SECTION XIV

PROPOSED PROJECTS

A. INTRODUCTION

In the process of preparing the LWRP the Town has identified a wide variety of coastal zone projects to fulfill policy goals. These include initiatives to enhance and protect water-dependent uses, revitalize underutilized areas, increase public access, improve water quality, monitor and prevent damage from flooding and erosion and better understand coastal processes, and to educate citizens about coastal issues. (See Map XIV-1)

While these projects are not required for governmental administration of the LWRP, they are essential to its success as working public policy. The detailed development of the LWRP which engendered these projects has been a useful exercise in itself, but the plan must be translated into action to be truly meaningful. These projects extend the LWRP from paper policy into significant coastal zone management initiatives with tangible benefits for the Town. They are integral to the LWRP, and for the community to experience positive, concrete results from it, to provide a mandate and to maintain the political will to resolve future coastal policy issues.

Whenever possible the Town will apply to appropriate government agencies or private foundations for primary or supplemental funding for these initiatives. Availability of outside funding should not, however, prevent completing these projects on a prioritized or incremental basis within the constraints of the Town budget. They are vital to the LWRP and its successful implementation.

Proposed projects are categorized for convenience by related policy groups, although many projects overlap in purpose and serve multiple policy objectives.

B. PROJECTS LIST

POLICY GROUP/ PROJECT NAME PAGE

DEVELOPMENT POLICIES #1-6

1. Open Space Acquisition

Preserving open space is the primary way to protect ground and surface water quality, habitat, and scenic resources, and to provide for all kinds of recreation, from active sports to passive activities like birdwatching or photography. The Town Planning Department has prepared an Open Space Plan (September, 1995) designed to protect significant areas or parcels of open space through a broad variety of planning techniques ranging from clustered or large lot development to conservation easements and management agreements to acquisition. The Open Space Plan has been approved by the Town Board, and an Open Space Advisory Committee appointed to prioritize use of funds and refine open space objectives.

A number of the parcels for which acquisition is an option lie within the coastal area. While acknowledging that priorities change with time, designated parcels are listed here with the understanding that acquisition will be pursued when and if funding becomes available, as long as the property remains undeveloped. Coastal area parcels recommended for open space preservation through techniques other than acquisition are listed in the Inventory and Analysis for Development Policies #1-6, and in the Town Open Space Plan.

	SCTM#	Location
Reach 1		
	#111-1-3.1	Headwaters of Northwest Creek
	#111-3-1	" "
	#72-1-6.1/-6.2	Adjoining open space of Grace Estate, 33.8 A
	#90-1-2	Wetland parcel adjoining Northwest Creek
	#90-1-26.1	" " "
Reach 2		
	#119-2-2/-3/-4	Head of Three Mile Harbor
	#56-2-38/-39/-40/-41/-42/-46/-48	Small tidal wetlands parcels, harbor side of Sammy's Beach
	#37-2-1	Camp Blue Bay Girl Scout Camp (if/when available)
Reach 3		
	#41- -	Gerard Drive, any vacant parcels coming in for development
	#42- -	" " " " "
	#64- -	" " " " "
	#63-3-10	Accabonac Harbor shore, 15.9 A (Weitzman)
	#80-2-11.1	" " " , 26.5 A
	#80-4-6	Accabonac Harbor, old field, 1.8 A
	#83-2-1	Accabonac Harbor shore, 37.0 A
	#83-2-19.1	" " " , 3.2 A
	#83-2-20.1	" " " , 1.4 A
	#83-2-22.1	" " " , 3.3 A
	#83-6-5	Freshwater wetland, Mud Hole (part of 5.3 A)
Reach 4		

#128-1-29.3	Napeague Bay near fish factory, 1.3 A for access
#110-1-5.1/-5.2	
#110-2-10/-12.10/-12.12/-12.16/-12.6/-12.7/-12.9	Wetlands on SE side of Napeague Harbor

Reaches 5-9 (Montauk)

#7-2-9.4/-9.22	Underwater lands Lake Montauk, adjoining Town property
#12-4-4/-5	Underwater land, Lake Montauk (Star Island)
#12-4-6	Lake Montauk shore, 2.2 A
#13-2-1	Adjoins Indian Field cemetery, 1.1 A
#13-2-29	" " " " , 3.5 A, unopened private road
#15-1-14	Oyster Pond drainage shed, freshwater wetlands, adjoins protected open space, 339.8 A (Sanctuary)
#19-2-16.1/-16.2/-16.3/-16.4/-18.1/-18.2/-18.3/-18.4/-18.5/-18.6/-18.7/-20.1/-20.2/-61	Lake Montauk drainage shed, small lots ≈ 8.2A
#19-5-17	Lake Montauk shore (Squaw Cove), 2.8 A
#19-5-18	Lake Montauk, Stepping Stones Pond outlet
#19-5-22.12	Lake Montauk, Peter's Run outlet
#19-5-22.13/-22.5	Underwater land, Lake Montauk, adjacent to Peter's Run
#20-6-1	Underwater land (Stepping Stones Pond), freshwater wetlands, Lake Montauk drainage, 29.4 A
#20-6-10.1	Freshwater wetlands, Lake Montauk drainage shed
#27-2-4.1	Fort Pond Bay shore, Benson Reservation, 1.2 A
#27-3-18	Massacre Valley, Fort Pond drainage shed
#28-1-32	Massacre Valley, archaeological resources
#29-1-18.6/-19.6	Freshwater wetlands
#28-9-46.1/-46.2	Shadmoor (Bear & Schub) 98.8 A on bluffs W of Ditch Plains
#30-0-0	Lake Montauk drainage, unopened road, wetlands
#30-0-0	" " "
#32-1-35	" " "
#32-1-1	Stepping Stones Pond and Lake Montauk drainage
#32-2-2/-3/-4/-5/-35	Freshwater wetlands, Lake Montauk drainage
#32-4-31.1/-32/-33/-34	Freshwater wetlands
#44-1-2/-3/-4/-6/-7/-9	Eastern end of Hither Woods, steep slopes, 27.3 A
#48-3-8.7	" " " , 95.5 A
#48-3-36	Fort Pond shore, adjacent to Second House
#49-2-8	Freshwater wetlands
#49-4-1	Little Flower School (if/when available)
#51-1-7.2	Freshwater wetlands

Reach 10

#130-2-2	40.9 A east of Dolphin Drive, for water access

Reach 11

#197-7-15 Georgica Pond shore, 4.6 A, for public access

2. Gardiner's Island Preservation

The 3375 acres of Gardiner's Island is one of the most extraordinary troves of history and prehistory, human and natural, on the entire east coast. The island is privately owned, and although the Gardiner family heirs show every indication of being deeply dedicated to its conservation and preservation, the Town should work with them to do everything it can to ensure those goals as well. As recommended in the **Development Policies #1-6** and in the Town's *Open Space Plan* (pp. 30-32), government should work cooperatively with the heirs in facilitating a conservation plan for the island. Experts in financing, law, historic preservation, ecology and planning should work directly with the Gardiner Trust and heirs to establish such a conservation plan.

This project would enable the Town to assemble a small task force to provide research and support staff, expert consultation, and legal support. For its part the Town may wish to explore with the heirs such additional protections as tax incentives for conservation, historic district designations, habitat protections, conservation easements or other planning measures, and possible local legislation to facilitate preservation. Any tax abatement plans would also need to consider implications on revenue for the Springs School District.

3. Restoration of Marina Lane Dredge Spoil Site, Three Mile Harbor

This site, on the east side of Three Mile Harbor, has historically been used to deposit spoil from dredging of the south end of the Three Mile Harbor channel. The site is vastly underutilized and bears good potential for passive recreation as a waterfront park with public access to the water and exceptional sunset viewing across the harbor. The shoreline is disturbed and being taken over by invasive non-native species such as phragmites. The Town Natural Resources Department is interested in utilizing the site for a demonstration wetlands restoration project, with the disturbed upland area being used as a nursery area for beach grass and other seaside plants and shrubs such as beachplum for use in dune restoration and beach stabilization [in conjunction with the Town Parks Department] in other areas of the Town. The site is already being used in a limited way as a source of native species for public works.

This project would include development of a management plan to restore the site, and design and installation of a passive recreation park and native species nursery. It would involve efforts by the Town's Planning, Natural Resource, Parks and Highway Departments. An alternative dredge spoil disposal site would be needed for future dredging of the channel, or restoration could be integrated with continued use of the spoil site as a mixed use or as a temporary spoil depository for beach nourishment projects.

4. Old Fishing Station, Three Mile Harbor, Reach 2

A dilapidated fishing station near the mouth of Three Mile Harbor, purchased by the Town in 1995, offers an opportunity for reuse. Although purchased primarily to prevent commercial development in a sensitive area, the site itself is disturbed and bulkheaded, with a deteriorated building. It adjoins

the Town's Maidstone Park bathing beach with access to Gardiners Bay, and fronts on the harbor. The fishing station is surrounded by high quality saltmarsh, including shore habitat used by osprey and the federally threatened piping plover, upland dunes, and panoramic harbor views. Potential uses for the site include as a growout facility for the Town Shellfish Hatchery and wetland restoration. Some moorings for use by the Harbormaster may also work in the small boat basin, if the bulkhead is maintained. Future uses of the site envisioned by the Town will evolve further with community input.

5. Revitalize Former Fish Factory Site in Napeague State Park

The old fish factory (Smith Meal Co.) site at Promised Land acquired by New York State as part of Napeague State Park has been designated as a potential site for revitalization in the LWRP. This project would design a plan for its reuse. Limited redevelopment of the waterfront portion for passive recreation, e.g. with a public fishing pier, accompanied by public education relating to the site's history and ecology, would transform the former industrial site into a useful recreational facility for both Town and State residents. However, the site has severe development limitations due to its surrounding ecological features and lack of infrastructure. For these reasons, proposals for commercial development, a ferry terminal or active recreation (ballfields, golf courses, etc.) should be denied. The Town also opposes installation of a launch ramp because of the likelihood of increased traffic and jet-ski use. The whole of Napeague State Park is of such fragile character it should be classified as a "park preserve" in order to maintain its ecological values.

Beyond the immediate disturbed area of the former industrial plant at the fish factory, the remainder of the site is a fragile dune and wetland ecology with important habitat values, which should be maintained as undisturbed open space. The site must be carefully analyzed to determine what kind of redevelopment or revitalization is appropriate, and where it can take place.

A redevelopment plan must be consistent with preservation objectives of NYS OPRHP and the LWRP, and should provide the public with increased waterfront recreational opportunities and access to the water. It should assess potential demand and would need to address removal of debris and/or restoration of the deteriorated dock and pier area of the former fish factory, hazards from underwater remnants of former dock structures, historic preservation and documentation of the former use, environmental education, and appropriate reconstruction of the pier, with associated parking and other amenities such as toilets. Appropriate low-intensity uses include a primitive campsite for canoe/kayakers, a concession for canoes and kayaks, a picnic area, the fishing pier, and an interpretive exhibit about the old fish factory. Because of the fragility of its environment and concerns over an influx of undesirable uses [such as water scooters], numbers of users, parking and the area of the site to be used should be restricted.

In keeping with the historic use of the site, another appropriate re-use could be as a finfish hatchery, possibly for fingerling flounder, to help restore productivity to the inshore fisheries of the area. Expertise may be available from the adjoining Valenti Multi-Aquaculture facility on private land to the immediate west, or through the Town Shellfish Hatchery in Montauk. If Multi-Aquaculture finds it untenable to remain as a non-conforming use in its present location, consideration should

be given to relocating it on the fish factory site, where it could provide a living link to the local fishery that could be integrated into educational and historical programs at the site.

6. Reclamation and Park Design for Former Montauk Landfill

The former Montauk landfill is situated at one of the highest points in the Town in Hither Woods with impressive views of Block Island Sound to the north. The site would lend itself to long term reclamation, re-landscaping and park facilities for passive (picnic tables, sunset viewing) and active recreation use (ballfield, soccer field). It adjoins an extensive trail network through the preserved open space of Hither Woods, is an outstanding observation point for birdwatching and hawk migrations, especially migratory passuarines, and would also be readily accessible to residents and others making use of the present recycling and transfer facility.

7. Revitalization of Montauk Harbor

As the most active harbor and the most intensively used waterfront in the Town, as well as a primary tourist attraction, Lake Montauk deserves a coordinated planning effort to improve and enhance the land area, incorporating methods for preserving and maintaining water-dependent uses essential to the fishing industry and the maritime character of the harbor. While the needs of individual sites are addressed by private business, the Town can improve community infrastructure in conjunction with business, citizens' and commercial fishing groups, and facilitate a planning dialog on such issues as parking and lighting in the West Lake loop area, making the area more pedestrian-friendly, enhancing scenic and visual attractiveness, and improving water quality. The Town can assist with planning support and help in obtaining grants, and investigate incentives for businesses to upgrade properties.

A planning study will examine possible improvements, look at existing regulations and zoning boundaries, identify essential fish packing and fishery support facilities and analyze future needs (see *Fisheries Shoreside Support Infrastructure*), and look at ways to ensure stability of water-dependent uses and prevent their displacement, along with improving the appearance of the area and its accessability for tourists. The plan will ascertain whether current standards for WF zones adequately reflect the needs of the fishing industry and other water-dependent uses.

The project will include elements to enhance water-dependent commercial and recreational productivity in the concentrated northern section of Lake Montauk. Land uses in the Waterfront (WF) and Resort (RS) districts along north West Lake Drive and on Star Island will be analyzed with an eye toward improving or maintaining existing patterns of water-dependent uses and preserving natural wetland areas intact as buffers. Existing ACOE channel and dredging studies will be sought and incorporated. Traffic and parking patterns for the area will be analyzed and, if necessary, plans produced to increase parking capacity and improve accessibility.

The Town will organize a joint effort with waterfront business owners to connect existing walkways and/or construct additional links between docks, marinas and other waterfront facilities so pedestrians can travel unimpeded from Gosman's to the Star Island Causeway. The Town will contribute planning expertise and, possibly, financing through an improvement district. This phase

of the project will provide improved access for tourists and sightseeing, shopping, and recreational opportunities. It will add to the scenic and visual enjoyment of the harbor, increasing Montauk's desirability as a destination and enhancing the environment for tourism. It should also improve auto and pedestrian traffic by eliminating short-haul traffic between separate dock areas. The plan will also examine realignment of existing wharf lines to simplify and improve boat traffic.

In terms of water-dependent and water-enhanced uses, there is increasing pressure for traditional water-dependent uses such as commercial fishing support facilities to be displaced by higher value uses such as retail shops and other tourist oriented businesses. Maintaining existing water-dependent uses, against encroachment or displacement by water-enhanced or non-water-dependent uses is a key issue. A number of facilities in the Montauk Harbor complex encompassing Coonsfoot Cove, Star Island and northern East Lake Drive provide critical shoreside infrastructure for the Town's commercial fishing fleet, and this is the area where future commercial fishing needs will logically be met. There are also a large number of water-dependent recreational fishing and boating marinas and related businesses in the area to consider, along with the water-enhanced uses such as restaurants, lodging and fish markets which make it a focal area for tourism.

Incentives will be considered to help retain necessary shoreside infrastructure on Montauk Harbor's working waterfront. Possibilities include permitting additional combinations of special-permit water-enhanced uses in WF zones, provided they complement and supplement water-dependent uses, and tax incentives or grant assistance for improvements of water-dependent uses which provide significant public access.

Extensive consultation with civic and user groups such as the Montauk Harbor Association, Montauk Captains Association, Concerned Citizens of Montauk, Chamber of Commerce, etc. is envisioned at the outset, and public comment will be actively pursued before a plan is finalized or implemented.

8. Camp Hero Revitalization and Redevelopment

Former Camp Hero in Reach 8 in Montauk contains numerous structures and facilities left from its days as a U.S. military installation. It also encompasses an environmentally sensitive section of the Town's coastline that has little public access. Improved public access to the water through Camp Hero would address desires of surfers and recreational fishermen, and could be enjoyed by casual beachcombers and hikers. However, significant ecological resources in the undeveloped parts of Camp Hero constrain use, which should be confined to passive or low intensity recreational uses such as hiking, birdwatching, photography, etc.

Some of the structures, though deteriorated, may be amenable to restoration or conversion for recreational use, or as a museum to document Camp Hero's significant military history. Given the large radar tower and other structures on the site, leasing some structures for communication antennas could be considered in the already developed portion of the property. Likewise, using a disturbed section of the site for wind generation of electricity is another potentially compatible use, given the high wind speeds recorded in Montauk.

The site should be surveyed and inspected and a management plan developed by NYS OPRHP, with consultation and approval of the Town, with the primary goals of preserving ecological and habitat values, providing public access and enhancing passive public recreational uses. The plan should conform to the conservation goals expressed in the transfer agreement for the parcel from the U.S. Government to New York State, which specifies that no more than 15% of the site be developed. Camp Hero's unusual plant communities, including an oak/holly forest, threatened or endangered species present in the perched ponds or wetlands, and Montauk moorlands ecological systems, must be protected in the management plan. The plan should also address preservation of the site's historic resources, including artifacts and structures relevant to World War II, and to the post-Spanish-American War return of the Rough Riders to Montauk. Cleanup or removal of deteriorated structures or toxic remnants from military activities may be required before redevelopment can occur.

NYS OPRHP is currently preparing a feasibility study to determine the future use of Camp Hero. A recent proposal for a golf course on the property conflicts with the ecological and habitat values, and may violate the original conservation agreement under which the parcel was acquired by the State from the Federal government. From a planning standpoint the golf course proposal is inconsistent with the goals of the LWRP, and should be rejected by the Town, New York State and by the Federal government.

Passive and low intensity park and recreational uses that limit impacts on the site's wetlands, plant communities and historic resources are appropriate for Camp Hero; more intensive uses with associated impacts are not. A "park preserve" designation would be consistent with its high habitat and ecological values.

9. Revitalize the Hamlet of Montauk

The Montauk hamlet is the second largest commercial center in the Town with the highest concentration of motels, restaurants and other facilities for transient guests. The numerous motels along the oceanfront are greatly enhanced by their coastal location, indeed, many are built directly on the dunes, and their reason for being is proximity to the beach. These water-enhanced uses contribute significantly to the resort economy of the Town. The hamlet includes a business area radiating from the traffic circle presided over by East Hampton's sole [six-story] skyscraper, both artifacts of Carl Fisher's day when Montauk was slated to become the "Miami Beach of the north". Much of the present motel and other resort construction dates from the post-war boom of the 1950's, pre-dating zoning and site plan review. Much of it is aging and will progressively require refurbishing in the foreseeable future.

With the cooperation of Montauk's pro-active business community, the Town has an opportunity to help revitalize the downtown business area. As aging structures begin to require renovation the Town will form an active partnership with the community to shape the future Montauk hamlet into an attractive and prosperous area, and address potential problems from parking and traffic flow to flooding and erosion. The Town can contribute to this partnership overall planning, site plan and design expertise, and facilitate an exchange among business owners and citizens groups to devise community goals and draft a planning framework for future development and redevelopment.

Implementation of the resulting plan will seek to improve common infrastructure such as parking, sidewalks, parks and active recreation sites, enhance visual appeal and formulate community standards that will augment the entire area.

SIGNIFICANT HABITATS POLICY #7

10. Townwide Habitat Inventory, Management, and Restoration Plan

This project will identify and map the major Town habitats, including their flora and fauna, in publicly owned open space areas (especially in designated Nature Preserves). The inventory will identify habitats at risk, and those that are already disturbed or degraded and prioritize them according to their significance, size and degree of disturbance or degradation. Open space areas will be inspected and checked annually to assess habitat conditions and environmental degradation.

Management plans consistent with habitat conservation for Town owned open space areas will then be developed. Maintenance of habitat for threatened and endangered species will be a priority, with other LWRP goals to be included, such as maintaining public access. Management plans will also work to resolve conflicts with other uses. Restoration plans will be developed for those habitats that receive high priority.

Examples of habitats to be inventoried are:

grasslands, maritime red cedar groves, tidal wetlands, freshwater wetlands, deciduous forests, mixed hardwood forests, pine barrens, heathlands, dunes, strands, shores, beaches, streams, coastal ponds, and tidal embayments.

Examples of habitats to be restored are:

eelgrass beds, degraded wetlands, phragmites-invaded marshes, exotic-invaded woodlands, overgrown grasslands, destabilized dunes, dredge spoil sites, silted up embayment bottoms and coastal lagoons.

11. Interagency Management Plans

Interagency management plans should be prepared on a cooperative basis for a number of areas in the Town that have overlapping interests. Some of these areas, affected agencies, and management concerns include the following:

Napeague State Park, old fish factory: NYS OPRHP and Town of East Hampton; public access to water, fishing pier, low-impact canoe/kayak camping area, dune habitat

Napeague Harbor: Town of East Hampton and NYS OPRHP; windsurfing area on west side, ORV traffic on east side to Goff Point and around to Napeague Bay side, wetland, dune and beach habitat

Hither Hills/Hither Woods/Montauk County Preserve: NYS OPRHP, Suffolk County Parks Department, Town of East Hampton; trails, fire management, ATV's, upland habitat, avoid large scale uses

Camp Hero/Sanctuary: NYS OPRHP and Town of East Hampton; habitat, public access to the water, trails, historic resources, military theme park/museum, eliminate golf course or other large scale use

12. Interpretive Signs

This project serves multiple purposes of public education and environmental and habitat protection. By posting interpretive signs at overlooks and in sensitive locations such as dunes, marshes, trailheads, etc. users acquire respect and knowledge about the place they are seeing. For instance, dune signs would emphasize the critical role of beachgrass in anchoring the dune system, the role of the dune itself as first line of erosion defense, etc. They would also indicate foot trails or board walks to control pedestrian impacts. Where habitat restoration is underway, signs can explain the project. The sign at the Hither Hills overlook designed by Judy Cooper some years ago is a good example of interpretive signage that is informative and visually interesting.

Sign designs should blend in and complement the site without obstructing views or being obtrusive. It should be relatively easy to develop a standard set of sign texts and graphic formats for various site-types and habitats, dunes, beaches, saltmarsh, etc. The sign can be customized for individual sites on computer, printed out on a color ink-jet printer, and laminated or adhered to plexiglas for outdoor use. If the designs are sufficiently handsome, they can be printed and sold as limited edition posters by the Town -- which may also provide an incentive for collectors not to steal them ! Design criteria would also require weatherproof long-lasting mounting and installation, probably through a professional sign contractor.

The project will seek joint sponsorship from local business or a business group, such as the Business Alliance, Chamber of Commerce, etc.

13. Wetland Restoration

This project will have several components, described below, each designed to address a significant aspect of wetland loss or degradation. It also integrates with a number of other proposed projects, including *Restoration of the Marina Lane Dredge Spoil Site, Interpretive Signs, Eelgrass Restoration, Drainage and Runoff Mitigation for Georgica Cove and Wainscott Pond, Road-end and Beach Access Modifications, Stormwater Abatement, Open Marsh Water Management (OMWM), Harbor Management Plans, Harbor Protection Overlay District Homeowner Education*, etc.

13a. Phragmites

Phragmites is an invasive species that has been taking over wetland areas and crowding out longstanding native marsh communities. NRD has mapped phragmites incursion, which ranges from 10-50% of marsh surface surrounding local harbors. Every harbor and most of the larger coastal ponds have phragmites populations at present. Several methodologies have been proposed for

inhibiting phragmites, some of which involve the use of herbicides (Rodeo, Roundup), others of which are purely mechanical in nature. In order to maintain the integrity of existing marsh communities, the Town proposes to use non-chemical, non-intensive mechanical methods. An experimental phragmites removal effort at Pussy's Pond adjacent to Accabonac Harbor was undertaken in 1993, and appears to be successful.

The phragmites component of wetland restoration will employ periodic cutting down phragmites followed by flooding [using tidal cycles or impoundments such as *OMWM*, or pumping]. Cutting weakens the plant, then salt causes osmotic shock, further weakening the phragmites plant and allowing other in situ native species to gain a competitive foothold and repopulate the phragmites areas. The project will begin with a single harbor, and progressively add one harbor per year. Project requirements will include permitting, staffing, equipment and monitoring, including photo documentation.

13b. Marsh Replanting

Nearly every harbor and pond in the Town's coastal area has some section of degraded or otherwise compromised fringing marsh or wetland. All these disturbed areas will be inventoried and prioritized for restoration. Degraded areas will be regraded and replanted with native species gleaned from borrow sites at other Town marshes. Two sites have been replanted successfully to date, therefore the Town has confidence that these methods will work at other sites. Harvest and planting techniques are low impact, using simple hand tools which disturb marsh soils minimally. Project needs include permitting, plant materials, staffing, equipment and monitoring, including photo documentation.

Replanting efforts will be posted with signs (see *Interpretive Signs*) to explain the restoration effort, educate on the value of wetlands, and prevent further damage. The Town intends to establish a native plant nursery, which would potentially supply much of the plant material for these projects (see *Marina Lane Dredge Spoil Site*). Any marsh replanting projects adjacent to a Trustee harbor will require Town Trustee approval.

13c. Native Vegetation Buffers

Buffers adjacent to marshes and surface waters serve many important ecological and habitat needs. This project would have both public and private components. On the one hand the Town will undertake to reestablish native vegetative buffers on municipal property adjoining marsh areas, and also at road ends to filter stormwater runoff (see *Road-end and Beach Access Modifications*).

A second public education component with demonstration plots will encourage homeowners with lawns or grounds adjoining wetlands or marshes to install native vegetation as a means of preventing pollutants from entering marshes or surface waters. The proposed Town native plant nursery at the Marina Lane site would be a potential source for plant material (see *Restoration of Marina Lane Dredge Spoil Site*, and *HPOD Homeowner Education*).

13d. Alewife Runs

Alewives and other anadromous fish seek fresh or brackish ponds and streams to spawn or reach reproductive maturity, but traditionally prolific sites in the town have been compromised by

development, diversions, obstructions or chronic water quality problems. This project will seek to restore previously productive streams and ponds by reopening streams and stream beds, improving access for fish through modifying and cleaning culverts, and improving local water quality as outlined above and through some of the methods noted in other projects. Annual monitoring of fish runs will record effectiveness.

14. Eelgrass Restoration

Subaquatic vegetation, primarily eelgrass (*Zostera marina*), is a vital element of the bay, harbor and creek habitats of the Peconic/Gardiners Bay system. Meadows of eelgrass support a myriad of marine organisms and provide shelter for finfish fry and shellfish, especially the bay scallop. Since the onset of the Brown Tide algae blooms in the mid-1980's, and possibly due to other factors of degraded water quality or excess nutrients, eelgrass beds have declined precipitously.

As part of a Peconic Estuary Program Grants for Action Plan Demonstration Projects, Cornell Cooperative Extension, Suffolk County, East Hampton Town Natural Resources Department and East Hampton Town Trustees, are conducting an experimental pilot project to restore eelgrass in three different East Hampton harbors, Three Mile Harbor, Accabonac Harbor and Northwest Creek. In the past these harbors had large healthy eelgrass meadows, but in recent years, since the visitations of Brown Tide algae, there has been very little growth.

Stock for transplanting is gleaned from different local areas, a variety of planting methods are employed, and surrogate beds are chosen on different sediment types and in different hydrographic conditions. Sites selected include: one each in Accabonac Harbor and Three Mile Harbor, and two in Northwest Creek (north and south). Healthy eelgrass plants(shoots) are collected from thick meadows at natural sites located in Hog Creek and in Northwest Harbor.

Once successful transplanting and culture techniques are sufficiently developed the program will be expanded to restore eelgrass beds in harbor and creek areas where they have declined. This is a crucial step for restoring the inshore bay scallop fishery, formerly one of the most important to the local baymen. Eelgrass is a barometer of the health and productivity of inshore waters. Any eelgrass restoration projects iwhtin Trustee harbors will require Town Trustee approval.

15. Beach Habitat and Coastal Processes Test Area

This project will provide a control area to observe and compare natural vegetation and habitat isolated from human uses. Isolated areas of beach with typical geological and topographic characteristics will be selected to establish references for several bay and ocean beach habitat types within the community.

These areas will serve as baseline control areas for information on coastal habitat and ecology restoration in other parts of the Town. They will also provide comparative data for flooding and erosion policy, conservation of natural protective features, and determining how shorebird nesting habitats and beach vegetation develop naturally without human interference.

If possible, sufficiently isolated beach sites should be found where it is unnecessary to restrict public access. Designated sections of bay and ocean beaches should receive appropriate signage to limit intensive human activity in the test area. Town Trustee approval may be required, depending on the location.

16. Roadside Wildflower Habitat, Scenic Byways

Road shoulders of many of the Town's back roads in the coastal area support indigenous populations of wildflowers, some of which are threatened or endangered. Populations of birdsfoot violet, lupine, and several species of orchids have probably subsisted since wagon road days, but are now threatened by road widening, mechanized highway equipment, mowing, and other practices more typical of suburban than rural roads.

This project would identify roadsides with significant or threatened indigenous populations, produce management plans, and work with local, County and State Highway Departments to promote habitat management for indigenous wildflowers and use of native, non-invasive species for road shoulder revegetation. In general roadsides covered with healthy native vegetation experience less surface runoff, soil erosion and siltation than those covered with non-native grasses. In addition, the native vegetation is hardier, has historic value, and provides scenic and esthetic amenities.

In coordination with LWRP Historic and Visual Resources Policies #23-25, some routes may also be designated as scenic byways (see also *Scenic and Visual Resources Survey and Protection Program*).

COMMERCIAL FISHING POLICY #10

17. Fisheries Shoreside Support Infrastructure

This project addresses the future infrastructure needs of the local commercial fishing industry to assure continued access to shoreside facilities and explore possibilities for future development, consonant with the goals of the LWRP. Though existing commercial fishing facilities appear adequate for the present, future needs of the inshore and offshore commercial fishing fleets may change and land use alterations may affect shoreside infrastructure that provides essential support for the fishing industry. Existing facilities will be analyzed in detail, shortcomings determined, and future needs identified in active consultation with local commercial fishermen. A local Right-to-Fish Law will be drawn up and implemented to insure fishing activities are not curtailed or harassed by nuisance complaints, although such water-dependent uses are protected under §915 of Article 42 of NYS Environmental Law.

The Town will identify potential sites at Montauk and Three Mile Harbors where land may be acquired or designated for future fish packing, dockage, or other commercial fishing uses (see *Revitalization of Montauk Harbor*). Consideration will be given as to whether future needs can be best met by private enterprise, or whether the Town should help to finance, build or operate additional fish packing, processing or distribution facilities.

The existing Waterfront (WF) District designation will be reexamined in individual Harbor Management Plans, with a view toward creating a sub-category Commercial Fishing zone for packing or dock facilities with fewer requirements as to the land-related uses, e.g. parking, but more specific use restrictions. Current zoning will also be further analyzed to determine whether adequate protection is offered to water-dependent fishing support activities, in addition to the protections afforded under §915 of Article 42 of NYS Environmental Law. For instance, the Multi-Aquaculture facility on Napeague Bay is important to the local fishing industry as the base of the live-fish market. As it is a non-conforming use in a residential zone, consideration should be given to its continued existence in its present location, and to its relocation if necessary, possibly to the adjoining former fish factory site on NYS OPRHP land.

Present distribution networks and past attempts at alternative distribution schemes, such as cooperatives and an ill-fated state project in lower Manhattan, will be reviewed and future alternatives explored in consultation with local commercial fishermen and distributors.

18. Local Fishery Assistance

Fisheries management and coastal zone permitting agencies need to weigh the costs and assess the impact on fisheries of environmental degradation due to marina construction, boating pollution, navigational congestion, and pressure on stocks from recreational anglers (e.g. where recreational landings are greater than commercial harvests). However, in many of these areas concrete data is lacking as a basis for regulation or improving fisheries management, and other levels of government lack manpower and resources to adequately monitor local conditions.

This project will allow the Town to retain a fish and wildlife specialist in the Natural Resources Department to monitor water quality, shellfish and finfish stocks, and to act as an advocate and liaison for management of traditional local fisheries with appropriate state and federal agencies. The Town's Natural Resource Department will upgrade its water-testing capabilities to monitor water-quality and maintain health standards for shellfish beds. See *Water Quality Monitoring*.

FLOODING & EROSION POLICIES #11-17

19. Hazard Mitigation Plan

This project will synthesize recommendations from the Flooding and Erosion section of the LWRP with a Town hazard assessment program being carried out under a grant from FEMA through the NYS Emergency Management Office (SEMO). The Hazard Mitigation Program will identify critical infrastructure for restoration or risk reduction, identify mitigation measures for flooding and erosion prone areas, and recommend appropriate areas for floodproofing, redevelopment, relocation, buyouts, or other mitigation in the event of 1) flooding and erosion events within the parameters of the 30 year storm, using NFIP Hazard Mitigation or other funds, and/or 2) catastrophic storm damage, using Stafford Act funds in conjunction with a Federal disaster declaration.

20. Hurricane Damage Mitigation Plan

The Hurricane Damage Mitigation Plan (HDMP) is a detailed plan to include measures for pre-storm mitigation, evacuation and recovery plans, and post-storm reconstruction and redevelopment. It will be designed to reduce pre-storm risks, assist in damage assessment, and supply a reconstruction and redevelopment blueprint for the Town in the event of a catastrophic storm, helping Town and other governmental agencies to prioritize recovery resources in a well thought-out manner.

It will pay particular attention to public infrastructure, including reconstruction and/or relocation of damaged roads, water and sewer lines, restoration of public facilities and public trust lands, because these are areas where government can exert direct control. The HDMP will augment existing civil defense and emergency response with land use and mitigation plans and will work to minimize loss of life and property and more effectively plan for the aftermath of various category storms.

Elements of the plan will do the following:

Pre-storm mitigation

Mapping and Geographic Information Systems (GIS): Produce a unified map integrating flood zones from FIRM's, CEHA zones, SLOSH areas of inundation from various categories of storms and hurricanes, historical shorelines and contemporary erosion rates with Suffolk County Tax Maps (SCTM's). Integrate satellite and aerial photos showing underwater shoals, etc. to indicate littoral patterns and sediment trends. Consolidate previous studies by other agencies, and integrate current Town initiatives such as proposed erosion mitigation at Ditch Plains. Analyze natural protective features such as dunes and bluffs, note and map areas of vulnerability. This phase of the HDMP would be best performed on a GIS system. The maps and other data will then be used to:

a) designate local erosion hazard areas;

b) generate preliminary parcel recommendations for post-storm reconstruction and redevelopment, and identify areas requiring intensive review for post-storm redevelopment, such as Beachampton and the Montauk business area;

c) identify potential post-storm open space acquisitions;

d) identify areas of potential overwash or breach of the coastal barrier and formulate priorities for closing or stabilizing breaches;

e) produce remedial strategies to restore deteriorated features to full protective capacity, e.g. dunes at Kirk Park, Montauk damaged by excessive pedestrian summer traffic;

f) identify arterial roads (e.g. Montauk Highway at Napeague and Georgica) where storm flooding and erosion may necessitate emergency repairs or future protection, and work with Town Highway Department and NYS DOT to stockpile necessary equipment and materials;

g) identify critical public infrastructure and facilities in hazard zones, such as water, power and sewer lines, fuel supplies, etc.

h) identify areas where flooding and salt intrusion may impact wells, and develop contingency plans for drinking water in these areas;

i) identify areas that may be subject to increased storm flooding or erosion from long term sea level rise, and phase in reconstruction restrictions for these areas.

Inventory public infrastructure in hazard zones, propose mitigation measures, and coordinate emergency restoration of services with local Civil Defense plans.

Develop a public awareness program on coastal hazards, coastal processes, how land forms respond to coastal dynamics, local ordinances, and the implications of living in impacted areas. Scientifically based knowledge of human impacts on flooding and erosion, and an understanding of the hazards of living adjacent to the coastline are important to improving coastal zone management. Public and private property owners should be made aware that their properties are potentially subject to severe coastal flooding and coastal storms.

To increase public awareness, property in coastal hazard areas will have that designation recorded on tax maps and official records in municipal clerks', assessors', and building inspector's offices. In addition, properties in coastal hazard areas should be required to be so designated by real estate agents, lending institutions, and in contracts of sale for pending property transfers.

Publish a homeowner's guide to environmentally benign, non-structural and soft solutions to flooding and erosion problems, including native plantings, techniques for dune reconstruction, protecting beach grass, etc.

Develop local initiatives to limit new development or expansion of existing development in flood and erosion hazard areas. For instance, the Town may wish to limit additions or accessory buildings in areas such as Sammy's Beach and Gerard Drive, and require flood-proofing whenever construction is permitted. (However, flood-proofing should not be construed to permit multi-story construction.)

Develop better guidelines, local laws, and public education to limit damage to beaches, beach vegetation and habitat caused by ORV's.

Seek to expand undeveloped coastal barrier designations under the Coastal Barrier Resources Act on storm-damaged portions of the island. (LIRPB 1984 Hurricane Damage Mitigation Plan for South Shore)

Insurance: Survey homeowners in areas of potential flooding and erosion to determine participation in NFIP. Encourage participation in NFIP to the maximum extent legally possible (e.g. houses on bluffs are eligible as well as those in V- and A- zones). Confer with local insurance agents to set up coordinated post-storm damage assessment and claims adjustment. Survey carriers' risk exposure and insurance availability within Town's coastal zone to make sure continuing coverage remains available [and affordable ?] after a catastrophic storm.

Check commercial sites located in flood hazard zones for potential flood-borne dispersion of hazardous or toxic materials and potentially hazardous water-borne debris, e.g. lumber, fuel, pesticide or chemical tanks, etc., and require mitigation measures where necessary. New facilities with potential hazards should not be sited in flood hazard zones.

Update Town building code to include latest hurricane and flood proofing standards in cooperation with NYS agencies, Town Building Department, and representatives of insurance industry.

Enact Town local law for CEHA administration to provide permitting consistency in erosion hazard areas, both NYS and locally designated.

Formulate a long-term program to adapt zoning and planning procedures to the changing coastline, shoreline recession, storm activity, rising sea level, etc. For example, the Town will put in place mechanisms to periodically reevaluate and adapt coastal setbacks to erosion rates and flooding conditions.

Evacuation and recovery planning

Set up a contingency plan to survey the Town's coastline with aerial photography and video following major storms, and coordinate with the Erosion Monitoring Project and NYS DOS to conduct ground-based pre- and post-storm beach profile surveys.

Use the mapping techniques above to identify flood and erosion-prone parcels, analyze lot size in relation to existing and potential setbacks, with options for reconstruction, relocation or acquisition for each lot. Integrate with existing Town Open Space and Public Access plans to target areas for acquiring open space or improving public access in the wake of a storm.

Devise a post-storm damage assessment and inspection procedure based on the mapping procedures above, to rapidly determine which residential and commercial structures should or should not be rebuilt, where floodproofing to NFIP standards is required, where structures should be required to relocate landward, where land should be acquired or condemned by the Town [or State] if the structures are destroyed, where leases of public trust land should be terminated or phased out, etc. As above, identify public infrastructure at risk and develop damage assessment and emergency plans for restoration of services and facilities.

Develop mechanisms for rapid claim processing and condemnation proceedings in coordination with FEMA and SEMO.

In coordination with Civil Defense evacuation procedures, use mapping above to evaluate critical evacuation areas and potentially untenable shelter sites (e.g. Springs School, which according to the SLOSH model, could be flooded in a Category 3 or greater hurricane). Analyze sites of emergency generating facilities (e.g. LIPA's Montauk substation in Fort Pond). Check plans for stockpiling of medical and other supplies, communications and generating equipment, availability of heavy equipment, etc. with mapping as above. Assist with planning aspects of local Civil Defense plan, and help to coordinate with appropriate State and Federal agencies, such as SEMO and FEMA.

Post-storm reconstruction and redevelopment

Prepare contingency response plans for closing breaches in coastal barriers and reconstructing vital highway arteries damaged by flooding or storm overwash. Prepare an emergency dredging plan for reopening harbors and inlets closed by storms.

Using the studies above identify areas and parcels where post-storm emergency reconstruction should be permitted, where reconstruction should not be permitted, and which parcels should be acquired using federal disaster funds. Prepare information and forms for applicable buy-out provisions of NFIP and, in cooperation with FEMA, prepare ready off-the-shelf applications for [Stafford Act] Federal Disaster Relief for properties identified for acquisition.

Institute a moratorium on post-storm reconstruction in areas questionable for reconstruction pending completion of the HDMP. Examine practices and standards for temporary

emergency reconstruction in permitted areas to make certain new temporary structures will not be made permanent.

Establish emergency municipal bonding authority for reconstruction and for acquisition of designated areas, and identify other sources of funding and bridge financing, both governmental and private [e.g. Nature Conservancy, local banks].

Explore establishing special local property taxing districts to pay for erosion control and beach nourishment projects that benefit groups of individual homeowners. To support local erosion control activities, the Town could impose a surcharge on property taxes for all properties located within V-zones or Coastal Erosion Hazard Areas and a lesser surcharge on all other shoreline property located within A-zones. Rather than being used for pay-as-you-go funding, the local surcharges and/or district taxes could be used to pay off revenue bonds sold to finance local erosion control projects which warrant prompt action (Source: Governor's Erosion Task Force Report, Volume II, pg. 178).

Analyze erosion control structures on the shoreline and designate by tax map number those eligible for in-place in-kind reconstruction, those which require full permit review or may not be reconstructed, and those which should be removed if damaged more than 50%, or if shoreline recession renders them non-functional.

In cooperation with the Association of Marine Industries, prepare a post-storm reconstruction plan for marinas and commercial docks in the primary harbor areas of the Town, viz. Coonsfoot Cove in Lake Montauk and the east side of Three Mile Harbor. This plan could include future hazard mitigation and remediation including floodproofing, relocating structures, upgrading of aging septic systems (see Policies 31-40 + 44), restoration of vegetative buffers and natural shorelines, etc. It could also provide opportunity for other improvements, such as an integrated harbor walkway at Coonsfoot Cove proposed to facilitate public access (see *Revitalization of Montauk Harbor*).

21. Visual Inventory of Existing Waterfront

Establish a visual database for future planning of the Town's coastline, especially as relates to land use and erosion policies. Shoot high quality video from helicopter of existing LWRP covered waterfront (shoreline + 1500 ft. inland). Video should be time-coded and frame numbered so images can be later accessed and scanned for image analysis. Also, acquire multi-spectrum SPOT satellite photos with digital data for analysis of resources. Video should be shot at a season when there is no foliage and atmosphere is of maximum clarity (late fall, early spring). Make sure data formats will translate to Town GIS system so images can later be transferred to optical disk or similar system for comparative use.

[Dr. Stephen Leatherman at U. of Md. suggests that video mapping of the coastline [for comparative erosion mapping] be conducted on an annual basis. His formula is to shoot from a helicopter at 150-200 ft, traveling about 40 mph and with an audio track identifying location, then log the information

with time code into a computer database. He also suggests additional inventory after major storms or hurricanes.] See *Erosion Monitoring* and *Scenic and Visual Resources Survey and Protection*.

Pre-arrange post-storm helicopter inventories of the Town coastline (for 2-3 days after a major coastal storm) with Air National Guard through DOS and local Congressional delegation.

22. Coastal Erosion Monitoring Project

With 110 miles of coastline, East Hampton's shores encompass some of the world's finest ocean beaches along its Atlantic shore and protected bay beaches along the Peconic-Gardiner's Bay system to the north. These beaches, dunes, and bluffs and the property adjoining them are frequently exposed to damaging flooding and erosion from nor'easters, tropical storms and hurricanes, as well as the constant force of wind, waves, tides and the encroachment of rising sea level. Erosion hazards and sea-level rise are probably the two most critical coastal policy issues for the decades to come. If global warming accelerates the rate of sea level rise and leads to increased frequency and severity of storms and hurricanes, problems of coastal flooding and retreating shorelines will increase dramatically. It is important to plan for and work to minimize these environmental impacts rather than simply react to successive storm emergencies.

The need for good data on erosion is pressing to ensure the efficacy of public policy and planning responses. Present information on coastal erosion for East Hampton Town is primarily anecdotal or outdated, or from broader studies of the south shore of Long Island. Proper methodology and scientifically acceptable local data are important to identify specific erosion hazard zones for planning purposes.

Many past responses to erosion, whether by individual homeowners or various levels of government, have caused more harm than good. Engineered solutions of the past such as groins, seawalls and other structures have accelerated the loss of beaches and in some cases deprived citizens of public access.

This project will help establish a long term shoreline monitoring system and database for the Town, effectively involve people in erosion related environmental issues, and provide an information based forum for changing perceptions and developing local erosion policy. The project is designed with two components, one for development of information and one for development of policy alternatives.

The information and coastal planning component of the project has three parts: 1) acquiring an aerial visual record of the Town's existing coastline using video and still photography; 2) ground-based quantitative surveys of selected beach erosion test sites; and 3) an historical shoreline analysis of the Town's coastline using aerial photographs and photogrammetric techniques. Some of the work can be performed by Town personnel while other parts, particularly technical photogrammetry, will, at least initially, be contracted to consultants with required expertise.

The public policy component will consist of researching and developing policy alternatives and solutions for erosion problems, and educating the public on the issues in white paper reports and

through public access video. This part of the project will address how people can live along the coast without disrupting coastal processes such as storm erosion, historical shoreline changes and sea level rise. It will examine coastal environmental, development and legal aspects, and offer legislative alternatives to local government.

As a community whose resort economy is literally built on sand, it is important that erosion policy solutions for East Hampton be produced through an unthreatening process of education and community consensus. In a regional context and because of the National Estuary Program designation of the Peconic Bay Estuary, this small Town program may also serve as a model for other communities on Long Island.

23. Storminess History and Statistical Model

This project will establish a detailed storm history for the Town, through research of local documents, anecdotal recollections and non-local (NOAA, NWS, etc.) storm records of tropical and extra-tropical (nor'easter) storms that have affected East Hampton.

This record will be correlated with such cycles as the El Niño occurrences, with available tidal records, and with the aerial photo record (see historical shoreline change analysis in Erosion Monitoring Project above). An attempt will be made to develop a predictive model for probable periods of storminess and consequent flooding, erosion and property damage using statistical techniques. This data will be correlated to other factors having an impact on the Town's coastline such as sea level rise, effects of human development and alterations to the coast such as dredging.

24. Sea Level Rise Model

This project will develop a GIS computer model for the Town shoreline under different sea level rise scenarios for the next 50-100 years. It will identify areas of greatest concern, with prospective erosion and inundation rates, with computer graphic simulations of predicted shoreline positions correlating sea level and local coastal topography. It will include analysis of possible increased hurricane activity due to global warming, using SLOSH model and FIRM's to identify vulnerable areas.

The project will also develop policy alternatives for protection and/or orderly retreat of natural features such as beaches and wetlands, critical community infrastructure [such as Montauk Highway], and for private property. It will present the various alternatives in a series of white papers to local government and to the public through conferences and video presentations (see *Public Education*).

25. Erosion Control Districts

The Town will research models and mechanisms for Erosion Control Districts for neighborhoods surrounding sections of the Town's coastal zone where beaches and other natural protective features are being degraded or are particularly susceptible to erosion. As part of the project the Town will set up a model district for beach restoration in a sector where beaches have been damaged by human

activity, e.g. erosion control hard structures. In conjunction with local citizen groups it will explore innovative solutions for beach nourishment and/or restoration, as well as possible funding mechanisms. The Barnes Landing/Accabonac Cliff area in Reach 3 and Sound View Drive in Reach 6 are possible sites (see also *Hurricane Damage Mitigation Plan*).

26. Northwest Creek Channel Relocation, Feasibility Study

This study would consider relocating the Northwest Creek inlet channel to it's original position at the eastern end of the baymouth spit, in order to improve navigation, circulation and water quality in the Creek. Since moving the channel to its present location it has required frequent dredging, and water quality has deteriorated, due in part to decreased flushing. As part of this study any resulting dredge spoil should be considered for deposition on Barcelona Neck or the toe of the bluff south of Cedar Point, for beach nourishment and/or bluff stabilization.

27. Accabonac Harbor North End Sluice, Feasibility Study

Proposals for re-opening the former sluice at the north end of Accabonac Harbor, or opening a second inlet along the Gerard Drive causeway, have circulated for years. The purpose would be to improve flushing and circulation and reduce siltation within the harbor. Such a solution could be combined with redesign of the causeway to ameliorate the nearly annual washouts of the roadbed there. The study would evaluate effects on the tidal range and circulation, on the shellfishery and shorebird habitat, as well as flooding and sedimentation within the harbor.

28. Fresh Pond Channel Erosion Stabilization and Widening

The inlet to Fresh Pond shoals up continually and has eroded part of the Town park and picnic area. This project will shorten or remove the jetty at the north side of the inlet and widen the inlet to allow for increased flushing and to stabilize the north side of the park against further erosion. Saltmarsh vegetation will be reestablished along the inlet following any excavation.

29. Montauk Harbor Channel Sand Bypass System

The jetties stabilizing the inlet to the Federal channel at Montauk Harbor have interfered with littoral transport of sediment, contributing to the significant erosion problems along Sound View Drive and Captain Kidd's Path to the west. This project will analyze the various causes of erosion in the vicinity, with emphasis on the impacts of the jetties, and propose possible solutions to the erosion problems. One objective will be to design, fund and implement a sand bypass system to equalize any sediment deficit in the area immediately downdrift of the jetties. Since the inlet is a Federal channel dredged and periodically maintained by the Army Corps of Engineers, and the jetties were built and are maintained by the ACOE, Federal funding should be utilized to conduct a feasibility study and determine funding for this project.

30. Ditch Plains Erosion and Remediation Study

A consultant working with the Town will determine causes and possible solutions to erosion problems at the Town bathing beach and neighboring municipal land at Ditch Plains in Montauk. The study is designed to establish baseline and historical information for the shoreline at Ditch Plains, assess causes of erosion and potential extent of risk from future flooding and erosion, and propose remedial "soft" strategies for approval by the Town Board. An EPF matching grant has been awarded to the Town by NYS DOS to assist with this project. The study phase is expected to be completed during 1998.

31. Drainage Mitigation, Georgica Cove

A drainage system that emanates from Route 114 and empties into Georgica Pond through an outfall at Cove Hollow in East Hampton Village constitutes a substantial input of stormwater runoff which acts to increase flooding [and pollution] in the pond. Partly as a result of the drain, the pond is prone to substantial fluctuations in water level, resulting in periodic flooding of basements and septic systems on bordering properties even under relatively normal conditions. This project will analyze and propose design and engineering solutions for the run-off entering the Cove Hollow drain with the goal of eliminating or limiting input to Georgica Pond by natural filtration or other diversion of waters emanating from this watershed. It will require a cooperative arrangement with the Village of East Hampton.

32. East Hampton/Southampton Cooperative Run-off Mitigation, Wainscott Pond

Flooding in Wainscott Pond is exacerbated by runoff from fields and roads to the northwest, a drainage corridor that culminates in the pond through the culvert near the Wainscott School. Much of these floodwaters originate in Southampton Town, therefore mitigation should be an inter-municipal effort.

This project would develop a cooperative inter-jurisdictional agreement culminating in joint actions by both Town's Highway and Public Works Departments to reduce and otherwise mitigate road and agricultural run-off entering Wainscott Pond. It will analyze watershed characteristics and run-off patterns and recommend strategies for capital improvements to divert, impound and filter upland floodwaters.

In addition to alleviating flooding this project will improve water quality by reducing non-point pollutants entering the pond from road run-off, agricultural chemicals, nutrients and sediments. Improved water quality will also enhance habitat for the many native and migratory species that utilize the pond.

33. Reduce Impacts of the Federal Groins on Wainscott Beach

A 1989 study by coastal geomorphologist Stephen Leatherman discusses the adverse impact of the Federal groins on the Wainscott beach and indicates the desirability of mitigating their downdrift effects. Leatherman states "There is an obvious and unacceptable adverse impact of these groins on the Wainscott shoreline... resulting in the wave-eroded and storm-susceptible downdrift beaches...." Similarly, a 1991 study by the Marine Science Resources Center at SUNY Stony Brook

notes "the shoreline change is approximately 15% to 20% greater for the existing, long Federal groins condition."

Potential remediation includes removal or shortening of the Federal groins to improve sand bypass and restore littoral drift. Leatherman suggests the two Federal groins be shortened by 205 feet to bring them in line with the updrift State groins, which "would go a long way to correct the present shoreline problem." This action would require approvals from County, State and Federal agencies, particularly the Army Corps of Engineers. An August 1984 report (appended in Leatherman) commissioned by the Army Corps on removal of the groins states "the short-term effects of removing the groins at the Easthampton (Georgica Pond) groin field and the Ocean Beach groin field should not be dramatic, since both of these fields are nearly filled and effectively by-passing."

This project will assemble available research and anecdotal information on the groins and their effect on neighboring beaches, work to develop a cooperative political approach with East Hampton Village, conduct engineering and feasibility studies on possible remedial solutions, assess support of affected property owners, research possible sources of funding for remedial actions, and seek necessary permits from State, Federal or other involved agencies.

PUBLIC ACCESS AND RECREATION POLICIES #9 & 19-22

34. Improve Public Access to Ocean Beaches

The Town's south shore ocean beaches are some of the finest in the world and are a primary recreational resource for residents, tourists, renters and second-home owners. Parking at the Town's ocean bathing beaches is inadequate for peak summer crowds, and available space for expansion is limited onsite. The bathing beaches themselves can accommodate more people without overcrowding and the Town needs to develop ways to expand public access to these beaches.

A system of additional offsite parking with shuttle transport is one way to meet existing and future demand for getting people to designated bathing areas. The Town also needs to plan for possible future development of additional public bathing beaches, and has previously purchased land in the Napeague section of Town for one such facility.

As part of this project the Town Planning, Parks, Natural Resources and Highway Departments will:

1) Study existing and projected future demand for Town beach facilities and parking by residents and non-residents, and analyze potential sites for new or expanded facilities. A list of options to meet future demand will be prepared, including at least the following two actions.

2) Conduct a feasibility study for offsite parking areas in Amagansett and Montauk with shuttle transportation ("Bus to the Beach") to the Town's primary bathing beaches at Atlantic Avenue and Indian Wells Highway in Amagansett, and Kirk Park and Ditch Plains in Montauk.

3) Prepare a plan for the Assembly of God property purchased by the Town in Napeague to develop it as a municipal bathing beach, with attendant facilities, parking, etc., addressing relevant environmental concerns for the fragile dune ecology, potential flooding and erosion, and colonial shorebird nesting habitat.

35. Road-End and Beach Access Modifications

Many of the Town's road ends leading to beaches are simply exposed pavement used for parking, pedestrian and ORV access to the beach. In heavy rains there is direct run-off from the road system onto the beach and into surface waters, and in times of severe coastal storms the road ends may act as open flood corridors, exacerbating inland flooding. The heavy summer traffic from pedestrians and ORV's inhibits growth of natural beach vegetation that could act to filter pollutants and preclude erosion.

This project proposes to reduce flooding and erosion by eliminating or changing the topography of flood corridors, and improve surface water quality by filtering or recharging non-point pollutants from road run-off. Habitat restoration will also be an objective as part of revegetation efforts. To accomplish these objectives the Town will:

Survey and prioritize exposed road ends and accesses according to severity of problems. In consultation with coastal experts, design a variety of appropriate landscaping and paving solutions that are appropriate to bayshore and ocean conditions. The project will result in a design matrix adaptable to a variety of road end conditions.

Create and vegetate low dunes at exposed road ends where flooding is a potential problem, with pedestrian walkways and designated vehicular access corridors where appropriate.

Erect snow fence and revegetate dunes or access points damaged by excessive pedestrian and/or vehicular use to prevent erosion (examples: Kirk Park in Montauk, vehicle access at east end of Marine Boulevard in Amagansett).

Maintain visual access to water views by creating viewing platforms with seating or elevating road ends to provide views over the dune.

Reduce impacts of ORV use on beaches where vegetation or dunes have been damaged or inhibited through some or all of the following measures: a) additional regulation, b) fencing of vegetated areas, c) improved public education, d) increased enforcement of beach vehicle regulations.

[N.B. An EPF grant from NYS DOS was received by the Town Natural Resources Department in 1996 for the study and design phase of this project.]

36. Public Access & Recreation Improvements

Public Access and Recreation Policies #9 & 19-22 recommend a variety of measures to improve access to the water and recreational use of the coast and to resolve use conflicts. While in aggregate these recommendations would be costly, a modest program of annual capital improvements will result in substantial incremental progress at a reasonable cost to the Town.

Proposed capital improvements, acquisition of access points, and projects to redesign accesses to reduce impacts (e.g. dune walkovers) or use conflicts are listed here and proposed for implementation as funding becomes available either from the Town budget or from outside grants. A number of the proposals would be included within or integrated with *Road-end and Beach Access Modifications, Wetland Restorations* or other projects. This is a working list which will be periodically updated. See *Map VII-1A and 1B* for locations.

Location/ Description	**Improvement Opportunity**
Reach 1	
CEDAR POINT PARK	Parking, wetland restoration (phragmites has invaded Alewife Pond), close access seasonally to Cedar Point to protect nesting shorebirds
NORTHWEST CREEK/NORTHWEST HARBOR	Water quality improvement, wetland restoration, phragmites has invaded wetlands
NORTHWEST HBR CTY PARK (NW CREEK)	Benches, bike racks, repair launch ramp, canoe/kayak potential campsite, interpretive signs, parking, picnic tables, parking lot could be improved, fence point seasonally for nesting shorebirds, erect educational sign
BARCELONA NECK	Bike racks, wetland restoration, phragmites along golf course driveway
MILE HILL ROAD END & TOWN PROPERTY	Bike racks, pedestrian access, relandscape to reduce flooding
GRACE ESTATE	Interpretive signs, wetland restoration, phragmites has invaded south of Alewive Brook Road
ALEWIFE POND	Wetland restoration

ALEWIVE BROOK ROAD END	Launch ramp should be improved, presently in disrepair
Reach 2	
HEDGES BANKS DR. - W END, TOWN	Remove private property sign, pedestrian access, parking could be accommodated by widening road R.O.W.
HEDGES BANKS DR. - MID, HOMEOWNER	Bike racks
HEDGES BANKS DR. - MIDDLE, SUF. C0.	Bike racks, parking could be accommodated by widening road R.O.W.
HEDGES BANKS DR. - OLD WOOD LNDG	Bench, bike racks, remove berm, parking could be accommodated by widening the road R.O.W.
OLD HOUSE LANDING ROAD END	Bike racks, restore road-end
SAMMY'S BEACH	Bike racks, interpretive signs, restrict vehicle access seasonally to protect nesting shorebirds, educational signs
THREE MILE HARBOR	Acquire public access, access to west side of Harbor needed
HANDS CREEK	Acquire public access, water quality improvement, wetland restoration, phragmites has invaded wetlands
HANDS CREEK ROAD END & TOWN PARK	Bike racks, interpretive signs, trail
DUKE DRIVE ROAD END	Acquire public access, pedestrian access, possible launch area to replace loss of historic launch area at Dominy's Point.
SPRINGY BANKS ROAD ACCESS PATH	ORV access, pedestrian access, dirt road until fence of private property.
HAMPTON WATERS (CEDAR POND)	Wetland restoration

HAMPTON WATERS BEACH ASS'N	Wetland restoration, phragmites has invaded wetlands.
GARDINER COVE ROAD-END	Garbage cans, wetland restoration, phragmites has invaded the wetlands.
BOAT YARD ROAD END	Wetland restoration, phragmites has invaded wetlands.
TOWN DOCK - BOAT BASIN	Bike racks, picnic tables
MARINA LANE (EH TOWN)	Interpretive signs, picnic tables, scenic viewpoints, trail, wetland restoration, phragmites has invaded wetlands
TOWN DOCK - GANN ROAD	Benches, bike racks, garbage cans, minimize potential conflicts between recreation and commercial fishing uses.
HARBOR VIEW LANE ROAD END	Pedestrian access
FOLKSTONE ROAD END	Benches for sunset viewing
OLD FISHING STATION	Benches, fishing pier, garbage cans, launch ramp, parking, scenic viewpoints, should be used in conjunction with Maidstone Park, possible moorings in Three Mile Harbor (subject to approval of the Town Trustees), water quality lab and shellfish hatchery uses (see **Development Policies**)
MAIDSTONE PARK	Bike racks, garbage cans, parking, rollerblading, scenic viewpoints, tennis, trail, sign, "Dangerous Currents" on channel side
HOG CREEK	Acquire public access, water quality improvement, wetland restoration, protected navigable access needed near mouth of Creek, fence nesting areas seasonally to protect shorebirds

HOG CREEK HIGHWAY ROAD END	Wetland restoration, wetlands at head of Creek have been disturbed, possible launch for hand carried boats, canoes, etc. ... but no space to park and dangerous curve in road
Reach 3	
FIREPLACE ROAD END	Bike racks, interpretive signs
ACCABONAC HARBOR	Acquire public access, water quality improvement, PA recommends Town purchase land or obtain easement to west side of Harbor for vehicular access to edge of meadow, pedestrian access to water for clamming
LANDING LANE ROAD END	Benches, interpretive signs, scenic viewpoints, wetland restoration, launch ramp is in disrepair and should be removed, should be used as a launch area without ramp
COMBER PARK - OLD STONE HWY & LOUSE POINT RD	Scenic viewpoints, trail, wetland restoration, phragmites has invaded wetlands
GERARD PARK	Benches, bike racks, garbage, interpretive signs, fence shorebird colony and close entire bayside of Gerard Drive beach to vehicles Apr 1-Aug 15
GERARD POINT	Benches, bike racks, garbage cans, interpretive signs, scenic viewpoints
LOUSE POINT BEACH	Benches, parking, picnic tables, scenic viewpoints, wetland restoration, phragmites has invaded wetlands
SPRINGS SCHOOL	Trail
PUSSY'S POND	Water quality improvement, wetland restoration, ongoing wetland

	restoration projects to remove phragmites
PUSSY'S POND PARK	Benches, bike racks, garbage cans, interpretive signs, parking, picnic tables, trail, wetland restoration, ongoing wetland restoration projects by Town and Cornell Cooperative Extension
BARNES LANDING	Benches, bike racks, garbage cans, apply daytime vehicle restrictions (10 a.m. to 6 p.m.)
ALBERTS LANDING ROAD END	Bike racks, apply daytime vehicle restrictions (10 a.m. to 6 p.m.)
LITTLE ALBERT'S LANDING	Bike racks, apply daytime vehicle restrictions (10 a.m. to 6 p.m.)
FRESH POND	Water quality improvement, wetland restoration, phragmites has invaded the wetlands
FRESH POND PARK & ROAD END	Bike racks, interpretive signs, trail, wetland restoration
ABRAHAMS LANDING ROAD END	Bike racks

Reach 4

NAPEAGUE BAY	Acquire public access from Cranberry Hole Road by acquiring SCTM #128-1-29.3
FISH FACTORY PIER	Provide public access for fishing pier, pedestrian access through park, develop primitive canoe/kayak campsite
BAY VIEW AVENUE ROAD END	Remove "Private Road" sign, parking, pedestrian access, wetland restoration, swimming
TRUSTEE LANDS AT LAZY POINT	Benches, [dry] toilets, garbage cans, parking for windsurfers
CRASSEN BLVD./ NAPEAGUE POND	Scenic viewpoints, wetland restoration
NAPEAGUE ST. PK.(North)	Benches, bike racks, canoe/kayak potential campsite, fishing pier, garbage cans, interpretive signs, parking, scenic viewpoints, toilet facilities
NAPEAGUE HARBOR RD.	Launch ramp, sign "Fragile Habitat", close road behind dune and revegetate
TOWN PARCEL, NAPEAGUE HARBOR RD.	Interpretive signs, trail
HITHER HILLS/WALKING DUNES (St Park)	Benches, bike racks, canoe/kayak potential campsite, garbage cans, interpretive signs, picnic tables, scenic viewpoints, restrict vehicles from Walking Dunes
GOFF POINT	Fence seasonally to protect nesting shorebirds, signs
ART BARGE (MUSEUM OF MODERN ART)	Pedestrian access to beach

Reach 5

FORT POND	Wetland restoration
SECOND HOUSE	Benches, bike racks, garbage cans, interpretive signs, picnic tables, trail, wetland restoration
LIONS FIELD/ MONTAUK POINT STATE BLVD. RECREATION COMPLEX (see also p.XIV-34)	Ballfields, soccer, basketball, rollerblading, tennis, benches, garbage cans, parking, pedestrian access, picnic tables, scenic viewpoints, toilet facilities
HITHER WOODS	Benches, bike racks, canoe/kayak potential campsite, garbage cans, interpretive signs, scenic viewpoints, trail
FORT POND BAY	Acquire additional public access from Navy Road for swimming, access on SE shore for commercial fishermen
BENSON POINT DOCK	Boat dock, fishing pier, launch ramp, pedestrian access to beach
MONTAUK MOUNTAIN	Trail, important maritime grass and heathlands, maintained by TNC
ROUGHRIDER DOCK	Boat dock, fishing pier
TOWN BEACH AT NAVY ROAD	Benches, bike racks, garbage cans, parking, scenic viewpoints, toilet facilities
TOWN SHELLFISH HATCHERY	Interpretive signs, scenic viewpoints
CULLODEN POINT	Bike racks, canoe/kayak potential campsite, garbage cans, interpretive signs, parking, pedestrian access, swimming, scenic viewpoints, trail (Town management plan)

MONTAUK RECYCLING CENTER	Ballfield, basketball, benches, bike racks, garbage cans, ORV access, parking, picnic tables, rollerblading, scenic viewpoints, swimming pool, toilet facilities, trail
RESERVED AREA W. OF FLAMINGO RD.	Trail w/ potential for scenic appreciation only
Reach 6	
LAKE MONTAUK	Acquire public access, additional access needed to western shore, new launch ramp on east shore, proposed coordinated walkway through Coonsfoot Cove (see pedestrian access below), remediation/restoration of wetlands and ditches along West Lake Dr. and Ditch Plains area could reduce pollutants and minimize flood potential
GOSMAN'S DOCK	Pedestrian access
TOWN DOCK AND ROAD END	Pedestrian access
MONTAUK FISH DOCK/DURYEA'S	Pedestrian access
TUMA'S DOCK (JOHNNY MARLIN'S)	Pedestrian access
SALIVAR'S DOCK	Pedestrian access
VIKING DOCK	Pedestrian access
UIHLEIN'S	Pedestrian access
PIER ONE	Pedestrian access
MONTAUK MARINE BASIN	Pedestrian access
MONTAUK SPORTSMAN'S DOCK	Pedestrian access
OFFSHORE SPORTS	Pedestrian access
THE LANDINGS	Pedestrian access

LAND'S END	Pedestrian access
CAPTAIN'S COVE	Pedestrian access
WEST LAKE FISHING LODGE	Pedestrian access
SNUG HARBOR	Pedestrian access
STAR ISLAND YACHT CLUB	Pedestrian access
STAR ISLAND CAUSEWAY	Acquire public access
TOWN R.O.W. OFF WEST LAKE DRIVE	Pedestrian access
STEPPING STONES POND	Acquire public access, wetland restoration may improve water quality in southern Lake Montauk
BIG REED POND	Wetland restoration
SOUTH LAKE DRIVE ROAD END	Benches, bike racks, upgrade comfort station with model composting toilet to help improve water quality.
UNNAMED ROAD OFF EAST LAKE DRIVE	Launch ramp, acquire adjacent underwater lands SCTM #7-2-9.4, 7-2-9.22 (see Open Space Acquisition)
WEST JETTY BEACH	Bike racks, separate parking from spoil area with pilings, revegetate upland spoil, snowfence to reduce wind-borne sand movement
EAST JETTY BEACH	Benches, picnic tables, close access to vehicles, redirect through County Park
MONTAUK COUNTY PARK	Reduce heavy summer vehicle load on beach, seal holding tanks at entrance
MONTAUK DOWNS STATE PARK	Trail

Reach 7

OYSTER POND	Wetland restoration to prevent phragmites from invading but area contains too many protected plant species to disturb otherwise, close road around Oyster Pond to vehicle traffic, improve pedestrian trail
FALSE POINT (North side)	Fence off ½ mi area around seal haulout, from mid-Nov to Apr 30, allow pedestrian access along bluff top
MONTAUK STATE PARK (North)	Bike racks, garbage cans, interpretive signs, scenic viewpoints

Reach 8

MONTAUK STATE PARK (CAMP HERO)	Develop low impact water access open to hiking, surfcasting, etc., interpretive signs, trail, wetland restoration; upland parking area closer to Turtle Cove
CAMP HERO BALLFIELD	Parking, picnic tables
MONTAUK SANCTUARY	Acquire public access, garbage cans, interpretive signs, parking, pedestrian access, trail[s]

Reach 9

RHEINSTEIN PARK	Interpretive signs, trail, wetland restoration
SHADMOOR	Acquire public access, pedestrian access, scenic viewpoints, swimming, trail[s]
DITCH PLAINS	Pedestrian access only, close beach to vehicular traffic
RHEINSTEIN PARK	Restrict ORV traffic from park
MONTAUK HAMLET	Restrict vehicle access to S. Edison and S. Eton road ends

KIRK PARK (South)	Bike racks, revegetate dune at walkway
BENSON RESERVE AREA	Acquire public access, garbage cans, interpretive signs, parking, scenic viewpoints
TOWN OVERLOOK	Benches
GURNEY'S INN	Pedestrian access to beach
Reach 10	
HITHER HILLS STATE PARK (South)	Interpretive signs
BEACH PLUM COURT (Town Rsv Area)	Interpretive signs
EH TOWN (FORMER ASSEMBLY OF GOD)	Develop as bathing beach, benches, bike racks, garbage cans, parking, toilet facilities
NAVAHOE ROAD END	Bike racks, close beach seasonally 4/1-8/15 to protect nesting shorebirds [except for commercial fishermen], fence colony and erect signs
DOLPHIN DRIVE/ATLANTIC DRIVE	Close beach seasonally from 4/1-8/15 to protect nesting shorebirds [except for commercial fishermen], fence colony and erect signs
SEA BREEZE ESTATES	Acquire public access, interpretive signs, ORV access, swimming, prime shorebird nesting area
DOLPHIN DRIVE ROAD END	Benches, bike racks
ATLANTIC DRIVE ROAD END	Benches, bike racks
NAPEAGUE STATE PARK (South)	Interpretive signs
SHIP WRECK DRIVE R.O.W.	Acquire public access, bike racks, garbage cans, improvements after dedication of the road to the Town.

WHALER'S LANE R.O.W.	Bike racks, garbage cans
MARINE BLVD. E END	Establish narrower right-of-way for vehicles, restore blow-out in dune, revegetate, snowfencing, parking at road-end, signs
NAPEAGUE LANE ROAD END	Benches, bike racks
BEACH AVENUE R.O.W.	Bike racks, garbage cans
BLUFF ROAD DOUBLE DUNES	Interpretive signs, scenic viewpoints, trail, wetland restoration, acquire additional land or obtain easements to create a contiguous ecosystem, phragmites in man made pond, possible scenic view from Bluff Road, TNC maintains boundary markers and identification signs
INDIAN WELLS BEACH	Benches, bike racks, picnic tables
Reach 11	
BEACH LANE ROAD END	Bike racks, increase parking, improve drainage
TOWN LINE ROAD END	Bike racks, garbage cans
GEORGICA POND STATE ACCESS, RTE 27	Bike racks, garbage cans, interpretive signs, launch ramp [for shallow draft boats], picnic tables
GEORGICA POND	Acquire public access (see PA report and below), water quality, close beach to ORV's 4/1-8/15, except emergency vehicles & commercial fishermen, fence shorebird colony
HOPPING PARCEL, GEORGICA POND	Acquire public access
MATHEWS ROAD, GEORGICA POND	Acquire public access
WAINSCOTT POND	Acquire public access

Note: The Town Trustees do not support the beach vehicle restrictions proposed for Sammy's Beach (p. XIV-26); Gerard Park, Barnes Landing and Little Albert's Landing (p. XIV-28); Walking Dunes (p. XIV-29); Navahoe Road End and Dolphin Drive (p. XIV-32); and Georgica Pond (p. XIV-33).

37. Canoe/Kayak Water Trail System with Low-impact Campsite Network

This project will establish a water trail system extending through the Town from Northwest Harbor to Montauk. Associated with it will be a linked series of low-impact rustic campsite areas for canoers and kayakers at roughly one-day paddle intervals. Possible locations include Northwest or Cedar Point County parks; the old fish factory site in Napeague State Park at Promised Land; and the reserve area of Culloden Point in Montauk. The project will involve planning and coordination between Town, County and State agencies, and consultation with user groups to develop an action plan, and to seek necessary permits and funding for development of the water trail system.

38. Lions Field/ Montauk Point State Boulevard Recreational Complex

Utilizing state land originally designated for the right of way for Montauk Point State Boulevard, the Town will expand its Lions Field ballfield to accommodate demand for recreational facilities. Plans include two ballfields, a soccer field, basketball courts, a rollerblading rink, and tennis courts, with associated amenities including parking, benches and scenic viewpoints, pedestrian access to Fort Pond, garbage cans, toilet facilities, etc. Facilities will be spread out so as to minimize impacts to the natural resources surrounding Fort Pond, and will include areas to the east of Flamingo Road and adjoining the Montauk Library.

39. Management Plan for Lazy Point Road End

This popular windsurfing access to Napeague Harbor receives an overload of traffic in an area with fragile dune and wetlands which are being affected by vehicle and pedestrian traffic. A management plan is needed to address problems caused by the existing use, conflicts with the natural resources and other users (e.g. clammers), and to coordinate the several jurisdictions of East Hampton Town, the Town Trustees, and Napeague State Park which have management responsibilities for the area.

The plan would need to assess present and future use of the site, including its use for competitions and rental activities, adequacy of parking and sanitary facilities, and appropriate changes in regulations, and resolution of use conflicts consonant with resource protection.

HISTORIC & VISUAL RESOURCES POLICIES #23-25

40. Town Historic Building and District Update

In 1989 - 1990, Robert J. Hefner was commissioned to conduct an intensive level survey and study of the historic and architectural resources of the town. This Historic Preservation Report provided recommendations for properties and districts eligible for listing on the National Register of Historic Places. A public hearing was conducted on the findings and recommendations of this report, changes were made and the report was adopted into the Town Comprehensive Plan. However, none

of the recommendations have been implemented: no districts were designated and no legislation was adopted. This project will review and update this report to incorporate structures that previously were not within the 50-year historic designation but are now more than 50 years old. This may bring in many of the World War II structures, primarily in Montauk and some in Amagansett, that were not yet eligible under the previous survey. Surveys from the report will also be updated to review integrity of previous sites and account for recent development.

The project will also coordinate this work with the preparation and implementation of a *Historic District and Building Preservation Local Law*.

41. Historic District and Building Preservation Local Law

As recommended in the Town's Historic Preservation Report, the Town has prepared (October 1999) a townwide local law to provide regulations to preserve and enhance buildings nominated or eligible for listing on the national register of historic places. The law provides for architectural review to maintain harmony with the historical characteristics of a landmark or historic district. The jurisdiction of the Architectural Review Board has been expanded to evaluate applications for construction, alteration, removal, or demolition affecting designated landmarks, historic sites or structures within historic districts. Historic districts have not yet been designated townwide, but are being considered and evaluated for several areas.

Separate legislation based on an inventory and/or sensitivity model of significant cultural, historic and prehistoric sites is identified as a separate project.

42. Cultural Resources Inventory and Identification Matrix

Tasks of this project will be to:

1) Inventory and map all known areas of historic and pre-historic significance. Archaeological and culturally significant sites documented in the literature as well as sites discovered through the phased investigations required at the time of development should be included. Research should also include a survey of local lore, historic maps and documents to identify economic and cultural features of historical importance, such as former wharfs, fish processing sites, whaling facilities, communications networks, old trails and roads, etc.

2) Develop a probability model to assess the likelihood of an area having historic or prehistoric significance. This model would evaluate all identified areas of known significance (refer to task 1 described above) mapping and correlating them with natural and cultural features such as navigable water bodies, drinking water sources, shellfish beds, topography, old trails, local lore, etc.

3) Develop local legislation to protect areas of known historic and prehistoric significance. The law would require incorporation of the probability model into planning procedures and building permit inspections, and in areas identified by the model as potentially significant

would require phased archaeological research and preservation to be conducted in accordance with state and federal standards before development occurs.

43. Coastal Oral History Project

A series of video-recorded interviews will be conducted with Town elders to record the history of the Town's waterfront. Baymen, fishermen and other residents will be interviewed about traditional fishing techniques, how the coastline has changed, old access points, and general reminiscences on East Hampton's rich waterfront history. This could be a sub-project of the *Cultural Resources Inventory*.

44. Scenic and Visual Resources Survey and Protection Program

East Hampton has an extraordinary endowment of unique and irreplaceable coastal scenic resources. These scenic resources are the backbone of the Town's resort economy. This project will identify and categorize the scenic and visual resources within the coastal zone. The Town will conduct an inventory and analysis of scenic resources consistent with standards and criteria developed by the NYS DOS Scenic Areas of Statewide Significance (SASS) program. The Scenic Inventory and Analysis will build on the Town's proposed *GIS for Coastal Zone Management*. A narrative will be prepared discussing the role of scenic resources in the cultural history and economic life of the Town, as experienced by residents, visitors and the many distinguished visual artists who have depicted East Hampton coastal scenes and activities over the years. Emphasis will be placed not only on natural landscapes, but also on traditional marine landscapes that relate to commercial fishing and other water-dependent uses. Implementation procedures will be developed to better protect scenic resources, including siting and design guidelines, land use regulations, policies and procedures for preserving scenic resources, and for initiation of the State SASS.

Aesthetic values are necessarily relative. An observer's position in relation to a scene, or movement through the landscape in a car or boat, affects their impression. An observer in a house in the dunes may be delighted by the water view, but someone viewing from behind the house or from the water may consider it an eyesore. Distance shifts the emphasis from details to overall patterns. Ephemeral effects of seasonal change, foliage altering visibility, weather related clarity of the atmosphere, fog, moisture, and the vagaries of sun and cloud cover, all further affect our visual perception. Views can also be scenic or unattractive depending on viewer interpretation of values. For example, the radio tower at Napeague is a large structure interrupting a natural wetland vista, which might put it in the unattractive category. However, the tower is also a longtime landmark which evokes nostalgic feelings, which could classify it as scenic.

Some controversy is unavoidable when aesthetics are involved. However, a broad consensus is often shared by people on what they consider either scenic, visually attractive or unattractive and this consensus can be quantifiable. Using a variety of planning techniques to inventory and evaluate scenic resources, for example visibility and viewshed analyses, and social research methods like preference surveys to quantify public appreciation of views and open space, aesthetic considerations can be systematized and codified to provide better visual resource protection. In an inventory, scenic values can be categorized and values assigned to aesthetic elements and views, with critical

input from the public to characterize favorite viewpoints, vistas and scenic routes. Visual eyesores should be identified that need attention. Planning procedures and zoning regulations can be developed to minimize visual impacts and safeguard scenic resources through setbacks, site planning, landscaping, height restrictions, architectural review and other common sense measures to minimize the impact of development.

Products to be generated by the project include:

- A resource library of postcards and art reproductions depicting historical Town scenes
- A slide library of the coastal region incorporating aerial, ground and water-based perspectives keyed to a base map (see also *Visual Inventory of Existing Waterfront*)
- Classification of the Town's coast into visual districts
- Identification and mapping of coastal viewsheds
- Identification and mapping of key viewpoints
- Identification and mapping of visual subunits
- Completion of visual inventory forms
- Visual inventory of the Town's coastal area
- Survey to rate public interest and reaction to the identified sites and to identify any additional sites that may have been overlooked in the inventory
- Visual evaluation of the Town's coastal area
- Identification and narrative description of areas suitable for SASS designation
- Visual analysis maps
- Design guidelines for managing future development within scenic areas
- Implementation recommendations for policy guidelines, local laws and regulations, and planning procedures
- A manual for government combined with a citizens' handbook, accompanied by slide or video presentations, to educate property owners and planning and zoning personnel on the benefits, methods and regulations for protecting scenic and visual resources

WATER & AIR RESOURCES POLICIES #31-44

45. Watershed Management Plans

Using GIS, the Town will map primary and secondary watersheds within the coastal area, to assist in controlling non-point source pollution, stormwater and road run-off abatement, and septic waste remediation. Maps will inventory and identify all road drains and catchments, ditches and other drainage inputs into the harbors and creeks, and will be used to develop a pollution mitigation plan for each harbor. Hydrological data from test wells will be introduced to determine groundwater underflow, and determine areas vulnerable to saltwater intrusion or entrainment of pollutants into surface waters.

46. Stormwater Abatement

Stormwater runoff is a significant source of pollutants in surface waters of the Town. Runoff carries chemical contaminants, sediments, nutrients and organic wastes that adversely affect the purity of harbors, creeks and bays, compromising marine habitat and reducing biological productivity and recreational enjoyment of these critical resources.

The Town has undertaken a program of capital improvements to reduce the impacts of stormwater runoff, including road drainage catchments, marsh pond impoundments, and an *Open Marsh Water Management (OMWM)* program to restore the filtering mechanism of saltmarshes. The Town has maintained a consistent commitment to carrying out such projects. However, the program has been administered on an ad hoc basis and is subject to annual budget constraints.

This project would seek to place the road drainage and catchment program on a well-planned footing, consistently funded in the Town's capital budget over a multi-year time span. Individual stormwater abatement projects will be surveyed and prioritized, and engineering, permitting and capital funding needs will be identified, grants sought out and/or funds raised and committed through Town bond issues. Staff time will be dedicated for engineering, permitting and follow-up and coordination between Town agencies and with State permitting agencies. A feasible number of site improvements will be scheduled annually, and a concerted effort made to address all significant stormwater runoff problems in the Town within a set time. A stormwater database of inputs and abatement work will be established to monitor progress.

Innovative methods for capturing and filtering runoff will be researched and tested, and the program will be integrated with other water quality and habitat initiatives of the LWRP (*Eelgrass Restoration, Georgica Cove Drainage Mitigation, Wainscott Pond Cooperative Runoff Mitigation, OMWM, Water Quality Monitoring, Septic Leaching Into Harbors Experiment, Alternative Septic Systems Pilot Project, Beneficial Dredging to Improve Water Quality, and No-Discharge Zone*).

47. Open Marsh Water Management (OMWM)

Wetlands and saltmarsh are extremely productive lands, not only for marine plants and animals, but for warm-blooded terrestrial and avian animals as well. As development has consumed, altered or otherwise compromised the natural saltmarsh environments resulting pollutants have decreased fishery productivity and precipitated closures of shellfish beds in inner harbors and creeks.

Studies have shown that much of the pollutant loading is channeled through ditches and culverts in the wetlands installed over the last 70 years for mosquito control purposes. Vector control ditches by their design are intended to drain the surrounding wetland area. In addition to providing habitat, vector control ditches appear to act as direct conduits for fecal material from warm-blooded animals into receiving surface waters.

Open Marsh Water Management (OMWM) is a technique that seeks to restore the natural water flow and filtration function of the wetlands, and has been used elsewhere for habitat restoration and natural control of mosquitos. In cooperation with the Marine Program of Cornell Cooperative

Extension Service the Town Natural Resources Department has conducted two pilot studies of OMWM in Accabonac Harbor and Northwest Creek. The results have been encouraging, and the project has been expanded to 50 acres of tidal wetland in Accabonac Harbor and 25 acres in Northwest Creek.

Small dams constructed of wood or sand bags are installed near where the ditch enters the creek or embayment. The top of the dam is set at a level to allow flood tides to enter the ditches near the end of the flooding cycle. On the ebb, tidal water is trapped and/or diverted to larger channels that enter the embayment closer to the bay's inlet, where pollutants are more rapidly dispersed by increased tidal flushing.

This simple low cost approach appears to be an effective method for mosquito control and for lowering fecal coliform levels in receiving waters. In addition to providing enhanced habitat for mosquito predators such as killifish, OMWM prolongs residence time for fecal bacteria in the marsh, accelerating decomposition by allowing additional UV exposure and grazing by other organisms, lowering the numbers of coliform bacteria used by NYS DEC to certify water quality in shellfish harvest areas.

This project will expand OMWM to additional tidal wetlands in the Town's enclosed harbors, creeks and embayments, provide personnel for installation and monitoring, as well as equipment and materiel. Projected benefits include habitat restoration and enhancement, surface water quality improvement, natural mosquito control, enhanced fishery productivity, and possible reopening of waters now uncertified for shellfishing.

48. Water Quality Monitoring Project

This project will continue and amplify an ongoing program by the Town Natural Resources Department for sampling and testing of selected surface water sites to monitor water quality. As part of it the Town will develop in-house capability for analyzing these samples for relevant pollutants, in coordination with NYS DEC and the National Shellfish Sanitation Program (NSSP) shellfish quality assurance programs to insure better compliance and regular data collection for health standards for local shellfish beds. This will assist the Town's goals for improved water quality and minimizing shellfish closures in Town waters.

The project proposes that the Natural Resources Department equip and staff a water testing laboratory, with the aim of eventually attaining certification by NYS DEC, to perform coliform and other testing such as salinity, dissolved oxygen, etc. As NYS DEC and the NSSP have stringent standards and requirements for testing procedures, a feasibility study should be conducted beforehand of requirements for compliance with NYS DEC standards, including an analysis of costs of construction, certified equipment, staff training and operating costs to determine whether such an installation would be cost effective.

The test program will be used to monitor sources, types and quantities of pollutants, and to aid and monitor the Town's various efforts to improve water quality. Testing will be coordinated with NYS

and NSSP shellfish quality assurance programs to help resolve the Town's ongoing difficulties over shellfish closures.

A second component of this project will be a comparative analysis of water quality as related to eelgrass production, subaquatic vegetation and plankton that provides important habitat and food sources for juvenile bay scallops and other organisms (see *Eelgrass Restoration*). This phase of the project will be coordinated with research and management objectives of the Peconic Estuary Program and other local and regional water quality initiatives, and is not dependent on NYS DEC certification.

49. Septic Waste Remediation

Infiltration of septic waste into the Town's surface waters and groundwater is an unseen and insidious source of pollution of largely unknown dimensions. Many residences in proximity to the water have inadequate septic systems that predate current health department standards, and in areas with high groundwater tables or high hydrologic head [i.e. significant groundwater underflow toward a water body] even systems that are up to code may not adequately filter nutrients and bacterial or viral pathogens.

This project involves several measures to survey and monitor existing systems, repair or upgrade failing or substandard facilities, and to test and recommend alternative septic disposal systems in areas where standard soil leaching systems are unlikely to function acceptably.

A first phase of this project would be to explore creation of a revolving low interest loan fund for residential septic system upgrades. Setting up this fund will involve legal and financial research and, in addition to local laws, may require enabling legislation at the state level, which would require lobbying to draft and introduce the law, and then to educate legislators for passage. As recommended in **Water Resources Policies #30-40 & 44**, property tax reductions or other incentives should also be considered, which may also require enabling legislation.

As more stringent septic waste standards have already been introduced for certain areas in the Town within the Harbor Protection Overlay District (HPOD), this would be a logical area to begin this effort. The septic waste remediation effort would be undertaken in conjunction with other HPOD initiatives (see *HPOD Homeowner Education*). For example, to solicit homeowner input a letter could be sent to affected property owners within the HPOD, notifying them of the availability of funding and requesting cooperation in identifying candidate systems for upgrading, with a self-survey including information about the age, location and construction of their septic system. If homeowners elect to participate in the program, systems would be upgraded to the standard of the HPOD.

Depending on the initial rate of success, methods may need to be reappraised following a pilot phase. Obviously a voluntary system is preferable. However, if voluntary subscription is ineffective, after a grace period the Town may wish to set up a procedure to require septic system testing and remediation, either triggered as described in the HPOD, i.e. when homeowners apply for building permits or variances for new construction, or alternatively, through a program of

inspections and mandatory upgrading. Once working well the program would be expanded to other parts of the coastal area, and perhaps eventually to all groundwater recharge areas of the Town.

As part of the effort to raise public awareness of the clean-up effort, a community experiment on septic leaching into the harbor may be a useful educational tool. This is similar to a "Great Flush-Out" conducted in the Chesapeake Bay estuary. Some research would be required to assess whether the procedure would be effective here, given the composition of local soils. Dye tablets are distributed to all residents around a harbor where septic leaching is a suspected cause of coliform contamination, and everyone flushes the dye down their toilet at once. If the dye becomes visible in the harbor it will emphasize the need to reconstruct faulty systems and help to identify the location of inadequately functioning systems.

A second segment of this project is to identify coastal residential areas where high hydrological "head" and proximity to the water (e.g. along Springy Banks Road on Three Mile Harbor) combine to produce pollution. See *Watershed Management*. The same revolving fund and incentives such as tax rebates would be provided to residents to retrofit existing systems with waterless composting toilets or other alternative septic disposal systems. The Town would work with NYS and County Health Departments to approve alternative systems and secure permits, and would monitor coliform counts in areas of the harbor in proximity both before and after the installation to determine its effectiveness. Again, this initiative would begin as a pilot project with a few volunteer homeowners, adjust methods as necessary, and eventually expand to other coastal areas as needed.

Along with *Stormwater Abatement, No-Discharge Zones, Harbor Management Plans* and *Water Quality Monitoring*, these *Septic Waste Remediation* projects are an important component of a comprehensive effort to improve surface water quality, to insure biological productivity and recreational enjoyment.

50. Harbor Management Plans

In preparing the LWRP, the Town identified numerous harbor management issues and recognizes the need to manage shore and nearshore areas through harbor management planning. A harbor management plan addresses conflict, congestion and competition for space in the use of a community's surface waters and underwater land. It provides guidance and regulation for management of boat traffic and general harbor use; optimum locations and numbers of boating support structures such as docks, piers, moorings, pumpout facilities, and transient anchorage areas; and identifies local and federal navigation channels and maintenance needs. It also provides the opportunity to identify various alternatives for optimum use of the waterfront and adjacent water surface, while at the same time analyzing the probable environmental effects of these alternatives.

Although the LWRP integrates many harbor management issues, the Town should undertake comprehensive harbor-specific management plans for Northwest Harbor/Northwest Creek, Three Mile Harbor, Hog Creek, Accabonac Harbor, Napeague Harbor, Fort Pond Bay and Lake Montauk. The most urgent of these are Lake Montauk and Three Mile Harbor, the most intensively used and extensively developed waterbodies in the Town. Harbor management should be integrated with other LWRP harbor initiatives, including *Restoration of Marina Lane Dredge Spoil Site; Former*

Fishing Station, Three Mile Harbor; Montauk Harbor Revitalization; Wetland Restoration; Eelgrass Restoration; Fisheries Shoreside Support Infrastructure; Montauk Harbor Channel Sand Bypass; Road-end and Beach Access Modifications; Public Access and Recreation Improvements; Coastal Oral History; Scenic Resources Survey and Protection Program; Stormwater Abatement; Water Quality Monitoring; Septic Waste Remediation; No-Discharge Zone; Boater Education; Harbor Protection Overlay District; Dredging; and the Geographic Information System (GIS). The Town Trustees have the authority to adopt those aspects of any harbor management plan which relate directly to their harbors, bays, bottomlands and beaches.

Harbor Management Plans also involve collecting data and establishing standards for, among other parameters:

Water quality, including flushing and tidal patterns, circulation studies, effects of boat wastes, No-Discharge Zones, pump-out facilities and boat waste disposal, pump-out monitoring, run-off containment, impact of surrounding septic systems, provisions for upgrading substandard systems

Habitat protection, including wetlands and shorebird nesting areas, terrestrial, marine and benthic flora and fauna of interest, saltmarshes, intertidal zones, beaches and tidal flats

Boat traffic, including analysis of existing marina resources, boat slip demand, mooring locations, launching ramps, dock space and developing overall carrying capacity models of the harbor, with designated locations for future expansion

Shellfish management, including impacts of above as well as inventory of prime beds and breeding areas, target areas for seeding programs or public aquaculture, and problems of access to shellfish beds on private underwater lands

Commercial fishing, available dockage and shoreside support facilities, including fishpacking marketing, and gear repair, existing and future demand

Private dock regulations, incorporating navigation and shellfish management concerns, ecological factors, and visual impact

Flooding and erosion, existing control structures and impacts, non-structural solutions, impacts of inlet management and need for sand bypassing

Upland uses, relative to existing and future harbor needs and priorities, Waterfront (WF) and Resort (RS) District requirements, visual and scenic context, and *HPOD*

Harbor management plans should have input from all Town agencies, including the Town Trustees, Harbormaster, Planning and Natural Resource Departments, and representatives of local marine industries and other harbor users.

51. No-Discharge Zone

Along with *Stormwater Abatement, Septic Waste Remediation*, and the land-based *Harbor Protection Overlay District*, No-Discharge Zones are an important tool for improving surface water quality in inshore waters of the Town and in its enclosed harbors, creeks and embayments. The designation serves as both a public education opportunity and facilitates enforcement against discharges of boat waste. Rules on discharges within the NDZ are simplified, the standard for enforcement is simplified, and visitors and local boaters alike are aware that violations are not permitted.

It is important that No-Discharge Zones not be seen in isolation, but as one component of a comprehensive effort by the Town to improve water quality. Also, if presented as part of a coordinated effort, the NDZ is likely to meet wider acceptance among boaters and marine industry people, who otherwise may feel they are being blamed or unfairly required to bear the brunt of clean-up efforts.

In coordination with NYS DOS and NYS DEC, in July 1997 the Town applied for State and Federal No-Discharge Zone designations, which were approved in January 1999 for the following water bodies:

Reach 1: Northwest Creek
Reach 2: Three Mile Harbor, Hog Creek
Reach 3: Accabonac Harbor
Reach 4: Napeague Harbor
Reach 6: Lake Montauk

The NDZ requires planning, public education and careful implementation for success. The Town will implement the NDZ in coordination with a public education program (see *Boater Education*), a phase-in period for boaters and marinas, and will develop new local laws and enforcement procedures. Public support and widespread participation are critical, and public awareness and boater willingness to comply have to be built with public education. Enforcement is a last resort, but will be better received if it comes hand in hand with education.

A broad coalition of local business, environmental groups and the marine industry are supporting the Town's NDZ effort, which complements the goals of the regional Peconic Estuary Program. 1998 has been agreed to by all participants as a year of public education. A campaign to raise public awareness about the impending NDZ and water quality issues began in 1998, and will continue into the 1999 boating season. Elements of the campaign include a Town brochure, meetings with marina owners, print ads in local newspapers and regional boating publications, harbor signage, a public launch of a new pumpout boat, and radio and TV PSA's.

NDZ public education was expanded during the 1998 boating season and will continue into 1999. The new Peconic Baykeeper will be in touch with boaters and the marine industry, and will become an ambassador for the NDZ. In the fall, emphasis will shift to retrofitting boats during the off season to comply with the NDZ. By spring another round of announcements, ads, new signage and a new brochure will announce the NDZ going into effect.

In conjunction with establishing the NDZ, the Town will seek to modify its Scavenger Waste Treatment Plant facility to accept marine vessel waste. A 1990-91 Marine Vessel Waste/Pump-out Waste Pilot Project conducted by Cameron Engineering for the Town established that pump-out waste can be successfully trickle-fed into the Scavenger Waste Treatment Plant and treated to State standards. As pump-out waste otherwise has to be trucked out of town at considerable expense to a facility at Bergen Point, treating it locally represents a significant cost saving for the Town and for marina owners who operate pump-out facilities. Plans for the plant modification and an estimated budget are included in the Pilot Project. The SPDES permit for the plant will also require amendment to permit treatment of vessel waste. SPDES permitting should be coordinated with the NDZ designation process to facilitate overall implementation.

52. Boater Education Project

In addition to instituting a *No-Discharge Zone*, this project will further educate boaters on the advantages of having clean attractive harbors, both for the enjoyment of local users and to lure visitors. Information offered will emphasize BMP (Best Management Practices) to protect and improve water quality, including locations and procedures for using pump-out equipment, and maintaining MSD's (heads) and bilge systems. It will encourage the use of onshore facilities for laundry, dishwashing, showers and hygiene. It will also address other aspects of ecology for boaters, including disposal of waste oil, solid waste, and wash water, use of biodegradable detergents and cleaners, fueling procedures to avoid spills, and educate boaters about other Town programs to improve water quality.

Brochures and signage will be used to inform boaters throughout the Town, and will be distributed through marinas and docks, the Town Clerk, Town Trustees, and marine personnel. Print material should be sufficiently attractive so the brochure can be used by marinas to promote their facilities to out-of-town boating customers. Education efforts should be coordinated with the Peconic Estuary Program to assure regional consistency and avoid duplication.

Ongoing "market surveys" of boaters and marine industry participants will be used to monitor effectiveness of the education effort. Special presentations will be developed to train people who will be interfacing with the public, such as marina personnel, harbormasters and bay constables, and boater user groups such as the Power Squadron, Coast Guard Auxiliary, and yacht clubs.

Boater Education will seek joint sponsorship from other stakeholders such as the Association of Marine Industries, Montauk Harbor Association, Montauk Captains Association, Concerned Citizens Of Montauk, Group for the South Fork, etc. It will also promote local waters for cruising.

53. Harbor Protection Overlay District (HPOD), Homeowner Education

The recently adopted Harbor Protection Overlay District (HPOD) encompasses regulations and suggested best management practices (BMP) for residential property surrounding the Town's inner harbors, embayments, creeks and coastal ponds. The HPOD law is intended to help control stormwater runoff, constrain swimming pool chemicals and effluent, upgrade septic systems, encourage use of native vegetative buffers, and discourage use of fertilizers and pesticides, and of

treated wood products in contact with surface waters. The effectiveness of the HPOD in improving water quality will be measured not by regulations and permits, but by cooperation and participation of residents in conservation of their harbors. A number of the provisions of the HPOD are directly dependent on public awareness and education, since they are homeowner initiatives rather than regulatory requirements.

The HPOD public education program will design and prepare a variety of materials including a homeowners' guide, watershed maps, a presentation and slide show for public meetings, and a direct mail package for property owners within the district. Besides direct mail, outreach to residents will be accomplished through public meetings and topical discussions on subjects like landscaping with native vegetation, alternatives to treated wood products, and how upland uses affect surface water quality. Meetings will also be videotaped for distribution via public access TV and local libraries. The focus of the meetings and materials will be on fostering a sense of ownership and participation, that what individual homeowners do on their property can help to improve water quality for the whole community.

Minimizing use of fertilizers and pesticides, cultivating native plant buffers and filter strips, promoting onsite drainage, operating swimming pools with minimal or non-chemical means, using pool dry wells to drain them, and maintaining septic systems properly are all initiatives of the HPOD which rely on easily understood information getting directly into the hands of homeowners who will willingly follow the practices.

This project will fund an informational brochure, personal contacts and informal neighborhood meetings to communicate HPOD recommendations and the reasons behind them. An environmental educator will contact affected homeowners and encourage them to fill out a self-assessment form for their property, and will maintain a resource database of sources of environmentally friendly techniques and materials. Effectiveness of the public education campaign will be evaluated through periodic surveys.

54. Tanker-Free Zone for Block Island Sound

In accordance with **Water Resources Policy #36, Shipment and Storage of Petroleum and Other Hazardous Materials**, and in recognition of the fragility of the coastal environment its importance to the Town's economy, and of navigational hazards existing in Block Island Sound, the Town of East Hampton shall encourage the U.S. Department of Transportation to establish a Tanker-Free Zone in Block Island Sound waters between Block Island and Montauk.

55. Oceanside Drainage Mitigation

A series of artificial marsh ponds will be used to impound and filter polluted run-off from the Oceanside subdivision in Ditch Plains, which has affected water quality in the south end of Lake Montauk. The project was designed by the Town Natural Resources Department, Town Engineer, Cornell Cooperative Extension Service, and the USDA Natural Resource Division, and is in the permitting stage. Funding commitments include federal ISTEA moneys and a contribution from the Concerned Citizens of Montauk.

56. Dredging Projects

56a. Dredging to Benefit Water Quality and Habitat

Several areas of the Town's harbors and enclosed water bodies could likely benefit from dredging to improve flushing and circulation, which could help to improve water quality and marine habitat, enhance shellfishing, and prevent siltation. Potential sites, several of which include channels which have since been closed, moved or otherwise altered, include:

Northwest Creek, investigate reestablishing original channel on east side
Goose channel in the northwestern section of Three Mile Harbor
Former north-end sluice of Accabonac Harbor, now closed off by Gerard Drive
Fresh Pond, Amagansett, jetty has constricted natural pond opening
Georgica Pond, extensive bar built up near gut impedes flushing when pond is opened

This project will analyze circulation and flushing for the proposed water bodies and evaluate prospective impacts and changes which would result from dredging, and design least cost/ lowest impact solutions where appropriate. The project will carry proposals though the design and permitting phases. Actual dredging will be arranged through Suffolk County or private contractors as available. Project will be integrated with *Harbor Management Plans*, above.

56b. Maintenance Dredging for Navigation Channels

Channels to Three Mile and Montauk Harbors and to protected anchorages in the Town's creeks and embayments require periodic dredging to maintain adequate depths for safe navigation. In the past this work was performed with some regularity by Suffolk County Public Works Department, which had its own dredge, or in the case of the Federal channel at Lake Montauk, by the Army Corps of Engineers.

In recent years the County sold its dredge to economize, and dredging efforts have fallen behind, causing problems with boats running aground in the channels of both Lake Montauk and Three Mile Harbor. The Town will seek to prioritize channel maintenance dredging and to identify stable funding sources for a long term maintenance dredging program. It will also provide for emergency dredging when storms or other short term phenomena cause channels to fill in or shift. Private maintenance and emergency dredging needs will also be identified and monitored.

In the past dredging projects have lacked monitoring and quality control to make sure work is carried out to specification. The Town will develop in-house capability for monitoring, which will also assist in identifying areas prone to rapid infill, sand bars, etc.

56c. Use of Dredge Spoil for Beach Nourishment and Sand Bypass

In the past dredge spoil has been required by law to be disposed of in the least cost manner possible, which in practice has meant creating spoil sites immediately adjacent to channels or other areas being dredged. Many of these spoil sites have now been filled, and serve no useful purpose.

This project will bring dredge spoil disposal practices into line with the policy objectives of the LWRP (**Flooding and Erosion Policy #15** and **Water Resources Policy #35**), designate appropriate

permanent or temporary spoil storage sites, and prioritize further use of spoil for beach nourishment, sand bypass projects, etc.

As stated in **Policy #15**, priorities for use of dredge spoil are: "1) to nourish public bathing beaches, 2) to restore habitat, primarily for nesting shorebirds, 3) to nourish other public trust lands and beaches, and 4) for erosion control, possibly through future erosion control districts, though none presently exist in the Town."

56d. Dredging Workshop

The Town will organize an inter-agency workshop to discuss dredging issues and their environmental impacts. The conference will include regulators, public works administrators, contractors, harbor interests and environmental groups. Potential subjects include dredging specifications for different locations, windows to minimize environmental impacts, channel maintenance, use of spoil, permitting and financial needs.

57. Air Quality Monitoring Station

The Town should monitor rainfall for acid-rain and other pollutants, which might provide additional insight into phenomena such as the brown tide, and other alterations in marine and onshore habitats. In view of prevailing wind patterns and the Town's proximity to both the Millstone nuclear power generating plants, the nuclear submarine yards near New London, and the reactor at Brookhaven National Laboratory, and since the Town is not included in emergency notification or evacuation zones for these installations, the Town should set up an automated radiation monitoring station with alarms in case of unauthorized releases from these sources (the Millstone plants are notoriously "dirty").

58. Storm and Flood Monitoring Cooperative with National Weather Service

Weather conditions in the shore/inland/bay/ocean environments of the Town can vary widely, and adequate data is often not available at a sufficient density of recording points to allow thorough analysis. Conditions in East Hampton are often at variance with other parts of Long Island, and offshore forecasts essential for fishermen are sometimes not reliable. These problems can be particularly acute in times of severe storms or other inclement weather.

With advice and technical assistance from the National Weather Service (NWS) office at Brookhaven National Laboratory, the Town and a group of interested local citizens will set up a network of recording stations to monitor weather conditions and storm flooding. These will be connected to a local computer in the Town Natural Resources Department and relayed to NWS Brookhaven via radio transmitter. Funding is needed for additional monitoring stations, computer and communications equipment.

PUBLIC EDUCATION & FUTURE PLANNING NEEDS

59. LWRP Implementation

This project will provide staff to identify future LWRP projects, explore grants and other outside funding, and supervise implementation of existing projects. Project personnel will also coordinate information sharing between Town departments and with appropriate state and federal agencies, and assist with consistency review procedures.

60. LWRP Public Education

Many of the measures contemplated in the LWRP require understanding, acceptance and support by the citizens of the Town to be effective. The Town will undertake a series of coordinated public education efforts using various media to educate townspeople about the LWRP and what they can do to help implement it.

Some efforts will be targeted at specific user groups, for instance brochures given to boaters on using pumpouts and how to maintain clean waters (*Boater Education Project*), to waterfront property owners within the *Harbor Protection Overlay District* (see page XIV-44), to owners in the Flood Hazard Overlay District, and to shellfishermen and ORV beach driving permitees on how to protect beach species and bottomland resources.

The Town is proposing several elements of LWRP-related public education for funding in 1998-99. These programs will cover two areas related to water quality, the *Harbor Protection Overlay District* to prevent non-point pollutants from entering surface waters, and a vessel waste *No-Discharge Zone* (see page XIV-42) expected to be in place for the 1999 boating season. In addition, a *Symposium on Flooding and Erosion Issues*, including future sea level rise, will be held in the fall at the local public access television studios.

The televised symposium will focus attention on flooding and erosion issues during the fall hurricane season, as part of a mid-October media festival at the local public access television station. The TV studio has capacity for a substantial live audience, as well as the possibility for broadcasting via a link to the entire East End. The symposium will present an opportunity to bring public attention to flooding and erosion problems, solutions proposed in the LWRP, and new local laws. Public safety issues such as storm evacuation, breach closures, and restoration of infrastructure will be one topic. Local flooding and erosion hot spots will be highlighted, and ongoing erosion-related Town projects described. Long term issues such as scenarios for rising sea level and increased hurricane activity due to global warming will be framed and discussed. State and nationally known coastal geomorphologists, policy makers, and public officials will be invited to join local participants to bring as broad a perspective as possible to the discussion. If successful, other avenues for distribution of the program will be sought in addition to public access TV.

Future LWRP public education efforts will focus on other issues, and will include slide shows and videos on coastal issues for school classes, civic groups, and property owner associations, programs for local public access cable TV, and PSA radio spots for local radio stations. Programs will be integrated with existing public education efforts by various Town departments by the Town Trustees, Harbormasters, Natural Resource and Planning Departments. The Town Waterfront Advisory Committee will sponsor a series of issue-oriented public forums including experts, local

officials, and members of the public, and resulting in white papers and video tapes, on coastal policy issues addressed in the LWRP, such as:

- Hurricane damage mitigation
- Erosion hazards/control
- Dune preservation and restoration
- Pollution and water quality
- Beach ecology, wildlife habitat vs human use
- Global warming and sea level rise

Each hamlet of the Town has a Citizens Advisory Committee, and these groups will be encouraged to organize public meetings in their communities. Property owner associations and other civic organizations will also be approached to have education programs at their meetings or to include material with mailings. Members of the Waterfront Advisory Committee will be encouraged to form a speakers bureau, and using the audiovisual materials prepared by the project, make presentations to civic and school groups to personalize the communication about the LWRP.

Project scope will be expanded once the Town's LWRP is approved and being implemented. Additional grant applications, and budgets including salary, costs for contractors, production and distribution will be prepared at that time. Funding will be required for a coordinator/producer; for producing materials in several different media, including print (with related direct mail or other distribution), slides, video, and radio; and for arranging the public forums.

61. Environmental Education Center

A proposed environmental education center will focus on raising the level of public awareness about water quality and other LWRP-related issues. This will be a low-key facility located near the water that will bring together marine science and coastal planning, and where coastal issues can be demonstrated with hands-on immediacy. Both students and townspeople will have an opportunity to learn about and experience the estuarine environment, to spur community problem-solving for clean-up of local waters.
Programming will integrate the regional goals of the US EPA sponsored Peconic Estuary Program and the LWRP, by emphasizing real world connections of planning efforts with grassroots community action. A two-pronged educational strategy will provide for the needs of students, the future users of the resource, and homeowners and boaters, existing users whose habits have created the legacy of water quality problems the area faces today.

Programs for students will complement school environmental curricula. Staff from the Town Natural Resources Department will assist with student activities to demonstrate field and lab equipment, for instance, water testing gear, a video microscope to introduce marine micro-organisms, or grow-out racks from the Town Shellfish Hatchery.

Programs for adults will be aimed at specific water quality issues, through exhibits and workshops dealing with, for example, runoff, use of treated wood products, native landscaping buffers, wetland restoration, septic remediation, nutrient loading from lawn fertilizers, pumpout use and vessel

discharges. Adult programs at the center will also focus on community consensus building. Land use and boating management practices developed within the surrounding neighborhoods of each of the Town's enclosed water bodies will ultimately result in formulation and adoption of harbor management plans. The center will provide a forum for community input into Town policy making, to promote creative thinking and inquiry on water quality issues, and exchange data, ideas and promote voluntary action. Emphasis will be on citizens understanding what they as individuals can do to improve water quality.

LWRP related programs for which the center will provide public education support include the *Harbor Protection Overlay District (HPOD), No-Discharge Zones, Harbor Management Plans*, water quality initiatives such as *Open Marsh Water Management (OMWM) and Stormwater Abatement*, wetland and aquatic habitat protection and restoration, and traditional fishing and public aquacualture. LWRP policies implemented by the center will include:

Development Policies #1-6
Significant Habitats Policy #7
Commercial Fisheries and Aquaculture Policies #10/10A
Public Access and Recreation Policies #9 & #19-22
Water and Air Resources Policies #30-44

The Center as envisioned will accommodate approximately 50 students, and will consist of a multi-use building with classroom and combination wet room and laboratory, and preparation, greenhouse, storage, and small kitchen and office facilities. The building is intended to be an integral statement of the center's educational objectives. For example, sanitary facilities will include a waterless toilet. The building will be handicapped accessible and constructed according to regulations for the appropriate flood zone. Building and site design will incorporate appropriate technology such as passive solar devices for energy needs, etc. Details will be further specified as the program is developed and a site is identified.

62. G I S for Coastal Zone Management

A large number of the projects listed above will be greatly facilitated by a computerized Geographic Information System, which will make coastal zone information more readily available and accessible for all levels of Town government and to the public. Some of the projects and other aspects of the LWRP that will benefit from a GIS system include: Land Use and Development Inventory, Recreation and Public Access Database, Habitats Inventory, Historic and Scenic Resource Inventory, Erosion Monitoring, Hurricane Damage Mitigation Plan, Sea Level Rise Model, the Coonsfoot Cove Management Plan, Fisheries Shoreside Support Plan, Cultural Resources Sensitivity Model, Harbor Management Plans, etc.

It is important that whatever system is chosen be as flexible and easy to learn as possible. It should be selected with future upgradeability in mind, and should be compatible with systems in use by other levels of government, such as Suffolk County and NYS DOS.