

BOATING AND FISHING ACCESS AND OPPORTUNITIES ON THE MANASQUAN RIVER ESTUARY

An Action Now Project

**Conducted For The
Manasquan Watershed Management Group**

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I. INTRODUCTION

Recreational use in coastal areas has increased significantly since passage of the Coastal Zone Management Act in 1972. Outdoor recreation and tourism are currently the most significant economic activities in the coastal zone, accounting for over half of all ocean-related economic activity. Two of the most important outdoor marine recreational activities are boating and fishing. In 1996, the US Environmental Protection Agency (EPA) estimated that over 77 million people participate in recreational boating annually and, in 1998, the National Marine Fisheries Service (NMFS) estimated that over 12 million people participate in marina recreational fishing annually. Coastal zone management experts predict that participation in these and other marine recreational activities will continue to grow and recreation and tourism will likely continue to be the most significant water-dependent economic activities in the coastal zone for decades (Bookman, et al., 1999; Cicin-Sain and Knecht, 1999; Cicin-Sain et al., 1999; NOAA, 1999).

Governmental agencies play an important role in providing the underlying conditions for marine recreation and tourism, including ensuring a clean environment, assuring coastal access and promoting a safe operating environment. In terms of managing coastal boating and fishing in a sustainable manner, the challenge to coastal zone managers is to provide increased access and opportunities along beaches and coastal waters of the nation (Bookman, et al., 1999; Cicin-Sain and Knecht, 1999; NOAA, 1999).

The Manasquan River Estuary provides recreational, aesthetic and economic benefits for residents of the Manasquan River Watershed, as well as state residents and visiting tourists. The waters of the Manasquan River Estuary form one of the busiest ports on the New Jersey coast. Recreational vessels docked at marinas or private yacht clubs, along with commercial fishing vessels and party and charter fishing boats, use the estuary as their home port and travel to the ocean through the Manasquan Inlet or to southern destinations via the Point Pleasant Canal and the Intracoastal Waterway.

In addition, smaller boats and shoreside fishermen utilize the Manasquan River Estuary and its tributaries during the spring, summer and fall, particularly in the summer. Unfortunately, access for launching small boats and fishing from the shoreline is limited in the estuary. Some of the causes for this condition include private ownership of waterfront property, competing uses of the waterfront and opposition to recreational facilities and associated uses in residential neighborhoods. In addition, many of the existing access points are limited in size, capacity and associated amenities.

II. GOALS AND OBJECTIVES

The goal of this project was to provide the Manasquan Watershed Management Group (MWMG) with information allowing them to plan and implement actions that will result in enhanced

recreational boating and fishing opportunities on the Manasquan River Estuary.

Specific objectives of the project included:

- Production of an inventory of existing boating and fishing access points on the Manasquan River Estuary.
- Development of recommendations for enhancing and improving small boat and fishing opportunities through suggestions for improvements to existing sites.
- Identification of appropriate locations where additional small boat and fishing access facilities could be located.
- Development of criteria for siting small boat and fishing access facilities and identification of design options to be considered.

III. BOATING AND FISHING ON THE MANASQUAN RIVER ESTUARY

For the purposes of this project, the Manasquan River Estuary was considered to include the navigable waters of the Manasquan River from the Manasquan Inlet west to the point where the river enters the Narrows as well as all of the associated navigable channels and tributaries. Municipalities bordering the Manasquan River Estuary include Manasquan, Brielle and Wall Township in Monmouth County and Point Pleasant Beach, Point Pleasant Borough and Brick Township in Ocean County.

Vessels using the Manasquan River Estuary can be categorized into one of three groups (MOA, 1997):

- Boats docked at marinas and yacht clubs;
- Boats docked at private docks; and
- Transient vessels such as vessels using the Intracoastal Waterway en route to points north or south and smaller vessels that use the boat ramps in the river or upper Barnegat Bay.

Recreational boating activities in the Manasquan River Estuary, include fishing, crabbing, cruising, water skiing or simply anchoring-out to enjoy the aesthetics of the area.

Recreational fishing occurs by a variety of modes in the Manasquan River Estuary, including from small private boats and rental boats from local boat liveries. Shoreside anglers fish from piers, docks, river banks and man-made shoreline structures such as the inlet wall and jetties.

Important recreational fisheries in the estuary include:

- Blue crab (*Callinectes sapidus*) - primarily a late spring, summer and early fall fishery.

- Winter flounder (*Pleuronectes americanus*) - primarily a spring and fall fishery.
- Striped bass (*Morone saxatilis*) - primarily a spring and fall fishery.
- Summer flounder (*Paralychthys dentatus*) - primarily a summer and early fall fishery.
- Bluefish, including snapper blues (*Pomatomus saltatrix*) - primarily a summer and early fall fishery.
- Weakfish (*Cynoscion regalis*) - primarily a summer and early fall fishery.

IV. EXISTING BOATING AND FISHING ACCESS SITES ON THE MANASQUAN RIVER ESTUARY

Boating Access

Boat ramps at commercial marinas on the Manasquan River Estuary are limited. Currently only three marinas have launch ramps:

- Strictly Marine (Manasquan Marine Center – Located along the Glimmer Glass on Brielle Road in Brielle.
- McCarthy's Marine Sales – Located on the Manasquan River at the foot of the Route 70 bridge in Brielle.
- Cove Haven (Eagle Point) Marina – Located at the westernmost portion of the estuary on Ridge Road in Brick Township.

The boat ramps at each of these marinas are single lane cement launch ramps and fees are charged for use.

Only one public boat launching area provides direct access to the Manasquan River Estuary:

- Point Pleasant Municipal Boat Ramp – Located on the Manasquan River at the foot of Curtis Avenue in Point Pleasant.

Use of this municipal launch ramp is restricted to residents of Point Pleasant and a municipal permit is required for use. The ramp is a single lane cement slab. Parking is limited.

In addition to these boat ramps, there is a public launching area on state land along the Point Pleasant Canal at the Point Pleasant Canal Fishing Access Site located on Beach Boulevard in Point Pleasant. Another public launch ramp is located at the confluence of the Canal and the head of Barnegat Bay at the foot of Bay Avenue in Point Pleasant. The launch site on the Canal

is unpaved. The launch ramp at the foot of Bay Avenue is a single lane cement slab. Parking at both sites is limited.

Canoe and kayak launching access to the Manasquan River Estuary is limited to public lands along the estuary, such as Gull Island County Park in Point Pleasant Beach.

Fishing Access

Shoreline fishing access to the Manasquan River Estuary is primarily available in the lower estuary from the Manasquan Inlet west to the Route 35 highway bridge. Accessible areas in the lower estuary include:

- Manasquan Inlet, Manasquan – Fishing access is available at the Manasquan Inlet along Riverside Drive in Manasquan. Metered parking is available along Riverside Drive.
- Fisherman’s Cove Conservation Area, Manasquan – Fisherman’s Cove Conservation Area is located on Third Avenue in Manasquan, just inside the Manasquan Inlet. The site, which is owned by Monmouth County, is open to the public for passive recreation such as fishing, bird watching, walking and sunbathing. Fishing access is primarily limited to the area of sandy beach along the river. Street parking is available along Third Avenue.
- Stockton Lake Boulevard Park, Manasquan – Stockton Lake Boulevard Park is a linear park with a bulkheaded walkway along Stockton Lake in Manasquan. Fishing is permitted along the bulkhead. There is also a short catwalk located at the eastern end of the area.
- Manasquan Inlet, Point Pleasant Beach – Fishing access is available at the Manasquan Inlet along Inlet Drive in Point Pleasant Beach. Metered parking is available in a parking lot and along Inlet Drive.
- Gull Island County Conservation Area and Park, Point Pleasant Beach – Gull Island County Conservation Area and Park is located along the Manasquan River Estuary and Will’s Hole Thorofare in Point Pleasant Beach. This site, which is owned by Ocean County, includes Gull Island, and a small area (Gull Island Park) across from Gull Island along Broadway Drive in Point Pleasant Beach. Fishing takes place along the park bulkhead and at the foot of the adjacent railroad trestle.

The only publicly accessible sites for shoreline fishing along the Manasquan River Estuary west of the Route 35 bridge are at the following locations:

- Cedar Avenue street end in Point Pleasant Beach; and
- Maxson Avenue Beach in Point Pleasant.

There are only two publicly accessible fishing piers on the Manasquan River Estuary:

- Brielle Road, Manasquan – A small fishing pier is located on the Glimmer Glass off Brielle Road in Manasquan. Parking is limited to a small parking lot on the north side of Brielle Road, just north of the drawbridge adjacent to the Sanctuaries residential development.
- Maxson Avenue, Point Pleasant – A small fishing pier is located on the Manasquan River at the Maxson Avenue Beach in Point Pleasant. The Maxson Avenue Beach is a municipal bathing beach. Restrooms are available in summer when lifeguards are on duty and beach fees apply. Street parking is available on Maxson Avenue.

Both of these piers are limited in size (length and width) and angler capacity and lack fishing-related amenities.

In addition to these areas, fishing is possible from the shoreline of Osborne Island. Osborne Island is located in the Manasquan River Estuary across from the convergence of the River and the Point Pleasant Canal between Point Pleasant and Brielle. Fishing occurs around the shoreline of the island; however, the island is only accessible by boat.

Fishing access is also available along the Point Pleasant Canal. The US Army Corps of Engineers maintains a federal right-of-way along the Canal. In areas where access is not limited by bordering private residential development, such as at public street ends, fishermen can gain access to this right-of-way. Popular fisheries in the Canal include winter flounder, tautog (blackfish) and striped bass.

V. RECOMMENDATIONS FOR ENHANCING AND IMPROVING SMALL BOAT AND FISHING ACCESS AND OPPORTUNITIES ON THE MANASQUAN RIVER ESTUARY

The reason for local, county, or state government, or other regional entity to contemplate providing the public with a boat launch site, fishing pier or related marine recreational facilities is to augment boating and fishing opportunities and, beyond boating and fishing, to create significant community assets (Leedy et al., 1981).

Recommendations for Enhancing and Improving Existing Boating and Fishing Access and Opportunities on the Manasquan River Estuary

Actions that could enhance existing boating and fishing access sites and boating and fishing opportunities on the Manasquan River Estuary include:

- Install float plan drop boxes at all boat ramps in the region.
- Add amenities such as tables, benches and bait preparation and fish cleaning tables to fishing access areas.

- Ensure that adequate and convenient waste receptacles for garbage and recycling are available at all boat ramps and shoreline fishing access locations along the estuary and ensure that these facilities are emptied frequently.
- Improve fishing access and fishing-related facilities at the Fisherman's Cove Conservation Area.
- Improve fishing access and fishing-related facilities at Gull Island County Park.
- Expand and improve the fishing piers at Brielle Road in Brielle and Maxson Avenue in Point Pleasant. Determine the feasibility of additions to pier length or width; add amenities such as benches and bait preparation and fish cleaning tables.
- Publicize the locations of existing boating and fishing access on web sites of municipalities and chambers of commerce in the watershed as well as web sites of appropriate Monmouth and Ocean County agencies.

Recommendations For Expanding Boating And Fishing Access And Opportunities On The Manasquan River Estuary

Actions that could expand boating and fishing access sites and boating and fishing opportunities on the Manasquan River Estuary include:

- Require installation of a public boat ramp and fishing pier at all new waterfront developments or as part of waterfront redevelopment plans (e.g., at the Cerbone's Marina site which has been sold and is currently being refurbished).
- Ensure that municipal, county and state environmental, planning and engineering organizations and agencies accommodate increased boating and fishing access and opportunities in their comprehensive planning and infrastructure investment strategies for the Manasquan River Estuary region.
- Ask Monmouth County to consider including small boat, canoe and kayak access as a component of the plans for the Fisherman's Cove Conservation Area.
- Ask Ocean County to consider adding small boat access as a component of the facilities at Gull Island County Park.
- Ask Ocean County to consider developing a recreation plan for Gull Island that includes fishing access to Will's Hole Thorofare and the Manasquan River Estuary and provides fishing-related amenities for anglers utilizing the area.
- Ask municipalities bordering the Manasquan River Estuary to consider the feasibility of siting small boat, canoe or kayak launch facilities and/or providing fishing access at public street ends along the estuary and its tributaries.

Based on a review of information contained in the Monmouth County Coastal Waterfront Access Study (Monmouth County, 1992), information in the Manasquan River Watershed Initial Characterization and Assessment Report (Tiedemann, 1999) and field surveys conducted during 1999 and 2000, the following street end right-of-ways could be considered as locations for siting small boat launch facilities or providing fishing access to the Manasquan River Estuary:

Manasquan –

- Deep Creek/Cut Drive
- Perrine Boulevard
- Warren Avenue
- Long Avenue

Brielle –

- Forest Road
- Brainard Place
- Osprey Drive
- Laurel Avenue

Wall Township –

- Old Bridge Road
- Lakewood Road
- Riverside Terrace
- Ramshorne Drive (Manasquan Wildlife Refuge)

Point Pleasant Beach –

- Lincoln Avenue
- Sinclair Road
- Bradley Road

Point Pleasant –

- **Richard Road**

Brick Township –

- **Riverside Drive (empty lot along Sawmill Creek)**
 - **Beverly Drive**
 - **Thiele Road**
- **Ask municipalities bordering the Manasquan River Estuary to consider the feasibility of providing small boat and canoe and kayak access on public lands along the estuary and its tributaries.**

Examples of locations that should be considered include:

- **Mallard Park and the Manasquan Municipal Marina – Mallard Park is located on Cedar Avenue and Perrine Boulevard in Manasquan; the Manasquan Municipal Marina is located along Perrine Boulevard on Watson Creek in Manasquan.**
 - **Stockton Lake Boulevard Park – Stockton Lake Boulevard Park is a linear park with a bulkheaded walkway along Stockton Lake in Manasquan.**
 - **Stockton Lake Recreation Area – Stockton Lake Recreation Area is located along Stockton Lake and Watson Creek at the foot of Stockton Avenue in Manasquan.**
 - **Maxson Avenue Beach – Maxson Avenue Beach is located on the Manasquan River at the foot of Maxson Avenue in Point Pleasant.**
- **Request that the New Jersey Department of Transportation (NJDOT) provide the public with fishing and/or small boat access at the base of the Route 35 bridge.**

An existing access road is located off of the southbound lane on the Route 35 bridge (Point Pleasant Beach side). This road leads to a bulkheaded, paved area at the foot of the bridge. Opening this site to the public would provide direct access to the Manasquan River Estuary. The addition of appropriate amenities could make this area suitable for fishing, as well as launching canoes and kayaks.

- **Request that the New Jersey Department of Transportation (NJDOT) include fishing and small boat access facilities as part of the plans for the reconstruction of the Route 70 bridge.**

Route 70 is presently being widened from the Manasquan Circle to the Laurelton Interchange. The Route 70 highway bridge between Wall Township and Brick Township is slated for replacement. The bridge replacement was proposed to coincide with the dualization work now

underway. The current NJDOT budget allocates \$1,400,000 for fiscal years 2000 through 2002 for replacement of the bridge; however, according to the NJDOT the plans for the bridge are currently not finalized. Furthermore, no solicitation for bids has been issued and there is no target date for beginning this work. NJDOT should accommodate boating and fishing access to the Manasquan River in the plan for the new bridge.

- NJDEP should assist MWMG in providing enhanced boating and fishing access and opportunities with funding available from New Jersey's Sportfish Restoration Program.

The Federal Aid in Sport Fish Restoration Act of 1950, along with the Wallop-Breaux Amendments of 1984, provides federal aid to the states for protection of natural resources and enhancement of recreational fishing and boating opportunities. The funds, which are generated from fees, excise taxes and duties placed on certain fishing tackle, marine electronics, marine supplies and motorboat fuels, are deposited into the Aquatic Resources Trust Fund which is comprised of the Sport Fish Restoration Account and the Boating Safety Account. The federal government subsequently provides state fish and wildlife agencies with a portion of these funds (AFS, 1997; FWS, 2000).

Each year, millions of dollars are provided to the states under the Sport Fish Restoration Program. These funds are allocated to individual states based on the size of the state and the number of fishing licenses. State allocations can be used for a variety of purposes, including to build or reconstruct fishing or boating access sites and purchase land for boating and fishing access. The states may expend these funds on facilities that they develop, own, and operate or they may make grants to local units of government. The 1984 Wallop-Breaux amendments to the Sport Fish Restoration Act require the states to equitably allocate funds between marine and fresh water projects and to allocate a minimum of 10 percent of their apportionment to boating facilities (AFS, 1997; FWS, 2000).

New Jersey has received over \$2 million of Sport Fish Restoration funds annually for the past several years. In 1999, the state apportionment totaled \$2.12 million. Approximately 12% (\$264,000) of these funds were obligated to motorboat access (\$189,000 for boat ramp construction and \$75,000 for boating access facility maintenance). The state's year 2000 apportionment is estimated at \$2.4 million with approximately 15% (\$375,000) earmarked for motorboat access (\$300,000 for boat ramp construction and \$75,000 for boating facility maintenance). New Jersey does not presently allocate any Wallop-Breaux funds to construction or maintenance of fishing piers or other fishing access facilities (Snyder, 2000).

VI. SMALL BOAT AND FISHING ACCESS FACILITY SITING, PLANNING AND DESIGN CONSIDERATIONS

Planning successful small boating and fishing access sites requires attention to many factors. A strategy for siting, planning and designing small boat and fishing access facilities for the Manasquan River Estuary should be based, in part, on consideration of the items outlined below.

General Facility Siting Considerations

General siting considerations associated with boat launch sites include the following (Wilson, 1989):

- Sites should be located in the least environmentally sensitive areas along shorelines that do not support wetland vegetation or seagrasses.
- Sites should be located where adjacent waters have adequate navigational depths to avoid propwashing and minimize the need for dredging.
- Acceptable sites may include existing marinas, bridge approaches and causeways where access channels already exist, and natural or previously created deepwater habitats.
- Sites should contain adequate upland area for parking and for boat launching/removal.
- Hydrographic conditions in the area should be conducive to safe, easy launching and retrieval (e.g., waves, wind and currents; water depth and tidal fluctuations; bottom conditions; shoreline configuration).

General siting considerations associated with fishing access facilities include the following (Leedy et al., 1981):

- Sites should be located in a manner that results in preservation of existing habitat quality.
- Sites should provide access to fishable waters.
- Sites should be located in areas that allow for opportunities for habitat enhancement and improvement.

General Facility Planning Considerations

General planning considerations for boating and fishing access facilities include (Leedy et al., 1981; Breen and Rigby, 1986; Wilson, 1989):

- Ease of access and egress;
- Parking needs; and
- Public safety needs.

Amenities that could be included as part of the plans for small boat or fishing access facilities include (Leedy et al., 1981; Breen and Rigby, 1986; Wilson, 1989):

- Adequate lighting;

- Adequate and convenient waste receptacles for garbage and recyclable material;
- Special purpose areas such as turnaround/maneuvering areas at boat launch sites or bait and fish cleaning tables at fishing access facilities;
- Public telephones;
- Restrooms;
- Drinking water;
- Tables and benches;
- Shade pavilions or similar shelters;
- Freshwater wash down at boat launch facilities;
- Portable toilet dump station at boat launch facilities; and
- Educational information boards and other appropriate signage.

For boating and fishing access areas to remain functional, attractive and safe, they must be properly maintained. Routine maintenance should be a component of all facility plans, including consideration of the following (Leedy et al., 1981; Breen and Rigby, 1986; Wilson, 1989):

- Regular cleaning, including periodic hosing;
- Regular garbage removal;
- Regular litter cleanup; and
- Other measures that preserve intended uses, promote safety, prevent vandalism and extend facility life.

Boat Launch Site Design Considerations

Specific consideration should be given to the following items when designing boat launch sites (Wilson, 1989):

- Boat ramps should be designed to minimize direct and secondary impacts to aquatic resources.
- Catchment basins for collection runoff should be included as components of the launch site design.

- Clearing of brush, trees, and riparian vegetation for construction of any component of the project should be avoided if possible.

The types of boats to be launched and the type of boat launching system appropriate for conditions at a particular site should also be considered so that facilities can subsequently be customized accordingly.

For example, areas used to launch canoes, kayaks and car-toppers do not need a launch ramp. Facilities to launch canoes and kayaks are generally small and usually are less expensive to construct than facilities used to launch powerboats from a trailer. On the other hand, facilities designed to launch trailerable boats generally need a permanent surfaced ramp. Other components that can be incorporated into the design of launch sites include installation of floating docks or provision of a boat beaching area.

Fishing Access Design Considerations

Specific consideration should be given to the following items when designing fishing access (Leedy et al., 1981; Breen and Rigby, 1986):

- Piers should be placed perpendicular to the shoreline and extend out from shore to the maximum extent feasible without interfering with navigation.
- Boardwalks, walkways or other shoreline structures should be placed parallel to shoreline along the riverfront and extend over the water where feasible.

The type of fishing access appropriate for conditions at a particular site should also be considered so that facilities can subsequently be customized accordingly.

For example, as previously discussed, some shoreline locations such as beaches, parks or street ends may be appropriate for simple, informal fishing. Such sites are typically convenient, accessible places for anglers with limited or no amenities.

In the Manasquan River Estuary, a lack of shoreline fishing access has resulted from the intense coastal development in the area. Since vacant, available shoreline property is at a premium, it may be difficult to find suitable locations to site boardwalks, walkways and other structures appropriate for shoreline fishing. However, recreational fishing access to the estuary could be substantially improved by constructing additional fishing piers. Breen and Rigby (1986) define several designs that can be considered when planning fishing piers:

- No-Frills Piers – No-frills piers are less elaborate, usually shorter piers primarily offering anglers a way to get out over the water. No-frills piers generally have few or no associated amenities.
- Large Recreational Fishing Piers – Large recreational fishing piers are usually built exclusively for fishing, although spectators are welcome. They are generally built with public funds and open to the public free of charge. They are often developed in

conjunction with major development or redevelopment projects. Amenities may include a bait and tackle concession, restrooms, observation platforms, benches and fish cleaning stations.

- **Focal Point Piers** – Focal point piers are piers that, in addition to serving the primary purpose of providing fishing access, can also serve as a focal point for community activity. They are often centrally located along the waterfront and positioned to become a focal point of activity. In addition to fishing, people use the pier for strolling, relaxing, or enjoying the unique vantage point offered by these overwater structures.
- **Multi-Use Piers** – Multi-use piers offer opportunities for fishing along with, or incidental to, other activities, be they recreational, commercial, or industrial. Multi-use piers include amenities that consider the special needs of anglers by offering such things as bait shops, fish cleaning facilities and extra space.

Site Specific Considerations

Ultimately, the type of small boat or fishing access facility that can be accommodated at a particular location will be determined through a site specific suitability analysis. For each parcel or property along the Manasquan River Estuary under consideration for developing small boat or fishing access, a site suitability evaluation could be accomplished using a Geographic Information Systems (GIS) approach similar to the approach developed by Antonini et al. (1997).

In their study of boating facility needs in Charlotte County Florida, Antonini et al. (1997) employed a GIS-based suitability analysis that rated parcels as future sites for marinas, boat ramps or private docks. Their methodology consisted of a point system which scored parcel attributes. A development suitability rating was assigned to each candidate parcel. The rating was based on an evaluation of developmental and environmental criteria, including vacant adjacent parcels, acreage, land use, land-side infrastructure (e.g., sewer lines, water lines, roads), wetlands, seagrasses, water depth adjacent to the parcel and proximity to dredged channels. Cumulative point scores were subsequently used to evaluate the suitability of individual sites for various types of facilities.

A similar analysis could be performed to rate specific parcels of land or properties along the Manasquan River Estuary in terms of their suitability as sites for boat ramps, canoe and kayak launching and fishing access (i.e., shoreline fishing facilities, fishing piers, etc.).

VII. CONSTRAINTS AND CHALLENGES TO DEVELOPING SMALL BOAT AND FISHING ACCESS FACILITIES ON THE MANASQUAN RIVER ESTUARY

Developing small boat and fishing access facilities in densely populated residential and commercial areas such as the communities surrounding the Manasquan River Estuary presents many challenges.

Constraints to developing small boat and fishing access facilities can include:

- Infrastructure limitations;
- Regulatory constraints;
- Social considerations, including siting conflicts in residential neighborhoods and resultant public resistance;
- Competing uses of waterfront property;
- Natural features such as shoreline type and configuration and hydrographic conditions; and
- Economic considerations associated with construction, operation and maintenance.

In order to overcome such constraints in the Manasquan River Estuary, local, state and federal agencies should coordinate planning efforts to ensure the best possible recreational experiences for all user groups throughout the estuary. This pertains to environmental compliance, resource management, enforcement of guidelines and standards concerning public access, resolution of user conflicts and safety on the water.

Some social conflicts that may arise in association with development of small boat and fishing access facilities can be partially alleviated by adopting facility size and use constraints. Site specific measures that can be incorporated into facility plans to minimize potential problems include:

- Setting admittance and usage limits such as establishing maximum limits as to the number of users of boat launch facilities;
- Establishing a user fee-based permit system; and
- Adopting rules and regulations establishing permitted uses, hours of operation, parking restrictions, fueling restrictions, procedures for handling fish and fish waste and waste/trash disposal.

Finally, efforts to enhance small boat and fishing access, as well as other marine recreational opportunities, on the Manasquan River Estuary should be a component of a comprehensive waterfront management plan for the area. Including efforts to enhance boating and fishing access as part of a comprehensive waterfront management plan would provide a mechanism to address infrastructure limitations, regulatory constraints, competing uses of waterfront property and economic considerations associated with construction, operation and maintenance of boating and fishing facilities. A comprehensive waterfront management plan would also provide a mechanism to implement short term and long term strategies that ensure that boating, fishing and other marine recreational activities in the Manasquan River Estuary are managed in a sustainable manner.

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