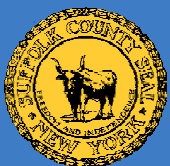


SURVEY PLAN FOR SHELLFISH CULTIVATION LEASING IN PECONIC AND GARDINERS BAYS



April 2003



Suffolk County Department of Planning
Suffolk County Department of Health Services
Suffolk County Department of Public Works

Suffolk County # New York

**Survey Plan
for
Shellfish Cultivation Leasing
in
Peconic and Gardiners Bays
Suffolk County, New York**

April 2003

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INTRODUCTION

Historical Background

Suffolk County has certain authorities pertaining to shellfish cultivation in Peconic and Gardiners Bays under New York State law, and was once actively engaged a century ago in the administration of the program that issued grants of underwater lands for private oyster farming. The status of oyster beds in the Peconic and Gardiners Bays, the conduct of private shellfish cultivation activities, conflicts among different bay users, and the need for sites to expand shellfish culture in the future are all topics that have long stirred vigorous debate.

Suffolk County currently has the authority to lease certain underwater lands in Peconic and Gardiners Bays for shellfish cultivation pursuant to Chapter 990 of the Laws of New York (1969). However, the County has not met the requirements in the law to exercise this authority, and no lands have been leased. But, as the more recent events below reflect, Suffolk County remains involved with shellfish culture issues in Peconic and Gardiners Bays.

- A 1982 Suffolk County introductory resolution that would have provided funds for the accurate mapping and survey of underwater lands in Peconic/Gardiners Bays and other required items was not adopted primarily because of opposition from baymen.
- Long Island Oyster Farms, Inc. (LIOF) bankruptcy proceedings prevented the County from taking title to thousands of acres of underwater lands for non-payment of taxes. Since the mid-1980s, Suffolk County legal and real estate staffs have dealt with tax default and bankruptcy issues, and subsequent lawsuits concerning the ownership status and use of these oyster grant underwater lands by Aqua Culture Technologies Corp.
- The Suffolk County Aquaculture Committee was established pursuant to Resolution No. 487-2001 in response to concerns over the

activities conducted by Aqua Culture Technologies Corp., which had engaged in dredging significant quantities of natural set hard clams from oyster grant lands previously held by LIOF. The Committee's final report, *Policy Guidance for Suffolk County on Shellfish Cultivation in Peconic and Gardiners Bays*, was completed in 2002. The recommendations in this report address the need for a general policy statement on private shellfish cultivation in the bays; actions the County should take with respect to oyster grant lands; and the acquisition of additional information that is essential to identify areas that would be presumptively compatible for shellfish leasing.

- A decisive action taken by Suffolk County in April 2002 changed the ownership pattern in Peconic and Gardiners Bays in dramatic fashion. The deeds for 61 private parcels, totaling about 5,190 acres of oyster grant lands, were taken by the County for non-payment of taxes. The parcels involved were reputedly owned by Aqua Culture Technologies Corp., Long Island Oyster Farms, and Peconic Bay Oyster Co. This action was taken in part to promote the establishment of a more modern administrative framework for providing access to underwater lands in the future for private shellfish culture activities.

Subsequent interest by a private party to obtain ownership of 776 acres of grant lands taken by the County resulted in an impasse when the introductory resolution asserting a superior governmental need for this property (I.R. 2043-02) was tabled in committee. This impasse provided the impetus for passage of Resolution No. 1229-2002.

Resolution No. 1229-2002

Resolution No. 1229-2002, signed by County Executive Gaffney on December 20, 2002, directs the County Department of Planning, the Division of Environmental Quality in the County Department of Health Services and the County Department of Public Works to prepare a plan for the conduct of

INTRODUCTION

the survey specified in Laws of 1969, Chapter 990 that would in-part, empower Suffolk County to lease underwater lands in Peconic and Gardiners Bay for shellfish cultivation. (The total underwater land area subject to Suffolk County leasing authority is 110,266 acres.) Elements of the survey plan include feasibility; methodology; projected survey costs; and potential sources of funding. The survey plan must be completed and submitted to the County Executive and members of the Legislature by April 19, 2003. Resolution No.1229-2002 is included in the Appendix of this report.

Survey and Mapping Mandates in Laws of New York (1969), Chapter 990

The actual survey mandates referred to by Resolution No.1229-2002 are found in Laws of 1969, Chapter 990, Section 3, as quoted below.

§3. Survey and mapping. Before leasing or using the lands hereby ceded to it, Suffolk

county shall cause an accurate survey to be made of such lands, and a map or maps to be prepared therefrom. Such survey shall determine the location of and such map or maps shall show (a) the boundary lines through said waters of the several towns involved, (b) the ordinary high water mark and a line one thousand feet therefrom, (c) the location of existing grants, easements, franchises and cable lines, (d) areas where the federal government permits fish traps to be located, (e) lands under water presently privately owned for the purpose of the cultivation of oysters, (f) areas where bay scallops are produced regularly and harvested on a commercial basis, (g) structures on the land, publicly or privately owned, and aids to navigation installed and maintained by the federal government which are useful for taking ranges and determining points on the surface of the waters of said bays and (h) proposed plots for leasing and points for the location of buoys from which the boundaries of said plots can be readily determined.

REQUIRED SURVEY COMPONENTS

This section includes an evaluation of each survey component and a recommendation as to how it should be addressed. It provides the basis for preparing work task descriptions in a request for services that would be used by Suffolk County to select a contractor(s) responsible to conduct all work for the survey.

The need exists to portray all of the different types of required spatial/survey information on a base map for this survey. Hence, a Geographic Information System (GIS) map-building element that will achieve the transfer of survey information onto the base map within defined accuracy limits will be required, and must be included in the request for contractor services. (It is noted that Laws of 1969, Chapter 990 calls for an "accurate survey" to be made; it does not define any specific level of accuracy needed to create said survey.) It is recommended that all contractor survey work be conducted at the sub-meter Global Positioning System (GPS) accuracy level.

Town Boundary Lines in Peconic and Gardiners Bays

Metes and bounds descriptions for town boundaries over water are displayed on the Suffolk County Tax Map (SCTM). These descriptions are sufficient to satisfy this survey requirement. The contractor shall obtain town boundary descriptions from the Suffolk County Real Property Tax Service Agency and transfer said boundaries to the survey base map.

Ordinary High Water Mark and Boundary Line 1,000 Feet Seaward of Same

It is not necessary to conduct a new survey of the high water mark. The shoreline shown on National Ocean Survey (NOS) Nautical Charts 12358 (Edition 19, printed September 2002) and 13209 (Edition 23, printed October 1999), which show the Peconic/Gardiners Bays region, is the mean high-water line. It is recommended that the shoreline on these NOS charts be used for this required item. A digital coverage of same would

have to be obtained by the contractor to enable transfer to the survey base map. The procedures for acquiring digital versions of NOS charts can be viewed on the World Wide Web at <http://www.csc.noaa.gov/products/>.

Pursuant to section 4 of Laws of 1969, Chapter 990, Suffolk County cannot lease any underwater lands "within one thousand feet of the high water mark." Once the mean high-water line is mapped, per above, the needed 1,000 foot buffer boundary can be plotted on the base map. (At the time when specific plots are considered for leasing, it could be assured that none are located within or close to the 1,000 foot shoreline buffer.)

Location of Existing Grants, Easements, Franchises and Cable Lines

When the survey is conducted, the NYS Office of General Services, Submerged Land and Natural Resources Section (OGS) and the L.I. Power Authority must be contacted to ascertain the locations of land grants, cable lines, etc. The list of areas to be mapped would also include: a. the water column lease issued by OGS for the fluke fish farm located to the south of Plum Island; b. any restrictive zones defined by distance criteria that are established by the U.S. Dept. of Homeland Security to protect the Plum Island Animal Disease Center; and c. established navigation channels and ferry routes. The boundaries of such areas would have to be obtained and transferred to the survey base map by the contractor.

Federally-designated Fish Trap Areas

There are only two *explicit* requirements in Laws of 1969, Chapter 990 that relate directly to fisheries. They involve fish traps and the bay scallop fishery.

The NYS Department of Environmental Conservation (NYS DEC) issues permits for fish traps that are located in areas west of Shelter Island. (See Environmental Conservation Law {ECL} Section 13-0343, subsection 14, paragraph A3 for

REQUIRED SURVEY COMPONENTS

boundary line description.) The NYS DEC permit authority does not encompass areas to the east of Shelter Island. Here, fish traps are located within designated federal fish trap areas; such areas are supposedly shown on nautical charts, but none are shown on NOS Charts 12358 and 13209. Apparently, the U.S. Army Corps of Engineers no longer designates areas for fish traps (a.k.a. pound nets). Under its more general Nationwide Permit Program, the Corps authorizes fish and wildlife harvesting activities, such as pound nets, lobster pots, crab pots, clam and oyster digging, etc. to occur.

The contractor must contact the NYS DEC Bureau of Marine Resources for the location of permitted fish traps. The location/boundary of designated fish trap areas must be ascertained via contact with the U.S. Coast Guard and Army Corps of Engineers. This information would be transferred to the base map.

Private Oyster Cultivation Grants

As a result of oyster grant issuance activity during the late 1800s to early 1900s, the underwater lands in Peconic and Gardiners Bays (110,266 acres) were subdivided into approximately 550 parcels, the boundaries of which are described in old oyster lot deeds. The *Peconic/Gardiners Bays Underwater Land - Private Oyster Grants* map in the Appendix shows the location of: a. all privately owned oyster grant parcels (with taxes assessed); and b. all other parcels (parcels that are tax exempt, parcels that are not assessed, or Suffolk County parcel - taxes paid). This survey requirement should be limited to cover only those oyster grant parcels that are privately owned. There are 45 of these parcels, with a combined total area of about 3,434 acres. Table 1 in the Appendix identifies these parcels by SCTM number, acreage and assessed owner; and is based on a tax search for the 2000/2001 tax year.

The parcel boundaries shown on the SCTM are not adequate for preparation of a guaranteed survey. This required component will entail the conduct of

updated title searches by the Suffolk County Division of Real Estate on all private grant parcels to ascertain parcel boundary descriptions contained in original oyster lot deeds, and any recent ownership changes. The contractor will contact private owners to determine if accurate surveys already exist. This information will be used by the contractor to prepare parcel surveys at sub-meter level GPS accuracy. Surveyed parcel boundaries will then be transferred to the survey base map by the contractor.

Areas Where Bay Scallops are Produced Regularly and Harvested on a Commercial Basis

The Peconic Estuary bay scallop fishery was once a predominant segment of the northeast bay scallop industry. Northwest Harbor, Orient Harbor, Flanders Bay, Shelter Island and other areas have been historically productive for bay scallops. But since the mid-1980s, aperiodic brown tide blooms in Peconic and Gardiners Bays have decimated this fishery. Suffolk County cannot lease any underwater lands "where bay scallops are produced regularly and harvested on a commercial basis." (Laws of 1969, Chapter 990, Section 4) There is a need to develop a consensus on this important issue.

The ecological linkage between bay scallop populations and submerged aquatic vegetation (SAV) provides a way to meet this survey requirement by making the assumption that bay scallops are produced regularly and commercially harvested in SAV beds. Given this assumption, the distribution of SAV beds in Peconic and Gardiners Bays can be used as a proxy for locating productive bay scallop habitat in a first order sense.

The natural resource inventory work conducted under the Peconic Estuary Program (PEP) provides a direct and timely input to the completion of this survey component. The just-completed report - *An Inventory of Submerged Aquatic Vegetation and Hardened Shorelines of the Peconic Estuary, New York* - contains GIS maps that show the location and shape of beds comprised of eelgrass, green fleece, widgeon-grass and other types of SAV,

based on the interpretation of fall 2000 aerial photographs and field inspections (Tiner et al. 2003). The Suffolk County Department of Health Services will be able to provide the GIS coverage for SAV distribution to the contractor for transfer to the survey base map. The availability of this coverage eliminates the need for additional natural resource inventory work on this topic at this time. However, the fall 2000 SAV bed map must be reviewed by commercial fishermen in the user workshops discussed later herein to determine if any additional areas (e.g., sandy bottom near eelgrass beds) should be added to address the survey requirement pertaining to bay scallops.

Structures on the Land and Federal Aids to Navigation which are Useful for Taking Ranges and Determining Locations on Bay Surface Waters

This requirement reflects survey technology and practice in common use at the time over thirty years ago when Laws of 1969, Chapter 990 was adopted by the State of New York. Today, parcel and feature boundaries over the surface of the water will be described using GPS technology. The contractor will identify and locate on the survey base map any necessary points of reference that are needed for use of GPS technology. Given the fact that land reference points and navigation buoys are not necessary when GPS technology is used, this survey requirement is no longer valid.

Proposed Plots for Leasing and Points for the Location of Buoys from which the Boundaries of said Plots can be Readily Determined

The issue of location, with respect to where leasing for shellfish cultivation is considered to be presumptively compatible with both user and environmental concerns, is the crux of the public policy debate over aquaculture in Peconic and Gardiners Bays. All other survey components must be completed first and the results analyzed before the location of proposed plots for leasing can be identified. Hence, this required component is basically analytical and iterative, and must involve communication with and feedback from the

involved constituencies, i.e., commercial fishermen, recreational boaters and anglers, shellfish growers, environmentalists, etc.; government agency regulators and the general public. In short, all interested parties must achieve a consensus on where leasing *could* occur. This paves the way for a policy decision by Suffolk County on where and how leasing *will* occur.

There is a need to determine primary use patterns related to commercial and recreational fishing activities in Peconic and Gardiners Bays, so that any anticipated space use conflicts with shellfish farming can be avoided/mitigated, and a consensus on location achieved. The contractor will conduct open workshops/meetings in each of the five east end towns with commercial fishermen, recreational fishermen, boaters and others to arrive at a reasonable approximation of where different user activities occur. (Conduct of some activities may be limited by applicable law. For example, commercial draggers cannot use "trawls" in the waters located generally near and to the west of Shelter Island. {See ECL Section 13-0341, subsection 5 for boundary line description.}) The meetings should be widely advertised. They will enable contact with various user groups to be made, and input received directly.

Current and prospective shellfish farmers should also be invited to attend the workshops/meetings. In this regard, the location of Temporary Marine Area Use Assignments (circular areas about 5 acres in size) issued by NYS DEC for off-bottom shellfish culture should be mapped. (DEC has coordinates for center points.) A list of private shellfish cultivation activities now underway should be constructed by the contractor.

Commercial shell-fishermen would also be asked to review the SAV distribution map discussed earlier to assess its adequacy as a proxy for bay scallop production and harvest areas. A buffer zone may need to be incorporated around the SAV beds to account for bay scallop movement and areas where they are harvested.

REQUIRED SURVEY COMPONENTS

The contractor will prepare large scale maps of Peconic and Gardiners Bays that show plotted boundaries of the survey components required under Laws of 1969, Chapter 990. These maps should be used at the meetings to elicit responses from the various user groups, and enable recording of input with spatial content directly onto the maps. Two examples of such maps that use NOS charts as a base are shown in the Appendix of this report.

The product would consist of draft maps showing locations of user activities, accompanied with brief narrative descriptions of same. Maps would be prepared in suitable format for transfer of information to the GIS base map. It is conceivable at this point that Suffolk County could identify one or more zones where leasing could occur. The County will provide the boundaries of these *shellfish cultivation zones* to the contractor, who will then plot them on the survey base map.

The methodology for locating lease plots within shellfish cultivation zones appears to be straightforward. Preliminary concepts concerning how a leasing program could be structured and where lease plots could be sited were recently proposed by The Nature Conservancy-sponsored Peconic Bays Aquaculture Advisory Committee (2002). This committee suggested that a leasing program could issue two types of leases. *Off-bottom shellfish culture leases* would not exceed 10 acres in size. *On-bottom shellfish culture leases* would not exceed 50 acres. For discussion purposes, it can be assumed that leases are square in shape. GPS coordinates for each of the corners of a square-shaped lease would suffice for locating lease plots on the survey base map. The use of GPS survey technology renders the "points for the location of buoys" issue obsolete, as discussed earlier.

OTHER STUDIES
(NOT REQUIRED BY THE LAWS OF 1969, CHAPTER 990)
THAT WILL ASSURE PROPER MANAGEMENT OF
SHELLFISH LEASING ACTIVITIES

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THAT WILL ASSURE PROPER MANAGEMENT OF SHELLFISH LEASING ACTIVITIES**

Benthic Mapping Survey

The Peconic Estuary Program (PEP) Benthic Mapping Survey was initiated with multi-agency support to improve decision-making about a variety of issues, including Essential Fish Habitat and critical natural resource areas (areas of “particular ecological significance” designated by the PEP). Scientific researchers at the Marine Sciences Research Center, SUNY @ Stony Brook will produce GIS maps of benthic habitat types in the Peconic Estuary based on depth, sediment characteristics (grain size, reflectivity, etc.) and fauna/flora populations. It is anticipated that statistical analysis of bottom conditions and biota will result in the identification of 10 to 20 different benthic habitats. (The exact number of habitat types will not be definite until all groundtruthing samples have been collected and analyzed.) The extent and relative distribution of the different habitat types will be discernable from the GIS maps. Habitat types can be linked to areas that are likely conducive to flounder spawning, natural shellfish set, etc. It is the intent of the Peconic Estuary Program to map the entire Peconic Estuary.

To date, The Nature Conservancy, Suffolk County, Peconic Estuary Program, and New York State have successfully leveraged a total of \$295,000 to fund the Benthic Mapping Survey:

- \$70,000 Suffolk County Capital Program
- \$120,000 The Nature Conservancy
- \$55,000 Peconic Estuary Program
- \$50,000 New York State

The \$295,000 is currently funding Phases I and II of this project, which will cover about one-third of the 149,234 acres of underwater lands in Peconic and Gardiners Bays that are within the PEP study area boundary. Habitat characterizations for Phase I will be completed by the end of 2004. It will likely take a total of five years of additional work by personnel at the Marine Sciences Research Center to complete the mapping, groundtruthing, species identification, and habitat characterization work for the remaining lands in the estuary.

The anticipated results of benthic mapping research will provide additional information that will help refine decision-making with respect to where leasing for shellfish cultivation should occur. The long-term goal of completing benthic mapping for the entire estuary should be supported. (This would avoid the possibility of skewing the results of habitat mapping by limiting it to only portions of the estuary.)

Action on the survey plan for shellfish cultivation should not be delayed by waiting for completion of all anticipated benthic mapping work. The results should be used when they become available. Their utility, however, will be enhanced by the conduct of a study on the potential impacts of shellfish farming on different benthic habitat types.

Impacts of Shellfish Farming on Benthic Habitats

The positive impacts of bivalves on ambient water quality have often been extolled. (See the Habitat and Living Resources Management section in the *Peconic Estuary Comprehensive Conservation and Management Plan* {Peconic Estuary Program 2001}.) However, according to scientists at the Marine Sciences Research Center, there are few published studies that document the positive and adverse impacts of commercial scale, shellfish farming activities on different benthic habitat types. There is an opportunity to use results of the benthic mapping survey described above in the design of a research project that would address two important questions:

How will shellfish farming operations impact different benthic habitat types in Peconic and Gardiners Bays?

What is the significance of these potential impacts?

It is not necessary to complete all of the benthic mapping survey work for the entire Peconic Estuary before such a project could be undertaken. Funding for this type of study may be available through the New York Sea Grant Program.

**OTHER STUDIES (NOT REQUIRED BY THE LAWS OF 1969, CHAPTER 990)
THAT WILL ASSURE PROPER MANAGEMENT OF SHELLFISH LEASING ACTIVITIES**

Suffolk County should encourage the design and funding of a research project, perhaps through the New York Sea Grant Program, that would investigate the impacts of commercial scale, shellfish farming activities on several benthic habitats typically found in Peconic and Gardiners

Bays. New shellfish farms located on lands leased by Suffolk County could be evaluated. Project results would help to improve decisions on where and how the County should lease, and the regulation of shellfish culture activities under NYS DEC permit authority.

**DEVELOPMENT AND IMPLEMENTATION OF A
SHELLFISH CULTIVATION LEASING PROGRAM**

DEVELOPMENT AND IMPLEMENTATION OF A SHELLFISH CULTIVATION LEASING PROGRAM

One can envision a two step process with respect to development and implementation of a Suffolk County shellfish cultivation leasing program in the Peconics: 1. Conduct of the needed surveys and resolution of the location issue, i.e., by process of elimination and using reasonable judgement, determine if there are **any** underwater lands where leasing would be presumptively compatible with all other interests. ***If such lands do exist, then*** 2. Define the details of the leasing program itself, and how it would be implemented (including needed amendments to State law, as discussed in the concluding section of this report).

The development and enactment of the required local law and regulations governing a Suffolk County shellfish cultivation leasing program, as well as the fulfillment of State Environmental Quality Review Act (SEQRA) provisions, will require substantial effort *after the policy decision is made to implement such a program*. The resources for additional work needed to accomplish implementation could be substantial, especially with respect to SEQRA, and are not within the scope of this survey plan.

The conduct of plan surveys and subsequent spatial and conflict analyses in step one above would constitute a Type II action under SEQRA. If potentially leasable areas can not be identified in step one, then it makes no sense to proceed to the second step.

The policy decision to proceed with implementation in step two would trigger the SEQRA process at a later time. All shellfish culture activities will require permits issued by the NYS DEC. The responsibilities of Suffolk County relative to those of NYS DEC under the SEQRA process remain to be determined. Analysis of environmental issues associated with shellfish farming to be conducted on County-issued leases would have to consider the implications of any natural resource management area designations in the estuary. Such designations include NYS Dept. of State (NYS DOS) Significant Coastal Fish & Wildlife Management Areas; National Marine Fisheries Service Essential Fish Habitats; PEP Critical Natural Resource Areas; and any endangered species habitat.

SUMMARY OF SURVEY PLAN COMPONENTS AND COSTS

SUMMARY OF SURVEY PLAN COMPONENTS AND COSTS

This report has presented descriptions of the work that needs to be completed by Suffolk County in order to meet the requirements for implementation of a shellfish cultivation leasing program pursuant to State law. This work entails various types of expertise, especially with regard to execution of surveys within stated levels of accuracy and the need to portray different types of map information in suitable GIS format and scales. The information base to be established by this work is crucial to the analysis and resolution of marine surface water use conflicts, and the identification of shellfish cultivation zones, as described earlier. The description of the various survey components provides the foundation for drafting a request for contractor(s) services that would be issued by Suffolk County to secure the professional capability to conduct the work.

In this section, survey components and studies have been summarized and categorized into two groups. Group A components are those that are required by existing law, and that identify use patterns. Group B includes those studies that are needed to develop the specifics of a prospective Suffolk County leasing program, and to refine and improve the management of leasing activities over time. The completion of Group A should provide enough information to locate shellfish cultivation zones where leasing would be considered compatible, and to make an informed policy decision to either proceed, or not proceed, with implementation of a lease program. It is noted that the cost estimates in this section are for planning purposes only; they are not based on responses to any specific request for contractor services.

Group A:

Group A includes all work to be conducted as described in the REQUIRED SURVEY COMPONENTS section of this report.

Surveys, Use Pattern Analysis and GIS Mapping. Conduct all parcel and boundary surveys and data collection; conduct workshops with constituencies that use Peconic and Gardiners Bays for

commercial and recreational purposes; identify and delineate primary use patterns; and prepare the survey base map and GIS coverages that show boundaries for all data layers. Cost estimate: \$275,000.

Group B:

Group B includes the work as described in the DEVELOPMENT AND IMPLEMENTATION OF A SHELLFISH CULTIVATION LEASING PROGRAM section of this report.

Establish the Suffolk County Shellfish Leasing Program. This includes the specification of regulations that would govern the leasing process, drafting the required local law and fulfilling SEQRA considerations. The policy decision to proceed with this work is conditional upon the completion of Group A. Cost estimate: none at this time.

Group B also includes projects discussed in the OTHER STUDIES (NOT REQUIRED BY LAWS OF 1969, CHAPTER 990) THAT WILL ASSURE PROPER MANAGEMENT OF SHELLFISH LEASING ACTIVITIES section of this report.

Complete the PEP Benthic Mapping Survey. Work is currently underway to inventory bottom habitats in a portion of the Peconic estuary. The work that remains to be done to complete the mapping for the entire estuary should be supported by Suffolk County, and will require on the order of an additional \$600,000 in funding over a five year period. Detailed proposals would need to be prepared in order to refine the estimate of needed funds. County funding can be used to leverage support from other sources (New York State, The Nature Conservancy and U.S. Environmental Protection Agency).

Impacts of Shellfish Farming on Benthic Habitats. Pending receipt of results from the first phase of the Benthic Mapping Survey, Suffolk County should encourage the design and funding of a research program that would assess the impacts of shellfish

SUMMARY OF SURVEY PLAN COMPONENTS AND COSTS

farming activities on typical bottom habitats found in Peconic and Gardiners Bays. The New York Sea Grant Program holds promise as a vehicle to solicit and fund research projects under such a program. Cost estimate: none at this time.

Potential Sources of Funding and Assistance

The conduct of the survey components in Group A will provide information and insights that are crucial to the decision to proceed with the development and implementation of a shellfish leasing program in Peconic and Gardiners Bays. Although there is interest on the part of State agencies to provide staff involvement in such an effort, it is unlikely that the NYS DEC or the NYS DOS will provide any direct funding assistance to the County to conduct the work. Indeed, Suffolk County is not eligible to receive assistance under the NYS DOS Local Waterfront Revitalization Program, which is a vehicle used by cities, towns and villages to prepare management plans for harbors and coastal zones.

The five east end towns focus their marine resource management efforts on those local harbors and bays that are tributary to Peconic and Gardiners Bays and under the jurisdiction and control of the towns and town trustees. Currently, only one town is actively considering the potential of private shellfish culture as a contributor to its marine-related economy. The Southampton Town Trustees have hired a consultant team to prepare a feasibility study on small-scale shellfish aquaculture in town waters. The proposed use of movable shellfish culture gear for shellfish nursery and grow-out on Trustee-owned bottom in Shinnecock and Moriches Bays is being explored. Hence, direct funding assistance to the County from the towns is unlikely. The same probably also holds for federal sources, such as the National Marine Fisheries Service (U.S. Department of Commerce) and the Northeastern Regional Aquaculture Center (U.S. Department of Agriculture), both of which periodically issue requests for proposals for projects that address national research needs and industry priorities.

**SHOULD LAWS OF 1969, CHAPTER 990
BE AMENDED?**

SHOULD LAWS OF 1969, CHAPTER 990 BE AMENDED?

In response to the need to obtain secure access to underwater lands for shellfish farming, an effort is underway to amend the Laws of 1969, Chapter 990. The East End Marine Farmers Assoc., a group that represents those in the business of shellfish cultivation in Peconic and Gardiners Bays, has been working with NYS legislators to achieve this goal. As a result, Assembly Bill A. 7182 (sponsored by Assemblyman Fred W. Thiele, Jr.) and Senate Bill S. 3329 (sponsored by Senator Kenneth P. LaValle), which are identical, were introduced in the NYS Legislature on March 24, 2003. Given the determinations made in this survey plan report, and the immediate opportunity now at hand, Suffolk County should review these bills and request that additional amendments be made. Conceptual changes that are needed to the Laws of 1969, Chapter 990 are identified below.

- Eliminate all references in the law that relate to outmoded survey technology, and substitute appropriate language pertaining to use of Global Positioning System survey techniques with appropriate accuracy levels.
- Remove the requirement to map proposed plots for leasing; it should be replaced by the mapping of shellfish cultivation zones where shellfish leases could be issued. All other survey and mapping mandates in the law should be amended to match the work that is contemplated within this survey plan report. This makes sense; it would also make such work legally defensible.
- Remove the residency requirement as a condition for lease purchase eligibility. Remove the explicit references in the law to lease area (50 acres or more) and lease term (10 years) limits. (These explicit lease stipulations reflect the extensive culture practices of the oyster industry in the past, and should be deleted.) Remove the provision for sale of leases at public auction. (In general, Suffolk County should have the authority to develop regulations that would govern *all* aspects of leasing, and that reflect current shellfish culture technology and practice, and user issues and concerns.)
- Add provisions authorizing the County to: prepare and adopt a shellfish cultivation zone map; and to adopt a local law with regulations governing all aspects of the leasing process. The latter would include lease application, terms, rents, size limits, conditions, cancellation/termination, renewal, procedures for lease application review and approval, lease recording, disposition of lease rents, etc.
- Eliminate the requirement for the County to pay 75% of the lease rents collected to the five East End towns. Lease rents should be established at an amount that does not deter legitimate shellfish farmers from participating in the lease process. Shellfish farming is a risky venture. Rents should be low enough to attract interest, but high enough to prevent frivolous applications. Lease rents in other states are very low, and do not constitute a significant source of government revenue. The same should hold for Suffolk County, which should not expect a financial windfall from issuing shellfish leases. The primary goal of a lease program should be to encourage marine-related jobs in the region.
- The NYS DEC has the authority to regulate how private shellfish culture activities in Peconic and Gardiners Bays are conducted. Regulation is accomplished through the administration of various permit programs, and enforcement of the law by Environmental Conservation Officers. This includes protection of private property owned by shellfish farmers, i.e., culture gear and cultured shellfish stocks. Codification of the Suffolk County leasing program under the Environmental Conservation Law would enhance Environmental Conservation Officer enforcement efforts "on the water." This additional amendment should be supported by Suffolk County.

SHOULD LAWS OF 1969, CHAPTER 990 BE AMENDED?

GLOSSARY AND REFERENCES

GLOSSARY

benthic habitats

Benthic habitats are found on the sea floor, and can be characterized by water depth, sediment type, biota (plants and animals) present, and other factors. “Organisms that live on or in the sea floor are collectively known as *benthos*.” (Wahle 1990)

bivalves

Mollusks that have two hinged shells (valves) are called *bivalves* (e.g., hard clams, oysters). Those with a continuous shell are called univalves or gastropods (e.g., snails) (Wahle 1990).

shellfish cultivation

The term “shellfish cultivation” is not defined in the law (Laws of 1969, Chapter 990) that authorizes Suffolk County to lease underwater lands in Peconic and Gardiners Bays for “the purpose of shellfish cultivation.” However, the terms *shellfish* and *cultivation* are defined in the NYS Environmental Conservation Law (ECL), and the New York State Official Compilation of Codes, Rules and Regulations, respectively. According to ECL Article 11, section 11-0103:

“Shellfish” means oysters, scallops, and all kinds of clams and mussels.

Title 6, Part 48 Marine Hatcheries, On-bottom and Off-bottom Culture of Marine Plant and Animal Life, section 48.1 defines *cultivation* as follows:

“Culture” or “cultivation” means the controlled or partially controlled raising, breeding, growing, planting and containment of marine plant or animal life in any marine hatchery or through on-bottom or off-bottom culture as herein defined.

Given the above, *shellfish cultivation* is defined by a combination of the above definitions, and with respect to how this activity has occurred in the past, is now underway or could occur in the future within the specific geographic area of Peconic and Gardiners Bays.

submerged aquatic vegetation (SAV)

Submerged aquatic vegetation (SAV) "pertains to all types of multicellular plant species found within the Peconic Estuary. This includes not only rooted aquatic vegetation (e.g., eelgrass and widgeon grass), but also attached and unattached macroalgae (e.g., green fleece, rock weed, brushy redweed, lacy redweed, sea lettuce, kelp, etc.). Intertidal marsh grasses are not considered to be SAV (Cashin Associates, P.C. 1995).

REFERENCES

- Cashin Associates, P.C. 1995. *Peconic Estuary Program Submerged Aquatic Vegetation Study*. Hauppauge, NY. Prepared for the Peconic Estuary Program of the Suffolk County Department of Health Services, Office of Ecology, Riverhead, NY.
- Peconic Bays Aquaculture Advisory Committee. 2002. *Final Report*. The Nature Conservancy. East Hampton, NY.
- Peconic Estuary Program. 2001. *Peconic Estuary Comprehensive Conservation and Management Plan*. Sponsored by the United States Environmental Protection Agency under Sec. 320 of the Clean Water Act. Suffolk County Department of Health Services, Program Office.
- Suffolk County Aquaculture Committee. 2002. *Policy Guidance for Suffolk County on Shellfish Cultivation in Peconic and Gardiners Bays*. Suffolk County Department of Planning. Hauppauge, NY.
- Tiner, R.W., H.C. Bergquist, D. Siraco, and B.J. McClain. 2003. *An Inventory of Submerged Aquatic Vegetation and Hardened Shorelines for the Peconic Estuary, New York*. U.S. Fish and Wildlife Service, Northeast Region, Hadley, MA. Prepared for the Peconic Estuary Program of the Suffolk County Department of Health Services, Office of Ecology, Riverhead, NY.
- Wahle, Lisa, 1990. *Plants and Animals of Long Island Sound*. CT-SG-90-11. Connecticut Sea Grant College Program. Marine Sciences Institute, Groton, CT.

APPENDIX

Intro. Res. No. 2296-2002
Introduced by Legislator Crecca

Laid on Table 12/5/2002

RESOLUTION NO. 1229 -2002, IMPLEMENTING AQUACULTURE COMMITTEE RECOMMENDATIONS IN CONNECTION WITH COUNTY SHELLFISH CULTIVATION LEASING AUTHORITY (PECONIC AND GARDINERS BAYS)

WHEREAS, Resolution No. 487-2001 established a fourteen (14) member Aquaculture Committee to issue a report regarding a dispute over the status of aquaculture beds in the area between Peconic Bay and Gardiners Bay and, in particular, Suffolk County's role under Chapter 990 of the LAWS OF NEW YORK (1969) and its related predecessor acts; and

WHEREAS, the dispute involved outstanding taxes owed on such underwater properties; the role of Suffolk County in managing such land; and the status of the aquaculture industry on Long Island; and

WHEREAS, a report was issued by the Suffolk County Aquaculture Committee in June 2002, concluding that State law now requires compliance with certain requirements before Suffolk County may lease or use the underwater lands that were ceded to it by the State of New York in an area that extends from the mouth of the Peconic River east to a line running from the most easterly point of Plum Island to Goff Point, at the entrance of Napeague Harbor, as follows:

- A.) Suffolk County must survey the land and prepare maps from the survey showing:
 - 1.) Town boundary lines in Gardiners and Peconic Bays;
 - 2.) Ordinary high water mark and a line located 1,000 feet seaward of same;
 - 3.) Location of existing grants, easements, franchises and cable lines;
 - 4.) Federally designated fish trap areas;
 - 5.) Underwater lands presently privately owned for the purpose of oyster cultivation;
 - 6.) Areas where bay scallops are produced regularly and harvested on a commercial basis;
 - 7.) Structures on the land and federal aids to navigation that are useful for taking ranges and determining points on the surface of the waters; and
 - 8.) Proposed plots for leasing and location of buoy markers.
- B.) A local law must then be enacted, which contains regulations governing at least the following items:
 - 1.) lease applications, required notices, and fees for filing applications, maps and documents;
 - 2.) the form, terms, transfer, and renewal of leases;
 - 3.) re-survey and mapping where significant changes in the location of the shoreline occur, or where there are changes in range markers or navigation aids;
 - 4.) the placing and maintenance of marker buoys;
 - 5.) the use of lands not leased;
 - 6.) the underwater lands may only be leased for the purpose of shellfish cultivation;
 - 7.) limit the leasing of underwater lands only to Suffolk County residents (one year residency required);
 - 8.) limit the leasing of underwater lands only in plots containing fifty (50) acres or more for a term of ten (10) years;
 - 9.) the underwater lands within 1,000 of the high water shoreline are exempt from leasing
 - 10.) areas where bay scallops are produced regularly and harvested on a commercial basis are exempt from leasing; and
 - 11.) seventy-five percent (75%) of the lease fees received by the County must be

APPENDIX

allocated to the Towns of Riverhead, Southold, Shelter Island, Southampton, and East Hampton in an amount proportional to the leased acreage located within each town;

now, therefore be it

1st RESOLVED, that the Suffolk County Department of Planning, the Division of Environmental Quality within the County Department of Health Services, and the County Department of Public Works are hereby authorized, empowered and directed, pursuant to Section 14-8(A)(9) of the SUFFOLK COUNTY CHARTER, Section 9-2(F) of the SUFFOLK COUNTY ADMINISTRATIVE CODE, and Section 8-2(W) of the SUFFOLK COUNTY CHARTER, respectively, to jointly prepare a written plan for preparation of the survey required by the LAWS OF NEW YORK 1969, in accordance with the requirements described in the last WHEREAS Clause above, said written plan to include the feasibility and viability of securing such a survey; the methodology to be utilized in connection with the preparation of such a survey; the projected costs of such a survey; a recommended source of cost effective funding for such a study; the availability of State or federal aid to offset the cost of such a survey; and the feasibility and advisability of inducing the participation of the Towns of Riverhead, Southold, Shelter Island, Southampton, and/or East Hampton in such an undertaking, either financially or through in-kind services; and be it further

2nd RESOLVED, that a formal written report and its recommendation for action on the written plan required by the 1st RESOLVED Clause of this Resolution shall be submitted to the County Executive and to each member of the County Legislature no later than one hundred twenty (120) days subsequent to the effective date of this Resolution; and be it further

3rd RESOLVED, that this Legislature, being the State Environmental Quality Review Act (SEQRA) lead agency, hereby finds and determines that this resolution constitutes a Type II action pursuant to Section 617.5(c)(20), (21), and (27) of Title 6 of the NEW YORK CODE OF RULES AND REGULATIONS (6 NYCRR) and within the meaning of Section 8-0109(2) of the NEW YORK ENVIRONMENTAL CONSERVATION LAW as a promulgation of regulations, rules, policies, procedures, and legislative decisions in connection with continuing agency administration, management and information collection, and the Suffolk County Council on Environmental Quality (CEQ) is hereby directed to circulate any appropriate SEQRA notices of determination of non-applicability or non-significance in accordance with this resolution.

DATED: December 17, 2002

APPROVED BY:

/s/ Robert J. Gaffney
County Executive of the County of Suffolk

Date of Approval: December 20, 2002

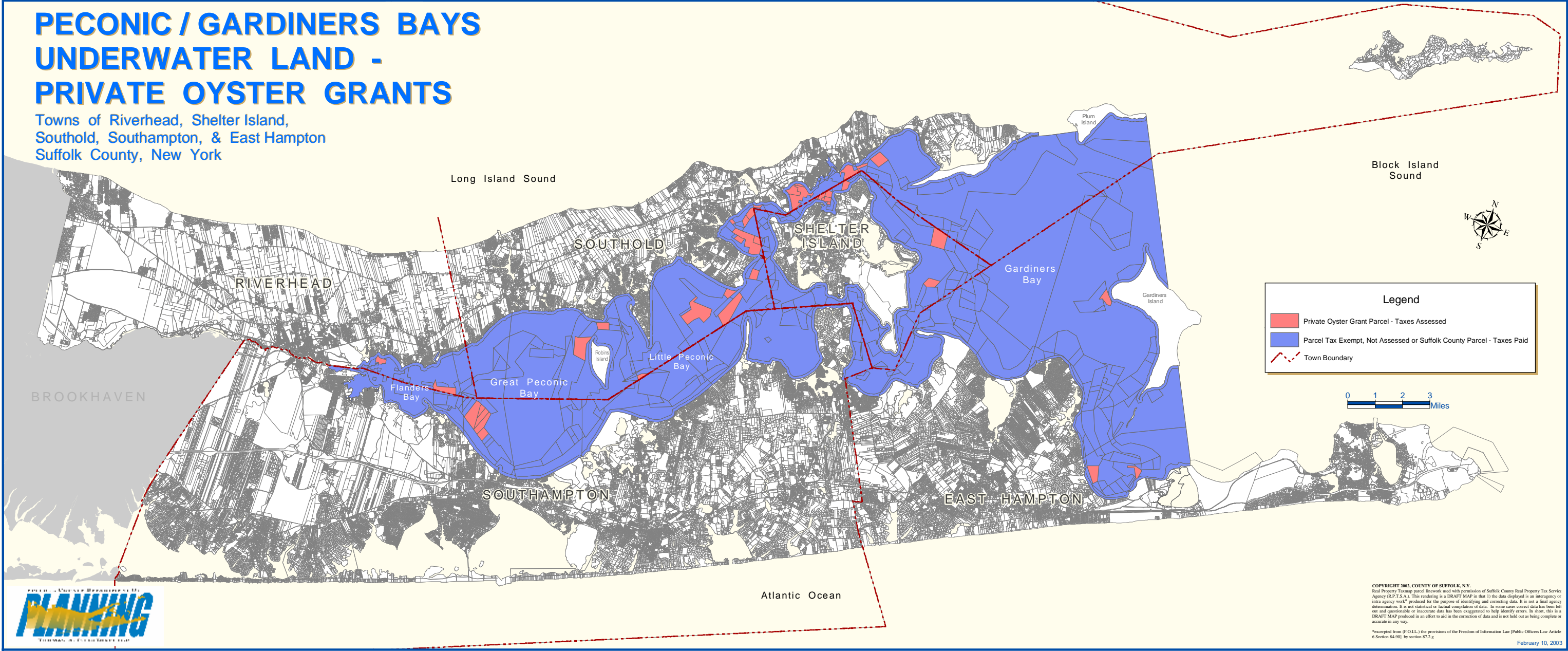
Table 1. Private Underwater Oyster Grant Parcels in Peconic and Gardiners Bays*

Suffolk County Tax Map Parcel No.	Approximate Acreage	Assessed Owner
Town of East Hampton		
0300 20300 0200 011000	81	Temple Beth El
0300 20400 0500 022000	57	E. Rattray
0300 20400 0500 002000	118	Stoekert
Town of Riverhead		
0600 15000 0100 004000	45	D. Lessard
0600 15000 0100 013000	113	Aquacult.
0600 15000 0200 002000	3	R. Tollefsen
Town of Southampton		
0900 00100 0200 030000	1	L. Munder
0900 15400 0200 005000	193	AMMS Land/BayBottoms
0900 15400 0200 006000	35	AMMS Land/BayBottoms
0900 15400 0200 008000	81	AMMS Land/BayBottoms
0900 15400 0200 009000	102	AMMS Land/BayBottoms
0900 15400 0200 011000	69	AMMS Land/BayBottoms
Town of Shelter Island		
0700 02800 0100 099000	50	E. Kelmenson
0700 02800 0100 012000	205	J. Markow
0700 02800 0100 096000	36	A. Pioccozzi
0700 02800 0100 088000	29	W. Devlin
0700 02800 0100 095000	28	A. Pioccozzi
0700 02800 0100 089000	6	A. Pioccozzi
0700 02800 0100 087000	5	P. Windorf
0700 02800 0100 094000	8	LI Oyster
0700 02800 0100 027000	85	A. Pioccozzi
0700 02800 0100 032000	0	Aquacult.
0700 02800 0100 066000	6	N.Perry
Town of Southold		
1000 13300 0200 001000	16	R. Parrino
1000 13300 0100 028001	53	D. Hotline
1000 13300 0100 028002	41	E. Zeneski
1000 13300 0100 025000	14	R. Parrino
1000 13300 0100 020000	259	Aquacult.
1000 13300 0100 019000	43	
Town of Southold		
1000 13300 0100 021000	34	J. Holzapfel
1000 13300 0100 005000	58	G. Schmelzer
1000 13300 0100 003000	339	H. Pickerell
1000 13400 0300 009000	73	J. Scott
1000 13400 0300 006000	226	J. Scott
1000 13400 0400 006002	29	Private
1000 13200 0100 001007	5	E. Marion Clam & Oyster Co.
1000 13300 0200 016001	126	R. Parrino
1000 13300 0200 012000	1	A. Piccozzi
1000 13300 0200 008000	16	D. Yaxa
1000 13300 0200 009000	196	Bluept Co.
1000 13300 0200 007000	75	D. Yaxa
1000 13300 0100 015004	64	N. Perry
1000 13300 0100 009000	260	LNX Inc.
1000 13200 0100 002000	124	K. Schultz
1000 13200 0100 001005	25	E. Marion Clam & Oyster Co.

* This table is based on a tax search prepared by Donna Waide, Suffolk County Department of Planning, Division of Real Estate, on all underwater land parcels in Peconic and Gardiners Bays for the 2000/2001 tax year. Parcel acreage was rounded to the nearest whole acre.

PECONIC / GARDINERS BAYS UNDERWATER LAND - PRIVATE OYSTER GRANTS

Towns of Riverhead, Shelter Island,
Southold, Southampton, & East Hampton
Suffolk County, New York

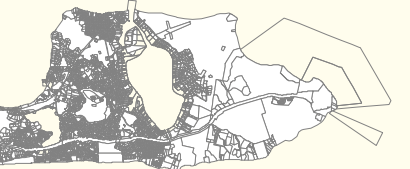
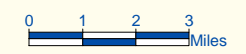


Block Island Sound



Legend

- Private Oyster Grant Parcel - Taxes Assessed
- Parcel Tax Exempt, Not Assessed or Suffolk County Parcel - Taxes Paid
- Town Boundary




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Real Property Taxmap parcel framework used with permission of Suffolk County Real Property Tax Service Agency (R.P.T.S.A.). This rendering is a DRAFT MAP in that 1) the data displayed is an interagency or intra agency work* produced for the purpose of identifying and correcting data. It is not a final agency determination. It is not statistical or factual compilation of data. In some cases correct data has been left out and questionable or inaccurate data has been exaggerated to help identify errors. In short, this is a DRAFT MAP produced in an effort to aid in the correction of data and is not held out as being complete or accurate in any way.

*excepted from (F.O.I.L.) the provisions of the Freedom of Information Law (Public Officers Law Article 6 Section 84-90) by section 87.2-g
February 10, 2003

NATIONAL OCEAN SURVEY NAUTICAL CHART 12358 WITH PRIVATE OYSTER GRANT PARCEL OVERLAY

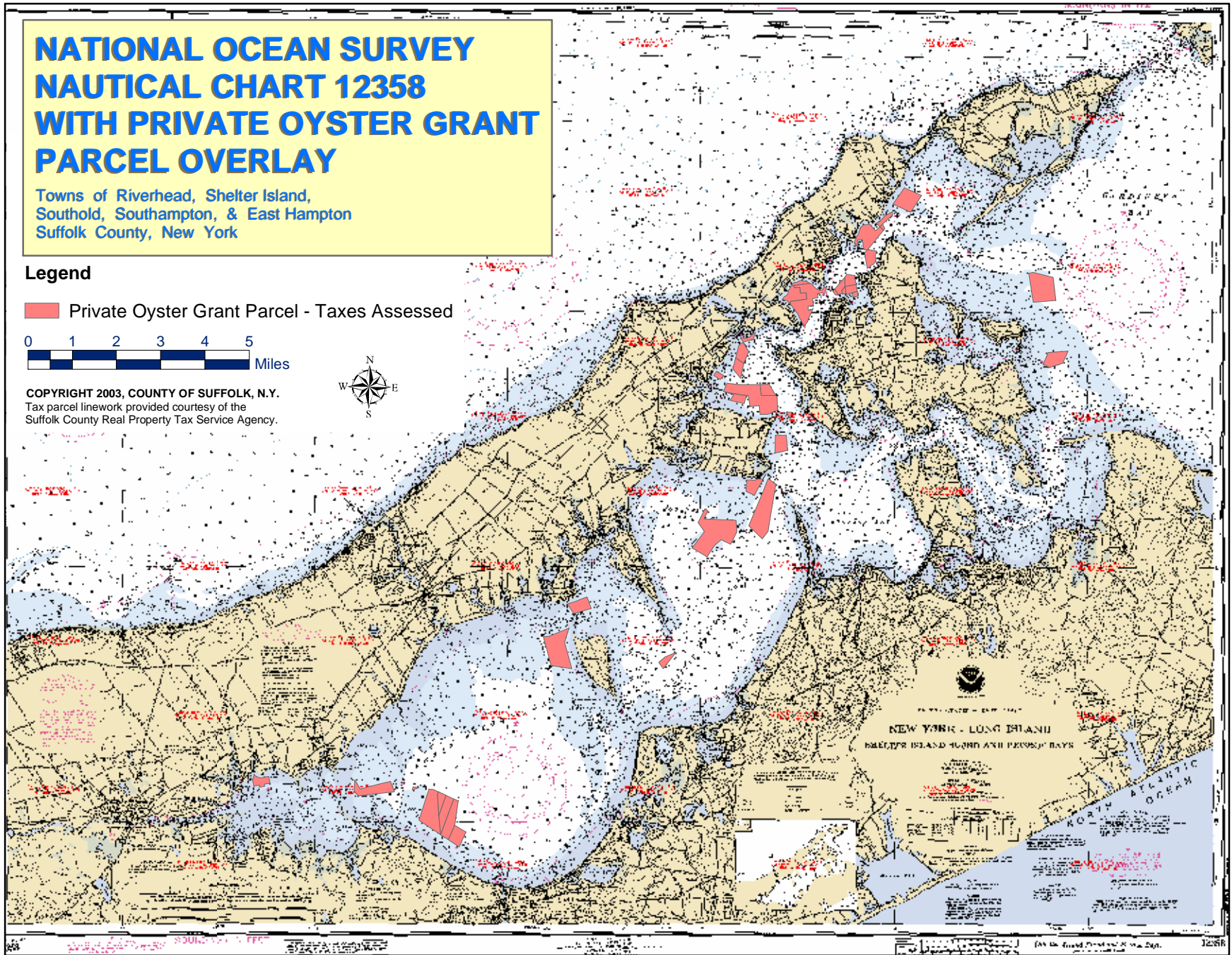
Towns of Riverhead, Shelter Island,
Southold, Southampton, & East Hampton
Suffolk County, New York

Legend

 Private Oyster Grant Parcel - Taxes Assessed



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NATIONAL OCEAN SURVEY NAUTICAL CHART 13209 WITH PRIVATE OYSTER GRANT PARCEL OVERLAY

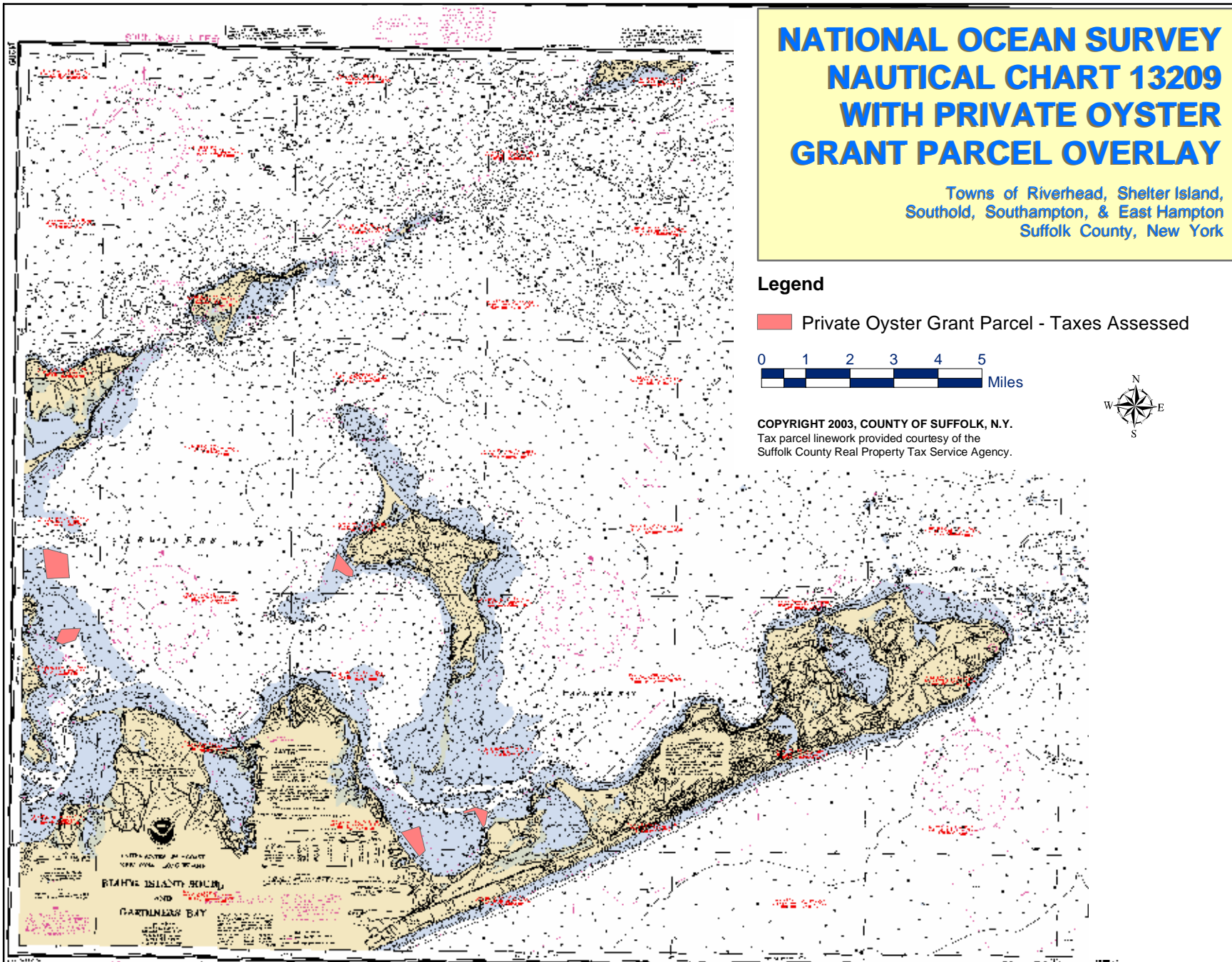
Towns of Riverhead, Shelter Island,
Southold, Southampton, & East Hampton
Suffolk County, New York

Legend

 Private Oyster Grant Parcel - Taxes Assessed



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ROBERT J. GAFFNEY
SUFFOLK COUNTY EXECUTIVE