

Part 1

1. INTRODUCTION

The Public Beach Restoration Program (PBRP) was created in 1999 by Assembly Bill 64 (Public Beach Restoration Act; Harbors and Navigation Code §69.5–69.9). The PBRP recognizes that a legislative funding mechanism is required to provide for the sustainability and management of beaches, which play a significant economic, recreational, coastal access, public safety and environmental role for the State of California. The state budget for fiscal year 2000-2001 provided \$10 million for grants administered by the California Department of Boating and Waterways, representing a nearly six-fold funding increase over previous years.

The Public Beach Restoration Act found that:

- (a) The state's beaches provide California with an enriched quality of life, worldwide recognition, and unparalleled tourist opportunities for economic enhancement.
- (b) The state's beaches are California's most popular recreational destination with over 550 million visitors in 1995, 85 percent of whom were non-coastal residents.
- (c) Tourism is the third largest industry in the state; the state's beaches provide the attraction and recreational infrastructure that drives a major portion of that industry.
- (d) Beach-induced recreation and tourism produce over \$10.6 billion in direct spending, produce \$17 billion in indirect and induced spending, support over 500,000 jobs, and generate over \$1.0 billion dollars in state taxes.
- (e) Many state beaches are in an advanced state of erosion and are disappearing because of human-induced impacts produced by inland development and watershed modifications, such as concrete channels, flood control structures, and water supply dams. The health of the state's beaches relies upon a steady flow of sand from watersheds via rivers and streams that are now greatly modified and dammed.
- (f) The state's beaches provide a natural habitat for many species, some of which are on the threatened or endangered species list, such as the least tern and the snowy plover.
- (g) Beaches provide exceptional, low-cost recreational opportunities for all socio-economic levels especially in densely populated areas that possess limited water recreation opportunities.
- (h) A dedicated state-funding source will greatly enhance our ability to partner and qualify for federal matching funds through the United States Army Corps of Engineers' Shore Protection Program.
- (i) The Public Research Institute at San Francisco State University has studied beach nourishment needs along the California coast and found a statewide need for one hundred thirty-two million dollars (\$132,000,000) in one-time project costs with annualized maintenance costs of seventeen million six hundred thousand dollars (\$17,600,000).

In addition to providing resources for projects and research, the Public Beach Restoration Act mandates that the Department of Boating and Waterways and the State Coastal Conservancy conduct the California Beach Restoration Study. This document meets that mandate. The study is intended to assess the success of and continuing need for the PBRP, and investigate ways to increase the volume of sand on the state's beaches through increasing the supply of sediment to the coast through natural processes rather than beach nourishment. The primary objectives of the study are as follows:

1. Detail the projects funded by the PBRP
2. Assess the need for continued beach nourishment projects
3. Evaluate the effectiveness of the PBRP in addressing that need
4. Discuss ways to increase natural sediment supply in order to decrease the need to nourish the state's beaches

The study is divided into four major parts. Part I is an overview of the state's beach setting (Chapter 2) and the economic benefits of California's beaches (Chapter 3). Part II focuses on beach nourishment. The basic concepts of beach nourishment are described in Chapter 4. The projects that were approved for 2000-2001 PBRP funding and future needs of the program are outlined in Chapter 5, while past projects that are similar to those approved for PBRP funding are analyzed in Chapter 6. Part III contains chapters on natural sediment supply along the coast; Chapter 7 focuses on fluvial contributions and reductions while Chapter 8 analyzes contributions from bluff erosion and reductions to those contributions due to coastal armoring. The final section of the report, Part IV, is a summary of the major conclusions and recommendations derived from the study.