

L-1415 (Bulkheads)

Memo to File

December 5, 2005

To: Fire Island National Seashore Files

From: Superintendent

Subject: Policy Language for Special Use Permits for Private Bulkheads

This memo to file documents the policies and procedures for reviewing and issuing permits and approvals for private bulkheads within the Seashore. This is to be the park policy until further revisions from either a new rule, plan, or procedure is developed.

The purpose of this guidance is to provide for consistent treatment and a clear understanding of compliance requirements and park policy concerning applications for special use permits for the repair and replacement of bulkheads on private property.

#### Bulkhead Policy for Fire Island National Seashore

The National Environmental Policy Act (NEPA) was passed by Congress in 1969 and took effect on January 1, 1970. This landmark legislation established this country's environmental policies, including the goal of achieving productive harmony between human beings and the physical environment for present and future generations. NEPA is far-reaching. Whenever the NPS considers an action (including issuance of a permit) that could have impacts on the human environment, NEPA is triggered. This is true whether NPS generates the action or the applicant is a private individual or another federal, state, or local agency.

Besides setting environmental planning policy goals, NEPA created the Council on Environmental Quality (CEQ), an agency of the President's office that would be the "caretaker" of NEPA. CEQ requires that agencies examine connected actions, cumulative impacts, secondary or indirect impacts, and similar actions in their NEPA documents. Cumulative effects are "additive" impacts to a particular resource. NPS analyzes them without regard to land ownership (i.e., cumulative effects may occur from actions on private or other agency land), and it includes impacts of actions in the past, the present, and the reasonable foreseeable future (see section 2.4, cumulative actions).

Fire Island National Seashore (FIIS) includes numerous private properties within its boundaries, primarily developed for residential use. Particularly on the bay side of the island, property owners have constructed individual bulkheads with the intention of protecting their property against erosion. Often, these bulkheads were installed prior to the creation of FIIS, others have been constructed subsequently, without permission of the FIIS management, and in other cases under the issuance of special use permits. Construction of bulkheads along a shoreline is often incremental, creating a complex shoreline configuration, with

beaches of different widths isolated from each other by artificial headlands formed by short lengths of protective walls. When considered cumulatively, the impacts of bulkheads are significant.

Bulkheads negatively impact both natural ecosystem processes, and private property that is not bulkheaded. Bulkheads replace natural formations landward of them and prevent upland sand sources from entering the littoral drift system, causing sediment starvation downdrift, and shifting negative effects to neighboring land. The interaction of waves with a structure increases wave reflection and turbulence, nearshore current velocities, and sediment activation and transport at the base of the structure (Kraus 1988; Kraus and McDougal 1996; Miles et al. 1997). Changes in infiltration and exfiltration of water through the beach near the structure can change moisture content of sediments (Plant and Griggs 1992). These conditions can lead to coarsening of beach foreshore sediments, increased scour and steepening of the foreshore, reducing its suitability as habitat (Thom et al. 1994). A conclusion of studies of impacts of shore armoring is that the level of physical impacts increases as structures are placed successively seaward of high water (MacDonald et al. 1994). Sea level rise will place structures even lower in the intertidal frame, and structures built as backup protection landward of high water may eventually interact with waves and currents during non-storm periods.

Continuing past practices that have been shown to be in conflict with scientific understanding of best management practices is imprudent and short sighted. Knowledge about bay shore processes is ever increasing and new methods of shoreline protection that are more respectful of and responsive to natural systems, and that address erosion concerns of property owners are being developed and tested in coastal environments around the world. Park managers, in cooperation with universities and other federal and state agencies, are monitoring these developments and supporting research in order to ascertain an environmentally sensitive approach to these erosion concerns.

In the interim, in recognition of the erosion concerns of individual property owners, FIIS management has adopted the following policy regarding special use permits for bulkhead construction; the cumulative environmental impacts of bulkheading; and the requirements of National Park Service policies relating to the NEPA.

1. Permit applications for new bulkheads, where no bulkhead previously existed, **will be denied.**
2. Permit applications **will be approved** when they propose:
  - a. replacement in kind of minor structures with little or no change in location, capacity or appearance; **or**
  - b. routine maintenance and repairs to non-historic structures; **and**
  - c. in both (a) and (b) above, applicants agree that approved structures will be removed at such time that FIIS management recognizes a comprehensive and ecologically sound approach to bayside sediment transfer that may include existing bulkheads being replaced by a more sustainable shoreline protection method.

- d. Bulkhead permits of this type will be processed under a categorical exclusion consistent with Director's Order 12, Chapter 3.4.
3. Permit applications to remove traditional and install new non-traditional bulkheads, **may be approved** when an applicant(s) submits an innovative and environmentally sensitive design, not involving shore hardening, which has been demonstrably successful in similar bay-shore environments with analogous ecosystem dynamics. Such systems should not introduce non-native flora or fauna, result in changes in predation, have high potential for negatively effecting adjacent property, or other negative impacts to the shore. Multiple property owners along a variably bulk headed contiguous stretch of shoreline, proposing a unified or comprehensive approach of an innovative nature, are highly encouraged to submit a joint application. Proposals of this type will require a higher level of environmental review, such as an EA or EIS.

### **Code of Federal Regulations (36 CFR)**

#### **CFR 36 § 1.2 (3) Applicability and Scope:**

Waters subject to the jurisdiction of the United States located within the boundaries of the National Park System, including navigable waters and areas within their ordinary reach (up to the mean high water line in places subject to the ebb and flow of the tide and up to the ordinary high water mark in other places) and without regard to the ownership of submerged lands, tidelands, or lowlands;

#### § 1.6 Permits.

(a) When authorized by regulations set forth in this chapter, the superintendent may issue a permit to authorize an otherwise prohibited or restricted activity or impose a public use limit. The activity authorized by a permit shall be consistent with applicable legislation, Federal regulations and administrative policies, and based upon a determination that public health and safety, environmental or scenic values, natural or cultural resources, scientific research, implementation of management responsibilities, proper allocation and use of facilities, or the avoidance of conflict among visitor use activities will not be adversely impacted.

(b) Except as otherwise provided, application for a permit shall be submitted to the superintendent during normal business hours.

(c) The public will be informed of the existence of a permit requirement in accordance with Sec. 1.7 of this chapter.

(d) Unless otherwise provided for by the regulations in this chapter, the superintendent shall deny a permit that has been properly applied for only upon a determination that the designated capacity for an area or facility would be exceeded; or that one or more of the factors set forth in paragraph (a) of this section would be adversely impacted. The basis for denial shall be provided to the applicant upon request.

(e) The superintendent shall include in a permit the terms and conditions that the superintendent deems necessary to protect park resources or public safety and may also include terms or conditions established pursuant to the authority of any other section of this chapter.

(f) A compilation of those activities requiring a permit shall be maintained by the superintendent and available to the public upon request.

(g) The following are prohibited:

(1) Engaging in an activity subject to a permit requirement imposed pursuant to this section without obtaining a permit; or

(2) Violating a term or condition of a permit issued pursuant to this section.

(h) Violating a term or condition of a permit issued pursuant to this section may also result in the suspension or revocation of the permit by the superintendent.