



Figure I-2-17. Seattle, located in sheltered Puget Sound, is one of the world's great natural anchorages. In the 1800s Seattle was a timber town and point of embarkation for Alaska and the Orient. During the 1980s and 1990s, the port has prospered with container traffic and the export of grain and other agricultural products. Areas of the harbor need regular dredging. (Photograph July 1995)

Sometimes the solutions require the use of “hard” static structures built of rock, steel, or concrete, and sometimes the solutions involve “soft” dynamic approaches, such as adding littoral material or modifying the vegetation. Chapter V-3, “Shore Protection Projects” provides a more detailed discussion of the options and limitations available to the coastal engineer.

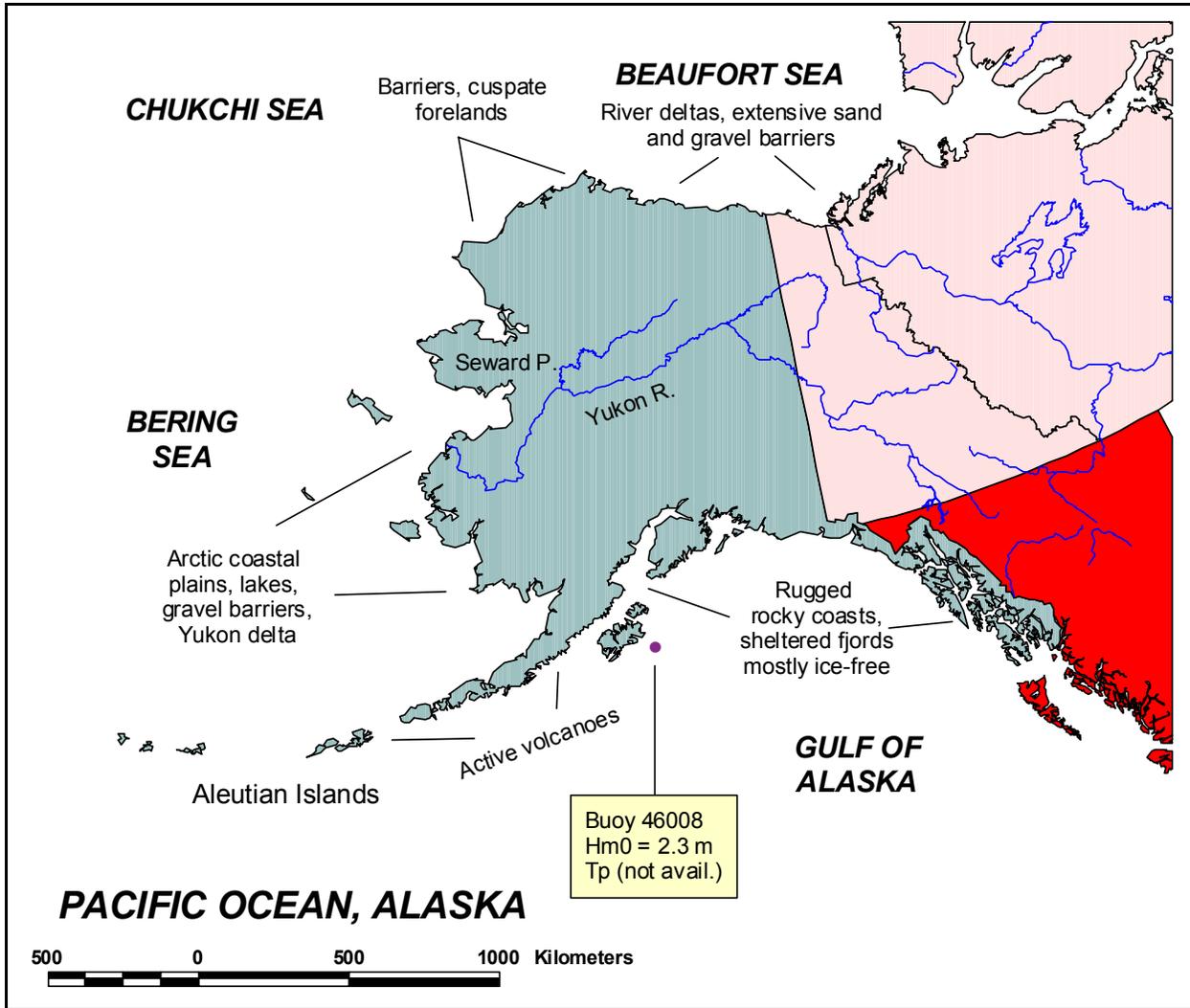


Figure I-2-18. Alaska coastal characteristics

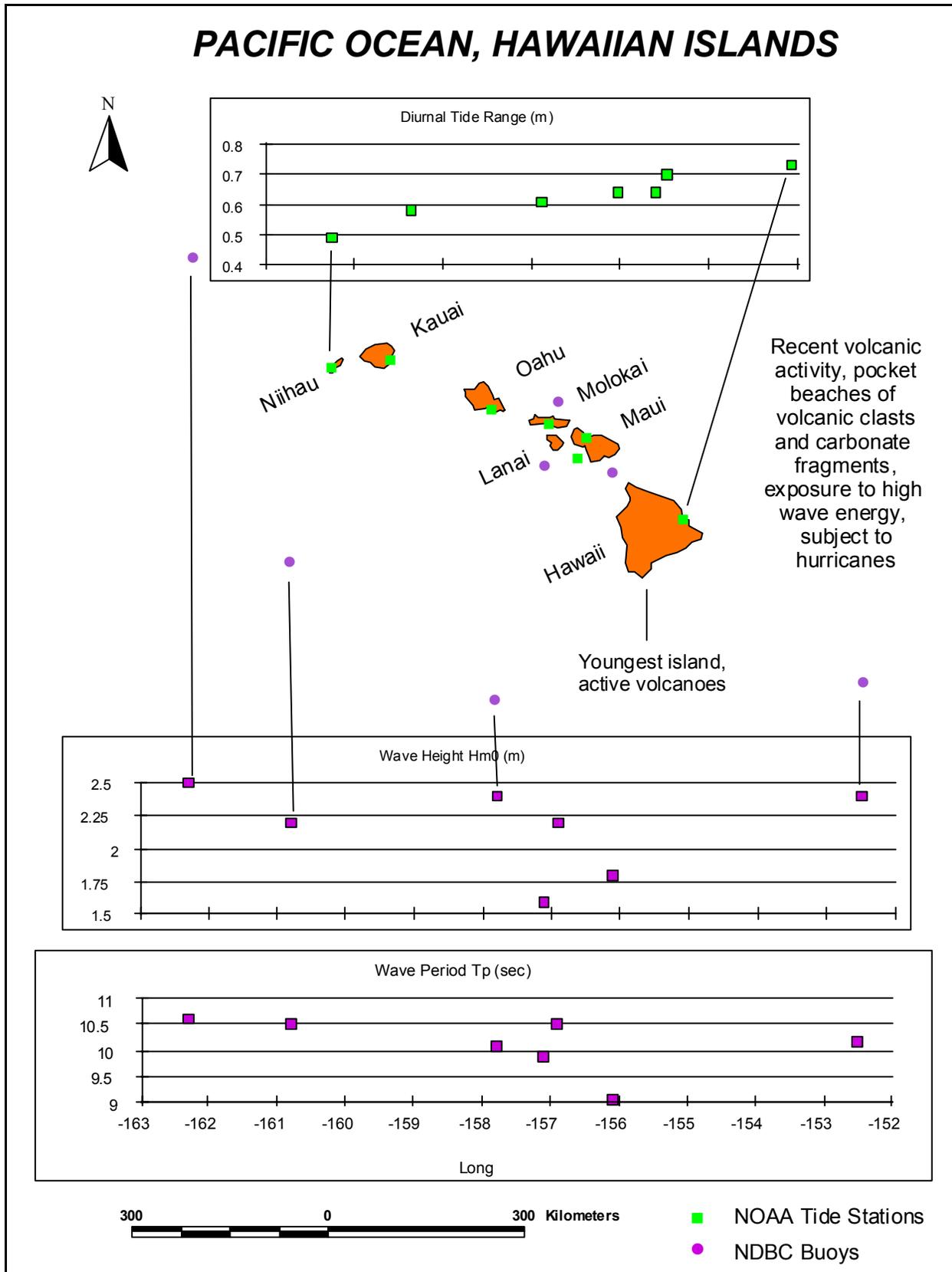


Figure I-2-19. Hawaiian Islands wave characteristics

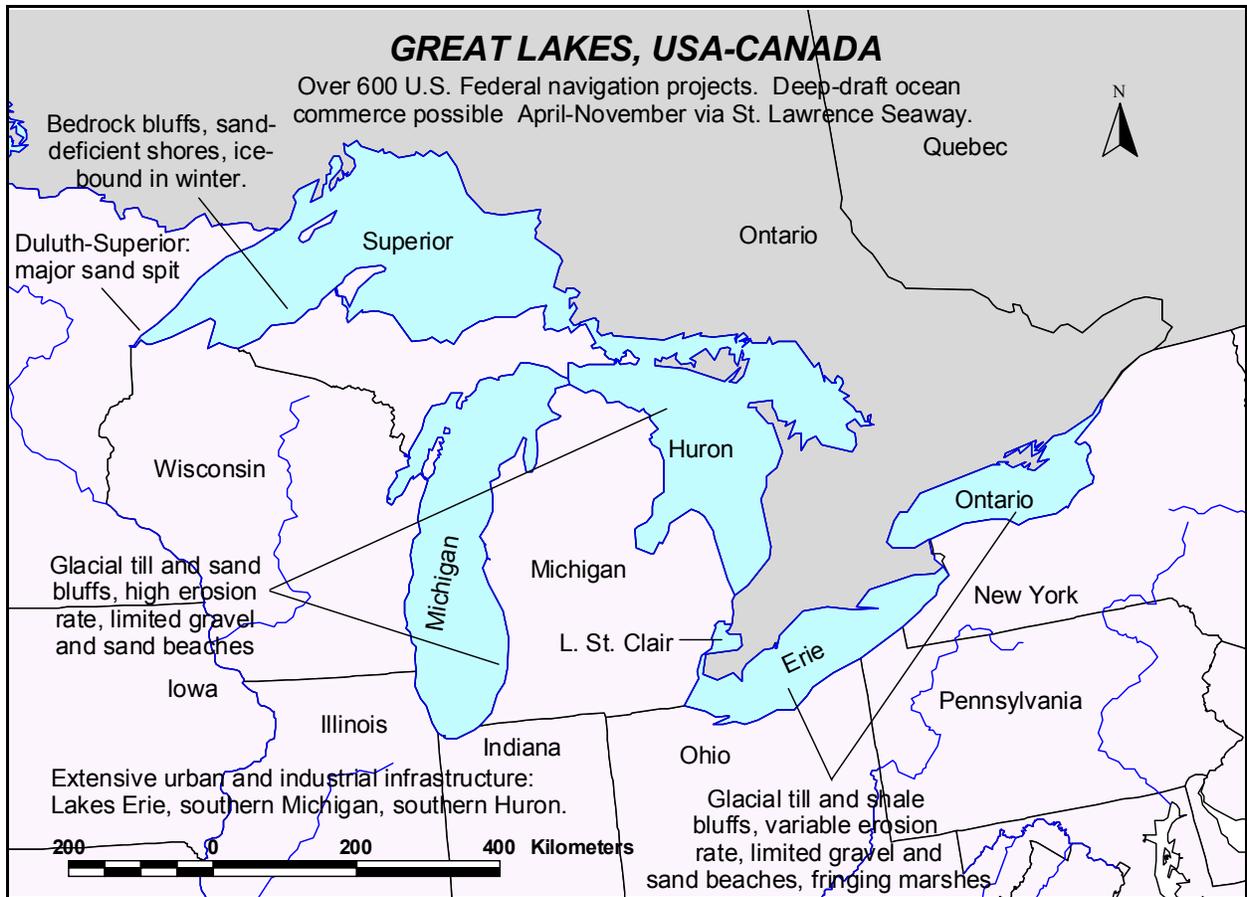


Figure I-2-20. Great Lakes shoreline characteristics