

**SHORELINE PROTECTION STRATEGY:
Background, Summary & Objectives Only**

Submitted by the Village Shoreline Protection Committee

Final Document

March 19, 2010

COMPREHENSIVE SHORELINE PROTECTION STRATEGY
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Background:

The letter sent last April to potential participants in the “Brain Sail” to be conducted later that July included the assertion that “the threat from erosion, both natural and man-made, is relentless and the financial and political background, against which solutions must be fashioned, is daunting.” Now, eleven months later, even with taxpayer-paid dredgers recovering sand lost from our beaches to temporarily restore them to health, the erosion of our shoreline continues to represent a real threat to the future of Bald Head Island. The letter went on, “if unchecked, asset value will plummet, natural habitats will vanish, costs associated with both defensive and remedial actions will sky-rocket, quality-enhancing amenities will be threatened and a foundational necessity for vitality will disappear.” The stakes are still as high, and there is no time for idleness or wishful thinking.

That “Brain Sail”, which was a community-wide effort in collaboration with the Village government, produced a “Strategic Action Plan”, setting in place a suggested organizational structure and detailing the consensus thinking around an overarching strategy consisting of different streams of tactics to address the erosion challenge. An independent Shoreline Preservation Steering Committee was formed, sub-committees focusing on separate tactics were created, and progress was achieved against that plan.

At this point, the independent SPSG has dissolved and the Village Council has appointed a Village Shoreline Protection Committee, as a standing committee, to support its efforts to address the erosion challenge. This committee, accountable to the Village Council and the island stakeholders, prepared a “Comprehensive Shoreline Strategy” which defines five “Prime Objectives” of a successful outcome as well as nine “Enabling Objectives” which support success in reaching these prime objectives. Viewed in total, the objectives are:

“Prime Objectives”

1. Modify the Wilmington Harbor Navigation Channel
2. Modify the Sand Management Plan
3. Attend to specific projects to preserve shoreline, including:
 - South Beach Groins

- Harbor Groins
 - Harbor Jetty
 - Terminal Groin
 - Dredge Creek mouth
 - Inclusion in “50 Year Beach Plan”
 - Other Shoreline Projects that will arise
4. Protect and Preserve BHI Shoreline Including Ocean and Estuarine Environment and Related Natural Resources and Habitats
 5. Develop Village Position on NCIT

“Enabling Objectives”

1. Understand and manage shoreline protection by:
 - Establishing a Village “standing committee” with public accountability for shoreline preservation
 - Creating a Village “Shoreline Manager” employee position with collateral duties relating to other natural resource matters
2. Pursue negotiated solutions necessary to resolve BHI Shoreline issues
3. Preserve and protect all legal rights
4. Engage and manage an effective Federal and State lobbying effort
5. Take necessary steps to model Cape Fear River and Inlet conditions
6. Create and project a BHI “message”
7. Create reliable and meaningful Village communications effort
8. Develop appropriate contingency plans
9. Secure superior technical guidance and support
10. Identify & Facilitate Shoreline Project Funding Opportunities

Implementation details or action steps were created for each of these prime and enabling objectives listed above. Recommendations are made, all predicated on the notion that the arrival of purchased sand on our south and west beaches provides no comfort for the future. It may, in fact, provide only “breathing room” needed for the Village government to address this problem with fresh energy and intensity. What follows is a summary of the overall strategy.

SHORELINE PROTECTION STRATEGY SUMMARY

DEFINITION OF THE PROBLEM.

Non-natural, accelerated beach erosion resulting from USACE actions in support of the Wilmington Harbor shipping channel resulting in loss of property values, habitat, tourism and buffer protection from storms, threatening the viability and sustainability of the Island.

Put simply, as dramatically demonstrated in 2009, Bald Head Island's morphology is permanently changing as a result of repeated USACE dredging, particularly where dredging is not accompanied by sand placement on Bald Head Island. This "gap" in the Sand Management Plan occurs every third regular maintenance dredging, or approximately every six (6) years. Bald Head Island is scheduled next to receive sand from dredging in 2010-2011 and 2012-2013. However, a modification of the Sand Management Plan, change in dredging practice, or other major change must occur by 2014-2015, or the Island will again face destructive erosion as it did in 2009.

A community wide planning meeting known as the Brainsail was conducted in 2009 to identify the problem and discuss solutions and strategy. As a result of the Brainsail effort, the Village Council formed a Shoreline Protection Committee as an official working group of the Village. Through data gathering and recommendations, it is hoped that this Committee will provide helpful support for Island efforts to combat erosion.

Additional issues and challenges are presented by the proposed North Carolina International Terminal ("NCIT") at Southport. If it obtains regulatory approvals and the necessary public and private funding, this will be a very large shipping container terminal. While it may present an opportunity for the shipping channel to be relocated further from Bald Head, thus helping the erosion problem, the increased channel size necessary to accommodate larger vessels, as well as the increased shipping traffic, may pose threats to the Island. The issue clearly requires further study and public input from BHI as the process moves forward.

STRATEGY

The Island's actions must be deliberate, well considered and practical. Overall, the Village strategy will be to (1) obtain necessary environmental and technical data; (2) identify possible solutions; and (3) coordinate with other governmental agencies and stakeholders to obtain approval and funding for construction of necessary solutions. The solution will likely be expensive and will require regulatory approvals and funding beyond the capability and control of Bald Head Island itself.

I. DATA GATHERING

A. Entrance Channel. Need to understand Cape Fear River entrance and shipping channel dynamics, including dredging and inlet processes. The Village is likely to contract its long-time coastal engineer, Erik Olsen, to provide a very extensive and detailed computer model of the channel entrance. Assigned to Olsen Associates, Inc., coastal engineers.

B. Data Regarding Environmental and Property Harm. Conduct regular, beach and environmental monitoring and gather historical data. This will also include creation of a Village maintained data base of channel related information. Assigned to Shore Protection Committee, BHI Conservancy, Village Staff and Olsen Associates.

C. Obtain Data and Monitor the Regulatory Progress of the NCIT. Take an informed position on the NCIT and seek a place at the table for BHI in related deliberations. Assigned to Shoreline Protection Committee.

II. IDENTIFY APPROPRIATE SOLUTIONS

Obtain consultant input and build consensus among other stakeholders and agencies regarding solutions. Solutions under consideration include:

A. Amend Sand Management Plan to provide necessary sand to Bald Head Island every two (2) years/each dredging event.

B. Construct one or more terminal groins or other environmental structures at the terminus of the Island adjacent the shipping channel to mitigate sand loss and erosion. This also avoids substantial cost of regularly replacing the existing cloth groin field tubes. However, even with terminal groins, the Island will require regular sand placement.

C. Relocate channel west of Bald Head Island. This may be extremely expensive and long in coming but may also be necessary to accommodate the larger vessels contemplated by the NCIT.

Tasks are assigned to Village Council; Shoreline Protection Committee; Olsen Associates, Inc.; federal lobby firm, Akerman Senterfitt; state lobby firm, McGuire Woods; legal team, George W. House of Brooks, Pierce, McLendon, Humphrey & Leonard, L.L.P. and Village Attorney Charles S. Baldwin, IV of Rountree, Losee & Baldwin, L.L.P.;

III. OBTAIN STAKEHOLDER AND AGENCY SUPPORT, ENVIRONMENTAL APPROVALS AND FUNDING FOR PROPOSED SOLUTION(S)

This will involve state and federal lobbying efforts for project authorization and funding. Much coordination and planning is required with USACE, NC Water Resources Division, regulatory agencies and other beach communities and stakeholders.

Assigned to Village Council; Shoreline Protection Committee; Olsen Associates, Inc.; Akerman Senterfitt; McGuire Woods; George W. House, Esquire and Village Attorney Charles S. Baldwin, IV.

ADDITIONAL ACTIONS AND PHILOSOPHY

Erosion should be addressed in a systematic and Island-wide manner. This will involve cooperation and coordination with other stakeholders, agencies and Island groups, including the Conservancy, Property Owners Associations, Bald Head Island Club, Bald Head Island Limited and property owners. Because of potential legal claims against the USACE, certain information must be maintained in confidence, though public input and communication will be an important part of this process. Communications via emails, newsletters and public forums are contemplated. We believe it important that the Island speak with a common voice on these issues. While most of our attention has been directed to erosion on the South and West Beaches, our strategy includes issues related to the BHI estuarine environment.

Natural erosion will continue to be treated with prudent sand management practices and severe storm damage to South and West beaches may trigger recovery under FEMA's obligations to "engineered" beaches. Storm damage to other beaches will be treated on an "as needed" basis. At the same time, "contingency planning" is part of the strategy recommendations.

To affect these outcomes, we believe we must organize ourselves for effective community focus, urgency, and unity; to staff and fund appropriately to the challenge; to impose expectations on our legal representatives reflecting a practical, effective legal stance; to engage appropriate supporting expertise as respects lobbying, public relations, technical expertise, etc.; and to create or cause to be created the science-based modeling of the Cape Fear River and inlet dynamics that portray cause and effect and solutions.

Moreover, our overall strategy is to take all reasonable actions to mitigate and reduce the erosion in those areas of our shoreline where groins and jetties may be effectively deployed, recognizing the obstacles imposed by legal and regulatory restrictions and by science.

Fully informing BHI stakeholders on those strategic and tactical intentions that can be disclosed prudently is part of our overall strategy, as is making known accountable progress against those intentions. The costs, environmental and real estate value implications associated with the solution to this Island-wide challenge are significant and those bearing those costs have a right to be kept informed. Likewise, the Village has a need to look to those stakeholders for support and for input into the thinking that drives direction.

Lastly, successfully managing this challenge requires a highly energized effort, one showing an understanding of the implications of failure. Critical success factors include the final positions taken by the USACE and other agencies, finite financial resources, the capability of the Village to execute this strategy, the support of all stakeholders, and “luck” in avoiding setbacks beyond our control. There has to be stubborn pursuit of outcomes and constant attention to both planning and execution. There has to be evident leadership on those elected, hired or volunteering to lead.

