

A Fact Sheet on the Importance of Rhode Island Beaches

Marisa Mazzotta, James Latimer, and Mikalai Zhukavets

U.S. EPA, Atlantic Ecology Division, Narragansett, RI

May 14, 2012

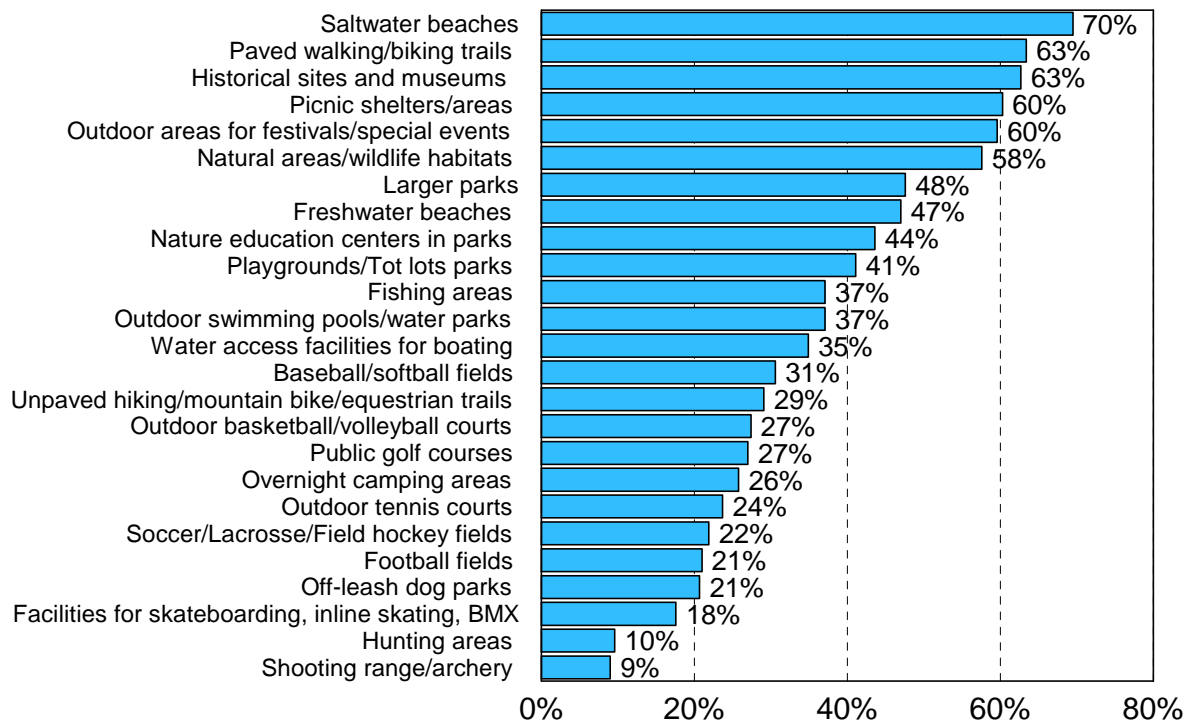
This fact sheet presents a compilation of information related to the importance and economic values of Rhode Island’s beaches.

General facts about beach use and importance of beaches in Rhode Island:

- In total, there are over 20 million “beach visits” in Rhode Island per year (defined as one person visiting a beach for any part of a day); and over 15 million salt water swimming days per year.ⁱ
- The total non-market social value of these beach days is estimated at over \$155 million per year.ⁱⁱ
- On average, about 1.5 times as many people visit beaches on a sunny day, as compared to a cloudy or partly cloudy day.ⁱⁱⁱ
- 70% of RI households surveyed stated that they have a need for saltwater beaches, the most frequently stated need of all outdoor recreational facilities.^{iv}

Q6. Respondent Households that Have a Need for Various Outdoor Recreational Facilities

by percentage of respondents

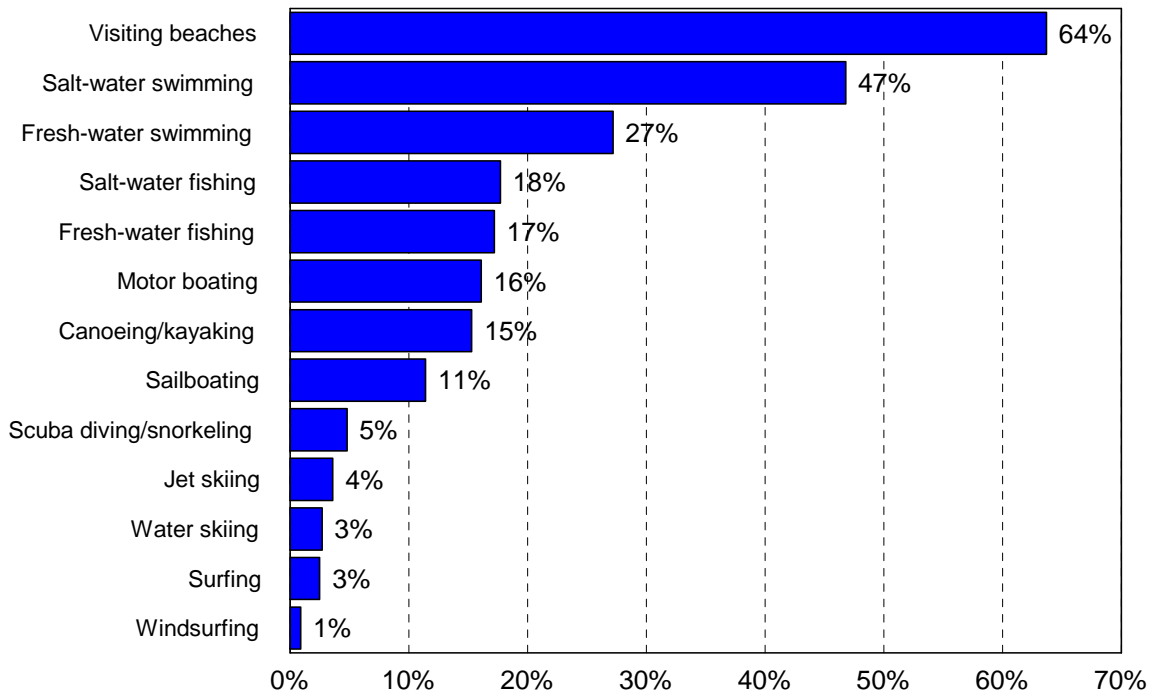


Source: Leisure Vision/ETC Institute (October, 2002)

- 64% of RI households surveyed stated that they had visited beaches over the past year. Visiting beaches and saltwater swimming are the two most popular water-based activities.^v

Q12. Various Water-Based Activities that Respondents Have Participated in Over the Past Year

by percentage of individuals in households who will have the next birthday (multiple choices could be made)

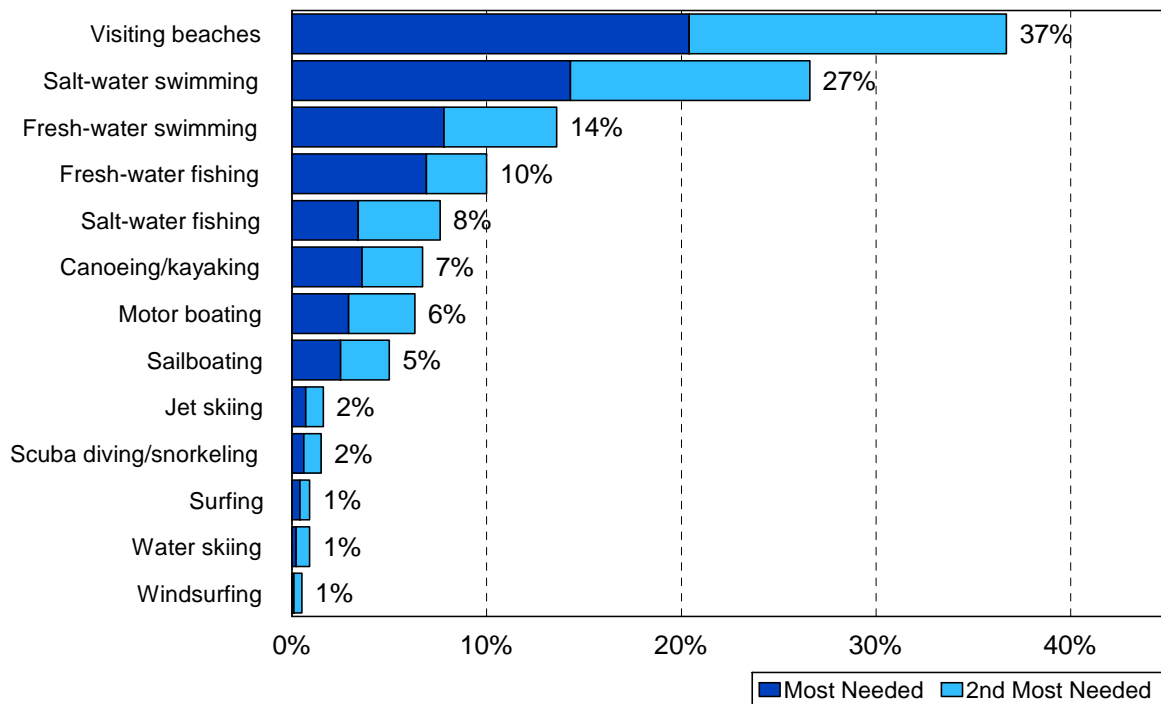


Source: Leisure Vision/ETC Institute (October, 2002)

- Visiting beaches and salt-water swimming were the two water-based activities needed most in Rhode Island: 37% of individuals surveyed rated visiting beaches as the 1st or 2nd most needed water-based activity in Rhode Island, and 27% rated salt-water swimming as the 1st or 2nd most needed water-based activity.^{vi}

Q13. Water-Based Activities that are Needed Most in Rhode Island

by percentage of individuals in households who will have the next birthday (two choices could be made)



Source: Leisure Vision/ETC Institute (October, 2002)

Facts about Narragansett Town Beach:

On a single perfect summer beach day (defined as a day when beaches are at capacity attendance, which may occur 8-10 times per year^{vii}):

- Around 7,400 or more people visit Narragansett Town Beach.^{viii}
- The lots for day-visitors fill (431 spaces), with additional visitors parking at the elementary school and taking the shuttle to the beach; and the season pass-holder lots are full (592 spaces). On these days, additional cars enter as spaces open in the lots.^{ix}
- The cars carrying day-visitors account for around 1,000 people,^x who spend around \$49,000 total on that day related to their visit to the beach, including money the town receives in parking fees and money people spend for food and other things related to a visit to the beach.^{xi} This includes only day-visitors and does not include people who rent or stay at hotels in town because of the beach.
- The 7,400 visitors to the beach have an estimated total non-market social benefit valued at over \$93,000 for this day.^{xii}
- This does not include people who visit the beach after-hours.

On an *average* August beach day:

- There are around 5,000 people on the beach.^{xiii}
- There are close to 700 day visitors, who spend around \$34,000 in the local area (including parking) on that day.^{xiv}
- In total, the non-market social benefits for all visitors on this day are valued at close to \$64,000 for this day.^{xv}

Facts about Easton's Beach:

On a single perfect summer beach day (this may occur around 6 times per year^{xvi}):

- The lot will fill with 850 cars, including day visitors and seasonal pass holders.^{xvii}
- This translates to around 1,800 people, which does not include the significant number of people who walk, bike, or take public transportation to Easton's Beach.^{xviii}

Facts about Warwick beaches:

- Oakland Beach and Conimicut Point Beach in Warwick have the highest rate of closures, due to unsafe water quality, of all Narragansett Bay beaches.^{xix}
- Around 14,000 people use these beaches each summer.^{xx}
- Usage at these beaches is only 5 to 25 percent of maximum capacity,^{xxi} and therefore many more people in this urban area might enjoy these upper bay beaches if water quality improves.

The information about attendance at Rhode Island beaches is based on data obtained from beach managers. While the information is believed to be reliable, we are unable to verify the accuracy. Although the information presented has been funded by the U.S. Environmental Protection Agency, it does not necessarily reflect the views of the Agency and no official endorsement should be inferred.

ⁱ Sources: average estimates from RIDEM Outdoor Recreation Demand Citizen Survey, Conducted by Leisure Vision, Aug-Oct., 2002 and National Survey of Recreation and Environment 2000 (From: <http://coastalsocioeconomics.noaa.gov/core/nsre/nsre2000.html#marine>, preliminary estimates from versions 1-6: coastal recreation participation, and 2001 participation in marine rec nsre_2).

ⁱⁱ This refers to the “consumer surplus” or net “willingness to pay” value for a beach day – what a person would be willing to give up beyond what they actually pay for that day at the beach. Sources for value per day: Average of value per day from 2 studies in nearby locations, in 2011\$: (i) Peconic Estuary recreation survey, conducted summer of 1995 at Peconic Estuary LI beaches using travel cost (revealed preference) method; and (ii) contingent valuation survey (stated preference method) conducted in summer 1995 at Gooseberry Island, near Horseneck Beach, MA (beach with no facilities or services).

References: Johnston, R.J., T.A. Grigalunas, J.J. Opaluch, J. Diamantides, and M. Mazzotta. 2001. Valuing estuarine resource services using economic and ecological models: the Peconic Estuary System study. *Coastal Management* 30(1).

Kline, J. D. and S. K. Swallow 1998. The demand for local access to coastal recreation in southern New England. *Coastal Management* 26(3): 177-190.

Opaluch, James J., Thomas Grigalunas, Marisa J. Mazzotta, Jerry Diamantides, and Robert Johnston. 1998. “Resource and Recreational Economic Values for the Peconic Estuary,” Report prepared for Peconic Estuary Program, Suffolk County Department of Health Services, Riverhead, NY, by Economic Analysis, Inc., Peace Dale, Rhode Island.

ⁱⁱⁱ Source: calculated using actual attendance and weather data for Sandy Point Beach in Portsmouth for 2010 and 2011. Data provided by beach manager.

^{iv} Source: RIDEM Outdoor Recreation Demand Citizen Survey, Conducted by Leisure Vision, Aug-Oct., 2002.

^v Source: RIDEM Outdoor Recreation Demand Citizen Survey, Conducted by Leisure Vision, Aug-Oct., 2002.

^{vi} Source: RIDEM Outdoor Recreation Demand Citizen Survey, Conducted by Leisure Vision, Aug-Oct., 2002.

^{vii} Source: S. Wright, Narragansett Town Beach Manager, personal communication, 2012.

^{viii} Source: actual beach attendance data for 11 days in August 2011, obtained from S. Wright, Narragansett Town Beach Manager (in personal communication, Mr. Wright indicated that there could be up to 10,000 people on the beach on the most crowded day).

^{ix} Source: parking data for 2011 season from S. Wright, Narragansett Town Beach Manager.

^x Source: calculated value using results of statistical regression of people per car based on actual data for 2010 and 2011 from Sandy Point Beach, Portsmouth, RI (obtained from T. Dunbar, Sandy Pt. Beach Manager).

^{xi} Source: survey conducted by Ninigret Partners survey in July-August, 2007, commissioned by the RI Economic Monitoring Collaborative (reported in their FY08 Monitoring Report).

^{xii} This refers to the “consumer surplus” or net “willingness to pay” value for a beach day – what a person would be willing to give up beyond what they actually pay for that day at the beach. Source: estimated consumer surplus per day from Peconic Estuary recreational survey referenced in endnote *ii* above, inflated to 2011\$ (\$12.60/person * 7,400 people).

^{xiii} Source: actual beach attendance and day parking data for 11 days in August 2011, obtained from S. Wright, Narragansett Town Beach Manager.

^{xiv} Sources: calculated value using results of statistical regression of people per car based on actual data for 2010 and 2011 from Sandy Point Beach, Portsmouth, RI (obtained from T. Dunbar, Sandy Pt. Beach Manager); and Ninigret Partners survey referenced in note *xi* above.

^{xv} This refers to the “consumer surplus” or net “willingness to pay” value for a beach day – what a person would be willing to give up beyond what they actually pay for that day at the beach. Source: estimated consumer surplus per day from Peconic Estuary recreational survey referenced in endnote *ii* above, inflated to 2011\$ (\$12.60/person * 5,000 people).

^{xvi} Source: E. Reis, Newport Town Beach Manager, personal communication.

^{xvii} Source: E. Reis, Newport Town Beach Manager, personal communication.

^{xviii} Source: calculated value using results of statistical regression of people per car based on actual data for 2010 and 2011 from Sandy Point Beach, Portsmouth, RI (obtained from T. Dunbar, Sandy Pt. Beach Manager).

^{xix} Source: RI Department of Health beach closure data.

^{xx} Source: M. Rooney, Warwick Parks and Recreation Department, based on 2011 data.

^{xxi} Source: M. Rooney, Warwick Parks and Recreation Department, based on 2011 data.