Squibnocket Pond District Advisory Committee

Wendy Weldon

18 Austin Pasture

Chilmark, MA 02535

508 645-3199

January 9, 2012

To Tim Carroll and

Chilmark Board of Selectmen,

The Squibnocket Pond District Advisory Committee supports the town of Chilmark to appropriate the sum of $54,500.00 to enroll Chilmark Pond and Squibnocket/Menemsha Ponds in the Massachusetts Estuaries Project. Chilmark voted in 2006 and 2007 to have the Tisbury Great Pond enrolled in the Massachusetts Estuaries Project and both times the appropriations were recommended by the Chilmark Town Finance Advisory Committee. Please now include Chilmark Pond and Squibnocket/Menemsha Ponds in the MEP.

It is critical for the town of Chilmark to continue its participation in The MEP including Chilmark Pond, Squibnocket Pond, Menemsha Pond, Quitsa Pond and Stonewall Pond. Since much of the data has already been collected, why not analyze it and make it work to improve the health of our ponds now and in the future. Squibnocket Pond needs help. The nitrogen levels are unacceptably high and they are having an adverse effect on the health of the pond.

A group of homeowners from Squibnocket Pond have organized funding of mapping the phragmites and they are working on funding a new study of how to abate and or eliminate them. The results of the MEP are essential in helping with the phragmites issue.

Do we reinstate the old herring run from Squibnocket beach into the east end of the Pond? Would this help slow down the rapid growth of the phragmites?
Do we open up the barrier beach once a year (it use to breach naturally almost yearly) to help regulate the saline content of the pond thus aiding in the reduction of the phragmites growth?

So many questions and no answers. We need this study to help determine our course in managing our fragile ecosystem in Squibnocket Pond.

The results from the MEP study will give us information to make the necessary changes to improve the health of our ponds in Chilmark.

The following is copied from the MEP website:

"Project partners will determine the geographic area contributing nutrients to a specific estuary, determine what the nutrient sources are, what the nutrient load is, and how great a nutrient load the estuaries can tolerate without dramatically changing their character and usages. In most cases, returning the estuaries to the water quality condition that support sensitive shellfish habitats and lush eel grass beds, it will be necessary to remove a significant percentage of the nutrient loadings coming from an estuary's watershed.... In some scenarios, changing the water flow within an estuary to increase flushing may compliment nutrient reduction and removal efforts.

This project will provide water quality, nutrient loading, and hydrodynamic information for 89 estuaries in Southeastern Massachusetts. This information will be combined through the use of a linked watershed/estuary model that will predict the water quality changes that will result from land use management decisions. Over the next six years a report for each of the 89 estuaries will evaluate several water quality conditions and how that relates to the health of the estuary and the land use changes necessary to bring about that improvement.

This project...is subsidized by funding that allows communities to undertake this evaluation at approximately 40 percent of the actual cost."

Included here are many letters of support from the homeowners residing in the Squibnocket Pond watershed. The Blacksmith Valley Association earmarked funds annually for a few years to be contributed to the cost of the MEP. This funding is awaiting the Towns' moving forward with the MEP. Other residents in the Squibnocket Pond watershed are also willing to contribute.

Please join us in our support of this very worthy study.

Sincerely Yours,

Wendy Weldon
Chair, Squibnocket Pond District Advisory Committee

The Squibnocket Pond District Advisory Committee

A 5 (five) Year Management Plan for Squibnocket Pond
February 5 2008

The primary goal is to manage Squibnocket Pond and its watershed as a brackish pond for the purpose of supporting an estuarine ecosystem, with a key element being the management of sustainable habitat suitable for oysters and spawning alewives (herring). The health of the pond is necessary to protect the recreational activities and opportunities for livelihood that Chilmark residents have enjoyed in the past.

What local residents and visitors appreciate about Menemsha and its surrounding waters is in large part dependent upon Squibnocket Pond. Without the alewives (herring) and other baitfish that spawn in the slightly brackish waters of Squibnocket Pond our fishing industry would be greatly reduced.

Another key element is determining how to reduce adverse impacts to the pond's ecosystem and watershed. Water column chemistry data indicate that Pond water quality is impaired by excess nitrogen primarily from acid rain, natural background sources in streams and groundwater and from man-made sources.

Important Priorities

1. **Continue the involvement in the Massachusetts Estuary Project (MEP). This project began three years ago. Data has been collected over the past three years including core samples and tide data. The study will result in recommendations from the MEP as to how various pond and watershed management alternatives would affect water quality in the pond. The cost for the project is approximately $82,000 ($41,000 Aquinnah + $41,000 Chilmark). Chilmark will pay its share of the funds for the project through a warrant article at the Special Town Meeting in 2009. (2-3 year goal)**

2. **Reduce cormorant predation on the finfish populations in the Pond.** A study should be undertaken to determine the impacts of cormorant predation on the alewife, perch and eel populations. If severe impacts are documented, permission to control the population should be sought. (2-3 year goal)

3. **Develop a management plan for the sustainable harvest of the Pond's resources.** When they are abundant, oysters are an important means to maintain water quality. By filtering microscopic algae from the water column for food and depositing organic matter to bottom sediments, oysters improve water clarity and remove available nitrogen. Also, a viable oyster fishery can provide a mechanism for additional removal of nitrogen from the Pond's ecosystem through the harvest of oysters. With proper management, the substantial population of oysters in the Pond, can provide employment opportunities for local fishers. The development of the oyster fishery is hampered by fecal coliform contamination and low salinity. These constraints can be addressed as follows:
    - **Investigate the sources of fecal coliform contamination in the Pond.** Areas of the Pond are closed to the harvest of oysters due to elevated levels of fecal coliform. A study should be undertaken to determine the sources of contamination and provide strategies for reduction. (2-3 year goal).
    - **Develop a management plan that provides for the transplant of oysters to higher salinity beds in Quitsa/Menemsha.** Providing a mechanism to increase the salt content of the Pond's oysters will improve their market value and stimulate harvest. (2-3 year goal).
    - **Improve habitat for the oyster and alewife (herring) resources.** Identify and map existing oyster reefs and areas of suitable hard bottom appropriate for future expansion of this resource. Identify critical spawning areas for herring and other suitable areas not in use.

4. **Determine solutions to problems of circulation, elevated nitrogen, invasive species, and public access, dependent upon the recommendations of the MEP.** (2-3 year goal)
    - The Massachusetts Estuary Project will address the questions of whether dredging or controlled breaching is advisable to remediate low circulation and high nitrogen levels. The pond nitrogen levels are dangerously high and we are looking at possibly dredging the pond and/or opening the pond to the ocean on a controlled basis. It has been noted that the balance of Squibnocket Pond directly effects/impacts the ecological balance of Menemsha Pond not only from the discharge of Squibnocket water into Menemsha but also by the production of anadromous fishes. Sometimes in the past 20 years, Squibnocket Pond naturally breached, but has not done so in recent years. It would be helpful to conduct an historical study regarding past openings of Squibnocket Pond to the Atlantic.

We can then identify potential dredge sites to improve internal circulation including the entrance to Herring Creek and the access to the southeast coves.

- There are two apparent options to enhance circulation in the Pond: increased flow through Herring Creek and opening the system directly to the Atlantic. The MEP circulation model will be able to predict what changes to tidal flushing and water quality would result from both approaches. If a man-made opening is planned, the management plan will need to address permits and easements, timing, responsible parties, funding and other issues.

- The east end area of the pond needs attention for public access for kayaks. A plan for access should be developed to minimize impacts from foot and boat traffic, assure public safety and to identify appropriate steps to facilitate launching and passage through the shoals.

- Address invasive and non-native vegetation. Map phragmites areas to evaluate options to limit its spread or to devise removal plans. Alert riparian landowners about other invasive plants that should be removed such as purple loosestrife.

- Implement recommendations of MEP study.

5. **Examine the water quality of the aquifers and the water usage in homes in the pond's watershed.** (1-3 year goal)
   Inform Squibnocket Pond District residents of the following:
   - The residents in the watershed should have their water tested for potability at least once a year. Sodium and contaminant levels can vary seasonally as well as from house to house. The time to test the drinking water is in the spring or when residents arrive back on the Vineyard for their summer stay, when the water table is usually higher.

   - The Wampanoag Environmental Laboratory in Aquinnah can perform a basic water quality test. The Wampanoag Environmental Laboratory will perform tests for the standard potability sequence which includes the following: Total Coliform and E coli Bacteria, pH, Conductivity, Total Dissolved Solids, Chloride, Nitrite, Nitrate, Phosphate and Sulfate.

   - The Laboratory has the ability to perform the following additional analyses as well: Ammonium, Potassium, Sodium, Calcium, Magnesium as well as a variety of total metals such as Arsenic, Copper, Iron, Nickel, Lead, Chromium, Cadmium, Zinc and

Mercury for additional cost. Please call the Laboratory to discuss the charges and the procedure for these tests 508-645-2903.

- As the water table levels in adjacent lots vary considerably, residents need to be watchful of their water usage. The aquifer that supplies irrigation for a large lawn may be the same one that supplies vital drinking water to a neighbor. Lawns take an enormous amount of water to stay green during the time of year when the water table is lowest and there is very little recharge to the water table as the sod absorbs most of the water. Maintained lawns should be kept to the minimum. The remainder of a former lawn can be converted to native grasses. Choosing native plants for landscaping will reduce the water usage, as they need less water to thrive. Overhead irrigation will add to water evaporation; standard ground irrigation will help conserve water. Residents should consider using a manual rather than automatic control to prevent irrigating during rainy periods when it is unnecessary and wasteful of water and electricity. There are many other ways to reduce water usage. It is highly recommended that residents consult the ***Island Blue Pages for*** an extensive guide to water conservation. Copies can be found at the Chilmark Library and at the Chilmark Town Hall.

- Remind the residents in Squibnocket Pond's watershed that the use of nitrogen fertilizers is not recommended and if nitrogen must be used then use slow release, organic forms of nitrogen. Inform them that **the use of chemical fertilizers, herbicides, fungicides, pesticides and chemical septic system cleaners in the Squibnocket Pond Overly District is prohibited**

6. **Educate residents about nitrogen in water**. Create an informational pamphlet with the assistance of the Chilmark Board of Health. Inform the residents of options, such as composting toilets and nitrogen reducing septic systems. (2-4 year goal)

7. **Suggest alternative energy recommendations for homes over a certain number of square feet**. The SPDAC would work with the Chilmark Planning Board on this possibility. (3-5 year goal)

8. **Explore locations of** invasive and non-native vegetation. Map phragmites areas to evaluate options to limit its spread or to devise removal plans. Alert riparian landowners about other invasive plants that should be removed such as purple loosestrife. (2-4 year goal)

From: **Charles Parker <cparker_ma@yahoo.com>**
Subject: Re: Massachusetts Estuary Project/please respond today as I need feedback by tomorrow to meet a Wednesday deadline. MANY THANKS
Date: January 10, 2012 4:32:02 PM EST

To the Chilmark Board of Selectmen,

I am writing this in support of efforts to proceed with MEP studies of the ponds, as noted (p
of Chilmark since 1951 and am intimately familiar with the ponds. While Chilmark has mar
important.

Over the past few years I have been working with a small interest group to confront the phı
attest to the challenges of organizing studies and taking local action. While it was exciting
can honestly say that these environmental issues are complex and, at times, overwhelmin
answers. And, this is but one of many issues that we should be dealing with on one of fou

I believe we need to develop clear strategies for these ponds, based on assessments that
healthy to have outside scientific intelligence to sort-out the issues, challenges, and option
of the key measures of the healthiness of a pond and its wildlife and we should have a cen
key as we seek to understand the impact of development, global warming, other discontinu
exists for some of these ponds, we need a more systematic approach to data gathering. V
done elsewhere for mitigation, along with the results, applicability to our ponds, etc.

There is a large body of knowledge that's been developed through other estuary studies in
we can tap into. This is a unique and compelling opportunity to get ourselves organized ar
that have been applied elsewhere.

I have indicated my support for contributing BVA resources to this effort. And, I'm sure we
necessary.

Regards,

Charlie Parker
Concord, MA and Chilmark

CC: Vineyard Open Land Foundation, Wendy Weldon

January 10, 2010

Dear Chilmark Selectmen,

We, Leanne Cowley and Steven Galante, urge the town of Chilmark to appropriate the sum of $54,500.00 to enroll Chilmark Pond and Squibnocket/Menemsha Ponds in the Massachusetts Estuaries Project. Chilmark voted in 2006 and 2007 to have the Tisbury Great Pond enrolled in the Massachusetts Estuaries Project and both times the appropriations were recommended by the Chilmark Town Finance Advisory Committee. Please now include Chilmark Pond and Squibnocket/Menemsha Ponds in the MEP so that Chilmark and Aquinnah can have access to the same scientific analysis that the rest of southeastern Massachusetts is accessing and utilizing.

It is important to establish baseline studies in order to make fully informed management decisions going forward. We already know that our ponds are impacted; we also need to know very specifically the extent, causes and sources of degradation before we can know how to regulate future impacts and manage the ponds as a resource.

We also would like to point out some of the pertinent information contained in the MEP website:

"Project partners will determine the geographic area contributing nutrients to a specific estuary, determine what the nutrient sources are, what the nutrient load is, and how great a nutrient load the estuaries can tolerate without dramatically changing their character and usages. In most cases, returning the estuaries to the water quality condition that support sensitive shellfish habitats and lush eel grass beds, it will be necessary to remove a significant percentage of the nutrient loadings coming from an estuary's watershed.... In some scenarios, changing the water flow within an estuary to increase flushing may compliment nutrient reduction and removal efforts.

This project will provide water quality, nutrient loading, and hydrodynamic information for 89 estuaries in Southeastern Massachusetts. This information will be combined through the use of a linked watershed/estuary model that will predict the water quality changes that will result from land use management decisions. Over the next six years a report for each of the 89 estuaries will evaluate several water quality conditions and how that relates to the health of the estuary and the land use changes necessary to bring about that improvement.

This project...is subsidized by funding that allows communities to undertake this evaluation at approximately 40 percent of the actual cost."

Completed reports for other ponds and estuary systems, found on the MEP website, are extremely persuasive and instructive, and demonstrate how very useful such analysis could be for Chilmark. The ponds in Chilmark are among its most valuable resources, and we don't believe the town should let this opportunity slip away.

Thank you.

Leanne Cowley and Steven Galante
18 Blacksmith Valley Road
Chilmark

"Susan Regen" <sregen@frontiernet.net>
Support Squibnocket Pond being included in estuary project
January 9, 2012 10:05:59 PM EST
"Weldon, Wendy" <wendyweldon@earthlink.net>

To: The Selectman of the Town of Chilmark:

We, Richard & Susan Regen, long time seasonal residents and owners of 6 Storks Nest Lane, Chilmark support the Town of Chilmark appropriating the sum of $54,500 to enroll Squibnocket/Menemsha Pond in the Mass Estuary Project. Please include Chilmark Pond and the Squibnocket-Menemsha Pond system in the MEP.

Thank you,

Richard W Regen
Susan K Regen

Sue Regen
10 Hillside Rd.
Penfield, NY 14526
585-381-4036
sregen@frontiernet.net

From: **Peter Weldon <peterdweldon@gmail.com>**
Subject: Massachusetts Estuaries Project
Date: January 9, 2012 9:15:39 PM EST
To: Wendy Weldon wendyweldon@earthlink.net

Dear Town of Chilmark Selectmen:

I, Peter Weldon, support the town of Chilmark to appropriate the sum of $54,500.00 to enroll Chilmark and Squibnocket/Menemsha Ponds in the Massachusetts Estuaries Project. Chilmark voted in 2006 and 2007 to have the Tisbury Great Pond enrolled in the Massachusetts Estuaries Project and both times the appropriations were recommended by the Chilmark Town Finance Advisory Committee. Please now include Chilmark Pond and Squibnocket/Menemsha Ponds in the MEP.

Thank you.

Best regards,

Peter Weldon
19 Lake Road

From: **James May <jamesnmay@hotmail.com>**
Subject: RE: This needs immediate response by tomorrow if possible please
Date: January 10, 2012 9:14:11 AM EST
To: Wendy Weldon <wendyweldon@earthlink.net>

Dear Town of Chilmark Selectmen:

The May family (15 Red Valley Road) supports the town of Chilmark to appropriate the sum of $54,500.00 to enroll Chilmark Pond, Squibnocket/Menemsha/Quitsa Ponds in the Massachusetts Estuaries Project. Chilmark voted in 2006 and 2007 to have the Tisbury Great Pond enrolled in the Massachusetts Estuaries Project and both times the appropriations were recommended by the Chilmark Town Finance Advisory Committee. Please now include Chilmark Pond, Squibnocket Pond,Menemsha Pond and Quitsa Pond in the MEP. Thank you.

Best regards,

Jim May
202.257.6071

From: **Leanne Cowley <galantecowley@comcast.net>**
Subject: RE: Massachusetts Estuary Project/please respond today as I need feedback by tomorrow to meet a Wednesday deadline. MANY THANKS
Date: January 9, 2012 8:54:34 PM EST
To: Wendy Weldon <wendyweldon@earthlink.net

Wendy and all,
I am a firm believer in baseline studies as the most efficient way to facilitate informed decisions about ecological management. I think the MEP study for the Chilmark ponds is essential. Chilmark is very fortunate to have this opportunity for the kind of state-of-the-art analysis the MEP study provides. It's been extremely helpful for Edgartown Great Pond.

Development and redevelopment continues apace in Chilmark. Squibnocket Pond is one of the more remote ponds on the island, with relatively few homes along its shores, nevertheless it is impacted. We need to know very specifically the extent, causes and sources of degradation before we can know how to regulate future impacts and manage the pond as a resource.

The completed project reports on the MEP website show the wide-ranging, high level of information that is provided by the studies. Acquiring this hard scientific analysis, which includes projections for various management scenarios, would be extraordinarily helpful, and possibly provide an entirely new perspective. The ponds in Chilmark are among its most valuable resources, and I don't think the town should let this opportunity slip away.

Leanne Cowley

PATRICIA P. SANDS

4 AUSTIN PASTURE

CHILMARK, MA 02535

To the Chilmark Board of Selectmen and Finance Committee

I am very much in support of an appropriation of $54,500.00 by the Town of Chilmark to enroll Chilmark Pond and Squibnocket/Menemsha Ponds in the Massachusetts Estuaries Project.

Chilmark voted in 2008 and 2007 to have the Tisbury Great Pond enrolled in the Massachusetts Estuaries Project and both times the appropriations were recommended by the Chilmark Town Finance Advisory Committee. It is my hope that Chilmark Pond and Squibnocket/Menemsha Ponds will be included in the MEP this year.

Thank you for your consideration.

Yours truly,

Patricia P. Sands 12/9/2012

From: r2 <r2lurie@aol.com>
Subject: MEP
Date: January 10, 2012 10:11:18 AM EST
To: wendyweldon@earthlink.net

The Lurie Family supports the Massachusetts Estuaries Project and the use of Blacksmith Valley Association funds earmarked for this purpose.

Ralinda and Robert Lurie

Doug Liman <doug@hypnotic.com>
MEP
January 9, 2012 1:12:04 PM EST
<wendyweldon@earthlink.net>

To whom it may concern:

I, Doug Liman, support the town of Chilmark to appropriate the sum of $54,500.00 to enroll Chilmark Pond and Squibnocket/Menemsha Ponds in the Massachusetts Estuaries Project. Chilmark voted in 2006 and 2007 to have the Tisbury Great Pond enrolled in the Massachusetts Estuaries Project and both times the appropriations were recommended by the Chilmark Town Finance Advisory Committee. Please now include Chilmark Pond and Squibnocket/Menemsha Ponds in the MEP.

Thank you.

Doug Liman
34 Blacksmith Valley Road
Chilmark

From: **Rick Karney <mvsg@comcast.net>**
Subject: Re: Massachusetts Estuary Project/please respond today as I need feedback by tomorrow to meet a Wednesday deadline. MANY THANKS
Date: January 9, 2012 2:22:18 PM EST
To: Wendy Weldon <wendyweldon@earthlink.net>

Wendy,

I am stongly in favor.

Rick (Karney)
Martha's Vineyard Shellfish Group

From: **Charles Parker <cparker_ma@yahoo.com>**

Hi Wendy,

Many thanks for alerting us to this opportunity.

I'm 150% in support of this proposal to proceed with MEP for these ponds and I would support the contribution of BVA monies to this effort (monies previously earmarked for the study of Squibnocket Pond).

I'm in agreement with your concerns about Squibnocket Pond and feel that these questions need to be addressed systematically through a scientific study process. We need the data in order to make informed decisions and to develop a strategy for the Pond.

I'm also very concerned about Quitsa and Menempsha Ponds. As a result of recent large scale development in Quitsa, we may need to establish the Quitsa Pond area as a District Of Critical Planning Concern (DCPC) or take some other bold action to protect it from further uncontrollable development.

Regards,

Charlie Parker
24 Blacksmith Valley Road, Chilmark MA