

Marina and Drystack Market Assessment

For the Isle of Palms Marina

Isle of Palms, South Carolina

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Executive Summary

The City of Isle of Palms has retained Applied Technology and Management, Inc. (ATM) to provide consulting services related to the potential redevelopment of the City's marina site on the Atlantic Intracoastal Waterway (AIWW) and Morgan Creek.

In an effort to gauge current and projected market demand for marina storage at the subject site, this Marina and Drystack Market Assessment has been conducted as part of a broader site redevelopment planning effort. This market analysis work was conducted from September to November 2015 and included research of existing marina facilities in the greater Charleston area. Boating statistics were reviewed, and demographics for appropriate areas were researched. Targeted interviews were conducted with marine industry personnel.

The goal of these efforts was to determine the competitive position of the Isle of Palms Marina in the local market and to identify the primary demand components at the site. Specifically, this work was aimed at identification of current and projected demand for boat storage at the site, the determination of appropriate slip sizes, analysis of the potential demand for drystack storage, and review of appropriate slip/rack storage rate(s) for a redeveloped marina facility.

This information and analysis will provide critical information for facility planning and redevelopment efforts and help determine project viability from functional and economic standpoints.

Key findings and recommendations include:

- Boat registrations have increased steadily in South Carolina since 2010 and though they dipped slightly in 2014, they still exceed pre-recession levels.
- Regional boat registrations have increased steadily as well. Charleston County registrations have climbed at a steady rate since 2010.
- Boat registration data and ATM interviews have indicated a slight shift in the size of registered vessels and popular boat types along the coast. A slight downsizing trend has enabled many boaters to stay in boating during the recession. The largest, recent growth segment of registered boats has been in the 20- to 40-ft range.
- National expenditures on recreational boating have increased steadily since 2010.
- Statewide (South Carolina) purchases of new powerboats, engines, trailers, and accessories have risen dramatically since 2010, with a sharp increase noted between 2013 and 2014.
- Population growth for the state and Tri-County area of Charleston is strong, particularly for Berkeley and Dorchester Counties, where much of the sprawl of Charleston is occurring.
- The age distribution of Isle of Palms residents indicates a slightly more mature residency than neighboring areas, with a median age of 52.6 years. The median age in neighboring Mt. Pleasant

is 38.1 years. According to the NMMA, the largest segment of boat owners is between 31 and 49 years of age.

- Boating popularity in the Charleston area is strong, particularly among Berkeley and Charleston County residents. This reinforces the ingrained culture of boating in the Charleston area.
 - While localized data are not available, it is assumed that the popularity of boating on the relatively affluent barrier island of Isle of Palms exceeds the noted county figures.
- Median household income among Berkeley, Charleston, and Dorchester Counties is relatively high. This is indicative of strong industry along the coast and the level of affluence necessary to support boat ownership.
- The level of affluence on the Isle of Palms and neighboring Mt. Pleasant is substantially higher than county and statewide averages.
- Charleston is, of course, a premier tourist and transient boating destination. In recent seasons, transient boating has improved, according to local sources.
- Megayacht visitation potential at the site will be limited due to water depths in the AIWW and spatial constraints at the marina and Morgan Creek. Limited accommodations to support these vessels are recommended.
- ATM profiled over 20 marinas throughout the greater Charleston area. These included marinas on the Isle of Palms, around Charleston Harbor, North Charleston, and other outlying areas.
 - Overall occupancy approached 85 percent, which is strong and includes a wide range of facilities.
 - Occupancy of drystack storage in the subject area is very high. All drystack racks east of the Cooper are 100 percent occupied.
- There are several components of marina/boat storage demand at the subject site:
 - Long-term dockage
 - Transient dockage
 - Restaurant dockage
 - Charter dockage
 - Dry storage
 - Boat ramp
 - Non-motorized vessel launch
 - Watersports dock
- Based on observed trends and projections, the following table represents a summary of storage/usage demand for the subject site

<i>Isle of Palms Marina Demand Summary</i>		
<i>Marina Storage Element</i>	<i>Recommended Number</i>	<i>Specific Needs</i>
Wetslips	Maximization within site constraints	10 inshore charter spaces 10 boat rental spaces 2 spaces for Barrier Island Eco Tours 1 or 2 larger charter slips
Drystack Storage	Maximization within site constraints	Assume maximum boat size in the 35- to 40-ft range Assume average boat size in the 23-ft range
Boat Ramp	Maintain current ramp	Assume 20 to 30 parking spaces/lane required
Kayak Launch	Provide separate kayak launch facility	Segregate from heavy motorized vessel activity
Watersports Dock	Maintain Watersports Dock	Carefully examine parking needs/assignment

- Demand from Island residents is expected to be strong and should increase as the benefits of a redeveloped site and, particularly, if drystack storage is developed. Preliminary residential demand estimates range from 75-100 slips/racks.
- Phasing is not indicated from a market perspective, as current demand trends are strong. Phasing may be necessary from a financial standpoint, however.
- The proposed slip mix for redeveloped marina at the subject site includes flexible side-tie dockage, specifically sized dockage for charter vessels, smaller (25-ft slips) for rental boats, reconfigured dockage for the restaurant/AIWW dock, and vertical drystack storage capable of storing vessels up to the 35-40-ft range.
- Basic, recommended rates for redeveloped marina facilities are as follows (in 2015 dollars):
 - Annual Wetslips – about \$15/ft/month
 - Transient Wetslips -- \$2.10 to \$2.25/ft/night
 - Drystack Storage -- \$19 to \$20/ft/month
 - Additional fee recommendations and commentary has been provided in the body of this report.
 - An initial 5 to 10 percent discount on boat storage for island residents is suggested.
 - Slip/rack reservation priority should be afforded to residents of Isle of Palms.
- ATM has presented a list of suggested amenities that will enhance marina redevelopment and help ensure project success. These are presented in detail in the body of the report. Key amenities include:
 - High-quality dockage and reliable utilities
 - Adequate, controlled parking for all marina and site users

- Enhanced pedestrian access
- Maintain onsite amenities, including the marina office/store, marina-only restrooms, restaurant
- ATM suggests that the proposed marina redevelopment may utilize basic timber floating docks and open, uncovered drystack racks to meet market expectations. Upgraded docks or drystack storage architecture may be desirable and help the facility integrate with the fabric of the site and community.

Introduction and Background

Project Background

The City of Isle of Palms has retained Applied Technology and Management, Inc. (ATM) to provide consulting services related to the potential redevelopment of the City's marina site on the Atlantic Intracoastal Waterway (AIWW) and Morgan Creek.

Currently, the marina offers approximately 60 berthing spaces for a variety of vessels, including long-term sliptakers, transient boaters, charter/tour boats, and restaurant visitors. A watersports dock on the AIWW provides personal watercraft rentals, parasailing trips, and other water-related adventures to marina visitors. In addition, the facility is home to a popular boat ramp that provides water access for a variety of trailer boaters.

The upland portion of the site includes a large ship's/convenience store, a popular seafood restaurant (Morgan Creek Grill), a fuel pump, and an array of parking for marina users/visitors.



Isle of Palms Marina Site

The City purchased the marina in 1999 with the primary objective of preserving water access for City residents. Since that time, the marina has grown in popularity, and visitation/usage has increased

substantially. The City has invested in some important refurbishment projects at the site, however, much of the onsite infrastructure is aging and is unable to effectively accommodate current usage demands.

In an effort to gauge current and projected market demand for marina storage at the subject site, this Marina and Drystack Market Assessment has been conducted as part of a broader site redevelopment planning effort. This market analysis work was conducted from September to November 2015 and included research of existing marina facilities in the greater Charleston area. Boating statistics were reviewed, and demographics for appropriate areas were researched. Targeted interviews were conducted with marine industry personnel.

The goal of these efforts was to determine the competitive position of the Isle of Palms Marina in the local market and to identify the primary demand components at the site. Specifically, this work was aimed at identification of current and projected demand for boat storage at the site, the determination of appropriate slip sizes, analysis of the potential demand for drystack storage, and review of appropriate slip/rack storage rate(s) for a redeveloped marina facility.

This information and analysis will provide critical information for facility planning and redevelopment efforts and help determine project viability from functional and economic standpoints.

Methodology

To gain a general understanding of current marina trends and offerings in the greater Charleston area, ATM first conducted a “desktop” research effort. This initial effort included review of available boating publications, City-provided information, previous reports and other data sources to review the locations of marina facilities in the area as well as the characteristics and offerings of each. Available historical statewide boat registration data was reviewed to gauge general trends.

At the conclusion of this preliminary desktop effort, ATM professionals visited Charleston area marinas to profile marina facility offerings. The field investigation included visits to more than 20 marinas and provided additional, current understanding of facility offerings, condition, marina user characteristics, amenities, boat types, occupancy levels, slip rates, and boating trends.

ATM’s field investigation included not only physical observation of the facilities but also targeted interviews with marina operators and industry personnel to gain anecdotal information about boating and marina trends in the region.

At the conclusion of this field investigation, ATM conducted a second desktop data compilation effort aimed at filling in gaps in field-collected data and identifying current and projected demand for boat storage at the proposed marina site. Specific efforts included:

- Compilation and analysis of existing marina offerings and characteristics, dock/drystack types, amenity offerings, rate structures, etc.
- Procurement and analysis of current boat registration data for South Carolina
- Procurement and analysis of demographic data and projections

- Evaluation of transient boating market

ATM compiled and analyzed the information gathered during these efforts and developed an opinion of future demand for marina storage at the subject site. Recommendations for marina offerings, characteristics (e.g., dock types, rack types, utility offerings, etc.), rates, and amenities were developed and are provided in this report.

Research information sources included, but were not limited to, the following:

- South Carolina Department of Natural Resources (SCDNR) – Boat registration data
- National Marine Manufacturer’s Association (NMMA) – Demographic and Boat Registration Data
- 2015 Special Report on Paddlesports – Non-motorized vessel statistics
- U.S. Census Bureau – Demographic Information
- State of South Carolina, Budget and Control Board – Population projections
- U.S. Army Corps of Engineers (USACE) – Water level data
- Waterway Guide, Southern
- Various Internet sites
- ATM in-house databases

Market Demand Potential

Area Positioning

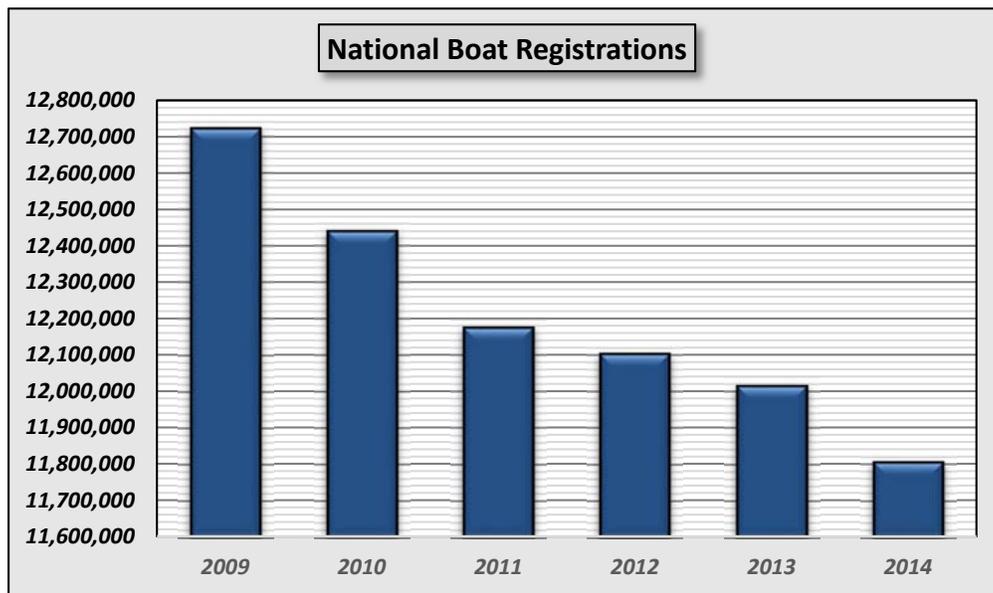
The Isle of Palms, South Carolina, is a small coastal city that comprises just 5.4 square miles of area outside the popular southern city of Charleston. Bordered by the Atlantic Ocean and the AIWW, the Isle of Palms is a barrier island that is a year-round residential community and home to a popular coastal resort (Wild Dunes). Many vacation homes are also available for rental throughout the year on the island.

The Isle of Palms has a strong boating and maritime culture. With miles of beachfront, direct access to the AIWW, expansive marshes, and two inlets leading to the Atlantic Ocean, the Isle of Palms provides a variety of water-based recreation opportunities. The subject marina provides access to the water and berthing for island residents, regional residents, and visitors from around the country. These visitors include resort guests, vacation home renters, and boaters traversing the AIWW and the east coast of the United States.

Boat Registration Data

National

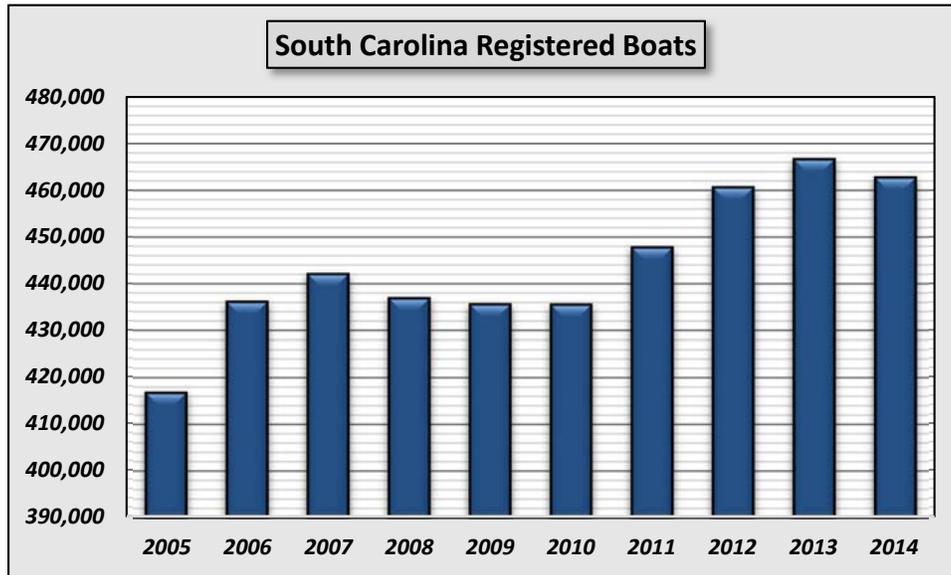
In 2014, there were 11,804,002 registered recreational boats in the United States, according to the U.S. Coast Guard. This is down slightly from the 2013 level of 12,013,296 and has been decreasing modestly since the economic recession that started in 2008-2009. National boat registrations in 2009 totaled 12,721,541, according to NMMA.



Source: USCG, NMMA

South Carolina

According to the NMMA, 462,680 recreational vessels were registered in South Carolina in 2014. This number is down 0.8 percent from the 2013 total of 466,589, but far exceeds the pre-recession high of 442,040 registered vessels in 2007.



Source: NMMA

Regional

Regionally, boat registrations have improved substantially from 2007 to 2015 and are now slightly above the historical highs of 2007. The following table depicts boat registrations for Charleston County and neighboring Berkeley and Dorchester Counties.

REGIONAL BOAT REGISTRATION COMPARISON 2007-2013					
County	2007	2010	2013	2015	% Change from 2013-2015
Berkeley	16,124	14,680	15,425	17,885	15.95%
Charleston	32,409	28,752	31,534	34,986	10.95%
Dorchester	9,410	8,331	8,758	9,773	11.59%
Total	57,943	51,763	55,717	62,644	12.43%

Source: SCDNR

The increase in boat registrations in the areas of South Carolina identified in the table (areas adjacent to the subject site) indicate stability and improvement in the local, recreational boating market.

Vessel Size Distribution

Not all vessels in the project region will require wetslip marina storage. Specifically, smaller vessels are generally trailerable or may be kept in dry storage. Therefore, it is important to analyze boat size distribution to further evaluate the potential for wetslip and drystack storage (re)development, as is being contemplated at the subject site.

The following table reflects registered recreational vessel sizes in Charleston County for 2015. The percent change in each size category from 2013 is presented so trends in vessel size popularity may be reviewed.

2015 Registered Vessel Size Distribution		
Charleston County		
Vessel Size	# Vessels	% Change from 2013
Less than 16 ft	16,210	1.71%
16 ft to less than 20 ft	14,249	2.06%
20 ft to less than 40 ft	10,019	8.62%
40 ft and over	104	-0.95%

Source: SCDNR Coast Guard Report

Generally, there has been a steady increase in the number of mid-size vessels in the 20- to 40-ft range. Many of these are trailerable vessels, while some may be candidates for either wetslip or drystack storage. The number of larger vessels (over 40 ft) has stayed steady, as has the number of smaller vessels (less than 20 ft).

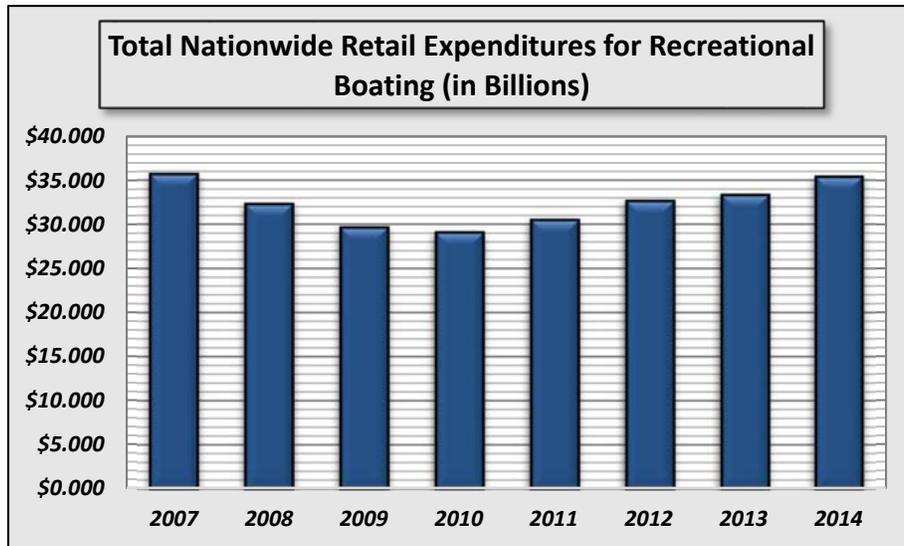
This trend was corroborated through ATM's field observations. In particular, a marked increase in the number of small to mid-size vessels berthed in area marinas and drystack (vessels in the 20- to 25-ft range) was observed. Specifically, many of these size vessels were observed in larger marina wetslips on drive-on floating boat lifts commonly known as "JetDocks," a brand name. In addition, occupancy of area drystack storage facilities has spiked in recent years.



Drive-On Floating Boat Lift

Boat Sales Trends

Other factors that provide insight into the general health of the boating market are boat sales and retail expenditures on boating-related purchases. The following figures present general information on national retail expenditures on recreational boating and state-level boat sales data.

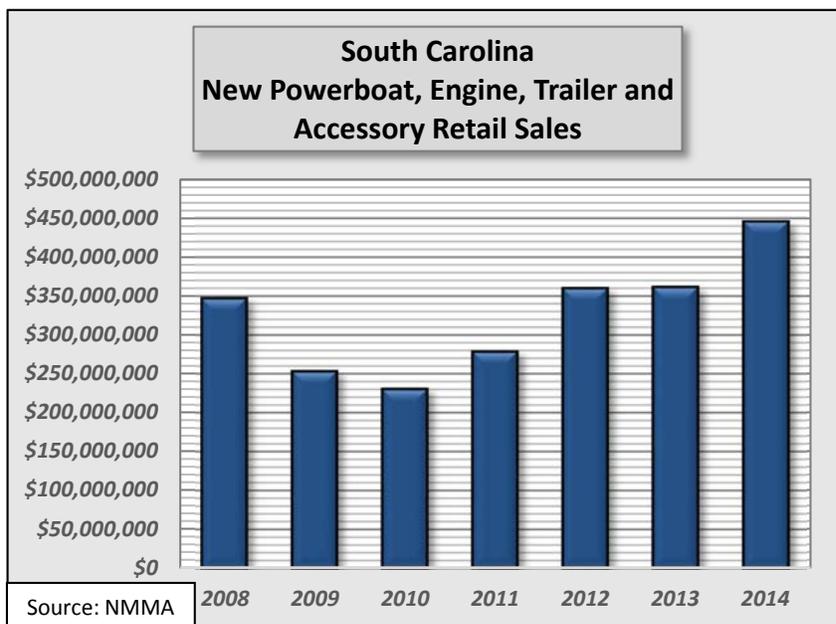


Source: NMMA

Various components comprise these national retail expenditures. Key component categories include new boats, pre-owned boats, new outboard engines, new boat trailers, and other expenditures. “Other” expenditures include fuel, finance, insurance, docking, maintenance, etc.

Overall, it is clear that retail expenditures have increased steadily since 2010. In fact, 2014 expenditures nearly equal those of the pre-recession year of 2007. Expenditures in all component categories have increased similarly since 2010 and indicate stabilization and growth of the industry.

In South Carolina, the picture is very positive as well. The following chart presents new powerboat, engine, trailer, and accessory retail sales figures from 2008-2014. As is evident, new powerboat, engine, trailer, and accessory retail sales have increased dramatically since 2010, when they totaled \$230 million. This total has grown to more than \$445 million in 2014, posting a 23.4 percent increase over 2013 numbers. This increase is among the highest growth rates in the United States from 2013 to 2014 and is



Source: NMMA

evidence of the popularity of boating in South Carolina, as well as the health of the boating market in the state.

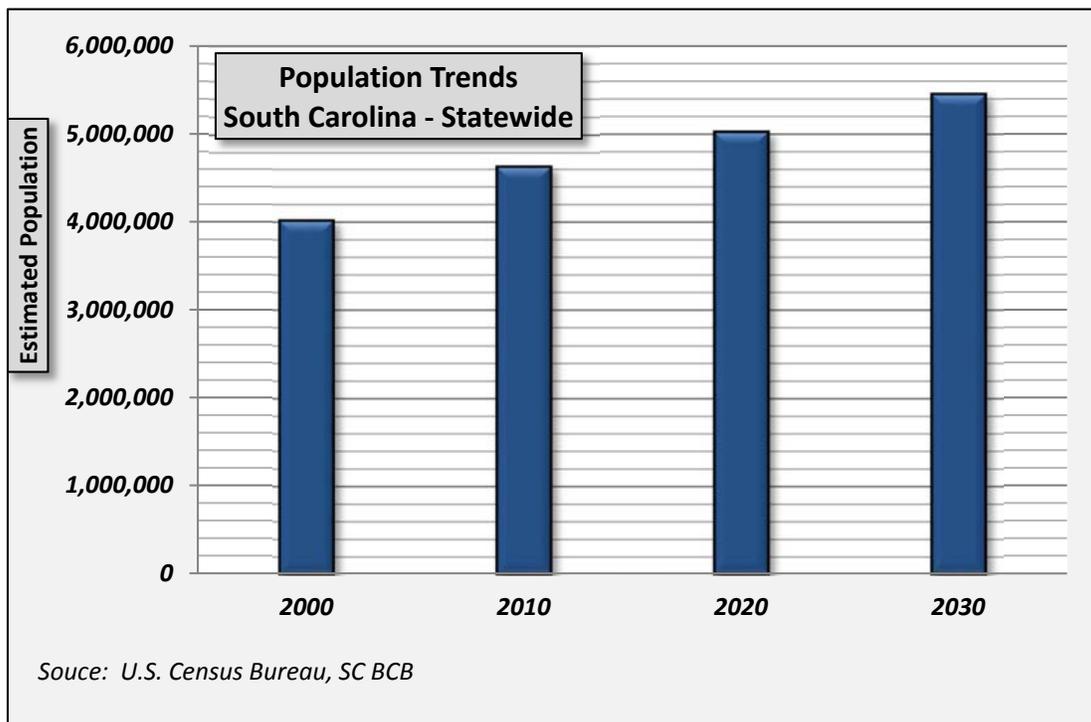
Demographics

ATM has reviewed relevant demographic data for South Carolina, Charleston County, and the surrounding areas as they relate to potential customer bases for boat slips at the subject site. Key demographic trends are highlighted in the following sections.

Population

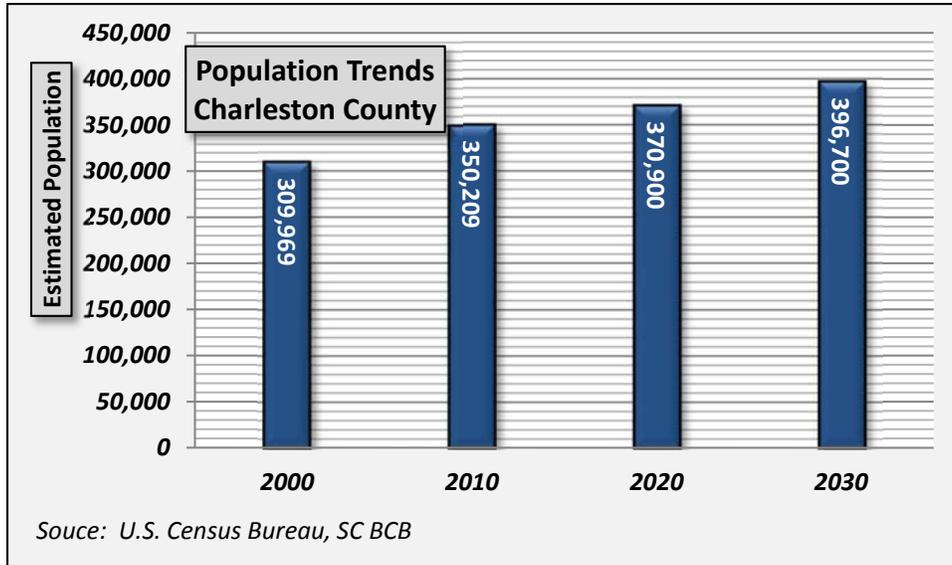
South Carolina

From 2000 to 2010, the population of South Carolina rose from 4,012,012 to 4,625,364, an increase of 15.3 percent. The state's population is expected to continue to rise through 2030, reaching 5.45 million. This projection translates to an 18 percent increase in population from 2010 to 2030 and is a testament to South Carolina's climate, economy, lifestyle opportunities, and overall appeal.

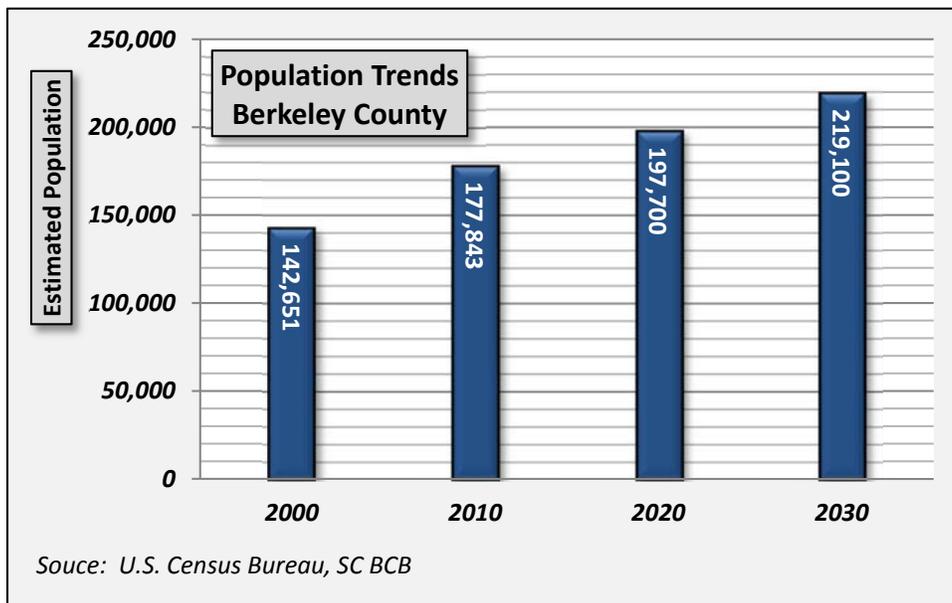


Regional Population Growth

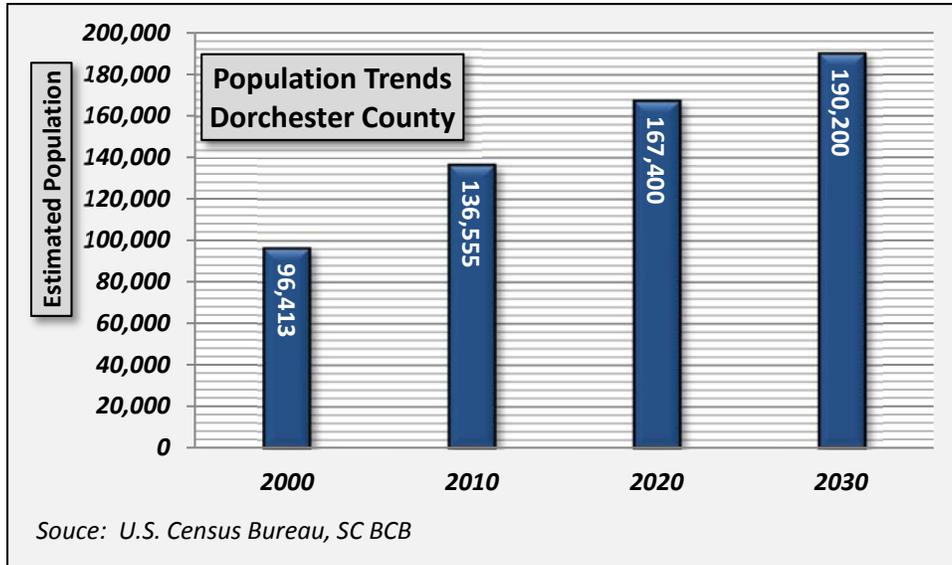
The population in Charleston County (which includes the subject site) as well as neighboring Berkeley and Dorchester Counties is expected to rise as well in the coming years. Charleston County has enjoyed strong growth from 2000 to 2010 (13 percent). This growth is projected to continue at a similar pace through 2030.



Berkeley County experienced a growth rate of 25 percent from 2000 to 2010. This rapid increase is expected to continue through 2030.



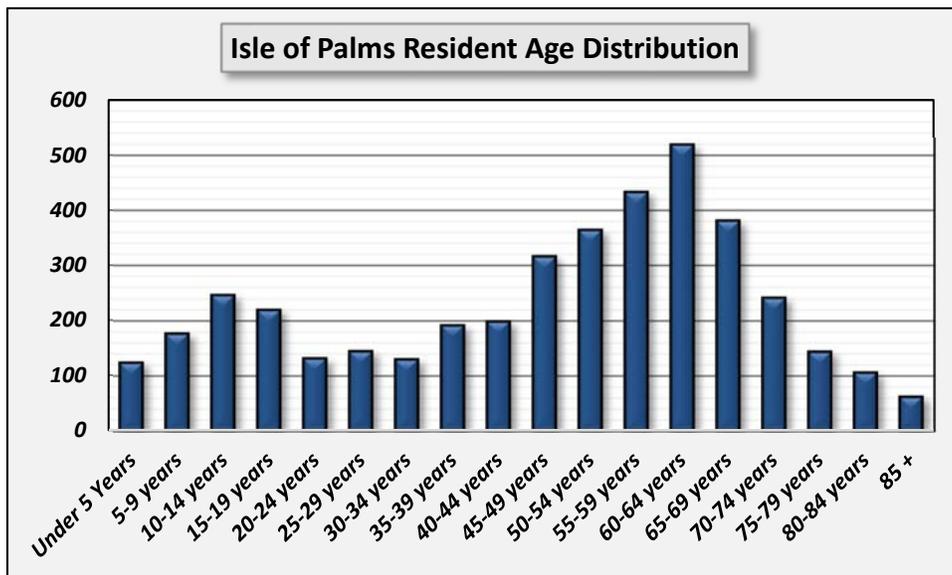
The population in Dorchester County grew rapidly from 2000 to 2010, rising a substantial 42 percent. While the overall population level in Dorchester is smaller (compared with Charleston and Berkeley Counties), this is still significant. By 2030, the population in Dorchester County is expected to reach 190,200 people, an increase of 39 percent from 2010 levels.



Local Population Trends

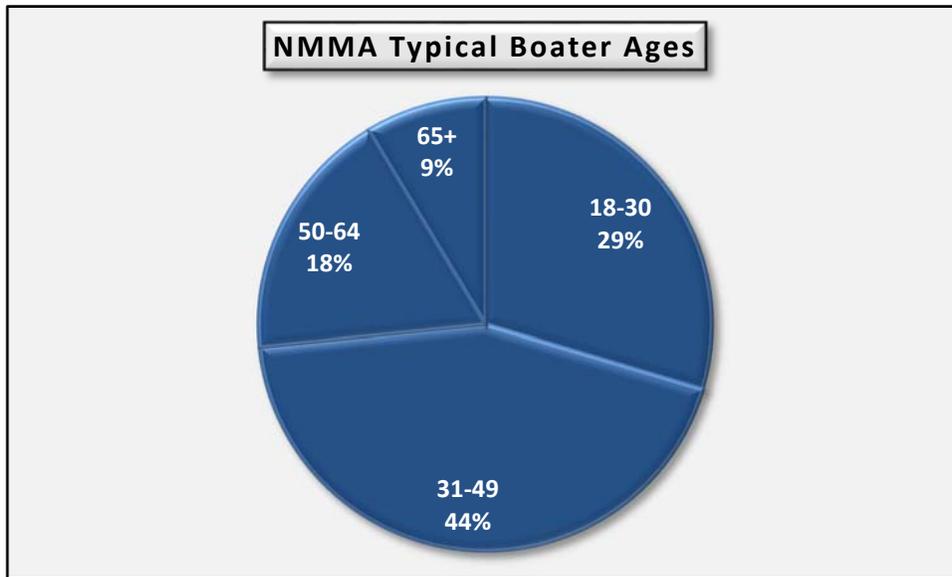
Isle of Palms

In 2000, the U.S. Census reported that the City of Isle of Palms included 4,583 residents. This number dropped in the 2010 census to 4,133, a decrease of 450 people or 10 percent of the total population. Current estimates indicate a population in the range of 4,300. Age distribution of Isle of Palms residents is presented in the following graph. As shown, nearly half of the population of the Isle of Palms is between 45 and 70 years of age. The median age of the population of the Isle of Palms is 52.6 years.



Source: U.S. Census, 2010

NMMA tracks typical recreational boater ages. These statistics for 2014 are shown in the following graph. As is evident in this figure, 73 percent of active boaters are between the ages of 18-49. As such, the Isle of Palms has a slightly more mature population than what is indicated as the most prevalent age for current boating participants.



Source: NMMA

Mt. Pleasant

The Town of Mt. Pleasant is located immediately west of the City of Isle of Palms. Mt. Pleasant is the fourth largest municipality in the state of South Carolina, with an estimated 2014 population of 77,796. This is up nearly 10,000 from just 2010, making Mt. Pleasant one of the fastest growing communities in the state. The Isle of Palms provides a gateway for Mt. Pleasant residents to access the beach and boating opportunities on the AIWW. Therefore, the growth of Mt. Pleasant may have a direct impact on the demand for boat storage and water access at the subject facility.

The median age for Mt. Pleasant residents is 38.1 years, according to the U.S. Census. This is within the largest age segment for active boaters according to the NMMA (31 to 49 years).

Overall, the population trends and projections for South Carolina and the subject area are positive. As the population in the project area continues to grow and the economy continues to stabilize and improve, the potential need for more boat storage space is evident.

Boating Popularity

Comparing the number of registered boats to population levels can yield additional insight about the level of popularity of boating in a given area. The following table presents this information for the Charleston Tri-County area in 2010.

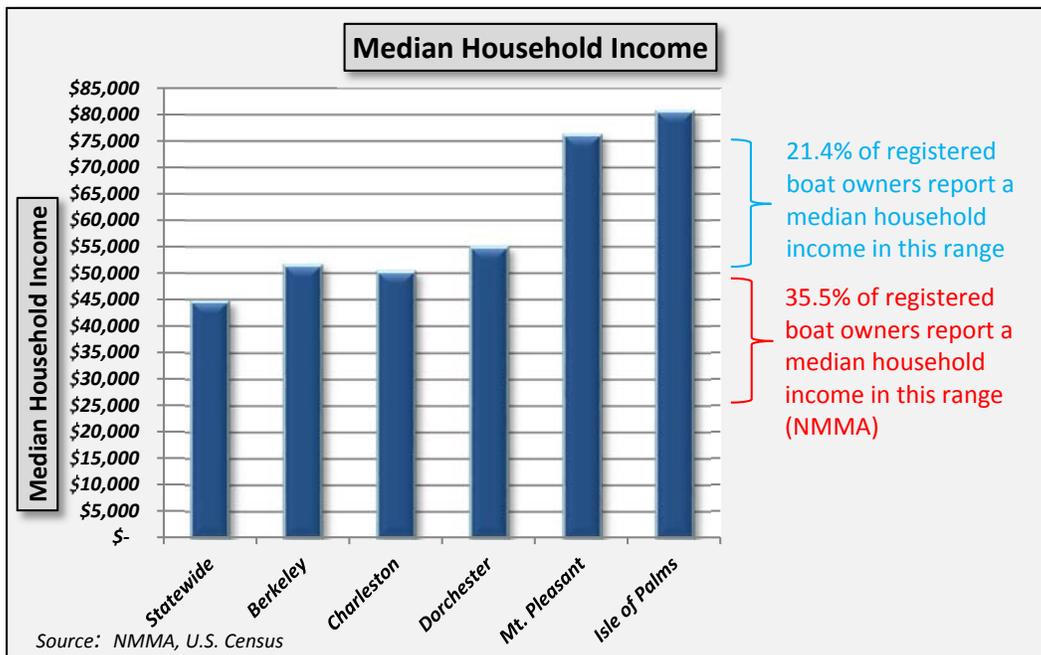
BOATING POPULARITY 2010			
Area	Population	Registered Boats	% Reg. Boats/Population
Berkeley	177,843	14,680	8.25%
Charleston	350,209	28,752	8.21%
Dorchester	136,555	8,331	6.10%
Total	664,607	51,763	7.79%

Source: U.S. Census and SCDNR

Statewide, the percentage of boat owners to population has been near 7 to 7.5 percent in recent years. Therefore, it is noted that the popularity of boating increases nearer the coast. More boating opportunities are available in the coastal region of Charleston and, generally, the level of affluence is higher.

Median Household Income

The NMMA tracks the typical household income ranges among boat owners. In 2012, the largest percentage of boat owners had a household income of between \$25,000 and \$49,999 (35.5 percent). Boaters earning between \$50,000 and \$74,999 comprised the second largest segment of boat owners (21.4 percent). These statistics compare well with Berkeley, Charleston, and Dorchester Counties and indicate good potential for boat ownership. The relative affluence of residents in Mt. Pleasant and the Isle of Palms is a strong indicator of potential boat ownership.



Transient Boaters

Established Cruising Ground and Appealing Destination

The greater Charleston area is an exceptionally popular tourism destination. Charleston has been ranked the Number 1 Small City in the United States by Condé Nast magazine for 5 straight years and has also been awarded the Number 1 City in the United States and Canada by Travel+Leisure magazine in 2014 and 2015. Area tourism brings more than 4.5 million visitors per year and generates more than \$3 billion in economic impacts. Charleston's coastal influences are a key part of the overall allure of the area. Featured in a full-length article in the November 2015 issue of *Yachting* magazine, Charleston has a strong appeal to boaters.

Isle of Palms is situated directly on the AIWW, a transit route that provides protected passage via natural bays, rivers, sounds, and excavated canals from Key West, Florida, to Manasquan Inlet, New Jersey. It is a highly popular route for seasonal transient boaters who keep their vessels in southerly climates during cold winters in the northeastern United States and for those boaters in the Southeast who enjoy temperate summertime cruising and a respite from the threat of tropical weather by visiting the Northeast in the summer.

Although there are numerous areas in the region on the AIWW that offer berthing, the Isle of Palms Marina is the northernmost facility in the greater Charleston area. This provides an outstanding opportunity to capture southbound transient boaters as they approach Charleston.

While other marina stopping points are available in Charleston, the Isle of Palms Marina provides easy access to beautiful beaches, golf, waterfront dining, and other amenities that appeal to transient boaters (e.g., ship's store/provisioning, showers, marine fuel). Further, the facility provides the only fully staffed marina access for the nearby Wild Dunes resort.

Transient Boating Trends

To further examine the potential for transient visitation at the subject site, ATM interviewed several marina staff members at facilities around the Charleston area to gauge current transient demand trends. Key notes are presented below.

- Mr. Kelley Poe at the Charleston Harbor Resort and Marina in Mt. Pleasant indicates that they experienced a 33 percent gain in transient boating visitation from 2013 to 2014.
- Officials at the Charleston City Marina, home to the 1,530-ft-long transient "Megadock," reports an outstanding transient boating season where they have been forced to turn away boaters on occasion due to lack of slip space.
- Matt Driscoll at the Cooper River Marina in North Charleston also has had to turn away transients this season due to lack of slip space. He has seen a particular increase in larger transient vessels (boats in excess of 45 ft) seeking slips.
- Kevin at Toler's Cove Marina reports an increase in transient visitation for fueling, to the extent that they have applied for federal grant funding assistance to improve their fueling infrastructure.

- Mr. Brian Berrigan at the subject marina endeavors to maintain about six docking spaces for transient vessels, but indicates that more space is needed. He feels that he could utilize “a couple hundred more feet” of transient dockage, particularly after the AIWW is dredged in the area of the site.

Megayacht Potential

Megayacht is a term that is commonly used to refer to large, private, recreational vessels that are 80 ft long and greater. These vessels typically have professional crews and specialized needs in terms of berthing and services. Further, the crew and owners of megayachts are generally very discerning and often require a high level of services and accommodation.

A number of megayachts visit the Charleston area currently, docking primarily at the Charleston City Marina. Charleston offers some undeniably popular attractions for megayacht owners and crew and is along the prime route that provides the vessels refuge from summer heat and storms.

The potential to berth megayachts at the subject facility is limited based on a number of factors, most prominently, lack of water depth in the AIWW. While the AIWW is authorized to be dredged/maintained at a depth of -12-ft mean low water (MLW), federal funding available to conduct maintenance dredging has decreased in recent years. As such, the consistency of water depths in the AIWW is a concern to many megayacht operators. These vessels often bypass the AIWW and enter the Charleston area through the maintained federal channels in Charleston Harbor. Mr. Berrigan at the subject marina confirmed that the marina rarely sees 80-ft vessels, and that the typical transient boat is no larger than 60 ft.

Currently, two AIWW dredging projects have been authorized in Charleston County that will improve water depths in selected areas of the AIWW. These areas include the “reaches” or specific areas between Dewees Inlet to Breach Inlet and the area near Jeremy Creek in McClellanville (which is north of the project site). It is ATM’s opinion that this will improve access through the AIWW in northern Charleston County significantly, but with controlling water depths in other reaches of the waterway that are not scheduled to be dredged, it is not anticipated that the waterway or marina will attract a significant number of megayachts as a result of the dredging project. Large transient vessel traffic (less than 80 ft), however, (including sailboats) will undoubtedly increase in the AIWW.

Spatial constraints of the AIWW and Morgan Creek at the marina also preclude berthing for larger megayachts. Specifically, the clear width of Morgan Creek (considering the presence of the *current* marina docks and private docks) is about 215 ft. The clear width of the AIWW is approximately 245 ft. The bridge clearance of the Isle of Palms Connector also presents mast clearance constraints for large sailing vessels. It is anticipated that most large megayachts visiting the Charleston area will not seek dockage at the subject site. Some smaller to mid-size megayachts may transit the AIWW and seek dockage at the marina, particularly if visiting the Wild Dunes Resort or other attractions on the island.

With this in mind, it is suggested that some minimal consideration be given to providing flexible side-tie dockage that can accommodate a variety of vessels, including transient megayachts up to about 120 ft. ATM megayacht data files indicate that vessels in the 120-ft range typically draft about 6.5 ft. These vessels also require keel clearance for safety and effective navigation. Suggested minimum water depths

for these vessels is about 10 ft. The AIWW throughout Charleston County will not provide these water depths at low tide levels on a consistent basis. The current dredging projects will not change this. However, not all megayachts have the same draft/clearance requirements and some will elect to transit the AIWW.

Supply Evaluation

The greater Charleston area is home to numerous marina and drystack facilities catering to a wide range of vessel sizes and types, from small runabouts and center consoles to some of the world's largest luxury megayachts. To facilitate the market investigation for the proposed redevelopment of the Isle of Palms Marina, ATM catalogued area marinas and drystack storage facilities and collated key information about facility capacity, offerings, etc. In addition, ATM visited area marinas and conducted interviews with marina managers, personnel and other industry contacts to gather current information on the facilities, their performance, slip rates, and the general regional market for marinas. The gathered information has been summarized in comparative matrix format (see Appendix A) and is discussed qualitatively in the following sections.

Isle of Palms

There are three marinas located on Morgan's Creek in Isle of Palms: Isle of Palms Marina, Wild Dunes Yacht Harbor, and Dewees Marina. ATM also identified two other marina facilities on the Isle of Palms near Breach Inlet. These include a marina located directly behind Carroll Realty and another facility located immediately behind The Boathouse restaurant, Two Island Marina.

Isle of Palms Marina

Isle of Palms Marina (subject facility) is a relatively small (about 50-slip) wet slip marina. Upland amenities include a well-stocked general store and gift shop, waterfront dining, and standard offerings such as laundry, restrooms, and showers. Many of the floating timber docks onsite are in generally poor condition and at the end of their useful life. According to marina staff, the marina generally stays full and currently is 100 percent occupied. The marina is a popular stop for transient boaters and offers an upscale waterfront restaurant, Morgan Creek Grill.

Additional offerings and amenities at the marina include a popular 3-lane boat ramp, upland trailer/boat storage (ground-level only), charter fishing opportunities, eco tour opportunities, kayak/paddleboard rental operations, upland gas station, and a watersports rental operation.

Wild Dunes Yacht Harbor

Wild Dunes Yacht Harbor is a larger facility (about 190 slips), situated in the natural cove of Morgan’s Creek. The slips are privately owned and a homeowner’s association and third-party property management firm manages the facility. Slips are not available commercially for lease. However, it is common for slip owners to rent slips on an informal, month-to-month (or similar) basis. No slips were currently advertised for rent during ATM’s field investigation. Observed occupancy was approximately 85 percent.



Typical Docks at Wild Dunes Yacht Harbor

Dewees Marina

This is a small, private marina that provides the mainland access point for residents and visitors of Dewees Island. The facility on Morgan Creek includes approximately 29 floating wetslips, a boat ramp, and an active ferry dock. The facility is located immediately adjacent to the Isle of Palms Marina and includes floating timber wetslips, most of which appear to be in fair/poor condition.

Carroll Marina

Located immediately behind the Carroll Realty building near Breach Inlet and the City’s boat ramp on Palm Boulevard, the Carroll Marina provides approximately 700 linear ft of side-tie dockage. This affords berthing space for roughly 25 vessels in the 25- to 30-ft range.

At the time of the field investigation the marina facility appeared to be approximately 80 percent occupied. Dockage at the marina consists of floating timber docks that appear to be in fair condition, with limited utilities (e.g., for smaller vessels).



Carroll Marina

Two Island Marina

The Two Island Marina consists of approximately 23 to 25 slips immediately behind The Boathouse restaurant on Palm Boulevard and Hamlin Creek. The docks are reportedly not affiliated with the restaurant and are in generally poor condition. Observed occupancy was just 20 percent. Very limited power and water were provided to the slips.



Two Island Marina

Mt. Pleasant

Mt. Pleasant, located just to the west of the Isle of Palms, is home to several marina facilities.

Toler's Cove

Toler's Cove Marina is located near Sullivan's Island directly off the AIWW. The facility is known to cater almost exclusively to sportfishing vessels, although a few larger cruisers were observed at the marina. The docks are floating concrete in fair condition. The facility offers basic amenities such as restrooms, showers, and limited supplies and bait. The majority of the marina's 140 slips are privately owned, although some are available in a rental pool. Occupancy is 100 percent, with a waiting list. Marina management has recently added several JetDocks and filled these immediately. They indicated they are actively looking for ways to add more JetDock storage.



Typical Conditions and Sportfishers at Toler's Cove

Shem Creek Marina

Shem Creek Marina is a drystack facility in Mt. Pleasant with 192 total racks that can accommodate vessels up to about 29 ft in length. The racks are open and some, but not all, are covered.

Racks are available for purchase but are also rented or leased via a third-party marina management firm. Management indicates that the racks are currently 100 percent occupied.



Shem Creek Marina Drystack Facility

Magwood Marina

Magwood Marina is a small (80-rack) drystack facility located on Shem Creek in the Old Village area of Mt. Pleasant. The facility was constructed in about 2007 and is currently 100 percent occupied and has a waiting list. Magwood Marina offers open racks with roof cover and architectural side panel treatments.



Magwood Marina Drystack

Charleston Harbor Resort and Marina

The Charleston Harbor Resort and Marina is the largest wet slip marina in the area, with approximately 450 total slips. The marina features a wide range of amenities including an adjacent resort, restaurants, lounge, bar, pool, restrooms, showers, Internet, fitness facility, meeting space, etc.

Although the marina is located in Mt. Pleasant, across the harbor from downtown, it offers shuttles and water taxis to key destinations on the peninsula.

The main portions of the marina include slightly older, floating concrete docks that are in relatively good condition. Of particular note, the marina includes a series of boat lifts that allow smaller vessels (up to 25 ft) to be stored “in the dry.” The boat lifts have been very popular and remain fully occupied at most times. Overall, the marina is currently about 85 percent occupied.



Typical Conditions at Charleston Harbor Resort and Marina

Wando River Marina

The Wando River Marina is located at Highway 41 and the upper Wando River in Mt. Pleasant. The marina offers approximately 50 wet slip berthing spaces for vessels of various sizes. Observed occupancy at the marina was 20 percent during ATM’s field visit. The appeal of the marina is limited based on the presence and water clearance of the Highway 41 bridge and the location in the upper Wando.

It is anticipated that marina occupancy will improve as the bridge is replaced with a fixed span structure that has a clearance of 55 ft. In addition, the growth of Mt. Pleasant and nearby Berkeley County neighborhoods should spur interest in the facility.

Charleston

Ripley Light Yacht Club

The marina at Ripley Light Yacht Club consists of approximately 86 wetslips. The marina was completed in about 2007 and consists of floating concrete (Bellingham) docks that are in excellent condition. While upland amenities are currently minimal, including a small bathhouse and marina office, the marina features a large ipe hardwood deck overlooking the marina as well as numerous fish cleaning stations located directly on the docks. Marina tenants also have access to the pool facility at the adjacent hotel.



Typical Dock Conditions and Vessel Types at Ripley Light Yacht Club

The marina caters primarily to sportfishing vessels, although several larger cruisers were noted as well. Marina staff indicates that the cruisers are generally transient vessels.

According to marina staff, most of their annual sliptakers are local residents, but not all vessels are registered in South Carolina. Several vessels are registered out-of-state for tax and other reasons. Marina staff also identified an observed shift in vessel trends in Charleston from sheer growth in vessel size to stabilization on 50- to 60-ft sportfishing vessels that are highly amenitized. The shift to these size vessels eliminates the need for a professional crew and captain and helps reduce maintenance costs. The marina is currently at full capacity with a waiting list.

Ripley Light Marina & Drystack



Open, Uncovered Racks at Ripley Light Marina & Drystack

Ripley Light Marina & Drystack consists of 223 open, uncovered racks and approximately 70 wetslips. The drystack caters primarily to center consoles and cruisers up to 40 ft, whereas the wetslips cater almost exclusively to sportfishing vessels.

An aging, enclosed drystack building was replaced in about 2010 by larger open racks. The wetslip marina consists of aging concrete docks that are in fair condition. The marina offers limited amenities, which include bathrooms and showers, fish cleaning station and basic sundries (drinks, ice).

According to marina management personnel, the drystack occupancy has improved significantly in recent years. Available/serviceable racks are 100 percent occupied. Additionally, they note an increased demand for larger racks (up to about 40 ft).

Charleston City Marina

The U.S. Navy constructed the Charleston City Marina facility in the 1960s and Hurricane Hugo effectively destroyed the marina in 1989. The marina was redeveloped in the mid-1990s by the City Marina Company and has since grown to become one of the area's largest marinas, with more than 400 slips. Currently, the marina is almost 100 percent occupied. According to interviews with key marina staff, the facility was only 60 to 65 percent occupied just a few of years ago.



Sportfishers at Ripley Light Marina & Drystack



Megayacht Rising Sun at the Megadock

The marina caters to vessels of all shapes and sizes, but is known as the premier destination in the region for larger megayacht vessels. Specifically, the Megadock, a 1,500-ft-long side-tie floating concrete dock, offers amenities targeted towards larger vessels, such as in-slip high-speed fueling and 100-amp shore power. The marina regularly hosts vessels up to 150 ft, but is known to berth larger vessels on occasion, such as the 453-ft megayacht, *Rising Sun*.

While portions of the marina's docks are aging, overall, the facility is well maintained and offers an array of amenities and excellent service, including a floating bathhouse and marina office,

an upland ship's store, onsite yacht/boating service providers, etc. Additionally, a private shuttle offers transportation to the Market and other key destinations downtown. The wide variety of amenities and high level of service establish the City Marina as a benchmark facility in the regional market.

The City Marina has received local and state approvals for a proposed expansion of the marina and Megadock facilities. This expansion would add approximately 120 dedicated slips and extend the Megadock by approximately 600 linear ft.

The Harborage at the Ashley



Typical Conditions, Ashley Marina

The Harborage at the Ashley, locally known simply as the Ashley Marina, is the second largest marina on peninsular Charleston, with approximately 230 slips. Individual slips are owned privately, and the marina staff, infrastructure, etc. are funded and managed via a homeowner's association. Slips are actively leased or rented via a central rental pool managed by marina staff.

The marina underwent a significant retrofit in 2007 that included installation of new marine utilities and new ipe hardwood decking. The marina is in good condition, is well maintained, and offers professional

customer service. Amenities include a small ship's store, lounge, laundry, restrooms, shower, etc. In contrast to the City Marina, the Ashley Marina focuses primarily on providing a more personalized experience to *smaller* vessels.

The marina is approximately 85 to 90 percent occupied, although several slips are intentionally left available to accommodate transient visitors.

Bristol Marina

The Bristol Marina is located just north of the Highway 17 bridges near Brittlebank Park on the Charleston Peninsula. The Highway 17 bridges have a relatively low clearance and, while they are drawbridges, they are seldom opened. As such, access to the Bristol Marina is effectively limited to powerboats. This is obvious in the mix of vessels at the facility, which consists primarily of cruisers and center consoles.



Typical Conditions and Boat Types, Bristol Marina



JetDocks at Bristol Marina

Of particular note, the marina includes a series of JetDocks for smaller vessels (up to about 24 ft). These allow the boats to be drawn out of the water and stored "in the dry." Staff interviews and experience at the facility indicate that these have been a very successful and popular component of the marina's offerings.

The recent addition of new JetDocks inside the dedicated double-loaded slips (three JetDocks in the space designed for two larger vessels) at the marina has contributed to a spike in occupancy, which is now approaching 100 percent.

Seabreeze Marina and Drystack

Seabreeze Marina and Drystack is a relatively small (130-rack) drystack facility located on Town Creek (the east side of the peninsula). The facility is approximately 85 percent occupied currently, up from a reported 70 percent in 2013.



Seabreeze Marina Open, Covered Drystack Racks

However, the marina received federal and state approvals in 2012 to construct 52 new floating wet slips.

North Charleston

ATM visited three marinas in North Charleston as part of this Marina and Drystack Market Assessment.

Cooper River Marina

Cooper River Marina is owned and operated by the county and catering primarily to sailboats. The facility is relatively isolated by both land and water, but offers slips at a low rate (relative to other area marinas). The facility consists of a combination of newer and older floating concrete docks and offers basic amenities including restrooms, showers, laundry and a small ship's store. Despite the isolated location and lack of high-end amenities, the marina enjoys a 100 percent occupancy rate.



Forklift and Office/Lounge Building at Seabreeze Marina & Drystack

Upland amenities include a small but well-appointed ship's store, lounge, marina office, and restrooms and limited provisioning (ice, drinks, and snacks).

The floating concrete docks at the marina are used currently only as staging area for the marina and are

Dolphin Cove Marina

Dolphin Cove Marina is located on the Ashley River approximately 5 miles (by water) from the mouth of the river to the Charleston Harbor. The facility includes approximately 125 wetslips and a large (350-rack) enclosed drystack building. Dolphin Cove Marina is located in an undesirable industrial zone of North Charleston and is in poor condition. It appears that portions of the floating timber docks have been replaced in a piecemeal fashion throughout the years, but the docks remain in an overall state of disrepair. Similarly, the drystack building is aging but appears to be generally serviceable. The facility offers limited amenities, including a small café/lounge. Despite conditions at and location of the facility, observed occupancy was approximately 85 percent.



Typical Dock Conditions at Dolphin Cove Marina

River's Edge Marina



River's Edge Marina

River's Edge Marina is a large drystack facility located on the upper portions of the Ashley River. The facility was expanded in about 2007 to its current capacity of 472 racks. Despite a slow initial absorption due to the recession, occupancy at the facility has increased over the past couple of years and is currently at 86 percent.

In addition to the drystack racks, the marina includes approximately 50 wetslips, although these are reserved primarily as staging docks for the drystack. Some dock space will be leased on a limited basis, however. Amenities include a large dockmaster's office and ship's store, captains' lounge, picnic/grill areas, restrooms, showers, and fish cleaning stations. A boat dealer, Duncan's Boats, is also onsite.

Outlying Areas

In addition to the marinas located directly in Charleston and the immediately surrounding areas, ATM identified, visited, and catalogued a few other marinas in the region that comprise part of the local marina market. These include:

- Bohicket Marina (Seabrook Island)
- St. Johns Yacht Harbor (Johns Island)
- Daniel Island Marina (Daniel Island)

Bohicket Marina

Bohicket Marina is a 200-slip wetslip marina located near Seabrook Island with an additional drystack facility that recently added 42 new open, uncovered racks to augment the previously existing 90-rack enclosed drystack building. The marina features single-loaded floating timber docks and exceptional upland amenities, including several restaurants, bars, shops, etc. The facility is the closest marina to the resort areas of Kiawah and Seabrook Islands and enjoys strong seasonal visitation. Overall marina occupancy was observed to be about 85 percent.



Wetslips at Bohicket Marina



Boardwalk and upland restaurants at Bohicket Marina

St. Johns Yacht Harbor

St. Johns Yacht Harbor on Johns Island was redeveloped in about 2007. The facility offers approximately 200 wetslips on the Stono River, an upland restaurant (with another planned), pool, bar, ship's store, restrooms, etc. Additionally, a courtesy car is offered to guests to allow them to visit surrounding attractions or downtown Charleston.

The marina is currently 100 percent occupied and has regular transient visitation since it is located immediately adjacent to the AIWW. Of particular note are the boat lifts offered at the marina. These lifts can hoist vessels to about 42 ft and have proven exceptionally popular since they were installed.



Boat Lifts at St. Johns Yacht Harbor

Daniel Island Marina

Daniel Island Marina is a large (425-rack) drystack facility located on Daniel Island. The facility features enclosed drystack storage as well as limited wet slip dockage. Amenities include a ship’s store and outdoor deck bar. Current occupancy is 100 percent, with an average vessel size in the drystack of 24 ft.



Daniel Island Marina Drystack (three-sided storage)

Refer to Appendix A for summary information on all profiled marina facilities, including slip rates.

Other Boat Storage

In addition to traditional marina storage, ATM also investigated alternate boat storage facilities including mini-storage facilities and purpose-designed boat storage facilities. These businesses allow boat owners to store their vessels on trailers in (typically) secure upland locations. This offers trailer boaters who are not able or do not elect to keep their vessels at their residences a boat storage solution.

Subject Site

The Isle of Palms Marina currently offers 31 or 32 boat/trailer parking spaces onsite for long-term and short-term storage. Costs for this onsite storage range based on length of stay and season (refer to the following table).

ON SITE TRAILER STORAGE			
	High Season April-Sept.	Off Season October-March	Launch Pass Included (Yes/No)
Daily	\$10	\$20	No
3-Day	\$100	\$60	Yes
Weekly	\$150	\$70	Yes
Monthly	\$12/foot	\$10/foot	No

The onsite trailer storage at the Isle of Palms Marina provides a very convenient storage location for boaters who prefer to launch at the site. In addition, this amenity is very attractive to vacationers at Wild Dunes and other locations on the Island that do not allow boat/trailer storage.

Mini Storage

ATM profiled three mini storage facilities in Mount Pleasant. Key information collected at these facilities includes:

- Mount Pleasant Mini Storage on Von Kolnitz Road
 - Can accommodate up to a 30-ft boat
 - Cost is \$80/month
 - Boat storage nearly 100 percent occupied
- Uncle Bob's Self Storage on Mathis Ferry Road
 - Offers covered storage for boats
 - 25-ft maximum boat size
 - Cost is \$169/month for covered boat storage
- Extra Space Storage
 - Open, outdoor boat parking for vessels to 40 ft
 - \$126/month for 10-ft x 25-ft parking space
 - \$164/mo. for 10-ft x 40-ft parking space

Boat Storage

ATM profiled three dedicated boat storage facilities in the East Cooper area. Key information collected at these facilities includes:

- Carolina Boatyard on Highway 41 (at the Wando River)
 - Storage is full with a waiting list
 - Cost is \$3.00/ft/month with a \$75/month minimum
 - Some Isle of Palms clients were noted, although most are from Mount Pleasant
- Sewee Outpost in Awendaw, South Carolina
 - All boat storage is full with a waiting list
 - All boat storage is covered
 - Price is \$100/month
- Mount Pleasant Boat and RV Storage
 - Occupancy is near 100 percent
 - All boat storage is open
 - Price is \$90/month for 25-ft space; \$100/month for a 30-ft space

As is evident, trailer storage for boats is a popular and cost-effective manner of storing vessels. Storage costs at the subject facility are substantially higher than other identified offsite locations, primarily due to the location/convenience of the storage opportunity.

Based on the occupancy levels of the onsite and offsite trailer storage facilities profiled and the occupancy of all drystack storage facilities east of the Cooper (100 percent), it is likely that some current tenants of local upland storage would prefer drystack storage at the subject site. This certainly includes a number of Isle of Palms residents who reportedly store their vessels/trailers at storage facilities onsite and in Mount Pleasant.

Demand Forecast

Area Demand Overview

Local Occupancy Trends

In addition to a growing base of registered boats in the Lowcountry area of Charleston, the supply of marina slips is limited. Several marinas are at or approaching full occupancy. The demand for transient boat slips is also increasing.

Wetslips

The demand for wetslips has increased steadily in recent years. Many marina facilities, including that at the subject site, exhibit strong demand for wetslip marina storage. Several other large wetslip marina facilities are enjoying exceptional occupancy levels. These facilities include the Charleston City Marina, Ripley Light Yacht Club, St. Johns Yacht Harbor, the Cooper River Marina, and Toler's Cove Marina.

Boat Lifts/JetDocks

A key trend in recent years is the prevalence and popularity of in-water boat lifts and JetDocks. Several marina facilities throughout the Charleston area offer either boat lift storage alternatives or JetDock storage. In almost every instance, the occupancy levels on this type of boat storage are exceptionally high or at 100 percent occupancy. The Bristol Marina has recently installed three JetDocks inside the space of larger, double-loaded marina wetslips that were designed for two larger vessels. This has helped increase marina occupancy. Other facilities such as Toler's Cove are actively looking to add JetDocks. Private facilities such as the Carolina Yacht Club in downtown Charleston have added a number of JetDocks in a response to patron demand and in an effort to reduce onsite boat trailer parking and ramp usage.

The advantages of boat lifts and JetDocks include the ability to store a boat so that the hull is out of the water. This precludes marine growth on the hull, which decreases vessel performance and increases maintenance requirements for the vessel. In addition, boat lifts and JetDocks reduce the need for trailering/launching, making the boating experience simpler.

Drystack Storage

ATM profiled eight drystack storage facilities in the greater Charleston area as part of this effort. Three of these facilities were at 100 percent occupancy; none exhibited an occupancy rate below 85 percent. The drystack storage facilities in Mt. Pleasant are 100 percent occupied with waiting lists. Bohicket Marina recently added 40 new racks to its facility in response to strong demand for this vessel storage type.

Drystack storage is popular for many of the same reasons that boat lift/JetDock storage is popular, but offers other benefits as well. Obviously, drystack storage keeps vessels out of the water where marine growth or harmful saltwater corrosion may occur. Drystack also generally offers increased vessel security and even more boater convenience.

Typical drystack storage provides on-demand launch and retrieval of a boater's vessel and includes washdown service after use as well. Concierge-level service such as fueling, stocking the vessel with ice and refreshments, routine cleaning, and vessel maintenance may also be included.

Site Demand Overview

There are several components of marina/boat storage demand at the existing Isle of Palms Marina site. These components are discussed in the following sections.

Wetslips

As mentioned, the existing marina facility at the Isle of Palms provides wetslip berthing for approximately 50 vessels. This includes a variety of uses such as long-term slips, transient slips, restaurant dockage, charter boat dockage, etc. Specifics of each use is described as follows.

Long-Term Dockage – According to Mr. Berrigan, the marina offers 30 to 40 wetslips for long-term lease. There is a waiting list for this dockage space as well.

Transient Dockage – As mentioned previously, Mr. Berrigan strives to maintain six transient vessel dockage spaces at the marina. These are generally well utilized. Additionally, the fuel dock provides overflow transient berthing space for short-term vessels arriving after hours or late afternoon and departing in the morning.

Restaurant Dockage – Approximately six dedicated wetslips and 118 linear ft of side-tie berthing area are reserved for restaurant usage. This enables boaters to tie up at this dock to enjoy dining and entertainment opportunities at the Morgan Creek Grill. In addition, the dock is intended to provide a base for restaurant-sponsored boat cruises.

Charter Dockage – The Isle of Palms Marina is a popular embarkation point for fishing charters, eco tours, and boat rental excursions. At the time of the Limited Conditions Assessment, ATM observed approximately five rental boats moored at the marina and approximately 13 inshore fishing charter vessels (flats or bay boats to about 23 ft). Many of these inshore charter vessels also utilize JetDocks for in-slip vessel storage. Other observations include two large pontoon tour boats (Barrier Island Eco Tours) and one multi-purpose charter vessel (the Osprey).

Dry Storage

Upland dry storage is provided at the marina site for boats that are situated on trailers. A special lot is designated within the marina site to accommodate these trailers/vessels. ATM's observations indicate that the lot provides for approximately 31 or 32 trailer parking spaces. While the majority of these were occupied during ATM's observations, Mr. Berrigan indicates that he specifically maintains some level of vacancy in this lot to accommodate Isle of Palms visitors who may wish to store their boat at the marina while they are vacationing on or visiting the island. Mr. Berrigan also stated that approximately 10 percent of the boats stored in the dry storage area at the marina belong to island residents. There is a wide range of dry storage fees, depending on length of stay.

Boat Ramp

The marina site is also home to a popular, 3-lane concrete boat ramp. The ramp provides excellent access to Morgan Creek and the AIWW for residents and visitors. The convenience of boat ramp access to the water, coupled with the onsite fueling opportunities, convenience store, and bait/tackle sales, contributes to the high popularity of the boat ramp.

There are modest fees charged by the marina operator for boat ramp usage. For singular launches, these fees range from \$5.00 for Isle of Palms residents to \$15.00 for non-residents. Annual launch passes are also available for \$100 for residents and \$300 for non-residents.

It is evident that demand for the boat ramp, particularly during weekends and holidays of the summer boating season, outstrips available parking onsite for trucks and trailers.

Kayak Launch

In addition to traditional vessel launching, the boat ramp at the Isle of Palms marina is also popular among non-motorized vessel users (e.g., paddleboarders and kayakers). Further, the marina is home to a kayak and paddleboard rental/tour operation, Coastal Expeditions.

According to The Outdoor Foundation and The Coleman Company, Inc., 21.7 million Americans participated in paddlesports in 2014. This represents 7.4 percent of the overall population and signifies an increase of more than 3 million participants since 2010. Participation in stand-up paddling has grown by over 150 percent since 2010 and included 2.8 million people in 2014.

It is evident through these statistics and the observed prevalence of non-motorized vessels at the subject marina and on area waterways that there is a high level of demand for non-motorized vessel access.

Watersports

Tidal Wave Watersports operates a dedicated watersports rental and excursion dock at the marina facility. This dock provides personal watercraft rentals, parasailing adventures, and other opportunities during the summer boating season. Currently this dock, located on the AIWW, provides approximately 13 personal watercraft docking places (on JetDocks) and one or two larger vessel docking spaces.

Overall, the marina site enjoys exceptional popularity from a variety of user groups. The variety of opportunities, visitors, and users is also part of what adds to the special appeal of the site. Physical constraints at the site, including available upland area and waterside development limits (e.g., AIWW channel offsets, etc.) do present a challenge in accommodating current and projected demand for water access and boat storage.

Marina Demand Projections

Boat Registrations

As presented previously, the number of registered boats in the Charleston area has grown over the past several years. In addition, the population of the area is projected to increase into 2020, 2030, and beyond.

Utilizing the information gathered and presented in this study, the following table depicts ATM's projection of the estimated number of additional vessels of appropriate size for marina storage that may be present in the Charleston Tri-County area by 2030.

MARINA DEMAND PROJECTION				
	Berkeley	Charleston	Dorchester	Total
2014 Population Estimate	198,205	381,015	148,469	
2030 Projected Population Increase	20,895	15,685	41,731	
Estimated Current Boating Popularity Index	9.00%	9.10%	6.50%	
Projected Additional Registered Boats 2030	1,881	1,427	2,713	
Percentage of Appropriate Size for Marina Storage*	11%	13%	9%	
Add'tl Boats Appropriately Sized for Marina Storage 2030	207	186	244	Total 637

*Assume 50% of registered vessels between 20-40-ft. and all registered vessels over 40-ft.

Clearly not all of these vessels will require a slip or drystack rack at the subject marina, but the location and appeal of the project site is clear. In addition, ATM believes that these boat registration projections are conservative, since State Budget and Control Board projected population increases for 2020 have already been exceeded in 2015.

Local Demand

Demand from Isle of Palms residents is an important component in the overall demand for slips and marina storage at the subject site. Since detailed boat registration data for the Isle of Palms is not readily available, ATM calculated an estimate of potential marina demand using the information and factors presented in the following table.

RESIDENTIAL DEMAND ESTIMATE				
				Notes
A	Number of Dwellings on Isle of Palms	4,274		Number of overall dwellings on the Island per the 2010 Census
B	Number of Vacation Rentals	1,550		Number of registered vacation rentals per the City of IOP
C	Dwellings Less Vacation Rentals	2,724		
D	Number of Residents/Dwelling	2.26		Per the 2010 Census
E	Total Ownership Population	6,156		Dwellings x # Residents/Dwelling
F	Assumption of Boat Ownership/Population	10%	12%	Assumption per previous calculation; higher than CHS Co. Avg.
G	Boats Owned By Ownership Population	616	739	Row E x Row F
H	Less Private Docks	150	150	Per aerial imagery; assume all docks accommodate a single vessel
I	Less other marina storage on IOP	206	206	Per ATM occupancy observations at other IOP marinas
J	Total Potential Pool	260	383	Row G-Row H-Row I
K	% Preferring Storage at IOP Marina	20%	20%	Estimate per ATM experience
L	Baseline Residential Demand	52	77	Demand from IOP Residents for marina storage at site

Using readily available statistics and relying on ATM’s experience on similar projects in the southeast United States, the potential demand from Isle of Palms residents for marina storage at the subject site has been estimated. After review of the rudimentary calculations presented above, ATM believes the demand estimate is conservative for a number of reasons:

- The percentage of boat owner/population has been presented as ranging from 10 to 12 percent. This is based on a Charleston County average of 9.10 percent. Given the coastal nature of the Isle of Palms and relative affluence of the community, this percentage may range even higher.
- Not all private docks on the Island can accommodate boat storage, and some private dock owners may prefer the security and convenience of marina storage for their vessels.
- ATM is certain that the redevelopment of the Isle of Palms marina and, in particular, the construction of vertical drystack storage opportunities, will attract boaters from other marinas on the Island, since no such storage is available currently. It is certain that some boaters, particularly those with smaller power boats (about 17- to 30-ft) would prefer to store their boats in a drystack as opposed to in a wet slip. Drystack simply offers greater protection from the elements.
- The marina is the only full-service facility on the Island. A redeveloped site will be more welcoming and attractive to boaters.

With these reasons in mind, ATM estimates that the initial demand for redeveloped marina storage at the subject site from residents may range up to 75 to 100 slips/racks. ATM’s experience also suggests that as

drystack comes on line, the demand for this type of storage will likely increase as boaters discover the convenience and security that drystack offers.

Site-Specific Needs

As discussed previously, there are several site-specific berthing and access needs at the marina.

- Wetslip Dockage –There is a current use and need for several types of wetslip dockage at the facility, including long-term dockage, transient dockage, restaurant dockage, and charter dockage.

It is evident based on the occupancy levels at the existing marina, boating trends in the Charleston region, improving conditions in the AIWW, lease stipulations for the restaurant, and site spatial constraints that maximization of wetslip dockage at the site is indicated.

Mr. Berrigan suggests the need for 10 inshore charter spaces, 10 boat rental spaces, 2 spaces for the Barrier Island Eco Tour boats, and 1 or 2 larger charter slips. Additional dockage to accommodate an increased number of long-term and transient boaters is indicated also. Restaurant dockage will remain constant per the terms of the restaurateur’s lease and anticipated usage.

Reconfiguration of the wetslip dockage is indicated per discussions with the marina operator and restaurateur to make the docks more useful (especially the Intracoastal Dock) and accessible. Incorporating side-tie dockage where possible will allow for berthing of a variety of vessel sizes, including larger yachts. Lastly, dock uses should be segregated to the extent practical (transient, long-term, charters, etc.).

- Dry Storage – The site currently provides dry trailer storage parking for up to about 32 trailers/vessels. Based on observed occupancy at area drystack marina facilities, particularly those east of the Cooper, the popularity of vertical drystack storage is clear. Further, the projected increase in area population growth, the stabilization and improvement of the economy and the recreational boating industry, and the steady growth in drystack-sized vessel registrations (20 to 40 ft) indicate the need for additional drystack storage opportunities. Additionally, the location (near highly desirable boating and fishing grounds) and popularity of the Isle of Palms Marina site make it an exceptionally well-suited location for the development of drystack storage. Drystack storage also presents an extremely convenient form of boat storage and water access for a mature and affluent waterfront community such as the Isle of Palms.

The maximization of vertical drystack storage development on the site is indicated from a market perspective. However, this must be carefully evaluated in conjunction with other site uses, site parking needs, zoning restrictions (e.g. eave height limitations), potential operational concerns (aesthetics, noise, etc.), and economics.

- Boat Ramp – The boat ramp is an integral part of the existing marina facility. The ramp provides water access for a wide variety of boaters, from inshore anglers to commercial crabbers to kayak enthusiasts. As with the demand for marina storage, the demand for ramp facilities is increasing and will continue to increase into the foreseeable future. Therefore, improving the existing boat ramp facilities to better accommodate existing and projected demand levels should be a primary part of site redevelopment plans. The following key improvements are necessary:
 - Improved approach lane(s)
 - Improved tie down area(s)
 - Improved staging docks
 - Appropriate parking area/spaces
 - Access compliant with the Americans with Disabilities Act (ADA)
 - Thoughtful integration of non-motorized vessel launch

- Kayak Launch – As mentioned previously, the popularity of paddlesports in the United States is increasing rapidly. The high level of activity of the onsite kayak/paddleboard business is a testament to this. Non-motorized vessels enable a wider variety of users to access the water. However, conflicts can occur between motorized vessels and non-motorized kayakers/paddleboarders, particularly in confined spaces such as Morgan Creek.

It is ATM's opinion that separate or designated launch facilities should be provided at the subject site for non-motorized vessels. This should include appropriate space for the existing commercial tour/rental operation as well as public access. Key elements for public access include appropriate parking/launch area.

- Watersports Dock – The Watersports Dock provides visitors to the Isle of Palms with a fun and easy way to access water recreation. It draws visitors to the marina and contributes to the overall energy of the site. The existing Watersports Dock is tucked away on a relatively remote corner of the site and, while it does not directly impact marina access or operations, the operation does have an effect on the overall parking situation at the subject site. It is ATM's opinion that this must be carefully managed to ensure the successful, long-term integration of this business into overall site operations.

Demand Estimate Summary

A summary of identified marina storage/usage demand components is presented in the following table.

<i>Isle of Palms Marina Demand Summary</i>		
<i>Marina Storage Element</i>	<i>Recommended Number</i>	<i>Specific Needs</i>
Wetslips	Maximization within site constraints	10 inshore charter spaces 10 boat rental spaces 2 spaces for Barrier Island Eco Tours 1 or 2 larger charter slips
Drystack Storage	Maximization within site constraints	Assume maximum boat size in the 35- to 40-ft range Assume average boat size in the 23-ft range
Boat Ramp	Maintain current ramp	Assume 20 to 30 parking spaces/lane required
Kayak Launch	Provide separate kayak launch facility	Segregate from heavy motorized vessel activity
Watersports Dock	Maintain Watersports Dock	Carefully examine parking needs/assignment

Potential mitigating factors for marina usage/storage demand at the subject site include:

- Prevalence of private docks on the Isle of Palms
 - Other marina facilities in the Charleston area with expansion plans*, including:
 - Seabreeze Marina – 52 wetslips
 - Charleston City Marina – 120 dedicated slips and 1,200 linear ft of side-tie berthing (Megadock expansion)
 - St. Johns Yacht Harbor – 125 boat lifts and 62 traditional wetslips
 - Governor’s Harbor Marina (Daniel Island) – 341 wetslips and 208 drystack racks
- *Note: These expansions are currently permitted by state and federal agencies.
- Continued siltation/maintenance issues related to the AIWW

It is ATM’s opinion that these factors will not adversely impact the overall demand for marina usage/storage at the subject facility on the Isle of Palms. However, site and regulatory constraints will limit the variety and scale of offerings that can be appropriately integrated at the marina. These constraints will be evaluated in greater detail in subsequent investigation and planning efforts that are part of ATM’s overall study.

From a strict demand perspective, no phasing of marina improvements is suggested. It is ATM’s opinion that sufficient demand exists currently to warrant immediate redevelopment of wetslip marina storage at the site. Further, the condition of most of the floating docks at the site indicates near-term replacement. Boat ramp improvements (staging docks, etc.) are also necessary from a physical perspective and will immediately benefit users. Kayak demand is strong and the need for drystack marina storage is readily apparent in Charleston, particularly in the East Cooper area. Estimated absorption for a moderately sized drystack storage facility (150 to 250) at the subject site is one to three seasons.

The financial cost of the proposed improvements will not be insignificant, however. These costs may govern phasing and will be examined in greater detail during site planning and financial analysis efforts.

Recommended Slip Mix

The recommended slip mix for a redeveloped marina facility at the Isle of Palms marina should consider existing market conditions and provide as much flexibility as possible to accommodate future demand components. Side-tie berthing, as is provided at the existing marina, provides exceptional flexibility to accommodate a wide variety of vessels. As such, ATM recommends that side-tie berthing areas are well integrated into a redeveloped marina.

As discussed previously, several charter vessels call the Isle of Palms Marina their homeport and add to the overall appeal of the site. The 10 inshore charter slips recommended should be sized to properly accommodate up to a 25-ft vessel, although many will be in the 17- to 20-ft size range. JetDocks or boat lifts should also be provided to accommodate these vessels. One or two larger charter slips should be provided in the 50- to 65-ft range. Barrier Island Eco Tours will require two slips in the 40- to 45-ft range to properly accommodate its tour vessels.

The 10 rental boat spaces should be sized in the 25-ft range and oriented to ensure easy access and navigation for rental customers who may be inexperienced boat operators.

The marina operator and restaurateur have expressed that the current configuration of the Intracoastal Dock is not ideal (e.g., short fingers with mooring piles, limited access to shore-side area, etc.). This dock should be evaluated for reconfiguration to provide longer finger piers and improved access to side-tie areas. Additionally, this area may be considered as a potential kayak launch point.

Drystack storage facility operators in Charleston indicated that the typical vessel size accommodated is in the 22- to 25-ft range. A drystack facility at the subject site should be designed to accommodate these size vessels, but also larger craft up to 35 to 40 ft. Space for T-tops, antennae, and larger cruising vessels should be considered in terms of vertical height planning. Smaller vessels, including flats boats and small center consoles, should also be considered.

Recommended Rates

The current long-term lease rates at the Isle of Palms Marina are generally consistent with those of other marinas in the Charleston area, trending toward the upper end of the observed range. It is recommended that annual slip rates at a redeveloped marina remain in this range (about \$15/ft/month), but increase regularly as slips are absorbed.

Transient slip rates at the marina range from \$1.50 to \$2.00/ft/night, depending on season. This is generally in line with other rates observed in the greater Charleston area. However, given the prime location of the marina along the AIWW, presence of amenities onsite (including the restaurant, convenience store, fuel service, etc.), ATM believes that these rates may be increased slightly to the \$2.10 to \$2.25 range in a redeveloped marina facility. Electrical rates may also be increased in a redeveloped marina. ATM suggests a 35 to 50 percent increase.

Drystack storage rates in Charleston range from \$11.00 to \$18.65/ft/month. Large vessels, those with T-tops, or special storage needs are often charged an additional fee. If a drystack facility is developed at the subject site, ATM recommends that the annual rate be set at the very top of the area market (in the \$19.00 to \$20.00/ft/month range). The overall appeal of the site, positive trends in the marina/drystack market and scarcity of quality drystack storage should enable the facility to easily command these rates.

Boat ramp fees are not inexpensive for non-residents, but appear to be set at fair levels, given the amenities provided at the site and the appealing location of the boat ramp. Setting higher rates for non-residents may act as a deterrent to non-resident use, which helps alleviate congestion at this already very popular ramp site.

Given the infrastructure investment that will likely be required to facilitate the development of a separate non-motorized vessel launch, ATM recommends that fees should be charged for this type of vessel launch as well.

The City and/or the Marina Operator should carefully evaluate and set other fees such as rental fees for Coastal Expeditions, charter pickup fees, etc., since they have more intimate knowledge of these operations. Such fees should also consider lease fees (for space, boatslips, etc.) paid by the charter operator.

Based on the historical purpose of the facility, ATM suggests that a discount be applied for all island residents/property owners in terms of slip and rack rates. An initial 5 to 10 percent discount is suggested. Residents should also be afforded the opportunity to reserve a wet slip or drystack rack prior to non-residents in a redeveloped marina facility.

User Profile

The proposed redevelopment of the Isle of Palms Marina will bring the marina forward from what was originally developed as a “mom and pop” enterprise to a 21st century marina facility. The marina enjoys a wonderful location along the AIWW. However, to compete effectively in the local and regional marketplace, a redeveloped marina will have to provide the appropriate facilities and amenities to attract and retain patrons. Further, the marina will have to correct current deficiencies in terms of aged infrastructure, parking congestion, and improve ADA access. Additionally, the marina redevelopment will have to fit into the fabric of the local community in terms of architectural features and comply with regulatory requirements (stormwater, fuel distribution, etc.).

Amenities/Features

ATM suggests the following amenities be included at a redeveloped Isle of Palms Marina.

- High-quality floating docks and gangways
 - Adequate staging docks for boat ramps and drystack storage
- Dependable marina utilities, including:
 - Shore power (30, 50, limited inclusion of 100A; 3-phase may also be considered)
 - Potable water
 - Marine pumpout
 - WiFi
 - Satellite TV
 - Appropriate fire protection
 - New marine fuel (gas and diesel); consider high-speed distribution for larger yachts
- A focused charter vessel area with patron drop-off
- JetDocks for all smaller charter vessels (inshore)
- Adequate, controlled parking for all marina users
 - Appropriately surfaced and landscaped parking lots will enhance the appeal of the site and the experience for all users. The marina is a gateway for boaters to the Isle of Palms. The site should reflect the overall allure and character of the island.
 - Appropriate, enhanced stormwater collection/treatment system
 - Clear signage and traffic flow
 - Improved and integrated golf cart parking area(s)
- Easy access to transportation
 - Taxi/Uber availability
 - Bike loan program
 - These will enable marina visitors to have access to the beaches and other attractions on the Isle of Palms
- Available and regularly serviced waste (trash) disposal and recycling
 - Ensure easy access to waste and recycling facilities for remote slips

- Screen all waste and recycling dumpsters from view and ensure easy truck access over paved roads to reduce maintenance on gravel
- Relocated upland fuel pump, including updated tank storage equipment
 - Integrate tank storage with marina distribution system
- Pet walking area and cleanup facilities
- Provisioning availability for transient boaters (with local provider such as Sysco, Trader Joe's, etc.)
- Partnership with marine service provider
 - Remote service available for smaller repairs; offsite provider for larger repair needs
- Alongshore boardwalk and fishing area
- Enhanced pedestrian access for walkers and cyclists
 - Bike rack
- Additional restrooms for boaters and other marina users (e.g., boat ramp users).
- Maintain existing amenities onsite, including:
 - Marina office facility
 - Marina-only restroom and comfort facilities
 - Including shower and laundry facilities to accommodate transient boaters
 - Ship's/convenience store
 - Restaurant

Dock and Drystack Types

Dock Types

The docks at the existing marina are older timber frame floating docks, many of which are nearing the end of their useful lives. A wide variety of floating dock systems are commercially available, including timber framed systems with polytub flotation, aluminum-framed systems with polytub flotation, and monolithic concrete systems. Examples of each of these systems are in use in the Charleston area and are presented in the following photographs.

Timber framed systems tend to be the least expensive, whereas concrete tends to cost the most. The anticipated useful life of the systems range from 20 to 35 years, with timber framed systems at the lower end of the range and concrete at the higher end. All the systems require regular maintenance to ensure proper performance and longevity.

From a market perspective, there is no specific advantage of one dock type over the other in the Charleston area and at the subject facility. Final selection of dock type at a redeveloped Isle of Palms Marina facility should be based on owner/operator preferences and financial constraints. However, the floating dock system (and associated anchorage) should be designed to meet site-specific environmental conditions, anticipated loading characteristics, and required utility services.



Floating Timber Docks with Southern Yellow Pine Decking



Timber Frame Floating Dock with Ipe Hardwood Decking



Aluminum Frame Floating Docks with Ipe Decking



Monolithic Concrete Docks

Drystack Rack Types

Historically, the term “drystack storage” has conjured up images of drab, industrial-looking metal buildings that efficiently house boats, but present a visual eyesore. In fact, several types of drystack storage structures are employed today around the world. These include the basic industrial-building (barn) style structures, architecturally-enhanced metal buildings, three-sided structures that include end walls and a roof over the boats, open/covered structures that integrate a protective roof structure, and open/uncovered structures that simply provide steel racks on which to stack vessels vertically. Examples of each of these popular drystack storage types are presented in the following photographs.



Traditional Barn-Style Drystack Storage Building



Barn-Style Building with Architectural Enhancements



Barn-Style Drystack with Architectural Enhancements and Tropical Landscaping



Three-Sided Drystack Storage Building (Magwood Marina, Old Village, Mt. Pleasant)



Three-Sided Drystack Building (Palmetto Bluff, Bluffton, South Carolina)



Open, Covered Drystack Racks



Open, Uncovered Drystack Racks



Open, Uncovered Drystack Racks

From a strict market perspective, it is ATM's opinion that the type of drystack rack storage is not important to prospective rack takers at the Isle of Palms Marina site. While a roof may help protect the stored vessels from rain and harmful UV rays, the scarcity of rack storage in the immediate project area does not dictate the need for protected storage. A trend toward open, uncovered racks is prevalent throughout the Charleston area and was observed at Shem Creek Marina, Ripley Light Marina & Drystack, and Bohicket Marina. Open, uncovered racks are also the least expensive type of drystack storage to construct and still allow the opportunity to command premium storage rates.

However, ATM recognizes that a drystack development at the project site must appropriately integrate into the fabric of the site and neighborhood. Some level of cover/walls/architectural features/screening/landscaping around the structure may be preferred or required. It is ATM's opinion that a tastefully developed drystack presents an excellent opportunity to re-purpose the existing ground-level trailer storage at the subject site in a far more efficient manner. Further, since the Isle of Palms enjoys such a strong boating and maritime culture, a well-developed drystack should not present an unsightly feature at the marina.

Drystack storage has been successfully integrated into high profile residential areas such as Cape Cod, Massachusetts, and in the Old Village in Mt. Pleasant. The drystack storage facility at Palmetto Bluff, an exclusive development on the May River in Bluffton, South Carolina, was integrated within the neo-traditional village core and is surrounded by multi-million dollar homes, some less than 120 ft away. This facility is widely recognized as one of the most tasteful, architecturally pleasing drystack storage

structures in the world. It was designed by renowned architectural firm Hart Howerton out of San Francisco, CA.



Drystack at Palmetto Bluff, Bluffton, SC



Integrated Lowcountry architecture and flora at Palmetto Bluff, SC

A well executed drystack structure can become an asset and attractive visual feature at the project site and can improve the aesthetic of the existing trailer storage yard that exists on the property today. The noise that a drystack building may create may be mitigated in a number of ways, including use of a propane-powered forklift, which is substantially quieter than traditional diesel lifts. In addition, it is ATM's understanding that the Occupational Safety and Health Administration (OSHA) does not specifically require back-up alarms on forklift trucks. Therefore, the forklift operation can integrate more seamlessly into the local neighborhood.

Summary and Conclusions

Industry stabilization and improving local market conditions indicate the need for additional marina slips in the subject area over the near term. ATM believes this is especially the case in the immediate area of the project site at the Isle of Palms, where current slip occupancies are high and the appeal of the site is well known.

- Boat registrations have increased steadily in South Carolina since 2010 and, although they dipped slightly in 2014, they still exceed pre-recession levels.
- Regional boat registrations have increased steadily as well. Charleston County registrations have climbed at a steady rate since 2010.
- Boat registration data and ATM interviews have indicated a slight shift in the size of registered vessels and popular boat types along the coast. A slight downsizing trend has enabled many boaters to stay in boating during the recession. The largest, recent growth segment of registered boats has been in the 20- to 40-ft range.
- National expenditures on recreational boating have increased steadily since 2010.
- Statewide (South Carolina) purchases of new powerboats, engines, trailers, and accessories have risen dramatically since 2010, with a sharp increase noted between 2013 and 2014.
- Population growth for the state and Tri-County area of Charleston is strong, particularly for Berkeley and Dorchester Counties, where much of the sprawl of Charleston is occurring.
- The age distribution of Isle of Palms residents indicates a slightly more mature residency than neighboring areas, with a median age of 52.6 years. The median age in neighboring Mt. Pleasant is 38.1 years. According to the NMMA, the largest segment of boat owners is between 31 and 49 years of age.
- Boating popularity in the Charleston area is strong, particularly among Berkeley and Charleston County residents. This reinforces the ingrained culture of boating in the Charleston area.
 - While localized data are not available, it is assumed that the popularity of boating on the relatively affluent barrier island of Isle of Palms exceeds the noted county figures.
- Median household income among Berkeley, Charleston, and Dorchester Counties is relatively high. This is indicative of strong industry along the coast and the level of affluence necessary to support boat ownership.
- The level of affluence on the Isle of Palms and neighboring Mt. Pleasant is substantially higher than county and statewide averages.
- Charleston is, of course, a premier tourist and transient boating destination. In recent seasons, transient boating has improved, according to local sources.

- Megayacht visitation potential at the site will be limited due to water depths in the AIWW and spatial constraints at the marina and Morgan Creek. Limited accommodations to support these vessels are recommended.
- ATM profiled more than 20 marinas throughout the greater Charleston area. These included marinas on the Isle of Palms, around Charleston Harbor, North Charleston, and other outlying areas.
 - Overall occupancy approached 85 percent, which is strong and includes a wide range of facilities.
 - Occupancy of drystack storage in the subject area is very high. All drystack racks east of the Cooper are 100 percent occupied.
- There are several components of marina/boat storage demand at the subject site:
 - Long-term dockage
 - Transient dockage
 - Restaurant dockage
 - Charter dockage
 - Dry storage
 - Boat ramp
 - Non-motorized vessel launch
 - Watersports dock
- Based on observed trends and projections, the following table represents a summary of storage/usage demand for the subject site

<i>Isle of Palms Marina Demand Summary</i>		
<i>Marina Storage Element</i>	<i>Recommended Number</i>	<i>Specific Needs</i>
Wetslips	Maximization within site constraints	10 inshore charter spaces 10 boat rental spaces 2 spaces for Barrier Island Eco Tours 1 or 2 larger charter slips
Drystack Storage	Maximization within site constraints	Assume maximum boat size in the 35- to 40-ft range Assume average boat size in the 23-ft range
Boat Ramp	Maintain current ramp	Assume 20 to 30 parking spaces/lane required
Kayak Launch	Provide separate kayak launch facility	Segregate from heavy motorized vessel activity
Watersports Dock	Maintain Watersports Dock	Carefully examine parking needs/assignment

- Demand from Island residents is expected to be strong and should increase as the benefits of a redeveloped site and, particularly, if drystack storage is developed. Preliminary residential demand estimates range from 75 to 100 slips/racks.
- Phasing is not indicated from a market perspective, since current demand trends are strong. Phasing may be necessary from a financial standpoint, however.
- The proposed slip mix for redeveloped marina at the subject site includes flexible side-tie dockage, specifically sized dockage for charter vessels, smaller (25-ft slips) for rental boats, reconfigured dockage for the restaurant/AIWW dock, and vertical drystack storage capable of storing vessels up to the 35- to 40-ft range.
- Basic, recommended rates for redeveloped marina facilities are as follows (in 2015 dollars):
 - Annual Wetslips – about \$15/ft/month
 - Transient Wetslips -- \$2.10 to \$2.25/ft/night
 - Drystack Storage -- \$19 to \$20/ft/month
 - Additional fee recommendations and commentary has been provided in the body of this report.
 - An initial 5 to 10 percent discount on boat storage for island residents is suggested.
 - Slip/rack reservation priority should be afforded to residents of Isle of Palms.
- ATM has presented a list of suggested amenities that will enhance marina redevelopment and help ensure project success. These are presented in detail in the body of the report. Key amenities include:
 - High-quality dockage and reliable utilities
 - Adequate, controlled parking for all marina and site users
 - Enhanced pedestrian access
 - Maintain onsite amenities, including the marina office/store, marina-only restrooms, restaurant
- ATM suggests that the proposed marina redevelopment may utilize basic timber floating docks and open, uncovered drystack racks to meet market expectations. Upgraded docks or drystack storage architecture may be desirable and help the facility integrate with the fabric of the site and community.

A redeveloped marina facility at the Isle of Palms Marina has the potential to establish the facility as one of the premier marinas in Charleston. Further, general site improvements for patron access, vehicular flow, parking, landscaping, etc., will enable the marina to become a source of pride and a key attraction for Isle of Palms *residents*. This will require thorough planning and tactful execution to ultimately ensure success.

Appendix A

Comparative Matrix

CHARLESTON AREA MARINAS - SUMMARY MATRIX

ID	Facility Name	Water body	Approx. No. Wetslips	Approx. No. Drystack Racks	Dock/Rack Type; Condition	Utilities	Rates			Observed Occupancy
							Annual Wetslip Rate (\$/ft./month)	Annual Drystack Rate (\$/ft./month)	Transient Rate (\$/ft./day)	
Isle of Palms										
1	Isle of Palms Marina	Morgan Creek	50	0	Floating timber; poor condition; JetDocks	30 A to 50 A; G/D	\$12-\$18	N/A	\$1.50-\$2.00	100%
2	Wild Dunes Yacht Harbor	Morgan Creek	191	0	Floating Timber; fair condition	30 A to 50 A	N/A	N/A	N/A	85%
3	Deweese Marina	Morgan Creek	29	0	Floating timber; poor condition	30A & 50A	N/A	N/A	N/A	65%
4	Carroll Marina	Breach Inlet	25	0	Floating Timber; fair condition	Limited/Water	\$15	N/A	N/A	80%
5	Two Island Marina	Breach Inlet	23	0	Floating timber; poor condition	Limited Power/Water	\$12.50	N/A	\$1.00	20%
Mount Pleasant										
6	Toler's Cove Marina	AIWW	140	0	Floating concrete; fair to good condition; JetDocks	30 A & 50 A; G/D	\$15.00	N/A	\$1.50	100%
7	Shem Creek Marina	Shem Creek	0	192	Covered and uncovered open racks	Gas	N/A	\$18.65	N/A	100%
8	Magwood Marina	Shem Creek	0	80	Covered, open rack drystack	Gas	N/A	\$17.95	N/A	100%
9	Charleston Harbor Resort	Charleston Harbor	450	0	Floating concrete, older but well maintained	30 A & 50 A; G/D	\$14 to \$18	N/A	\$2.15	85%
10	Wando River Marina	Upper Wando River	50	0	Floating timber with composite decking	30A & 50A	\$14.00	N/A	N/A	20%
Charleston										
11	Ripley Light Yacht Club	Ashley River	97	0	Floating concrete (Bellingham); good condition	50 A	\$14	N/A	\$1.75	100%
12	Ripley Light Marina & Drystack	Ashley River	70	223	Floating concrete; good condition - new open/uncovered drystack	50 A; G/D	N/A	\$17.85	N/A	95%
13	Charleston City Marina	Ashley River	415	0	Floating timber, aluminum & concrete (Bellingham Megadock); generally good condition, aging in some locations	up to 100 A; D (hi speed)	\$14.25 to \$16	N/A	\$2.10-\$3.00	95%
14	The Harborage at the Ashley	Ashley River	230	0	Floating timber, IPE hardwood decking; fair/good condition	up to 100 A; G/D	\$10 and up	N/A	\$2.00-2.20	85%
15	Bristol Marina	Ashley River	148	0	Floating aluminum, IPE hardwood decking; good condition; jet docks	30 A & 50 A	\$10-\$11.75	N/A	\$1.80	90%
16	Seabreeze Marina & Drystack	Charleston Harbor	0	130	Covered open racks	Gas	N/A	~\$14 to \$17	N/A	85%
North Charleston										
17	Cooper River Marina	Cooper River	185	0	Floating Concrete, (Bellingham); well maintained; some older, some new (transient docks)	30 A	\$8.92-\$11.15	N/A	\$1.65	100%
18	Dolphin Cove Marina	Upper Ashley River	125	350	Floating timber, sections being replaced in good condition; older sections in poor condition; fully-enclosed drystack	30 A; G/D	\$10-\$11	\$11-\$12	\$1.00	85%
19	River's Edge Marina	Upper Ashley River	50	472	Floating timber; good condition - recently expanded drystack (~2008) Covered and 3 sided	30 A to 50 A; Gas	\$10.50	\$13-\$13.50	N/A	85%
Outlying Areas										
20	Bohicket Marina	Bohicket Creek	200	132	Floating timber with IPE hardwood decking; single-loaded; good condition; Enclosed and open/uncovered racks	30 A & 50 A; G/D	\$11.50	\$13.86	\$2.50	85%
21	St. Johns Yacht Harbor	Stono River	200	0	Floating timber with IPE hardwood decking; good condition	30 A & 50 A; G/D	\$13.50	N/A	\$1.75	100%
22	Daniel Island Marina	Clouter Creek	50	425	Floating Timber; good condition; Covered 3 sided racks	Limited power on staging docks; Gas	\$14.50	\$14.50	\$40/night	100%
Total			2,728	2,004						



Appendix B

Interview Summaries

Interview Summaries

Interviewee

Contact: Mr. Brian Berrigan, Manager/Operator – Isle of Palms Marina
Date: September/November 2015

Key Discussion Points

- Receives frequent inquiries for dry storage
- Existing dry storage is full with some spaces left available for weekly users/visitors
- In a redeveloped marina would see the need for:
 - 10 inshore charter spaces
 - 10 boat rental spaces
 - 2 spaces for Barrier Island Eco Tours
 - 1-2 spaces for larger charter vessels (e.g. The Osprey and/or offshore sport fishing vessels)
- Transient vessels are no longer than 60-ft., rarely up to 80-ft.
- Transient business not as good since 2008.
- Current AIWW maintenance project presents an opportunity to attract additional transient boaters to the marina
- Currently maintain 30-40 long term slips; wait list is 30-40 deep for these slips
- Currently maintain ~6 transient spaces; utilize fuel dock for additional overnight berthing (after hours)
- More transient space is needed and a BIG grant could help offset development costs for transient infrastructure

Interview Summaries

Interviewee

Contact: Logan Reidenbach, Duncan's Boats
Date: November 2015

Key Discussion Points

- Sales are great
- Business is trending positively
- Boeing has brought many more customers in; expect Volvo to do the same
- 20-21-ft. center consoles/runabouts most popular

Interview Summaries

Interviewee

Contact: Shane Marler, Dockmaster - Shem Creek Marina
Date: October 2015

Key Discussion Points

- 100% occupied
- 75% of clientele from Mount Pleasant
- Drystack is a “good idea at the Isle of Palms Marina. No reason it wouldn’t work.”
- The prime location of Shem Creek Marina and the Isle of Palms Marina would enable charging higher rates.

Interview Summaries

Interviewee

Contact: Corey Smith, General Manager - Ripley Light Yacht Club
Date: October, 2015

Key Discussion Points

- 100% occupied
- 30 vessel wait list
- Currently charge ~\$14/ft./month
- Clientele coming from "all over," not just Charleston or West Ashley
- SKA "Fishing for Miracles" host marina. Will cease to host event due to numerous incidents at this year's tournament.

Interview Summaries

Interviewee

Contact: Homer Bauserman, Daniel Island Marina & Boat Club
Date: October 2015

Key Discussion Points

- 100% occupancy
- Economy is improving
- Boeing has influenced demand
- \$14/ft./month
- \$25/month for T-Top
- Adjacent boat dealer, Longshore Marine, posted best sales year in last 10
- Daniel Island continues to grow and with this growth comes demand for water access/storage
- Average vessel 24-ft.
- They are limited by drystack bay widths. Homer recommends at least a 30-ft. clear width.

Interview Summaries

Interviewee

Contact: Kevin Austin, Marina Manager - Toler's Cove Marina
Date: October 2015

Key Discussion Points

- JetDocks are "hot," particularly with charter guides.
- Charge \$350/month for JetDock berthing (16-22-ft.). Could command more, but do not charge guides because they bring traffic to the marina (clients buy soft drinks, beer, ice, etc.)
- They get "2-3 calls per day for JetDocks."
- If they could fit more JetDocks in they would.
- Improved transient traffic, particularly through Internet/Active Captain/Other sites/advertising. This has spurred fuel sales.
- Applied for a 2016 BIG grant to improve fuel distribution system.
- All wetslips privately owned, but marina manager is leasing agent.

Interview Summaries

Interviewee

Contact: Matt Driscoll, Marina Manager - Cooper River Marina
Date: October 2014

Key Discussion Points

- 100% occupied, likely due to low rates and not location
- Port seeking to relocate the marina
- Excellent transient seasons in 2015. Turning vessels away, particularly larger boats over 45-ft.

Interview Summaries

Interviewee

Contact: Josh Carson, Dockmaster - Ripley Light Marina and Drystack
Date: January 2016

Key Discussion Points

- Highly occupied. All available slips filled. Wait list.
- Some slips not usable due to wear/tear/active maintenance (bunk boards)
- Demand for all racks. Phone inquiries on daily basis.
- 19-20-ft. vessels most popular overall; 23-27-ft. boats recent trend in demand.
- Fewer fishermen; more general boating usage.
- Can rack up to 40-ft.
- Most clientele from Charleston; 3 from Isle of Palms; some moving out to IOP
- Raised rack rates by \$1 in January 2016
- Feels that IOP is a “great location” for a drystack.