- Naval Weapons Station Seal Beach Causeway, Boat Channel, Turning Basin and Ammunition Pier Project
- US Army Corps of Engineers On-Call Contracts, Los Angeles and Honolulu Districts
- Sand Retention Groin Repair, Los Angeles County
- Sea Level Rise Vulnerability Assessments and Adaption Strategies for Multiple Public Agencies
- Dana Point Harbor Dredging and Beach Nourishment
- Bolsa Chica Wetlands Restoration, Huntington Beach
- Alamitos Bay Marina Rehabilitation, Long Beach

1981 – 1986 Ocean Engineer, PMB Systems Engineering / Bechtel (San Francisco, CA)

• Multiple joint-industry feasibility studies of deep-water and arctic oil production platforms

Mr. Boudreau is a registered Civil Engineer in the States of California and Hawaii, and is an American Society of Civil Engineers certified Diplomate in both Coastal Engineering and Port Engineering. He currently serves as a Director of the American Shore and Beach Preservation Association.