The Intracoastal Waterway in Palm Beach County offers many forms of public access, both on and along the water, and protected access to the water is considered by many to be a key quality of life factor. Access occurs in built forms, such as riverwalks and parks, as well as natural forms, such as preservation areas. The boating public, including both motorized and non-motorized vessels, can access the ICW from marinas, inlets and canals, and boat ramps. Other modes of access for strolling, bicycling, fishing, swimming, and other activities occur in parks, natural areas, sandy shorelines, and constructed riverwalks. In general, however, as land uses along the waterway have become more residential, the Intracoastal has become less accessible to users. This trend towards privatization along the waterway has become common in many parts of Florida and the nation, encouraging emphasis on protection of public waterfront lands. The protection, enhancement, and expansion of public access was also among the strongest recommendations by charrette participants in the development of the Intracoastal Report.

This chapter discusses the many forms of public access along the Intracoastal in Palm Beach County along with the different types of users. In addition to marinas and boat ramps, park and recreational areas, riverwalks and fishing piers, certain commercial uses are noted that provide public access for patrons. The chapter concludes with a series of findings and recommendations regarding public access, with strong emphasis on local government actions to protect, expand, and enhance public access through development conditions as well as with the creation of street-end parks. Expanded public access is also encouraged for natural areas where appropriate.
PUBLIC ACCESS

The Intracoastal is a unique amenity in Palm Beach County, providing access, recreational opportunity, and a beautiful backdrop for upland activities. As land uses along the waterway have tended towards residential development over time, access to the waterway for non-waterfront residents has become increasingly limited. Accordingly, increased public access to the Intracoastal was among the strongest recommendations by charrette participants. Public access is viewed as a key quality of life component as well as part of Palm Beach County’s T.R.P.C.

In this report, public access is defined as location or facility that offers some type of interaction with the water without restriction on who may use the park. A few examples of public access are:

- public parks (active and passive)
- riverwalks and fishing piers
- causeways and recreational islands
- fishing and snorkeling locations along the Intracoastal
- boat ramps and canoe/kayak launches
- public marinas
- commercial uses located on the waterway such as restaurants and hotels

Public access along the Intracoastal takes many different forms in Palm Beach County, ranging from urban promenades (pictured above in West Palm Beach) or natural areas such as Munyon Island (pictured below), which has become a popular destination for kayakers.
This report differentiates between two types of public access to the ICW. The first is large-scale access for larger vessels such as sailboats, motorized recreational boats, and larger yachts and ships. The second form of access is smaller-scale, designed for non-motorized watercraft (e.g., canoes/kayaks), bicyclists, and pedestrians, and users seeking to wade or swim from a sandy beach (along the ICW, but not within it).

Examples of public access listed above all can be accessed by larger vessels, but not all can be accessed by kayakers or waders. Less than 10% of Palm Beach County’s 1.2 Million people live within a half-mile or walking distance of the ICW. Most of that 10% can access the ICW from their backyards, at the end of their residential street, or within walking distance of a waterfront park or other venue if available. The majority of Palm Beach County residents must drive or use transit to access the water. Furthermore, there are 38,000 registered boats creating a need for adequate public access to the waterway for larger vessels and motorized watercraft.

The number of boat ramps is expected to increase due to planned projects. However, the marinas allowing public access and working waterfront that supports the boating and marine industries are becoming more limited.

According to the Working Waterfronts report presented to the Florida Senate in 2004, the use of Florida’s waterfront for recreational boating activities have diminished over time due to the increased demand for residential waterfront condominiums. Over the past several decades, this demand has driven up property values, displacing working waterfront use and making waterfront property less available to governmental entities for preservation due to its high cost. Since the housing market peaked in 2007, the pressure for all forms of residential, including waterfront residential, has subsided, creating an opportunity for local governments to reconsider their approach to diversified waterfront uses. Further, in November 2008, Florida voters approved a “Working Waterfronts” amendment to the state’s constitution to limit property taxes on working marine waterfront uses, such that these properties will be taxed at their current (typically industrial) value rather than the potential highest-and-best-use value (typically higher density residential). These combined factors of reduced demand and tax relief create an opportunity to reconsider public access priorities for potential acquisition or expansion. Often, the best time to plan for the future is in a down market.

Parks, Recreational Facilities, and Riverwalks

As evidenced by its trademark motto, “Palm Beach County ~ The Best of Everything,” residents of and visitors to Palm Beach County enjoy a high quality of life. The County possesses natural beauty, well-designed towns and neighborhoods, and along with these, beautifully designed and well-located parks are perhaps a hallmark for the community. County residents have committed to financially support the acquisition of environmentally sensitive lands and development of well-amenitized park and recreational facilities throughout the County, especially along the 43-mile Intracoastal. Park and recreational facilities should be provided for all walks of life. In Palm Beach County, they are provided by the County and its local governments as well as the
PUBLIC ACCESS

State of Florida and other public entities. These facilities, especially those on the waterway, provide opportunities for festivals and public events such as Sunfest. Activities can range from quiet reflections to weddings and birthday celebrations. Parks can celebrate the waterway and create a focal point and identity for the community, or they can be tucked away to create respite from a busy urban area. Parks are excellent locations for public art and civic investment. They encourage tourism and help economic recruitment and development.

The planning field differentiates between active and passive parks. Active parks have more structured activities and can contain ball fields, tennis courts, or playgrounds. Active parks require more infrastructure investment such as lighting, parking, and restrooms and need to be actively managed. They tend to be larger in scale; host events such as fireworks and festivals; include program space such as amphitheatres; and are often regional in attraction.

In contrast, passive parks are often smaller-scale, usually offering fewer activities, requiring less infrastructure, and providing simpler, lower-cost amenities, such as picnic tables and pavilions. Passive parks can be large or small and be adorned or simple.

Either type of park can be rural or more urban in nature and range in size. Small-pocket parks, or street-end parks, can simply entail a 25-foot wide left-over strip of land or a single residential lot in a

These maps illustrate current parks (city, county, and state) as well as preservation lands along the Intracoastal Waterway in Palm Beach County. Clearly, there is a significant concentration in northern Palm Beach County, particularly north of the Lake Worth Inlet (from Peanut Island north into Jupiter/Tequesta ~ see map above left). In contrast, the population distribution of the county tends to favor the south County, creating a potential transportation network demand for users accessing these facilities.
neighborhood. Or, larger facilities can consume (or preserve) hundreds of thousands of acres. Facilities can be located on the edge of a community or can be the center of the town or neighborhood. Along the Intracoastal, and through the many communities that include the waterway, the County and local governments should provide for a wide range of park types to provide recreation for all ages and interests from the young baseball player to the older couple strolling through a quiet natural area. Palm Beach County’s current inventory of parks and natural lands are illustrated in this chapter.

Currently, there are 38 generally accessible waterfront parks along the ICW from Tequesta to Boca Raton, and they range in size from 1/2 to 300 acres. Of this waterfront park inventory, 12 are active parks, and 26 are passive. In addition to these, there are numerous pocket and street-end parks that are designed to serve the immediate neighborhoods in which they are located.

The larger active parks offer marine activities such as boat ramps, docks, and saltwater fishing. There are also non-marine-related activities at many of these waterfront parks, including ball fields, tennis courts, playgrounds, and pavilions.

The passive parks are usually located at the edge of residential neighborhoods, with direct views to the Intracoastal. Most do not provide motorized boat access, yet some include amenities such as fishing piers, canoe/kayak launches, walking trails, bike paths, and play areas.

The County proposes to expand its waterfront park facilities with major expansions planned for Jupiter Inlet Park (additional day docks and passive recreational facilities) and Bert Winters Park (expansion of boat ramp support amenities), as well as develop a passive natural facility north of Donald Ross Road (canoe/kayak launch facilities and passive amenities). Within the seven marina villages described in this plan, two in particular (Jupiter and West Palm Beach) propose significant expansion of public recreational space (mostly passive) along the waterway. With the significant limitations of publicly accessible recreational space along the Intracoastal, and likely reductions in public funding, these proposed facilities should be strongly safeguarded to ensure their development.

**Design Principles for Parks**

When designing parks, care should be given that the area has natural surveillance. Instead of depending on law enforcement to patrol a park, the easiest way to achieve monitoring of a park is by designing it so residents, workers, and patrons survey the park.

On the following page is an illustration of how a waterfront park can be incorporated into a community with natural surveillance by adjacent uses. The concepts illustrated in the image are for the waterfront portion of the Riviera Beach CRA, south of the Blue Heron Bridge, which focuses on Bicentennial Park. Note that all buildings surrounding the park have their fronts to the park. People entering and exiting the buildings cannot help but notice activities occurring in the park.

*Park pavilions, such as the larger pavilion pictured above, are in high demand for waterfront events such as parties, weddings, and celebrations. These facilities should correspond to the local architectural vernacular and be designed with genuine materials and green building standards to address the sentiments of charrette participants.*
An untapped resource in many communities exists in the form of roadways that terminate at the ICW. These small, narrow public parcels create the opportunity for inexpensive street-end parks within neighborhoods. Allowing for typically passive recreational space along the waterway, the conversion of these underutilized rights-of-way enables natural surveillance by neighboring residents. Structures within these parks can utilize architectural details to create an identity for the neighborhood and reflect the architecture of the area.

Street-end parks can increase the quality of life for the surrounding community. They provide “shouting distance” parks for children as well as quiet respites for senior residents who may not be able to drive but can walk to the park. They can also increase property values by expanding a waterfront amenity to non-waterfront properties. From a design perspective, street-end parks also allow for streets to be terminated with architectural and/or landscape designs that enhance waterfront vistas for neighborhood residents and visitors. For street-end parks to be successful, local governments need to resist the urge for short-term revenue with the abandonment of these unique and valuable properties, and instead, .

Street-end parks, and the buildings surrounding them, should be properly designed with buildings facing these parks. This building orientation will keep eyes on the park, provide natural surveillance, as well as maintain a measure of privacy for adjacent residential properties. Ideally, a building should have two fronts: one facing the park and the other facing the waterway much like a corner lot. Local governments should consider special land development and zoning regulations to encourage street-end parks and accompanying natural surveillance. Furthermore, with proper planning, oversight, landscaping, and maintenance, the park can become the responsibility of the neighborhood.

The Town of Lantana offers an excellent recent example of street-end development. The Town identified its unused roadway rights-of-way that...
terminate at the water (identified in the aerial photo above with green stars). Subsequently, the Town approached neighborhood associations to determine which would be amenable to working with the municipality for the development of street-end parks on these underutilized parcels. Photos of the before and after conditions for one of these park facilities are included above.

Street-end parks can also accommodate more ambitious designs and improvements. Depending on available land area, a variety of uses can be incorporated into these facilities, such as the boathouse illustrated on the following page. Walking along the water’s edge, the structure provides shade from the sun or shelter from the rain. The building illustrated could provide internal storage for canoes/kayaks or other small lightweight watercraft. If managed by a neighborhood or homeowner’s association, a street-end park could provide recreational access with capital facilities funded by the association. Maintenance costs could be funded by annual assessments or user fees, depending on the services offered.

**Riverwalks and Bridges**

With populated barrier islands to the east and the mainland to the west, Palm Beach County has a

In the above map from the Town of Lantana, green stars indicate street rights-of-way that terminate at the water’s edge.

The pictures above show the before and after conditions of one of Lantana’s street-end parks. These areas can offer simple, passive recreational access to the waterfront, which is especially desirable for non-waterfront residents.

Street-end or other waterfront parks could include well-designed architectural statements, such as the rowing club building pictured above.
history of significant bridges crossing the ICW. While the County’s earliest bridges were low-scale, bascule bridges operated by bridge tenders, over time several of these bridges have been converted to higher-span fixed bridges. Palm Beach County currently has 18 bridges, and ten of these are controlled and maintained by FDOT.

Some of Palm Beach County’s most interesting urban waterfront access points have been created in conjunction with these bridges. Indiantown Road’s bridge in Jupiter provides a riverwalk that connects the lands below the bridge with the Town’s marina village north and south. The area provides a lighted festival plaza for special events, a fishing pier and public parking underneath the bridge, decorative pavers, lighting, landscaping, benches, and other public amenities. The bridge structure also includes decorative features and context-sensitive architecture for the bridge tender facility.

In West Palm Beach, the bridge and promenade to the water with a low-scale seawall to allow users to enjoy broad views of the water.

Flagler Drive in West Palm Beach hosts boat shows, exhibitions, festivals, and concerts. The low-scale seawall removes visual barriers to the water.

Boathouses and other public structures within neighborhood street-end parks offer opportunities for architectural creativity and significance, increasing surrounding property values and creating a community asset from otherwise unused land.

There are many different forms of public waterfront buildings that will help maintain public access to the ICW. In addition to small pavilions and passive recreational structures, rowing club buildings, such as the one illustrated in the image above, can exist in street-end parks or other settings.
The Boynton Beach Boulevard bridge is an example of a successful riverwalk and bridge park with a marina village. Benches and other people-friendly amenities encourage people to enjoy the water and look at the mechanisms for the raising and lowering of the bridge. In the immediate vivinity, Boynton Beach’s marina village features residential units, restaurants, office, retail, and entertainment venues, boat slips, and docking facilities with expanded public access to the waterway.

The Atlantic Avenue bridge in Delray Beach is in close proximity to waterfront restaurants and

The area below the Boynton Beach Bridge is treated as a shaded plaza with benches and landscaping. Below, downtown Delray Beach’s riverwalk extends below the Atlantic Avenue Bridge, activating the waterfront with park area, a playground, and quiet areas to sit.

Veteran’s Park, which features lighted lawn bowling courts, shuffleboard courts, and a playground. A tree-lined, brick paved walkway connects below the bridge.

Local governments should maximize the potential of these bridges and surrounding areas for multi-use public access for its residents and visitors. They offer opportunities to increase public access by creating new “real estate” around this form of public infrastructure such as these.

Fishing is an age-old tradition in Palm Beach County, and residents and visitors fish recreationally as well as to supplement their diet. The County needs more fishing accessibility for all income levels but perhaps most importantly for those without boats. When designing and upgrading parks, local governments should create angler-friendly and pedestrian-friendly overpasses, underpasses, and bridge landings. Railings should be at a comfortable height for fishing.

Architectural elements and detail create a strong identity and pride in the dual-purpose bridge/park in Boynton Beach.
and anglers and pedestrians should be shielded from motorized traffic. Receptacles for fishing lines and rubbish should be provided, for these will help protect the physical amenities as well as fisheries and other marine life. Other facilities such as restrooms, seating, and picnic areas should be provided where appropriate, and pedestrian-scale lighting and improvements should be emphasized. Designs should utilize and maximize potential of the “dead space” under bridges for sitting, picnicking, parking,
walking, fishing, and related activities. Local governments should work with permitting agencies, participate in project-specific design committees, and ideally work collaboratively at the county or regional level to maximize the public access potential of public rights-of-way and facilities along the waterfront.

Other Recreational Destinations

Recreational boaters and the general public look for destinations to enjoy the water, for most boaters do not want to cruise all day. Instead, many boaters want to dock, anchor, or beach their boats, using the vessel as transportation. While the shoreline is well-populated with commercial destinations, there are fewer recreational destinations along or within the Waterway. Given their limited number, the existing facilities and destinations are in high demand, with tens of thousands of boaters frequenting spoil islands, such as Peanut Island along with nearby sandbars outside the ICW and park properties. In comparison to its large population, Palm Beach County has only a few such facilities, and charrette participants emphasized their desire for existing facilities to be expanded, and new facilities to be developed.

Lake Worth’s Snook Island project in 2005 is an excellent example of how the environment and public can share benefits from a restoration project. In this example, existing, man-made dredge holes were filled to create islands adjacent to the Intracoastal channel, with native plantings and rock to establish habitat and water quality improvement. While the southernmost island will be accessible by riverwalk, the northern islands are only accessible by small watercraft and non-motorized watercraft. In this portion of the Lake Worth Lagoon, even spoil islands are somewhat limited, so the creation of these islands provides a double-benefit for the natural system as well as the recreational users.

Charrette participants recognized the potential access opportunities created by the Snook Island project and suggested primitive camping sites and educational kiosks be provided at restored spoil and natural islands. The image in this chapter shows Snook Island with simple camping facilities, constructed from renewable materials that would ideally represent

The Intracoastal and its shoulders provide extensive fishing opportunities for Palm Beach County residents and visitors.

Located in the Lake Worth Lagoon near the Lake Worth municipal golf course, the Snook Island restoration project transformed existing dredge holes into an environmental amenity that also provides a series of ecologically interesting destinations for recreational users.
closed systems, negating any environmental impacts. The Lake Worth Bridge is in the background, enhanced with a pavilion and fishing facilities. Local governments, agencies, and organizations should work together to create more of these multi-purpose, multi-user public access destinations for users in and along the ICW.

To expand the inventory of public access facilities, local governments should utilize regulatory incentives to form partnerships with private sector developers and business owners. Potential incentives include land donations, public easements, construction, and maintenance of public access and waterfront facilities along the mainland and barrier islands in exchange for entitlements. For example, density increases can be given to a project, or local governments could offer expedited permitting when a project includes (and maintains) public access to the waterfront. The public access would also provide an amenity to the developer’s project, conferring increased value on individual properties within the project.

Additional access can be established via commercial concessions offered in conjunction with traditional marina and waterfront uses. For example, marinas offering water taxis, rentals of personal watercraft (e.g., jet skis, waverunners), motorized and non-motorized watercraft, fishing charters, picnic and fishing areas, and other waterfront enjoyment activities could receive additional entitlement or tax rebating for these uses. Parks, playgrounds, and picnic facilities could be located in places people may fish, rent, or launch a boat, canoe, or kayak. Public pathways, bike routes, and transit systems should be designed to interconnect the waterfront and commercial destinations and neighborhoods.

Greenways, Trails, and Blueways

The promotion of eco-tourism was a strong recommendation by charrette participants, who noted the natural beauty of the undeveloped shorelines along the Intracoastal as well as islands within and along the waterway. Eco-tourism is a broad issue, which is discussed in several chapters of this report. With regards to public access, eco-tourism is addressed in this chapter with regards to greenways and trails, bike paths, and blueways. More discussion on this topic is available in Chapters V (Protection of Natural Resources) and VII (Eco-Tourism and Recreational Opportunities).

Eco-tourism is generally defined as a form of tourism to undisturbed areas high in natural beauty or biodiversity that strives to minimize ecological impact or damage. From a public access standpoint, the Intracoastal and its shoreline offer interesting and possibly expanded opportunities for eco-tourism within Palm Beach County. Within the State of Florida, and Palm Beach County in particular, there is growing enthusiasm for and interest in alternative modes of transportation ~ travel by foot, bike, and non-motorized watercraft ~ that provide transportation mobility with enhanced recreational
activity and reduced fossil fuel consumption. In natural settings, these alternative modes of transportation primarily occur via three types of facilities:

- **Greenways**, which are generally defined as scenic land trails or routes occurring through natural areas that include travel or recreational activities. Greenways are typically considered to be wider natural corridors composed of natural materials; however, greenway segments may require interconnections composed of hardened materials. Greenways can typically accommodate pedestrians, off-road bicyclists, and equestrians.

- **Trails**, which are typically defined as pathways constructed of various materials, including natural surfaces as well as boardwalks, asphalt, and stone, that are used for recreation, as alternative modes of non-motorized transportation, or both. Although the terms “greenway” and “trail” are often interchanged, trails are typically considered to be smaller (narrower) facilities than greenways and are more often comprised of hardened surfaces that are compliant with the Americans with Disabilities Act. Therefore trails typically can more easily accommodate on-road bicycles, strollers, and other wheeled vehicles as well as off-road users (e.g., hikers, off-road bicycles, equestrians).

- **Blueways**, which are waterborne trails for typically non-motorized watercraft, including canoes and kayaks, that rely on paddling in water for mobility.

Charrette participants were highly supportive of expanded modes of access to and along the Intracoastal that utilized these three types of facilities. In addition, participants articulated strong interest in interconnections between upland facilities (greenways and trails) and blueways.

There are currently extensive efforts underway to create and enhance a network of greenways and blueways, with programs in various stages at the local, regional, state, and multi-state levels. These efforts are generally described below as they relate to public access.

### County Efforts

Palm Beach County has maintained a long-standing commitment to the preservation and enhancement of natural lands and expanded recreational access within those lands. As a leader in a multi-agency, multi-jurisdictional effort, the County has facilitated the development of the Northeast Everglades Natural Area (NENA) project, which identifies and enhances extensive multi-user facilities (hiking, bicycling, equestrian, and paddling) through this area. Located predominately in northern Palm Beach County, the NENA plan stretches from Bridge Road in Martin County south to Southern Boulevard in Palm Beach County, and from Lake Okeechobee in western Palm Beach County east to the Atlantic Ocean, encompassing 165,000 acres of natural Florida lands and providing connectivity to the Intracoastal, especially in the Jupiter area. Numerous points of interest are included within the NENA plan, noted as follows:

Canoes and kayaks have become popular on the Intracoastal, reflecting the growth of this national trend.
NENA includes several key multi-user trail facilities that ultimately connect to the ICW, generally in the Jupiter area, with future potential connections in central and southern Palm Beach County. NENA also interconnects with two major multi-county trails, including the Lake Okeechobee Scenic Trail (established on top of the Herbert Hoover Dike that surrounds Lake Okeechobee) and the Big Water Heritage Trail (a five-county trail facility occurring within the five counties surrounding Lake Okeechobee). As these facilities continue to develop, these trails and their interconnection with the

Projects such as Palm Beach County’s Northeast Everglades Natural Area (NENA) provide opportunities to integrate activity on the ICW with inland recreational and natural amenities for expanded eco-tourism and nature-based recreation.
Intracoastal provide multi-day, multi-user facilities, which will expand the natural access to these destinations as well as greatly expand the County’s eco-tourism opportunities.

The County is also developing the South County Greenways and Trails Plan to identify non-motorized transportation and recreational trail opportunities south of Southern Boulevard (SR 80) to the Broward County line (map excerpt below). This plan will result in a map of existing and proposed greenways and urban trails that will offer recreational opportunities, non-motorized transportation options, and connectivity to regional activity centers along with an implementation strategy for future funding consideration. At a regional level, the plan will also identify connections with Broward County’s Greenways Master Plan and the NENA plan for Northern Palm Beach County. Completion of the draft plan is anticipated in 2009.

At a larger scale, Palm Beach County actively participates in the development of the East Coast Greenway, a 3,000-mile multi-user facility that will ultimately provide a recreational connection between Key West and Calais, Maine. The County has generally identified its alignment for future planning purposes and, over time, anticipates designation of key segments, many of which will interconnect with the shoreline of the ICW.

The County’s Greenway and Linked Open Space Map (on the following page) indicates the general opportunities for natural interconnections. This effort, along with other updated information, will be utilized as the Palm Beach MPO develops its Greenways and Trails Map in 2009. In addition, the charrette discussion yielded especially strong interest in the paddling trails component of the County’s efforts, including locations along the ICW for canoeing and kayaking as well as interconnections to the interior upland. Initial location maps for this non-motorized activity have been developed as part of this report, based on available data. To further understand and develop this eco-friendly form of access to the Intracoastal and its environs, additional inventory, identification, and analysis of these facility components should be conducted.

Regional Greenways and Trails

The Treasure Coast Regional Greenways and Trails GIS Project is currently being developed, with TCRPC coordinating an inter-agency, multi-disciplinary working group. Palm Beach County’s portion of the Intracoastal will play a focal role in this regional system. This project will identify multi-county facilities through the four Treasure Coast
Counties (Palm Beach, Martin, St. Lucie, and Indian River) as well as the interconnections into surrounding counties. The component facilities are intended to address the needs of all user groups, including hiking, bicycling, equestrian, and paddling facilities. An early version of the Regional Greenways and Trails map is included on the following page. As the Intracoastal Waterway traverses the four Treasure Coast counties, it presents a strong opportunity for cross-county travel and heightened interest for users. A feature of the regional network will be identified interconnections to key historic, cultural, environmental, and educational facilities, many of which lie along the Intracoastal’s shoreline. Emphasis has also been placed on utilizing the regional greenways and trails network to highlight heritage and cultural tourism, particularly within historic downtowns, which corresponds to the marina villages and potential water taxi network discussed in this Plan.

State Greenways and Trails

The Florida Department of Environmental Protection (FDEP) Recreational Trails Program administers state and federal funds to city, county, state, and federal governments and organizations for the development of recreational trails, trailheads, and trailside facilities. Within FDEP lies the State’s Office of Greenways and Trails (OGT), which coordinates the state’s planning efforts in this area. The OGT maintains a state-wide inventory of “opportunity linkages,” which represent local priorities and expectations as to greenway and trail alignments. Proposed facilities must be included on this map to receive certain types of state funding (e.g., Florida Forever funds).

In addition to the upland facilities, FDEP also developed and maintains the Florida Circumnavigational Saltwater Paddling Trail, which

In Palm Beach County’s Greenway and Linked Open Space System Map (above), the Intracoastal clearly parallels the proposed alignment for the East Coast Greenway (indicated as a red highlighted corridor along the ICW).
identifies canoe and kayak trails to explore Florida at the periphery of the mainland while remaining protected from open waters. The Trail begins at Big Lagoon State Park near Pensacola, follows the external contours of mainland Florida, and ends at Fort Clinch State Park near the Georgia border. The trail traverses 1,600 miles divided into 26 segments. Images of the paddling trail as well as the opportunity linkages are included in this chapter.

For purposes of public access, special emphasis should be placed on those desired facilities that provide interconnection to the Intracoastal, consistent with the priority expressed by charrette participants regarding public access.

Multi-State Greenways

The East Coast Greenway, as noted above, represents a nationally prominent effort to establish a 3,000-mile multi-user path connecting the U.S. eastern seaboard through thirteen states. The trail incorporates a variety of different methods: waterfront esplanades, abandoned railroad corridors, canal towpaths, and other corridors. The goal of the East Coast Greenway is to create a traffic-free greenway for its entire length. Currently, roughly 20% of the greenway is traffic-free and already being utilized. Various governmental entities manage the greenway and utilize consistent signage, and the East Coast Greenway Alliance, which organizes the project, monitors trail conditions throughout the facility. Within Palm Beach County, the Intracoastal Waterway can play a highly visible role in its parallel alignment to the greenway, and special emphasis can be placed on portions of the facility that enable users clear water views, lookouts, or resting stops along the water’s edge. This multi-state facility can significantly expand public access for non-motorized travels, both within the County and beyond.

Integrating Greenway and Blueway Systems

Charrette participants wanted to tie the various trail systems together and into the ICW. This could be achieved by sharing facilities; marketing and

At the state level, FDEP has taken the lead to identify a “Florida Circumnavigational Saltwater Paddling Trail. Inland access is provided via ocean and gulf inlets.
Loxahatchee Basin canoe and kayak system
MacArthur Park and Peanut Island Loops

- Canoe & Kayak Launches
- Florida Saltwater Paddling Trail
- Kayak Trails
- Kayak Areas

McArthur and Peanut Island canoe and kayak system.
Southern Causeway to Snook Islands canoe and kayak system
Ocean Ridge Parks canoe and kayak system
PUBLIC ACCESS

developing the greenways and blueways as an interconnected system; making segments usable to different types of users such as hikers, bicyclists, and paddlers; and connecting the ICW to greenways with urban and natural trail segments. Various locations should be highlighted as interesting destinations (e.g., historic structures and geography, fishing sites, canoe and kayak launches) and visitor accommodations and amenities such as campsites, hotels, and laundry facilities. This data will be assembled at the regional level for major facilities, but additional data collection and analysis will be necessary at the local level within Palm Beach County to improve the depth of this concept. Popular ICW destinations such as Peanut Island, marina and water-related vendors and services, and linkages to water taxi services would provide a more “civilized” respite and should also be noted. Charrette participants also requested environmental education kiosks and tours along the Waterway, which could expand the advocacy base for the waterway’s restoration and enhancement.

Access for non-motorized watercraft, particularly canoes and kayaks, was a topic with much enthusiasm during the charrette. In addition to the provision of more launch locations for these users, participants also noted the need to enable improved crossing of spillway structures, which control the relationship of water levels between canals and the ICW. Also referred to as “control structures,” these provide a necessary water control function; however, they inhibit blueway access from the ICW to interior paddling trails through these canals. This disconnect also prevents access to upland greenways and trails, bifurcating the desired connections by users.

The East Coast Greenway is a 3,000-mile multi-use greenway and trail facility planned between Maine and the Florida Keys. Portions of the Greenway are aligned with the ICW along Florida’s east coast, including Palm Beach County.

The Office of Greenways and Trails, within FDEP, maintains a map of opportunity linkages for future user facilities (imaged above). Palm Beach County is the focus of the zoomed map on the left.
Spillways and other fixed structures in canals that connect many of the potential paddling trails inland currently prohibit connections, creating a need for portage. The C-51 canal already has an informal portage, evidenced by the “cow path” on the banks from canoes and kayaks being dragged up the bank and across the structure. The charrette team created a model portage that can be adapted and applied to other locations. Gently sloping steps allow paddlers to drag their vessels over land to the opposite side of the spillway.

When marketing the various greenways and blueways, it is important to create a consistent identity and signage system for users. Maps should be widely available to the public and posted at key locations throughout the trails, highlighting amenity locations as well as interconnections with other trail facilities. To build upon these systems, future greenway planning efforts to create greenways should connect, append, and enhance other greenway and blueway networks, filling in the gaps between stand-alone segments where possible.

**Boat Ramps and Public Marinas**

Boat ramps and public marinas serve as access points to the Intracoastal for those with and without boats. FIND data indicates Palm Beach County currently has a boater registration of roughly 38,000 vessels, most of which are below 25’ in length. For boaters that do not live on the water, there are three options to access the waterway: rent a wet or dry slip in a private marina, rent a wet or dry slip in a public marina, or use a boat ramp.

For a county of 1.2 million people, there is relatively limited public marina access along the ICW in Palm Beach County, with a current inventory of 37 public marinas that provide fuel, water, and other services. These facilities offer dry and wet slips for users on a monthly or annual basis. While marinas usually provide a wide range of services, many recreational boaters only need access to the water. Boat ramps provide that access; however, they need to be accessible landside and provide adequate infrastructure to launch smaller watercraft. Demand for both forms of boater access to the Intracoastal will continue to increase as the County’s population grows over time. A third form of boater facility along the Intracoastal is an anchorage or mooring field along the waterway, where users can anchor vessels or otherwise secure them to buoys. Currently, all the

Properly designed portage facilities should maintain gentle slopes and ideally floating docks at the water’s edge, such as the features illustrated in the above example.
PUBLIC ACCESS

County’s mooring fields are informal, which means these areas are available at no cost to users, but the mooring fields have limited security, surveillance, and operations. Long-term, formalized anchorages may provide a low-cost opportunity to increase available storage for boats as well as access to more traditional marine services such as pump-outs and other upland facilities or amenities.

In addition to motorized and larger vessels, there exists an access demand for non-motorized vessels, including canoes, kayaks, and other small boats. These forms of watercraft can be launched from a variety of formal and informal locations, including public launches integrated into public park facilities, or more simply, sandy beaches. Upland support facilities for this use include parking areas and typical park amenities. Similar to the growing demand for motorboat facilities, demand for non-motorized facilities will also grow with increased population.

This section describes the inventory, status, and recommendations related to public boating access to the ICW.

Boat Ramps

The TCRPC has identified boat ramps and the water access they provide as a regional issue. Currently there are fifteen boat ramps in Palm Beach County to accommodate more than 18,000 registered boat owners who indicate they trailer their boats. Parking at boat ramps limits their capacity, and often, users cannot find parking at these facilities. This creates hostility at the ramps and a spillover of trailer parking onto adjacent roadways.

Boat ramps are also important to marine businesses that are located inland. They allow access to the Intracoastal, Atlantic Ocean, and other water systems in Florida.

Although more boat ramps and trailer parking are planned, these new facilities will likely become inadequate to accommodate Palm Beach County’s growing population. County and local governments should look for ways to provide more boat ramps and parking for trailers. The efficiency of these facilities can be expanded with more staging docks to relieve pressure on the ramps themselves. Boat ramps need to be easily accessible by land, designed to integrate into the surrounding area rather than negatively impact their environs, be convenient and safe, and provide ample trailer parking. Boat ramps should also provide angler amenities such as fish-cleaning tables, fishing line disposal,
The Riviera Beach Marina, pictured above, includes both wet and dry slips in a working waterfront district. The County is developing a public boat ramp within walking distance of this facility.

Over half of the County’s registered boaters house their vessels in wet and dry slips. There are currently 37 public marinas along the ICW. Marinas provide important goods and services to boaters and other non-boating marine users, including boat rentals, marine-oriented concessions (e.g., food, beverages, ice, bait and tackle), and potential water taxi access. Public marinas also provide fuel, boat repair and maintenance, dockage facilities, and towing. Some public marinas offer lodging and recreational amenities as well. The map on the previous page illustrates the current inventory of boat ramps and public marinas in Palm Beach County. As illustrated in this map, these facilities are distributed throughout the County, with clear concentrations near the four inlets to the Atlantic Ocean.

These new and expanded facilities will greatly improve public boater access to the Intracoastal; however, supply/demand relationships consistently change. Given the County’s projected growth over time, additional facilities will ultimately be necessary to maintain quality public access commensurate with public expectations.

Another consideration particular regarding public marinas is the co-location of marine industrial uses. With a blend of marine-oriented uses, marine-related districts can emerge where goods, services, infrastructure, and specialty equipment can be shared, producing efficiencies and cost-savings. Co-location of these facilities also produces synergistic use patterns, thereby reducing travel times between uses and demand on the roadway network. The closest example of this type of district is Broward County’s “Marina Mile,” which contains more than seventy marinas and marine-related businesses within a small geographic district. This district’s organization is furthered by the non-profit “Marina Mile 84 Association,” which catalogs member businesses for advocacy, marketing, and expanded economic development.

Finally, there are design considerations for public marinas, and particularly dry storage facilities, to
improve their visual and functional relationships with neighboring uses. Traditional architecture, genuine materials, building articulation, and improved landscaping are design features and methods that can reduce the visual impact of dry storage facilities, making them better neighbors aesthetically and financially with regards to taxable value. Carefully planned vehicle access and sufficient overflow parking will improve the function of these uses.

Mooring Fields

Mooring fields or “anchorages” are areas where vessels can be secured with anchors or buoys. Often, boaters secure larger or deeper-draft vessels (sailboats as well as motorcraft) in anchorage areas and utilize dinghies to access upland amenities. Unregulated anchorages occur naturally in shallow, sheltered shoulders, outside active channels. In addition, formalized, designated anchorages can be established in these or other locations and operated in conjunction with a marina or harbormaster.

Mooring fields provide attractive alternatives to wet or dry slip space, attracting many boaters who like the community feel or lower cost of these facilities versus traditional marina settings.

At the time of this report, there were four informal mooring fields in Palm Beach County, including North Palm Beach, the north of Munyon Island at the northern end of the Lake Worth Lagoon; Riviera Beach near Phil Foster Park and surrounding Peanut Island; and West Palm Beach south of the Lake Worth Inlet. These locations are identified in “Unregulated Moorings” map on the following page.

Mooring fields are inexpensive for users and can provide temporary anchorage for transient boaters or long-term storage for residents. However, unregulated moorings can damage or threaten sea grasses, oyster beds, and other marine life. The lack of pump-out for sewage from these vessels creates a major problem for the health of the waterway and can threaten humans. Furthermore, vessels in unregulated moorings are often not properly maintained and serviced, producing a concentration of leaky bilges and gas tanks. Unregulated mooring fields can also develop a concentration of derelict vessels, posing environmental and navigational hazards along the waterway. Regulatory agencies and non-profit organizations such as Lagoonkeepers.org

In this photo of the unregulated anchorage north of Peanut Island in Riviera Beach, several moored vessels are apparent in the foreground, including a rusting vessel that appears to be inoperable on the left.
This map indicates the general areas where unregulated moorings tend to occur in the ICW.
PUBLIC ACCESS

inventory derelict vessels and organize their removal; however, preventing derelict vessels through proactive management can be a more efficient and effective solution.

Charrette participants indicated a desire for formalized mooring fields along the Intracoastal, particularly to provide better quality but low-cost moorings with amenities, reduce environmental contaminants by encouraging regular bilge pump-outs and permanent buoy placement, and reducing the incidence of derelict vessels. Permanent moorings also provide secure anchorage in times of high winds or hurricanes, as these events tend to cause anchoring damage often through environmentally sensitive bottom-lands.

Formalized mooring fields are typically overseen by an on-site harbormaster who provides assistance to patrons, ensures regular pump-out of vessels, and manages the facility. Harbormasters provide an interface with law enforcement and environmental agencies for the identification and removal of derelict vessels and other interventions when necessary. Within the Treasure Coast region, designated anchorages exist in Stuart and Fort Pierce. Low daily, weekly, or monthly fees help regulate use at the fields, and some local governments time-limit moorings to discourage permanent residence and prohibit unregulated mooring. Fees cover services and amenities such as showers and lockers. Goods and fuel may also be offered, and dinghy docks with surveillance are standard amenities.

Waterway Maintenance and Enhancement

The ICW was originally constructed as a transit route that moved both freight and people. It is still used to move freight mostly to the Atlantic Ocean through the Lake Worth Inlet. Shipping freight is administered by the Port of Palm Beach in Riviera Beach. There are four inlets allowing access to the Atlantic Ocean: Jupiter, Lake Worth, Boynton Beach, and Boca Raton. Each inlet has different management approaches and geography (e.g., inlet width, water depth, neighboring uses, users). For example, the Jupiter Inlet serves more recreational vessels with a narrow, fast-moving water flow. Many recreational boaters utilize the surrounding inland waters and landmasses for swimming, fishing, and relaxing. On the other hand, the Lake Worth Inlet is wide, deep, and is utilized by international shipping lines with international companies and marine industries nearby.

The four inlets are administered by three different entities, the Jupiter Inlet District; Palm Beach County covering the Lake Worth Inlet and Boynton Beach Inlet; and the City of Boca Raton. There is on-going coordination among these management entities and FIND to achieve efficiencies and economies of scale. Further coordination of dredging activities among the county’s four inlets could enhance funding opportunities, allowing for greater sharing of costs and resources. Of special note is the recommendation for “Megayacht Mile” near the Lake Worth inlet in Riviera Beach and its associated inlet and channel deepening needs. While this concept and related projects are more fully described in Chapter IX (Economics of the Intracoastal), it nonetheless represents a sample project which could benefit from enhanced coordination amongst these entities.

Smaller, Non-Motorized Vessels (Rowers and Paddlers) and People

A surprisingly strong theme articulated by charrette participants was the desire to develop and enhance canoe/kayak activity in and along the Intracoastal, particularly for recreational and eco-tourism purposes. It is difficult to determine statistics for these smaller, non-motorized vessels and anglers, as owners of these vessels are not required to register their vessels, and not all anglers obtain fishing licenses. One can infer growth and popularity of paddling and fishing by the number of businesses, related industries, and interests in various organizations such as the West Palm Beach Fishing Club and the Palm Beach Pack & Paddle Club. Also,
state and national trends seem to indicate heightened awareness and enthusiasm for the natural recreational opportunities offered by human power versus fossil fuels. Two core issues related to smaller, non-motorized vessels are discussed in this section: Access and Safety. Other aspects of this topic are further explored in Chapter VII (Expand Recreational Opportunities and Eco-Tourism).

Access

Larger motorized vessels and sailboats require boat ramps or marina infrastructure to access the Intracoastal. High capital, operating, and maintenance costs for these vessels and their access points limit their availability to the general population. However, a low-slope sandy shoreline is all that is needed for canoes, kayaks, and people wading, swimming, snorkeling, and fishing to access the waterway. Canoe and kayak launches and walk-in access to the water costs less than facilities for motorized vessels. Although parking is required, it can occur on roadway shoulders or within multi-use parks. Other infrastructure costs for this form of access are also lower. A gentle sandy slope or steps into the water can easily be co-located with other facilities at public marinas, waterfront parks, and existing publicly-owned land that is not currently utilized for park space. Numerous alternative locations for smaller non-motorized access can relieve congestion and traffic at boat ramps.

When designing facilities for these users, care should be taken to ensure facilities and infrastructure are appropriate in scale and comfort. Low slopes, trails, or formal steps down to the water can be created and appear as amenity features, depending on their settings. The
Waterfront public access can be enhanced with architecturally significant structures, such as the public boathouse illustrated above, which provides shaded seating on its upper level with storage for small, non-motorized watercraft within its lower level.

Steps to the water would invite anglers, swimmers, and paddlers into the water, such as those illustrated in the conceptual street-end park above.

Sandy shorelines, such as the sailing club image above, can also provide safe access for Intracoastal users.
KEY FINDINGS AND RECOMMENDATIONS

Public access has many forms in Palm Beach County, and there are many different types of users. The creation and expansion of larger-scale facilities, such as public marinas and larger natural and active park and recreational uses, are most appropriate for Palm Beach County to address at a county-scale. However, there are significant opportunities for municipalities to pursue and enhance public access. While some facilities are capital intensive, others, like greenways and street-end parks, entail minimal capital costs and can be advanced with regulatory incentives and progressive policy approaches. Below are the recommended approaches by which public access can be created and expanded in Palm Beach County.

Protect and Enhance Public Access to the Intracoastal for All Users

- Maximize public access to the Intracoastal within publicly owned properties.
- Ensure the access is genuinely public and not closed off to any segment of the population.
- Include/expand public access with land use changes, development approvals, and regulatory incentives.
- Support the development and expansion of waterfront parks to enhance quality of life, promote tourism, and further economic development.
- Encourage local governments to require minimum public access with development or redevelopment of waterfront properties, with dedication of land or public access easement prior to site plan approval or mitigate with comparable (or better) access via commonly-owned lands.
- Consider density bonuses or other entitlements in exchange for expanded public access.
- Encourage local governments to adopt “no net loss” policies to protect working waterfront.

Encourage Sustainable Development Patterns to Support Park and Recreational Facilities

- Utilize proper building placement and mix of uses to create safe parks with proper transitions between uses and natural surveillance (to create “eyes on the park”).
- Encourage local governments to adopt specialty zoning provisions adjacent to waterfront parks and street rights-of-way that terminate at the water such that buildings front adjacent non-residential uses.

Encourage Development and Maintenance of Street-End Parks

- Identify the public rights-of-way that terminate at the shoreline.
- Encourage local governments to adopt policies to prohibit the abandonment of waterfront rights-of-way.
- Consider adoption of special land development regulations to require neighboring homes and uses front these parks where possible.
- Encourage partnerships between local governments and neighborhood or homeowners’ associations that include these street-end park opportunities for financial assistance to develop the parks and provide regular maintenance.
• Develop model comprehensive plan policies and land development regulations for street-end park programs.

Encourage Expanded Public Access Via Riverwalks and Intracoastal Bridges

• Work with FDOT to maximize functional public access below bridges.
• Identify locations of integrated riverwalk networks.
• Develop model comprehensive plan policies to prioritize public access in conjunction with bridge renovation or replacement.
• Create minimum design standards for safe, human-scale, pedestrian and angler-friendly designs and furnishings to accompany bridge renovation or replacement.

Support Establishment and Expansion of Greenways, Trails, and Blueways

• Connect the ICW to greenways with urban and natural trail segments.
• Improve knowledge of paddling launch locations, paddling trails, and desirable paddling locations and destinations.
• Continue working with organizations to create and promote greenways, trails, and blueways.
• Help establish a public/private blueways users group, with public agencies, private suppliers, non-profits, and interested parties to further develop knowledge base, establish user network, and create advocacy coalition for creation and expansion of paddling facilities.
• Market the greenways and blueways as an interconnected system with interesting destinations.
• Create identity and consistent signage for greenways, trails, and blueways with cross-referencing between facilities and destinations.
• Explore creation of formal portage facilities on canal spillways and other impeding structures.
• Encourage canoers and kayakers to explore areas not accessible by motorized vehicles and to promote eco-tourism.
• Maximize interconnections between the East Coast Greenway and the Intracoastal Waterway that provide users clear water views, lookouts, and resting stops along the water’s edge.

Continue to Protect, Maintain, and Expand Public Marinas and Boat Ramps

• Create and expand boat ramp and public marina facilities with associated parking and amenities.
• Increase efficiency of boat ramps by adding staging docks at existing and planned facilities for in-water vessels to reduce demand on ramps.
• Discourage the displacement of boat ramps and conversion of public marinas to other non-public use.
• Design the boat ramps to minimize impacts with surrounding communities, particularly with regards to overflow parking and traffic circulation patterns.
• Provide angler facilities such as fish-cleaning tables, fishing line disposal, recycling, restrooms, and other appropriate facilities at boat ramps and in public marinas.
• Encourage development of marine districts around public marinas where appropriate to expand
synergistic uses and reduce vehicle miles traveled.

Improve and Enhance Mooring Fields Adjacent to the Intracoastal

• Develop a map and inventory of anchorage activity along the Intracoastal.
• Continue to evaluate establishment of designated anchorage in conjunction with marina renova-
tions at Phil Foster Park.
• Expand access to pump-out and other facilities with mobile services that can occur on-water.

Enhance Access and Amenities for Non-Motorized Use of the Intracoastal and its Environs

• Inventory canoe and kayak launch locations, destinations, and paddling trails and determine ap-
propriate locations for new launch locations.
• Maximize the potential of different users to the ICW including non-motorized and wading, fish-
ing, swimming, snorkeling users by co-locating appropriate facilities at public access points.
• Assist with public awareness programs for water safety to reduce conflicts between types of ves-
sels and users in the waterway.
PUBLIC ACCESS