

Seaside Special Area Management Plan Recreational Use Study & GIS Layer Written Survey Results

Final Report
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The goal of this Recreational Use Survey of the Seaside of the Eastern Shore of Virginia is to determine which areas experience significant recreational use and / or impact. This survey is not designed to be a comprehensive scientific analysis of the impact of human activity on the Seaside, but rather an assessment of use for planning purposes as a component of the Seaside Special Area Management Plan. Techniques used in the collection of the usage data included aerial surveys, surface surveys, parking lot surveys, interviews with owners and staff of water related businesses, printed surveys and online surveys. To maximize participation, an incentive was provided for survey respondents in the form of a kayak giveaway at random to a survey participant.

The initial survey period was marked by unusual stretches of unfavorable weather. As a result aerial and surface survey results were not highly valuable or reflective of typical use patterns. As the weather improved so did the quality of the survey results. However, the relatively small scale of this project over such a large geographic area limited the number of redundant survey efforts that could be conducted. Interviews at boat ramps and other access points provided high quality data, but in very limited quantities. The decision to move to on-line surveys as well as surveys distributed through advertising in the local newspaper resulted in a significant increase in the quantity of data collected. Unfortunately the precision of the data suffered as a result of the limitations of this format of data collection.



Recreational Boaters on the North End of Cedar Island



Recreational Boaters on the South End of Cedar Island

In the first phase of the survey period the primary data collection method employed was to interview boaters in the parking areas of major boat ramps and to collect data on the approximate geographic distribution of the boaters by recording the states in which boats, trucks, and trailers were registered. While this is far from perfect as a data collection technique, the interviews confirmed that the license information gave an adequate approximation of how far boaters had travelled to utilize the seaside.



Recreational Boaters in the inlet between Cedar and Paramore Islands

Of course it is impossible to tell from license plate surveying alone how many people are in a given boat, where they are boating, and what activities they are engaged in. Given the limited nature of the information being collected, the investment of time and energy involved in obtaining it, and the relevance to the goal of the overall survey, the license plate survey technique was abandoned fairly early in the survey period. However, data collected indicates that there are a significant number of recreational boaters who travel from areas beyond the Eastern Shore to utilize the Seaside barrier island and lagoon systems. Maryland and North Carolina were well represented at all boat ramps on days that were suitable for safe boating with distribution reflecting the common sense assumption that more Maryland boaters utilize the northern reaches of the seaside while North Carolina and Hampton Roads boaters are much more likely to be found in the southern portions of the Seaside. Boats and vehicles were also recorded as being registered in Pennsylvania, New York, Georgia, and Tennessee. Virginia registrations accounted for slightly more than half of the vehicles recorded. As the weather improved the number of vehicles increased as did the percentage of Virginia registrations.

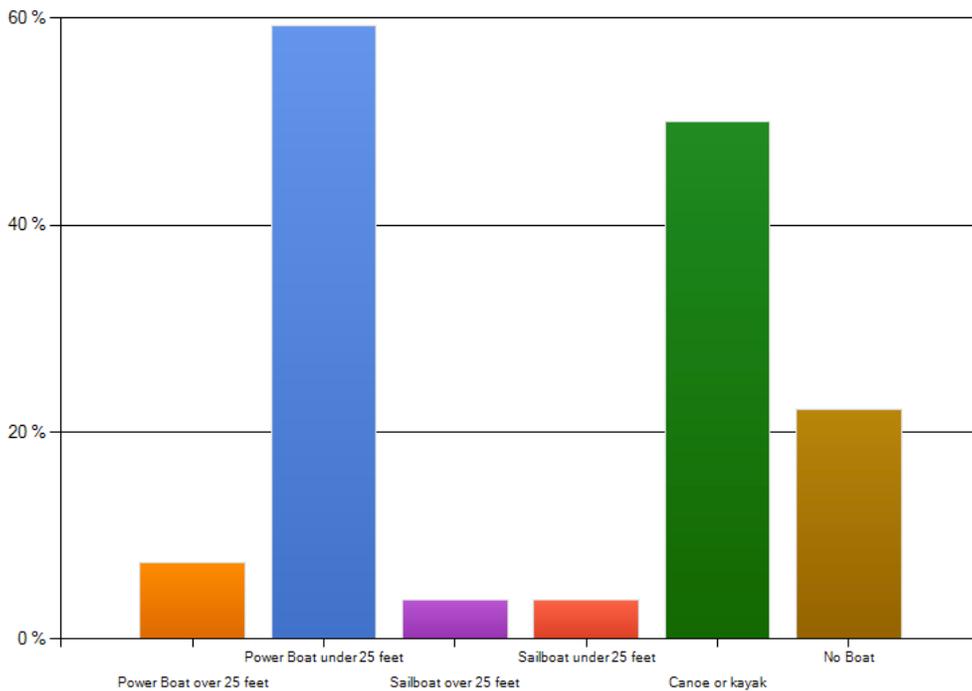
Interviews with boaters conducted at the time of the license plate surveys indicated that many of the traveling boaters were most interested in fishing in the channels and inlets between the islands, and at the mouth of the Chesapeake Bay near the Chesapeake Bay Bridge Tunnel. A number of kayakers were interviewed at the Wise Point boat ramp, nearly 100% of whom were planning on staying within 2.5 miles of the launch site with

Smith Island, Fisherman Island, and Raccoon Island being primary destinations. Kayakers at Willis Wharf and Wachapreague expected to stay within the primary boating channels and had destinations similar to the power boat users at those sites. Kiteboarders interviewed at Oyster were utilizing the marshes of Mockhorn Island as well as those along the mainland coast and travelling south for up to 7 miles. At Chincoteague launch sites most boaters indicated that they had no primary destination, but were intending to remain within Chincoteague Bay. However, it should be noted that the weather was particularly hazardous during most of the interviews conducted at Chincoteague launch sites.

Given the limited amount of data collected through the interview process, the decision was made to recruit survey results from the greater population of the Eastern Shore through online surveying and printed surveys in the local paper. In order to maximize potential participation, a kayak giveaway was included as an incentive to participate. While the increase in data collected was significant, there was a tradeoff in quality and precision due to the limitations of the medium. From the charts below a picture of usage can begin to be distinguished. This rough draft of usage patterns on the Seaside is enhanced by the addition of aerial survey data as well as surface surveying efforts on the water.

One interesting trend that developed through the surveying process was the prevalence of boaters who were confused by the difference between the Bayside and Seaside of the Eastern Shore. Many written and online surveys were returned with Bayside creeks listed as the most used areas on the Seaside. There are many possible reasons for this pattern.

What type or types of boat do you use on the seaside?



Comments Included:

- I own 2 recreational kayaks; go out to the barrier islands with a neighbor in a 20' v-hull.
- Kitesailing (kiteboard)
- Also use a rowing aluminum boat
- 21 ft Southern Skimmer with center console and 90 hp Tohatsu
- 16 foot carolina skiff
- 11 foot aluminum John Boat. 4 HP

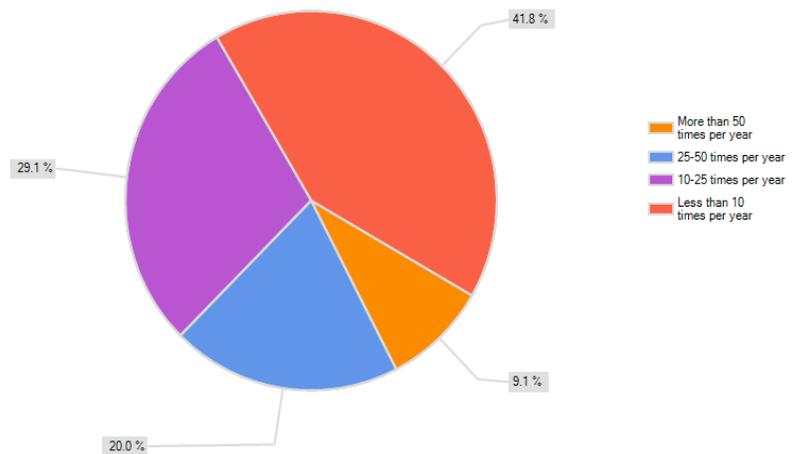
One obvious possibility is a flaw in the design of the survey such that it did not adequately communicate the study area. However, from a review of the completed surveys it seems just as likely that there is a significant lack of boater training and knowledge amongst the recreational boaters on the Eastern Shore. This is reflected by local residents who are not aware of which watershed they are operating in, as well as in those visiting boaters who are unaware of rules and regulations regarding the use of the barrier islands and the coastal ecosystem, or of the hazards to navigation that exist in the form of shallow water, aquaculture operations, and oyster grounds.

The picture of recreational use of the Seaside of the Eastern Shore of Virginia indicates that while usage is quite widespread, there are focal areas that are significant for planning purposes. The barrier island beaches are primary destinations, and the deep water channels that lead to them are obvious thoroughfares for boat traffic. There is also a significant diversity of users on the Seaside.

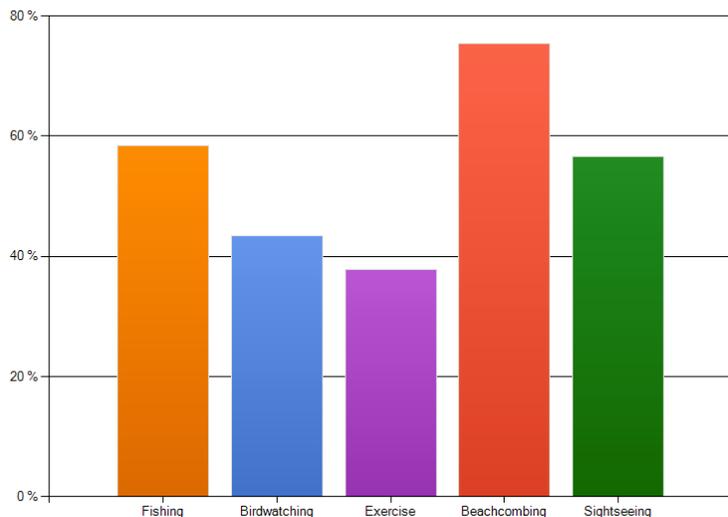
Comments Included:

- Everyday on vacation
- I work on the seaside over 200 days a year. I hunt and take the kids there the other 40-50 days.
- I'd do more if I had a boat.
- I'm not a boater but if our commercial tour guides had more access to the islands I could enjoy this resource and so could other non-boating residents.
- I spend all my free time either swimming or walking the edge of the water looking for junk and sea glass.
- Hoping that will be more once we get a boat or kayak!

How often do you use the Seaside waters of the Eastern Shore for Recreational purposes? (either as a passenger or commanding a vessel)



What are your primary activities on the Seaside?

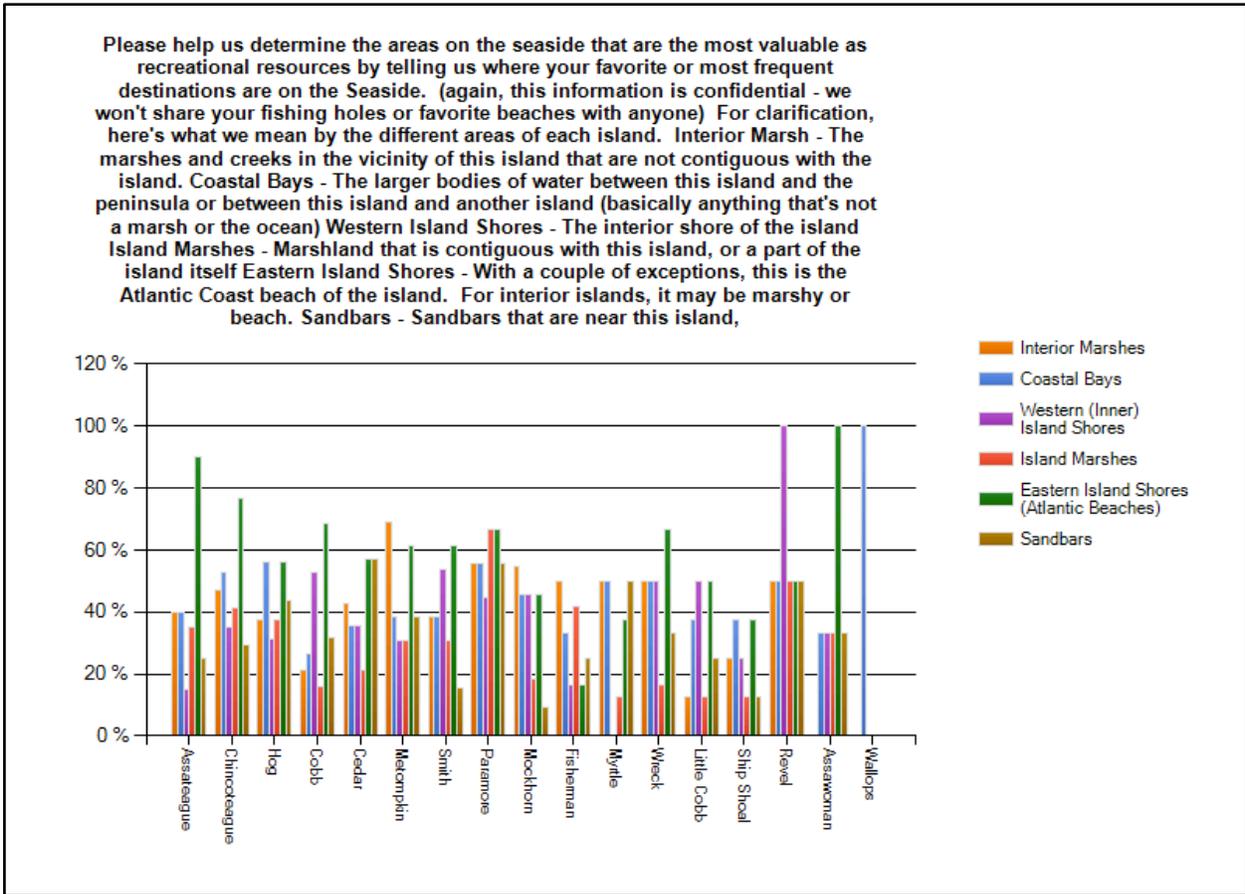


Additional Activities Listed Included:

- Beachcombing
- Boating
- Kayaking
- Swimming
- Kiteboarding
- Photography
- Clamming
- Painting
- Just hanging out and taking it all in



Fishermen in small boats, beachcombers in skiffs, birders in kayaks, and even kiteboarders and other sailors use the seaside regularly and any comprehensive planning effort in this ecosystem should recognize the patterns of recreational use and allocate resources appropriately. Arguably the most consistent thread throughout the survey responses is a desire to spend more time on the Seaside and to explore if further. As technology continues to advance, the population of the Shore increases, and more people learn about the nature of the Seaside, it should be expected that usage in coming years could potentially increase significantly. A failure to plan for this increase in use could result in negative effects on restoration, research, aquaculture, and ecological efforts and infrastructure. Proper anticipation of increased recreational use, and the implementation of appropriate educational programs, signage, and literature can help to direct recreational boaters to areas where their impact can be limited and mitigated.



Default Section

* 1. How often do you use the Seaside waters of the Eastern Shore for Recreational purposes? (either as a passenger or commanding a vessel)

- More than 50 times per year
- 25-50 times per year
- 10-25 times per year
- Less than 10 times per year

Any additional comments

2. What type or types of boat do you use on the seaside?

- Power Boat over 25 feet
- Power Boat under 25 feet
- Sailboat over 25 feet
- Sailboat under 25 feet
- Canoe or kayak
- No Boat

Tell us more about your boat

3. Are you primarily a boat operator or passenger?

- Operator
- Passenger
- Both

Any additional comments

4. What are your primary activities on the Seaside?

- Fishing
- Birdwatching
- Exercise
- Beachcombing
- Sightseeing

Other (please specify)

5. Please help us determine the areas on the seaside that are the most valuable as recreational resources by telling us where your favorite or most frequent destinations are on the Seaside. (again, this information is confidential - we won't share your fishing holes or favorite beaches with anyone)

For clarification, here's what we mean by the different areas of each island.

Interior Marsh - The marshes and creeks in the vicinity of this island that are not contiguous with the island.

Coastal Bays - The larger bodies of water between this island and the peninsula or between this island and another island (basically anything that's not a marsh or the ocean)

Western Island Shores - The interior shore of the island

Island Marshes - Marshland that is contiguous with this island, or a part of the island itself

Eastern Island Shores - With a couple of exceptions, this is the Atlantic Coast beach of the island. For interior islands, it may be marshy or beach.

Sandbars - Sandbars that are near this island, but are not attached to it

	Interior Marshes	Coastal Bays	Western (Inner) Island Shores	Island Marshes	Eastern Island Shores (Atlantic Beaches)	Sandbars
Fisherman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smith	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Myrtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mockhorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ship Shoal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wreck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Little Cobb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cobb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Revel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paramore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cedar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metompkin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assawoman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wallops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chincoteague	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assateague	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please use the comment field to be as specific as possible



6. How did you find out about this recreational use survey?

- Newspaper
- Shorekeeper Newsletter
- E-mail
- Word of Mouth
- Facebook
- Twitter
- Direct Request

Other (please specify)

7. Would you like to win a FREE KAYAK from the Virginia Eastern Shorekeeper? (In order to keep your answers confidential we have designed this survey to hide your personal information from us. If you want to win the kayak, please send us an e-mail telling us that you have completed your survey. 1 entry per person. Multiple e-mails will not increase your chances of winning.)

- Yes, and I'll send an e-mail to SHOREKEEPER@gmail to register to win.
- Yes, and I'd rather include my e-mail in the comment section below.
- No Thanks

e-mail address or other means of contact (optional)

