



**Town of Southern Shores
Regular Council Meeting
January 3, 2017**

The Town of Southern Shores Council met in the Pitts Center located at 5375 N. Virginia Dare Trail at 5:30 p.m. on Tuesday, January 3, 2017.

COUNCIL MEMBERS PRESENT: Mayor Bennett, Mayor Pro Tem Fred Newberry, Council Members Leo Holland, Chris Nason and Gary McDonald.

COUNCIL MEMBERS ABSENT: None

CALL TO ORDER / PLEDGE OF ALLEGIANCE / MOMENT OF SILENCE

Mayor Bennett called the meeting to order at 5:30 p.m., led the Pledge of Allegiance, and held a moment of silence.

AMENDMENTS / APPROVAL OF AGENDA

MOTION: Mayor Bennett moved to approve the agenda. The motion was seconded by Council Member McDonald. The motion passed unanimously (5-0).

CONSENT AGENDA

The consent agenda consisted of the following items:

- Approval of Minutes-December 6, 2016
- Budget Amendment- #10 (travel expense - Council Members conference attendance)
- Resolution 2017-01-01-Public Works Surplus

MOTION: Council Member Holland moved to approve the consent agenda. The motion was seconded by Council Member Nason. The motion passed unanimously (5-0).

SPECIAL PRESENTATIONS TO COUNCIL

- Johnny Martin, PE, Moffatt & Nichol - Economic Benefit Analysis of NC Coastal Properties
- Dare County Manager/County Attorney Robert L. Outten - Explanation to Council on procedures and status of Dare County Beach Nourishment Fund

Both Mr. Martin and Mr. Outten provided a question and answer period about beach nourishment.

[Clerk's Note: A copy of the PowerPoint presentation is hereby attached].

STAFF REPORTS

Town Planner:

The Town Planner presented the Planning Department's monthly report containing the following:

- Permitting and Inspections December, 2016

Southern Shores Police Department

Chief Kole presented the Police Department's monthly report for December.

Southern Shores Volunteer Fire Department: Fire Chief, Ed Limbacher presented the Fire Department's monthly report for December.

Chief Limbacher stated the Facility Assessments and Program Needs report has been completed and he will forward a copy of the assessment to the Town Manager in the morning. He stated Mr. Rascoe can then send it to Council and hopefully we can all talk about it intelligently next month.

Town Manager's report

The Town Manager addressed several matters:

- We have started recruiting and interviewing for a new Public Works Director. Mike McCleary is currently serving as interim director.
- Next week advertising and recruiting for a new Police Officer will begin. The department had a resignation due to relocation.
- The pre-bid conference for the East Dogwood/NC12 storm water remediation project will be this week followed by a bid opening on January 12th.
- The Yaupon Trail capital bulkhead replacement project to replace a significant amount of bulkhead in two locations is now under contract with Layden Marine & that project has also commenced.
- The capital project for the rebuild of Wild Swan Lane and Osprey Lane are now under contract with Barnhill Construction. Barnhill should begin the project in late spring and will be under a 90-day contract.
- CodeWright is targeted to deliver the first module of the draft re-write options for the Town code this month. This module will include the Towns land use ordinances. Once staff reviews it will then be forwarded to Council for review.
- Town Staff has been working with other Towns and Dare County to utilize an affordable telephone mass communication system. This will be available for non-emergency and emergency communications. Costs for each town will be prorated according to the population. This expense will be absorbed in the current telephone system budget.
- The beach nourishment public forum will be January 17th at the Hilton Garden Inn.
- The Town Manager thanked the Planning Department, especially Dabni Shelton for achieving a lower CRS rating. This lower rating provides lower flood insurance rates for property owners in Southern Shores.

BOARD AND COUNCIL COMMITTEE REPORTS

Planning Board Member Gray Berryman presented the planning board report for the month of December (report attached).

GENERAL PUBLIC COMMENT

Mayor Bennett called for public comment and the following citizens offered comment:

- Pat Wilson-101 Bear Track Lane- Bitter behavior from Council. Manipulation and hostile work environment, SSVFD and Police Dept. do an excellent job. Wake up, do not allow town to be destroyed
- Ursula Bateman-360 Sea Oats Trail-Spoke on announcements for and behalf of the LWV. Thanked Council for beach nourishment speakers. Asked that citizens vote on nourishment, not Council.
- Geri Sullivan-31 Tenth Avenue-Thanked Council for beach nourishment forum and asked for them to hold a vote until after the forum
- James Monroe- Southern Shores-In favor of beach nourishment. The piling sticking out of ground in front of Pelicans Watch need to be removed, they are a danger
- Brian Forbes-10 Pelicans Watch Way Pelicans Watch has spent numerous amounts of money in past several years trying to plug up areas of the beach. Stated they just need some help. The houses will eventually be lost if they do not get the beach nourishment
- Lorelei DiBernardo-32 9th Ave. LWV-Equal Rights Amendment. Would like to request time in February to present Council with a resolution.
- Anne Rouquie-9 Pelicans Watch Way-Southern Shores beaches are for family memories
- Mark Ferrera-14 Pelicans Watch Way-People come for our beaches. Always uses local vendors to keep the money locally
- Jim Connors-83 Duck Woods-transparency, Council Members texting during the meetings. Would like Council to address the issue. Staff is professional and courteous
- Jodi Hess-6 Sound View Trail-Council Member Newberry and McDonald offer no creative suggestions, no appreciation to Town staff. Transparency is a two-way street. Need to go to Town Hall, need to discuss agenda items with staff.
- Toni Radomski-183 Duck Rd-Concern for wildlife and the beach nourishment process. She stated to Ms. Hess that Council Member Newberry and McDonald were voted in and ask questions.
- Jim Gould-213 Woodland Drive-welcoming committee and new neighbors are nice. Created a wildlife habitat at his property
- Andy Ward-147 Bayberry Trail-read letter to Sentinel. Stated Council Member Newberry and McDonald have missed Council Committee meetings. Council Member McDonald has attended no RPO meetings to which he was appointed. Town Staff should not be micromanaged
- Joe VanGieson-228 N Dogwood- Stated no part of his letter to the sentinel talked about staff. Everything is fact, projecting motivation.
- James Kranda-82 Poteskett-last two agendas suggest micromanaging. Meetings are difficult to sit through. Get down to business and do your job Council
- [Clerk's Note: A copy of the public comment sign-up sheet is hereby attached].

OLD BUSINESS

Consideration of approval of owner's (WWTP LLC) request to replace Ginguite Woods Wastewater Treatment Plant

Town Planner Wes Haskett presented the staff report. He stated the applicant is Michael W. Robinson PEPLS and the requested action is the Ginguite Woods waste water treatment plant replacement.

Bob Howsare explained reasoning of the chosen gallon size of the replacement and the advantages of being placed in a non-profit ownership when questioned by Council Member Holland.

Council Member McDonald questioned if the 12,000 gallons will be sufficient if the adjacent commercial land is developed to which Mr. Howsare replied they felt it was sufficient.

MOTION: Council Member Holland moved to approve the replacement of the existing private Ginguite Woods Wastewater Treatment Plant system with the following three contingences:

1. A copy of the State NCDEQ permit shall be provided to the Town prior to any construction activities.
2. A copy of the deed(s) placing all properties underlying the system into single ownership shall be provided to the Town prior to any construction activities.
3. The applicant must strictly abide by all applicable requirements of the Town Code and with all other applicable State requirements

The motion was seconded by Council Member McDonald. The motion passed unanimously (5-0).

Amend Section 6. (a) of Council Rules of Procedure, making the pre-scheduling of monthly Council regular work session meetings discretionary

MOTION: Mayor Bennett moved to change the single word "shall" to "may" in the reference to holding a second meeting in the month per the Council Rules of Procedure Section 6. (a) Regular meetings. *The Council shall hold a regular meeting on the first Tuesday of each month, except that if a regular meeting day is a legal holiday, the meeting shall be held on the next business day. In addition to the regular meeting, the Council shall may hold a work session on the third Tuesday of the month.* The motion was seconded by Council Member Holland. After a brief discussion the motion passed unanimously (5-0).

Next Agenda item:

Manager's report (Weekly) to full council of all town actions, meetings, interactions with council members, etc.

The Mayor referred to Council Member McDonald as this was his request.

Council Member McDonald stated he would like a weekly report to each Council Member of staff meeting or interactions with any council member.

Council Member Nason stated with two meetings a month, in his eyes this is a bit of overkill and would create a burden for the Town Manager. He stated let the Town Manager do his job. He has done a great job so far in his eyes. He stated let's be a Council and try not and do his job. If he has a question he calls the Town Manager on the phone or stops in the Town Hall to ask it.

Council Member Holland stated it sounds like Council is trying to micromanage and that is not Council's responsibility in our form of government. He explained if enacted the scenario could potentially turn into a circle of dissecting reports and disciplinary actions if something was missed. Furthermore, it takes staff away from their daily duties, the duties of managing the Town and what they are charged to do. I see this as a tool of undermining the character of the Town Manager and the complete Town staff. He stated he sees no need for it.

Council Member Nason stated by going into Town Hall over the year he has gotten to know the staff and he trusts them to do a good job. It is not necessary to babysit them every week.

Mayor pro tem Newberry stated he sees the request as a matter of getting information, not micromanaging the Town Manager-that's not the point. He stated the County Manager stated he meets monthly with other managers and officials and he would like to know the results of those meetings. He stated it would keep Council more proactive with some of the issues that are being discussed, as example beach nourishment. If the Town Manager can provide Council with that information, then they are better informed. He stated he does not see it as a means of micromanaging the Town Manger. He disagrees with Council Member Holland and Nason's assessment. He stated his questions are centered around getting more information, he needs the facts.

Council Member McDonald stated Council did away with all the committees so they just need to report weekly of what is going on. That way the Town Manager can report on planning, finance etc.

MOTION: Council Member McDonald moved to have the Manager provide a report (Weekly) to full Council of all town actions, meetings, interactions with council members, etc. The motion was seconded by Mayor pro tem Newberry. The motion failed (2-3) with Council Member McDonald and Mayor pro tem Newberry voting YES; Mayor Bennett, Council member Holland and Council member Nason voting NO.

Next agenda item:

Notifying the public and council of all meetings involving planning, finance, capital improvement, public safety, etc.

Council member McDonald stated since the standing committees were deleted then there is not a planning committee.

Mayor Bennett stated there is no notification because it is a staff meeting.

Council Member Nason stated it all gets reported to Council at a meeting, heard by the public and there is a public comment period so citizens can give their opinion.

MOTION: Council Member McDonald moved to notify the public and council of all meetings involving planning, finance, capital improvement, public safety, etc. so they may attend. The motion was seconded by Mayor pro tem Newberry. The motion failed (2-3) with Council Member McDonald and Mayor pro tem Newberry voting YES; Mayor Bennett, Council Member Holland and Council Member Nason voting NO.

GENERAL PUBLIC COMMENT

Mayor Bennett called for public comment and the following citizens offered comment:

- Geri Sullivan-31 Tenth Avenue-looks like organized personal attacks on some councilman tonight
- Jewel Monroe-Southern Shores-do not lose the opportunity to take advantage of the beach nourishment equipment already in place
- Tommy Karole-77 East Dogwood Trail-Council now has lively discussions. The meetings went fast
- Joe VanGieson-228 N Dogwood-Prior Council had no discussion, that is not transparency. Citizens need input.

[Clerk's Note: A copy of the public comment signup sheet is hereby attached].

OTHER BUSINESS

Mayor's Comment & Responses

Mayor Bennett stated Dr. Timothy Kana who owns Coastal Science & Engineering has written an excellent brochure on beach nourishment and erosion control. The speakers schedule for the January 17th beach nourishment forum is Dr. Kana, Spencer Rogers, Reide Corbett, Bob Oakes, Ken Willson and Town Attorney Ben Gallop.

Council Member's Comment & Responses

Mayor pro tem Newberry stated he wanted to clarify remarks made by citizen Andy Ward. Mr. Newberry stated he did not attend the committee meeting identified by Mr. Ward due to the passing of his father in law. Mr. Newberry then stated he has been texting during the past two or three meetings with his wife who is caring for her dying mother. He stated he has never texted a Council Member in this forum. He stated as far as the criticism on transparency, he will strive for it and make sure Council is as transparent as possible. His heart is in the right place for the community. He stated with the Mayor's concurrence he is the one responsible for getting the two speakers on beach nourishment here this evening. He thanked Town Planner Wes Haskett and his department for obtaining a lower CRS rating, saving the citizens money.

Council Member McDonald stated to citizen Andy Ward that Fred Newberry asked him to sub in for him for that meeting which he did. As to the Albemarle Council, he stated he is not on that board; he was never appointed. He stated he was asked and declined before he became a Council Member. He stated there is miscommunication out there and he would like to know who said he wanted to get rid of staff. He said he keeps hearing that, and no one says who said it. He said to Mayor Bennett, you stated that to me. Mayor Bennett stated that is correct, the impression that you are giving by taking of some of the actions you are taking towards our Town Manager implies that is your intent. Council Member McDonald stated the Mayor said he heard Council Member McDonald wanted to fire the Town Manager. Mayor Bennett stated that was correct and is what he heard. Council Member McDonald stated is all the citizens have to cause discord in our community, that is wrong and I'm sorry because that is not what he wants to do. Council Member McDonald stated he has never said that about the Town Manager and has no intent to say it. He stated that when he and Council Member Newberry came in to office it was their intent to work with everybody.

Council Member Nason stated he encourages citizens to go to the Town's website and look at the new flood maps. There are important workshops coming up which pertains to the new maps which will dramatically effect flood insurance rates.

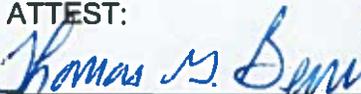
CLOSED SESSION

MOTION: Council Member Holland moved to go into closed Session pursuant to NCGS §143-318.11 (a)(6) for purpose of approving prior closed sessions' minutes in accordance with Town policy (Res. 2010-03-01). The motion was seconded by Council Member McDonald. The motion passed unanimously (5-0).

ADJOURN

MOTION: Upon returning to open session and taking no action, Mayor Bennett moved to adjourn. The motion was seconded by Council Member Holland. The motion passed unanimously (5-0). The time was 9:20 pm.

ATTEST:


Thomas G. Bennett, Mayor



Respectfully submitted,


Sheila Kane, Town Clerk



GENERAL PUBLIC COMMENT SIGN-UP SHEET

January 3, 2017

We encourage your public comments. All speakers must recognize the utmost importance of maintaining the decorum of Town meetings and of the need for all to have an opportunity to speak in a timely and uninterrupted manner. Please limit your comments to 3 minutes and speak courteously and respectfully to the Council as a whole. The 3 minute time allotted is your time to speak. You may choose to use all of it or less, but it is not transferrable to anyone else. Public comment is your opportunity to provide input on Town matters. It is not meant to be a dialogue exchange between you, members of the Council, or others in the audience.

NAME	MAILING ADDRESS OF RESIDENT	TOPIC
Pat Wilson	101 Bear Track Ln.	Council
Ursula Bateman	360 Sea Dr Tr	LWV of BEACH NOURISHMENT
Doni Suelwein	31 North Avenue	BEACH Nourishment
^{SMITH} David Monroe	4643 Holland	Beach
Brian Forbes	10 Pelican Watch Way	Beach
Lorelei DiBernardo	32 9th Ave	ERA
ANNE ROUQUIE	#9 PELICAN WATCHWAY	BEACH
MARK FERRERA	14 Pelican Watch Way	Beach
Jim Connors	83 DUCKWOODS	TRANSPARENCY
Josi Hess	6 SOUNDVIEW TR	'
Toni Radomski	183 Duck Rd	Beach
James "Jim" Gould	213 Woodland Dr.	Wildlife habitat / general
Andy Ward	147 Bayberry	wise
Joe Van Gieson	228 N Dewwood	Beach Nourishment
JAMES KERANDA	82 POES STREET	Standing committees



GENERAL PUBLIC COMMENT SIGN-UP SHEET
January 3, 2017

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NAME	MAILING ADDRESS OF RESIDENT	TOPIC
Vicki Star	360 Jank Rd TR	
Devi Sullivan	31 Smith Avenue	
Tami Redonki	183 Duck Rd.	
James "Jim" Guild	213 Woodland Dr.	general
Jim Monroe	205 Ocean Blvd	beach
Joe Van Gieson	228 N Dogwood Tr.	Beach
PATRICE Dwyer	327 N Dogwood	
Sue DAN Dwyer	327 N Dogwood	
Tommy Karate	77 E Dogwood	

**Town of Southern Shores
Budget Amendment Number # 10**

**Administration
Increases**

Decreases

<u>Account Number</u>	<u>Description</u>	<u>Amount</u>	<u>Account Number</u>	<u>Description</u>	<u>Amount</u>
40-39909	Revenues Unassigned Fund Balance	\$1,170			
42-50103 42-50090	Expenditures Travel Training	\$855 \$315			

Explanation: Cost for Council to attend NCBIWA Conference

Recommended By:

J. Peter Rascoe, III, Town Manager

Approved By:

Tom Bennett, Mayor

Date



Town of Southern Shores

5375 N. Virginia Dare Trail, Southern Shores, NC 27949

Phone 252-261-2394 / Fax 252-255-0876

www.southernshores-nc.gov

RESOLUTION 2017-01-01

A RESOLUTION DECLARING CERTAIN PROPERTY OF THE TOWN TO BE SURPLUS AND AUTHORIZING THE DISPOSITION OF SAID PROPERTY

WHEREAS, the Town Council of the Town of Southern Shores, North Carolina, has determined that the Town owns certain personal property that is no longer needed or usable by the Town; and

WHEREAS, the property is described below:

DEPT.	MAKE	MODEL	YEAR	V.I.N./DESCRIPTION
PUBLIC WORKS	FORD	CROWN VIC	2005	2FAFP71W75X175796

NOW, THEREFORE, BE IT RESOLVED by the Southern Shores Town Council that the Town Manager or his designee are hereby authorized to dispose of the aforementioned property by any means allowable to include offering for sale at public auction, donation to a nonprofit organization, internet on-line offering, private negotiation and sale, upset bid process, or destruction.

AND BE IT FURTHER RESOLVED that property described in this resolution is surplus as of January 3, 2017.

ATTEST:

Thomas G. Bennett, Mayor

Sheila Kane, Town Clerk



BEACH AND INLET MANAGEMENT PLAN (BIMP)

- Statewide Plan to Best Manage Critical Beach and Inlet Resources
- Baseline Plan (2009)
 - Collect Physical and Economic Data and Identify Gaps
 - Define Beach/Inlet Management Regions
 - Stakeholder Process (Advisory and Public Input)
 - Develop Beach/Inlet Management Strategies
 - Evaluate Economic Value of Beaches/Inlets and Identify Funding Need
- Baseline Plan Updated Every 2 Years As Data Becomes Available

(HB 1840 Section 13.99(d))

BIMP REGIONS



BIMP (2009) – Beach/ Inlet Value and Benefits

- **Creates Jobs and Economic Impacts (\$4.8B and 62,000 Jobs)**
 - Beach Tourism
 - Commercial/ Recreational Fishing
 - Marinas/ Recreational Boating
 - Etc.
- **Sustains Property Values And Reduces Vulnerability**
- **Habitat for Wildlife Resources**
- **Protects Public Infrastructure**

BIMP (2009) – Annual Expenditures to Maintain

- Total Spent Annually is \$55M to \$60M, ultimately rising to \$75M to 85M Annually
- Federal Interest potentially providing \$15M to \$30M (Deep Draft and Long-Term authorized projects)
- State/ Local Share is \$25M to \$30M annually, rising to \$60M to \$70M annually.
- Maintaining AIWW and Inland Waterways is \$5M to \$10M
- Total State/Local Investment may grow to \$70M to \$80M

BIMP (2009) – Beach/ Inlet Value and Benefits

- Return On Investment (ROI) Is ~ \$60 For Every \$1 Spent On Beach/ Inlet Management Spent
- ROI Would Increase With Deep Draft Port Economic Benefits Added

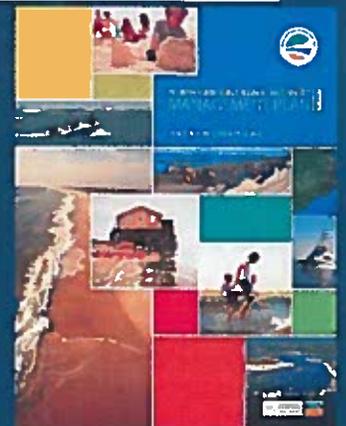


BIMP (2016 UPDATE) – HB 97 2015

- Update Dredging/Beach Nourishment/Sediment Resource Databases
 - Collect Data from Universities, USACE, Local Municipalities
- Refine Projections and Estimate for Beach and Inlet Funding
 - Update Dredge/ Beach Nourishment Volume and Costs by Region and Statewide – Current and Ultimate Conditions
 - Develop a Maintenance Cycle for Beach and Inlet Projects Implementation (4-yr Cycle)

BIMP (2016 UPDATE) – HB 97 2015

- Update Economic Benefit Analysis
 - Dr. Chris Dumas (UNCW) evaluate economic drivers/benefits
 - Deep Draft Ports Added
- Literature Review of Other States Funding Sources/Strategies & FEMA Engineered Beach Case Studies
 - Dr. Nicole Elko leading Other State Funding Sources
- Stakeholder/ Public Input
- Final Report
 - Draft November 2016
 - Final December 2016



BIMP (2016 UPDATE) – HB 1030 Section 14.22

- Literature Review/Executive Summary of Beach Nourishment Benefits (Economic, Storm Mitigation, Safety)
 - Focused on Existing Studies for Out-of-State Projects (Rita, Sandy)
 - DCM/DEQ lead
- Property Ownership Study
 - Electronic List of Addresses (In-County, Other NC County, Outside NC)
 - County Register of Deeds lead
- Economic Impact Study of 8 Coastal Counties
 - Travel/Tourism, Job Creation, Tax Revenues
 - Department of Commerce lead

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Analyses and Procedures Similar to 2009 – Baseline Years of 2014-2015 (Dataset Dependent)
- Sectors Included In Study
 - Coastal Property At Risk
 - Beach Recreation
 - For-Hire (Charter and Head Boat) Recreational Fishing
 - Private Boat Recreational Fishing
 - Shore and Pier Fishing
 - Commercial Fishing
 - Seafood Processing and Packaging
 - Marinas
 - Marine Services (Scuba, Wind Surf Board, Paddle Board Rentals, Etc.)
 - Salt Water Boat Building
 - Deep Draft Port Activity

BIMP (2016 UPDATE) – Economic Benefit Analysis

- "Economic Impacts" Is a Measure of "Gross" Economic Effects. Items Included In Economic Impacts Include:
 - Sales (Economic "Output"),
 - Labor Income (Includes Wages, Salaries, and Sole Proprietor/Partnership Income),
 - Capital Income (Rent, Interest, and Corporate Dividend Income),
 - Employment,
 - State and Local Government Tax Collections
- Direct Economic Impacts
 - Based on Local and State Government Agency Data and Reports, Academic Studies, and Relevant Consulting Studies.
 - Multiplier Effects Calculated Using IMPLAN Economic Input-output Modeling Software

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Coastal Property At Risk
 - Properties Identified In Ocean Erodible AEC – 90 X Setback Factor
 - Property Values Taken from NCOneMap
 - Property Ownership Also Included (County, NC, US)
- Comparison Made Between 1997 and 2011 Ocean Erodible AEC
 - 1997 – Pre Widespread Nourishment Activities
 - 2011 – Representative of Current Nourishment Program

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Coastal Property At Risk – All Oceanfront Counties – All Value

Owner Type	All Parcels	Total Value (\$)	% of Total Value (\$)
Coastal Resident	334,608	64,513,960,749	58.5%
NC Resident	77,346	19,173,101,641	17.4%
US Resident	90,989	26,392,936,232	23.9%
Unknown	2,952	160,101,258	0.1%
Total	505,895	\$110,240,099,880	100.0%

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Coastal Property At Risk – All Oceanfront Counties –
1998 Property Value At Risk

Owner Type	All Parcels	Total Value (\$)	% of Total Value (\$)
Coastal Resident	4,841	2,184,726,105	2.0%
NC Resident	7,250	3,552,741,030	3.2%
US Resident	7,973	5,966,919,481	5.4%
Unknown	382	20,715,488	0.0%
Total	20,446	\$11,725,102,104	10.6%

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Coastal Property At Risk – All Oceanfront Counties – 2012 Property Value At Risk

Owner Type	All Parcels	Total Value (\$)	% of Total Value (\$)
Coastal Resident	4,318	2,015,436,016	1.8%
NC Resident	6,061	3,143,148,553	2.9%
US Resident	7,626	5,945,429,993	5.4%
Unknown	344	20,335,018	0.0%
Total	18,349	\$11,124,349,580	10.1%

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Coastal Property At Risk – All Oceanfront Counties – 1998 - 2012 Property Value At Risk

Owner Type	All Parcels	Total Value (\$)	% of Total Value (\$)
Coastal Resident	523	169,290,089	0.2%
NC Resident	1,189	409,592,477	0.4%
US Resident	347	21,489,488	0.0%
Unknown	38	380,470	0.0%
Total	2,097	\$600,752,524	0.5%

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Coastal Property At Risk – Five Oceanfront Counties With Active Beach Nourishment Programs – 1998 - 2012 Property Value At Risk

Owner Type	All Parcels	Total Value (\$)	% of Total Value (\$)
Coastal Resident	554	193,348,189	0.2%
NC Resident	1,212	426,553,577	0.4%
US Resident	531	197,963,288	0.2%
Unknown	22	933,470	0.0%
Total	2,319	\$818,798,524	0.7%

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Beach Recreation (Tourism)
 - Lodging
 - Parking
 - Gas, Rental Cars, Restaurants
 - Groceries, Shopping
 - Entertainment
 - Consumer Surplus
 - Direct and Multipliers Effects Included (County and State)

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Beach Recreation (Tourism)

Region	County	Beach Recreation: Direct Impact Expenditures (2013-2014)	Beach Recreation: Total Impact Output/Sales/Business Activity (2013-2014)	Beach Recreation: Total Impact Employment (2013-2014)	Beach Recreation: Total Local Tax Revenue (2013-2014)	Beach Recreation: Total State Tax Revenue (2013-2014)	Beach Recreation: Total Federal Tax Revenue (2013-2014)	Beach Recreation: Annual Consumer Surplus (2013-2014)
1	Brunswick	\$176,550,385	\$342,231,219	3,992	\$14,503,152	\$13,450,602	\$27,168,895	\$8,674,965
2a	New Hanover	\$207,361,596	\$465,814,306	5,539	\$17,431,052	\$16,243,823	\$36,637,640	\$29,957,391
2b	Pender	\$46,448,698	\$70,630,717	903	\$3,468,370	\$3,140,358	\$5,037,897	\$3,473,212
2b	Onslow	\$25,103,828	\$38,129,598	493	\$1,921,311	\$1,649,488	\$2,734,575	\$2,429,707
2c, 3a	Carteret	\$149,775,460	\$297,370,636	3,730	\$12,817,393	\$12,276,342	\$23,033,681	\$13,334,667
3b	Hyde	\$26,326,920	\$42,852,631	516	\$1,878,153	\$1,768,226	\$3,164,782	\$792,153
3b, 4a, 4b	Dare	\$715,788,182	\$1,509,328,075	16,942	\$52,677,495	\$52,497,776	\$122,574,325	\$21,537,405
4c	Currituck	\$314,835,916	\$569,356,701	6,528	\$23,455,662	\$23,574,367	\$43,763,166	\$9,473,122
Total		\$1,662,190,984	\$3,335,713,884	38,642	\$128,152,589	\$124,600,983	\$264,114,963	\$89,672,622
Total with Statewide Effects		\$1,662,190,984	\$4,741,454,600	48,718	\$155,806,220	\$163,107,645	\$375,840,980	\$89,672,622
Difference		N/A	\$1,405,740,716	10,077	\$27,653,631	\$38,506,663	\$111,726,017	N/A

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Shore and Pier Fishing

Region	County	Annual Pier/Bridge/Jetty Fishing Consumer Surplus (2013-2014)	Annual Shore/Bank Fishing Consumer Surplus (2013-2014)	Total Annual Pier/Shore Fishing Consumer Surplus (2013-2014)
Region 1	Brunswick	\$991,114	\$736,164	\$1,727,278
Region 2a	New Hanover	\$3,546,463	\$1,262,593	\$4,809,056
Region 2b	Pender	\$1,245,356	\$903,358	\$2,148,714
Region 2b	Onslow	\$754,108	\$1,771,077	\$2,525,185
Region 2c & 3a	Carteret	\$8,583,907	\$3,507,270	\$12,091,177
Region 3b	Hyde	\$0	\$81,875	\$81,875
Region 3b, 4a, 4b	Dare	\$10,953,961	\$14,395,428	\$25,349,389
Region 4c	Currituck	\$0	\$262,994	\$262,994
Total		\$26,074,909	\$22,920,759	\$48,995,668

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Marine Recreational Services (Canoe/Jetski Rentals, Ecotourism, Etc.)

Region	County	Marine Recreational Services: Direct Impact Annual Sales (2013-2014)	Marine Recreational Services: Total Impact Output/Sales/Business Activity (2013-2014)	Marine Recreational Services: Direct Impact Employment (2013-2014)	Marine Recreational Services: Total Impact Employment (2013-2014)	Marine Recreational Services: Total Local Tax Revenue (2013-2014)	Marine Recreational Services: Total State Tax Revenue (2013-2014)	Marine Recreational Services: Total Federal Tax Revenue (2013-2014)
1	Brunswick	\$965,017	\$2,026,972	161	168	\$79,141	\$73,473	\$148,750
2a	New Hanover	\$3,328,528	\$6,991,418	556	581	\$279,800	\$260,743	\$588,100
2b	Pender	\$1,087,866	\$2,285,012	182	190	\$81,232	\$73,550	\$117,992
2b	Onslow	Included in Pender Co. totals.						
2c, 3a	Carteret	\$1,938,733	\$4,072,218	324	339	\$165,938	\$158,888	\$298,050
3b	Hyde	Included in Dare Co. totals.						
3b, 4a, 4b	Dare	\$3,726,270	\$7,826,856	622	651	\$274,230	\$273,294	\$638,101
4c	Currituck	Included in Dare Co. totals.						
Total		\$11,046,413	\$23,202,475	1,844	1,929	\$880,340	\$839,947	\$1,790,992

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Commercial Fishing

Region	County	Commercial Fishing: Direct Impact Landings Value at Dockside (2015)	Commercial Fishing: Total Impact Output/Sales/Business Activity (2015)	Commercial Fishing: Total Impact Employment (2015)	Commercial Fishing: Total Local Tax Revenue (2015)	Commercial Fishing: Total State Tax Revenue (2015)	Commercial Fishing: Total Federal Tax Revenue (2015)
1	Brunswick	\$2,908,338	\$3,818,922	291	\$49,497	\$44,819	\$83,190
2a	New Hanover	\$2,086,239	\$4,157,968	303	\$64,883	\$86,615	\$215,926
2b	Pender	\$1,645,650	\$2,087,987	224	\$23,703	\$32,142	\$58,461
2b	Onslow	\$5,475,273	\$7,342,059	462	\$90,820	\$122,561	\$241,061
2c, 3a	Carteret	\$18,878,984	\$30,948,572	1,141	\$454,489	\$674,400	\$1,494,921
3b	Hyde	\$9,119,176	\$14,359,864	404	\$186,196	\$279,299	\$634,555
3b, 4a, 4b	Dare	\$19,418,969	\$33,901,965	637	\$451,123	\$681,536	\$1,677,495
4c	Currituck	\$0	\$0	0	\$0	\$0	\$0
Total		\$59,532,630	\$96,617,338	3,462	\$1,320,711	\$1,921,371	\$4,405,610

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Seafood Packing and Processing

Region	County	Seafood Packing & Processing: Direct Impact Sales (2015)	Seafood Packing & Processing: Total Impact Output/Sales/Business Activity (2015)	Seafood Packing & Processing: Direct Impact Employment (2015)	Seafood Packing & Processing: Total Impact Employment (2015)	Seafood Packing & Processing: Total Local Tax Revenue (2015)	Seafood Packing & Processing: Total State Tax Revenue (2015)	Seafood Packing & Processing: Total Federal Tax Revenue (2015)
1	Brunswick	\$8,754,780	\$12,207,659	28	60	\$113,825	\$116,174	\$278,935
2a	New Hanover	\$6,396,545	\$7,986,394	20	35	\$67,044	\$68,934	\$169,729
2b	Pender	\$5,045,670	\$6,299,762	16	28	\$51,550	\$55,711	\$133,884
2b	Onslow	\$16,787,540	\$20,960,052	53	93	\$175,090	\$181,781	\$445,449
2c, 3a	Carteret	\$57,884,182	\$72,271,191	182	321	\$591,386	\$639,122	\$1,535,929
3b	Hyde	\$28,133,484	\$36,103,348	87	156	\$289,886	\$312,759	\$787,276
3b, 4a, 4b	Dare	\$59,087,801	\$78,344,977	186	355	\$641,043	\$693,219	\$1,828,269
4c	Currituck	\$0	\$0	0	0	\$0	\$0	\$0
Total		\$182,090,002	\$234,173,385	572	1,047	\$1,929,825	\$2,067,701	\$5,179,471

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Charter/Head Boat Fishing

Region	County	Charter/Head Boat Fishing: Direct Impact Expenditures (2015)	Charter/Head Boat Fishing: Total Impact Output/Sales/Business Activity (2015)	Charter/Head Boat Fishing: Direct Impact Employment (2015)	Charter/Head Boat Fishing: Total Impact Employment (2015)	Charter/Head Boat Fishing: Total Local Tax Revenue (2015)	Charter/Head Boat Fishing: Total State Tax Revenue (2015)	Charter/Head Boat Fishing: Total Federal Tax Revenue (2015)	Charter/Head Boat Fishing: Annual Consumer Surplus (2015)
1	Brunswick	\$6,394,213	\$9,792,965	124	196	\$269,458	\$254,069	\$506,008	\$7,059,111
2a	New Hanover	\$4,544,826	\$9,416,977	168	225	\$223,846	\$249,709	\$587,117	\$8,365,220
2b	Pender	\$535,547	\$713,856	26	31	\$20,226	\$20,591	\$34,450	\$1,033,735
2b	Onslow	\$1,778,442	\$2,379,549	66	84	\$71,332	\$68,514	\$117,184	\$2,848,193
2c, 3a	Carteret	\$6,298,731	\$10,958,324	164	249	\$287,464	\$332,110	\$665,284	\$10,856,531
3b	Hyde	\$641,940	\$917,020	14	20	\$23,458	\$25,986	\$46,354	\$1,444,972
3b, 4a, 4b	Dare	\$17,169,280	\$31,564,717	330	549	\$679,979	\$828,472	\$1,967,118	\$36,479,985
4c	Currituck	\$1,012,887	\$1,772,272	22	34	\$42,601	\$50,723	\$107,692	\$2,279,954
Total		\$38,375,865	\$67,515,681	914	1,388	\$1,618,364	\$1,830,175	\$4,031,208	\$70,367,700

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Private Recreational Boating

Region	County	Private Boating: Direct Impact Expenditures (2015)	Private Boating: Total Impact Output/Sales/ Business Activity (2015)	Private Boating: Total Impact Employment (2015)	Private Boating: Total Local Tax Revenue (2015)	Private Boating: Total State Tax Revenue (2015)	Private Boating: Total Federal Tax Revenue (2015)	Private Boating: Annual Consumer Surplus (2015)
1	Brunswick	\$8,096,145	\$15,826,696	206	\$711,394	\$676,644	\$1,347,635	\$444,417
2a	New Hanover	\$6,818,450	\$15,757,131	180	\$600,102	\$578,963	\$1,259,790	\$334,278
2b	Pender	\$636,932	\$965,397	15	\$56,510	\$50,724	\$78,837	\$31,840
2b	Onslow	\$4,531,687	\$6,866,651	107	\$411,954	\$350,110	\$560,611	\$237,817
2c, 3a	Carteret	\$16,890,990	\$34,062,716	447	\$1,538,620	\$1,515,059	\$2,724,400	\$914,525
3b	Hyde	\$2,118,716	\$3,424,742	48	\$175,915	\$163,236	\$262,891	\$138,434
3b, 4a, 4b	Dare	\$35,983,667	\$75,640,399	898	\$2,737,458	\$2,814,916	\$6,377,792	\$3,352,767
4c	Currituck	\$3,998,185	\$7,309,934	96	\$343,837	\$347,535	\$620,644	\$372,530
Total		\$79,074,771	\$159,853,665	1,997	\$6,575,790	\$6,492,187	\$13,232,600	\$5,826,607

BIMP (2016 UPDATE) – Economic Benefit Analysis

• Boat Building

Region	County	Number of Firms	Boat Building: Direct Impact Sales (2015)	Boat Building: Total Impact Output/Sales/ Business Activity (2015)	Boat Building: Direct Impact Employment (2015)	Boat Building: Total Impact Employment (2015)	Boat Building: Total Local Tax Revenue (2015)	Boat Building: Total State Tax Revenue (2015)	Boat Building: Total Federal Tax Revenue (2015)
1	Brunswick	3	\$16,122,642	\$24,377,564	58	138	\$527,742	\$485,598	\$1,246,796
2a	New Hanover	4	\$2,779,766	\$5,172,869	10	30	\$118,123	\$107,232	\$288,281
2b	Pender	2	\$6,949,415	\$8,601,972	25	39	\$119,620	\$115,027	\$329,180
2b	Onslow	1	\$5,559,532	\$6,881,577	20	31	\$39,806	\$92,021	\$263,344
2c, 3a	Carteret	16	\$70,050,102	\$105,916,314	252	601	\$2,292,950	\$2,109,839	\$5,417,114
3b	Hyde	0	\$0	\$0	0	0	\$0	\$0	\$0
3b, 4a, 4b	Dare	11	\$108,410,872	\$174,251,830	390	960	\$3,433,372	\$3,219,478	\$9,065,317
4c	Currituck	1	\$1,389,883	\$2,233,998	5	12	\$44,018	\$41,275	\$116,222
Total		38	\$211,262,212	\$327,436,125	760	1,811	\$6,575,632	\$6,170,470	\$16,726,255

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Marinas

Region	County	Number of Marinas (2015)	Marinas: Direct Impact Sales (2015)	Marinas: Direct Impact Employment (2015)
1	Brunswick	23	\$7,659,272	173
2a	New Hanover	48	\$15,891,573	358
2b	Pender	7	\$2,308,776	52
2b	Onslow	14	\$4,580,904	103
2c, 3a	Carteret	85	\$28,140,677	634
3b	Hyde	4	\$1,154,388	26
3b, 4a, 4b	Dare	29	\$9,647,384	217
4c	Currituck	3	\$989,475	22
Total		213	\$70,372,449	1,586

BIMP (2016 UPDATE) – Economic Benefit Analysis

- Deep Draft Ports

- If No NC Ports, Increased Transportation Costs Equal \$32.8M/yr
- Operating Revenues Have Increased from \$32.4M (2005) to \$43M (2015)
- Including All Jobs and Activities Associated with Ports Shows That Ports Have A Considerable Effect

Port	Sector	Direct Impact Output/ Revenues (2015)	Total Impact Output/Sales/ Business Activity (2015)	Direct Impact Employment (2015)	Total Impact Employment (2015)	Total Local Tax Revenue (2015)	Total State Tax Revenue (2015)	Total Federal Tax Revenue (2015)
Morehead	NCSOA Operations	\$11,700,000	\$19,594,575	43	121	\$170,442	\$241,971	\$839,089
Morehead	Other Operations at Port	\$41,729,747	\$69,886,894	120	400	\$607,907	\$863,025	\$2,992,732
Wilmington	NCSOA Operations	\$29,900,000	\$58,037,814	170	433	\$622,845	\$863,664	\$3,299,674
Wilmington	Other Operations at Port	\$138,751,516	\$269,325,573	798	2,019	\$2,890,323	\$4,007,847	\$15,312,201
Total		\$222,081,263	\$416,844,855	1,131	2,973	\$4,291,516	\$5,976,508	\$22,443,697

BIMP (2016 UPDATE) – Economic Benefit Analysis

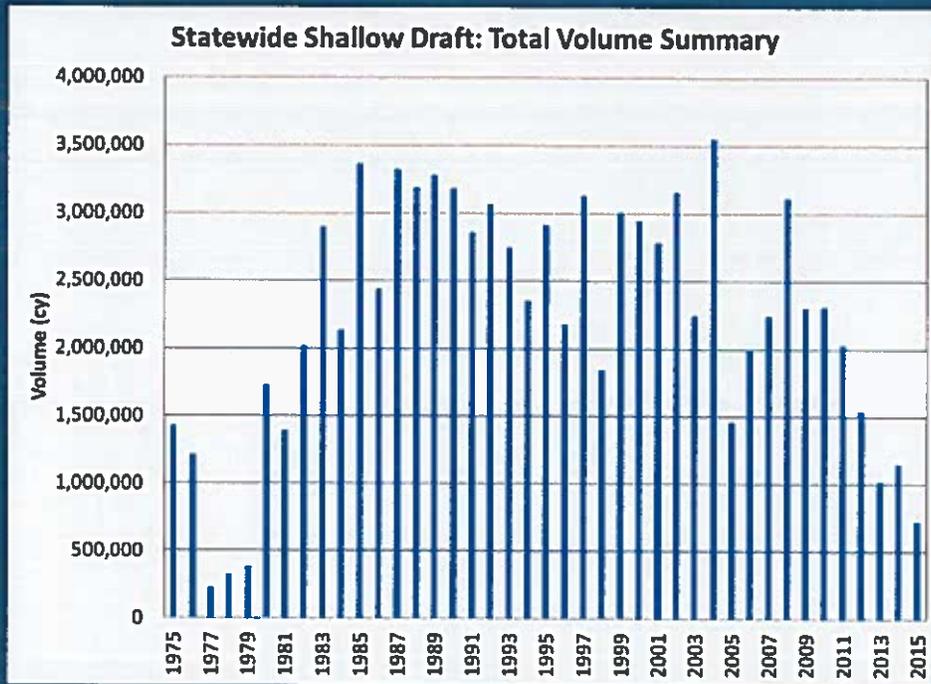
- Scenarios – 50% Reduced Beach Width and Inlet Depth (Selected Inlets)
 - 50% Reduced Beach Width
 - \$524M/yr in Tourism, 6,074 Jobs and \$15.3M/yr in Lost Consumer Surplus
 - 50% Reduced Inlet Depth (Selected Inlets – Ocracoke, Barden, Bogue, North Topsail, Carolina Beach, and Lockwoods Folly)
 - Tens of Millions/yr and Hundreds of Jobs Lost in These Six Inlets Alone

BIMP (2016 UPDATE) – Economic Benefit Analysis

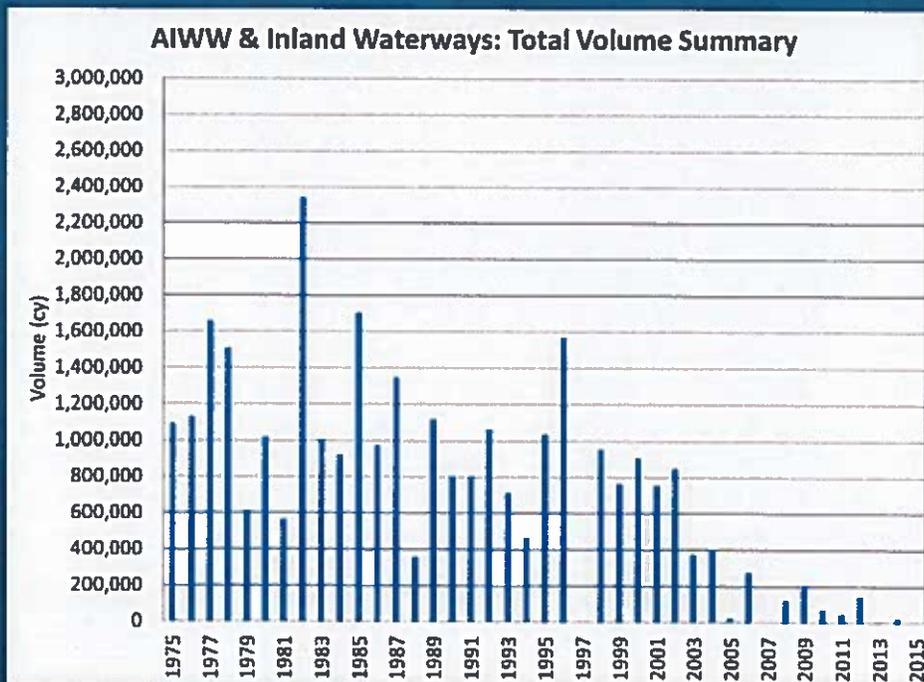
- Summary

Sector	Direct Impact Expenditures	Total Impact Output/Sales/ Business Activity	Total Impact Employment	Total Local Tax Revenue	Total State Tax Revenue	Total Federal Tax Revenue	Annual Consumer Surplus
Beach Recreation (2013-2014)	\$1,662,190,984	\$4,741,454,600	48,718	\$155,806,220	\$163,107,645	\$375,840,980	\$89,672,622
Shore and Pier Fishing (2013-2014)	-	-	-	-	-	-	\$48,995,668
Marine Recreational Services (2013-2014)	\$11,046,413	\$23,202,475	1,929	\$880,340	\$839,947	\$1,790,992	-
Commercial Fishing (2015)	\$59,532,630	\$96,617,338	3,462	\$1,320,711	\$1,921,371	\$4,405,610	-
Seafood Packing and Processing (2015)	\$182,090,002	\$234,173,385	1,047	\$1,929,825	\$2,067,701	\$5,179,471	-
Charter/Head Boat Fishing (2015)	\$38,375,865	\$67,515,681	1,388	\$1,618,364	\$1,830,175	\$4,031,208	\$70,367,700
Recreational Boating/Fishing (2015)	\$79,074,771	\$159,853,665	1,997	\$6,575,790	\$6,492,187	\$13,232,600	\$5,826,607
Boat Building (2015)	\$211,262,212	\$327,436,125	1,811	\$6,575,632	\$6,170,470	\$16,726,255	-
Marinas (2015)	\$70,372,449	-	1,586	-	-	-	-
Deep Draft Port Activity (2015)	\$222,081,263	\$416,844,855	2,973	\$4,791,516	\$5,976,508	\$22,443,697	-
NC TOTALS	\$2,536,026,589	\$6,067,098,124	64,911	\$178,998,398	\$188,406,004	\$443,650,812	\$214,862,598

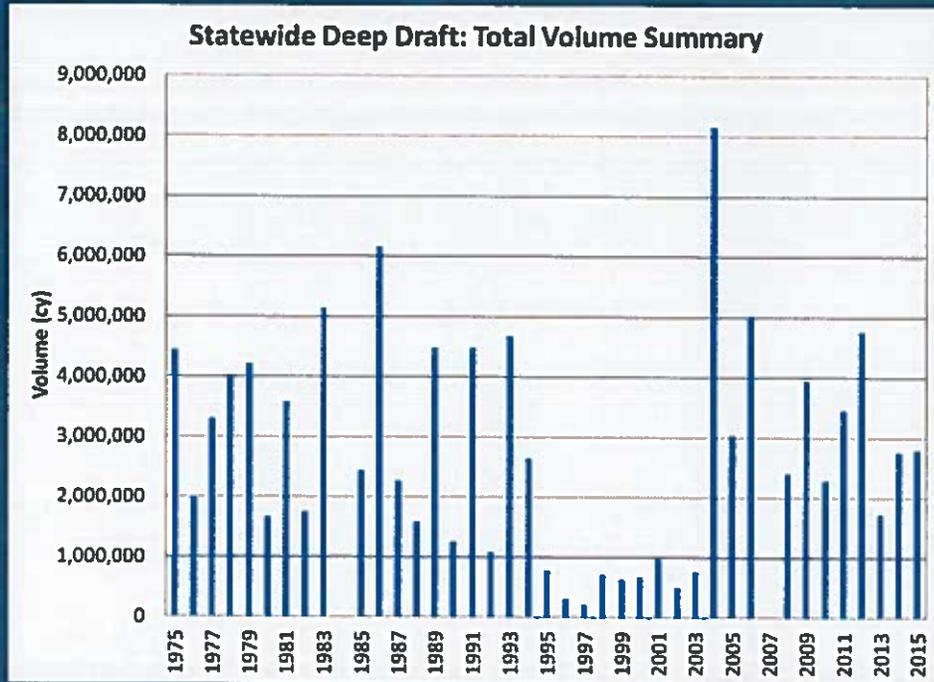
BIMP (2016 UPDATE) – Funding Need – Dredging



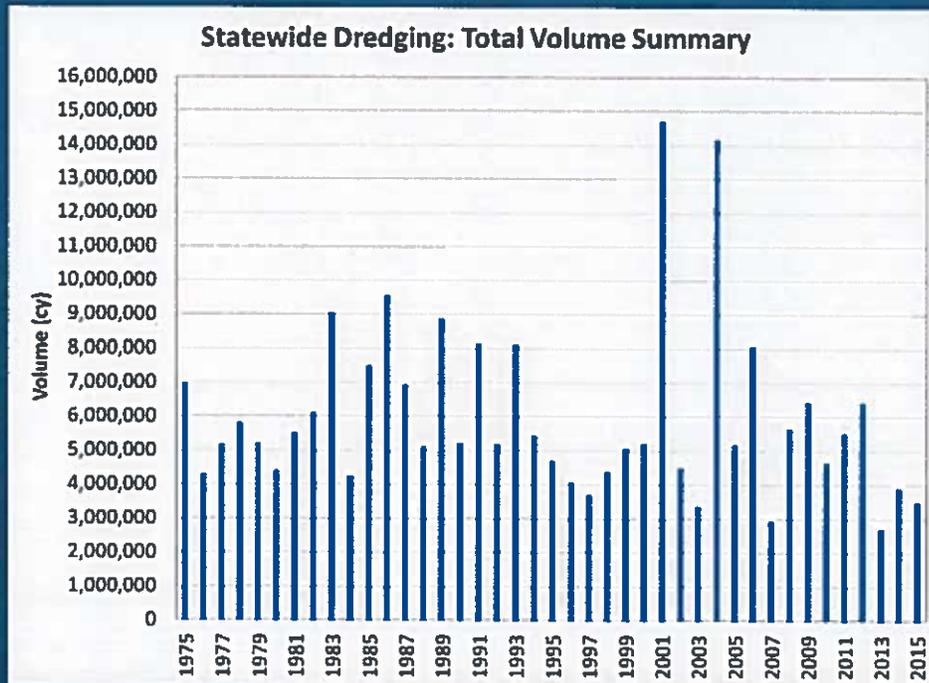
BIMP (2016 UPDATE) – Funding Need – Dredging



BIMP (2016 UPDATE) – Funding Need – Dredging



BIMP (2016 UPDATE) – Funding Need – Dredging



BIMP (2016 UPDATE) – Funding Need – Dredging

Table IV-1: Summary of Statewide Dredging Volumes (1975-2015)

Location	Shallow (cy)	Deep (cy)	Total (cy)	Average Volume (CY/YR)
Region 1	7,832,507	86,703,332	94,535,839	2,305,752
Region 2a	7,393,055	-	7,393,055	180,318
Region 2b	14,380,414	-	14,380,414	350,742
Region 2c	6,845,789	38,541,862	45,387,651	1,102,138
Region 3a	863,949	-	863,949	21,072
Region 3b	8,135,110	-	8,135,110	199,417
Region 4a	278,527	-	278,527	6,793
Region 4b	45,829,291	-	45,829,291	1,112,910
AJWW & Inland Waterways	29,748,306	-	29,748,306	725,571
Statewide Total	129,907,838	125,245,194	245,152,232	6,003,713
Statewide Average	2,948,952	3,954,761	6,003,713	N/A

Table IV-3: Summary of Statewide Dredging Volumes (2010-2015)

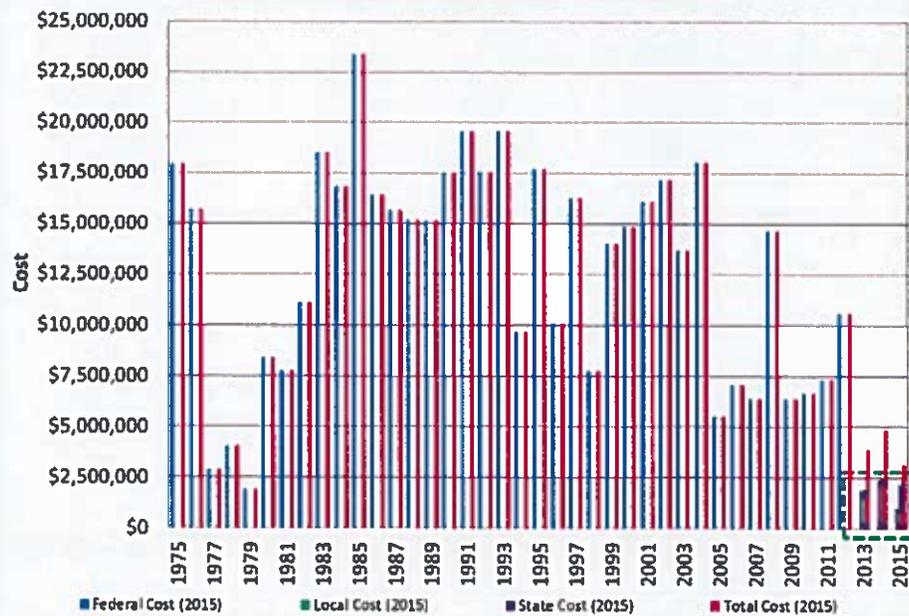
Location	Shallow (cy)	Deep (cy)	Total (cy)	Average Volume (CY/YR)
Region 1	597,025	15,800,902	16,397,927	2,732,988
Region 2a	732,305	-	732,305	122,051
Region 2b	1,114,350	-	1,114,350	185,725
Region 2c	656,734	1,905,434	2,622,168	437,028
Region 3a	-	-	-	-
Region 3b	1,935,443	-	1,935,443	322,574
Region 4a	143,650	-	143,650	23,942
Region 4b	3,580,760	-	3,580,760	590,793
AJWW & Inland Waterways	289,767	-	289,767	48,295
Statewide Total	9,050,034	17,766,336	26,816,370	4,469,395
Statewide Average	1,508,339	2,961,056	4,469,395	N/A

Table IV-2: Summary of Statewide Dredging Volumes (2005-2015)

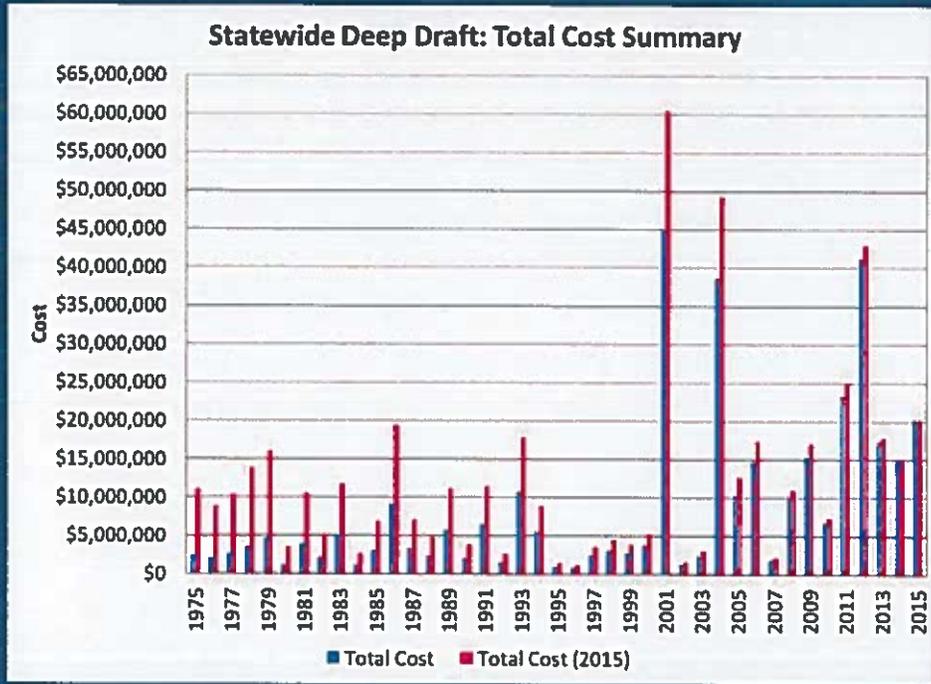
Location	Shallow (cy)	Deep (cy)	Total (cy)	Average Volume (CY/YR)
Region 1	2,124,170	28,641,073	30,765,243	2,796,840
Region 2a	1,893,565	-	1,893,565	172,142
Region 2b	3,849,533	-	3,849,533	349,958
Region 2c	1,344,688	5,679,428	7,024,112	638,556
Region 3a	-	-	-	-
Region 3b	3,248,554	-	3,248,554	295,323
Region 4a	151,650	-	151,650	13,786
Region 4b	7,277,712	-	7,277,712	661,610
AJWW & Inland Waterways	904,155	-	904,155	82,190
Statewide Total	20,794,025	34,320,499	55,114,524	5,010,411
Statewide Average	1,890,366	3,120,045	5,010,411	N/A

BIMP (2016 UPDATE) – Funding Need – Dredging

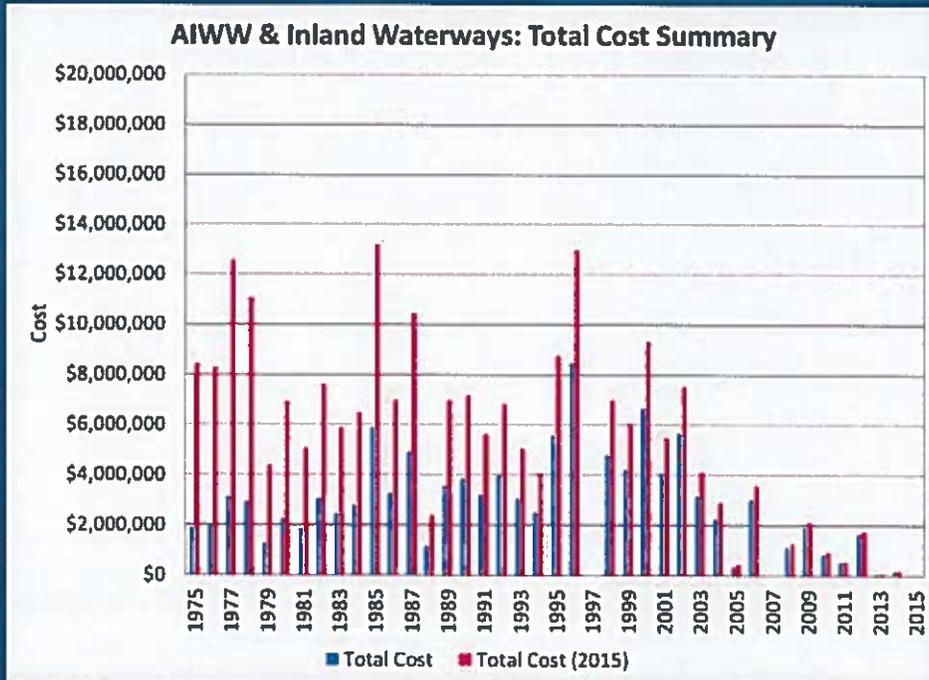
Statewide Shallow Draft: Total Cost Summary



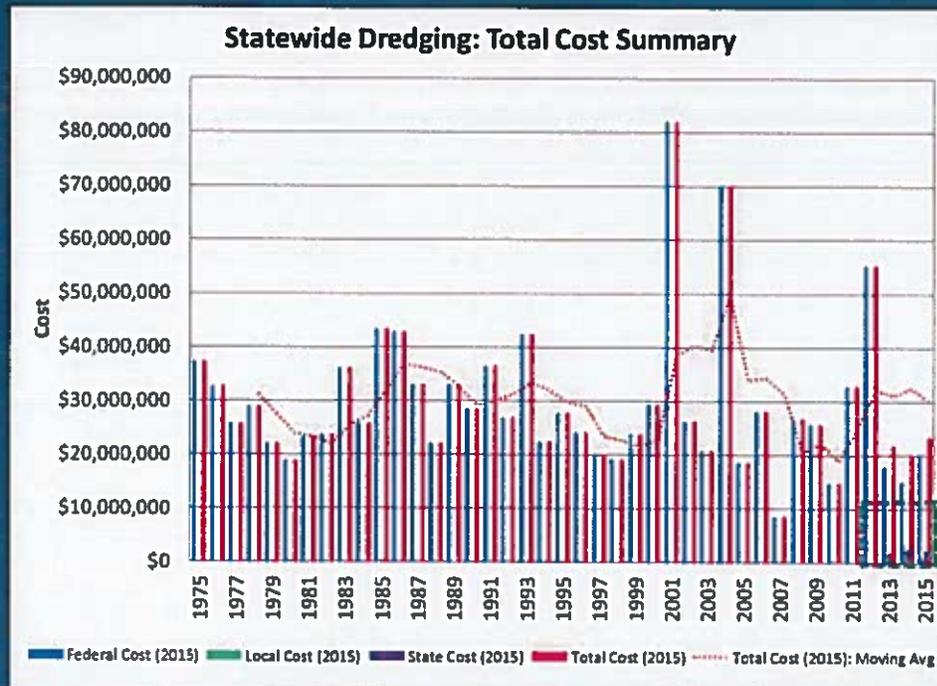
BIMP (2016 UPDATE) – Funding Need – Dredging



BIMP (2016 UPDATE) – Funding Need – Dredging



BIMP (2016 UPDATE) – Funding Need – Dredging



BIMP (2016 UPDATE) – Funding Need – Dredging

Table IV-4: Dredging Costs - Statewide (1975-2015)

Location	Shallow			Deep	Total	Average Cost
	Federal	State	Local			
	(2015 \$)			(2015 \$)	(2015 \$)	(2015 \$/yr)
Region 1	\$ 38,191,224	\$ 514,440	\$ 454,090	\$ 338,524,877	\$ 377,684,630	\$ 9,211,820
Region 2a	\$ 29,343,028	\$ 571,418	\$ 489,818	-	\$ 30,404,263	\$ 741,567
Region 2b	\$ 56,692,490	\$ 811,343	\$ 545,395	-	\$ 58,049,229	\$ 1,415,835
Region 2c	\$ 29,739,641	\$ 200,384	\$ 200,384	\$ 168,980,380	\$ 199,120,796	\$ 4,956,605
Region 3a	\$ 4,873,704	-	-	-	\$ 4,873,704	\$ 118,871
Region 3b	\$ 45,124,573	\$ 1,949,541	\$ 1,634,291	-	\$ 48,708,406	\$ 1,188,010
Region 4a	\$ 2,547,286	\$ 147,935	\$ 147,935	-	\$ 2,843,157	\$ 69,345
Region 4b	\$ 278,395,020	\$ 2,314,018	\$ 1,868,023	-	\$ 282,547,062	\$ 6,991,382
AIWW & Inland Waterways	\$ 219,790,621	-	-	-	\$ 219,790,621	\$ 5,360,747
Statewide Total	\$ 794,867,687	\$ 6,599,079	\$ 5,338,938	\$ 697,696,265	\$ 4,734,024,866	\$ 28,854,483
Statewide Average	\$ 17,187,014	\$ 158,758	\$ 130,242	\$ 12,378,177	\$ 25,854,192	N/A

Table IV-5: Dredging Costs - Statewide (2005-2015)

Location	Shallow			Deep	Total	Average Cost
	Federal	State	Local			
	(2015 \$)			(2015 \$)	(2015 \$)	(2015 \$/yr)
Region 1	\$ 4,889,139	\$ 514,440	\$ 454,090	\$ 153,045,008	\$ 158,902,677	\$ 14,445,698
Region 2a	\$ 4,673,967	\$ 571,418	\$ 489,818	-	\$ 5,735,202	\$ 521,382
Region 2b	\$ 9,685,578	\$ 811,343	\$ 545,395	-	\$ 11,042,316	\$ 1,003,847
Region 2c	\$ 4,391,679	\$ 200,384	\$ 200,384	\$ 34,909,439	\$ 39,701,805	\$ 3,609,262
Region 3a	-	-	-	-	-	-
Region 3b	\$ 15,270,320	\$ 1,949,541	\$ 1,634,291	-	\$ 18,854,152	\$ 1,714,014
Region 4a	\$ 163,685	\$ 147,935	\$ 147,935	-	\$ 459,555	\$ 41,778
Region 4b	\$ 25,504,507	\$ 2,314,018	\$ 1,868,023	-	\$ 29,686,548	\$ 2,698,777
AIWW & Inland Waterways	\$ 10,670,284	-	-	-	\$ 10,670,284	\$ 970,026
Statewide Total	\$ 75,249,159	\$ 6,599,079	\$ 5,338,938	\$ 187,954,447	\$ 275,052,829	\$ 25,004,784
Statewide Average	\$ 8,840,833	\$ 691,734	\$ 485,449	\$ 17,086,768	\$ 25,004,784	N/A

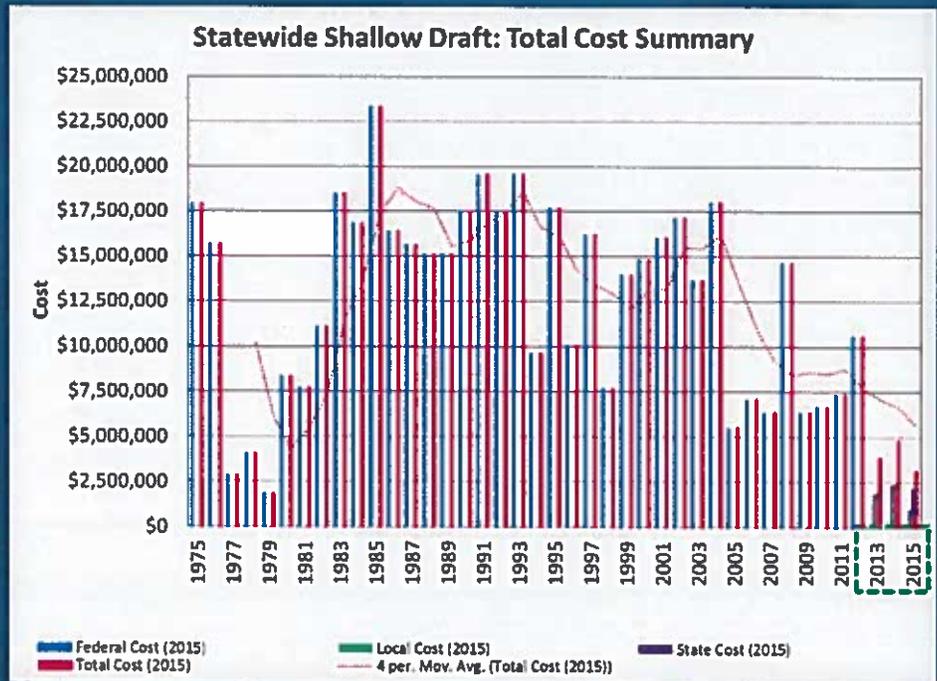
BIMP (2016 UPDATE) – Funding Need – Dredging

Table IV-6: Dredging Costs - Statewide (2010-2015)

Location	Shallow			Deep (2015 \$)	Total (2015 \$)	Average Cost (2015 \$/ yr)
	Federal	State	Local			
	(2015 \$)					
Region 1	\$ 996,018	\$ 514,440	\$ 454,090	\$ 103,146,635	\$ 105,111,183	\$ 17,518,530
Region 2a	\$ 1,473,364	\$ 571,418	\$ 489,818	-	\$ 2,534,599	\$ 422,433
Region 2b	\$ 2,075,660	\$ 811,343	\$ 545,395	-	\$ 3,432,398	\$ 572,066
Region 2c	\$ 1,643,355	\$ 200,384	\$ 200,384	\$ 24,683,145	\$ 26,727,267	\$ 4,454,545
Region 3a	-	-	-	-	-	-
Region 3b	\$ 5,594,282	\$ 1,949,541	\$1,634,291	-	\$ 9,178,115	\$ 1,529,686
Region 4a	\$ 139,273	\$ 147,935	\$ 147,935	-	\$ 435,144	\$ 72,524
Region 4b	\$ 12,678,053	\$ 2,314,018	\$1,868,023	-	\$ 16,860,094	\$ 2,810,016
AIWW & Inland Waterways	\$ 3,384,839	-	-	-	\$ 3,384,839	\$ 564,140
Statewide Total	\$ 27,984,845	\$ 6,509,079	\$5,339,936	\$ 127,829,780	\$ 167,663,639	\$ 27,943,940
Statewide Average	\$ 4,664,141	\$ 1,084,846	\$ 889,989	\$ 21,304,963	\$ 27,943,940	N/A

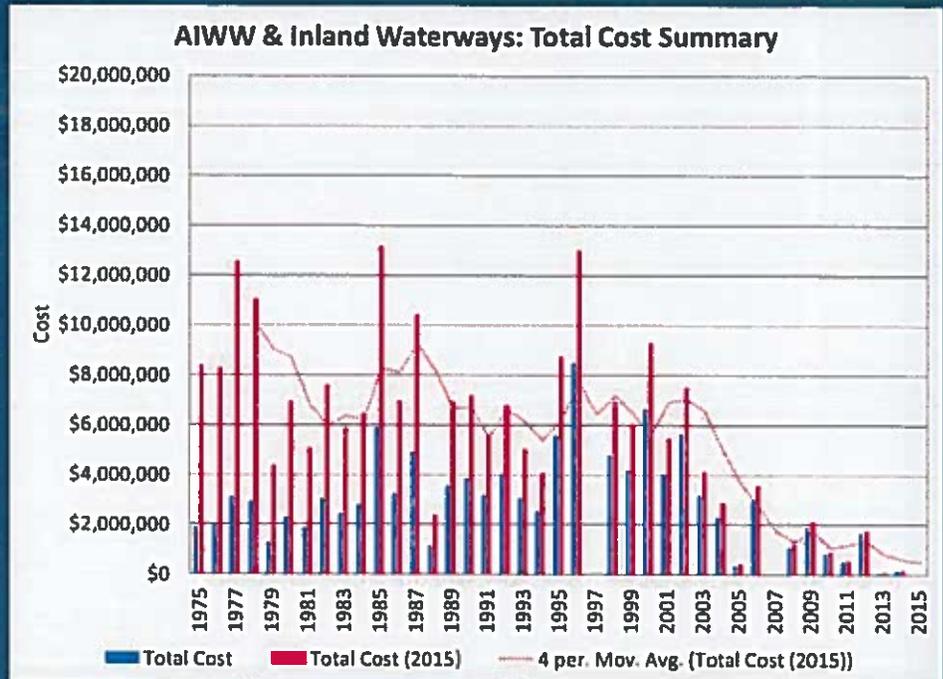
BIMP (2016 UPDATE) – Funding Need – Dredging

- Shallow Draft
– \$16.25M/yr



BIMP (2016 UPDATE) – Funding Need – Dredging

- AIWW/Inland
 - \$7M/yr
- Total Shallow Draft
 - \$23.25M/yr



BIMP (2016 UPDATE) – Funding Need – Dredging

- Deep Draft Funding Need
 - NC Ports Are Losing Ground Nationally to Other Ports Based on Tonnage
 - Funding Is Strained
 - NCGA Set Up Fund But No Appropriation to Date

“We Can’t Wait” Ports Compared to North Carolina Ports

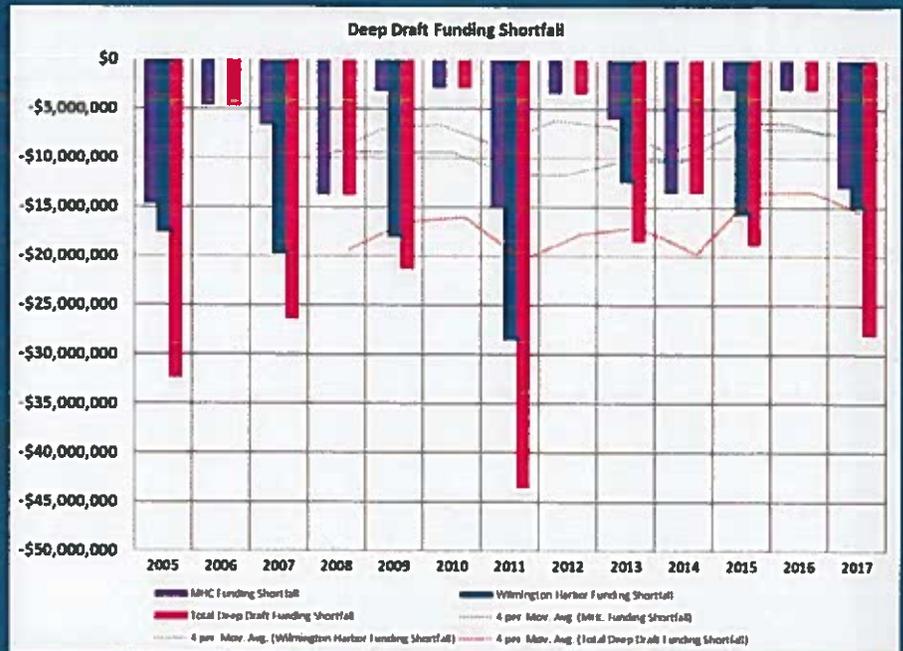
Year	Norfolk		Savannah		Charleston		Jacksonville		Miami		Wilmington		Morehead City	
	Rank #	Total Cargo Volume in Short Tons (Domestic and Foreign)	Rank #	Total Cargo Volume in Short Tons (Domestic and Foreign)	Rank #	Total Cargo Volume in Short Tons (Domestic and Foreign)	Rank #	Total Cargo Volume in Short Tons (Domestic and Foreign)	Rank #	Total Cargo Volume in Short Tons (Domestic and Foreign)	Rank #	Total Cargo Volume in Short Tons (Domestic and Foreign)	Rank #	Total Cargo Volume in Short Tons (Domestic and Foreign)
2010	15	41,949,771	19	34,881,854	39	17,395,995	34	15,117,821	62	6,998,779	60	7,419,180	81	1,497,946
2011	15	47,152,771	19	28,489,297	37	17,316,698	39	16,827,881	62	7,127,761	63	6,271,639	82	1,549,512
2012	15	46,219,396	20	27,132,064	33	19,826,027	39	18,415,144	62	6,993,927	64	6,714,640	86	1,548,648
2013	14	48,891,624	23	21,929,022	35	16,326,126	38	16,471,808	63	7,425,141	65	6,728,401	88	1,423,689
2014	14	47,399,843	22	24,329,141	33	19,847,051	38	17,100,607	65	7,142,109	77	5,837,971	100	1,421,649



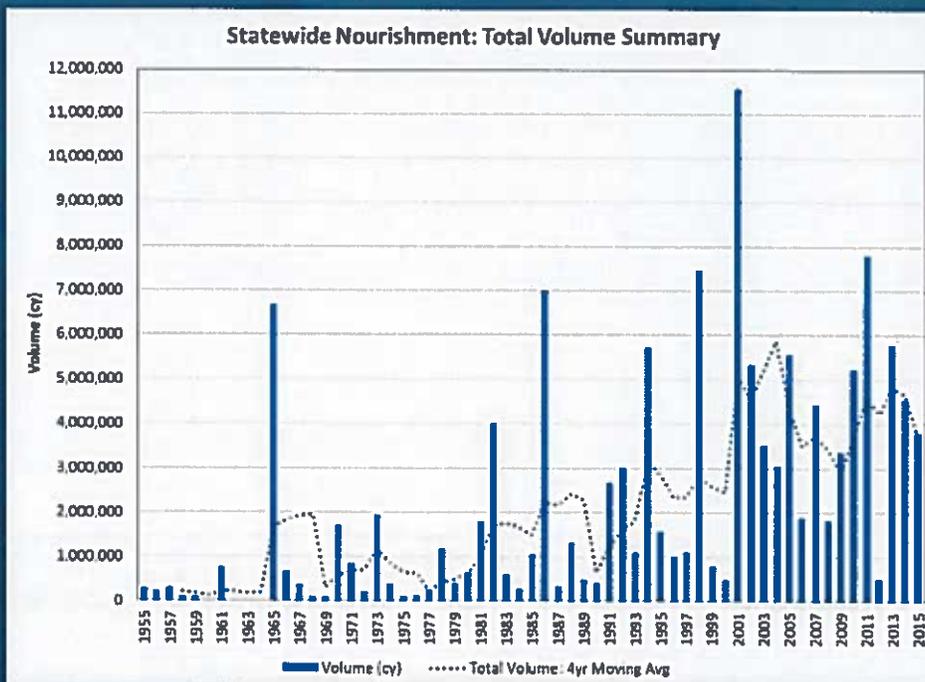
BUILDING STRONG_®

BIMP (2016 UPDATE) – Funding Need – Dredging

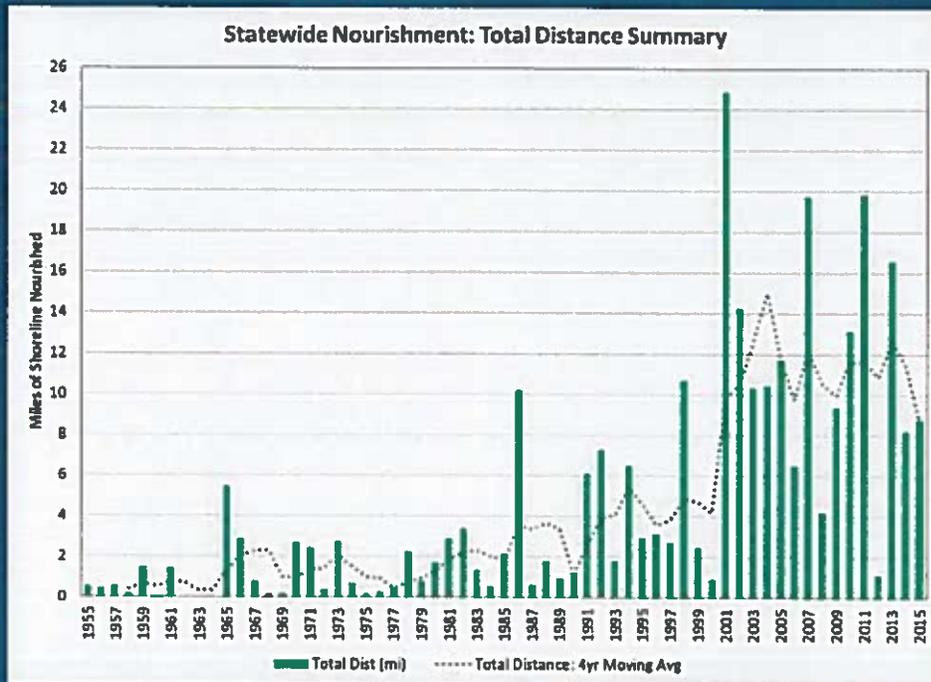
- Deep Draft Funding Need
 - \$17.5M Average Annual Shortfall
 - \$10M/yr to Wilmington Harbor
 - \$7.5M/yr to Morehead City Harbor



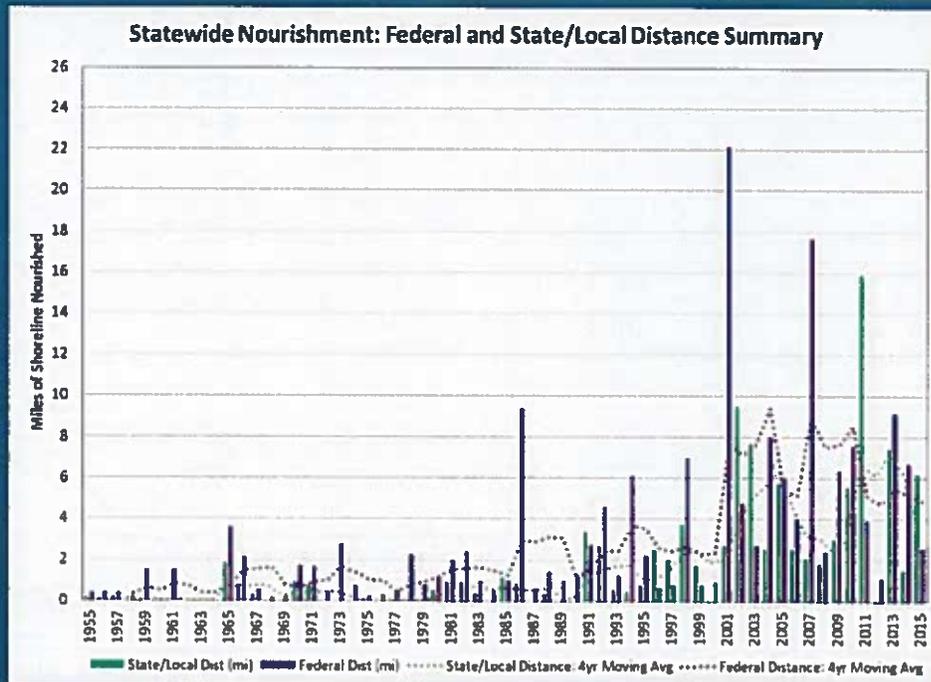
BIMP (2016 UPDATE) – Funding Need – Beaches



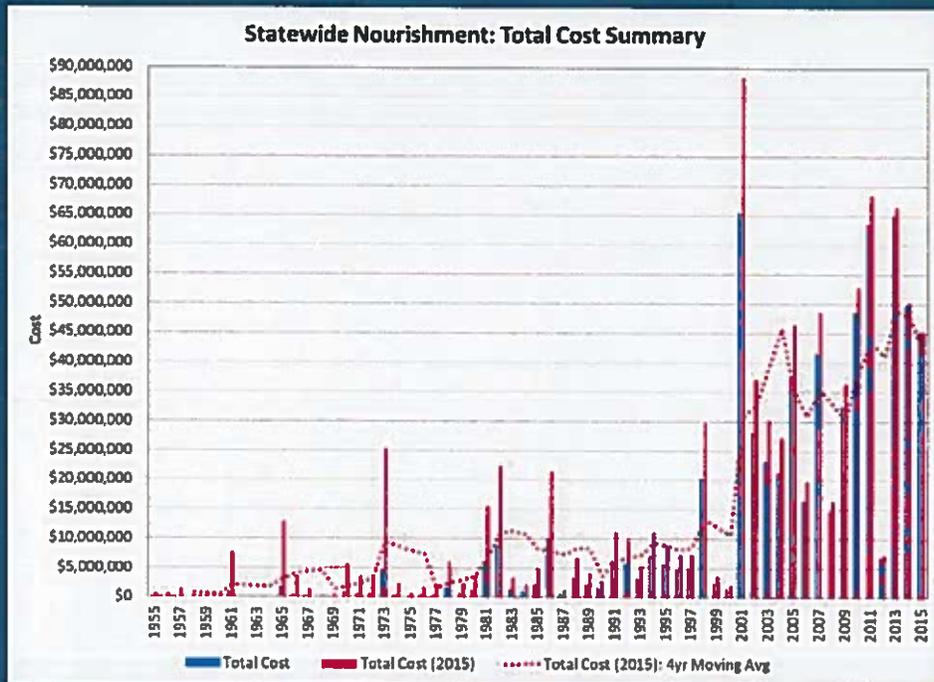
BIMP (2016 UPDATE) – Funding Need – Beaches



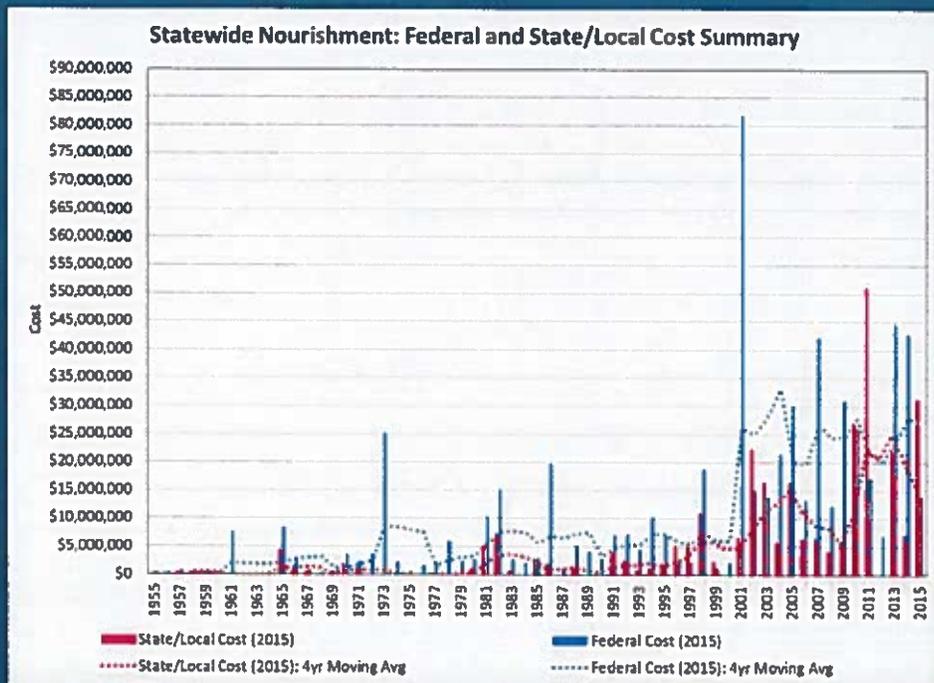
BIMP (2016 UPDATE) – Funding Need – Beaches



BIMP (2016 UPDATE) – Funding Need – Beaches



BIMP (2016 UPDATE) – Funding Need – Beaches



BIMP (2016 UPDATE) – Funding Need – Beaches

Table IV-7: Beach Nourishment Summary Data – Statewide (1955 – 2015)

Region	Number of Times Nourished	Total Volume Nourished (cy)	Cumulative Distance (mi)	Federal Cumulative Distance (mi)	State/Local Cumulative Distance	Total Cost (2015 \$)	Federal Cost (2015 \$)	State/Local Cost (2015 \$)
Region 1	90	27,128,912	67.5	44.9	22.6	\$230,064,720	\$178,097,117	\$51,967,603
Region 2a	100	49,825,675	89.8	53.3	36.5	\$255,208,455	\$155,760,621	\$99,447,835
Region 2b	24	5,800,308	16.4	5.1	11.3	\$64,717,434	\$22,880,753	\$41,836,682
Region 2c	43	26,527,019	73.1	50.4	22.7	\$183,547,263	\$125,072,421	\$58,474,842
Region 3b	12	1,403,863	2.1	2.1	0.0	\$16,244,041	\$16,244,041	\$0
Region 4a	4	3,430,083	4.5	4.5	0.0	\$46,795,723	\$46,795,723	\$0
Region 4b	25	14,854,244	27.0	17.0	10.0	\$108,670,297	\$70,307,679	\$38,362,618
STATEWIDE TOTAL	298	128,778,104	280.4	177.3	103.1	\$905,247,913	\$618,953,358	\$286,294,555
STATEWIDE AVERAGE (/yr)	N/A	2,130,985	4.6	2.9	1.7	\$34,840,130	\$24,881,203	\$4,758,928

Table IV-8: Beach Nourishment Summary Data – Statewide (2005 – 2015)

Region	Number of Times Nourished	Total Volume (cy)	Cumulative Distance (mi)	Federal Cumulative Distance (mi)	State/Local Cumulative Distance	Total Cost (2015 \$)	Federal Cost (2015 \$)	State/Local Cost (2015 \$)
Region 1	33	11,798,725	29.3	18.4	10.9	\$124,146,226	\$87,704,045	\$36,442,180
Region 2a	29	9,223,965	22.8	12.6	10.2	\$94,082,335	\$48,328,672	\$45,753,663
Region 2b	16	4,944,355	14.2	2.9	11.3	\$57,859,113	\$16,022,431	\$41,836,682
Region 2c	17	9,851,817	36.7	27.3	9.4	\$99,183,667	\$74,647,467	\$24,536,200
Region 3b	0	-	-	-	-	-	-	-
Region 4a	1	1,618,083	2.0	2.0	0.0	\$19,551,603	\$19,551,603	\$0
Region 4b	5	7,328,053	14.2	4.2	10.0	\$72,249,867	\$33,682,249	\$38,567,618
STATEWIDE TOTAL	101	44,764,698	119.2	67.4	52.8	\$467,082,611	\$270,036,408	\$197,046,203
STATEWIDE AVERAGE (/yr)	N/A	4,069,545	10.8	6.1	4.7	\$46,192,983	\$27,003,641	\$19,704,571

BIMP (2016 UPDATE) – Funding Need – Beaches

Table IV-9: Beach Nourishment Summary Data – Statewide (2010 – 2015)

Region	Number of Times Nourished	Total Volume Nourished (cy)	Cumulative Distance (mi)	Federal Cumulative Distance (mi)	State/Local Cumulative Distance	Total Cost (2015 \$)	Federal Cost (2015 \$)	State/Local Cost (2015 \$)
Region 1	17	6,988,510	15.5	9.4	6.2	\$75,555,796	\$45,702,984	\$29,852,812
Region 2a	15	5,809,947	15.1	9.4	5.7	\$55,910,164	\$35,848,559	\$20,061,605
Region 2b	11	4,417,041	12.8	1.5	11.3	\$51,748,384	\$9,911,702	\$41,836,682
Region 2c	7	3,681,703	12.2	8.7	3.5	\$41,030,480	\$32,975,928	\$8,054,552
Region 3b	0	-	-	-	-	-	-	-
Region 4a	1	1,618,083	2.0	2.0	0.0	\$19,551,603	\$19,551,603	\$0
Region 4b	2	5,180,925	10.0	0.0	10.0	\$45,953,898	\$7,386,280	\$38,567,618
STATEWIDE TOTAL	53	27,696,209	67.7	31.0	36.7	\$289,750,325	\$151,377,056	\$138,373,269
STATEWIDE AVERAGE (/yr)	N/A	4,616,035	11.3	5.2	6.1	\$48,291,721	\$25,229,509	\$23,062,211

BIMP (2016 UPDATE) – Projections and Cycles

- Average Nourishment Interval Across the State Is 4.5 years
- ~ 45% of Potentially Managed Shoreline Historically Managed

Region	Historical Total Managed Shoreline (mi)	Historical Federal Managed Shoreline (mi)	Historical State/Local Managed Shoreline (mi)	Current Total Managed Shoreline (mi)	Current Federal Managed Shoreline (mi)	Current State/Local Managed Shoreline (mi)	Managed and Potentially Managed Shoreline (mi)	Total Shoreline (mi)	Nourishment Interval (yr)
Region 1 Total	16.4	11.1	5.3	16.4	11.1	5.3	33.0	40	4.5
Region 2a Total	14.0	7.9	6.1	14.0	7.9	6.1	17.3	31	3.5
Region 2b Total	8.4	0.7	7.7	8.4	0.7	7.7	21.6	38	4.3
Region 2c Total	20.5	11.6	8.9	20.5	3.0	17.5	24.3	45	5.2
Region 3a Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41	-
Region 3b Total	1.0	1.0	0.0	1.0	1.0	0.0	5.5	30	-
Region 4a Total	2.0	2.0	0.0	4.9	2.0	2.9	10.9	35	5.0
Region 4b Total	12.5	2.5	10.0	20.1	2.5	17.6	35.6	43	4.6
Region 4c Total	0.0	0.0	0.0	0.0	0.0	0.0	19.1	23	-
TOTAL	74.8	36.8	38.0	85.3	28.2	57.1	167.3	326	4.5

BIMP (2016 UPDATE) – Projections and Cycles

- Currently \$50M Annually for Beach Nourishment
 - \$25M Annually Federal Cost For 36.8 Miles Of Shoreline
 - \$25M Annually State/Local Cost For 38.0 Miles Of Shoreline
 - Assuming a Unit Cost of \$10.5/cy - \$25M over 38 miles/4.5yr = 53 cy/ft - Reasonable
 - With Funding Shifts and Recent Projects, Now Need to Plan for 57.1 Miles of State/Local Managed Shoreline – $57.1/38 = 1.5$ Ratio
 - Equals \$37.5M Annual State/Local Cost – SAY \$40M
 - Including Buffer for CSDR, Storm Recovery, Upfront Support Engineering/Environmental – SAY \$40 – 50M

BIMP (2016 UPDATE) – Projections and Cycles

- Potential Need Statewide Fund for Beaches
 - \$20M - \$35M Annually Depending on Cost Share

Table IV-11: Current State/Local Beach Nourishment Funding Need Cost Share

Cost Share		\$40 M Total State/Local		\$50 M Total State/Local	
State	Local	State	Local	State	Local
25%	75%	\$10,000,000	\$30,000,000	\$12,500,000	\$37,500,000
33%	67%	\$13,200,000	\$26,800,000	\$16,500,000	\$33,500,000
50%	50%	\$20,000,000	\$20,000,000	\$25,000,000	\$25,000,000
67%	33%	\$26,800,000	\$13,200,000	\$33,500,000	\$16,500,000
75%	25%	\$30,000,000	\$10,000,000	\$37,500,000	\$12,500,000

BIMP (2016 UPDATE) – Projections and Cycles

- 167.3 Total miles – 28.2 Federal miles = 139.1 Potential State & Local miles/57.1 Current State & Local miles = 2.44 Ratio
- State/Local Costs of Beach Nourishment May Increase By 244% Once All Developed Shorelines Need Management
- State Fund for Beaches May Reach \$50M - \$70M/yr – 10-15 Years In the Future If Current Trends Continue

Table IV-12: Ultimate Future State/Local Beach Nourishment Funding Need Cost Share

Cost Share		\$95 M Total State/Local		\$105 M Total State/Local	
State	Local	State	Local	State	Local
25%	75%	\$23,750,000	\$71,250,000	\$26,250,000	\$78,750,000
33%	67%	\$31,350,000	\$63,650,000	\$34,650,000	\$70,350,000
50%	50%	\$47,500,000	\$47,500,000	\$52,500,000	\$52,500,000
67%	33%	\$63,650,000	\$31,350,000	\$70,350,000	\$34,650,000
75%	25%	\$71,250,000	\$23,750,000	\$78,750,000	\$26,250,000

BIMP (2016 UPDATE) – Funding Need

- State Fund for Shallow Draft Projects – Ultimate Need May be \$23.5M/yr.....With Local Match Included, Current Capacity With Shallow Draft and Lake Dredging Fund is \$28.5M/yr
- State Fund for Deep Draft Projects - \$17.5M annually – Separate Appropriation from General Assembly Recommended
- State Fund for Beach Nourishment - \$20M - \$35M annually

BIMP (2016 UPDATE) – Funding Sources

- Literature Review & Interviews
 - The Economic Value of N.C. Beaches/Inlets
 - Examples of Investment in Beaches/Inlets
 - Other State's Funding Sources
 - Municipal/Community Models
- The Cost of Doing Nothing
 - Examples from In- and Out-of-State Communities

BIMP (2016 UPDATE) – Funding

- A State Dedicated Beach Preservation Fund Is Justified
- NC's 8 Coastal Counties Are A Huge Economic Engine!
 - In 2014, Visitors Alone:
 - Spent \$3 Billion (B)
 - Produced \$130 Million (M) In State Sales Tax
 - Supported 31 M Jobs
 - All Consumers, Private Sector, 2014 Spending:
 - \$9.3B In State Taxable Sales
 - \$1.2B In Food Service Sales
 - \$2.2B In Real Estate Transfers
 - \$1.3B In Lodging Sales

BIMP (2016 UPDATE) – Funding

- Creation of an Atlantic Coast Development Region Should Be Investigated

Table V-2. Coastal Counties in a Hypothetical Atlantic Coast Economic Development Region (EDR) – 2014 Economic Importance of NC Visitor Expenditures (USTA, 2015).

Member Counties	Expenditure (millions (M))	Payroll (M)	Employment	State Tax Receipts (M)	Local Tax Receipts (M)	2014 Region Population (ACCESSNC)
Brunswick	\$496.32	\$91.36	5,190	\$22.19	\$29.75	118,836
Carteret	\$324.72	\$57.21	3,200	\$14.12	\$18.84	68,811
Currituck	\$144.18	\$26.53	1,540	\$5.96	\$6.60	24,976
Dare	\$1,019.30	\$207.24	12,300	\$47.06	\$45.15	35,104
Hyde	\$33.17	\$6.28	380	\$1.51	\$1.79	5,676
New Hanover	\$507.90	\$113.27	5,680	\$23.82	\$20.11	216,298
Onslow	\$217.29	\$39.40	1,750	\$11.02	\$8.11	187,589
Pender	\$89.63	\$15.19	790	\$4.16	\$6.13	56,250
Atlantic Coast Region Total	\$2,832.51	\$556.48	30,830	\$129.84	\$136.48	713,540

BIMP (2016 UPDATE) – Funding

- Creation of an Atlantic Coast Development Region Should Be Investigated

Table V-3. 2014 Comparison of a Hypothetical Atlantic Coast EDR to other NCPED Economic Development Regions: Economic Importance of NC Visitor Expenditures (USTA, 2015).

Eight Economic Development Regions (NCPED, 1997)	Expenditures (M)	Payroll (M)	Employment	State Tax Receipts (M)	Local Tax Receipts (M)	Number of Counties
Hypothetical Atlantic Coast EDR (ACEDR)	\$2,832.51	\$556.48	30,830	\$129.84	\$136.48	8
Advantage West	\$2,988.64	\$588.02	28,650	\$148.13	\$116.31	23
Carolina	\$6,526.01	\$1,895.44	62,250	\$311.90	\$156.02	12
Global/Eastern	\$1,067.14	\$179.10	9,040	\$57.01	\$24.78	11
Northeast	\$359.85	\$46.00	2,250	\$19.19	\$14.70	13
Southeast	\$855.50	\$140.14	6,950	\$45.66	\$18.47	8
Piedmont Triad	\$2,802.11	\$549.24	24,590	\$149.18	\$61.81	12
Triangle	\$3,891.25	\$968.17	40,380	\$191.08	\$107.69	13
TOTAL	\$21,323.01	\$4,922.59	204,940	\$1,051.99	\$636.26	100
ACEDR as % of Whole	13.30%	11.30%	15.00%	12.30%	21.50%	8.00%
ACEDR Ranks	4 th	4 th	3 rd	5 th	2 nd	7 th (Tie)
EDR Averages	\$2,665.38	\$615.32	25,620	\$131.50	\$79.53	NA
ACEDR vs. EDR Averages	\$167.13	-\$58.84	5,210	-\$1.66	\$56.95	NA

BIMP (2016 UPDATE) – Funding

- Beach Preservation Funding in Other States

STATE	DEDICATED?	SOURCE	% STATE COST SHARE	ANNUAL FUNDING
NJ	Yes	Real Estate transfer fee	75%	\$25 M*
FL	Yes	Real Estate transfer fee	50%	\$30 M*
DE	Yes	State tourist tax (1%) + general bonds	100%	\$1.5 M +
LA	Yes (wetlands + beaches)	Wetlands Trust Fund	variable	\$13-25 M
TX	No	CEPRA (state sporting goods sales tax) + general fund	75%	\$5.5 M
SC	No	General Fund	variable	\$30 M [#]
VA	No	n/a	n/a	\$0

*New Jersey And Florida's State Beach Advocacy Groups Are Requesting An Increase To \$50M/Yr

[#] One-time Allocation In 2016. State Beach Advocacy Group Requesting A Dedicated Source.

BIMP (2016 UPDATE) – Funding

- Possible State Cost Share Formulas
 - 50% State, 50% Local – Florida & Past Shallow Draft Match
 - 67% State, 33% Local – Current Shallow Draft (Tiering)
 - 75% State, 25% Local – NJ, TX
 - ~~100% State~~ – DE
- If 50% State Cost Share, If \$40M - \$50M Total Annual Need Then...Fund Revenues ≈ \$20M - \$25M/Yr
- If 67% State Cost Share, If \$40M - \$50M Total Annual Need Then...Fund Revenues ≈ \$27M - \$34M/Yr

BIMP (2016 UPDATE) – Funding

- Hypothetical Revenue Sources for a State Beach Preservation Fund (projected add'l tax revenue generated in the 8 coastal counties alone)
 - New State Tax Increases:
 - \$25M – Seasonal 0.5% State Sales Tax
 - \$15.1M – 1% State Meals Tax
 - \$10M – Additional Land Transfer Fee (\$1/\$500)
 - \$26.4M - \$0.001 Ad Valorem Tax per \$100 of Non-Resident Properties
 - A New 2% State Occupancy Tax Increase:
 - \$21.2M – State OT
 - Reallocating Existing Revenue:
 - \$24.2M – Half Of The Existing State Sales Tax Revenues On Short-term Lodging

BIMP (2016 UPDATE) – Funding

- Increasing State Sales and Use Tax (FY 14-15\$ in Thousands)

Table V-6. Hypothetical State Revenues Generated in the Eight Coastal Counties if a New Seasonal Sales and Use Tax ("State Sales Tax") is Implemented (Dollars in Thousands).

Coastal Counties	May-September, 2015*		Estimated 2015 Additional Seasonal Tax Revenues IF a State Sales Tax Rate Increase of:		
	Reported Taxable Sales*	Reported Gross Tax Collections*	0.75%	0.50%	0.25%
Brunswick	\$698,520	\$33,219	\$5,239	\$3,493	\$1,746
Carteret	\$526,304	\$24,964	\$3,947	\$2,632	\$1,316
Currituck	\$311,286	\$14,816	\$2,335	\$1,556	\$778
Dare	\$892,484	\$42,463	\$6,694	\$4,462	\$2,231
Hyde	\$40,003	\$1,912	\$300	\$200	\$100
New Hanover	\$1,749,219	\$83,257	\$13,119	\$8,746	\$4,373
Onslow	\$805,410	\$38,356	\$6,041	\$4,027	\$2,014
Pender	\$191,759	\$9,155	\$1,438	\$46	\$479
Totals:	\$5,214,985	\$248,143	\$39,112	\$25,162	\$13,037

* Estimated sum of monthly taxable sales and gross NC sales tax collections for May, June, July, August and September 2015 based on June-October monthly sale tax data reported by NCDOR (2016).

BIMP (2016 UPDATE) – Funding

- New State (Food and Beverage) "Meals" Tax (FY 14-15\$ in Thousands)

Table V-8. Hypothetical State Revenues Generated in the Eight Coastal Counties if a State Food and Beverage ("Meal Tax") Tax is Implemented (Dollars in Thousands).

Coastal Counties	FY 2015-16 Taxable Sales*	Projected Additional FY Tax Revenues IF a New State Meal Tax of:		
		1.00%	0.50%	0.25%
Brunswick	\$193,130	\$1,931	\$966	\$483
Carteret	\$139,775	\$1,398	\$699	\$349
Currituck	\$40,482	\$405	\$202	\$101
Dare	\$196,894	\$1,969	\$984	\$492
Hyde	\$13,110	\$131	\$66	\$33
New Hanover	\$569,941	\$5,699	\$2,850	\$1,425
Onslow	\$57,698	\$577	\$288	\$144
Pender	\$303,591	\$3,036	\$1,518	\$759
Totals:	\$1,514,622	\$15,146	\$7,573	\$3,787

* Except for Dare County, sales were based on sales and use tax returns by NC restaurants, cafeterias, grills, etc. (Business Group 306) (NCDOR, 2016). The projected Dare County meal tax revenues are based upon increasing its existing meal tax (EROB, 2016b).

BIMP (2016 UPDATE) – Funding

- New Land Transfer Tax (FY 14-15\$ in Thousands)

Table V-10. Hypothetical State Revenues Generated in the Eight Coastal Counties if an Additional Land Transfer Tax is Implemented (Dollars in Thousands).

Coastal Counties	Estimated Taxable Values*	Projected Additional Tax Revenues IF Fee of:			Tax Revenue IF One Dollar Per Transfer Value of:		
		1.00%	0.50%	0.25%	\$1/\$250	\$1/\$500*	\$1/\$750
Brunswick	\$1,112,349	\$11,123	\$5,562	\$2,781	\$4,449	\$2,225	\$1,483
Carteret	\$503,605	\$5,036	\$2,518	\$1,259	\$2,014	\$1,007	\$671
Currituck	\$320,226	\$3,202	\$1,601	\$801	\$1,281	\$640	\$427
Dare	\$541,202	\$5,412	\$2,706	\$1,353	\$2,165	\$1,082	\$722
Hyde	\$20,117	\$201	\$101	\$50	\$80	\$40	\$27
New Hanover	\$1,561,472	\$15,615	\$7,807	\$3,904	\$6,246	\$3,123	\$2,082
Onslow	\$654,082	\$6,541	\$3,270	\$1,635	\$2,616	\$1,308	\$872
Pender	\$325,896	\$3,259	\$1,629	\$815	\$1,304	\$652	\$435
Totals:	\$5,038,946	\$50,389	\$25,195	\$12,597	\$20,156	\$10,078	\$6,719

*Estimated using reported net proceeds of collected excise taxes (i.e. one dollar on each \$500 in real property conveyed, etc.) for a given county during FY 2013-14 (NCDOR, 2016).

+The NC current excise (stamp) tax rate is \$1 on each \$500 on or fractional part of real property conveyed to another person, this is equivalent to a 0.20% tax rate levied on the conveyed values.

BIMP (2016 UPDATE) – Funding

- New State Occupancy Tax (OT) on Short-term Rentals (FY 14-15 \$ in Thousands)

Table V-12. Hypothetical State Revenues Generated in the Eight Coastal Counties if a New State Occupancy Tax (OT) is Levied on Short-Term Lodging Sales (2014-15 Fiscal Year Dollars in Thousands).

Coastal Counties	Taxable Lodging Sales*	Projected Additional FY Tax Revenues IF a New State OT of:		
		1.00%	1.50%	2.00%
Brunswick	\$135,480	\$1,355	\$2,032	\$2,710
Carteret	\$102,170	\$1,022	\$1,533	\$2,043
Currituck	\$155,356	\$1,554	\$2,330	\$3,107
Dare	\$405,802	\$4,058	\$6,087	\$8,116
Hyde	\$7,115	\$71	\$107	\$142
New Hanover	\$185,020	\$1,850	\$2,775	\$3,700
Onslow	\$46,975	\$470	\$705	\$939
Pender	\$21,885	\$219	\$328	\$438
Totals:	\$1,059,802	\$10,598	\$15,897	\$21,196

*FY 2015-16 taxable sales reported on sales tax returns by NC hotels, motels, house rentals, etc. (Business Group 708) (NCDOR, 2016).

BIMP (2016 UPDATE) – Funding

- New Real Property Tax (Ad-Valorem) on Non-Residents (FY 14-15 \$ in Thousands)

Table V-14. Hypothetical State Revenues Generated in the Eight Coastal Counties if a New Real Property (ad-valorem) Tax is Levied on Real Property Owned by Non-Residents (Dollars in Thousands).

Coastal Counties	Assessed Valuation of Real Property in Coastal Counties:		Projected FY Revenues IF a New Property Tax Levy (Per \$100 of Valuation):		
	All Coastal County Property*	Non-Resident Owned Coastal Property	0.0005	0.00075	0.001
Brunswick	\$21,725,662	\$4,238,731	\$2,119	\$3,179	\$4,239
Carteret	\$16,785,208	\$3,866,808	\$1,933	\$2,900	\$3,867
Currituck	\$6,817,317	\$3,722,798	\$1,861	\$2,792	\$3,723
Dare	\$14,005,354	\$7,538,670	\$3,769	\$5,654	\$7,539
Hyde	\$1,685,258	\$837,578	\$419	\$628	\$838
New Hanover	\$29,781,013	\$3,361,123	\$1,681	\$2,521	\$3,361
Onslow	\$12,863,257	\$2,123,949	\$1,062	\$1,593	\$2,124
Pender	\$6,651,035	\$699,997	\$350	\$525	\$700
Totals:	\$110,314,104	\$26,389,648	\$13,195	\$19,792	\$26,390

*Source: Section II. The column values also includes property owners with residency status that can not be determined; only 0.1% (\$161.1M) of the column's grand total.

BIMP (2016 UPDATE) – Funding

- Reallocation of Existing State Sales and Use Tax on Short-term Rentals (FY 14-15\$ in Thousands)

Table V-15. Hypothetical Scenario for State Revenues Derived from Short-Term Lodging Sales in NC Coastal Counties by Reallocating 50% or 100% of Existing North Carolina Sales and Use Tax Collections (Dollars in Thousands).

Coastal Counties	Taxable Lodging Sales*	Gross Tax Collections	Projected FY Tax Revenues IF a Reallocated Percentage of:	
			100.0% of 4.75%	50.0% of 4.75% (or 2.375%)
Brunswick	\$135,480	\$6,453	\$6,453	\$3,226
Carteret	\$102,170	\$4,862	\$4,862	\$2,431
Currituck	\$155,356	\$7,383	\$7,383	\$3,692
Dare	\$405,802	\$340	\$340	\$170
Hyde	\$7,115	\$19,318	\$19,318	\$9,659
New Hanover	\$185,020	\$8,810	\$8,810	\$4,405
Onslow	\$46,975	\$2,243	\$2,243	\$1,122
Pender	\$21,885	\$1,043	\$1,043	\$522
Totals:	\$1,059,802	\$50,452	\$50,453	\$25,227

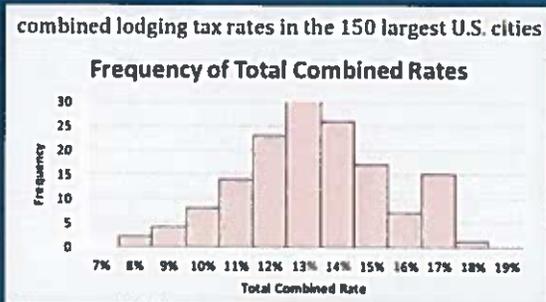
*FY 2015-16 taxable sales reported for sales tax returns by NC hotels, motels, house rentals, etc. (Business Group 708) (NCDOR, 2016).

BIMP (2016 UPDATE) – Funding

- Lodging Taxes Comparisons – Brunswick County (Typical)

State Sales Tax	4.75%
County Sales Tax	2%
County Occupancy Tax	1%
Municipal OT	5%
TOTAL TAXES:	12.75%

Example Large Urban Area Lodging Taxes*	
Kansas City, MO	18.35%
Birmingham, AL	17.50%
San Antonio, TX	17%
Atlanta, GA	16%
Virginia Beach, VA	15.50%
Charlotte, NC	15.25%
Long Beach, CA	15.00%
New York, NY	14.75%
Washington, DC	14.50%
Jersey City, NJ	14%
Las Vegas, NV	14%
Honolulu, HI	13.75%
Charleston, SC	13.50%
Durham, NC	13.50%
Miami, FL	13%
Raleigh, NC	12.75%
Orlando, FL	12.50%
Anchorage, AK	12%
Oceanside, CA	11.50%
Ft. Lauderdale, FL	11%
Knoxville, TN	10%



*Source: 2016, HVS Lodging Tax Report

BIMP (2016 UPDATE) - FEMA Engineered Beach

- Many Local Projects Have Incorporated a FEMA Engineered Beach

- Offers Benefit of Beach Volume Loss Replacement During a Presidentially Declared Disaster Event If:
 - Beach Was Constructed by Placement of Imported Sand (of Proper Grain Size) to a Designed Elevation, Width, and Slope
 - Maintenance Program Involving Periodic Nourishment with Imported Sand Has Been Established and Adhered to by the Applicant
 - Maintenance Program Preserves the Original Design

BIMP (2016 UPDATE) - FEMA Engineered Beach

- Many Local Projects Have Incorporated a FEMA Engineered Beach
 - To Document Eligibility of the Beach as a Designed and Maintained Facility, the Applicant Should Provide the Following to FEMA
 - All Design Studies, Plans, Construction Documents & As-Builts for Original Project and All Subsequent Renourishments
 - Documentation and Details of the Maintenance Plan, Including How the Need for Nourishment is Determined and Funded
 - Pre- and Post-Storm Profiles that Extend at least to the Seaward Edge of the Sub-aqueous Nearshore Zone (Closure Depth, Usually -15 to -20 ft)

BIMP (2016 UPDATE) – Funding Recommendations

- Hypothetical Revenue Sources for a State Beach Preservation Fund (projected add'l tax revenue generated in the 8 coastal counties alone)
 - Single New Source
 - New 0.5% seasonal State sales tax, which will generate \$25M
 - Combined New Source
 - New 1% State Meals Tax, Which Will Generate \$15.1M, And
 - An Additional Land Transfer Fee Of \$1/\$500, Which Will Generate \$10M
 - Reallocating Existing Revenue
 - \$25.2M – Half Of The Existing State Sales Tax Revenues On Short-term Lodging

BIMP (2016 UPDATE) – Return on Investment

- Is It Worth The Investment? – Shallow Draft Dredging
 - Current Shallow Draft Fund (\$19 Million/Yr) Is Adequate To Meet Both Current And Future Projected Needs And Should Be Kept As Is
 - Based On Results From Section II, The Shallow Draft Inlets In NC Provide \$651.8 Million In Direct Impact, \$908.8 Million In Indirect Impact, And 13,220 Jobs.
 - Approximates a ROI Of \$34.3/\$1 To \$47.8/\$1 Depending On Whether Economic Multiplier Effects Are Considered



BIMP (2016 UPDATE) – Return on Investment

- Is It Worth The Investment? – Deep Draft Dredging
 - Deep Draft Port Fund Should Be A Recurring Appropriation Of \$17.5 M/yr by the Legislature as Part of Its Investment in Ports. As a Condition Of Fund Use, All Beach Compatible Material Must Be Placed Directly On Adjacent Beaches.
 - Ports Bring An Estimated Economic Impact Of \$222.1 M (Direct) And \$416.8 Million (Indirect) With 2,973 Jobs.
 - ROI Of \$12.7/\$1 To \$23.8/\$1 Depending On Whether Economic Multiplier Effects Are Considered



BIMP (2016 UPDATE) – Return on Investment

- Is It Worth The Investment? – Beaches
 - Development Of A State Dedicated Beach Nourishment Fund Is Justified. Considering The Economic Impact To The Counties Outside Of The Eight Coastal Counties Alone, The Investment Of \$25 Million Provides \$1.406 Billion In Economic Impact (ROI = \$56/\$1) And Just Over 10,000 Jobs.
 - If The Eight Coastal Counties Are Included, The Economic Effect Goes To \$1.66 Billion Direct Impact (ROI = \$66.5/\$1) And \$4.74 Billion Indirect (ROI = \$189.9/\$1) With 48,718 Jobs

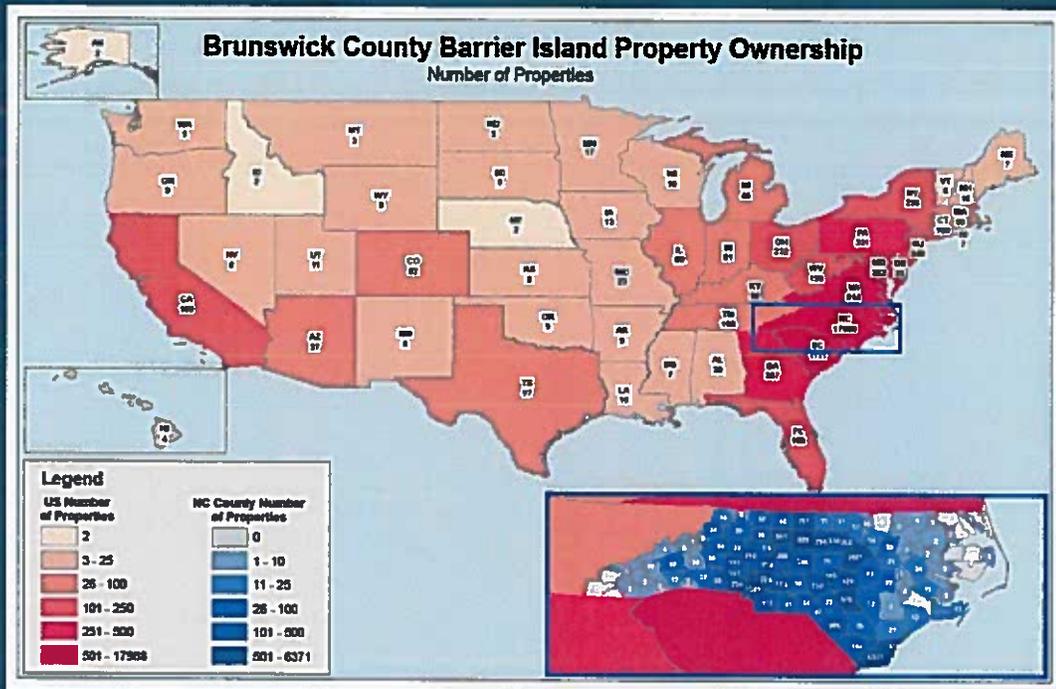


BIMP (2016 UPDATE) – Return on Investment

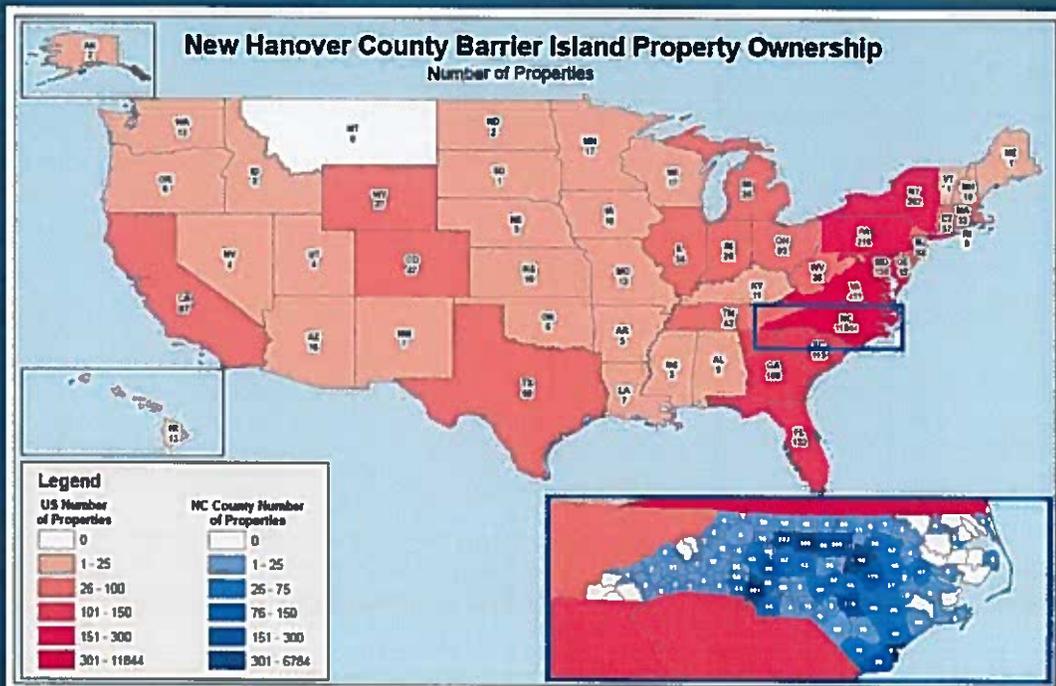
- Is It Worth The Investment? – Infrastructure
 - Lastly, Since These Projects Should Be Viewed As Infrastructure Projects, NCDOT Spending By County Was Investigated From 2013 – 2015
 - Roughly \$1.17 Billion Had Been Spent In Wake, Mecklenburg, Guilford, And Forsyth Counties During That Time While \$778 Million Had Been Spent In The Eight Coastal Counties
 - Given That Overall NCDOT Investments Are Approximately \$1 Million/Mile Of Improvement, An Amount That Equates To 25 Miles Of Roadway Improvements Seems Reasonable



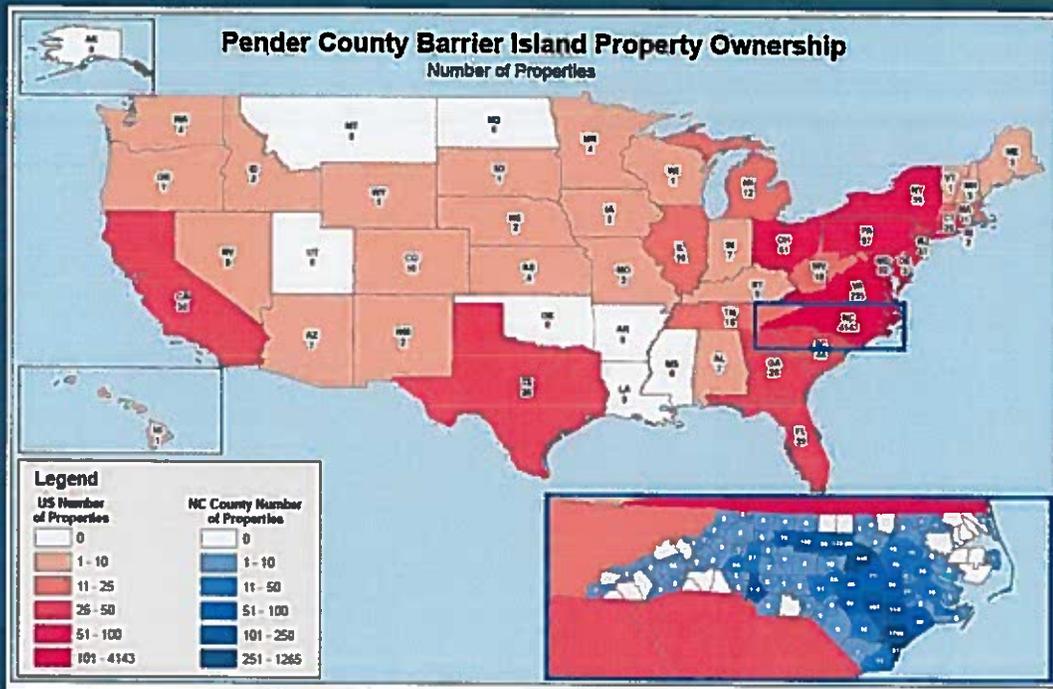
BIMP (2016 UPDATE) – Reach of the Beach



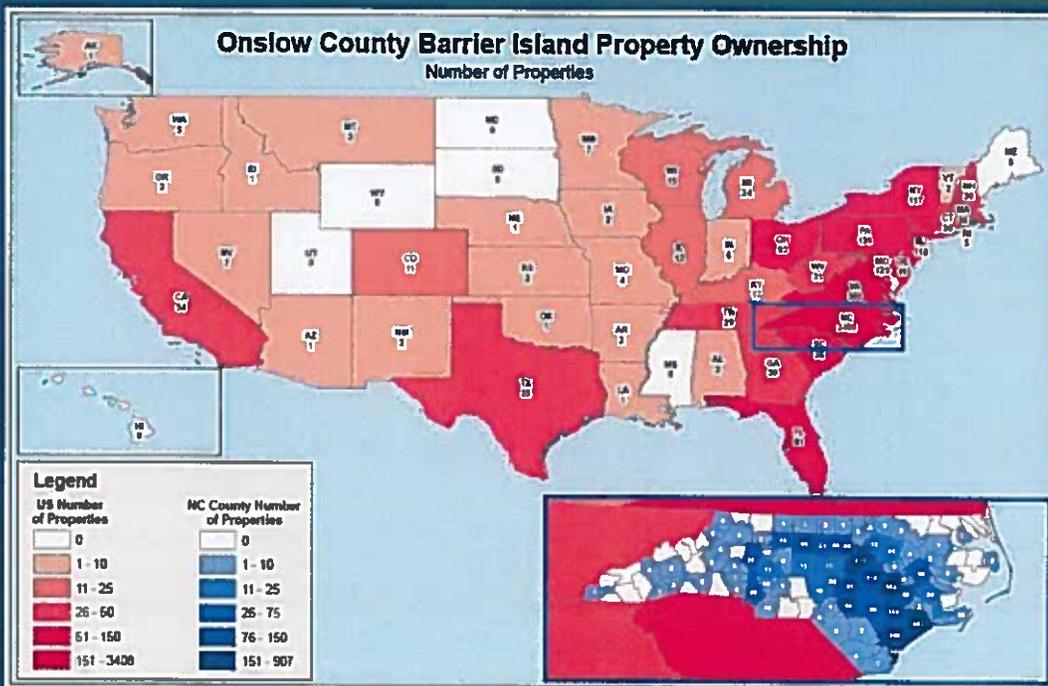
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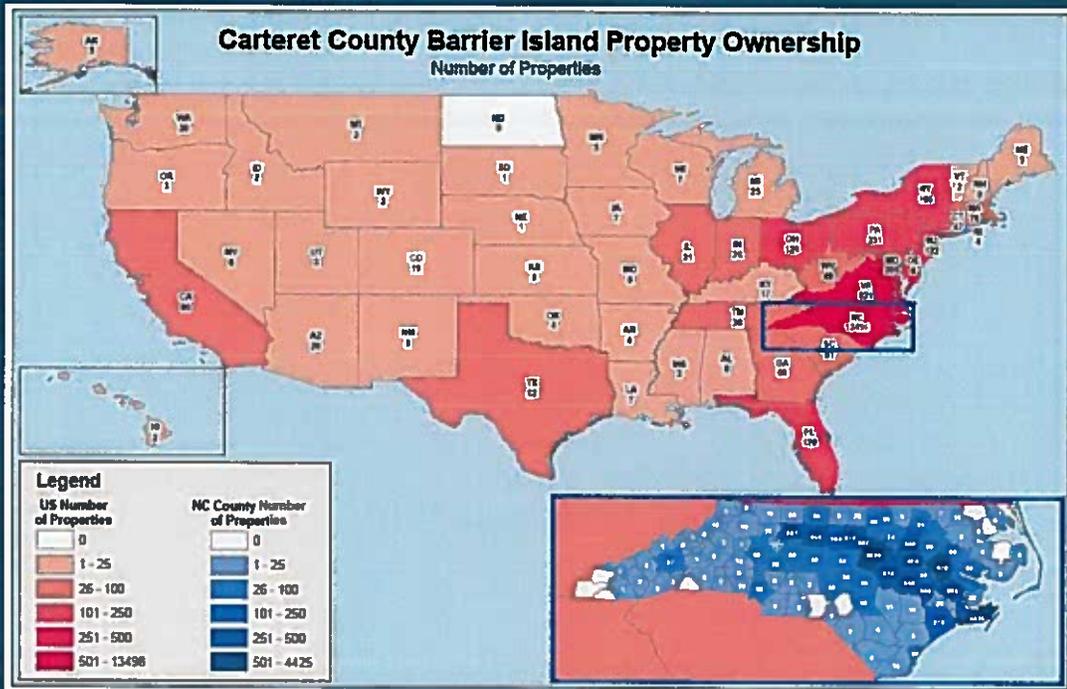
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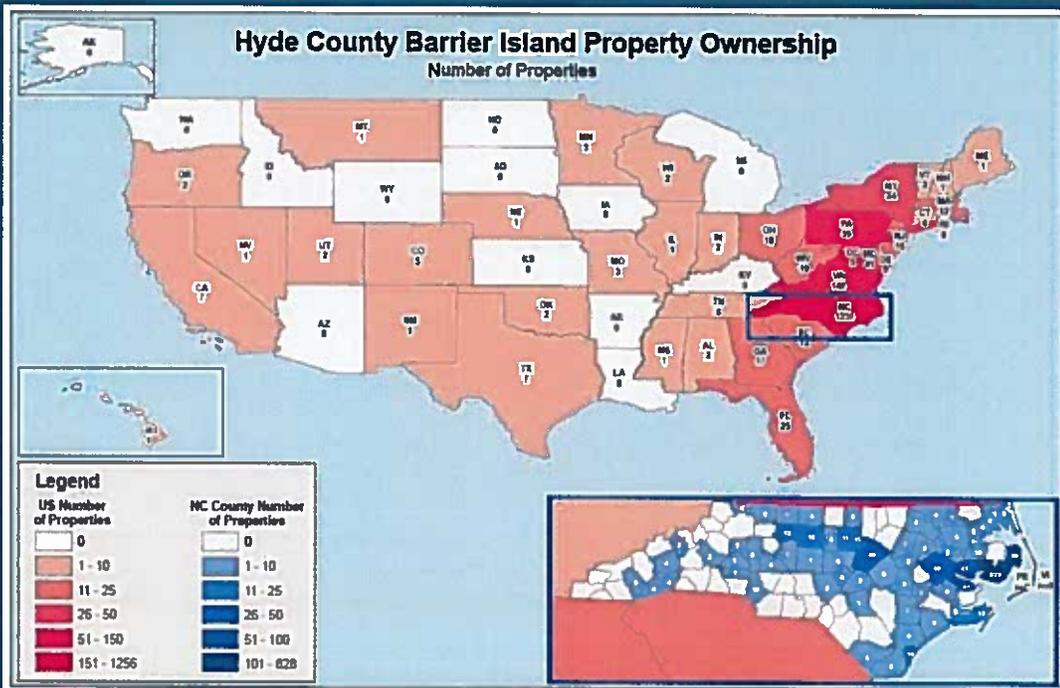
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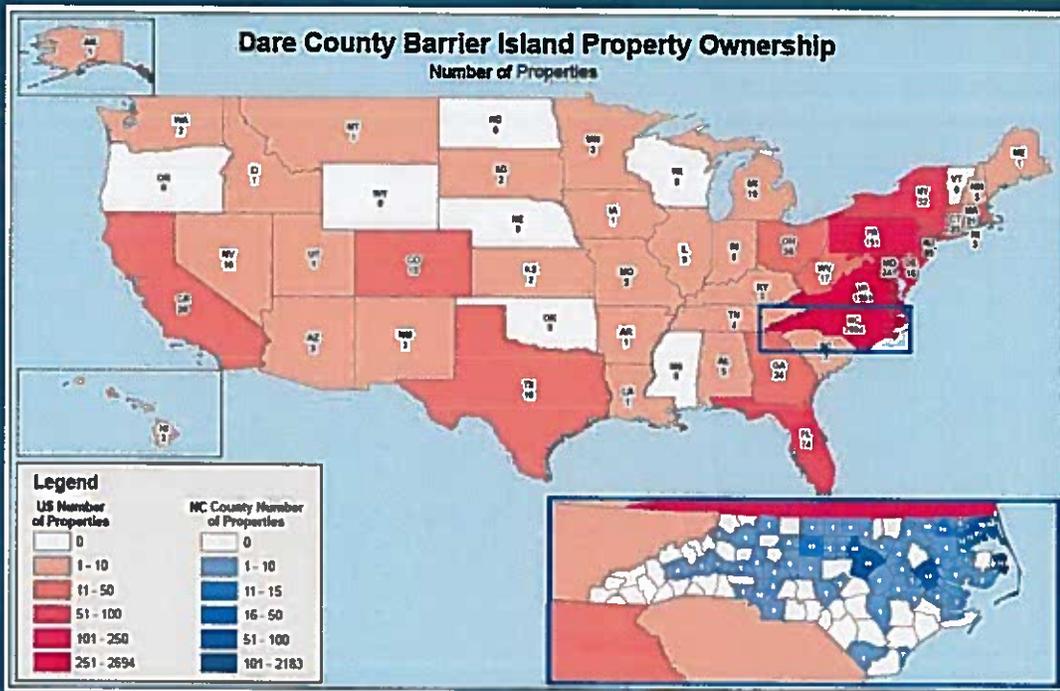
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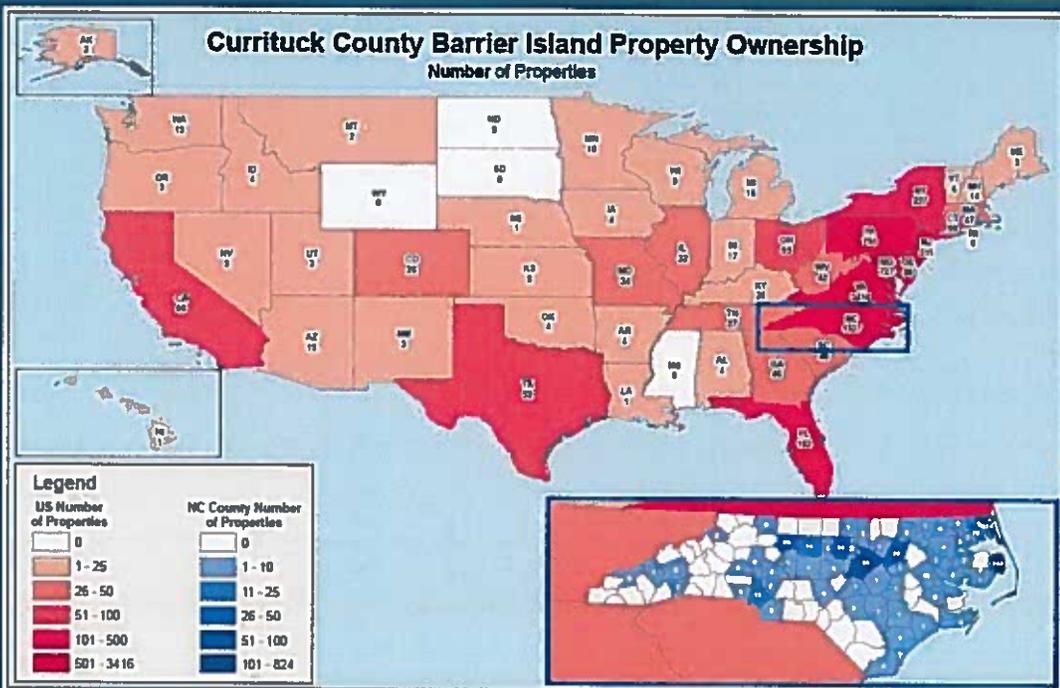
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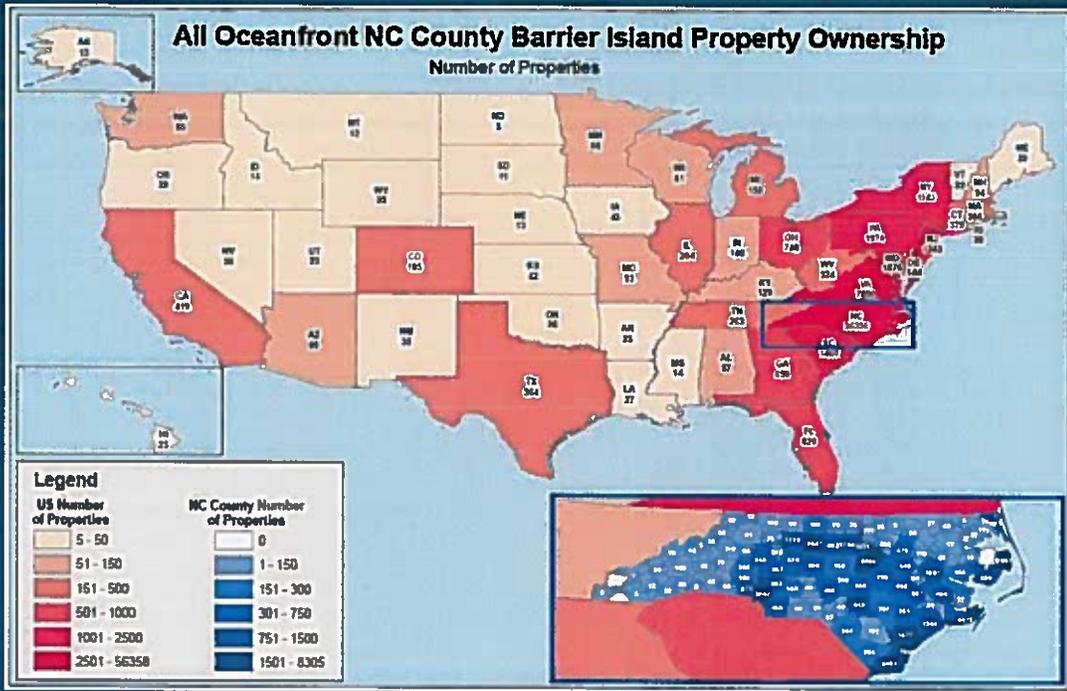
BIMP (2016 UPDATE) – Reach of the Beach



BIMP (2016 UPDATE) – Reach of the Beach



BIMP (2016 UPDATE) – Reach of the Beach



BIMP (2016 UPDATE) – Reach of the Beach



Beach Nourishment Fund

A portion of the 6% Occupancy Tax collected by Dare County is set aside for the Beach Nourishment Fund. The occupancy tax is applied to gross receipts derived from rental of room, lodging, campsite, or similar accommodation furnished by any hotel, motel, inn, tourist camp including private residence and cottages rented to visitors. The Beach Nourishment Fund must be used for the placement of sand, from other sand sources, the planting of vegetation, and the building of structures that are in conformity with NC CAMA, such as sand fences and dunes, on beaches of the Atlantic Ocean of North Carolina for the purpose of widening the beach to benefit public recreational use and mitigating damage and erosion from storms to inland property.

Occupancy Tax Distribution Rate

- 3% Room Occupancy Tax (68% of net proceeds to Duck, Kill Devil Hills, Kitty Hawk, Manteo, Nags Head and Southern Shores in proportion to the amount of ad valorem taxes levied by each town for the preceding fiscal year and 32% to Dare County)
- 1% Room Occupancy and Tourism Development Tax (net proceeds to the Dare County Tourism Board)
- 2% Room Occupancy and Tourism Development Tax for Beach Nourishment



Town of Southern Shores

5375 N. Virginia Dare Trail, Southern Shores, NC 27949
Phone 252-261-2394 / Fax 252-255-0876
info@southernshores-nc.gov
www.southernshores-nc.gov

PLANNING BOARD GENERAL APPLICATION FORM TOWN OF SOUTHERN SHORES, NC 27949

Date: 11/16/16 Filing Fee: \$10 Receipt No. 893716 Application No. _____

NOTE: The Planning Board will follow the specific provisions of the Zoning Ordinance Chapter 36. Article X Administration and Enforcement, Section 36-299.

Please check the applicable Chapter/Article:

- Chapter 30. Subdivisions-Town Code
- Chapter 32. Utilities-Town Code
- Chapter 36. Article VII. Schedule of District Regulations. Section 36-207 C-General Commercial District
- Chapter 36. Article IX. Planned Unit Development (PUD)
- Chapter 36. Article X. Administration and Enforcement, Section 36-299 (b) Application for Building Permits and Site Plan Review other than one and two family dwelling units *
- Chapter 36. Article X. Section 36-300-Application for Permit for Conditional Use
- Chapter 36. Article X. Section 36-303 Fees
- Chapter 36. Article X. Section 36-304-Vested Rights
- Chapter 36. Article XIV. Changes and Amendments

Certification and Standing: As applicant of standing for project to be reviewed I certify that the information on this application is complete and accurate.

Applicant

Name HWTP LLC c/o Bob Howsare

(Applicant must be property owner by Town policy)

Address: P.O. Box 90, Kill Devil Hills, NC 27948

Phone 252-395-2696 Email Bhowsare@lcrsaga.com

Applicant's Representative (if any)

Name Michael W. Robinson, P.E.

Agent, Contractor, Other (Circle one)

Address P.O. Box 2852

Kill Devil Hills, NC 27948

Phone 252-255-8026 Email mrobinson@obxengineering.com

Property Involved: Southern Shores ___ Martin's Point (Commercial only)

Address: Ginguite Woods Wastewater Treatment Plant Zoning district _____

Section _____ Block _____ Lot _____ Lot size (sq.ft.) _____

Request: Site Plan Review Final Site Plan Review Conditional Use Permitted Use
 PUD (Planned Unit Development) Subdivision Ordinance Vested Right Variance
 Wastewater System Review

Change To: Zoning Map Zoning Ordinance


Signature MICHAEL W. ROBINSON

11-16-16
Date

* Attach supporting documentation and twelve copies of the site plan.

STAFF REPORT

To: Southern Shores Town Council
Date: December 21, 2016
Prepared By: Wes Haskett, Town Planner/Code Enforcement Officer

GENERAL INFORMATION

Applicant: Michael W. Robinson, P.E., P.L.S.
P.O. Box 2852
Kill Devil Hills, NC 27948

Requested Action: Ginguite Woods Wastewater Treatment Plant Replacement
Location: Multiple parcels adjacent to Southern Shores Landing and U.S. Highway 158
Zoning: RS-10, Residential District and C, General Commercial District

Existing Land Use: Residential

Surrounding Land Use & Zoning:

North- Residential; R-1, Low Density Residential District and RS-10, Residential District
South- U.S. Highway 158
East- Commercial; C, General Commercial District
West- Commercial; C, General Commercial District

Physical Characteristics: Developed (existing wastewater treatment plant)
Applicable Regulations: Town Code: Chapter 32, Utilities

ANALYSIS

The applicant seeks approval to replace the existing private wastewater system (wastewater treatment plant) that is adjacent to and currently serves the Southern Shores Landing Planned Unit Development. Chapter 32 of the Town Code states that the Planning Board shall be responsible for screening all projects requiring wastewater management systems and the determination of compliance with the doctrines of Chapter 32, prior to recommending the project to the Town Council for final approval. In this case, the system is existing and was previously approved by the Town in 2002. Town Staff deferred to David A. Deel, Deel Engineering, PLLC, to review and comment on the proposed plans and design summary for compliance with Chapter 32 and his comments are enclosed.

RECOMMENDATION

The Land Use Plan identifies this area as Recreational in the RS-10, Residential and C, General Commercial zoning districts. All of Town Staff's concerns that are applicable to this request have been identified or are addressed in the recommended conditions. Should the Town Council approve the request, Town Staff and the Town Planning Board offer the following conditions for consideration:

1. A copy of the State NCDEQ permit shall be provided to the Town prior to any construction activities.
2. A copy of the deed(s) placing all properties underlying the system into single ownership shall be provided to the Town prior to any construction activities.
3. the applicant must strictly abide by all applicable requirements of the Town Code and with all other applicable State requirements

November 16, 2016

Mr. Wes Haskett
Town Planner
Town of Southern Shores
5375 N. Virginia Dare Trail
Southern Shores, North Carolina 27949

Re: Review of Wastewater Treatment Plant Submission
Ginguite Woods Wastewater Treatment Plant

Dear Mr. Haskett;

On behalf of the Town of Southern Shores I have reviewed the Wastewater Treatment Plant Plans & "Design Basis Summary" submitted by Apptech Design-Build, LLC for the Ginguite Woods WWTP and offer the following observations:

General: The proposed Wastewater Treatment Plant is intended to replace the existing 36,000 GPD Extended Air System with a 12,000 GPD Membrane Bioreactor system. Non-treatment components of the original plant will be retained, with the new components replacing the "heart" of the treatment train. Although the new system is smaller than the original, it is adequate to serve the existing Design Flow and the proposed system is expandable. Generally, Membrane Bioreactor systems (new proposed system) are recognized as having superior treatment to Extended Air Systems (system being replaced).

In order to understand the history and reasons for replacement of the system, I contacted Mike Robinson, P.E. (local Engineer permitting the system) directly. Per Mr. Robinson, the existing Plant is showing its age and replacement is appropriate at this time (this is normal for a WWTP – significant components have a specific lifespan and need to be periodically replaced).

Plan Review: The plans show a Membrane Bioreactor system, with most of the proposed system to be placed in tanks below-grade and with above-grade components not exceeding the height of the existing components that they are to replace. The replacement system is proposed to be placed just to the north of the existing system (further to the interior of the property) and it appears that existing screening is to remain. Based on these items, I believe that the system will comply with Sec 32-9(a) Screening.

Compliance with Chapter 32 of the Town Code: Generally, the proposed system appears to comply with the requirements of Chapter 32 with two items that will require follow-up in order to demonstrate compliance:

32-5(a) System shall meet State Requirements: In order to obtain a state permit, the WWTP must go through a rigorous review by NCDEQ. Issuance of the NCDEQ Permit will demonstrate compliance with the requirements of Section 32-5(a). **Recommend that the Town place a condition on any Town approval requiring that a copy of the State permit be provided to the Town prior to any construction activities.**

32-5(b) *System shall have one owner:*

32-7(b) *No WWTP on lands not owned or leased by the WWTP owner:* Per Mike Robinson, P.E., the existing system has been taken over by the State under a "Special Order of Consent" (SOC) due to abandonment by the original developer. Due to this process, the small parcel that the treatment plant sits on was placed in foreclosure and sold accordingly. Therefore, the complete existing system is actually located across three parcels: The Ginguite Parcel, which is owned by an LLC of SAGA, the small WWTP parcel, which is owned by Paragon Utilities, and the WW Disposal parcel, which is owned by an LLC of SAGA (exact names of the entities were not available at the writing of this review due to Dare GIS being down for maintenance). SAGA will be taking over the entire system and will place the whole project under a single entity once a permit is issued to assure that their plans & needs will be met. **Recommend that the Town place a condition on any Town approval requiring that a copy of the deed(s) placing all properties underlying the system into single ownership be provided to the Town prior to any construction activities.**

My review finds the proposal to be in general conformance with the requirements of Chapter 32, with the items noted above needing follow-up. If you have any questions, please do not hesitate to contact me at (252)202-3803.

Sincerely,

David A. Deel, P.E.

**TOWN OF SOUTHERN SHORES
RULES OF PROCEDURE FOR TOWN COUNCIL**

Section 6. Meetings.

(a) Regular meetings. The Council shall hold a regular meeting on the first Tuesday of each month, except that if a regular meeting day is a legal holiday, the meeting shall be held on the next business day. In addition to the regular meeting, the Council shall may hold a work session on the third Tuesday of the month.