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Virginia Marina Needs Assessment: Summary Statistics

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Virginia Institute of Marine Science

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DRAFT REPORT

Virginia Marina Needs Assessment: Summary Statistics

Completed on behalf of the
Virginia Department of Health,
Office of Environmental Health Services
and the
Virginia Sea Grant College Program

By

Thomas J. Murray
Marine Business and Coastal Development Specialist
Sea Grant Marine Advisory Program
Virginia Institute of Marine Science
Gloucester Point, Virginia


November 2000
Virginia Boating Access Needs Assessments

Background
In an effort to support Virginia's application for federal grant funds under the Department of Interior's "Boating Infrastructure Grant Program" (Grants), the Marina Technical Advisory Program (MTAP) at the Virginia Institute of Marine Science has undertaken assessment of the state's recreational boating infrastructure needs.\(^1\) A total of $32 million has been authorized over four years to fund this new program. It is designed to help states develop and maintain facilities for transient non-trailerable \(26'\ and over\) recreational boats. The Virginia Department of Health (VDOH) is providing overall leadership in the Boating Infrastructure Grants process supported by the The Virginia Sea Grant Program in completion of this needs assessment.

The completion of a boating infrastructure needs assessment, in furtherance of the states eventual application, was to follow the guidelines for surveys and survey instruments presented by the U.S. Fish and Wildlife Service in their proposed final regulations published January 20, 2000. The survey was to be conducted in a way that included facility providers that serve boats of 26'in length and over and facilities that serve boats of less than 26'. In view of the fact that initially it was not known which marinas - or how many - included the two groups, a single survey instrument was considered the most efficient and was drafted to follow the "Grants" Proposed Rule and associated survey document found in the Federal Register. The survey instrument included the required questions for both size classes of boats.

The selection of marinas to be surveyed began with the evaluation of a list of marinas in Virginia provided by VDOH. The list was further evaluated and sorted to contain marinas located in zip codes corresponding to Tidewater Virginia. The focus upon the coastal and estuarine region permitted evaluation of the most extensive component of the marinas
sector in Virginia, and that region with potentially the greatest demand for growth in transient boater access.

**Survey Methodology**

At the present time there is some uncertainty about the number of marinas in Virginia. An accurate count is nearly impossible due to the conversion of marinas into condominiums, name changes due to sale of the marinas, etc. To initiate the infrastructure needs assessment; VDOH provided a marina database, which contained 829 contacts. The list also identified which of the contacts was a marina and offered services in addition to dockage. From that subset, a sample population was derived representing contacts with mailing zip codes in Tidewater and coastal Virginia locations. The reduced population of 385 marinas' contacts was sent a survey instrument (Appendix A) and cover letter of explanation during the week of August 12 requesting the completion of the survey with return by September 15, 2000.

In order to better develop a “control” number of marinas, available databases were also obtained and reviewed. One major commercial directory is the “Marine Publishing Company” (MPC) Directory. The widely used MPC Boaters Directory covers all regions of the nation and is updated regularly. With on-line capabilities the MPC allows detailed searches by industry type and region. The data assimilated as a result of the MPC search listed a total of 205 marinas in the Chesapeake region of Virginia. A cross check of the

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2 DOH defines a marina as: “any installation operating under public or private ownership, which provides dockage or mooring for boats and provides through sale, rental or fee basis, any equipment, supply or service (fuel, electricity or water) for the convenience of the public or its lessee, renters or users of its facilities.” “Commonwealth of Virginia Sanitary Regulations for Marinas and Boat Moorings”, State Department of Health, VR-355-17-01 Article I Part I, Richmond, Va., 1990.
3 The preliminary survey instrument was field tested during personal visits with three marina operators and their revisions and recommendations for clarity, etc. were included in the instrument prior to its printing and final distribution.
MPC list with the refined DOH marina list allowed further confirmation of selected survey recipients and added further integrity to the overall marina population estimates.  

Additionally, a list of 100 marina facilities in the Tidewater Region of Virginia developed for an earlier assessment intended to assess implementation of water quality best management practices was reviewed to insure their inclusion into the subject marina survey list.  

A search of the U.S. Bureau of Labor Statistics (BLS) database was conducted to obtain further indicators of the number of marinas in Virginia. The BLS data on employment and wages (ES202 Covered Employment & Wages) includes information on the number of establishments by county for the nation and Virginia. Utilizing the standard industrial classification code (SIC) for marinas (SIC 4493) a search of this database was conducted. The most recent ES202 data available for Virginia was 1998. The BLS information reflected a total of only 93 covered marinas for the State as a whole.  

Survey Results
The initial survey resulted in 48 returns for incorrect addresses and 36 responses of non-applicability. The later did not complete the survey and explained that they were generally individuals whom, for example: reportedly did not operate marinas or have slips for boats, operated homeowner private piers and docks or condominium docks, owned launch ramps only, had lost marinas structures during Hurricane Floyd. Of the remaining returns, 52 were useable surveys.

In order to broaden the response a second letter of request and survey were sent out to marinas during the first week of October with a request for completion and return by  

October 27, 2000. The second mailing was limited to 150 non-responding marinas considered to be in business by comparing information from the other databases, though personal inquiry with marina industry, and also eliminating addresses that included only the names of individuals not marinas.

**Response Rate**

After adjusting for the above factors it is estimated that a total of 220-250 bona-fide public and private marinas are currently operating in the Tidewater Virginia area. A total of 72 complete and usable surveys were received for an estimated response rate of 29-33%. An additional 36 or 14-16% of the questionnaires were returned but could not be used due to either non-applicability or incomplete information. The overall return rate for marinas was 43-49%.

The reader should be aware that the sample data reported here is not to be interpreted as based upon a scientifically selected sample within prescribed margins of error. Due to the complexity of the marina industry no assessment of the accuracy of the sample data can be made. The mailings actually attempted to contact the entire population of marinas in Virginia's coastal zone. The averaging of results and reported ranges of data reported here may be considered representative of marinas in Tidewater Virginia, however, it should be recognized that wide differences exist between marinas across and within regions of the state. Also it should be emphasized that the nature of the survey was to assess the need for and interest in government associated grants for boating infrastructure development. Sufficient returns that commented that there was no interest in such a program are indicative of some potential bias in the survey results and may further explain the response rate.

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In addition, the reader should note that the responses were made as best estimates of the marinas managers responding; and while not formally verified, are believed to be representative for this purpose – evaluating Virginia’s marina industry infrastructure needs, relative to transient boat service in a format proscribed by the funding agency.
The Survey Data Summary

Descriptive Analysis of the Sample

Table 1. Average % of facility use by number of boats served in most recent year

<table>
<thead>
<tr>
<th>Boat Length</th>
<th>% Power Boats</th>
<th>% Sailboat</th>
<th>% Pontoon Boat</th>
<th>% Other Recreational</th>
<th>% Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 26'</td>
<td>25</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>26' and Over</td>
<td>31</td>
<td>16</td>
<td>1</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>25</td>
<td>3</td>
<td>14</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 2. Average use and accommodations of marinas reporting # (range)

<table>
<thead>
<tr>
<th>% With Transient Boats</th>
<th># Transients Boats</th>
<th>Largest Boat Length</th>
<th>Largest Draft</th>
<th># Of Wet Slips</th>
<th># Moorings</th>
<th># Out Water spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>65%</td>
<td>25 (0-2500)</td>
<td>63 (26-210)</td>
<td>6 (2-15)</td>
<td>70 (2-440)</td>
<td>4 (1-80)</td>
<td>50 (0-500)</td>
</tr>
</tbody>
</table>

Requirements for Marina Use

- 62% of marinas reported that they operated on a “first come first served” basis.
- 5% of responding marinas required club membership.
- 30% of respondents indicated that reservations were either required or recommended.
- 74% of responding marinas charged a dockage fee.
- 1.5% of respondents had governmental or special use permits.
- 3% of respondents posted “off limits areas”.
- 14% of respondents had use restrictions for seasonal or peak events (for example 4th of July).
- 3% of respondents have “Hourly Use Restrictions.”

7 The respondents in some cases provided breakdowns by numbers rather than percentages, and for total rather than size class thus the percentages do not equal 100% by length of boat. The results should be considered indicative of the relative composition of the marina customers’ boat size.
Types of services provided at Virginia's Tidewater marinas:

» 80% offered transient slips or tie-ups.

» 15% offered transient moorings.

» 56% offered gasoline sales.

» 48% offered diesel sales.

» 91% offered utilities:
  i - Power 91%
  ii - Water 91%
  iii - Other 7.5%

» 91% offered restrooms/showers.

» 77% provided sewage pump outs.

» 79% offered dump stations for portable toilets.

» 47% provided haul-out facilities.

» 48% furnish necessary repair and maintenance services (electrical, mechanical, painting, etc.).

» 56% provided a boat-launching ramp.

» 41% offered additional services and shore-side amenities such as shuttles, daycare, recreation facilities, etc.).

Overall Rating of Facility Condition:

» 8% rated their facility “Excellent”: “with no improvements needed.”

» 28% rated their facility “Good”: “will require upgrades within 10 years.”

» 41% rated their facility “Fair”: “will require upgrade within next 5 years.”

» 23% rated their facility “Poor”: “requires upgrade now.”
Average estimated replacement costs of improvements; and, the annual maintenance costs for responding marinas.

**Average Replacement Costs** of Existing Building and Improvements:
$1,239,676 (range $7,500-$6,000,000)

**Average Needed Improvement Costs:**
$317,868 (range $2,000-$2,000,000)

**Average Maintenance Costs:** Existing Building and Improvements:
$ $25,046 (range $500-$85,000)

<p>| Table 4. Number of Responding Marinas Needing Repairs Replacements or Additions⑧ |
|-------------------------------------------------|--------|--------|--------|--------|</p>
<table>
<thead>
<tr>
<th>Repair</th>
<th>Replace</th>
<th>Expand</th>
<th>Add New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transient slips or tie-ups</td>
<td>11</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Transient Moorings</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Gasoline Facilities</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Diesel Facilities</td>
<td>7</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Utilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>10</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Water</td>
<td>9</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Restrooms</td>
<td>15</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Oil Disposal</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Sewage Pump-outs</td>
<td>3</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Haul-out Facilities</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Painting Facilities</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Boat Launching Ramp</td>
<td>17</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

⑧ The numbers are not additive due to multiple responses by marinas regarding individual “needs”.

9
Primary Reasons for Boaters selecting individual marinas.

Average ranking of the primary reasons that boaters use individual marinas with #1 being top reason:

- Access to nearby cultural, historical attractions - 4
- Access to natural, scenic attractions - 3
- Access to services (shopping, dining) - 4
- Good water quality for fishing - 2
- Good water quality for swimming - 5
- Sheltered Location - 2
- Access to Primary Residence - 3
- Other - 1

Other reasons specified: For example, modern clean facilities; boatyard and services located near offshore and inland routes; cost; covered slips; no other nearby access; access to sailing grounds; only fuel services within miles; access to ICW; boat repairs; quality of work; reputation and location; ease of boat handling-dry storage.

Virginia Marina’s Interest in the Boating Infrastructure Grants Program

Percent of responding marinas that would be interested if public funding sources were available for facility repair, improvement, expansion, or additions:

YES 45% NO 5% MAYBE 8% Request Further information 25%
Appendix A Marina Survey 2000
Marina Survey 2000

Virginia Recreational Boating Infrastructure/Needs Assessment
Fax: 804-684-7161 or mail to:
VIMS - Attention-Tom Murray-P.O. Box 1346-Gloucester Point, VA 23062
Please return by September 15, 2000

If you operate a public or private marina or other tie-up facility that serves boats in coastal Virginia please answer the following questions:

1. Please identify the primary boating facility you operate or manage in the State:
   Marina Name: _________________________________________________________
   Address: _____________________________________________________________
   Location: Lat/Long: ________________________________
   Name of contact person completing survey: ______________________________
   Telephone: ________________________________

2. For your primary facility listed above, please estimate the percentage of use for each boat type, where the percentage of use for all boats equals 100%:

<table>
<thead>
<tr>
<th>Boat Length</th>
<th>Power Boats %</th>
<th>Sailboat %</th>
<th>Pontoon % -Boat</th>
<th>Other %</th>
<th>Commercial %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 26'</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 (a). How many "transient" boats used your marina during this most recent year? ________________________________

   What is the largest boat, which you currently can accommodate at your marina?
   Length: ___________ Draft: ___________

3. How many boat slips and moorings are available at your marina? Boat slips ____ Moorings ____

4. Please list the number of out-of-water or dry stack storage spaces available: ________________________________

5. Please indicate with a check mark or "x" any requirements for a boater to use your marina:
   None (first come first served) ______ Club membership required ______
   Reservations required ______ Dockage fee charged ______
   Any governmental special use permits ______ Has "off limits area ______
   Seasonal or peak events (for example 4th of July) ______ Use restrictions ______
   Hourly use restrictions ______ Other? Please explain briefly: ____________________________________________

6. Please identify the types of services provided at your marina:
   a) Transient slips/ Tie-ups ______ b) Transient moorings ______
   c) Gasoline ______ d) Diesel ______
   e) Restrooms/showers ______ f) Utilities: i. Power ______ ii. Water ______ iii. Other ______
   g) Sewage Pump outs ______ h) Dump stations for portable toilets ______
   i) Haul-out facilities ______ j) Services (electrical, mechanical, painting, etc.) ______
   k) Boat launching ramp ______
   l) Other, please identify briefly (for example shore-side amenities such as shuttles, day-care, recreation facilities, etc.) ________________________________
7. Please indicate how you rate the overall condition of your facility:
   Excellent-no improvements needed __
   Good-will require upgrades within 10 years __
   Fair-will require upgrade within next 5 years ___
   Poor-requires upgrade now _______

8. If Answer to Question 7 above was “Excellent” you may skip this question.
   What improvements repairs, replacements or additions are needed at your facility?
   (Please indicate with a check mark or an “x”)

<table>
<thead>
<tr>
<th>Repair</th>
<th>Replace</th>
<th>Expand</th>
<th>Add New</th>
</tr>
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<tr>
<td>Transient slips or tie-ups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transient moorings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasoline facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities: Power:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water:</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Thinking about your local area or other areas of the State with which you are familiar, and where no facilities currently exist, what from the table in question 8 should be built? (please specify site, area of river, lake, etc.) _______________________________ 

10. Please rank the primary reasons that boaters use your facility with # 1 being the top reason:
    Access to near-by cultural, historical attractions __
    Access to natural, scenic attractions ______
    Access to services (shopping, dining) ________
    Good water quality for fishing _________
    Good water quality for swimming __________
    Sheltered location _______________________
    Access to primary residence _____________
    Other (Please specify) __________________

11. Please estimate the replacement costs (not including land); and, the annual maintenance costs for your marina. (For example, you can use the “Insured Value” on the facilities property casualty insurance policy to readily estimate replacement cost).

   Replacement Costs:
   Existing building and additional structures: $ __________
   Also please add the estimated cost of needed improvements in question 8:
   Needed Improvement Costs: $ ______________________
   ______________________
   Maintenance Costs:
   Existing building and additional structures $ __________

12. If public funding sources were available for facility repair, improvement, expansion, or additions, would you be interested? YES _____ NO ____ MAYBE ____ I’d like more information. ______
## INDUSTRY NEEDS ASSESSMENT

What priorities should the Marina Technical Advisory Program at VIMS have to assist you in your marina operation? For example, Best Management Practices (BMPs) have been developed in conjunction with the marina industry and regulators. Please indicate below the topics that you would be interested in obtaining assistance with, by ranking them according to your overall priority areas:

1. Site Considerations For New and Expanding Marinas- (For example; legal setting, permit information, marina flushing, water quality, etc.)
   **Priority (1-5) ___**

2. Marina Design and Maintenance (For example; marina facilities and structures, shoreline stabilization, protecting sensitive habitat, etc.)
   **Priority (1-5) ___**

3. Emergencies (For example, storm preparations, fires, medical, legal setting, etc.)
   **Priority (1-5) ___**

4. Petroleum (For example; spill prevention control and countermeasure plan (SPCC), spill control or retention, regulations and design, bilge-water, etc.)
   **Priority (1-5) ___**

5. Vessel Maintenance and Repair Priority (For example; legal setting, boat cleaning in/out of the water, painting, etc.)
   **Priority (1-5) ___**

6. Habitat and Species (For example; minimizing introduction of exotic species, endangered species legal setting, boat wake impacts, etc.)
   **Priority (1-5) ___**

7. Wastes (For example; management and disposal of hazardous and non-hazardous solids and liquids, fish waste, batteries, etc.)
   **Priority (1-5) ___**

8. Storm-water (For example; landscape management to reduce run off, etc.)
   **Priority (1-5) ___**

9. Sewage and Gray Water (For example; pump-out financial assistance, legal setting, etc.)
   **Priority (1-5) ___**

10. Marina Management (For example; staff training, business practices, educate contractors and patrons, etc.)
    **Priority (1-5) ___**

11. Boater Education (For example; recycling, sewage, fish wastes, etc.)
    **Priority (1-5) ___**

12. Information on Financial Assistance/Loans/Grants
    **Priority (1-5) ___**

13. Most Importantly, please take a moment to list any other areas where your marina business could benefit from targeted information or education; or, any other comments you would like to make regarding Virginia's marina industry. _____________________

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Thank you very much for your assistance with this survey. If you have any questions or need any assistance related to the above priorities please contact:

**WILLIAM & MARY**
**VIMS**
**VIRGINIA INSTITUTE OF MARINE SCIENCE**
**SCHOOL OF MARINE SCIENCE**

Harrison Bressee (804) 684-7768  
Tom Murray (804) 684-7190

*Please return by September 15, 2000*

Fax: 804-684-7161 or mail to:

VIMS - Attention-Tom Murray-P.O. Box 1346-Gloucester Point, VA 23062