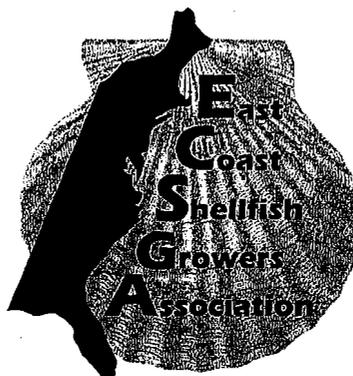


Thomas Isles, Director
Suffolk County Dept of Planning
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Robert Rheault
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January 28, 2007

Dear Mr. Isles,

In my capacity as president of the East Coast Shellfish Growers Association I have been asked to provide comments for the upcoming meetings to develop and implement a shellfish aquaculture lease program for the underwater lands in Peconic and Gardiner's Bays. Having endured a similar process over the past 20 years in Rhode Island, I have lots of personal experience in these sorts of processes.

I can predict that the upcoming meetings will be charged with emotion as waterfront homeowners and recreational boaters will make impassioned pleas to block the spread of aquaculture leases, claiming navigational impairment and destruction of property values. Fishermen will claim that prospective areas to be designated for leasing are productive and vital to their livelihood. Environmentalists will give examples of *potential* environmental problems and evoke images of environmental calamity. I challenge these groups to provide documented evidence of any of these claims.

The reality of shellfish aquaculture is that the practice is recognized as sustainable with proven environmental benefits. I have a PhD in Biological Oceanography and have spent much of my career documenting these benefits. In this brief letter I can only scratch the surface, but I encourage you to visit our website (www.ECSGA.org) for more detailed discussions and dozens of references to support the points I am making.

Shellfish aquaculture improves water quality. Because the shellfish are filter feeders they remove particles from the water, including plankton and silt as well as bacteria and viruses. They help graze down the peaks in phytoplankton blooms (including the noxious brown tide) and reduce the frequency of anoxic events. In doing so they improve light penetration, which can help preserve eelgrass. It has been shown that the sustainable harvest of shellfish removes nutrients from the water column. We have calculated that aquaculture of the American oyster alone removes over 177 metric tons of nitrogen from coastal waters and sequesters thousands of tons of carbon.

Environmental Defense notes: *"One type of aquaculture - mollusk farming – actually reduces nutrient pollution... Because 35-40% of the total organic matter ingested by a mollusk is used for growth and permanently removed by harvest of the mollusk."* – (1997). Murky Waters: Environmental Effects of Aquaculture in the US.

“EPA notes that mollusks are filter feeders and, in some cases, are recommended not only as a food source, but also as a pollution control technology in and of themselves. Molluscs remove pollutants from ambient waters via filtration.” - Environmental Protection Agency. September 2002. 57 Fed. Reg. 57,872. Washington, DC.

Cultured shellfish and the gear used to protect them from predators provide a wonderful habitat for millions of juvenile fish, crabs and lobsters that seek refuge in the nooks and crannies while feeding off the fouling that grows on the gear. Research has demonstrated that the abundance and diversity of organisms in and around shellfish aquaculture operations is equal to, or superior to that of eelgrass beds.

Shellfish aquaculture will provide jobs and economic development and help preserve a working waterfront that is an essential part of the tourism appeal of the Peconics. Over 90 percent of the shellfish farms on the East Coast are small family farms, run by owner-operators whose livelihood depends on maintaining good water quality and affordable waterfront access. Economists note that new wealth is created by only a handful of industries; farming, mining and fishing. Everyone else is simply moving old money back and forth. They also note that these industries have a tremendous impact on local economies (far beyond the value of their harvest) because the money these firms create is recycled many times over as it is used to pay rents, buy groceries and support local industries such as boatbuilding and outboard repair. While resource managers continue to document the decline of most wild-harvest fisheries, aquaculture is self-sustaining because farmers invest annually in the resource, planting tens of thousands of dollars of seed annually.

As planners work through the delicate process of deciding how diverse user groups will share a limited public resource amid increasing population pressures, they should consider which uses provide tangible environmental benefits while taking unproductive grounds and making them productive. Which users are going to be the most ardent protectors of water quality? And which industries will invest the most to sustain the treasured and delicate natural resources of the Peconics?

Shellfish aquaculture in the Northeast is growing at a rate of about 15 percent annually, in part because we have the best tasting shellfish in the world. I encourage Suffolk County planners to see how their neighbors to the north have dealt with these issues. Residents will invariably say they support aquaculture until they see a project planned in their backyard, and suddenly there will be a wave of protests that this particular spot is inappropriate. Planners will need to create a system of leasing that is objective, fair, balanced and immune to local politics.

Shellfish aquaculture should be an integral part of every coastal zone management program because the benefits to the environment and the local economy are proven.



Bob Rheault
President, East Coast Shellfish Growers Association



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East End Marine Farmers Association
PO Box 193
Orient, New York 11957

Statement for East End Marine Farmers Association
Presented to the Suffolk County Aquaculture Leasing Program Advisory Committee

The East End Marine Farmers Association is a shellfish grower association made up of some of the largest and smallest shellfish farming operations in New York. We have worked very diligently with our State and County legislators to bring forth the possibility of leasing underwater lands in the Peconics, to grow our businesses and provide opportunity for those wishing to enter the business.

The reality of shellfish aquaculture is that the practice is recognized as sustainable and has proven environmental benefits. **Shellfish aquaculture improves water quality.** Because the shellfish are filter feeders they remove particles from the water including plankton and silt as well as bacteria and viruses. It has been shown that the sustainable harvest of shellfish removes nutrients from the water column. Environmental Defense notes: *“One type of aquaculture - mollusk farming – actually reduces nutrient pollution... Because 35-40% of the total organic matter ingested by a mollusk is used for growth and permanently removed by harvest of the mollusk.”*

Cultured shellfish and the gear used to protect them from predators provide habitat for millions of juvenile fish, crabs and lobsters that seek refuge in the nooks and crannies while feeding off the fouling that grows on the gear.

Shellfish aquaculture will provide jobs and economic development and help preserve a working waterfront that is an essential part of the tourism appeal of the Peconics. Over 90 percent of the shellfish farms on the east coast are small family farms, run by owner-operators whose livelihood depends on maintaining good water quality and affordable waterfront access. The economic multiplier (amount money is cycled through the economy) for shellfish farming is quite high, 2.5 – 4.0. Money generated by shellfish farming generally remains in the local community in the form of equipment and supply purchases to sales of shellfish in restaurants.

The opportunities for establishing shellfish farms in New York are limited. Many growers do business in other neighboring states to insure that their investment in gear and animals under cultivation is not jeopardized by loss of access to growing areas. We are thankful that the County of Suffolk is pursuing this leasing program. We are not looking to displace other stakeholders, but to provide an opportunity for our industry. There is plenty of room for both.

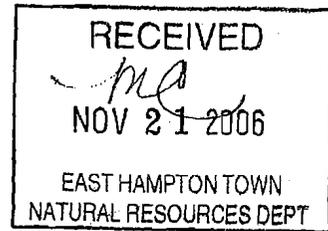
The EEMFA is also a member of the East Coast Shellfish Growers Association. A letter

from that organization has been submitted as a written statement, with 45 references listing the benefits of shellfish farming. The members of the EEMFA ask that you review that letter as well.

Thank you

001
FILE COPY

Mark D. Bertness, Ph.D.
Michelle Dionne, Ph.D.
Caitlin Mullan Crain, Ph.D.
Patrick Ewanchuck, Ph.D.
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Suffolk County Legislature
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RE: LONG TERM MOSQUITO AND MARSH MANAGEMENT PLAN

Dear County Executive Levy and Members of the Legislature:

We, the undersigned estuarine scientists and botanists, have reviewed Suffolk County's Long Term Mosquito and Marsh Management Plan at the request of the Coalition for the Protection of People and Wetlands (COPOPAW) and are writing to voice concern with regard to the proposed wetlands management scheme.

We are intimately involved in efforts to research and restore coastal marshes on the eastern seaboard. Our experience teaches us that tidal wetlands are inherently complex systems with elaborate and often misunderstood hydrological regimes.

Of particular concern to us is the plan's reliance on the practice known as Open Marsh Water Management ("OMWM"), especially the suggestion that it will "restore" Long Island's coastal marshes. OMWM, which involves artificial pond excavation, unnatural creek construction and the leveling of high marsh terrain through back-blading, is a mosquito control technique; it is not synonymous with marsh restoration.

The fact is, that despite the widespread application of OMWM, we know very little about its long-term impacts. The scientific literature contains no comprehensive, scientific studies of OMWM. The only multi-year study of OMWM, a recent assessment of the technique on several national wildlife refuges, found mixed and less than

persuasive results, even with regard to impacts on mosquito populations.

Based on our current understanding of marsh hydrology and ecology, there is nothing to suggest that OMWM restores lost ecological functions. In fact, there are concerns that the structural changes created by this technique lead to unnatural alterations of salt marsh ecosystem function.

With these thoughts in mind, we urge Suffolk County to reconsider the embrace of OMWM as a method to restore its coastal marshes. It is an unproven, experimental technique that is simply not a substitute for careful, comprehensive marsh restoration. In the long run, OMWM may even do more harm than good to your irreplaceable salt marshes.

Very truly yours,

Dr. Mark D. Bertness
Robert Brown Professor of Biology & Chair,
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Dr. Andrew Geller
Professor Emeritus
Biology Department
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cc: Suffolk County Council on Environmental Quality (c/o James Bagg, via email)
Coalition for the Protection of People & Wetlands -
Citizens Campaign for the Environment
Environmental Defense
Great South Bay Audubon Society
The Nature Conservancy
Peconic Baykeeper

SCVC + Wetlands Management.
Long Term Plan + Environmental Impact Statement
Final EIS. Vol. 2 of 5 APP 1 thru 4.
prepared by Cushman Assocs. Oct. 2006.

there is potential for the wetlands to become degraded and thus require a major restoration effort. 104

Table 7-4. Natural Heritage Program R-T-E Species in Fresh Water Environment of Suffolk County (pp. 944 to 946)

Table 7-4 is missing a number of RTE species from this list. These include the Northern cricket frog, *Acris crepitans*, which is another endangered species and which although absent for a number of years has been positively identified in an area of the north shore of western Suffolk County. Also missing from the list are the Marbled Salamander (*Ambystoma opacum*), Blue-spotted salamander (*Ambystoma laterale*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*) and Spotted Turtle (*Clemmys guttata*). 105

7.8.2.1.3 Conceptual Model (pp. 953 to 968)

On Page 964 amphibians are missing from the list of potential receptors in terrestrial areas. Specifically, salamanders (i.e. Tiger, rockhops, etc.) and toads (all) spend the majority of their adult life in terrestrial habitats. 60

7.8.2.4 Long-Term Plan Field Work Results (pp. 989 to 992)

On pages 989 to 990 in the discussion of Caged Fish Experimental Results (Larvicide), there is no data presented with the caged fish results. There should be a table that lists the rates, treatments (spray area vs. control) and measure of fish survivorship. Without data to review, the comments of the writer cannot be interpreted. How can the study conclude something that was not measured was the cause of death of anything? 106

Table 7-14 Critical Review of Additional Methoprene Articles (pp. 977 to 1016)

This table summarizes the technical review of 24 papers by Integral Consulting. The majority of the studies found significant impacts from the use of methoprene on a variety of invertebrate species. The consultant, hired by SCVC, summarily dismissed all the negative findings based on one of two reasons: either the fact that the study used concentrations of methoprene higher than what they claim would be normally found after treatment or based upon the finding of a study done by the Metropolitan Mosquito Control District of St. Paul Minnesota. According to the DOEIS one is supposed to ignore the findings of two dozen published and peer reviewed articles based on a single unpublished study done by a vector control agency and a literature review by SCVC's own consultant, both of which could not be considered unbiased parties. 107

7.8.2.6 Impacts of Application Methods (pp 1019 to 1021)

Contrary to what is described in this section the use of the helicopters themselves (not the pesticide) is a significant threat to breeding birds (with emphasis on listed species such as plover) when low overflights of breeding areas are conducted (<300 feet). The 300-foot

Dear Dewitt,

I am a commercial fisherman who fishes nine months annually exclusively in Gardiners Bay and Cherry Harbor. I would like to express my concern about the leasing of any public bottom land in those bodies of water for they are very productive. I own a 40 foot dragger and make my living trawling in those areas that are not being utilized by trap fishermen, conch and lobster potters, gill net setters, clammers and hook and liners. I attended the meeting held in Southampton on February 6, and found the public comments basically supportive of leasing unproductive public lands for small aquaculture operations.

I do believe that we can utilize unproductive bottom land for small private aquaculture sites, but I caution that the County only look to lease bottom lands which are currently not productive in commercial shellfish and finfish harvesting. In summarizing the public comments rendered at the two kickoff meetings over the Counties proposal, I see that several baymen and fishermen have expressed concern over leasing any of the productive bottom lands in Gardiners Bay. I fully agree that those bottom areas are fully productive.

As a resident of the Town of East Hampton which has had a diverse inshore fishery for centuries, I have a concern about leasing any public land for private use unless it is proven to be unproductive. Also, I believe that these leased areas should be small in size i.e. 5-6 acres and appropriately marked for navigational safety. As small private operations, I would support aquaculture, for it could bring new life to the shellfish market and baymen back to local waters.

Therefore, I urge ALPAC and the County to consider the needs of current commercial fishing interests and focus on the utilization of truly unproductive bottomlands. This will have the potential of making the Peconic and Gardiners Bay system more productive for East End baymen, fishermen and aquaculturists.

Sincerely,
Norman C. Edwards, Jr.
PO Box 543
Amagansett, NY 11930