

DRAFT
REPORT ON IMPLEMENTATION
South Coastal Harbor Management Plan
Chatham, Massachusetts

Prepared by the South Coastal Harbor Plan Committee
February 2014

The South Coastal Harbor Management Plan (SCHMP) was approved by the Secretary of Environmental Affairs on October 21, 2005 and has an expiration date of October 7, 2012. The SCHMP is an outgrowth of the harbor plan originally known as the Stage Harbor Management Plan, approved by the Secretary of Environmental Affairs in 1994. The Stage Harbor Plan was the first Harbor Management Plan to be approved for a Town in the Commonwealth.

In accordance with the provisions of the Decision, the Director of the Massachusetts Coastal Zone Management was informed by the Town of Chatham by letter dated February 21, 2012 as to its intent to request renewal of the SCHMP. The letter further stated that an implementation report would be provided as soon as it was completed.

This “Report on Implementation” provides a summary of efforts that the Town has undertaken to further the recommendations and action items contained within the SCHMP. This report is based in large part on the Implementation Matrix as contained in Chapter 5 of the SCHMP and provides annotated notes and comments to identify progress to date on the original recommendations. This implementation report was prepared by the South Coastal Harbor Plan Committee (SCHPC).

KEY IMPLEMENTATION ACCOMPLISHMENTS

Chatham has made considerable progress on numerous recommendations contained in the original 2005 SCHMP. Of particular note are the efforts related toward implementing the town’s wastewater management program which is directly related toward enhancing water quality within all of the town’s coastal embayments. Chatham is at the forefront when compared to other Cape communities at addressing wastewater and nutrient loading issues. The town is undertaking the construction phase of the program which includes construction and expansion of a new centralized wastewater treatment facility (completed in 2012) and the ongoing installation of new sewer lines throughout key critical areas of the community. This project will likely be underway for twenty years or more as the community embarks on possible sewerage of the entire town.

Another specific recommendation of the SCHMP that took considerable effort on the part of the SCHPC was the analysis of potential impacts of private docks and piers. In accordance with recommendations of the SCHMP, the SCHPC performed an assessment of all the shorelines and waterbodies within the planning area to evaluate the impact these structures may have on natural

resources, public access, water quality and navigation. This analysis ultimately culminated in recommending a change to the town's zoning bylaws that would prohibit the installation of new private single family residential docks and piers within the Stage Harbor Complex. This bylaw was subsequently adopted by town meeting in May 2010.

The town has also begun to look closely at existing mooring practices to determine if switching to alternative mooring tackle would prove beneficial to the surrounding habitat while still providing secure and safe berthing options for vessels. The harbormaster has been actively involved with field evaluations of elastic moorings, often referred to as conservation moorings, to assess their function and ability to reduce direct impact to bottom habitat. The results are proving positive but additional work needs to be accomplished to further determine whether, or to what extent, a change to alternative mooring systems is in the town's interest. This would include an assessment of the economic considerations for changing tackle systems as well as developing the most advantageous way a program to accomplish this goal should be implemented.

NEW INITIATIVES AND RECOMMENDATIONS

During the review and evaluation of the 2005 SCHMP for this implementation report, it became clear that the original report was comprehensive and sufficiently farsighted with regard to identifying current and future issues. Accordingly, there were few new unique issue areas that were not sufficiently addressed within the 2005 plan that would warrant inclusion as new recommendations or action items. Therefore, the current 2005 Plan is still considered relevant to provide the appropriate guidance and vision by which issues affecting the harbors should be reviewed and monitored. However, the following items are proposed as formal enhancements to the original Plan. These items include:

- Clarification of the SCHPC position regarding the construction of new private piers in the Stage Harbor Complex;
- Acknowledgment of the importance of planning for future sea level rise;
- Recommendations to monitor and plan for the potential impacts associated with new inlets and changes to the barrier beaches along the Atlantic Ocean;
- Expanding current recommendation for the continued traditional public use and access onto the lands and waters surrounding the Monomoy National Wildlife Refuge, including both commercial and recreational fishing and shellfishing; and
- Encouraging efforts to undertake the restoration of eelgrass habitat when conditions warrant.

Private Residential Piers

As discussed above, the Town of Chatham adopted a zoning bylaw in 2010 that prohibits the construction of new private residential piers within the Stage Harbor complex. This bylaw was the direct consequence of recommendations proposed by the South Coastal Harbor Plan Committee as a result of the detailed dock and pier assessment. However, since the bylaw as

worded focused on single family residential piers, it did not explicitly prohibit a private homeowners association from proposing the construction of a new private multi-use pier (not open to the public). Accordingly, the SCHPC reviewed the previous rationale for developing the original prohibition of private residential piers and concluded that their recommendation should extend to also include a prohibition on private homeowner's associations as well. They further reiterated their support for public water access and encouraged that new, enhanced or expanded public infrastructure should be looked on favorably provided steps are taken to avoid, or minimize when necessary, possible ecological impacts.

Sea Level Rise

While the ultimate cause as well as the predicted rate of the rise of future sea levels continues to be debated, the data are conclusive that sea levels are nonetheless rising and are likely to continue well into the future. Rising sea levels can and will have profound implications to the natural and physical environment including, among other things, loss of coastal and marine habitats and resources, loss of public and private property and waterfront infrastructure, potential impacts from salt water intrusion to water supply and septic systems, and greater impacts and damage from coastal storms and flooding associated with higher storm surge levels. Accordingly, it is important to begin to consider and plan for the effects of rising sea levels along our coastlines. This update includes a new recommendation that sea level rise should begin to be factored into many facets of management and future planning along the coast.

All zones within the South Coastal Harbor Plan:

Consider the effects and incorporate where appropriate the potential for future sea level rise when, and not limited to, planning for resource protection, land acquisition, waterfront development and changes to building codes and zoning. Encourage the incorporation of "Coastal Resiliency" strategies for existing and future activities along the coastline.

Impacts of New Inlet Formation and Barrier Beach Changes

One issue that was not included in the 2005 report relates to the formation and development of new inlets through the North and South Beach barrier beaches along Chatham's Atlantic coastline. A new inlet occurred in 2007 along Chatham's eastern Atlantic Ocean shoreline and then another formed on South Beach into the Southway in 2013. While some of these locations may be outside the specific planning jurisdiction of the SCHMP, the physical changes of these inlets and barrier beaches may have a profound town-wide impact on commercial and recreational navigation and waterfront infrastructure. Specifically of concern is the potential for impacts to Chatham's commercial fishing fleet and the Chatham Municipal Fish Pier which is the principal commercial fish offloading facility. Changes to nearby waterways and harbors are likely to occur as the inlets continue to develop and the barrier beaches undergo potentially significant morphological change. It may become necessary to relocate portions of the fishing fleet and/or aspects of the fish offloading operations to Stage Harbor. Therefore, a new recommendation of this implementation report is as follows:

Stage Harbor Complex and Southway:

Monitor inlet development and changes to the Atlantic barrier beach system and assess potential impacts these changes may have on vessel navigation and waterfront infrastructure within Chatham Harbor. Anticipate and proactively plan for the potential of relocating portions of the commercial fishing fleet and other maritime infrastructure to Stage Harbor if deemed necessary. This may require review of policies and strategies for providing appropriate mooring opportunities and enhancements in the commercial fish offloading infrastructure among other topics.

Monomoy National Wildlife Refuge

The existing SCHMP includes a recommendation that the town coordinates with the National Park Service (NPS) and the U.S. Fish and Wildlife Service (USFWS) to evaluate various issues related to access, physical changes and use within areas under the jurisdiction of these Federal agencies. While this continues as an important recommendation, this update more directly identifies this goal relative to the ongoing and future management of the Monomoy National Wildlife Refuge. Specifically, the ability to have access to the open waters and intertidal areas within the current and any proposed future boundaries under the jurisdiction of the USFWS is critical for preserving our traditional shell and fin fishing rights. The recommendation is as follows:

Southway & Nantucket Sound:

Work closely with the USFWS as well as local, state and federal agencies and elected officials to ensure that current and future areas associated with the Monomoy National Wildlife Refuge under the jurisdiction of the USFWS allow for the continuation of traditional recreational and commercial fishing use and access.

Eelgrass Restoration

Eelgrass is acknowledged as an important factor toward maintaining ecologically healthy and thriving waterbodies. However, the extent of eelgrass beds has declined within the Stage Harbor complex and regionally due to degraded water quality and other physical and environmental stresses. Restoration of viable eelgrass can be complicated and costly and should only be pursued when the environmental conditions warrant in order to improve the chances of success. Therefore, this plan update recommends the following:

Stage Harbor Complex:

Restoration of eelgrass should be considered within selected areas of the harbor system. Such restoration should only be pursued after an assessment has been made that indicates that the environmental conditions have improved to the extent that the restoration efforts should be successful.

IMPLEMENTATION MATRIX, 2005 THROUGH 2013

The 2005 SCHMP contained an “Implementation Matrix” that summarized the recommendations, priority of the issue and responsible parties that were described in more detail within the report. The updated Implementation Matrix below is the same list of original 2005 recommendations; however, the matrix has been modified to indicate the *Progress to Date*. The new list forms the basis of this 2013 Implementation Report in order to provide a comprehensive overview of efforts undertaken since 2005 to address the recommendations contained in the SCHMP. Some of the priorities have been modified to reflect a reassessment of the issue as well as to acknowledge the completion of some of the action items.

STAGE HARBOR COMPLEX: TOWN LANDINGS AND ACCESS POINTS

Recommendation	Priority *	Progress to Date
Continue a high level of municipal investment in the acquisition, improvement, maintenance, and management of town landings, access points and associated facilities.	1	<ul style="list-style-type: none"> ➤ Annual Town Landing maintenance fund established. ➤ Ongoing review/assessment of capital needs of waterfront infrastructure.
Develop a public education program about the opportunities, facilities, and regulations associated with various landings and access points.	2 now 4	<ul style="list-style-type: none"> ➤ Comprehensive Town Landing Master Plan completed Jan 2011 (Plan posted on town web site). ➤ Town Landing regulations on web site.
Develop a parking plan that addresses the vehicular access issues unique to each landing.	1	<ul style="list-style-type: none"> ➤ Town Landing Master Plan identifies existing parking availability and general needs for all landings. ➤ Parking improvements have been undertaken at Barn Hill and Mill Creek landings. ➤ Parking improvements to be undertaken in 2013 along the Morris Island Dike in partial response to a grant jointly undertaken by the Town and the US Fish and Wildlife Service, Monomoy National Wildlife Refuge. ➤ Designs for new road and parking layout with drainage improvements being analyzed for Battlefield Landing.
Secure permanent public use and access to Bridge Street landing, if possible.	2	<ul style="list-style-type: none"> ➤ Contact with property owners indicate possible interest sometime in the future.
Develop and implement a plan to locate permanent or seasonal public restrooms at heavily used landings and access points, as needed.	3	<ul style="list-style-type: none"> ➤ New permanent restroom facilities constructed at Old Mill Boat Yard. ➤ Substantial renovations to restrooms at Harding’s Beach.
Identify all access points that may not be governed by the Town’s existing regulations for landings and water dependent properties	3	<ul style="list-style-type: none"> ➤ Not yet implemented. ➤ 5 yr. Capital budget includes line item for comprehensive survey of all town

and address the need to clarify regulatory oversight at these locations.		landings.
Develop a dinghy storage plan appropriate to conditions at each town landing or access point.	3 -now 1	<ul style="list-style-type: none"> ➤ Dinghy storage improvements undertaken at Battlefield landing with ongoing efforts to address issues elsewhere. ➤ Town courtesy dinghy provided at Little Mill Pond. Other sites being evaluated for similar implementation. ➤ Dinghy storage continues as high priority action item throughout town. ➤ Consideration being given to implement a dinghy identification program.
Identify and evaluate opportunities to create new public access points as they may become available.	2	<ul style="list-style-type: none"> ➤ Ongoing. Continual diligence toward identifying possible land purchases or other means for promoting access as opportunities arise.

STAGE HARBOR COMPLEX: COMMERCIAL FISHING INFRASTRUCTURE

Recommendation	Priority	Progress to Date
Evaluate options for ensuring adequate offloading, packaging and storage facilities for the commercial fleet in perpetuity, through repair and maintenance of existing facilities and potential addition of new facilities.	3	<ul style="list-style-type: none"> ➤ Designs for reconfiguration of the Old Mill Boat Yard pier and floats underway. New designs incorporate improvements for commercial boat use. ➤ Seaport Advisory Council approved \$102,000 to fund the engineering and permitting phase of the project in April 2012. Construction funds to be sought in 2013/2014.
Operators of commercial offloading facilities should provide adequate waste management procedures and equipment, commensurate with the operation and services provided by the facility, in order to prevent degradation of water quality or surrounding resources.	1	<ul style="list-style-type: none"> ➤ No action at private facilities. Public landing at Old Mill Boat Yard has improved restroom facility.
Ensure availability of adequate haul out facilities for the commercial fleet, provided they meet the most stringent applicable environmental requirements.	2	<ul style="list-style-type: none"> ➤ Chatham & Harwich received 2012 grant for purchase of portable recyclable washdown system to provide effective containment of contaminants during haul-out operations of commercial fishing vessels. ➤ Washdown system currently in operation for use by owners of commercial fishing vessels with oversight of town staff.

Provide a reasonable number of moorings to be made available to transient boats, provided the boat operators adhere to all applicable bylaws and regulations.	2	➤ Chatham maintains 23 public moorings for temporary use by local and transient commercial and recreational boaters.
Continue to acquire public moorings at a reasonable rate in balance with the demand for private moorings.	2	<ul style="list-style-type: none"> ➤ Continue to consider expansion of public moorings as need/opportunity arises. ➤ Current number of public moorings deemed sufficient unless more commercial fishing vessels relocate from Aunt Lydia’s Cove to Stage Harbor. ➤ Review of the layout of the existing Stage Harbor “No mooring Zone” being considered for potential expansion of deeper draft moorings for the commercial fishing fleet.
Protect provisions within the zoning code that allow for gear storage in residential areas; and continue to evaluate potential alternate storage locations. Develop and enforce guidelines and access restrictions to prevent misuse of the gear storage area at Chatham Airport.	2	➤ No further action to date.

STAGE HARBOR COMPLEX: MARINA AND RECREATIONAL BOATING FACILITIES

Recommendation	Priority	Progress to Date
Marinas and boatyards should be brought into compliance with all existing federal, state and local water quality protection regulations and measures.	1	<ul style="list-style-type: none"> ➤ Best management practices and upgrades encouraged/required during facility changes/improvements which require local and state permits. ➤ Most private marinas now have upgraded on-site or off-site washdown areas with containment facilities.
Marinas and boatyards should be allowed to expand activities provided they meet stringent environmental requirements and have exhausted upland site options.	4	<ul style="list-style-type: none"> ➤ Opportunities for expansion have been approved for at least one marina (Chatham Yacht Basin). ➤ Most marinas have the ability to make modifications for improvements to pier and float layouts within current footprint “zone of reconfiguration.”

STAGE HARBOR COMPLEX: MOORINGS

Recommendation	Priority	Progress to Date
The Harbormaster and the Waterways Advisory Committee should develop a comprehensive mooring program.	1	<ul style="list-style-type: none"> ➤ Efforts for revised mooring plans and layouts are ongoing. ➤ Harbormaster has significantly improved the automated database of mooring information and locations.
Evaluate the utilization of environmentally compatible mooring technologies and techniques.	1	<ul style="list-style-type: none"> ➤ Harbormaster has utilized and evaluated elastic “conservation” moorings for several years. ➤ Cape and Islands Harbormaster

		Association received grant to perform comprehensive literature review to evaluate benefits of elastic moorings.
Designate environmentally sensitive areas and enforce the removal of concrete block moorings from those areas within five years of the designation.	4 now 3	➤ No further action.
Evaluate and address insurance liability and compliance issues for temporary use of moorings by a vessel other than the permit holder's.	3	➤ No further action.

STAGE HARBOR COMPLEX: REGULATION OF PRIVATE PIERS AND OTHER SHORELINE STRUCTURES

Recommendation	Priority	Progress to Date
Undertake an assessment of the entire Stage Harbor Complex shoreline, focusing on the public access, navigation, and natural resource values addressed by the management plan.	4 completed	➤ Extensive evaluation of the potential impacts of private piers was undertaken for all the waterways within the jurisdiction of the SCHMP.
Use the assessment to designate areas where the location of private piers may or may not be consistent with the management plan; and to develop performance and design standards for private docks in areas where they may be consistent.	4 completed	➤ The assessment served as the basis for adopting a zoning bylaw, approved at Town Meeting in May 2010, which prohibits the construction of new single family private residential piers within the Stage Harbor Complex.
Use the assessment to evaluate the appropriateness of catwalks and erosion control structures and, if necessary, develop permitting guidelines for areas where those structures may be permitted.	4 completed	➤ Assessment focused on private piers. Existing town zoning by-laws and wetlands regulations deemed adequate for regulating catwalks and erosion control structures.
Take action to ensure that the Davis dock is removed expeditiously.	4 completed	➤ Pier removed in 2007.
Work with the Department of Environmental Protection to monitor all structures within tidelands, including docks, piers, bulkheads and stairways, and ensure they have a valid Chapter 91 license and that the provisions of the license are being enforced.	1	<ul style="list-style-type: none"> ➤ Ongoing. All new structures are evaluated to ensure compliance with Chapter 91 regulations. Existing structures are reviewed as opportunities develop to ensure compliance with Chapter 91. ➤ Effort undertaken in summer 2012 to field inventory all docks and piers. Data to be incorporated into town GIS database with goal to include digitally linking actual permits and licenses to each structure. ➤ Town attempting to develop a database of all shoreline structures within the town's GIS system.

STAGE HARBOR COMPLEX: DREDGING

Recommendation	Priority	Progress to Date
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Continue maintenance dredging to continue safe access into the Stage Harbor Complex, and for the use of facilities there.	2	➤ Town has positioned itself to ensure permits are in place for continued maintenance dredging of access channels and portside facilities.
Allow improvement (new) dredging in areas where shoaling is limiting access through traditionally important publicly navigable waterways.	3	➤ Improvement dredging for other locations will be evaluated as needs arise.
Undertake regular bathymetric surveys of all navigable channels throughout the Complex.	3	➤ Surveys undertaken as needs arise.

STAGE HARBOR COMPLEX: BOATING SAFETY AND NAVIGATION

Recommendation	Priority	Progress to Date
Continue to use all means available to manage the number and size of boats that access the Stage Harbor Complex through town landings and access points.	3	<ul style="list-style-type: none"> ➤ Existing Town Landing regulations specify the maximum boat length that can tie to a town float. ➤ In areas with high mooring density, mooring waiting lists are maintained to limit the number of moorings that can be installed.
Continue active, highly visible patrol presence during the prime boating season (Memorial Day through Labor Day), especially on weekends.	1	➤ Ongoing, normal operation.
Allow relocation of lobster pots by appropriate town officials as necessary if pots are located in areas where they pose a hazard to navigation.	3	➤ Performed as necessary.
Develop a public education program and/or changes in waterways regulation to promote safe and appropriate use of recreational equipment and activities, including but not limited to kayaks and canoes, parasails, kiteboards, towed tubes and water skis, and swimming.	4 now 2	➤ No action to date.

STAGE HARBOR COMPLEX: COMMERCIAL AND RECREATIONAL SHELLFISHING

Recommendation	Priority	Progress to Date
Continue the Town's commitment to propagation of the wild shellfishery; explore the benefits of expanding the propagation program, and evaluate the adequacy of the existing upwelling facility.	2 now 1	<ul style="list-style-type: none"> ➤ Town continues strong commitment to propagation program. ➤ Improvements to existing system will be sought during renovations to the overall Old Mill Boat Yard facility. ➤ Sought continuity in availability of shellfish seed for town's upwelling operation, currently through Aquacultural Research Corporation's (ARC) operation at Stage Harbor Yacht Club.
Increase the amount of resources for enforcement to match the increase in the number of permit holders.	1	➤ Existing resource commitment considered appropriate for level of activity. Will be adjusted as

		necessary.
The on-going management of town landings should ensure that offloading activity is undertaken in compliance with all applicable bylaws and regulations.	2	➤ Ongoing. Modifications to the OMBY facility incorporate the need for enhanced commercial use.
Evaluate creative methods for addressing demand for increased access to moorings for commercial shellfishermen.	3	➤ Open to options but difficult to implement within existing state statutes and town regulations governing the permitting of private moorings.
Require applicants for projects within coastal resource areas to provide documented assessment of impacts on shellfish or shellfish habitat and access to shellfish beds.	2	<ul style="list-style-type: none"> ➤ Required as per local and state regulations and Conservation Commission places high priority to protection of shellfish resources. ➤ Shellfish Warden is required to comment on all projects with potential for impacts to shellfish habitat.

STAGE HARBOR COMPLEX: WETLANDS AND EELGRASS

Recommendation	Priority	Progress to Date
Make salt marsh protection a priority consideration in the review of projects for private docks, marina or boatyard expansion, erosion control structures, walkways and dredging.	1	<ul style="list-style-type: none"> ➤ Required as per local and state regulations. ➤ Existing Land Bank and Community Preservation Act programs have been established in Chatham which can provide possible funding opportunities for land acquisition projects.
Identify opportunities for the restoration of damaged salt marsh, and for acquisition of land for inland migration.	2	<ul style="list-style-type: none"> ➤ Degraded wetlands have been identified as part of the Cape Cod Atlas of Restricted Salt Marshes and the Cape Cod Water Resource Restoration Project. The Town is currently working with the MA Division of Ecological Restoration on the Champlain Creek Tidal Assessment. ➤ No action to date regarding land acquisition specifically for wetland resource inland migration due to sea level rise.
Monitor changes in eelgrass throughout the complex and develop an understanding of the causes of eelgrass variability.	2	<ul style="list-style-type: none"> ➤ SCHPC has begun efforts for public education for increased awareness and importance of eelgrass in the environment. ➤ Town is considering further use of elastic mooring systems to minimize mooring tackle impacts to eelgrass. ➤ Renewed interest to consider restoration when conditions allow for successful implementation.

STAGE HARBOR COMPLEX: WATER QUALITY

Recommendation	Priority	Progress to Date
Continue water quality monitoring throughout the system; and implement the recommendations of the nutrient management.	1	<ul style="list-style-type: none"> ➤ The Coastal Water Quality Nutrient Monitoring Program began in the Stage Harbor Complex in 1998 and is ongoing. The Town is currently in the process of implementing the initial phase of the town-wide wastewater management plan. ➤ The Town has been working with the Pleasant Bay Alliance on the development of fertilizer management policies/recommendations which can be applied town-wide.
Evaluate methods to identify bacteria sources in areas where sustained high bacteria counts have been recorded on a frequent basis.	2	<ul style="list-style-type: none"> ➤ The Town has worked with MA DEP on the application of Bacterial Source Tracking techniques in locations in Chatham with historically high bacteria counts. These techniques can be applied in the Stage Harbor Complex as applicable.
Develop a locally tailored emergency response plan to address spills that, while harmful to the area, may not trigger intervention by the Coast Guard.	4	<ul style="list-style-type: none"> ➤ The Town has response capability in place, coordinated by the Harbormaster and Fire Department, to respond to spills. ➤ Potential use of dye pills for marine sanitation to be considered for vessels entering the harbor. ➤ Work with the Harbormaster to ensure appropriate bilge inspections are performed as necessary.
Monitor research and develop policy develop Harmful Algal Blooms (HABs).	4 now 3	<ul style="list-style-type: none"> ➤ Town staff continues to monitor research dealing with HABs and other environmental topics and develop policy as needed.

STAGE HARBOR COMPLEX: SHELLFISH RESOURCES

Recommendation	Priority	Progress to Date
Continue support for the shellfish propagation program. Evaluate whether the existing upwelling facility is adequate to meet the Town's long-term propagation needs. Secure additional resources to meet desired increases in propagation activity.	2 now 1	<ul style="list-style-type: none"> ➤ Town continues strong commitment to propagation program. ➤ Improvements to existing system will be sought during renovations to the overall Old Mill Boat yard facility. ➤ Evaluating potential alternative sites for upwelling facility to improve effectiveness of the program. ➤ Leadership of the Stage Harbor Yacht Club was educated of the regional significance and importance of the private leased upwelling facility housed on their property.

<p>Expedite implementation of nutrient management plan to protect habitat. Consider measures to reclaim degraded habitat.</p>	<p>3</p>	<ul style="list-style-type: none"> ➤ The Town is currently in the process of implementing the initial phase of the town-wide wastewater management plan. The Town has been working with the Pleasant Bay Alliance on the development of fertilizer management policies/recommendations which can be applied town-wide. These efforts are designed to address the degradation of aquatic habitats.
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STAGE HARBOR COMPLEX: LAND USE AND VISUAL CHARACTER

Recommendation	Priority	Progress to Date
<p>Support efforts to maintain and reopen coastal views on town properties or private properties.</p>	<p>5</p>	<ul style="list-style-type: none"> ➤ Vista pruning and invasive species control governed by local and state wetland protection regulations and by-laws. Projects approved with conditions as appropriate. ➤ Multiple private invasive removal and vegetation restoration projects have been approved and implemented.
<p>Explore mechanisms for preserving and restoring water views from public roads in residential areas.</p>	<p>5</p>	<ul style="list-style-type: none"> ➤ No action to date.
<p>Develop management guidelines related to encroachment at town landings and access points.</p>	<p>2</p>	<ul style="list-style-type: none"> ➤ Town Landing Master Plan assists in defining location and extent of all town landings and access points. Monitoring of private encroachment is ongoing but has in general not been a significant problem to date.
<p>Evaluate definition of water dependent uses to ensure that it encompasses all desirable water dependent uses.</p>	<p>5</p>	<ul style="list-style-type: none"> ➤ No action to date.

SOUTHWAY: CONTINUED ACCESS

Recommendation	Priority	Progress to Date
<p>Coordinate with the National Park Service and the U.S. Fish & Wildlife service to evaluate issues related to access for commercial shellfishing, geomorphology and erosion control, navigation management, use policies and enforcement.</p>	<p>2 now 1</p>	<ul style="list-style-type: none"> ➤ Close coordination with the NPS and USFWS is ongoing. ➤ Extensive efforts have been underway to support shellfishing rights held since Colonial times and before in the intertidal zones of the Monomoy National Wildlife Refuge. ➤ Town is awaiting release of the draft USFWS Comprehensive Conservation Plan (CCP) for the Monomoy National Wildlife Refuge (NWR). The CCP will identify USFWS recommendations for guiding future management and policy governing uses and activities within the

		Monomoy NWR.
Preserve and protect limited town access points on the Southway, particularly town access along a pathway accessible from Morris Island Road.	4 now 3	<ul style="list-style-type: none"> ➤ No action to date relative to the pathway referenced. ➤ Improvements to the shoulder parking on the causeway dike on Morris Island Road currently underway in cooperation with the USFWS.

SOUTHWAY: PUBLIC SAFETY

Recommendation	Priority	Progress to Date
Continue to monitor vessel traffic throughout the area and evaluate the need for further speed controls, or other actions to reduce vessel conflicts or disturbance to nearby wildlife.	2	<ul style="list-style-type: none"> ➤ Vessel activity has greatly diminished after the 2006 closure of the inlet between the Southway and Atlantic Ocean. ➤ Harbormaster continues to place mid-channel buoys to assist navigation. ➤ Monitor effects of the new 2013 inlet through South Beach on navigation.

SOUTHWAY: NATURAL HABITAT AND RESOURCE PROTECTION

Recommendation	Priority	Progress to Date
Seek No Discharge Area designation for the Southway; evaluate and publicize existing pump out capacity.	5	<ul style="list-style-type: none"> ➤ Southway included in the Outer Cape Cod NDA which was approved in 2011. ➤ Existing Town pump-out facility in Stage Harbor deemed to be adequate for local needs. Continue to monitor whether additional pump out facilities are necessary.
Continue to work with the Cape Cod Stranding Network, and seal tour providers to take measures to prevent harassment or injury to seals, and to report and respond to events as they occur.	3	<ul style="list-style-type: none"> ➤ Coordination with the Cape Cod Stranding Network continues as necessary. ➤ Seal tour operations have declined following the closure of the Southway inlet in 2006. At least two seal operations continue to access the Southway and Monomoy vicinity. ➤ The new 2013 inlet may result in increased opportunities for seal tours if seals begin to return to the Southway.
Consider use of DNA testing, or other feasible method of determining bacteria sources, in areas where sustained high bacteria counts have been recorded on a frequent basis. Cause remediation by town or responsible parties.	2	<ul style="list-style-type: none"> ➤ The Town has worked with MA DEP on the application of Bacterial Source Tracking techniques in locations in Chatham with historically high bacteria counts. These techniques can be applied in the Southway as applicable.
Develop a locally tailored emergency response plan to address fuel spills that may not trigger intervention by the Coast Guard.	4	<ul style="list-style-type: none"> ➤ The Town has response capability in place, coordinated by the Harbormaster and Fire Department, to respond to spills.

Monitor research and policy regarding Harmful Algal Blooms (HABs). Develop a plan to address the prevention, mitigation, and control of HABs.	4	➤ Town staff continues to monitor research dealing with HABs and other environmental topics and develop policy as needed.
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NANTUCKET SOUND: SHORELINE PROTECTION

Recommendation	Priority	Progress to Date
Continue nourishment of public beaches to mitigate erosion; evaluate/prioritize shoreline areas for re-nourishment. Identify potential sediment sources for re-nourishment.	1	<ul style="list-style-type: none"> ➤ Nourishment of Town beaches has been undertaken as funding and opportunities arise. Beach nourishment has occurred as by-product of maintenance of navigational projects as well as stand-alone beach nourishment projects. ➤ Town completed a comprehensive study in 2011 to evaluate the erosion problems along its Nantucket Sound beaches which included recommendations for establishing a comprehensive shoreline management program. Results identified both recommended placement areas as well as potential sediment sources. Town will be further developing policies on how to implement.
Undertake an assessment of the Nantucket Sound Complex shoreline to determine where along the shoreline of the Complex new private shoreline structures may be found in compliance with the plan (docks, catwalks, erosion control).	± Completed	<ul style="list-style-type: none"> ➤ Extensive evaluation of the potential impacts of private piers was undertaken for all the waterways within the jurisdiction of the SCHMP.
Use the assessment to designate areas where the location of new private structures may or may not be consistent with the management plan. Develop performance and design standards for private structures in areas where they may be consistent (docks, catwalks, erosion control).	± Completed	<ul style="list-style-type: none"> ➤ Assessment determined that existing wetland regulations and zoning by-laws were sufficient to guide where new private structures could be constructed within the Nantucket Sound area
Evaluate current configuration of groins and jetties, particularly between Red River and Mill Creek, to determine effectiveness in shoreline stabilization. Evaluate re-design potential.	4	<ul style="list-style-type: none"> ➤ This assessment was included in the Nantucket Sound Erosion Study. No changes in existing groin and jetty design were deemed necessary at this time. Continue to monitor if further analysis is necessary.
Continue support of shoreline monitoring.	1	<ul style="list-style-type: none"> ➤ Annual aerial photography of shoreline to monitor/document conditions continues.

NANTUCKET SOUND: MAINTENANCE AND MANAGEMENT OF PUBLIC BEACHES

Recommendation	Priority	Progress to Date
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Develop demand management policies for public beaches.	2	➤ No action to date.
Address safety concerns where boating activity takes place in proximity to swimmers and moored vessels.	2	➤ Ongoing.
Continue/develop protocols for seaweed raking at selected beaches for dune stabilization.	3	➤ Beach raking activities for specific public recreational beaches have been approved and now governed by standing Order of Conditions approved by the Conservation Commission.
Monitor commercial activity at beaches.	2	➤ Ongoing.
Address pet access/pet waste issues at beaches.	1	➤ Pet waste clean-up “Mutt-Mitts” dispensers have been located at all public beach locations.

NANTUCKET SOUND: PROTECTION OF HABITAT

Recommendation	Priority	Progress to Date
Seek designation of Nantucket Sound as a No Discharge Area; ensure adequate pump out capacity.	3	<ul style="list-style-type: none"> ➤ Designation of Nantucket Sound as a NDA completed June 29, 2012. ➤ Existing Town pump-out facility in Stage Harbor deemed to be adequate for local needs. Continue to monitor whether additional pump out facilities are necessary.
Continue water quality monitoring; activities within the jurisdiction of health and wetland protection regulations should be held to the strictest standards applicable.	1	<ul style="list-style-type: none"> ➤ The Coastal Water Quality Nutrient Monitoring Program was expanded in 1998 with more than 100 trained volunteers and is ongoing. Health & wetland regulations are constantly being reviewed and updated as necessary.
Consider use of DNA testing, or other feasible method of determining bacteria sources, in areas where sustained high bacteria counts have been recorded on a frequent basis. Cause remediation by town or responsible parties.	2	<ul style="list-style-type: none"> ➤ The Town has worked with MA DEP on the application of Bacterial Source Tracking techniques in locations in Chatham with historically high bacteria counts. These techniques can be applied in Nantucket Sound as applicable.
Develop a locally tailored emergency response plan to address fuel spills that may not trigger intervention by the Coast Guard.	4	<ul style="list-style-type: none"> ➤ The Town has response capability in place, coordinated by the Harbormaster and Fire Department, to respond to spills.
Monitor research and policy regarding Harmful Algal Blooms (HABs). Develop a plan to address the prevention, mitigation, and control of HABs.	4	<ul style="list-style-type: none"> ➤ Town staff continues to monitor research dealing with HABs and other environmental topics and develop policy as needed.
Continue a high level of commitment to public aquaculture projects.	2	<ul style="list-style-type: none"> ➤ Town shellfish propagation program continues to have good support within the town.

NANTUCKET SOUND: BOATING AND NAVIGATION

Recommendation	Priority	Progress to Date
Affirm the importance of the permitted weir sites to the local fishing industry, as well as the potential for any of the alternate permitted sites to be used at any one time.	3	<ul style="list-style-type: none"> ➤ Weir permits are routinely renewed as necessary. No issues have been raised about continuation of weir activities into foreseeable future. One weir permit has been approved for use as an experimental aquaculture site for mussel production.
Limit the issuance of new mooring permits and maintain waiting lists at Nantucket Sound locations.	1	<ul style="list-style-type: none"> ➤ The Harbormaster maintains waiting lists at many locations throughout the town. Nantucket Sound currently does not have established waiting lists but will continue to be monitored to determine if mooring density warrants the establishment of new waiting lists.
Evaluate demand for and impacts from dry sailing and dinghy storage at public beaches and landings, and develop management recommendations.	2	<ul style="list-style-type: none"> ➤ Issue has not reached level requiring significant action. Monitoring of this activity continues.
Limit dredging in the estuarine waters of the Nantucket Sound Complex. Allow dredging in the outer waters of Nantucket Sound for navigation or mining of sediment for beach nourishment. Ensure that all dredging meets federal, state, county and local environmental standards and requirements for dredging and material disposal.	2	<ul style="list-style-type: none"> ➤ Improvement dredging of the inlet at Mill Creek implemented in 2010 (with ongoing maintenance) to re-establish tidal flow for proper flushing of the marsh system and for maintaining the existing modest level of navigation. ➤ Town is currently developing improvement dredging permits for the Morris Island Cut given the potential for shoaling to limit traditional access between Nantucket Sound and the Southway. ➤ Will also need to monitor the effects of the new 2013 inlet through South Beach as it impacts shoaling and navigation.

CONTINUATION OF ACTIVITIES

The SCHMP (and Implementation Report upon approval) will continue to serve as a guide as to how Chatham’s South Coastal harbors and waterways should be managed and protected. Action items within the current plan that require further implementation will be monitored and used to guide town efforts and funding priorities. Furthermore, the SCHPC will continue to remain active and will review, and provide formal comment as necessary, to ensure specific projects and initiatives are consistent with the Plan. Further updates to the Plan will be undertaken at appropriate intervals.