The purpose of this project was to identify areas throughout the State of Hawaii which might have suitable conditions for the establishment of shore-based facilities which use deep, cold nutrient-rich, ocean water for: (1) aquaculture; (2) energy production; (3) air conditioning; (4) industrial cooling; (5) cooled tropical agriculture, and (6) manufacture of marine products. Such facilities would be similar to the Natural Energy Laboratory of Hawaii Authority (NELHA) at Keahole Point on the Big Island of Hawaii.

NELHA is located on 870 acres (350 hectares) at Keahole Point, on the Big Island of Hawaii. This unique ocean science and technology park provides the resources, support and facilities for many innovative ocean-related businesses. Cold deep seawater pumped up from 2,000 feet (610 meters) deep off Keahole Point is utilized to produce energy, desalinate water, grow lobsters and fish, produce algae and shellfish, grow cold climate fruit and vegetables in the tropics and much, much more.

Further expansion at NELHA is currently limited by: (1) the capacity of its seawater supply piping systems; (2) the difficulty and cost of preparing land at the site for use by tenants; (3) current effluent seawater disposal methods; and (4) the effects of topography and distance on seawater pumping energy requirements and costs. It may be possible to develop other sites in Hawaii which may minimize such limitations and provide for economic development and employment opportunities in these areas.