

Coastal Resources Management Council

Coastal Briefings



Commonly Asked Questions and Answers about the
Army Corps of Engineers and the
Coastal Resources Management Council's

South Shore Habitat Restoration Project

February 2000

How did the South Shore Habitat Restoration Project begin?

Answer: The Rhode Island South Shore Habitat Restoration Project is the result of a resolution adopted by the U.S. Congressional Committee on the Environment and Public Works of the U.S. Senate on 2 August 1995 and funded by Congress in fiscal year 1997. The purpose of the resolution was to employ a three-phase effort to determine the need for improved flood control, frontal erosion, coastal storm damage reduction, and watershed, stream and ecosystem habitat viability in the area from Watch Hill (Westerly) R.I. to Narragansett, R.I. A Reconnaissance Investigation identified habitat restoration projects warranting further investigation by the Corps of Engineers.

What habitats are being restored in the South Shore Habitat Restoration Project?

Answer: During the Reconnaissance Phase of the project, CRMC, RIDEM, the towns and interested participants agreed to restore eelgrass beds to areas of the shoaled tidal deltas in Winnapaug, Quonochontaug and Ninigret Ponds. The participants agreed that anadromous fish passageways should be restored for Cross Mills Stream and Factory Pond Stream. An impacted salt marsh east of Quonochontaug Pond was also identified for restoration but was later eliminated because it is a healthy cattail marsh.

How do you know where productive habitats used to be?

Answer: Aerial photography provides us an historical accounting of areas where eelgrass used to grow. Eelgrass beds show as dark patches on aerial photos. By comparing two sets of photos (for instance, 1963 and 1992) one can discern whether the patches have changed in size or have been replaced by another habitat such as sand flats with no vegetation. There also have been several studies of eelgrass in the coastal ponds. One particular study in Ninigret Pond indicates that aerial distribution of eelgrass has declined 41% over a 32-year period. Between 1960 and 1992, 2.1km² (518.91 acres) were lost.

What is so important about eelgrass beds?

Answer: Some of the benefits of seagrasses such as eelgrass include:

- Seagrass beds support large numbers of plant and animals.
- Significant quantities of organic material are produced as the base of an active food cycle.
- Root structures bind sediments while the leaves baffle waves and currents. This stabilizes the pond bottom and promotes plant growth.
- Nutrients are gathered by the leaves and the root systems as well as by associated algae.
- Roots and leaves provide varied food resources and physical support for large numbers of animals. The result is a superior nursery habitat for finfish and shellfish.

How will you decide where deltas need to be dredged, and how much dredging will be required?

Answer: During the Feasibility Phase, going on now, marine scientists and habitat researchers from state and federal agencies, the University of Rhode Island and the University of New Hampshire are carefully studying the lobate-shaped sand flats of the breachway flood tidal deltas. Changes in the deltas sand depth, growth rates of the deltas, and current use of former aquatic plant habitats are among the many events being examined. The outcome of this meticulous scientific analysis is expected to be presented to the public this summer. The assembled data will be used to decide where to do seeding, planting and, in some cases, dredging of sand flats during the Restoration Phase.

Is dredging the only solution?

Answer: No. This is not a dredging project. Dredging will only be used where it is expected to be beneficial to the restoration or change of a particular habitat. The final combination of seeding, planting and dredging for each area to be restored or changed will be tailored to the unique requirements of the location.

It is also important to understand that some sites where productive eelgrass habitats once flourished may not be changed in any way. For example, if a former eelgrass habitat has now become a valuable feeding ground for migratory shorebirds, it will be left in its current state.

How much dredging will be needed?

Answer: That will not be determined until the Feasibility Phase is finished.

Why not let nature take its course?

Answer: Habitats of the expanding sand flats of the delta areas will continue to replace eelgrass habitats. If one places a greater value on eelgrass habitat, then humans must intervene in the habitat change process. There are additional benefits, which will result from the habitat restoration, including the availability of sand from dredging for beach replenishment and improvements for recreational boating activities.

