



Initiating the Discussion: Dredging in the Peconic Estuary

December 17, 2010

Suffolk County Community College: Culinary Arts Campus

20 East Main Street

Riverhead, NY 11901

Summary of Workshop and Breakout Sessions

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Executive Summary

Dredging within the Peconic Estuary is a topic that involves many diverse stakeholders, often with differing opinions and needs. There are regulatory, economic, and environmental concerns. The Peconic Estuary Program (PEP) attempts to address some of these concerns in its Comprehensive Conservation and Management Plan (CCMP). After much planning, a workshop, “*Initiating the Discussion*”, was conducted by PEP as an effort to provide a forum for a productive assessment of navigational dredging in the Peconic Estuary and to identify steps to move forward to employ a more effective and efficient process. This workshop consisted of background information on the local dredging process, presentation of case studies, and most importantly, three breakout sessions meant to provide an opportunity for different stakeholders and agencies to discuss major constraints and issues and ways in which to resolve them. Results from this workshop are compiled within this document, as well as, recommended priorities and next steps.

Introduction

This workshop is based on an action recommended within the PEP’s CCMP. PEP has spent much time determining the appropriate role to play within the issue of dredging with Peconic Estuary. In addition to the role of facilitator, PEP has also spent much time determining the most effective approach and meeting style for the workshop. Most important to this workshop was the participation of a wide representation of stakeholders. In addition to presenting information on the dredging process within the Peconic Estuary, and several case studies of alternative methods for dredging, this workshop provided an opportunity for open discussion regarding the most pressing concerns and issues. Ideas from this workshop will be used to address, to the extent possible, the PEP dredging process and improve the process.

1. Summary of the Suffolk County Dredging Process by Bill Hillman, Suffolk County Department of Public Works (DPW)

Bill Hillman provided an overview of Suffolk County dredging process. Towns will request a specific waterway to be dredged by the county. Suffolk County has a part in the overall permit process and uses a consulting firm (EEA). EEA applies for the dredging permits from New York State Department of Environmental Conservation and the Army Corps of Engineers. EEA obtains all pertinent information like desired depths and dimensions of inlet, dredging disposal locations and hydrographs from the towns by having a designated contact in each jurisdiction.

Dredging projects are then presented to the Suffolk County Screening Committee which reviews proposals and determines if they benefit the public. Examples of public benefit include marinas with public facilities, boat ramps with at least six parking stalls, commercial uses. The committee uses eleven dredging criteria (including environmental) to evaluate projects. If a project is approved by this committee, the project goes to the legislature for approval. If the project gets legislative approval, it gets added to the “dredging list.”

This process can take about four to five years. The dredging window is typically October 1 – January 15. It used to be about 6 months. Suffolk County has two hydraulic dredges and one crew consisting of four people. One of the dredges is used as a spare or a backup, or as a pump if the discharge location more than 2,000 to 3,000 feet away. Suffolk County DPW has an in-house staff of four and a survey crew of three. The County’s in-house dredge is solely for the Peconic Estuary (10” diameter pipe) and is used for two to four projects per year.

Previously, an Environmental Data Report (EDR) used to be prepared by the Army Corps of Engineers but now it is required to be completed by the applicant (County). This report includes a combined Essential Fish Habitat & Endangered Species Report. It includes information like salinity, sediment tests, habitat of area to be dredged & disposal site. This report can cost between \$10,000 to \$20,000 (based on consultant fees).

2. Case Studies, Alternative Approaches

2.1. Barnstable County, MA presented by Laura Stephenson (NYSDEC)

This case study was selected because it is one of the few county run programs and it has similar geology and similarly sized projects to the Peconic Estuary. Barnstable is a county in Massachusetts of approximately 200,000 people living in an area of 500 square miles with 560 miles of coastline. It has 15 towns with 54 villages. In comparison, Suffolk County has 1.5 million people living in an area of 900 square miles with 1000 miles of coastline. Suffolk County has 10 towns with 32 villages. Barnstable County’s Dredge Advisory Committee was established in 1994. It meets 3 times per year. It includes the towns, county, and the state. The committee reviews the town lists and needs. It also develop annual dredge schedules and sets annual dredge rates. The funding and costs of the Barnstable program is as follows:

- Prior to 1996, 75% of the funding was from the state and 25% from the towns,
- In 1996, there was a \$1 million state grant to purchase a dredge,
- Now each town pay \$7/cubic yard or \$11/cubic yard if pumping exceeds 4,000 yards,
- The FY09 Budget was \$628, 671 that included 91,731 cubic yards of dredge material and 8 projects, and
- The reserve fund is \$370,000.

Permits are secured by towns, cover town-wide areas and require a 10 year maintenance agreement. Issues with this program include narrow windows, geographic limitations and limited resources.

2.2. Beneficial Use of Dredged Material in the Hudson-Raritan Estuary presented by Steve Zahn (NYSDEC)

Dredged material is recognized today as potential resource material that can be recycled or reused to implement a variety of projects. Beneficial use opportunities for dredged material are numerous, and include remediation of upland landfills, upland construction or fill projects, remediation of in-water disposal areas (Historic Area Remediation Sites - HARS), storm damage protection and ecological restoration. Some dredged material can be beneficially reused across all categories. Most can be used at HARS. Other “clean” material can go to reefs and other aquatic applications. “Dirty” material can go upland but not simply disposed as waste. It has to be amended to meet physical and chemical requirements. Dredged material is very valuable in upland applications.

The main focus of this presentation was the wide range applications for ecological restoration use of dredged materials. These options included upland habitat, borrow pit restoration, treatment of or habitat for wetlands, re-contouring shallow water habitats, filling dead-end basins, artificial reefs, habitat for birds and shellfish, mud flats, oyster reefs and SAV habitat. To address tidal wetland loss, dredged material was used to re-establish a marsh based on its 1974 footprint. The area was then planted and monitored. The cost was high and the project required much planning and coordination among many partners. A pilot project like Big Egg Marsh may be applicable for small scale projects in the Peconics.

Dredged material can also be used for grassland restoration. White Island was a former salt marsh that became a municipal landfill. It was poorly capped and abandoned. Plans include to herbicide the invasive phragmites, establish a uniform cover of sand and replant.

In New York Harbor, there are many areas of bottom with degraded conditions (low dissolved oxygen, poor sediment quality, and contaminant burdens). These were predominately created by the excavation of the bottom for fill material. Dredged material could be used to re-contour these areas, raising the bottom up to create better conditions overall.

The “take home” message and lesson learned is that dredged material is a resource with many potential applications that should be considered in comprehensive habitat restoration plans. To be successful, strong partnerships are key and comprehensive planning and coordination is essential.

3. Description of Breakout Sessions

3.1. Limited Resources (Staff, Funding, Equipment) facilitated by Rick Balla, Peconic Estuary Program/United States Environmental Protection Agency

The following is a summary of the discussion that took place during this breakout session.

3.1.1 Increase Resource

To increase dredging resources, many ideas were suggested. These included having a third dredge in the Peconics to do small maintenance projects, being more efficient by doing more

with what we have, creating inter-municipal agreements to share equipment, and piggybacking and packaging to maximize the environmental benefits of bundled projects.

3.1.2 Master Plan

To make better use of limited resources, advanced comprehensive planning or master planning was suggested. By having an overall plan or vision, dredging projects in Peconics could coordinate, bundle, and piggyback projects more efficiently. The use of data collected for other purposes might have beneficial information for dredging plans. Master planning should coordinate public and private dredging at same time which would be less costly and have less environmental impact.

In addition to a Master Plan, an annual meeting of all players, or stakeholders, in the dredging process should occur. This is especially important for new-comers. This annual meeting of federal, state and local dredging permitting operations should include new staff. This meeting would allow for discussions so a coordinated plan could be created and updated yearly. Planning and coordination to bundle all projects would make things more efficient.

In preparation for dredging, the plan should not expect public money increases. Marinas should get maintenance permits in advance. It was suggested that Lake Montauk should have a comprehensive plan by the federal government and used as a model for other areas. Other issues that can be addressed by comprehensive planning are getting a third dredge, ability to dredge around dilapidated bulkheads and each town's responsibility for its own dredging.

Another issue that should be addressed in a master plan is regular monitoring by a group such as SUNY Stonybrook and their graduate students. Results from recent studies should be included such as dredging impacts on fish species, and dredging impacts on the structural integrity of bulkheads. The placement of dredged material should be discussed.

3.1.3 Funding

To deal with limited resources, increased funding was suggested. It is important to look at each involved entity and their available funding such as SCDPW, DEC, USFWS, ACOE, and NMFS. It was also noted that funding for dredging has not increased and probably will not in the near future. In addition, new criteria involved in dredging permits have not been met with additional money to implement it.

Funding sources and funding suggestions included:

- Suffolk County ¼% for environmental issues,
- Return to town-funded dredging,
- More frequent dredging may prevent the need for infrequent costly projects,
- Smaller and more frequent dredging projects,
- Utilizing local expertise instead of contractors,
- Adequate planning to take advantage of other dredge projects,
- Connect dredging with habitat restoration in order to take advantage of these funds,

- Putting the onus on the applicant,
- Coordinate dredging so private & public dredging done at the same time,
- Using a county dredge be used for private entities,
- Obtaining a private dredge to the Peconics, and
- Levying regular recipients of dredged material.

3.1.4 Public Benefit

There was discussion of the public benefits of dredging when dealing with limited resources. There is a need for better explanation of environmental criteria. There is also a need to define projects by navigational purposes versus environmental purposes. It would benefit the public to avoid crisis management situations which leads back to a need for a master plan.

3.1.5 Permitting

There was much discussion about permitting in the limited resource session. The permitting process was viewed as needing to be made more efficient. Proposals to increase permitting efficiency were to have a comprehensive permit for the Peconics, grouping the estuary into zones, updating existing permits, planning in advance of regulatory changes, and creating a special track for small projects. An evaluation, or audit, of the permitting process might be effective in streamlining the process and reducing redundancy and waste. This evaluation could lead to ensuring the latest technology is being used and that regulatory staff are trained.

It was suggested that permitting may be too difficult and complicated to do at the town level. If permits were in place, more projects could get done. Because of difficulties with the permitting process, only 50% of Southold's wish list is complete. AMI members say not enough is being done. The question arose, "Do we need to revise county law to allow county to do private dredging?" It was also stated that favoritism that occurred in the past needs to be avoided.

Overall, it was agreed the permitting is a huge undertaking. Many needs and questions were discussed. The town needs to help the county. The towns and the county need to work together to get permits completed. There is not a dedicated DEC dredging staff. Could permitting be done by the ACOE again? Is this unique to the NY/ACOE district? How can DEC do more with existing resources? Are the regulatory agencies coordinating as best as possible?

There is a need to implement regulatory program without people being put out of business. There is a need to understand the "nationwide permits." There is a need to meet, understand and discuss any significant regulatory changes. Could a permitting authority be delegated to local level? Other ideas included a bonus system for reviewing permits, micro dredge permit and LISDMMP.

3.2. Process Efficiency (Prioritize projects, Permit streamlining, Monitoring, Contracting) facilitated by Kim Shaw, Peconic Estuary Program/Suffolk County Department of Health Services

There were many ideas for increasing process efficiency for dredging projects. Some of these ideas were already suggested in the limited resource section of this document. The following summarizes the suggested ideas.

There should be an increase in town regulatory jurisdictions by allowing towns to have authority over wetlands in order to remove a regulatory layer. There should be a re-thinking of the process and reevaluation of the roles of agencies with regard to the regulations. Perhaps towns should take on larger roles to assist in permit process. Local government may need to make adjustments to ease process. Harbor management plan development may be helpful in possibly easing permitting elements. Towns should be charged a portion of project cost to supplement cost of a second crew. Coordination public and private resources would increase efficiency. Cost share incentives might mitigate backlog. The Suffolk County Marine Unit participation should include water quality sampling.

There should be development of “Peconic Estuary Dredging Team.” This team could tackle many of the following suggestions. Keeping a balance is very important between the protection of spawning grounds, enhancing circulation, public perception, and how projects are presented. The results from this meeting should be combined into a document and presented to all involved agencies. There needs to be more stress on the need for interagency communication and information sharing. Specific agencies need to internally organize and set protocols. Annual meetings should be planned with the towns and DEC to give “Heads Up” on new regulations, procedures, and conditions, especially in the off season. Because there are limited resources, including staff, perhaps there should be a designated representative from each town to attend quarterly county/regulatory meetings. There should be consistency through time on all levels in all involved agencies.

Develop mechanism to share information such as web-based clearinghouse though acknowledging that certain information may not be “Public.” Most information should be submitted electronically and able to be shared. Solicit and investigate the means of providing a public, web-based system. There should be a “One Stop Shop” for permitting. Again, web-based information for permit applicants may be feasible and helpful giving a cost savings.

The public and towns should take advantage of pre-application meetings offered by ACOE and DEC to better understand requirements. Applicants need higher level of understanding. Maybe additional resources can be developed to clarify resources and be a more effective means of outreach. Public outreach should always include understanding and patience. There needs to be better communication between applicants and regulators. There is a learning curve involved in the permitting process. Establish permit timelines to assist planning and understanding by applicants.

Pinpointing spawning timeframes and geographic areas and other “windows” related matters would help applicants. Dredge windows should specifically look at locations and habitat type.

There should be a needs analysis for utilizing two dredges rather than relying on windows extension. Are these procedures cost effective? There should be a plan to account for future variables in state and federal regulations and windows. There is a need to account for spring storms and weather issues that decrease efficiency of projects. How to mitigate this? There needs to be ample documentation for emergency situations to dredge outside window. Though, easing timeframes and documentation required for smaller scale and simpler projects may increase efficiency.

3.3. Placement Options (Beach nourishment vs. Upland disposal vs. Wetland enhancement) facilitated by Jen Skilbred, Peconic Estuary Program/Group for the East End

The following is a summary of the discussion that took place during this breakout session.

3.3.1 Potential Placement Locations and Usage

There was much discussion on potential placement locations for dredged materials. A group such as PEP can investigate usage through the habitat Restoration Program and match beneficial materials with appropriate sites that the towns and the county propose. Locations and areas that were suggested included:

- Using the littoral zone of the beach as a feeder beach,
- Using areas of the beachfront that provide sediment for down drift beach,
- Reuse sediment for beach re-nourishment,
- Use for sanding roads,
- Fill in mosquito ditches with fine sediments,
- Use in areas prevent with erosion issues to avoid shoreline,
- Create Piping Plover habitat by mixing fine sediments and coarser sand,
- Remove *phragmites* and replace with sediment,
- Bury silty fine grain sediments under topsoil for grading private property,
- Use geotubes with fine grain sediments for shoreline erosion,
- Look at sites for storage and re-use, not just for disposal,
- Use Southold clay “borrow” pits, fill the pit with fine sediments,
- Add sediment along jetties,
- Mix fine sediments with leaves to create compost,
- Use Pilot Projects to show results on erosion hotspots like beaches near inlets,
- Keep the sediment within dredged area system,
- Rebuild barrier island peninsulas,
- Place in offshore locations,
- Use fine sediments for road kill composting, let asphalt companies prepare it,
- Sand and fine sediments can be used for marsh restoration as pilot projects
- Clean organic sediments (desalted) and use for agriculture.

3.3.2 Future Plans and Discussions

There were many ideas as to the placement and usage of dredged material. As with planning for limited resources, this planning requires a comprehensive management plan, or master plan, for the disposal and placement of dredged materials for years to come. Included in this plan and discussion should be:

- Issues with protecting the surrounding marsh,
- Developing a regional sediment budget similar to The Nature Conservancy and ACE work,
- Developing a management plan,
- Using local knowledge with planning,
- Public awareness of reasoning,
- Clear policies,
- Identifying the issues needed for long term planning,
- Long term planning needs to be dynamic,
- Talk to everyone and consider new ideas,
- Emphasis on public education and public awareness,
- Ensure beneficial use of high quality sediments,
- Look at the local “sand budget,”
- Connect private contractors to public use plans,
- Linking pilot projects with environmental information and dredging locations,
- Permitting coordination with NYSDOS and NYSDEC,
- Pilot project funding,
- Create a Peconic dredging analysis that includes the type and quality of sediments,
- Involve waterfront homeowners,
- Make information public like LIS DMMP, engineering information, placement plans and ACE New England Website,
- DOS should have regulatory control over near shore only while DEC should be more interested in above MHTL. There has to be a compromise between these regulatory challenges.
- Know the thresholds for sediment contamination and make a plan for contaminated sediments.

4. Conclusion and Priorities

After evaluating the results from the breakout sessions in this workshop, it became evident that there were five main topics areas identified for possible action. These topic areas will be evaluated in the coming months in order to determine if the Peconic Estuary Program can address these concerns and if so, how to go about that process. Staff from PEP and partner agencies will meet and discuss the following topics within a newly formed Dredge Workgroup.

4.1 Increase resources

Additional funding opportunities and future inter-municipal agreements, or perhaps less formal agreements, to coordinate resources/equipment and other opportunities can be evaluated for appropriate action. A proposal to hold quarterly or yearly meetings with all involved parties will be explored to determine practicality.

4.2 Master Plan

Creating an advanced comprehensive plan for dredging in the Peconics will be evaluated. Comprehensive master planning at this time may be beyond the capabilities of the PEP, however some key components that will aid in the knowledge base related to dredging and dredge related impacts within the Peconics can be evaluated for appropriate action. Information could be gathered regarding dredging impacts including technical aspects of the dredge operation. Perhaps funding studies related to particular fish species and sensitive life stage issues in Peconics, or geographic life stage information, could be done. Placement alternatives could be evaluated for the Peconics.

4.3 Funding

With the current status of state, county and town budgets, additional funding will be hard to find. Creative solutions such as finding alternative sources of funding and coordination among municipalities will be needed. Overall, there will be a need for cost effective planning and the need to avoid crisis management situations.

4.4 Placement Options

The feasibility of alternative placement options of dredge material, especially the idea of beneficial uses of the dredge material and restoration opportunities can be evaluated for appropriate action.

4.5 Permitting

How to reach the goal of efficiency, streamlining and increased coordination and communication in the permitting process needs to be discussed further between participating agencies. There could be room for this type of discussion in the quarterly permit meetings under the Inter-municipal Agreements or other informal mechanisms.

Appendix A



Initiating the Discussion: Dredging in the Peconic Estuary December 17, 2010 AGENDA

- 8:30am **Arrive and Registration**
- 9:00am **Welcoming and Opening Remarks**
Laura Stephenson ~ *Peconic Estuary Program*
- 9:15am **Rundown, Rules, and Assumptions for the Day**
Doug Pabst (Meeting Facilitator) ~ *United States Environmental Protection Agency*
Kevin McDonald ~ *Peconic Estuary Program Citizen Advisory Committee/The Nature Conservancy*
- 9:30am **Dredging Process in Suffolk County, NY**
Suffolk County Department of Public Works
- 10:00am **Case Studies: Alternative Approaches**
1. Barnstable County, MA - Laura Stephenson
2. Beneficial Use of Dredged Material in the Hudson-Raritan Estuary - Steve Zahn (NYSDEC)
- 11:30am **Introduction to Afternoon Session**
Doug Pabst, Pre-determined groups (A, B, and C- noted on name tags) will discuss new innovative ideas and potential solutions and approaches to overcoming each of the following 3 constraints/issues:
1. Limited Resources (Staff, Funding, Equipment)
2. Process Efficiency (Prioritize projects, Permit streamlining, Monitoring, Contracting)
3. Placement Options (Beach nourishment vs. Upland disposal vs. Wetland enhancement)
- 12noon Lunch (On Your Own- Available for purchase through the Culinary Arts "Baker's Workshop")
- 12:30 pm **Rotational Breakout Session 1**
Group A ~ Limited Resources (Room 219)
Group B ~ Process Efficiency (Room 221)
Group C ~ Placement Locations (Room 222)
- 1:15 pm **Rotational Breakout Session 2**
Group A ~ Process Efficiency (Room 221)
Group B ~ Placement Locations (Room 222)
Group C ~ Limited Resources (Room 219)
- 2:00pm **Rotational Breakout Session 3**
Group A ~ Placement Locations (Room 222)
Group B ~ Limited Resources (Room 219)
Group C ~ Process Efficiency (Room 221)
- 2:45pm **Report Out on Breakout Session Findings**
Breakout Session Facilitators
- 3:30pm **Possible Next Steps/Follow-Up**
Doug Pabst
- 4:15pm **Meeting Wrap-up & Adjourn**
Kevin McDonald

Appendix B

Attendee List

Dave Bergen, Southold Trustee
Brian Frank, East Hampton Town
Wayne Grothe, The Nature Conservancy
Latham Sand & Gravel, Inc.
Sherri Aicher, New York State Department of Environmental Conservation
Dawn McReynolds, New York State Department of Environmental Conservation
Mark Mendelman, Association of Marine Industries
Elyse O'Brien, Suffolk County Department of Environment and Energy
Steve Papa, United States Fish and Wildlife Service
Mark Reiss, United States Environmental Protection Agency
Jay Schneiderman, Suffolk County Legislature
Jay Tanski, New York Sea Grant
Anna Throne-Holst, Southampton Town Supervisor
Ed Warner, Southampton Trustee
Jim Ammerman, New York Sea Grant Director
Dewitt Davies, Suffolk County Planning Department
Bob DeLuca, Group for the East End
Clete Galasso, Association of Marine Industries
Al Loreto, Shelter Island
Lynn Mendelman, East Hampton Trustee
Patricia Pechko, United States Environmental Protection Agency
Gerlyn Perlas, Army Corp of Engineers
Peter Reich, Shelter Island Town Board
Ed Romaine, Suffolk County Legislature
Scott Russell, Southold Town Supervisor
Peter Scully, New York State Department of Environmental Conservation
Eric Shultz, Southampton Trustee
Steve Sinkevich, United States Fish and Wildlife Service
Steve Zahn, New York State Department of Environmental Conservation
Christine Fetten, Riverhead Town
George Hammarth, New York State Department of Environmental Conservation
Scott Hilary, Suffolk County Department of Public Works
Kevin McAllister, Peconic Baykeeper
Dick Mendelman, Association of Marine Industries
Marty Shea, Southampton Town
Glen Spencer, Larry's Lighthouse Marina
Jennifer Street, New York State Department of State
Eric Star, New York State Department of Environmental Conservation
Mark Terry, Southold Town
Fred Thiele, Jr., New York State Assembly
Bill Wilkinson, East Hampton Town Supervisor
Gil Anderson/Bill Hillman, Suffolk County Department of Public Works
Larry Penny, East Hampton Town
Laura Stephenson, Peconic Estuary Program, NYSDEC
Kim Barbour, Peconic Estuary Program, Suffolk County
Kim Shaw, Peconic Estuary Program, Suffolk County
Jen Skilbred, Peconic Estuary Program, Group for the East End
Kevin McDonald, The Nature Conservancy
Rick Balla, USEPA