

**AGENDA:            September 18, 2013            Regular Meeting**

**ITEM #1:**

Discussion/Consideration of Models of Funding for Dare County Beach Nourishment Projects

**RECOMMENDED ACTION:**

- Approve Model Version 2B as the preferred model for funding for the Dare County Beach Nourishment Projects

**SUMMARY OF INFORMATION:**

Over the past several months, Dare County has been working with DEC Associates to develop models to provide options for the distribution of the Dare County Beach Nourishment Occupancy Tax funds for the Duck, Kill Devil Hills and Kitty Hawk beach nourishment projects. Several iterations of models were developed for the equitable distribution of funds, with each model requiring some level of matching funds from the Towns. These matching funds would be paid in the form of debt, most likely Special Obligation Bonds. Three models were presented to the Managers and Mayors of Duck, Kill Devil Hills, and Kitty Hawk at a meeting held on September 4, 2013. One model was based on each Town receiving a pro-rata share of occupancy tax funds. A second model set the amount of ad valorem tax equivalent revenue (\$7.82) that would need to be paid by each Town annually during the debt period of five years. The last model would require each Town to match the County funds based on an equal percentage (29%) increase in ad valorem equivalent revenue. After examining the models, it was the consensus of the group to recommend the second model, Version 2b, for the distribution of the Dare County beach nourishment funds. The Town Manager will review each of these models for the Council.

**ATTACHMENTS:**

- Model Summary
- Version 2a
- Version 2b
- Version 2c
- Example of Municipal Service Districts

County of Dare  
 Beach Nourishment Projects - Summer 2015  
 Model Version Comparisons

Version 2

|  | <u>Version 2a</u>                                 | <u>Version 2b</u>                                   | <u>Version 2c</u>                                     |
|--|---|---|---|
|  | Towns Pay Pro-Rata Portion based on Project Costs | 7.82¢ Town-Wide Property Tax Increase for All Towns | Equal % Town-Wide Property Tax Increase for All Towns |
| Dare Co. Upfront Money By Town:            |   |   |   |
| Duck                                       | \$ 7,700,000                                      | \$ 7,700,000  | \$ 8,700,000  |
| Kitty Hawk                                 | \$ 8,580,000                                      | \$ 10,300,000                                       | \$ 11,300,000   |
| Kill Devil Hills                           | \$ 5,720,000                                      | \$ 4,000,000  | \$ 2,000,000  |
| Total Dare Co. Upfront Money:              | \$ 22,000,000                                     | \$ 22,000,000                                       | \$ 22,000,000   |
| Borrowed Amount By Town:                   |   |   |   |
| Duck                                       | \$ 6,743,816                                      | \$ 6,743,816  | \$ 5,743,816  |
| Kitty Hawk                                 | \$ 7,935,159                                      | \$ 6,215,159  | \$ 5,215,159  |
| Kill Devil Hills                           | \$ 5,242,691                                      | \$ 6,962,691  | \$ 8,962,691  |
| Total Borrowed:                            | \$ 19,921,666                                     | \$ 19,921,666                                       | \$ 19,921,666   |
| Dare Co. Annual Money for D/S By Town:     |   |   |   |
| Duck                                       | \$ 350,000  | \$ 339,803  | \$ 378,509  |
| Kitty Hawk                                 | \$ 390,000  | \$ 694,586  | \$ 373,389  |
| Kill Devil Hills                           | \$ 260,000  | \$ 56,551   | \$ 223,982  |
| Total Dare Co. Annual Money for D/S:       | \$ 1,000,000                                      | \$ 1,090,940  | \$ 975,879  |
| Town-Wide Property Tax Increase by Town:   |   |   |   |
| Duck                                       | \$0.0775  | \$0.0782  | \$0.0609  |
| Kitty Hawk                                 | \$0.1506  | \$0.0782  | \$0.0870  |
| Kill Devil Hills                           | \$0.0480  | \$0.0782  | \$0.0931  |
| % Increase Town-Wide Property Tax by Town: |   |   |   |
| Duck                                       | 37%   | 37%   | 29%   |
| Kitty Hawk                                 | 50%   | 26%   | 29%   |
| Kill Devil Hills                           | 15%   | 24%   | 29%   |
| New Town-Wide Property Tax by Town:        |   |   |   |
| Duck                                       | \$0.2875  | \$0.2882  | \$0.2709  |
| Kitty Hawk                                 | \$0.4506  | \$0.3782  | \$0.3870  |
| Kill Devil Hills                           | \$0.3689  | \$0.3991  | \$0.4140  |
| Beach Fund Balance Ending FY21:            | \$ 20,847,284                                     | \$ 21,521,840                                       | \$ 22,360,415   |
| Lowest FY Ending Beach Fund Balance:       | \$ 8,840,394                                      | \$ 8,840,394  | \$ 8,840,394  |

Beach Nourishment Projects - Summer 2015

Version 2a

Dare Pays Share of Towns' Debt Service up to \$1M/year

Town's Pro-rata Portion of \$22,000,000 Upfront Payment based on Project Costs

|      | Revenues     | Expenditures<br>(Before New<br>Nourishment<br>Projects) | One-Time<br>Expenditures | New<br>Nourishment<br>Debt Service<br>(Other Towns) | New<br>Nourishment<br>Debt Service<br>(Dare Project) | Interest<br>Earnings | EOY Fund<br>Balance | Interest<br>Earning<br>Rate |
|------|--------------|---|--------------------------|---|--|----------------------|---------------------|-----------------------------|
| 2014 | \$ 4,920,879 | \$ 2,527,500  |                          |   |  | \$ 105,963           | \$ 19,416,231       | 0.65%                       |
| 2015 | \$ 7,797,100 | \$ 2,180,000  |                          |   |  | \$ 127,166           | \$ 25,160,497       | 0.70%                       |
| 2016 | \$ 8,031,013 | \$ 2,180,250  | \$ 22,000,000            |   | \$ 393,750   | \$ 222,884           | \$ 8,840,394        | 1.00%                       |
| 2017 | \$ 8,271,943 | \$ 180,500  |                          | \$ 1,000,000  | \$ 5,787,500   | \$ 212,506           | \$ 10,356,843       | 1.25%                       |
| 2018 | \$ 8,520,102 | \$ 180,750  |                          | \$ 1,000,000  | \$ 5,612,500   | \$ 143,979           | \$ 12,227,674       | 1.50%                       |
| 2019 | \$ 8,775,705 | \$ 181,000  |                          | \$ 1,000,000  | \$ 5,437,500   | \$ 197,615           | \$ 14,582,493       | 1.75%                       |
| 2020 | \$ 9,038,976 | \$ 181,250  |                          | \$ 1,000,000  | \$ 5,262,500   | \$ 268,102           | \$ 17,445,820       | 2.00%                       |
| 2021 | \$ 9,310,145 | \$ 181,500  |                          | \$ 1,000,000  | \$ 5,087,500   | \$ 360,319           | \$ 20,847,284       | 2.25%                       |
| 2022 | \$ 9,589,450 | \$ 181,750  |                          |   |  | \$ 478,664           | \$ 30,733,647       | 2.50%                       |
| 2023 | \$ 9,877,133 | \$ 182,000  |                          |   |  | \$ 709,238           | \$ 41,138,018       | 2.75%                       |

County of Dare

Tuesday, September 3, 2013

**Beach Nourishment Projects - Summer 2015**

**Version 2a**

**Individual Town Project Breakdowns**

|                  | Permitting Cost | Construction Cost | Total Project Cost | % of Total Town Projects | Dare Co. Down Payment | Total Borrowed Amount |                              |
|------------------|-----------------|-------------------|--------------------|--------------------------|-----------------------|-----------------------|------------------------------|
| Duck             | \$ 750,000      | \$ 13,693,816     | \$ 14,443,816      | 35%                      | \$ 7,700,000          | \$ 6,743,816          | Special Obligation Bonds     |
| Kitty Hawk       | \$ 870,000      | \$ 15,645,159     | \$ 16,515,159      | 39%                      | \$ 8,580,000          | \$ 7,935,159          | Special Obligation Bonds     |
| Kill Devil Hills | \$ 550,000      | \$ 10,412,691     | \$ 10,962,691      | 26%                      | \$ 5,720,000          | \$ 5,242,691          | Special Obligation Bonds     |
| Total:           | \$ 2,170,000    | \$ 39,751,666     | \$ 41,921,666      | 100%                     | \$ 22,000,000         | \$ 19,921,666         |                              |
| Dare             |                 | \$ 25,000,000     | \$ 25,000,000      |                          | \$ -                  | \$ 25,000,000         | 160A-20 Installment Purchase |
| Totals:          | \$ 2,170,000    | \$ 64,751,666     | \$ 66,921,666      |                          | \$ 22,000,000         | \$ 44,921,666         |                              |

County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015  
Individual Town Projects

Term: 5 years  
Interest Rate: 3.50%

Version 2a

Duck - 35% of Total Projects

Kitty Hawk - 39% of Total Projects

1¢ = \$156,188

\$ 0.21 Current Property Tax Rate

1¢ = \$97,951

\$ 0.30 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 106,215 | \$ 106,215   | \$ -               | \$ 106,215       |              |                      |                       |
| 2017    | \$ 1,348,763 | \$ 212,430 | \$ 1,561,193 | \$ 350,000         | \$ 1,211,193     | 0.0775       | 37%                  | 0.2875                |
| 2018    | \$ 1,348,763 | \$ 165,223 | \$ 1,513,987 | \$ 350,000         | \$ 1,163,987     | 0.0745       | 35%                  | 0.2845                |
| 2019    | \$ 1,348,763 | \$ 118,017 | \$ 1,466,780 | \$ 350,000         | \$ 1,116,780     | 0.0715       | 34%                  | 0.2815                |
| 2020    | \$ 1,348,763 | \$ 70,810  | \$ 1,419,573 | \$ 350,000         | \$ 1,069,573     | 0.0685       | 33%                  | 0.2785                |
| 2021    | \$ 1,348,763 | \$ 23,603  | \$ 1,372,367 | \$ 350,000         | \$ 1,022,367     | 0.0655       | 31%                  | 0.2755                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 6,743,816 | \$ 696,299 | \$ 7,440,115 |                    |                  |              |                      |                       |

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 138,865 | \$ 138,865   | \$ -               | \$ 138,865       |              |                      |                       |
| 2017    | \$ 1,587,032 | \$ 277,731 | \$ 1,864,762 | \$ 390,000         | \$ 1,474,762     | 0.1506       | 50%                  | 0.4506                |
| 2018    | \$ 1,587,032 | \$ 222,184 | \$ 1,809,216 | \$ 390,000         | \$ 1,419,216     | 0.1449       | 48%                  | 0.4449                |
| 2019    | \$ 1,587,032 | \$ 166,638 | \$ 1,753,670 | \$ 390,000         | \$ 1,363,670     | 0.1392       | 46%                  | 0.4392                |
| 2020    | \$ 1,587,032 | \$ 111,092 | \$ 1,698,124 | \$ 390,000         | \$ 1,308,124     | 0.1335       | 45%                  | 0.4335                |
| 2021    | \$ 1,587,032 | \$ 55,546  | \$ 1,642,578 | \$ 390,000         | \$ 1,252,578     | 0.1279       | 43%                  | 0.4279                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 7,935,159 | \$ 972,057 | \$ 8,907,216 |                    |                  |              |                      |                       |

Kill Devil Hills - 26% of Total Projects

Dare

1¢ = \$198,889

\$ 0.3209 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 82,572  | \$ 82,572    | \$ -               | \$ 82,572        |              |                      |                       |
| 2017    | \$ 1,048,538 | \$ 165,145 | \$ 1,213,683 | \$ 260,000         | \$ 953,683       | 0.0480       | 15%                  | 0.3689                |
| 2018    | \$ 1,048,538 | \$ 128,446 | \$ 1,176,984 | \$ 260,000         | \$ 916,984       | 0.0461       | 14%                  | 0.3670                |
| 2019    | \$ 1,048,538 | \$ 91,747  | \$ 1,140,285 | \$ 260,000         | \$ 880,285       | 0.0443       | 14%                  | 0.3652                |
| 2020    | \$ 1,048,538 | \$ 55,048  | \$ 1,103,586 | \$ 260,000         | \$ 843,586       | 0.0424       | 13%                  | 0.3633                |
| 2021    | \$ 1,048,538 | \$ 18,349  | \$ 1,066,888 | \$ 260,000         | \$ 806,888       | 0.0406       | 13%                  | 0.3615                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 5,242,691 | \$ 541,308 | \$ 5,783,999 |                    |                  |              |                      |                       |

|         | Principal     | Interest     | Debt Service  |
|---------|---------------|--------------|---------------|
| 2014    |               |              |               |
| 2015    |               |              |               |
| 2016    |               | \$ 393,750   | \$ 393,750    |
| 2017    | \$ 5,000,000  | \$ 787,500   | \$ 5,787,500  |
| 2018    | \$ 5,000,000  | \$ 612,500   | \$ 5,612,500  |
| 2019    | \$ 5,000,000  | \$ 437,500   | \$ 5,437,500  |
| 2020    | \$ 5,000,000  | \$ 262,500   | \$ 5,262,500  |
| 2021    | \$ 5,000,000  | \$ 87,500    | \$ 5,087,500  |
| 2022    |               |              |               |
| 2023    |               |              |               |
| Totals: | \$ 25,000,000 | \$ 2,581,250 | \$ 27,581,250 |

Beach Nourishment Projects - Summer 2015

Version 2b

Dare Pays Share of Towns' Debt Service up to \$1M/year  
 7.82¢ Town-Wide Property Tax Increase for all Towns

|      | Revenues     | Expenditures<br>(Before New<br>Nourishment<br>Projects) | One-Time<br>Expenditures | New<br>Nourishment<br>Debt Service<br>(Other Towns) | New<br>Nourishment<br>Debt Service<br>(Dare Project) | Interest<br>Earnings | EOY Fund<br>Balance | Interest<br>Earning<br>Rate |
|------|--------------|---|--------------------------|---|--|----------------------|---------------------|-----------------------------|
| 2014 | \$ 4,920,879 | \$ 2,527,500  |                          |   |  | \$ 105,963           | \$ 19,416,231       | 0.65%                       |
| 2015 | \$ 7,797,100 | \$ 2,180,000  |                          |   |  | \$ 127,166           | \$ 25,160,497       | 0.70%                       |
| 2016 | \$ 8,031,013 | \$ 2,180,250  | \$ 22,000,000            |   | \$ 393,750   | \$ 222,884           | \$ 8,840,394        | 1.00%                       |
| 2017 | \$ 8,271,943 | \$ 180,500  |                          | \$ 1,090,940  | \$ 5,787,500   | \$ 212,506           | \$ 10,265,903       | 1.25%                       |
| 2018 | \$ 8,520,102 | \$ 180,750  |                          | \$ 951,488  | \$ 5,612,500   | \$ 143,297           | \$ 12,184,564       | 1.50%                       |
| 2019 | \$ 8,775,705 | \$ 181,000  |                          | \$ 852,963  | \$ 5,437,500   | \$ 196,442           | \$ 14,685,247       | 1.75%                       |
| 2020 | \$ 9,038,976 | \$ 181,250  |                          | \$ 762,250  | \$ 5,262,500   | \$ 268,698           | \$ 17,786,920       | 2.00%                       |
| 2021 | \$ 9,310,145 | \$ 181,500  |                          | \$ 671,538  | \$ 5,087,500   | \$ 365,312           | \$ 21,521,840       | 2.25%                       |
| 2022 | \$ 9,589,450 | \$ 181,750  |                          |   |  | \$ 491,359           | \$ 31,420,899       | 2.50%                       |
| 2023 | \$ 9,877,133 | \$ 182,000  |                          |   |  | \$ 727,963           | \$ 41,843,994       | 2.75%                       |

County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015

Version 2b

Individual Town Project Breakdowns

|                  | Permitting Cost | Construction Cost | Total Project Cost | % of Total Town Projects | Dare Co. Down Payment | Total Borrowed Amount |                              |
|------------------|-----------------|-------------------|--------------------|--------------------------|-----------------------|-----------------------|------------------------------|
| Duck             | \$ 750,000      | \$ 13,693,816     | \$ 14,443,816      | 35%                      | \$ 7,700,000          | \$ 6,743,816          | Special Obligation Bonds     |
| Kitty Hawk       | \$ 870,000      | \$ 15,645,159     | \$ 16,515,159      | 39%                      | \$ 10,300,000         | \$ 6,215,159          | Special Obligation Bonds     |
| Kill Devil Hills | \$ 550,000      | \$ 10,412,691     | \$ 10,962,691      | 26%                      | \$ 4,000,000          | \$ 6,962,691          | Special Obligation Bonds     |
| Total:           | \$ 2,170,000    | \$ 39,751,666     | \$ 41,921,666      | 100%                     | \$ 22,000,000         | \$ 19,921,666         |                              |
| Dare             |                 | \$ 25,000,000     | \$ 25,000,000      |                          | \$ -                  | \$ 25,000,000         | 160A-20 Installment Purchase |
| Totals:          | \$ 2,170,000    | \$ 64,751,666     | \$ 66,921,666      |                          | \$ 22,000,000         | \$ 44,921,666         |                              |

County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015

Term: 5 years

0.0782 Cents Town-Wide Property Tax Increase for All Towns

Version 2b

Individual Town Projects

Interest Rate: 3.50%

Duck - 35% of Total Projects

1¢ = \$156,188 \$ 0.21 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 106,215 | \$ 106,215   | \$ -               | \$ 106,215       |              |                      |                       |
| 2017    | \$ 1,348,763 | \$ 212,430 | \$ 1,561,193 | \$ 339,803         | \$ 1,221,390     | 0.0782       | 37%                  | 0.2882                |
| 2018    | \$ 1,348,763 | \$ 165,223 | \$ 1,513,987 | \$ 292,597         | \$ 1,221,390     | 0.0782       | 37%                  | 0.2882                |
| 2019    | \$ 1,348,763 | \$ 118,017 | \$ 1,466,780 | \$ 245,390         | \$ 1,221,390     | 0.0782       | 37%                  | 0.2882                |
| 2020    | \$ 1,348,763 | \$ 70,810  | \$ 1,419,573 | \$ 198,183         | \$ 1,221,390     | 0.0782       | 37%                  | 0.2882                |
| 2021    | \$ 1,348,763 | \$ 23,603  | \$ 1,372,367 | \$ 150,976         | \$ 1,221,390     | 0.0782       | 37%                  | 0.2882                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 6,743,816 | \$ 696,299 | \$ 7,440,115 |                    |                  |              |                      |                       |

Kitty Hawk - 39% of Total Projects

1¢ = \$97,951 \$ 0.30 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 108,765 | \$ 108,765   | \$ -               | \$ 108,765       |              |                      |                       |
| 2017    | \$ 1,243,032 | \$ 217,531 | \$ 1,460,562 | \$ 694,586         | \$ 765,977       | 0.0782       | 26%                  | 0.3782                |
| 2018    | \$ 1,243,032 | \$ 174,024 | \$ 1,417,056 | \$ 651,079         | \$ 765,977       | 0.0782       | 26%                  | 0.3782                |
| 2019    | \$ 1,243,032 | \$ 130,518 | \$ 1,373,550 | \$ 607,573         | \$ 765,977       | 0.0782       | 26%                  | 0.3782                |
| 2020    | \$ 1,243,032 | \$ 87,012  | \$ 1,330,044 | \$ 564,067         | \$ 765,977       | 0.0782       | 26%                  | 0.3782                |
| 2021    | \$ 1,243,032 | \$ 43,506  | \$ 1,286,538 | \$ 520,561         | \$ 765,977       | 0.0782       | 26%                  | 0.3782                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 6,215,159 | \$ 761,357 | \$ 6,976,516 |                    |                  |              |                      |                       |

Kill Devil Hills - 26% of Total Projects

1¢ = \$198,889 \$ 0.3209 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 109,662 | \$ 109,662   | \$ -               | \$ 109,662       |              |                      |                       |
| 2017    | \$ 1,392,538 | \$ 219,325 | \$ 1,611,863 | \$ 58,551          | \$ 1,555,312     | 0.0782       | 24%                  | 0.3991                |
| 2018    | \$ 1,392,538 | \$ 170,586 | \$ 1,563,124 | \$ 7,812           | \$ 1,555,312     | 0.0782       | 24%                  | 0.3991                |
| 2019    | \$ 1,392,538 | \$ 121,847 | \$ 1,514,385 |                    | \$ 1,555,312     | 0.0782       | 24%                  | 0.3991                |
| 2020    | \$ 1,392,538 | \$ 73,108  | \$ 1,465,646 |                    | \$ 1,555,312     | 0.0782       | 24%                  | 0.3991                |
| 2021    | \$ 1,392,538 | \$ 24,369  | \$ 1,416,908 |                    | \$ 1,555,312     | 0.0782       | 24%                  | 0.3991                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 6,962,691 | \$ 718,898 | \$ 7,681,589 |                    |                  |              |                      |                       |

Dare

|         | Principal     | Interest     | Debt Service  |
|---------|---------------|--------------|---------------|
| 2014    |               |              |               |
| 2015    |               |              |               |
| 2016    |               | \$ 393,750   | \$ 393,750    |
| 2017    | \$ 5,000,000  | \$ 787,500   | \$ 5,787,500  |
| 2018    | \$ 5,000,000  | \$ 612,500   | \$ 5,612,500  |
| 2019    | \$ 5,000,000  | \$ 437,500   | \$ 5,437,500  |
| 2020    | \$ 5,000,000  | \$ 262,500   | \$ 5,262,500  |
| 2021    | \$ 5,000,000  | \$ 87,500    | \$ 5,087,500  |
| 2022    |               |              |               |
| 2023    |               |              |               |
| Totals: | \$ 25,000,000 | \$ 2,581,250 | \$ 27,581,250 |



County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015

Version 2c

Dare Pays Share of Towns' Debt Service up to \$1M/year  
 Equal % Town-Wide Property Tax Increase for All Towns

|      | Revenues     | Expenditures<br>(Before New<br>Nourishment<br>Projects) | One-Time<br>Expenditures | New<br>Nourishment<br>Debt Service<br>(Other Towns) | New<br>Nourishment<br>Debt Service<br>(Dare Project) | Interest<br>Earnings | EOY Fund<br>Balance | Interest<br>Earning<br>Rate |
|------|--------------|---|--------------------------|---|--|----------------------|---------------------|-----------------------------|
| 2014 | \$ 4,920,879 | \$ 2,527,500  |                          |   |  | \$ 105,963           | \$ 19,416,231       | 0.65%                       |
| 2015 | \$ 7,797,100 | \$ 2,180,000  |                          |   |  | \$ 127,166           | \$ 25,160,497       | 0.70%                       |
| 2016 | \$ 8,031,013 | \$ 2,180,250  | \$ 22,000,000            |   | \$ 393,750   | \$ 222,884           | \$ 8,840,394        | 1.00%                       |
| 2017 | \$ 8,271,943 | \$ 180,500  |                          | \$ 975,879  | \$ 5,787,500   | \$ 212,506           | \$ 10,380,963       | 1.25%                       |
| 2018 | \$ 8,520,102 | \$ 180,750  |                          | \$ 836,428  | \$ 5,612,500   | \$ 144,160           | \$ 12,415,548       | 1.50%                       |
| 2019 | \$ 8,775,705 | \$ 181,000  |                          | \$ 696,976  | \$ 5,437,500   | \$ 199,469           | \$ 15,075,246       | 1.75%                       |
| 2020 | \$ 9,038,976 | \$ 181,250  |                          | \$ 557,524  | \$ 5,262,500   | \$ 274,908           | \$ 18,387,856       | 2.00%                       |
| 2021 | \$ 9,310,145 | \$ 181,500  |                          | \$ 445,046  | \$ 5,087,500   | \$ 376,460           | \$ 22,360,415       | 2.25%                       |
| 2022 | \$ 9,589,450 | \$ 181,750  |                          |   |  | \$ 509,353           | \$ 32,277,468       | 2.50%                       |
| 2023 | \$ 9,877,133 | \$ 182,000  |                          |   |  | \$ 751,271           | \$ 42,723,871       | 2.75%                       |

County of Dare

Tuesday, September 3, 2013

Beach Nourishment Projects - Summer 2015

Version 2c

Individual Town Project Breakdowns

|                  | Permitting Cost | Construction Cost | Total Project Cost | % of Total Town Projects | Dare Co. Down Payment | Total Borrowed Amount |                              |
|------------------|-----------------|-------------------|--------------------|--------------------------|-----------------------|-----------------------|------------------------------|
| Duck             | \$ 750,000      | \$ 13,693,816     | \$ 14,443,816      | 35%                      | \$ 8,700,000          | \$ 5,743,816          | Special Obligation Bonds     |
| Kitty Hawk       | \$ 870,000      | \$ 15,645,159     | \$ 16,515,159      | 39%                      | \$ 11,300,000         | \$ 5,215,159          | Special Obligation Bonds     |
| Kill Devil Hills | \$ 550,000      | \$ 10,412,691     | \$ 10,962,691      | 26%                      | \$ 2,000,000          | \$ 8,962,691          | Special Obligation Bonds     |
| Total:           | \$ 2,170,000    | \$ 39,751,666     | \$ 41,921,666      | 100%                     | \$ 22,000,000         | \$ 19,921,666         |                              |
| Dare             |                 | \$ 25,000,000     | \$ 25,000,000      |                          | \$ -                  | \$ 25,000,000         | 160A-20 Installment Purchase |
| Totals:          | \$ 2,170,000    | \$ 64,751,666     | \$ 66,921,666      |                          | \$ 22,000,000         | \$ 44,921,666         |                              |

County of Dare  
 Beach Nourishment Projects - Summer 2015  
 Individual Town Projects

Term: 5 years 29.00% Increase for all Towns  
 Interest Rate: 3.50%

Duck - 35% of Total Projects

1¢ = \$156,188 \$ 0.21 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 90,465  | \$ 90,465    | \$ -               | \$ 90,465        |              |                      |                       |
| 2017    | \$ 1,148,763 | \$ 180,930 | \$ 1,329,693 | \$ 378,509         | \$ 951,185       | 0.0609       | 29.00%               | 0.2709                |
| 2018    | \$ 1,148,763 | \$ 140,723 | \$ 1,289,487 | \$ 338,302         | \$ 951,185       | 0.0609       | 29.00%               | 0.2709                |
| 2019    | \$ 1,148,763 | \$ 100,517 | \$ 1,249,280 | \$ 298,095         | \$ 951,185       | 0.0609       | 29.00%               | 0.2709                |
| 2020    | \$ 1,148,763 | \$ 60,310  | \$ 1,209,073 | \$ 257,888         | \$ 951,185       | 0.0609       | 29.00%               | 0.2709                |
| 2021    | \$ 1,148,763 | \$ 20,103  | \$ 1,168,867 | \$ 217,682         | \$ 951,185       | 0.0609       | 29.00%               | 0.2709                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 5,743,816 | \$ 593,049 | \$ 6,336,865 |                    |                  |              |                      |                       |

Kitty Hawk - 39% of Total Projects

1¢ = \$97,951 \$ 0.30 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 91,265  | \$ 91,265    | \$ -               | \$ 91,265        |              |                      |                       |
| 2017    | \$ 1,043,032 | \$ 182,531 | \$ 1,225,562 | \$ 373,389         | \$ 852,174       | 0.0870       | 29.00%               | 0.3870                |
| 2018    | \$ 1,043,032 | \$ 146,024 | \$ 1,189,056 | \$ 336,883         | \$ 852,174       | 0.0870       | 29.00%               | 0.3870                |
| 2019    | \$ 1,043,032 | \$ 109,518 | \$ 1,152,550 | \$ 300,376         | \$ 852,174       | 0.0870       | 29.00%               | 0.3870                |
| 2020    | \$ 1,043,032 | \$ 73,012  | \$ 1,116,044 | \$ 263,870         | \$ 852,174       | 0.0870       | 29.00%               | 0.3870                |
| 2021    | \$ 1,043,032 | \$ 36,506  | \$ 1,079,538 | \$ 227,364         | \$ 852,174       | 0.0870       | 29.00%               | 0.3870                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 5,215,159 | \$ 638,857 | \$ 5,854,016 |                    |                  |              |                      |                       |

Kill Devil Hills - 26% of Total Projects

1¢ = \$198,889 \$ 0.3209 Current Property Tax Rate

|         | Principal    | Interest   | Debt Service | County Contributed | Town Contributed | Property Tax | % Change in Tax Rate | New Property Tax Rate |
|---------|--------------|------------|--------------|--------------------|------------------|--------------|----------------------|-----------------------|
| 2014    |              |            |              |                    |                  |              |                      |                       |
| 2015    |              |            |              |                    |                  |              |                      |                       |
| 2016    |              | \$ 141,162 | \$ 141,162   | \$ -               | \$ 141,162       |              |                      |                       |
| 2017    | \$ 1,792,538 | \$ 282,325 | \$ 2,074,863 | \$ 223,982         | \$ 1,850,881     | 0.0931       | 29.00%               | 0.4140                |
| 2018    | \$ 1,792,538 | \$ 219,586 | \$ 2,012,124 | \$ 161,243         | \$ 1,850,881     | 0.0931       | 29.00%               | 0.4140                |
| 2019    | \$ 1,792,538 | \$ 156,847 | \$ 1,949,385 | \$ 98,504          | \$ 1,850,881     | 0.0931       | 29.00%               | 0.4140                |
| 2020    | \$ 1,792,538 | \$ 94,108  | \$ 1,886,646 | \$ 35,765          | \$ 1,850,881     | 0.0931       | 29.00%               | 0.4140                |
| 2021    | \$ 1,792,538 | \$ 31,369  | \$ 1,823,908 | \$ -               | \$ 1,850,881     | 0.0931       | 29.00%               | 0.4140                |
| 2022    |              |            |              |                    |                  |              |                      |                       |
| 2023    |              |            |              |                    |                  |              |                      |                       |
| Totals: | \$ 8,962,691 | \$ 925,398 | \$ 9,888,089 |                    |                  |              |                      |                       |

Dare

|         | Principal     | Interest     | Debt Service  |
|---------|---------------|--------------|---------------|
| 2014    |               |              |               |
| 2015    |               |              |               |
| 2016    |               | \$ 393,750   | \$ 393,750    |
| 2017    | \$ 5,000,000  | \$ 787,500   | \$ 5,787,500  |
| 2018    | \$ 5,000,000  | \$ 612,500   | \$ 5,612,500  |
| 2019    | \$ 5,000,000  | \$ 437,500   | \$ 5,437,500  |
| 2020    | \$ 5,000,000  | \$ 262,500   | \$ 5,262,500  |
| 2021    | \$ 5,000,000  | \$ 87,500    | \$ 5,087,500  |
| 2022    |               |              |               |
| 2023    |               |              |               |
| Totals: | \$ 25,000,000 | \$ 2,581,250 | \$ 27,581,250 |

Example of Municipal Service District

For Discussion Purposes Only

Example A

| Fiscal Year        | Principal   | Interest  | Debt Service | County Contribution | General Town Contribution | Oceantfront Contribution | Non-Oceanfront Contribution | Total       |
|--------------------|-------------|-----------|--------------|---------------------|---------------------------|--------------------------|-----------------------------|-------------|
| 2016               | \$0         | \$106,215 | \$106,215    | \$0                 | \$106,215                 | \$0                      | \$0                         | \$106,215   |
| 2017               | \$1,348,763 | \$212,430 | \$1,561,193  | \$339,803           | \$1,263                   | \$769,340                | \$450,787                   | \$1,561,193 |
| 2018               | \$1,348,763 | \$165,223 | \$1,513,986  | \$292,597           | \$1,262                   | \$769,340                | \$450,787                   | \$1,513,986 |
| 2019               | \$1,348,763 | \$118,017 | \$1,466,780  | \$245,390           | \$1,263                   | \$769,340                | \$450,787                   | \$1,466,780 |
| 2020               | \$1,348,763 | \$70,810  | \$1,419,573  | \$198,183           | \$1,263                   | \$769,340                | \$450,787                   | \$1,419,573 |
| 2021               | \$1,348,763 | \$23,603  | \$1,372,366  | \$150,976           | \$1,263                   | \$769,340                | \$450,787                   | \$1,372,366 |
| Estimated Parcels: |             |           |              |                     |                           | 192                      | 915                         |             |
| MSD Rate:          |             |           |              |                     |                           | \$0.41                   | \$0.10                      |             |
| Tax Per Parcel:    |             |           |              |                     |                           | \$4,007                  | \$493                       |             |

Example of Municipal Service District  
**For Discussion Purposes Only**  
 Example B

| Fiscal Year        | Principal   | Interest  | Debt Service | County Contribution | General Town Contribution | Oceantfront Contribution | Non-Oceanfront Contribution | Total       |
|--------------------|-------------|-----------|--------------|---------------------|---------------------------|--------------------------|-----------------------------|-------------|
| 2016               | \$0         | \$106,215 | \$106,215    | \$0                 | \$106,215                 | \$0                      | \$0                         | \$106,215   |
| 2017               | \$1,348,763 | \$212,430 | \$1,561,193  | \$339,803           | \$260,301                 | \$600,460                | \$360,629                   | \$1,561,193 |
| 2018               | \$1,348,763 | \$165,223 | \$1,513,986  | \$292,597           | \$260,301                 | \$600,460                | \$360,629                   | \$1,513,987 |
| 2019               | \$1,348,763 | \$118,017 | \$1,466,780  | \$245,390           | \$260,301                 | \$600,460                | \$360,629                   | \$1,466,780 |
| 2020               | \$1,348,763 | \$70,810  | \$1,419,573  | \$198,183           | \$260,301                 | \$600,460                | \$360,629                   | \$1,419,573 |
| 2021               | \$1,348,763 | \$23,603  | \$1,372,366  | \$150,976           | \$260,301                 | \$600,460                | \$360,629                   | \$1,372,366 |
| Estimated Parcels: |             |           |              |                     | 2754                      | 192                      | 915                         |             |
| Project/MSD Rate:  |             |           |              |                     | \$0.015                   | \$0.32                   | \$0.08                      |             |
| Tax Per Parcel:    |             |           |              |                     | \$95                      | \$3,127                  | \$394                       |             |

Example of Municipal Service District  
For Discussion Purposes Only

| MSD Tax Rate | Oceanfront Amount Generated | Additional Tax Per Parcel | Non-Oceanfront Amount Generated | Additional Tax Per Parcel |
|--------------|-----------------------------|---------------------------|---------------------------------|---------------------------|
| \$0.01       | \$18,764                    | \$97.73                   | \$45,079                        | \$49.27                   |
| \$0.02       | \$37,529                    | \$195.46                  | \$90,157                        | \$98.53                   |
| \$0.03       | \$56,293                    | \$293.19                  | \$135,236                       | \$147.80                  |
| \$0.04       | \$75,058                    | \$390.92                  | \$180,315                       | \$197.07                  |
| \$0.05       | \$93,822                    | \$488.66                  | \$225,393                       | \$246.33                  |
| \$0.06       | \$112,586                   | \$586.39                  | \$270,472                       | \$295.60                  |
| \$0.07       | \$131,351                   | \$684.12                  | \$315,551                       | \$344.86                  |
| \$0.08       | \$150,115                   | \$781.85                  | \$360,629                       | \$394.13                  |
| \$0.09       | \$168,880                   | \$879.58                  | \$405,708                       | \$443.40                  |
| \$0.10       | \$187,644                   | \$977.31                  | \$450,787                       | \$492.66                  |
| \$0.11       | \$206,408                   | \$1,075.04                | \$495,865                       | \$541.93                  |
| \$0.12       | \$225,173                   | \$1,172.77                | \$540,944                       | \$591.20                  |
| \$0.13       | \$243,937                   | \$1,270.51                | \$586,023                       | \$640.46                  |
| \$0.14       | \$262,701                   | \$1,368.24                | \$631,101                       | \$689.73                  |
| \$0.15       | \$281,466                   | \$1,465.97                | \$676,180                       | \$738.99                  |
| \$0.16       | \$300,230                   | \$1,563.70                | \$721,259                       | \$788.26                  |
| \$0.17       | \$318,995                   | \$1,661.43                | \$766,337                       | \$837.53                  |
| \$0.18       | \$337,759                   | \$1,759.16                | \$811,416                       | \$886.79                  |
| \$0.19       | \$356,523                   | \$1,856.89                | \$856,495                       | \$936.06                  |
| \$0.20       | \$375,288                   | \$1,954.62                | \$901,573                       | \$985.33                  |
| \$0.21       | \$394,052                   | \$2,052.36                |                                 |                           |
| \$0.22       | \$412,817                   | \$2,150.09                |                                 |                           |
| \$0.23       | \$431,581                   | \$2,247.82                |                                 |                           |
| \$0.24       | \$450,345                   | \$2,345.55                |                                 |                           |
| \$0.25       | \$469,110                   | \$2,443.28                |                                 |                           |
| \$0.26       | \$487,874                   | \$2,541.01                |                                 |                           |
| \$0.27       | \$506,639                   | \$2,638.74                |                                 |                           |
| \$0.28       | \$525,403                   | \$2,736.47                |                                 |                           |
| \$0.29       | \$544,167                   | \$2,834.20                |                                 |                           |
| \$0.30       | \$562,932                   | \$2,931.94                |                                 |                           |
| \$0.31       | \$581,696                   | \$3,029.67                |                                 |                           |
| \$0.32       | \$600,460                   | \$3,127.40                |                                 |                           |
| \$0.33       | \$619,225                   | \$3,225.13                |                                 |                           |
| \$0.34       | \$637,989                   | \$3,322.86                |                                 |                           |
| \$0.35       | \$656,754                   | \$3,420.59                |                                 |                           |
| \$0.36       | \$675,518                   | \$3,518.32                |                                 |                           |
| \$0.37       | \$694,282                   | \$3,616.05                |                                 |                           |
| \$0.38       | \$713,047                   | \$3,713.79                |                                 |                           |
| \$0.39       | \$731,811                   | \$3,811.52                |                                 |                           |
| \$0.40       | \$750,576                   | \$3,909.25                |                                 |                           |
| \$0.41       | \$769,340                   | \$4,006.98                |                                 |                           |
| \$0.42       | \$788,104                   | \$4,104.71                |                                 |                           |
| \$0.43       | \$806,869                   | \$4,202.44                |                                 |                           |
| \$0.44       | \$825,633                   | \$4,300.17                |                                 |                           |
| \$0.45       | \$844,398                   | \$4,397.90                |                                 |                           |