

MANAGEMENT TOOLS TO MINIMIZE THE IMPACTS OF RESIDENTIAL DOCKS AND PIERS

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Abstract

To comprehensively manage docks, coastal managers must have both the latest science to support their decisions, and the laws and policies in place to implement new management techniques. This past November NOAA hosted a workshop to engage resource management professionals in promoting better dock and pier management tools. The workshop compiled and evaluated various regulatory, planning, design, and construction techniques that can be used to minimize the environmental impacts from small docks and piers. This talk presents the results of this workshop, describing the range of existing regulations and showcasing programs incorporating progressive and innovative management tools. As follow-up from the workshop, NOAA is developing a searchable, web-enabled database to house information on state regulatory and planning programs used to manage docks. The database will help managers improve and justify their regulations and permitting processes by providing examples of how other states handle similar circumstances. Information in the database can also be used to develop new standard operating procedures, support permit denials when the impacts of a proposed project are unreasonable, and develop dock management plans. The session will conclude with a discussion on regional outreach efforts to promote the information learned during the national workshop to a wider audience. This is one of three related talks on Integrating Science, Policy, and Management of Docks and Piers. Also see *Assessing Environmental and Aesthetic Impacts of Docks and Piers* (R. Kelty) and *Visual Impact Assessment of Docks and Piers—Theory and Practice* (S. Bliven) also included in these proceedings.

Introduction

Few issues confronting coastal managers are as divisive or difficult to manage as regulating the construction of private recreational docks and piers. The number of dock permit requests has increased significantly over the last few decades and dock authorizations are now the single most frequently sought permit from coastal managers. For example, the number of dock permit requests received each year in South Carolina increased ten fold over the past two decades from 80 to over 800. Many coastal managers and citizens are concerned about this proliferation of docks and the potential impacts numerous private docks may have on the environment, navigation, and the ability of the public to access the waterfront. Therefore, coastal managers have requested additional information on the suite of management techniques—both regulatory and non-regulatory—that they can employ to better manage dock and pier growth.

National Management Tools Workshop

To provide coastal managers with the tools they need to improve dock and pier management, the National Oceanic and Atmospheric Administration's (NOAA) Office of Ocean and Coastal Resource Management (OCRM), National Centers for Coastal and Ocean Science (NCCOS), and the Coastal Services Center (CSC), hosted a workshop, *Residential Docks and Piers, Phase II: Management Tools*, November 18-19, 2003 in Durham, NH. This workshop built upon an earlier workshop, *Developing a Science-based Decision Support Tool for Small Dock Management, Phase I: Status of the Science*, which NCCOS sponsored the previous winter (see R. Kelty, *Assessing Environmental and Aesthetic Impacts of Docks and Piers*, also included in these proceedings).

The purpose of this management workshop was to: (1) compile and evaluate available tools (planning, regulatory, design and construction techniques) for dock and pier management; and (2) initiate planning for regional meetings to inform a larger audience of coastal managers, planners, and local decision makers about that was learned during the first two national workshops. Fifty participants from coastal states across the country (ME, NH, MA, RI, CT, RI, NJ, NY, MD, NC, SC, GA, FL, AL, MS, WI and WA) attended the two-day workshop. Participants included a mix of coastal regulatory, planning and policy staff as well as outreach staff from the National Estuarine Research Reserves (NERRs) and SeaGrant Programs, several engineers, and an environmental lawyer.

The following is a summary of the presentations and small group discussions that occurred at the management tools workshop and a discussion of several follow-up projects that have stemmed from the two national workshops: a searchable database on dock management tools and regional outreach efforts.

Regulatory Techniques

Currently, regulatory techniques are the most common method states use for controlling dock placement and design. At the state level, they rely on three primary legal bases for their regulatory programs: (1) police powers (the state's authority to regulate for public health, safety and welfare); (2) public trust (the state's authority and obligation to protect important public resources including coastal land, tidal land, submerged land, and coastal waters); and (3) ownership (the state's proprietary interest in property and property rights through real property, fee interest, easements, eminent domain, leases and licenses). While not as widely used, states can also use authorities they have through tax law (e.g. the ability to levee real estate taxes) and contract law (e.g. the ability to craft deeds, easements, covenants, and siting agreements) to regulate docks and piers. At the local level, municipalities also have the ability to regulate dock placement and design through a variety of regulatory techniques such as zoning overlays, subdivision controls, building codes, ordinances, harbormaster control, and dock registration programs. (McGregor 2003)

In addition to these commonly used regulatory techniques that many states and municipalities already rely on, there are several new or emerging regulatory tools can be used to address dock management from a slightly different angle. To encourage docks to adhere to set standards or to promote community docks instead of individual docks, states and local governments could offer incentive programs such as subsidies, tax reductions, or a streamlined permitting process. Conversely, state and local governments could use disincentives such as assessing a displacement or occupancy fee for use of submerged land to deter dock permits. Dock permit applications could also undergo more stringent scrutiny such as with an environmental impact statement (EIS) or an Area of Environmental Concern. The regulatory body could also require the applicant to demonstrate a need for a dock. Developers often install deep water docks to increase the property value regardless of whether or not the future homeowner will own a boat that requires deep water access. Likewise, unless a homeowner owns three boats, it is not necessary to permit them a dock that can berth three vessels. States and municipalities can protect sensitive habitats or areas of historical significance by placing density or timing restrictions on docks through the use of zoning ordinances or seasonal restrictions for dock construction. Finally, states should ensure that the dock permits issued are consistent with existing management plans such as the state's coastal zone management plan, municipal harbor or coastal plans, and local master plans. (McGregor 2003)

Planning and Zoning Techniques

The last two regulatory techniques (zoning and plan consistency) discussed in the above section are going to be extremely important in the future of dock and pier management. The environmental, social and aesthetic problems associated with docks are not caused but just one or a handful of docks. These problems only arise with the increasing "sprawl" of many docks. Therefore, it is critical that states consider the cumulative impacts of docks if a full build out were to occur. After all, the first dock permitted opens the door for many more docks. It is very difficult for the state to deny the tenth dock permit if they have already approved dock permits for nine of its neighbors. However, the current case-by-case permit review process that each individual dock application undergoes does not address the sprawl or cumulative impacts issue (Bliven 2003).

Thus, the only way to address the cumulative impacts of docks is for states to employ a more comprehensive management scheme with a strong foundation in planning and zoning. For planning and zoning efforts to be successful, they first must have a well-defined and limited boundary (O'Beirne 2003). The larger an area encompassed in a plan, the more difficult it will be to develop and implement a successful program. In addition, management plans and zoning overlays must be based on community values; this is critical for public acceptance and legal support (Bliven 2003). Finally, plans should also be fluid and updated or renewed regularly.

Docks and piers can be addressed through a variety of management plans including: local coastal zone management plans; harbor management plans; regional plans; and special area management plans (SAMPs). For example, Pleasant Bay, Massachusetts and Ashley River, South Carolina both have SAMPs that address concerns over dock

proliferation in these areas (O’Beirne 2003). Regardless of the type of management plan chosen, the plan developed should designate areas that are suitable for dock growth and areas that should be protected. This may entail establishing limits for the maximum number of docks allowed in an area or prohibiting docks all together in a specific area. To limit “sprawl,” plans should also encourage the use of communal or community docks as opposed to individual docks. For example, it may be best to have one or two community docks for a new waterfront subdivision instead of allowing each parcel to have their own private dock. Similarly, plans may choose to promote marinas as an alternative to individual docks. States may also want to consider managing groups of docks as marinas (Ross 2003). Clusters of docks often have similar environmental impacts as a marina but marinas are subject to more stringent regulations.

Management Tools Database

One of the best outcomes of the management workshop was that it enabled states to talk with one another and learn what other states are doing for dock and pier management. Therefore, participants thought it would be very helpful to compile the information into a searchable, web-enabled database that could be the “resource” for dock and pier management. Although participation in the database would be voluntary, all workshop participants said they were willing to enter in the necessary information for their state. In addition, relevant information the NOAA Coastal Services Center collected for four southeastern states in their *Residential Docks and Piers: Inventory of Laws, Regulations, and Policies for the Southeastern United States* will be transferred to the new database so as to avoid duplication of this information.

The screenshot shows a Microsoft Access form titled "Dock and Pier Management Database" for the state of Alabama. The form is divided into two main sections. The first section, "GENERAL CONTACT INFORMATION FOR DOCK AND PIER MANAGEMENT", contains three columns of input fields for "LEAD AGENCY FOR DOCK AND PIER MANAGEMENT", "SECONDARY AGENCY", and "OTHER AGENCY". Each column has fields for "AGENCY", "CONTACT", "PHONE #", "E-MAIL", and "WEBSITE". The second section, "CONTEXT FOR DOCK AND PIER MANAGEMENT", contains three input fields for "Number of docks/piers in state:", "Number of docks and piers permitted annually:", and "Number of shoreline miles:". Below these are two large text areas for "Definition of docks and piers:" and "Overall Policy on Docks and piers:". At the bottom, there is a "General Description of Management Programs:" text area. The form is displayed in a Microsoft Access window with a menu bar and a toolbar.

Figure 1. Overview Tab from the prototype Dock and Pier Management Database.

The database organizes the information for each state into nine different tabs: (1) Overview; (2) Regulatory Programs; (3) Planning and Zoning; (4) Leasing; (5) Acquisition; (6) Siting Criteria; (7) Design Criteria; (8) Construction Criteria; and (9) Miscellaneous. The “Overview” tab will contain general contact information for the point person and/or agency(ies) within each state that handle dock and pier management as well as convey general background information for each state such as the number of docks permitted per year, the number or shoreline miles within the state and how the state defines a dock (Figure 1). The general background section will also contain a brief one or two paragraph description of how the state manages docks and piers to allow the user to quickly obtain a summary of the state’s overall program without reading through the more detailed information.

The Regulatory, Planning and Zoning, Leasing, and Acquisition tabs provide space for each state to describe several programs or authorities they use to manage docks (Figure 2). There will be an opportunity to link directly to the applicable authority or management plan if one is available on line. The database will also provide information about court cases that may have challenged the program. For specific regulatory or planning and zoning programs, the state will be able to check a series of yes/no check boxes to indicate if the program can be used to address specific issues related to dock management such as siting, design, or construction aspects or impacts the dock may have on habitat, navigation, public access, or aesthetics (Figure 2). The information contained in the check boxes can then be used in conjunction with the search tool to perform specific queries. For example, a user could easily obtain a list of all the techniques states use to address dock siting or limit impacts to habitat.

The Siting, Design and Construction Criteria tabs are designed to allow each state to briefly describe specific standards or regulations they have to direct dock siting, design and construction. For example, does the state have specific requirements of siting a dock near shellfish beds, mooring areas, or historical features? Has the state established maximum lengths or widths for docks? Does the dock have to be a specific height above vegetation? Are there specific construction practices that must be followed such as using preferred or required building materials or meeting temporal or seasonal constraints for construction activities? These are just a few examples of the types of information that will be collected under these “criteria” tabs.

Figure 2. Planning and Zoning Tab from the prototype Dock and Pier Management Database.

Finally, the Miscellaneous tab collects information on whether or not the state has created a checklist or standard operating procedures for evaluating dock permit applications or has education and outreach materials available to dock and pier management issues, etc.

Regional Workshops

The management tools workshop and earlier science workshop compiled a lot of useful information on dock and pier management. However, only a handful of people could attend each workshop. Therefore, we propose holding several regional workshops throughout the country in order to share the information learned during the national workshops with a wider audience. The regional workshops will also set the stage for improved communication on dock and pier issues within each region and give the regions an opportunity to cater the general national information to meet their specific needs. Since NOAA sponsored the first two workshops we hope state coastal management programs and other organizations and groups will be willing to co-sponsor the regional workshops.

Regional workshops should be designed to target a wide audience where ever possible by including coastal managers, the Army Corps of Engineers, non-government organizations, contractors, consultants, local decision makers and the general public. However, to meet their specific needs, the region may decide to hold several mini-workshops to target different groups.

There are many different groups that focus on education and outreach that could assist with the Regional Workshops such as the National Estuarine Research Reserves (NERR), SeaGrant Programs, National Estuary Programs and state coastal management programs. Several representatives from NERRs and SeaGrant programs attended the national management tools workshop and are interested in assisting with regional outreach efforts.

Because each region will likely be presenting on the same core information, NOAA has committed to developing model PowerPoint presentations to help with the regional outreach efforts and to prevent the regions from having to duplicate efforts. Presentation topics will most likely include: Environmental and Aesthetic Impacts of Residential Docks and Piers; Visual Impact Assessments: Theory and Practice; BMPs for Minimizing the Impacts of Your

Residential Docks and Piers; and Management Techniques for Docks and Piers. The model presentations can be modified at the regional level to meet the specific needs of the region.

Literature Cited

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