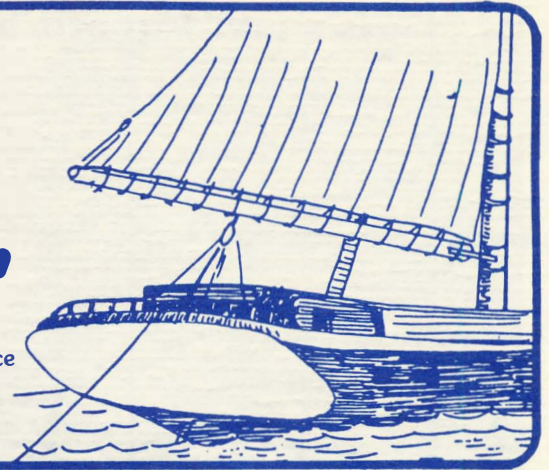


THE TAFFRAIL

By
Long Island Sound Taskforce
of
The Oceanic Society

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EIS Released for Sound Dredging

A well-known axiom reads: "All good things come to he who waits." For those who have waited since December 1976, the New England Division, Army Corps of Engineers has finally released a Draft Programmatic Environmental Impact Statement (PEIS) for the Disposal of Dredged Material in Long Island Sound.

This PEIS is the result of litigation brought by the Natural Resources Defense Fund, Inc., the Long Island Sound Taskforce and several other organizations against the United States Department of Navy and the Army Corps of Engineers. The action arose as a result of the Navy determining that the Thames River in New London needed to be dredged in order to accommodate a new class of submarine. The project called for the open water disposal of some 2.8 million cubic yards of severely polluted material.

The plaintiffs did not oppose the actual dredging project but rather objected to the use of the New London dump site for the dredge spoils. Two major points raised were: the Navy and the Corps failed to comply with National Environmental Policy Act and that the EIS (environmental impact statement) issued by the Navy failed to adequately discuss the issue.

After lengthy argument, it was agreed that the plaintiffs would dismiss the case against the Navy and the Corps in return for the preparation of a composite EIS for the disposal of dredged material from the Long Island Sound area: "The Corps will endeavor to complete the final CEIS by December 31, 1979." In addition to the EIS, the corps was directed to include the states of Connecticut and New York along with representatives of the plaintiffs as members of the Inter-Agency Scientific Advisory Subcommittee on Ocean Dredging and Spoiling (ISASODS). While the PEIS was released 1½ years late, the additions to ISASODS are a mute point as the entire committee has apparently disappeared.

Historically there have been

three major areas of concern: the amount of dredging and subsequent dredge material disposal necessary in LIS; which alternative(s) is (are) the most suitable for disposal; and should disposal activities occur prior to the identification and assessment of the long term impacts. In examining these and other issues, the PEIS finds that improvement and maintenance dredging of Long Island Sound harbors and inlets is necessary for the continued well-being and growth of the region's economy, recreational opportunities and national defense. Dredging of the naturally deposited sediments requires disposal or use of the excavated material. The Corps of Engineers has studied seven major disposal alternatives available to the Long Island Sound regions. These are: (1) no action; (2) resource reclamation; (3) incineration; (4) beach restoration and nourishment; (5) dredged material containment; (6) near shore open water disposal; and (7) deep ocean (off the continental shelf)

No Action is considered by some as a viable alternative. This course of action is usually advanced by persons who do not use Long Island Sound. In addition, no action would lead the waterways to gradually fill in until harbor after harbor became impassable to commercial and recreational traffic. While being the least expensive in terms of dredging expense, the cost in terms of lost jobs, trade and recreation would be enormous.

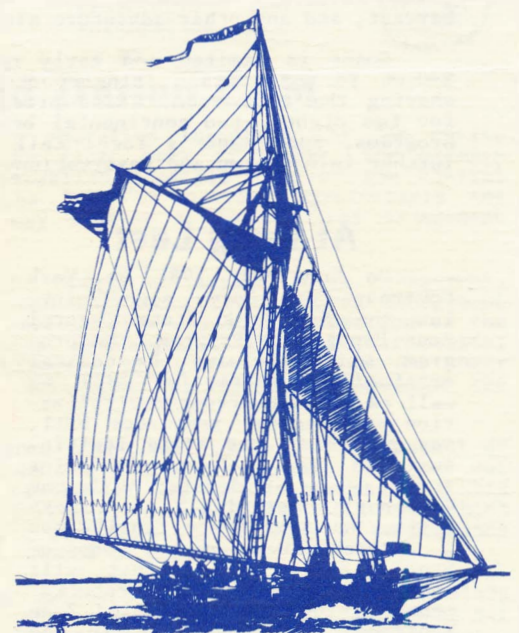
Resource Reclamation of dredged material offers many possibilities but only two appear to be remotely viable for the LIS area according to the PEIS: agricultural land enhancement and landscaping material where the dredged material would be mixed with the soil to improve organic and nutrient content. The drying and transportation costs make even these reclamation uses currently unmarketable.

Incineration using fluidized bed techniques could reduce the volume of dredged material and eliminate hazardous organics such as PCB and DDT associated with the dredged material. Inorganic contaminants such as heavy metals

would not be eliminated, though some reduction might occur. However, the cost of incineration is 3 to 15 times more expensive than open water disposal 20 miles from the dredged site. Siting of the incineration facility as well as the high cost are major concerns with this alternative.

Beach Restoration which involves the deposition of relatively clean dredged sands onto existing beaches has been a common practice where suitable material and economic transportation are available in relation to the beach in need of nourishment. Certain engineering limitations must be considered as silty material is easily eroded and use of contaminated sediments is unacceptable. The economics of this alternative are site specific and are similar to open water disposal. In cases where suitable material is available, beach restoration may be considered more desirable because of the associated benefits. Sandy beach is at a premium in Long Island Sound.

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Clearwater Sail SEE PAGE 3.

Sound Dredging

(continued from page 4)

deeper areas of LIS where storm effects are minimal.

• If low cohesion fine-grained materials with a high water content and high levels of contaminants are deemed suitable for open water disposal, capping of such spoils with cleaner material should be considered. The capping technique used in the Stamford/New Haven project appears to be satisfactory in reducing the impact of open water disposal of highly contaminated dredged material.

The PEIS' bottom line on open water disposal appears to be that while no evidence of unacceptable long term impacts have been proved at the disposal sites, the pervasive argument exists that unacceptable effects may yet accrue with continued open water disposal. During the studies that led to the PEIS, the definition and description of specific long term impacts was unsuccessful and as further studies are continued, identification of such impacts will remain difficult due to complex and interrelated environmental factors.

The issuance of an environmental impact statement for Long Island sound dredging does not solve the problem. The word "Programmatic" in front of the EIS title suggests that the report deals with the problem as a whole without making specific recommendations. However, what is most urgently needed is the establishment of specific management recommendations for the 46 Federal Maintenance projects in LIS and the numerous other private and improvement projects. The contribution of these projects can be substantial. A current feasibility study for the improvement of New Haven harbor calls for the disposal of 4.7 million cubic yards of material.

In order to establish a comprehensive management program, the finding of the PEIS must be incorporated into the NERBC Interim Plan. This plan must then be expanded to include specific guidelines. These guidelines would outline where and how dredged materials would be disposed of. As an example, Class I material would be permitted in any of the designated dump sites or to be used for appropriate uses as beach nourishment. Class II would also be allowed in any of the dump sites except where sediment analysis dictated otherwise. Class III material, if deposited in open water, would have to be deposited in a "containment" dump site (as opposed to a "dispersal" site) and capped. In addition to these guidelines, information must be updated on each of the existing federal projects. Past dredging history, current dredging need, commercial and recreational use and demand, along with future projections must be ascertained in order for a comprehensive plan to work.



Fall Whale Watch

As a result of the success of our last two Spring Whale Watches, we have now organized one for the fall in Provincetown, Massachusetts on October 24 & 25, 1981. Taking advantage of the warm (relatively speaking) waters of Cape Cod Bay, whale watchers will chance to see humpback, fin, minke, and right whales; shearwaters, gannets, petrels and other pelagic birds; and ocean fishes like the basking shark and the Malo malo (ocean sunfish).

We will meet in Provincetown Friday night where two nights accommodations have been arranged for us at the Quality Inn/Eastwood. Saturday morning, field trips will be arranged to the Cape Cod National Seashore to explore the salt marshes, salt ponds, and coastal dunes. After lunch the first two whale watches will leave the Town Wharf aboard Captain Avellar's Dolphin III. The five hour trip will travel Stellwagen Bank in search of whales, pelagic birds and other ocean dwellers.

For those interested, a reservation has been made at the Weathering Heights Restaurant after which a slide presentation will be given on "Cetaceans: Whaling to Whale Watching."

Sunday morning, the second whale watch will leave at 8:00 AM in search of whales. Returning at 1:00, the remainder of the day is free to spend leisurely returning home; enjoying the fall and the cranberry harvest; and any other adventure along the way.

Space is limited and early reservations a must. Prices range from \$90.00 for one person (single occupancy) to \$55.00 per person for four sharing the same room. These prices include two whale watches, lodging for two nights, two continental breakfasts, field trips, evening lecture programs, and leader's fees. Call the Taskforce at (203) 327-9786 for further information and reservations.

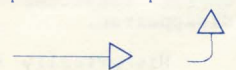
At Long Last!

On July 29th, 1981, New York Governor Hugh Carey signed into law the New York State Coastal Zone Management Program. The program, which includes the coastal erosion/dune protection bill as well as the waterfront revitalization and coastal resources bill, was passed by the state legislature in early July, following seven years of debate. With the Governor's signing of these bills, New York State finally has a comprehensive coastal management plan in place that will enable it to fulfill the requirements of the federal Coastal Zone Management Act, and qualify the State and its local governments for federal assistance in implementing solutions to coastal resource problems.

Looking For A Cheap Boat

1. Rhodes 18 fiber glass, keel sloop with Seagull outboard, full sails, in excellent condition.
2. 18½ ft. Cape Dory, Alberg Typhoon day sailer with outboard. Brand new 1981, full sails.

Both these boats have been recently contributed to The Oceanic Society and are available for sale. Please contact Mr. Ed Whitford at Rex Marine, Norwalk, CT (866-5555) or Christopher Roosevelt at The Oceanic Society, Stamford, CT (327-9786).



Finally, much to the woe of many environmentalists who feel that the greater number of permit steps, the greater the environmental protection, the permitting process must be streamlined and simplified. If accomplished, dredging operations would become more cost effective, require less time to accomplish, and environmental concerns would still be addressed.

Controversy will likely always be a component of dredging on the Sound. Controversy, however, should not prevent the adoption of a comprehensive dredging material disposal plan for Long Island Sound.

LIST News

LIST is pleased to offer another great trip through the talents of the Mountain Workshop. This weekend trip will incorporate camping, canoeing, hiking, map and compass work, natural history and geology, quaking bogs, and good camp cooking.

The trip will take place in the northwestern corner of Connecticut on the Taconic Plateau. The group will meet Saturday morning in Salisbury and head for South Pond near Mt. Riga. A tri-state vista, paddling on two lakes, fishing, a history walk to an old smelting furnace and a trip to one of the few spagnum bogs left in New England are a few of the weekend offerings.

All equipment (canoes, tents, etc.) and four meals will be provided by the Mountain Workshop. The cost of this overnight is \$70.00 per person (limited family rates available). Trip will be limited to 16-20 people on a first come, first serve basis. Call LIST at (203) 327-9786 for further information and reservations.



Demonstrating there is more than one way to catch a mackerel, Shelly shows off her eye-hand coordination aboard the R/V OCEANIC.

Sail Aboard Sloop Clearwater!

On August 21, the Hudson River Sloop Clearwater will sail into Stamford Harbor for three days and nights of sails on Long Island Sound.

A replica of an era gone by, the Clearwater is 106 feet overall above the water classifying her as a Class A "Tall Ship."

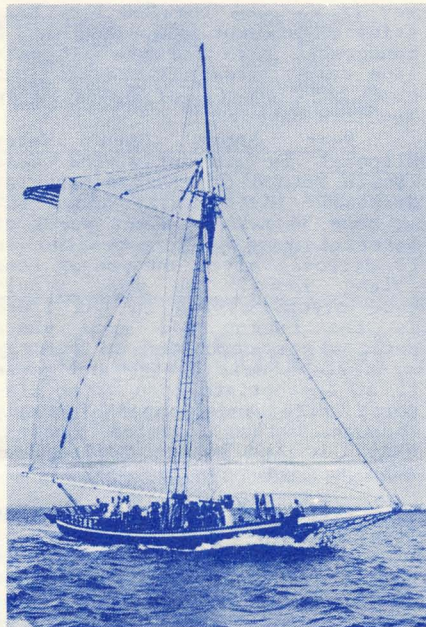
In cooperation with the Taskforce, the Clearwater will be offering three days of sails:

Friday, August 21	1-4 PM
Saturday, August 22	9-12 AM 1-4 PM 6-9 PM
Sunday, August 23	9-12 AM 1-4 PM 5-8 PM

Sailed by a professional captain and crew, the Clearwater is a sailing experience with a total sail area of 4,305 square feet for three sails and one of the largest main sails in the world.

Once clear of Stamford Harbor, sail will be made with the passengers helping haul the halyards. With sail set, a history of the vessel, some natural history of Long Island Sound, tours of below decks, and the joy of "being on the water" will occupy the time until it is time to return dockside.

The cost of these sails is \$15.00 per person, \$12.00 for LIST members. Reservations are a must. Call 327-9786 for reservations and information.



The value of volunteers is most felt when you no longer have them. The Taskforce has lost from active duty the services of Shelly Hubbard. For more than 1 1/2 years Shelly worked full time for LIST as Program Coordinator, Assistant Director, Chief sounding board, and a plethora of other duties.

Shelly now turns her attention to Law School while continuing to seat on the LIST Board of Trustees. While we will miss her at the Marine Center, we rest assured that any person who can fish for mackerel the way Shelly does can also hack Law School.



LIST to Aid Darien CAM

The Taskforce will perform a shoreline inventory for the entire coastline of Darien. Beginning the first week of August, the primary purpose of this project is to establish specific data on the coastal characteristics in order that the Town of Darien, particularly the Planning and Zoning Commission, may develop a coastal area management plan for its coastline.

Funded under a grant from the Office of Coastal Zone Management, U.S. Department of Commerce, through the state Coastal Area Management Program (CAM), this initial work will involve a visual inspection of the coast. Tidal marsh, mudflats, bluffs, seawalls, docks and other coastal habitat and structures will be mapped along with information on their size and condition. Photographs will also be taken to document the findings.

Quite often a developer or home owner will claim that a seawall or other structure has been in existence before CAM and the town does not have information that can prove otherwise. One major advantage of this shoreline inspection will be the formulation of baseline data from which the P&Z can decide whether or not a structure is new work or maintenance work and whether the proposed work should be permitted.

Darien has a 16.5 mile long coastline. The Town's land use along Long Island Sound is uniform: one acre residential zoning. Darien has not undergone the heavy coastal development pressure as have other Connecticut towns largely as a result of this uniform zoning. Whether or not the coast will fare as well in the future will rest in part on the Town's ability to formulate a strong CAM program. This cooperative project of the Taskforce and Darien P&Z is the first step toward this realization.

Containment is the deposition of dredged material inside or behind dikes made of impervious material. These facilities may form islands, shoreline extensions, or marsh restoration projects. This alternative is in use at some 200 sites in the United States. The Taskforce, in cooperation with the New England Division, Army Corps of Engineers, is currently studying the feasibility of establishing containment sites in the Sound. The feasibility of this alternative will likely be determined on a site by site basis as only relatively small sites will be appropriate for this area. In addition, ownership of the "new" land, resistance to high intensity storms, and economics will be prime considerations. The costs estimates are not well developed at this time but preliminary studies suggest a construction cost of \$2.00-5.00 per cubic yard in addition to the dredging and transportation costs.

Upland Disposal is exactly what the name implies. The feasibility of this option is dependent on availability of a site, transportation to the site, and the nature of both the site and the material to be deposited. If the site is outside the range of hydraulic pumping, the material must be dewatered and transported by rail or truck. Potential groundwater contamination and compatibility with adjacent land use are also considerations.

Historically, this option was the most common means used to dispose of dredged material. Wetlands were very commonly used for disposal sites. But as attitudes have changed toward wetlands, and upland sites continue to increase in value, this alternative has become less viable.

Upland disposal is not within the jurisdiction of the Corps. The State and/or local authorities are responsible for the designation of sites. Currently the New England River Basins Commission (NERBC) is investigating the site selection process and feasibility of upland disposal in the Narragansett Bay area. Such a

study may act as a prototype for a similar study in the LIS area. Concurrently, the New York District of the Army Corps of Engineers has conducted a preliminary survey of potential upland disposal sites within a 100 mile radius of New York City. This survey is part of the New York District's attempt to develop a management plan for the 5-8 million cubic yards of material that must be disposed of annually in New York Harbor.

Near Shore Open Water Disposal is currently the most common method of dredged material disposal. Historically about 60% or some 35 million cubic yards of material have been deposited in 19 disposal sites throughout Long Island Sound. The most widely used dredge system in the Sound is the bucket and scow where material is deposited on a barge by a clam shell dredge and towed to an appropriate open water disposal site and dumped (usually through bottom opening doors). Hydraulic and hopper dredges may also be used.

Presently under the NERBC Interim Plan for the Disposal of Dredged Material from Long Island Sound, three sites have been designated for near shore disposal: New London, Connecticut River Cornfield Shoals, and New Haven. Four new candidate sites have been proposed as the result of research conducted by Dames and Moore under contract with the Corps. These are Bridgeport, Branford, Clinton, and Block Island Sound. Eatons Neck was also considered under this study but subsequent objections from the New York State Department of Environmental Conservation led to the Corps not considering the site as a potential disposal site.

Because of the generally shorter distance to disposal sites, near shore open water disposal has largely been the most economic alternative with transportation costs averaging approximately \$0.62 per cubic yard per mile. This economy does not necessarily hold in the western end of the Sound where the distance to the New Haven site or Mud Dump

Site in the New York Bight is substantial.

Deep Ocean Disposal involves the transport of dredged material beyond the continental shelf. For material dredged in Long Island Sound, this would involve the transport of material an additional 100 miles beyond the limits of the Sound. Present equipment would have to be expanded with larger ocean-going barges constructed. Even with the capital improvements, the cost of deep ocean disposal would increase the overall cost an estimated \$6.00/cubic yard.

The PEIS further describes each alternative in regard to environmental impacts, socioeconomic impacts, and historical/archaeological impacts.

- In discussing the impacts and mitigating measures for open water disposal at the candidate sites, the PEIS finds the following: in general no adverse water quality effects are expected during the disposal of materials which have passed the appropriate testing procedures (bio-accumulation; bioassay)

- Dumping at Eatons Neck and Bridgeport during the summer has the potential for reducing already low dissolved oxygen levels. This potential problem could be mitigated by limiting disposal activity to colder months of the year.

- Disposal of dredged material at candidate sites will result in the localized depletion of benthic (bottom dwelling) species diversity but no significant loss to regional populations would result.

- Consideration of spawning and nursery areas should be incorporated into the site selection analysis. Where it is determined that a spawning area is associated with a disposal site, restriction should be placed on disposal in order to avoid spawning periods.

- In order to maintain an increased level of productivity of opportunistic species, dumping should be accomplished between January and February in the

(continued on page 2)



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