## **RESTORATION FEASIBILITY STUDY NUMBER 3**

Study Title: Identification of Potential Sites for Stabilization and Restoration with Beach Wildrye

SPWG

Lead Agency: DNR

Cooperating Agencies: USFS

## INTRODUCTION

The EVOS and associated cleanup efforts have affected supratidal beach ecosystems, of which a key component is the native grass, beach wildrye (Elymus mollis). The supratidal beach wildrye plant community is extremely important in the prevention of erosion in the coastal environment. Erosion can lead to the destabilization and degradation of cultural and recreational sites as well as of wildlife habitats (e.g., for ground-nesting birds). There are well established techniques for restoring rye grasses and other plants on coastal dune systems, including at some sites in Alaska. It is necessary, however, to first identify sites at which damage has occurred and restoration efforts appear to be feasible, and it is also necessary to establish the cost of a full-scale restoration project in the EVOS area.

## OBJECTIVES

- A. Determine the distribution and areal extent of supratidal sites at which beach wildrye restoration efforts will be needed and feasible.
- B. Identify potential sites for pilot projects to re-establish supratidal stands of beach wildrye.
- C. Determine the costs of implementing a full-scale project to restore supratidal stands of beach wildrye.

Relationships with Other Studies:

This feasibility study addresses a key component in supratidal beach ecosystems. It relates directly to other feasibility studies and potential restoration projects in the areas of cultural, recreational, and avian resources.

## METHODS

Beach segment survey data, aerial photographs, on-site inspections, and other sources of coastline status data will be used for a preliminary identification of sites where stands of beach wildrye have been injured and erosion is occurring or may occur as a result. Based on these preliminary results, individual sites will be visited and evaluated for their potential as sites at which beach wildrye restoration techniques may be developed and tested. The on-ground activities will include documenting the size, type, and extent of damage and the depth of oil, if present, in the substrate. This study will enable development and evaluation of a proposal for a full-scale feasibility study of restoration methods in subsequent years.

BUDGET: DNR

1997 - 19

Salaries	\$ 14.4
Travel	5.6
Contractual Services	5.0
Supplies	3.1
Equipment	0.0

TOTAL

\$ 28.1