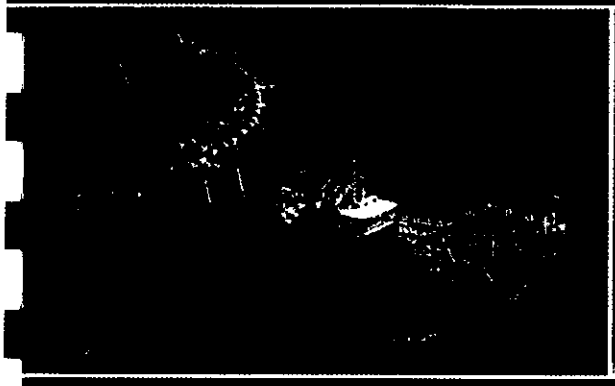
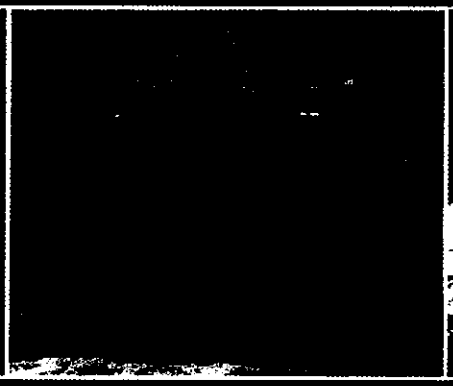
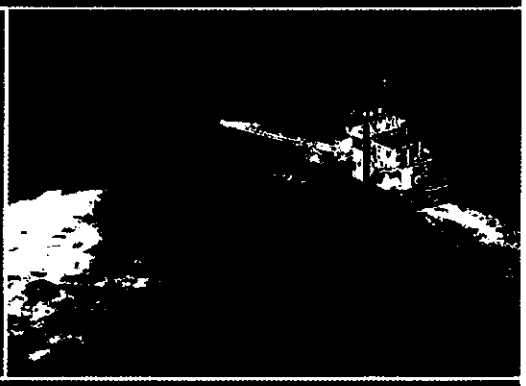
NORTH CAROLINA GENERAL ASSEMBLY

Report on Costs, Benefits, and Management Issues related to Maintaining North Carolina's Shallow Draft Navigation Channels

Final Report







MOFFATT & NICHOL

November 2005

VI. FINANCING

Multiple financing options were investigated to evaluate various strategies that could be used by North Carolina to finance shallow draft navigation channel maintenance. A thorough literature review as well as gathered information from other coastal states and from public administration experts on methods that might be considered by North Carolina to finance shallow draft navigation maintenance, including various types of taxes and fees. Viable options were further evaluated to determine the feasibility of a given strategy if applied in North Carolina.

Based on information gathered, various options exist for financing shallow draft dredging of North Carolina's waterways. These include usage of one or more of the following:

- property taxes
- general funds
- boat sales taxes
- boat registration fees
- fuel taxes
- personal property taxes on boats
- waterway user fees

This chapter will first provide an overview of existing taxes and fees collected at Federal and State levels in North Carolina and other States. Then, unique financing strategies implemented through programs in Florida and Maryland specifically for waterway maintenance and management will be presented. Finally, a review of the above options and their viability for financing shallow draft waterway maintenance and management in North Carolina will be reviewed.

Current North Carolina Programs

North Carolina has an existing program for financing small navigation projects. The General Assembly typically appropriates amounts in the range of $20 Million annually to the Division of Water Resources (DWR) for water resources projects. Some of these funds are used for financial assistance to local governments for navigation projects. Support for local navigation and beach restoration projects are available through the Water Resources Development Project Grant Program administered by the DWR. The cost share percentages provided by the State are 80% for general navigation projects with commercial traffic and 25% for recreational navigation. Appendix E contains a sample application package. Under this program, the sponsoring local government plans and designs the project and supervises construction. A list of dredging projects funded by the State of North Carolina for FY 1996 through 2006 is provided in Appendix E. The Department of Environment and Natural Resources Division of Water Resources also prepares a six year Water Resources Development Plan, which is updated on an annual basis. The plan provides a forecast of State

funding requirements, lists and prioritizes State water resource development projects including dredging.

Existing Federal and State Imposed Taxes and Fees

Revenues from various taxes and fees are currently being collected on federal and state levels to support various boating and waterway related programs. It is important to understand the current federal and state programs to identify potential funding for shallow draft channel maintenance, and where revenue sources could be shifted.

The federal government collects 18.4 cents per gallon on gasoline used for motorboats. Of this amount, 13 cents is placed in the Wallop/Breaux Trust Fund which supports boating and fishing (mostly dealing with safety and sport fish restoration). Additionally, the Federal government collects fuel tax revenues from commercial waterways operators which are deposited in the Inland Waterways Trust Fund. Users of the AIWW alone pay an average of $1 million annually to this fund. However, this fund only supports half of the cost of new construction and major rehabilitation of the inland waterway infrastructure (mainly locks), and does not support existing waterway maintenance.

Since there is no record of whether fuel is used for marine or other purposes, each state has a formula for calculating the amount of fuel tax to be captured for boating programs. This formula is based on studies which show that marine fuel accounts for a minimum of 1% of all gasoline sales. Many states utilize marine fuel taxes for building bridges and highways, not for the development of boating programs. This has led to states enacting their own laws to capture state taxes for boating programs in an effort to copy the success of the Wallop/Breaux Trust Fund.

Most states, coastal and inland collect various taxes and fees for property (boats) and fuel. However, not all of this revenue is used to fund waterway improvements or boating related programs. In support of boaters and waterways, the BoatU.S. (Boat Owners Association of the U.S.) Government Affairs group conducted a study of all U.S. states to address the following questions:

1. Is marine gas tax revenue received and utilized for state boating programs?
2. If gas tax is received, what programs are funded?
3. Is the gas tax revenue protected by law?
4. Is there a general revenue fund that supports boating programs?
5. Are the state's boat registration fees used to support boating programs?
6. Is there a sales tax on boats, and, if so, does this money support boating programs?
7. Is there a personal property tax on boats, and, if so, does this money support boating programs?

A table summarizing the information gathered for all states is included in Appendix F. For North Carolina, it was determined that the state currently utilizes 1/6 of 1% of the total gas tax

revenue for general boating programs. The amount collected was cited as approximately $1.4 million (representing 1/6 of 1% of NC's total gas tax revenue). General boating programs typically imply that the funds support law enforcement, safety education and promotion, and boating facilities such as docks and ramps. The State's gas tax revenue is protected by law. Currently the State does not have a general fund to support boating programs, but utilizes 100% of the boat registration fee for boating related programs. There is currently a 3%, or maximum of $1500 sales tax on boats in North Carolina; however, this money does not support boating programs. In addition, the counties collect personal property taxes for boats which are also not used to support boating programs.

Thirty two states return some portion of state gas tax revenue to boating programs. For the most part, the money is used for general purposes such as law enforcement, safety education and promotion, and boating facilities such as docks and ramps. Figure VI-1 shows the range of percentages that are returned to boating from State marine fuel taxes. Forty seven states use boat registration fees as a source of revenue towards boating programs. Approximately two thirds of those states use 100% of the registration fees toward boating programs. Of states that impose a sales tax on boats, only four, Maryland, New Mexico, Texas and Virginia put revenue generated from this sales tax toward boating programs. In fact, Maryland's waterway improvement program is supported almost entirely by boat sales tax revenues and will be discussed in more detail later in this chapter. The state of Montana is the only state which uses personal property tax (as paid on motor vehicles and boats) revenue for boating programs.

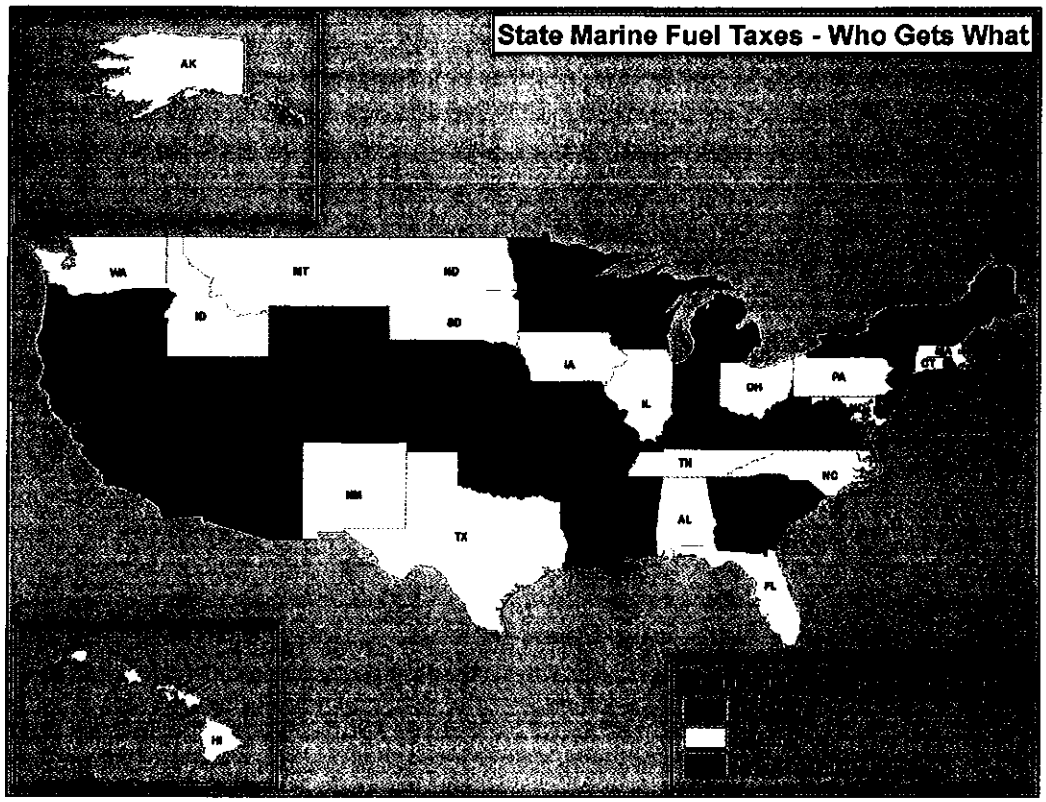


Figure VI-1. Percentages of State Marine Fuel Taxes Returned To Boating Programs (Adapted from Dickinson, January 2004)

Many states, including North Carolina, offer refunds on fuel taxes paid in the State. In North Carolina, recreational boaters can apply for a refund of the state sales tax on gasoline and diesel fuel that is purchased at a highway pump for use in boating. The current refund amount is approximately $0.18 per gallon of the current tax of $0.242 and subtracting a user fee of $0.06.

Financing Programs For Waterway Management In Other States

In review of existing literature and through contact with key individuals knowledgeable of various financing strategies employed in other states for waterway maintenance, Florida and Maryland were identified as two key states that have unique and successful state-level waterway management strategies. The following section will detail the programs practiced in these states for waterway management.

Florida Inland Navigation District

The Florida Inland Navigation District (FIND) is an independent taxing authority established for 12 counties along the waterways in Florida with the exception of Monroe County (Florida Keys). FIND was established in 1927, and is tasked with the responsibilities of funding and maintenance of Florida's waterways as well as providing financial and technical support to local governments for maintenance of waterway related projects, installation and maintenance of manatee regulatory signage, and public education. One mission of FIND is to serve as the local sponsor of the AIWW project in Florida, which is a State/Federal navigation project. Through this project, FIND is responsible for providing all land, including rights of way and lands for dredged materials disposal. Mr. David Roach, Executive Director of FIND, provided a wealth of information related to FIND's various programs, taxation process, and the unique cooperation with the USACE and local governments.

The primary source of funds for FIND is property tax revenues from counties along Florida's waterways. The property tax is levied on all real properties within the 12 counties under the jurisdiction of FIND. The rationale behind the taxation is that all property in the county benefits from the economic activity generated by the waterways or its use. The tax is a millage rate of 0.0385 which is equivalent to $3.80 per $100,000 property value. Annual tax revenues reported for 2004 were approximately $17 million. The cost of maintaining Florida's waterways is approximately $14 to $16 million per year. USACE funding is typically less than $5 million per year. FIND spends approximately $8 million on average annually for dredging. Approximately 500,000 cubic yards of material are dredged annually. The total spent, including USACE funding, typically ranges from $10 to $12 million annually. Aside from dredging and dredged material management costs, revenue from FIND supports various initiatives including waterway assistance grants for local governments, manatee signs, and public information.

For dredging and maintenance of the AIWW, FIND has established a unique State/Federal collaboration with the USACE which has been successful largely due to extensive project planning. FIND and the USACE maintain a future five year project list including expected costs and meet quarterly to discuss all planned projects. All dredging projects are discussed to determine whether the project should be completed independently by FIND or jointly with the USACE. Factors that weigh on these decisions include permitting, size of project, efficiency, cost, and manpower. Since 1987, FIND has had in place a Memorandum of Agreement with the USACE, which defines the responsibilities of each group and details how cooperative funding from FIND is implemented. For those projects done in cooperation with the USACE, FIND typically waits for bids to be received before transferring money to the USACE. This strategy helps to assure that funds go directly to support a given dredging project. The USACE requires that money be transferred before the final contract is agreed upon.

Due to increasing difficulty associated with identification and permitting of suitable dredged material management areas, in 1986, FIND initiated a program for long-range planning of dredged material management. The goal of this program is to provide a permanent

infrastructure of maintenance facilities for all dredged material from the AIWW and Okeechobee Waterway.

As mentioned, FIND also maintains good cooperation with local governments and provides them with technical and financial assistance to improve and manage waterways. The Cooperative Assistance Program allows FIND to ensure that all constituents benefit from their payment of waterway property taxes. Technical assistance is provided for the improvement of boat docks, boat ramps, and distribution of public information. FIND also assists in the development of waterway parks, fishing piers, and boardwalks for non-boaters to ensure that everyone benefits from payment of waterway property taxes. Financial assistance is provided through grants programs which receive approximately 40% of the FIND budget annually. This is equivalent to approximately $8 million per year.

Maryland Waterway Improvement Program

The Maryland Division of Natural Resources Waterway Improvement Fund was established in 1966 to fund projects improving the conditions and safety of Maryland's waterways and expanding the recreational and commercial capabilities of these waterways. Since 1966, the program has funded more than $600 million for waterway improvement projects. Mr. Robert Gaudette, Director, of the Waterway Improvement Program provided information related to the program initiatives, funding, and expenditures. Additionally, the Department of Natural Resources, Waterway Improvement Program publishes the "Waterway Improvement Fund Grants Manual" which is provided in Appendix E. The fund provides support in the form of grants to local governments, the Department of Natural Resources, and federal agencies for various projects and services for the boating public. These include maintaining channels and harbors, improvement of waterway structures, increased boating education and information distribution, and promotion of marine law enforcement.

The funds are generated from a 5% excise tax paid when a boat is purchased and titled in the state. This tax is in lieu of the state sales tax. The fund also receives 0.3% of the state motor fuel tax as a result of fuel purchases made for marine vehicles. This fuel tax amounts to approximately $1.7 million annually. Approximately $20-25 million is spent on waterway improvements each year. Approximately one third, or $8 million of this goes toward dredging projects annually.

Applications for project funding are made to the Waterway Improvement Program by local governments. Projects found to be eligible for state assistance receive funds in the forms of grants. For recreational dredging and navigation projects a range of grant levels are established. The level of funding is determinant on various factors including the scope of the project, statutory guidelines, technical and environmental considerations and the expected project benefit to the general boating public. The highest level of funding is 100% state funded projects which includes projects done in cooperation with the USACE, and projects which provide significant public benefits such as access to public boating facilities, waterways or connecting key destinations. Next, grants in the form of matching funds not

exceeding 50% may be provided for projects that are in locations that do not provide essential sevices to the general boating public. For those projects that serve a very limited segment of the boating public, the program may fund the applicant in the form of a tax district loan, which is an interest free long term loan (up to $300,000). Finally, various agencies and local governments may cooperate with various funding levels to support a given project. For example, a project could be funded by 50% DNR State sponsored tax district loan, 25% County benefit tax district, and 25% local government funds.

Grants provided to local jurisdictions cover the engineering and management of the projects, but no overhead. Any cooperation with the USACE is directly with the local jurisdictions. Typically, in the past, if a project does not generate enough federal interest, local governments undertake the jobs themselves.

Financing Options For North Carolina

Financing options were analyzed further to determine the feasibility of implementing various taxes or fees to support the maintenance of North Carolina's shallow draft waterways. Detailed analyses evaluated the use of revenues from taxes on real properties in the coastal counties and taxes on the sales of boats in North Carolina as outlined in the Florida and Maryland models. In addition, the feasibility of boater registration fees, marine fuel taxes, personal property taxes, and/or waterway user fees to support waterway maintenance will be presented.

Property Taxes

First, the FIND model, which utilizes revenues from property taxes applied on 12 coastal counties located along Florida waterways, was applied in North Carolina. Current fiscal year 2004-2005 taxable real property values for each county were obtained from the North Carolina Department of Revenue. The total taxable real property values included residential property, commercial property, industrial property, present-use property, historic property, roadway corridor property (none in coastal counties), and other property. The table summarizing these data is included in Appendix G. The taxable values from each of these categories were summed to yield the total taxable real estate for each county. Figure VI-2 shows the total taxable real estate determined for each county in billions of dollars.

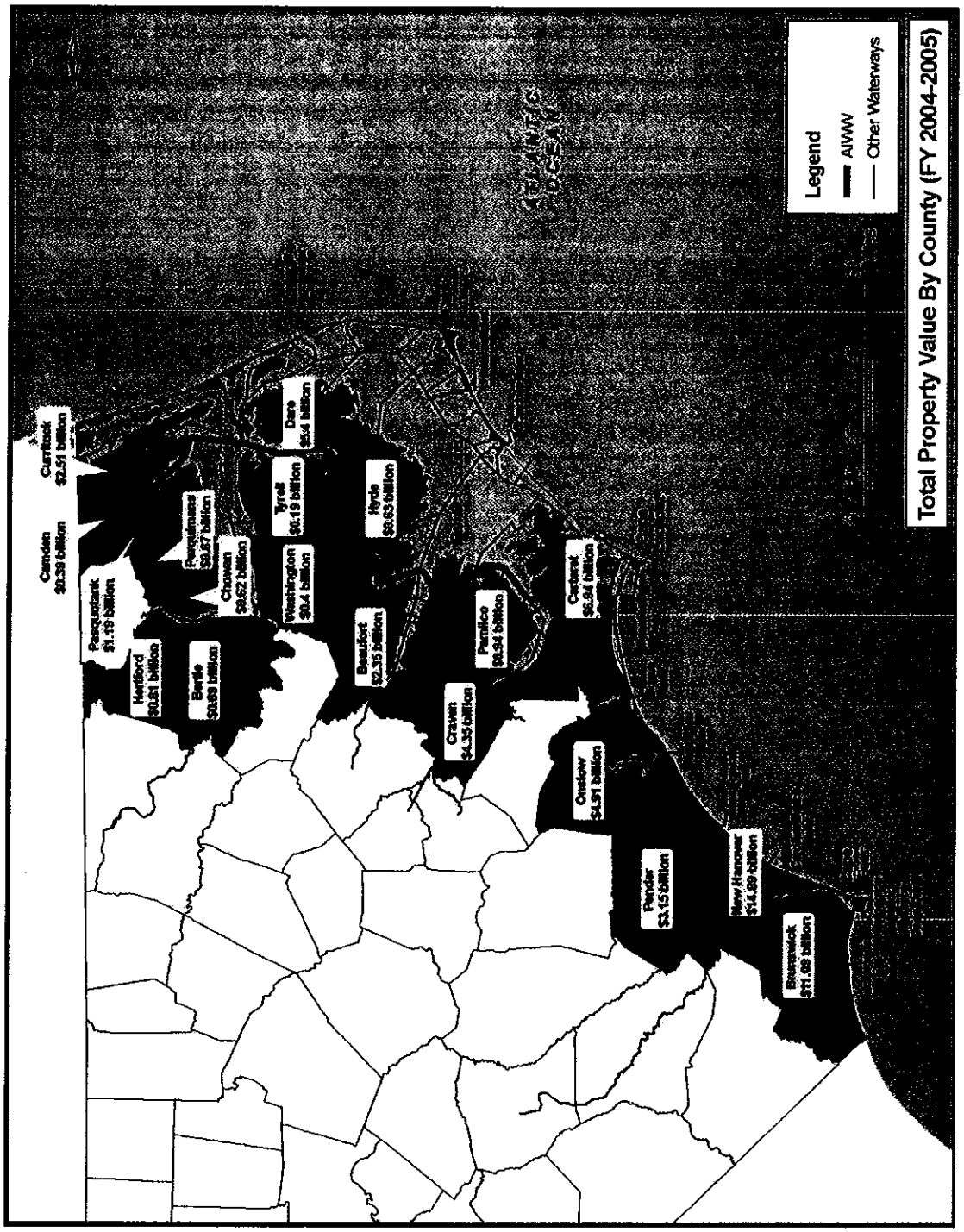


Figure VI-2. Total Real Taxable Property Value For North Carolina Coastal Counties (FY 2004-2005) Source: North Carolina Department of Revenue

The total taxable real property value in the 19 coastal counties considered was calculated as approximately $62.1 billion. Based on this value, the equivalent millage rates that would have to be imposed to support total shallow draft channel maintenance costs ranging from $8 million to $30 million annually, at $2 million increments, were computed. Table VI-1 shows the resulting millage rates and the equivalent rates per $100,000 property value. As shown, this analysis indicated significantly higher rates would have to be imposed in North Carolina than current rates excised through FIND. The millage rate imposed by FIND is equivalent to $3.80 per $100,000 value and generates on average $17 million annually. To achieve the same revenue in North Carolina, the tax rate would have to be approximately $27 per $100,000 real property value.

Table VI-1. Equivalent Property Taxes

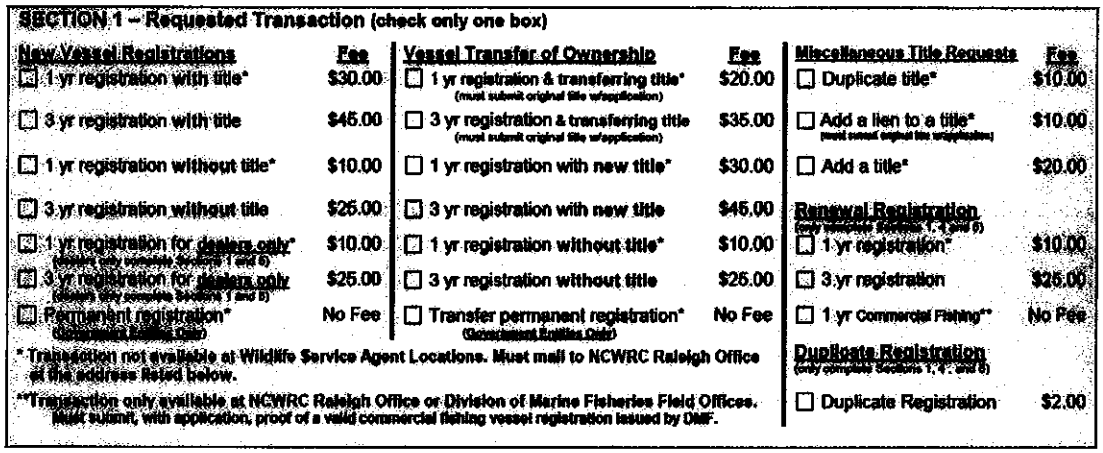
Annual Dredging Costs (Millions)	Millage Rate	Equivalent Tax Per $100,000 Value
$8	0.13	$12.88
$10	0.16	$16.10
$12	0.19	$19.32
$14	0.23	$22.54
$16	0.26	$25.76
$18	0.29	$28.98
$20	0.32	$32.20
$22	0.35	$35.42
$24	0.39	$38.64
$26	0.42	$41.86
$28	0.45	$45.08
$30	0.48	$48.30

Boat Sales Taxes

As described, the Maryland Waterway Improvement Program utilizes revenues generated from boat sales taxes, collected in lieu of standard sales taxes. The tax applied in Maryland is 5% of the boat sale price. In North Carolina, a 3% sales tax or maximum of $1500 is currently imposed on all boat sales. As stated previously, this revenue does not currently support boating or marine-related programs. To evaluate the feasibility of implementing a similar strategy in North Carolina to support waterway maintenance, this percentage was applied to the average annual boat sales in North Carolina. Average annual boat sales in the State were reported by the National Marine Manufacturer's Association for the period of 1997-2001. The total annual boat sales statewide ranged from $170 million in 1997 to $300 million in 2001 with a substantial increase occurring between 1998 to 1999. The average over 1997-2001 is approximately $231 million, and during 1999-2001 is $268 million. Applying 3% to these average annual sales yields approximately $6.8 to $8.1 million in revenue. This is based on the assumption that the $1500 maximum tax would not be imposed.

Boat Registration Fees

As stated, North Carolina currently utilizes 100% of the boater registration fees collected in the State to support boating related programs. Figure VI-3 shows the portion of the Vessel Registration Form published by the North Carolina Wildlife Resources Commission displaying the range of fees applied on new and transferred vessels and renewal registration fees. As shown, new vessels titled within the state currently pay a $30 registration fee for one year and renewals are $10 for one year. With approximately 360,000 boats currently registered in the State, the revenue generated from yearly renewals is approximately $3.6 million assuming a one-year renewal registration fee of $10. In comparison, South Carolina charges $40 to register and title a new vessel, and Florida prorates the registration fee based on the boat size, ranging from $7 for 12 foot boats to over $100 for larger boats exceeding 65 feet. Since North Carolina already utilizes 100% of the collected fees for boating related programs, generating additional revenue for shallow draft waterway maintenance would require increasing fees or shifting existing funding.



SECTION 1 – Requested Transaction (check only one box)

New Vessel Registrations	Fee	Vessel Transfer of Ownership	Fee	Miscellaneous Title Requests	Fee
☐ 1 yr registration with title*	$30.00	☐ 1 yr registration & transferring title* (must submit original title w/application)	$20.00	☐ Duplicate title*	$10.00
☐ 3 yr registration with title	$45.00	☐ 3 yr registration & transferring title (must submit original title w/application)	$35.00	☐ Add a lien to a title* (must submit original title w/application)	$10.00
☐ 1 yr registration without title*	$10.00	☐ 1 yr registration with new title*	$30.00	☐ Add a title*	$20.00
☐ 3 yr registration without title	$25.00	☐ 3 yr registration with new title	$45.00	Renewal Registration (only complete Sections 1, 4, and 5)	
☐ 1 yr registration for dealers only* (dealers only complete Sections 1 and 5)	$10.00	☐ 1 yr registration without title*	$10.00	☐ 1 yr registration*	$10.00
☐ 3 yr registration for dealers only (dealers only complete Sections 1 and 5)	$25.00	☐ 3 yr registration without title	$25.00	☐ 3 yr registration	$25.00
☐ Permanent registration* (Government Entities Only)	No Fee	☐ Transfer permanent registration* (Government Entities Only)	No Fee	☐ 1 yr Commercial Fishing**	No Fee

* Transaction not available at Wildlife Service Agent Locations. Must mail to NCWRC Raleigh Office at the address listed below.

**Transaction only available at NCWRC Raleigh Office or Division of Marine Fisheries Field Offices. Must submit, with application, proof of a valid commercial fishing vessel registration issued by DMF.

Duplicate Registration (only complete Sections 1, 4, and 5)

☐ Duplicate Registration $2.00

Figure VI-3. North Carolina Vessel Registration/Titel/Renewal Fees (N.C. Wildlife Resources Commission)

Fuel Taxes

As stated, both the federal government and state government collect taxes paid on gasoline or diesel fuel purchases made in the state. In North Carolina, one-sixth of 1% of the total State fuel taxes is collected and used to support general boating programs. Based on the recent survey conducted by BoatU.S., this amounts to approximately $1.4 million revenue. As stated, many other coastal States including California, Oregon, Mississippi, South Carolina, and Maine (see Figure VI-1) collect at least 1% of the marine fuel taxes for boating related programs. California generates approximately $47 million annually by collecting 1-2% of the total gas tax revenue, and uses this money to fund boating facilities, education and safety. If North Carolina increased the amount collected to 1% of the total State fuel taxes, the expected revenue would be approximately $8.4 million. Excluding $1.4 million already earmarked for boating related programs, the available funding would be approximately $7 million. It should also be noted that North Carolina currently offers fuel tax refunds in the amount of $0.18 per

gallon for applicants who report fuel purchases made for recreational boating purposes. Excluding this program may also increase the potential revenue generated from collection of a portion of marine fuel taxes.

Personal Property Taxes on Boats

In North Carolina, personal property taxes are excised on owners of boats, trailers, and/or motors similar to personal property taxes paid on motor vehicles. These taxes vary by county and are typically based on the value of the vessel. The revenue generated from these taxes does not currently support boating related programs. As stated, there are approximately 360,000 registered boats in North Carolina. Without knowing the total value of these boats and the various tax rates excised in each county, it is difficult to assess the potential revenue that is currently generated from personal property taxes. Since these revenues currently go to each county, the rate may have to be increased to generate additional revenue to support shallow draft waterway maintenance.

Waterway User Fees

Similar to personal property taxes, the state could impose user fees for waterway usage. User fees are widely implemented for various initiatives throughout the U.S. For example, many state and national parks employ a user fee program through park access fees. Additionally, many coastal jurisdictions charge beach access user fees in various forms ranging from hourly fees paid at a beach access point to seasonal permits. In May 2003, the Atlantic Intracoastal Waterways Association reported on potential user fees to be implemented by the Federal government on inland waterway users. These proposed fees would have supported operations and maintenance programs, as current fuel taxes collected from commercial waterway users can only be used towards new construction. North Carolina could implement a user fee program wherby recreational boaters accessing the waterways, channels, or inlets must have user access via a permit paid seasonally or annually. Fees could be set so that the State generates all or a portion of the revenue required to maintain the shallow draft channels based on the average number of boats registered in North Carolina and the percentage of those boaters that use the coastal waterways. Challenges in implementation would be enforcement which would require personnel unless coupled to all boaters as part of yearly registration fees.

Summary of Financing Options

Various financing options were reviewed and the viability of their implementation in North Carolina for shallow draft channel maintenance and management presented. Existing State and Federally imposed taxes and/or fees, most importantly the use of existing marine fuel taxes, were addressed. State-level programs implemented in Florida and Maryland which utilize specific funding to support waterway maintenance and management were detailed. Directors of these State programs both noted that key elements to their success included cooperation with local governments and the USACE, and long-term project planning.

Based on the total costs of dredging and associated management of shallow draft channels various strategies could be employed by the State utilizing one or more of the various taxing or fee-based programs. The property tax assessment indicated that North Carolina would have to impose a substantial tax on real property within the coastal counties to achieve a range of financing levels required. Given that these rates were significantly higher than the rates imposed through FIND, the viability of this option alone is questionable. Other options that include existing taxes or fees that are currently funneled to specific programs, such as boat sales taxes and registration fees may also be difficult to implement unless rates of taxation or fees were increased or funding purposes shifted. Based on findings of the economic impacts study, it is certainly a reasonable argument that North Carolina's shallow draft channels should be considered State highways that must be maintained. Of the presented options, several other coastal states are collecting a higher percentage of marine or total fuel taxes to support marine and boating related programs. Waterway user fees may be another viable option which are not currently imposed and could be coupled with annual registration fees. These fees are further justified if only charged to recreational boaters who use those waterways and directly benefit from their maintenance.