



12 March 2003

INFORMATION PAPER

SUBJECT: Sacred Falls Shore Protection, Oahu, Hawaii

1. Purpose: To provide information on the subject project.
2. Points of Major Interest and Facts.

a. The shoreline restoration of the Sacred Falls Beach Park is proposed because of the exposed and eroded shoreline that is repeatedly subject to inundation and damaging surf. The project is held in abeyance pending release of design funds expected in March 2003. Design completion is scheduled for the end of FY03. The project is being conducted under Section 227, Water Resources Development Act of 1996, entitled National Shoreline Erosion Control Development and Demonstration Program. This program provides research and development funding to the Engineer Research and Development Center (ERDC) for the advancement of the state-of-the-art in coastal shoreline protection.

b. The project site was nominated for inclusion in the Section 227 program based on a proposal to ERDC, prepared by the Honolulu District and under the sponsorship of the State of Hawaii, Department of Land and Natural Resources. The site selection considered factors such as extent (should be relatively small and confined), wave and erosion climate (should be typical of the island), and features that could be readily implemented (relatively low cost). Conventional project authorization justification through the U.S. Army Corps of Engineers (USACE) Civil Works Program, includes economic feasibility and is not required.

c. Sacred Falls Beach Park, Hauula, is located at the south end of Makao Beach on the island of Oahu, Hawaii, and is approximately 370 feet reach of undeveloped shoreline. Seawall-protected private residences bound the small publicly accessible beach at both ends. The beach is very narrow and becomes inundated at high tide. In the near shore a wide fringing coral reef extends along the coast with 12 feet water depth located approximately 2,500 feet offshore.

d. The State of Hawaii would like to investigate shoreline erosion mitigation measures, such as a low-impact semi-emergent control structure for retention of sand. The plan would be to build low-crested semi-emergent "Y-Head" structures. The results obtained from these methods will indicate the effectiveness of mimicking natural in form and function to reduce shoreline erosion. The methods suggested are unlikely to cause downdrift effects, or adverse impact adjacent shorelines since sand filling will be utilized.

3. Congressional Interest. There exists Congressional interest from States with coastal erosion problems and will be reflected in appropriations provided to USACE.