

# Funding Strategy SC-NTB Federal Project

## Town of Surf City

City Council Presentation  
April 2, 2013

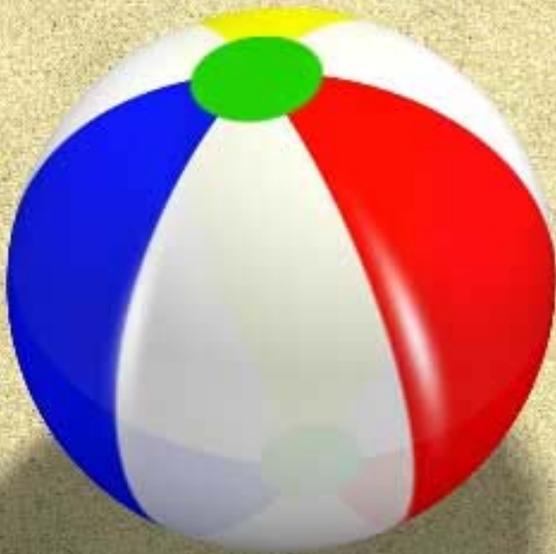
PETER A. RAVELLA, PRINCIPAL  
PAR CONSULTING, LLC

# Today's Agenda

- I. Review
  - Workshop schedule & Input
  - SC-NTB Federal Project – Plan 1550
  - Funding Contributors – You're Not Alone
- II. Walkovers, Parking & LERRD Credits
- III. Draft Funding Plan & Preliminary Recommendations
  - Open Discussion

# Review Part I

Project Schedule &  
Workshop Participation



# Beach Funding Workshop Schedule

- Nov. 3: Workshop #1, Principles & Secrets
- Dec. 8: Workshop #2, Funding Concept
- Jan. 26: Workshop# 3, First Draft Plan
- April 2: Presentation to City Council
- April 6: Workshop #4, Second Draft Plan
- May 7: Final Report to Council

Note: Each Workshop will be conducted twice on the scheduled day

# Workshop Participation to Date

Workshop	Attendance	On-line Participants
Workshop 1, Nov. 3, 2012	23	12
Workshop 2, Dec. 8, 2012	32	13
Workshop 3, Jan. 28, 2013	40	20
TOTAL 140	95	45

Email and phone contacts: 57 separate contacts to date

Total Participants: 197

Online views of workshops presentations: Unknown

# Summary of Workshop Comments

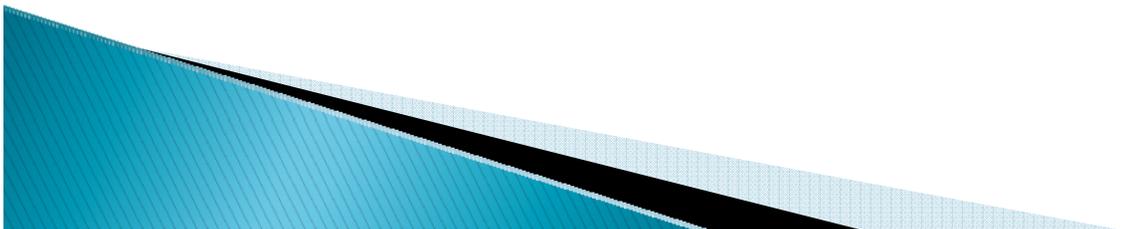
- ▶ Clear support for City's beach program and federal project
- ▶ Continue efforts to maximize federal & state contribution
- ▶ Continue current policy of dedicating Pender County accommodation tax and "give back" revenues to Beach Fund
- ▶ Consider Alternative Revenues
  - Paid Parking Program
  - Increase Traffic Enforcement
  - Institute Bridge Toll
- ▶ Concern over cost and impact of required public access improvements & upgrades

# Project Funding Principles

1. Prepare Now for Federal Project
2. Increase Local Savings Rate Beginning in 2013
3. Maximize Federal, State & County Contributions
4. Build on Local History of Sound Planning
5. Seek Stable, Broad-based Funding Mechanism as the Beach is an Asset for the Entire City

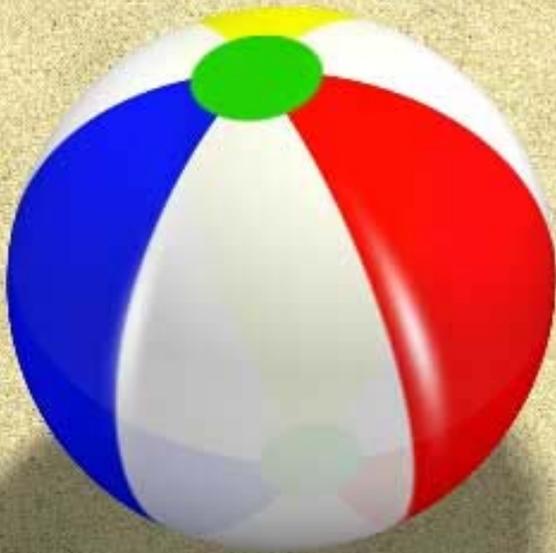
# Goal: Build Stable Funding Coalition

- ▶ **USACE** **Public**
- ▶ **State of North Carolina** **Public**
- ▶ **Pender County** **Public**
- ▶ **Surf City Property Owners** **Private**
- ▶ **Surf City Vacation Renters** **Private**
  
- ▶ **Other Sources:** New Parking Fees or Traffic Fines are not considered feasible at this time and are not included in the draft funding plan.



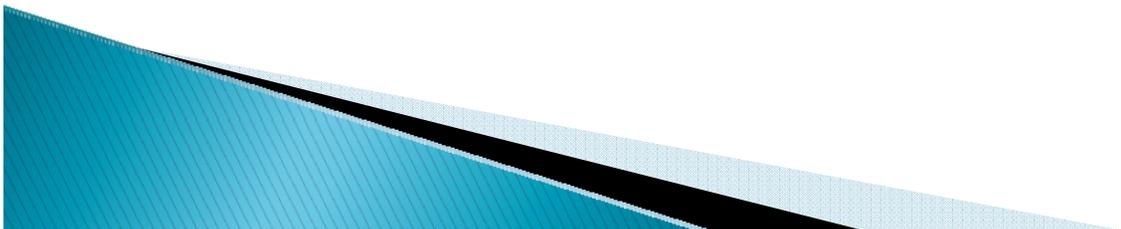
# Review Part II

SC- NTB Federal Project  
"Plan 1550"



# Plan 1550 – Your Federal Beach Project

- ▶ **Length:** 52,150 ft or 9.88 miles
- ▶ **Coverage:** Surf City plus  $\approx$  3.85 miles of NTB
- ▶ **Dune Height:** 15 ft
- ▶ **Dune Width:** 100 ft at base & 25 ft at crest
- ▶ **Dune Walkovers:** 60 included
- ▶ **Dune Vegetation:** Yes
- ▶ **Upper Beach Berm:** 50 ft wide @ +7 ft elevation
- ▶ **Lower Beach:**  $\approx$ 125 ft wide, sloping to the sea
- ▶ **Dry Beach Width:**  $\approx$  200 feet



# Plan 1550 Schematic

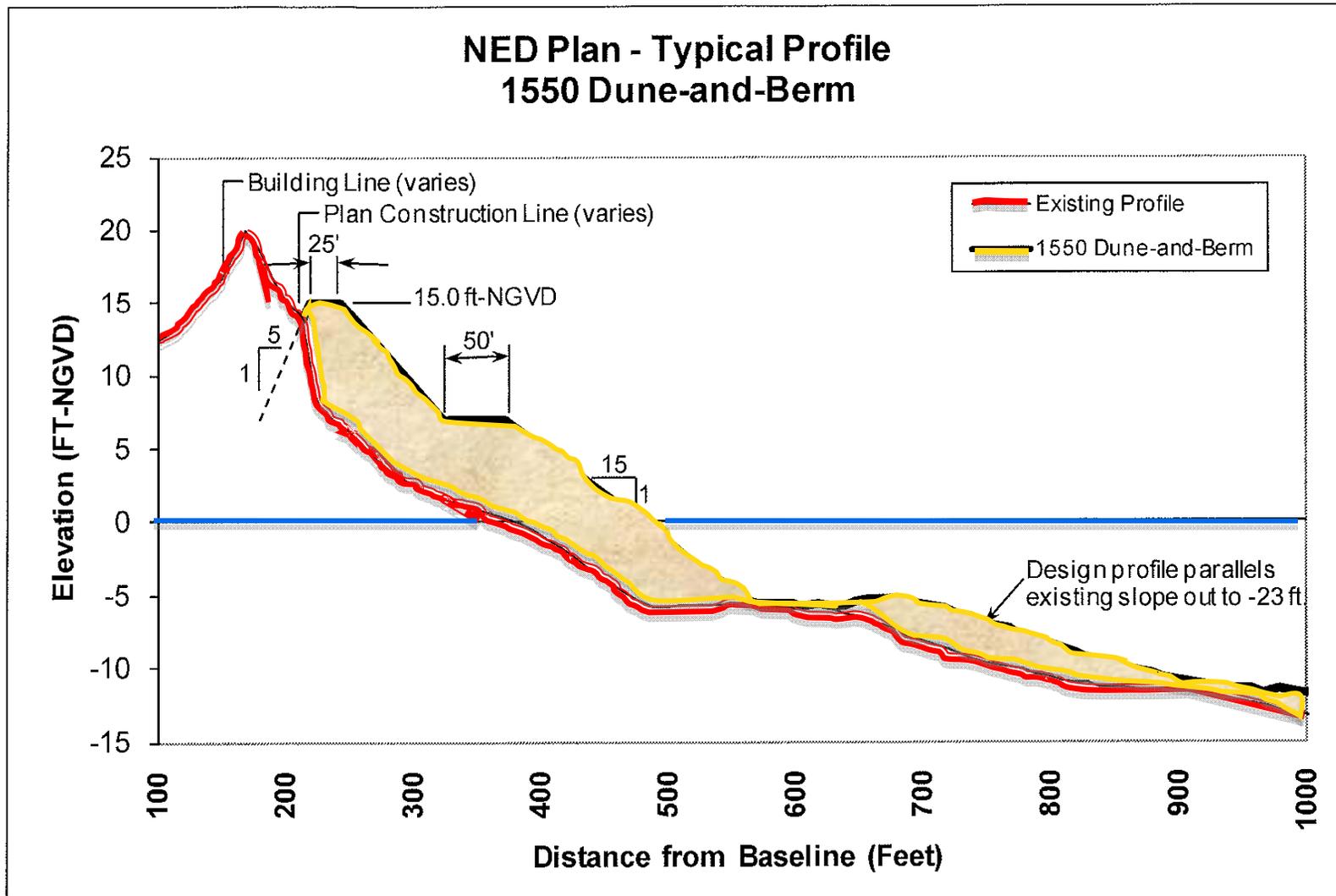
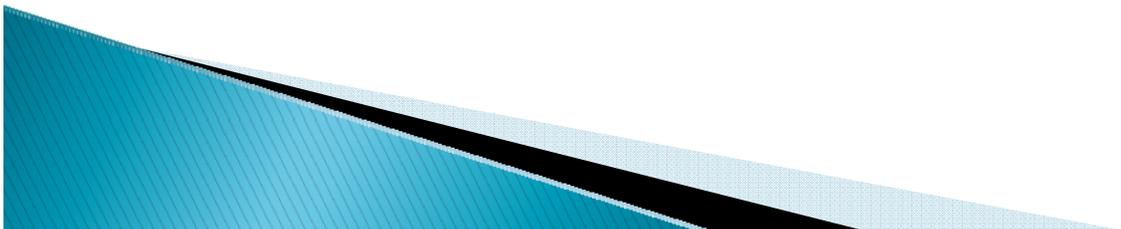


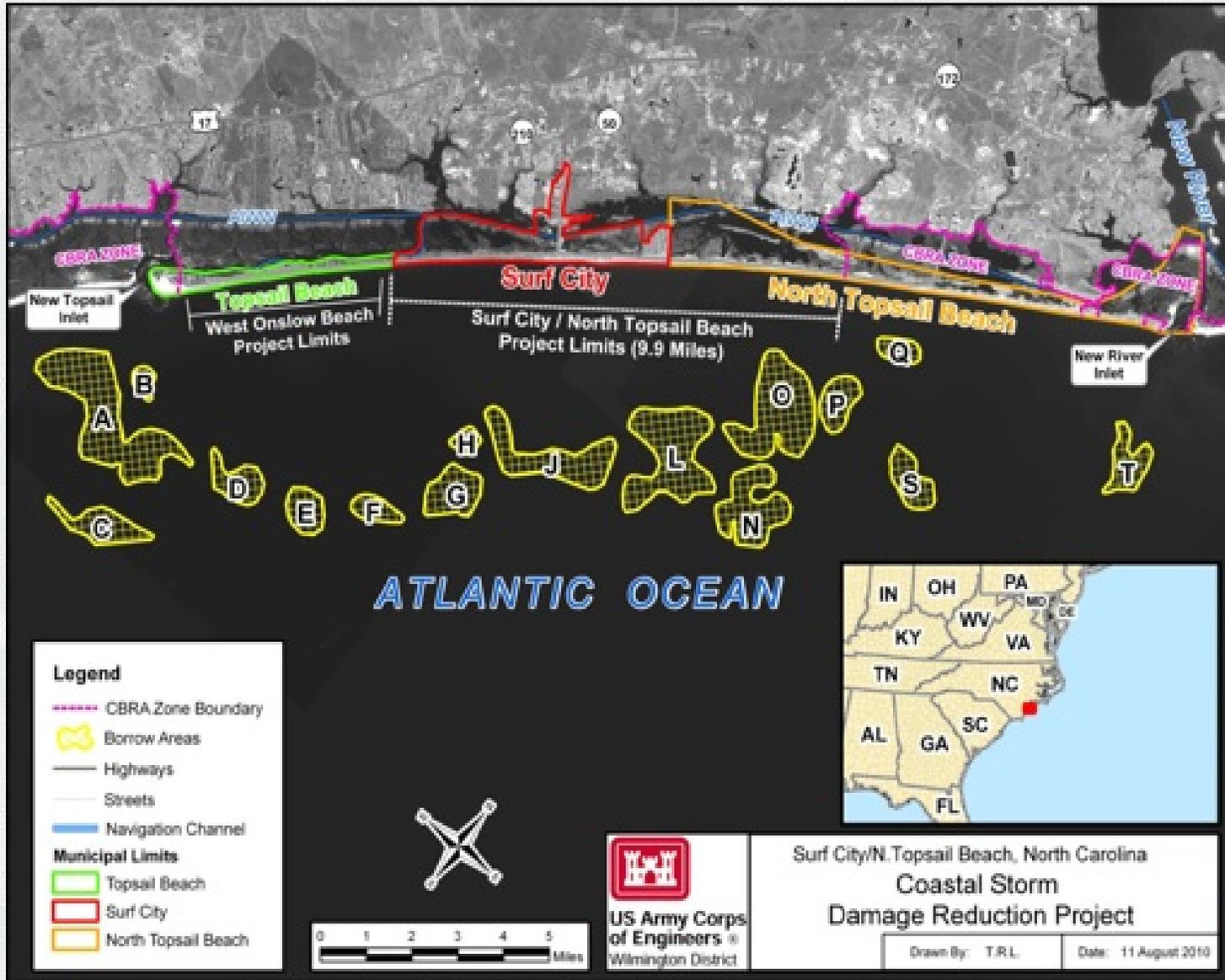
Figure 7.1. Plan 1550, NED Plan, cross section.

# Plan 1550 – Federal Beach Project Basics

- ▶ **Sand Source:** Offshore
- ▶ **Initial Sand Volume:** 11.9 million cu. yds.
- ▶ **Avg. Volume/Foot:** 228 cu. yds
- ▶ **Initial Construction Time:** 4 years
- ▶ **Renourishment Volume:** 2.9 million cu. yds.
- ▶ **Renourishment Interval:** 6 years
- ▶ **Renourishment Events:** 7
- ▶ **Project Duration:** 50 years



# Offshore Borrow Sites



# Plan 1550 Estimated Construction Costs

- ▶ **Initial Project Cost:** **\$132,648,000**  
(Oct 2010 price @ 4.375% Interest)
- ▶ **Renourishment Cost:** **\$21 to \$40 million**
- ▶ **Note 1:** Once the beach is constructed, the Corps will come back every six years to renourish the beach for 50 years.
- ▶ **Note 2:** The estimated renourishment volume is 2.9 million cubic yards, instead of 11.9 M cu. yds. for the first project.
- ▶ **Note 3:** Federal renourishment share is 50%, not 65%. SC will pay about \$3.5 to \$4.5 million per renourishment.

# USACE Published Cost Estimate

ITEMS	NED PLAN
Total Initial Construction	\$127,973,000
Interest During Construction	\$10,520,000
Total Investment Cost	\$138,493,000
Renourishment Cost (avg)	\$30,612,000
Total Annual Costs	\$11,585,000
Total Annual Benefits	\$40,779,000
BCR	3.5 to 1
Annual Net Benefits	\$29,194,000

October 2010 (Escalated) Price Levels



# Federal WRDA Update

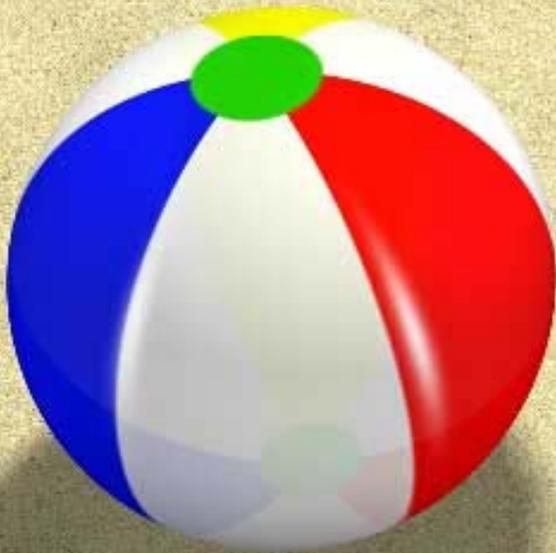
- ▶ Federal Actions Completed to Date
  - ✓ Reconnaissance Phase – Section 905(b) Report
  - ✓ Feasibility Study/EIS Phase
  - ✓ Planning, Engineering and Design
  - ✓ Final Project Plans & Specifications *on-going*
  
- ▶ Outstanding Congressional Actions
  - Construction Authorization under WRDA in 2013
  - Construction Appropriations
  
- ▶ SC–NTB Project construction authorization is included in Senate WRDA Bill and expected in House Bill

# Project Cost Uncertainties

- ▶ **Federal Cost Share Could be Reduced**
  - Undeveloped beachfront lots at issue
  - Federal share could fall from 65% to as low as 45% ???
  - Issue is under review by USACE/No determination yet
- ▶ **State Share Contribution under Review**
  - State share could fall below 50%, coastal caucus investigating new/alternative funding strategies
- ▶ **Access upgrade costs & allocation of LERRD credit unclear**
- ▶ **Timing of Project & Local Contribution**
  - When will federal project occur?
  - Can Surf City pay over the four-year construction period?

# Review Part III

LERRD, Parking &  
Access Issues



# LERRD COSTS – Easements

- ▶ Non-Federal Sponsors are required by law to furnish real estate interests required for cost shared projects. The Project Partnership Agreement (PPA) will require Surf City to provide all lands, easements, rights-of-way, relocations, and disposal/borrow areas (LERRD) required for construction, operation, and maintenance of the project.
- ▶ LERRD Costs incurred by Surf City are Credited against the local share owed
- ▶ LERRD does not include the cost of acquiring new local accessways, parking areas or construction of crossovers  
These costs must be paid by the Town

# LERRD Leases, Easements & Rights of Way for Construction

Identified LERRD Items	Estimated Cost
Construction staging area leases	\$ 105,000
Purchase of properties on beach (1)	\$ 507,000
Permanent construction easements	\$1,918,000
Federal Supervision of Easement Acquisition	\$ 255,000
Federal Relocation Costs	\$ 3,000
TOTAL	\$2,788,000

According to the USACE, the available estimated LERRD Credit for the project is \$4,814,000. Allocation of this credit between SC and NTB and how it will impact Surf city's local cost share is unclear and will be resolved through future negotiation.

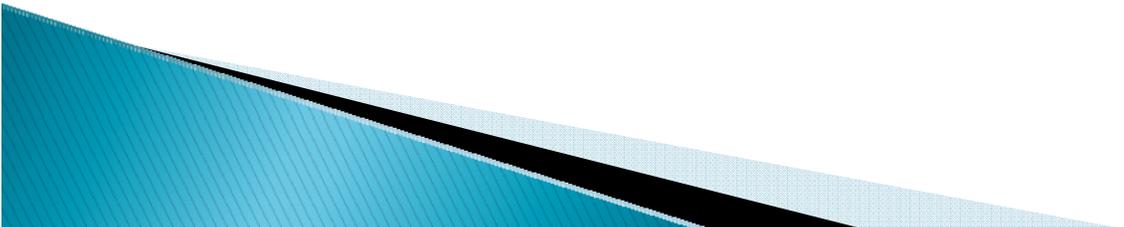
# Public Access & Crossovers

Many public beach access points and parking areas are in the limits of the study area. Surf City has 33 public beach access points in the allowable project limits, and North Topsail has 22. The access sites are shown in Figures 3.1 and 3.2.

The access points generally consist of small parking areas and wooden walkways to the beach. Only three areas of the study area do not have access points within one-quarter mile. Those areas are indicated in red on the access site figures. One such area in Surf City near Elizabeth Street in reaches 34 and 35 is 900 ft. long. Two sites are in North Topsail Beach. One site between Sloan and Lincoln streets in reaches 62 and 63 is 900 ft. long. Another site north of 2nd Street in reaches 76 and 77 is 1,000 ft. long. The total length without adequate public access is 2,800 ft.

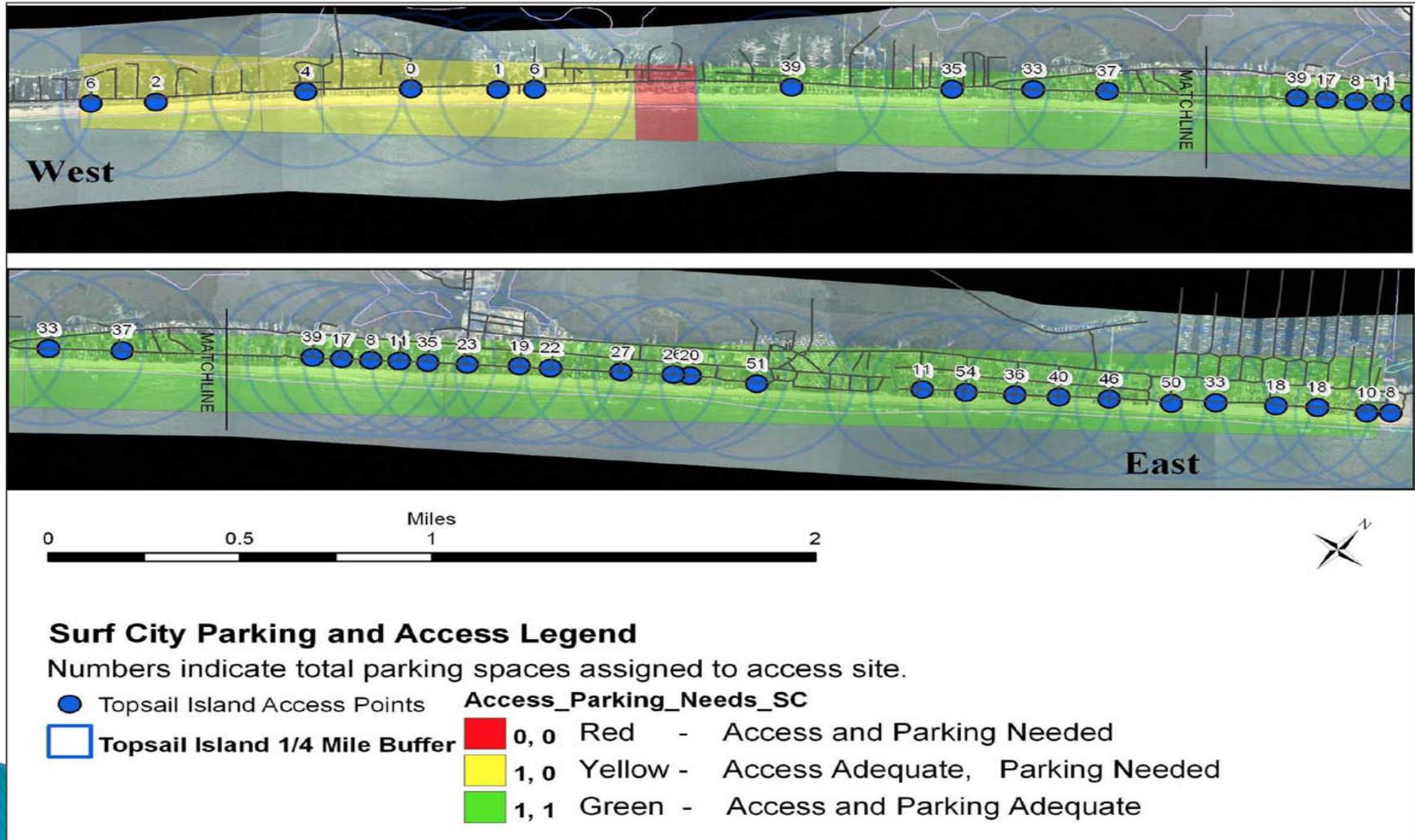
Additional access points would be necessary to meet the requirements for federal cost sharing.

FEIS/FS, Sec 3.04



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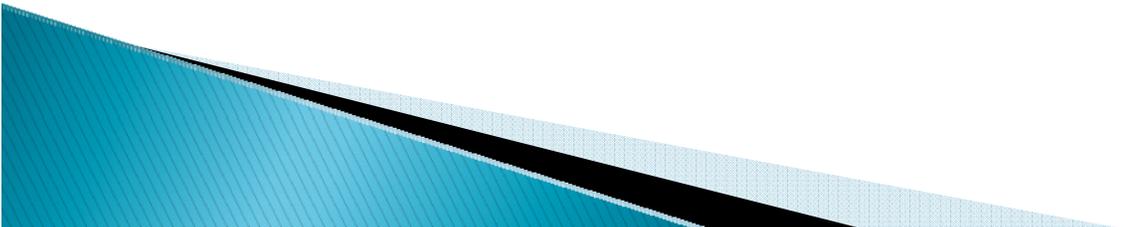
# Surf City Access & Parking Map



# Parking Needs– 37 New Spaces

In addition to direct access pathways to the beach, nearby public parking would be necessary to provide public access to the shoreline. A wide variety of public parking spaces are throughout Surf City and North Topsail Beach. They are at the access sites, on nearby street right-of-ways, and at four large parking lots. In 2003 and in 2008 parking space counts were conducted on site visits by the Wilmington District and town officials. All right-of-way areas were considered eligible for parking with the exception of areas that met designated restrictions (e.g., driveways, fire hydrants, intersection, physical barriers). For North Topsail Beach, only the reaches south of the CBRA zone were included in the count. The combined total from the 2008 count was 1,992 spaces, with 785 at Surf City and 1,207 at North Topsail. Those numbers are included in Tables 3.2 and 3.3. The distribution of parking spaces is uneven, with some areas not meeting a minimum of 10 publicly available parking spaces within one-quarter mile. Areas having access, but needing parking, are indicated in yellow in the access site figures. One area in the southern part of Surf City is 7,600 ft. long. Another area in North Topsail Beach is 600 ft. long. The total length of study area with access but without minimum parking requirements is 8,200 ft. A total of 37 additional parking spaces would needed in the southern portion of the project limits in Surf City and a minimum of 20 in North Topsail Beach would be needed to satisfy the 10-space minimum requirements.

FEIS/FS, Sec 3.04



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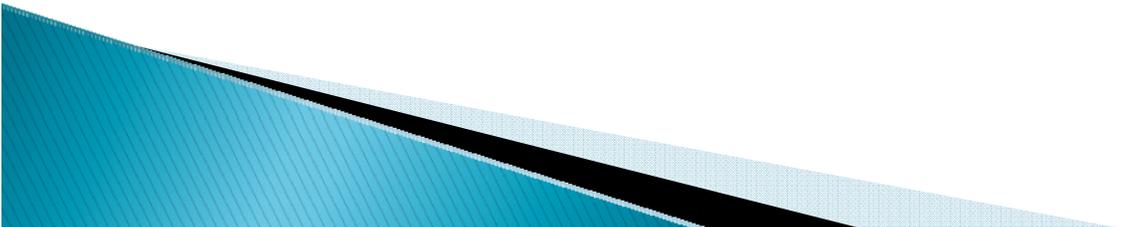
# Beach Access Parking Upgrades

- ▶ No final decision has been made on the location or manner of Surf City parking upgrades
- ▶ According to the USACE, Surf City must provide an additional 37 parking spaces in the southern project area
- ▶ The preliminary estimated cost of parking & access upgrades is [\\$1,250,000 in five areas](#)
- ▶ Final USACE determination of access upgrades is pending, final costs undetermined

# Can I Build a Walkover over the New Project Dunes? Yes

Owners are allowed to build and maintain walkover structures over the federal beach project dunes but will be required to obtain appropriate permits as required with all new walkovers.

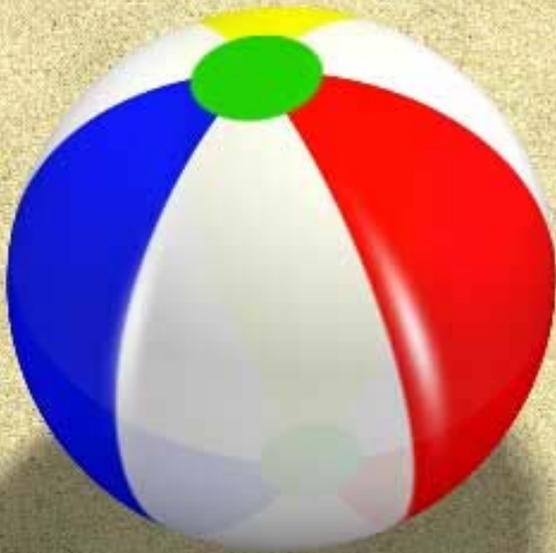
See, FEIS/FS, Appendix M, page 9



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# Review Part IV

Current SC Revenues and  
Non-Federal Funding Contributors –  
You are not alone



# Surf City's Beach Fund FY 2011-2012

Revenues	Amount
Collected Ad Valorem Revenues (5¢/\$100)	\$ 601,157
Accommodation Tax Revenues (Pender)	\$ 428,000
Pender "Give Back" & State Transfers	\$ 185,928
Total FY 11-12 Revenue	\$1,215,085
<b>Expenditures</b>	<b>(\$ 528,290)</b>
<b>Net Revenues</b>	<b>\$ 676,795</b>
Beach Fund Balance as of June 30, 2012	\$ 5,167,054

# Beach Fund Status as of April 1, 2013

Revenues FY 2012–2013 to Date	Estimated Amount
Collected Ad Valorem Revenues (5¢/\$100)	\$ 622,000
Accommodation Tax Revenues (Pender)	\$ 408,000
Pender “Give Back” & State Transfers	\$ 0
Estimated Fund Revenue to date	\$1,030,000
Current Estimated Account Balance	\$ 5.6 million

# SC Beach Fund Balances

Surf City Beach Fund Balances	
2010 (Year end)	\$4,200,254
2011 (Year end)	\$4,490,254
2012 (Year end)	\$5,167,054
2013 (Current estimated)	\$5,600,000

Estimated Annual Net Fund Growth for Planning Purposes:

**\$500,000 per year**

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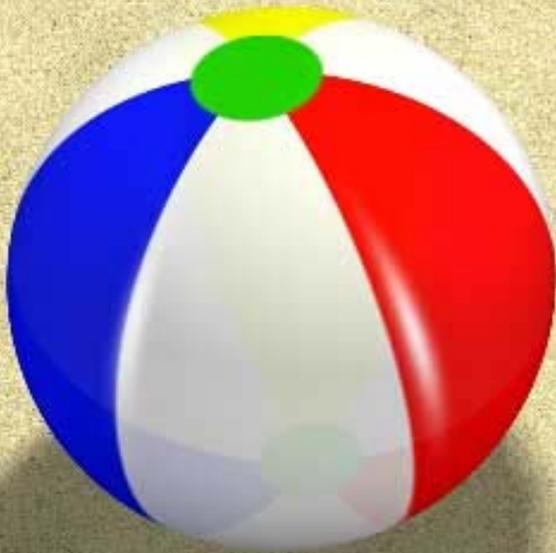
# Surf City Beach Fund Property Taxes

Revenue Source	FY 2011-2012
SC Assessed Value	\$1,281,005,872
Property Taxes Dedicated to Beach Fund	5 cents/\$100 value
Beach Prop Tax Revenue @ 100% Collection	\$640,500/year
Revenues Generated per 1 cent Property Tax	\$128,100/year
Tax Rate Necessary Additional \$1 million	7.8 cents/\$100 value

Note: Surf City assessed values and property tax revenues are going up as new construction occurs and new areas are annexed. Accommodation Taxes collected from renters are also increasing, typically at 2-4% per year.

# Part V

Draft Funding Plan  
and Preliminary  
Recommendations

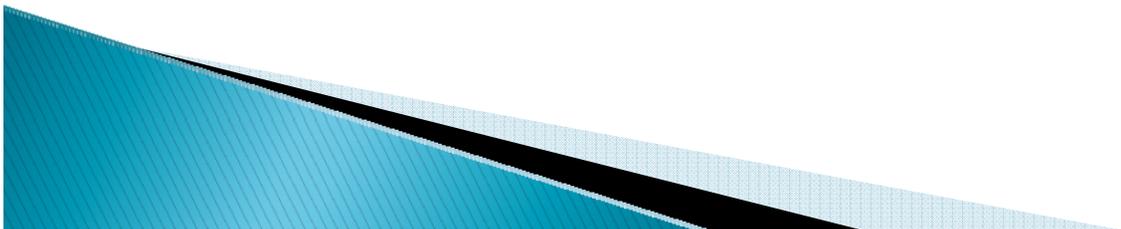


# Initial Federal Project Cost to SC

Assuming the State pays 50% of the Non-Federal Project Cost

For Planning Purposes, Surf City's Cost for the Initial Federal Project are Estimated to be:

- ▶ \$15.9 million at 65% federal cost share level
- ▶ \$24.4 million at 45% federal cost share level



Scenario 1: SC Cost at 65% Federal Cost Share	INITIAL SC-NTB PROJECT COST		\$ 138,493,000
	Federal Share	65%	\$ 90,020,450
	Non-Federal Share	35%	\$ 48,472,550
	State Share of Non-Federal	50%	\$ 24,236,275
	Local Share of Non-Federal	50%	\$ 24,236,275
	Surf City Share of Local	60.69%	\$ 14,708,995
	NTB Share of Local	39.31%	\$ 9,527,280
	SC Contingency Set Aside		\$ 1,250,000
	Surf City Initial project Cost for Planning Purposes		\$15,958,995

Scenario 2: SC Cost at 45% Federal Cost Share	INITIAL SC-NTB PROJECT COST		\$ 138,493,000
	Federal Share	45%	\$ 62,321,850
	Non-Federal Share	55%	\$ 76,171,150
	State Share of Non-Federal	50%	\$ 38,085,575
	Local Share of Non-Federal	50%	\$ 38,085,575
	Surf City Share of Local	60.69%	\$ 23,114,135
	NTB Share of Local	39.31%	\$ 14,971,440
	SC Contingency Set Aside		\$ 1,250,000
	Surf City Initial project Cost for Planning Purposes		\$24,364,135

# Approximate Beach Fund Shortfall At Current Revenue Levels Assuming 2015 Project Start Date

Scenario Based on Federal Share	Initial Project Cost for Surf City (millions)	Estimated Beach Fund Balance at end of FY 2012-13 (millions)	Annual Net Beach Fund Revenues Expected @ Current Funding Rates	Estimated Beach Fund Balance at end of FY 2014-15 (millions)	Estimated Construction Revenue Shortfall if 2015 Start Date
1 (65%)	\$15.9	\$5.7	\$500,000	\$6.7	\$9.2
2 (45%)	\$24.4	\$5.7	\$500,000	\$6.7	\$17.7

This is a conceptual estimate of the Beach Fund Shortfall for the initial Federal Project, assuming construction begins in December 2015 and current ad valorem rates and static property valuations.

# Preliminary Funding Conclusions

1. Existing revenue streams dedicated to the City's Beach Fund appear sufficient to carry the future renourishment projects once the initial project is paid for and constructed.
2. Our judgment is the City must temporarily but significantly increase Beach Fund revenues to offset the cost of the initial federal project.

## Recommendation 1: Continue to actively work to secure the maximum federal and state share contributions for the project.

The federal and state cost share commitments are the **most significant external factors** governing the city's funding plan for the SC-NTB Project. The City should aggressively seek to secure a 50% non-federal state share and a 65% federal share.

The federal cost share will be established at a future date through the Project Sponsor Agreement (PSA), based on public access and length of developed and undeveloped beach frontage calculated at the time of the agreement.

Surf City should continue to work with other Topsail Island Communities and the legislature's Coastal Caucus to maximize the state cost share contribution.

## Recommendation 2: The City should continue to work cooperatively with Pender County to maintain the current revenue sharing arrangements on accommodation taxes and ad valorem “give back.”

The City has an outstanding funding relationship with Pender County and should continue to cultivate and build upon that relationship.

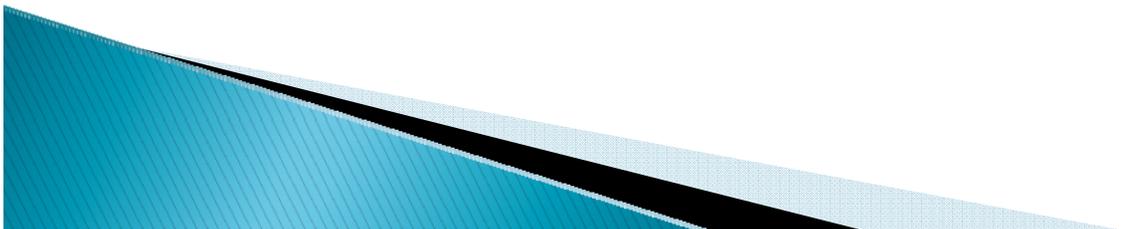
Efforts to approach Onslow County for assistance are unlikely to be fruitful unless the county agrees first to assist North Topsail Beach.

## Recommendation 3: As economic activity improves, the City should reevaluate the use of its local Accommodation Tax revenues

The City currently uses its local accommodation tax revenues (approximately \$400,000/year) for Tourism and Beach Operation and Maintenance (O&M) expenses. This is a necessary and appropriate use of the funds.

If economic activity continues to improve and if accommodation tax revenues exceed annual tourism/beach O&M expenses, the City should consider dedicating residual local accommodation tax revenues to help offset beach nourishment capitol costs.

PARC is currently evaluating projected growth of this revenue stream.



**Recommendation 4: The City should annually reevaluate the adequacy of the Beach Fund as project costs and construction timing become more clear. Additional revenues over those recommended may be needed.**

The local cost of the SC-NTB federal Project cannot be fully determined at this time. Decisions over the next 12 to 18 months can be expected to further define project costs and the City's local share.

After implementation of the recommended increase in *ad valorem* revenues, the City should annually reassess revenue needs and make appropriate adjustments.

## Recommendation 5: The City should increase city-wide the *Ad Valorem* Tax Rate dedicated to the City's Beach Fund by an additional 10 cents/\$100 value beginning in the next fiscal year

The City must increase its savings rate if it is to be prepared for the SC-NTB Project in the near term or fund an alternative project if the federal project does not proceed.

Assuming a 65% federal cost share, the recommended *ad valorem* increase strongly positions the City to move forward and may be sufficient depending on other project cost factors such as (a) federal project timing, (b) state share level, (c) actual construction and access improvement costs, (d) bond interest rates, and other factors.

The recommended increase is a solid financial commitment but may not be sufficient if the federal cost share rate declines significantly.

# Approximate Beach Fund Shortfall

If Ad Valorem Tax Rate is Increased to 15 cents/\$100

Scenario Based on Federal Share	Initial Project Cost for Surf City (millions)	Estimated Beach Fund Balance at end of FY 2012-13 (millions)	Annual Net Beach Fund Revenues Expected if Ad Valorem Rate Increased by 10 cents/\$100 value (millions)	Estimated BF Balance at end June 30, 2015 (millions)	Estimated Revenue Shortfall for Dec 2015 Start Date
1 (65%)	\$15.9	\$5.7	\$1.75	\$9.2	\$6.7
2 (45%)	\$24.4	\$5.7	\$1.75	\$9.2	\$15.2

If ad valorem rates are increased by 10 cents/\$100 value this year and the federal project begins in 2015, the city would face financing a portion of the beach project.

## COST OF AD VALOREM TAXES AT FIVE SAMPLE RATES ON A PER MONTH & PER YEAR BASIS

Property Value	1 cent per \$100 Value		5 cents per \$100 Value		10 cents per \$100 Value		15 cents per \$100 Value		20 cents per \$100 Value	
	Month	Year	Month	Year	Month	Year	Month	Year	Month	Year
\$ 100,000	\$ 0.83	\$ 10.00	\$ 4.17	\$ 50.00	\$ 8.33	\$ 100.00	\$ 12.50	\$ 150.00	\$ 16.67	\$ 200.00
\$ 150,000	\$ 1.25	\$ 15.00	\$ 6.25	\$ 75.00	\$ 12.50	\$ 150.00	\$ 18.75	\$ 225.00	\$ 25.00	\$ 300.00
\$ 200,000	\$ 1.67	\$ 20.00	\$ 8.33	\$ 100.00	\$ 16.67	\$ 200.00	\$ 25.00	\$ 300.00	\$ 33.33	\$ 400.00
\$ 250,000	\$ 2.08	\$ 25.00	\$ 10.42	\$ 125.00	\$ 20.83	\$ 250.00	\$ 31.25	\$ 375.00	\$ 41.67	\$ 500.00
\$ 300,000	\$ 2.50	\$ 30.00	\$ 12.50	\$ 150.00	\$ 25.00	\$ 300.00	\$ 37.50	\$ 450.00	\$ 50.00	\$ 600.00
\$ 350,000	\$ 2.92	\$ 35.00	\$ 14.58	\$ 175.00	\$ 29.17	\$ 350.00	\$ 43.75	\$ 525.00	\$ 58.33	\$ 700.00
\$ 400,000	\$ 3.33	\$ 40.00	\$ 16.67	\$ 200.00	\$ 33.33	\$ 400.00	\$ 50.00	\$ 600.00	\$ 66.67	\$ 800.00
\$ 450,000	\$ 3.75	\$ 45.00	\$ 18.75	\$ 225.00	\$ 37.50	\$ 450.00	\$ 56.25	\$ 675.00	\$ 75.00	\$ 900.00
\$ 500,000	\$ 4.17	\$ 50.00	\$ 20.83	\$ 250.00	\$ 41.67	\$ 500.00	\$ 62.50	\$ 750.00	\$ 83.33	\$1,000.00
\$ 550,000	\$ 4.58	\$ 55.00	\$ 22.92	\$ 275.00	\$ 45.83	\$ 550.00	\$ 68.75	\$ 825.00	\$ 91.67	\$1,100.00
\$ 600,000	\$ 5.00	\$ 60.00	\$ 25.00	\$ 300.00	\$ 50.00	\$ 600.00	\$ 75.00	\$ 900.00	\$ 100.00	\$1,200.00
\$ 650,000	\$ 5.42	\$ 65.00	\$ 27.08	\$ 325.00	\$ 54.17	\$ 650.00	\$ 81.25	\$ 975.00	\$ 108.33	\$1,300.00
\$ 700,000	\$ 5.83	\$ 70.00	\$ 29.17	\$ 350.00	\$ 58.33	\$ 700.00	\$ 87.50	\$1,050.00	\$ 116.67	\$1,400.00
\$ 750,000	\$ 6.25	\$ 75.00	\$ 31.25	\$ 375.00	\$ 62.50	\$ 750.00	\$ 93.75	\$1,125.00	\$ 125.00	\$1,500.00

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# Discussion and Comments

# New Access Costs Not Creditable

- ▶ Local sponsors must meet requirements for public access to participate in cost sharing with the Federal Government. Public access must be available every one-half mile, and parking must be within one-quarter mile of any access for which the sponsor desires to take credit. Engineer Regulation 1165-2-130 sets forth the requirements for public access. Surf City and North Topsail Beach currently do not meet this requirement. The sponsors are working toward meeting this requirement and understand that they must provide additional access points/ parking prior to signing the Project Partnership Agreement (PPA) to be eligible for full Federal cost sharing. These areas should be acquired either in fee or perpetual easement. Acquisition of public beach access points that are necessary for compliance in cost sharing is strictly a sponsor responsibility and is not considered a project cost. Accordingly, any cost incurred with the acquisition of public access points is not considered a creditable expense towards project cost.
- ▶ Appendix M @ 15

# Credit for Rights of Way & Construction Access

- ▶ The non-Federal sponsor is entitled to receive credit against its share of project costs for the value of lands it provides and the value of the relocations that are required for the project. Generally, for the purpose of determining the amount of credit to be afforded, the value of the LER is the fair market value of the real property interest, plus certain incidental costs of acquiring those interests, that the non-federal sponsor provided for the project as required by the Government. In addition, the specific requirements relating to valuation and crediting contained in the executed PPA for a project must be reviewed and applied. For shore damage reduction projects, lands subject to shore erosion, that are required for project purposes and that must be provided by the non-federal sponsor must be appraised for crediting purposes considering special benefits in accordance with relevant Federal statutes and Department of Justice guidance. Appendix M @ 16
- ▶ 2.17 Estates for Proposed Project
- ▶ The standard Perpetual Beach Storm Damage Reduction Easement will be used for those parcels where easements are required to construct the project. The Temporary Work Area Easement will be used for the staging areas. The Fee Estate will be used for the acquisition of any parcels where dwellings will be impacted by construction of the project. Appendix M @ 17

# FEIS Appendices

- ▶ Appendix A Project Maps
- ▶ Appendix B Economic Analyses
- ▶ Appendix C Geotechnical Analyses
- ▶ Appendix D Coastal Engineering
- ▶ Appendix E Sand Compatibility Analysis
- ▶ Appendix F – unassigned –
- ▶ Appendix G Section 404(b)(1) Guidelines Analysis
- ▶ Appendix H Correspondence
- ▶ Appendix I Biological Assessment – Endangered Species
- ▶ Appendix J Cumulative Effects
- ▶ Appendix K Scoping Letters & List of Respondents
- ▶ Appendix L Fish & Wildlife Coordination Act Report
- ▶ Appendix M Real Estate Plan
- ▶ Appendix N Project Costs
- ▶ Appendix O Recreation Analyses
- ▶ Appendix P Nonstructural Alternatives
- ▶ Appendix Q Larval Entrainment
- ▶ Appendix R Nearshore and Offshore Hard Bottom Survey Reports
- ▶ Appendix S Benthic Community Characterization Survey
- ▶ Appendix T Comments and Responses
- ▶ Appendix U Archaeological Report