# APPLICATION FOR A STATE DESIGNATED, FEDERALLY APPROVED NO DISCHARGE ZONE FOR INDIAN RIVER VERO BEACH TO FORT PIERCE AQUATIC PRESERVE

## (Clean Water Act Section 312(f)(3))

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Contents

# 1.0 Greater Protection and Enhancement Certification

The Indian River Lagoon (IRL) is a 156-mile-long estuary along Florida's east coast. Located in Indian River and Saint Lucie counties, Indian River-Vero Beach to Fort Pierce Aquatic Preserve is 12 miles long and encompasses 9,500 acres. The aquatic preserve extends from the southern Vero Beach corporate limit south to the north U.S. Highway A1A bridge in Fort Pierce.

The Florida aquatic preserves are administered on behalf of the state by the Florida Department of Environmental Protection's (DEP) Office of Resilience and Coastal Protection (ORCP) as part of a network that includes 42 aquatic preserves, three National Estuarine Research Reserves, a National Marine Sanctuary, the Coral Reef Conservation Program. This provides for a system of significant protections to ensure that our most popular and ecologically important underwater ecosystems are cared for in perpetuity. Each of these special places is managed with strategies based on local resources, issues and conditions.

An extensive coastline and wealth of aquatic resources have defined Florida as a subtropical oasis, attracting millions of residents and visitors, and the businesses that serve them. Florida's submerged lands play important roles in maintaining good water quality, hosting a diversity of wildlife and habitats (including economically and ecologically valuable nursery areas), and supporting a treasured quality of life for all. In the 1960s, it became apparent that the ecosystems that had attracted so many people to Florida could not support rapid growth without science-based resource protection and management. To this end, state legislators provided extra protection for certain exceptional aquatic areas by designating them as aquatic preserves. Today, Florida has 42 aquatic preserves, encompassing about 2.2 million acres. All but four of these submerged lands of exceptional beauty are located along Florida's 8,400 miles of coastline, in the shallow waters of marshes and estuaries. The other four are located inland, near springs, lakes and rivers.

In 2021, the Florida Legislature passed Senate Bill 1086 creating Chapter 327.521, Florida Statute (F.S.), designating, upon approval from the United States Environmental Protection Agency, all waters within the boundaries of aquatic preserves identified in Chapter 258.39, F.S., no-discharge zones. The Governor signed the bill on June 29, 2021.


Figure 1: Map of Proposed No-Discharge Boundaries for Indian River-Vero Beach to Fort Pierce Aquatic Preserve

## 1.1 Proposed Boundaries

The proposed no discharge zone includes a segment of the Atlantic Intracoastal Waterway between approximately mile 953.5 (North 27 degrees 37.6153 minutes, West 80 degrees 22.1865 minutes) and mile 964.8 (North 27 degrees 28.3272 minutes, West 80 degrees 19.4741 minutes.) This area encompasses the entirety of the Indian River-Vero Beach to Fort Pierce Aquatic Preserve, as delineated in Chapter 258.39, Florida Statute, as described in the Official Records of Indian River County in Book 368, pages 9-12, and in the Official Records of Saint Lucie County in Book 187, pages 1083-1086. In general, the boundaries can be described as extending from the Fort Pierce North, Causeway, Florida State Road (SR) A1A north to a boundary approximately 2,000 feet south of SR 656. More specifically, within that description, the southern corporate line of Vero Beach refers to the southerly corporate boundary line of Vero Beach as it existed on June 3, 1970, which is also a westerly projection of the south boundary of "Indian Bay" subdivision as recorded in Plat Book 3, page 43, Docket No. 59267, Public Records of Indian River County, and State Road A1A refers to State Road A1A, North Beach Causeway, located north of Fort Pierce Inlet.

Indian River- Vero Beach to Fort Pierce Aquatic Preserve, located in Indian River and Saint Lucie counties, is 12 miles long encompassing 9,500 acres. The aquatic preserve extends from the southern Vero Beach corporate limit south to the north U.S. Highway A1A bridge in Fort Pierce and includes Big Starvation Cove, Wildcat Cove and Fort Pierce Cut. The aquatic preserve is bordered by the cities of Vero Beach and Fort Pierce. The aquatic preserve is accessible from the east by U.S. Highway A1A and from the west by U.S. Highway 1. Numerous parks and boat ramps provide direct public access to the aquatic preserve.

## 1.2 Description of Resources

The Indian River Lagoon (IRL) is one of the most biologically diverse estuaries in North America and is designated as an Estuary of National Significance and an Outstanding Florida Water (OFW) (Chapter 62-302, Florida Administrative Code (F.A.C.)), classification of surface waters and the designation of OFW provides state's highest level of protection for water quality. Seagrass and mangrove habitats provide food, protection, and nesting/nursing areas for a wide variety of organisms including filter feeders, wading birds, gamefish, sea turtles, bottlenose dolphins, and manatees. These areas additionally filter runoff, stabilize sediments, maintain water quality, and protect shorelines from erosion.

The lagoon also directly and indirectly supports a large part of the region's and the state's economy. The basin supports the multimillion-dollar Indian River citrus industry and boat and marine sales industries. Finfish and shellfish harvesting from the lagoon also contribute to local economies. An economic study prepared by the East Coast Florida Regional Planning Council (ECFRPC) and Treasure Coast Regional Planning Council (TCRPC) (ECFRPC and TCRPC 2016) estimated the total annual value of the lagoon's benefits at $7.6 billion, measured in 2014 dollars. This does not include the estimated $934 million in annualized real estate value added

for property located on or near the IRL (Hazen and Sawyer 2008). The study area spanned from Ponce de Leon Inlet in Volusia County to the Jupiter Inlet in Palm Beach County, and included all of Brevard, Indian River, Saint Lucie, and Martin Counties. The primary IRL-related industry groups identified in the study are living resources, marine industries, recreation and visitor-related, resource management, and defense and aerospace.

The Indian River Lagoon Aquatic Preserves System Management Plan contains additional resource information (Appendix A).

## 1.3 Impairments

There are various sources of pollution in the proposed area detailed in the Central Indian River Lagoon (CIRL) Basin Management Action Plan (Florida Department of Environmental Protection 2021). Within the CIRL Basin Management Action Plan, the Indian River Vero Beach to Fort Pierce Aquatic Preserve is encompassed in the Central IRL B and Central IRL SIRL project zones. Nonpoint sources in the watershed contribute most of the Total Nitrogen and Total Phosphorus loads to the CIRL and include urban and agricultural runoff.

The nutrient Total Maximum Daily Load (TMDL) for the main stem of the IRL (not including tributaries) were adopted by DEP in March 2009. A TMDL is a scientific determination of the maximum amount of a given pollutant that a surface water can absorb and still meet the water quality standards that protect its designated uses including recreation, human health, and aquatic life. Water bodies that do not meet water quality standards are identified as 'impaired' for the particular pollutants of concern (nutrients, bacteria, mercury, etc.) and TMDLs must be developed, adopted and implemented for those pollutants to reduce pollutants and restore the water body so that designated uses are attained. The threshold limits on pollutants in surface waters — Florida's surface water quality standards on which TMDLs are based — are set forth primarily in Chapters 62-302 and 62-303, F.A.C., and the associated table of water quality criteria. Adopted TMDL rules are included in Chapter 62-304, F.A.C.

The TMDLs focus on the water quality conditions necessary for seagrass regrowth at water depth limits where seagrass historically grew in the lagoon, based on a multiyear composite of seagrass coverage. The median depth limits of seagrass coverage in the IRL decreased over the years because of changes in water quality conditions resulting from anthropogenic influences. As polluted runoff reaches the lagoon, it contributes to conditions that prevent the seagrass from growing in deeper water due to reduced water clarity.

Table 1: State Adopted and Federally Approved TMDLs in the Indian River-Vero Beach to Fort Pierce Aquatic Preserve

| State Adopted and Federally Approved TMDL | | |
|---|---|---|
| **Waterbody** | **Total Phosphorus** | **Total Nitrogen** |
| Central and southern South Indian River | 111,594 (lb./year) and 53,599 (lb./year) | 684,715 (lb./year) and 278,273 (lb./year) |

*Source: Florida Department of Environmental Protection - Chapter 62-304.520, F.A.C., Indian River Lagoon Basin TMDLs Section 7 and 8*

Table 2: Estuary-Specific Numeric Interpretations of the Narrative Nutrient Criterion in the Indian River-Vero Beach to Fort Pierce Aquatic Preserve

| Estuary-Specific Numeric Interpretations of the Narrative Nutrient Criterion | | | |
|---|---|---|---|
| **Waterbody** | **Total Phosphorus** | **Total Nitrogen** | **Chlorophyll-a** |
| Indian River Lagoon from Fort Pierce Inlet to Indian River County Line | 0.070 mg/L as AGM | 0.72 mg/L as AGM | 4.7 µg/L as AGM |

*Source: Florida Department of Environmental Protection - Chapter 62-302.532, F.A.C., Estuary-Specific Numeric Interpretations of the Narrative Nutrient Criterion*

Site specific numeric interpretations of the narrative nutrient criterion is established by DEP and approved by the U.S Environmental Protection Agency to establish the total allowable load or ambient concentration for at least one nutrient (total nitrogen, nitrate-nitrite, or total phosphorus) and at least one response variable (typically chlorophyll a). Criteria is expressed as annual geometric mean (AGM) values and are not to be exceeded more than once in a three-year period.

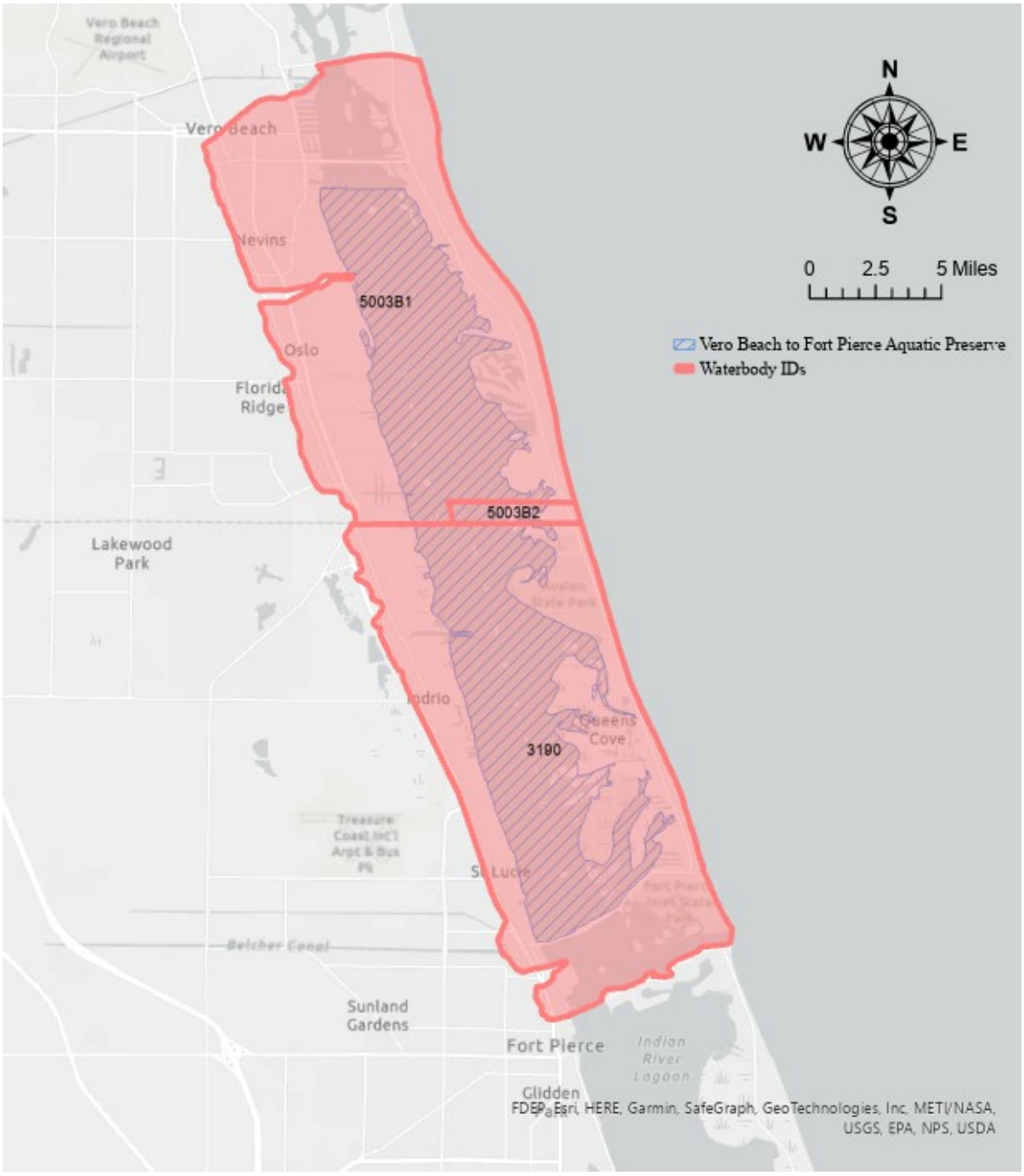
Table 3: Waters Not Attaining Standards in the Indian River Vero Beach to Fort Pierce Aquatic Preserve

| Waters Not Attaining Standards | | | | | | |
|---|---|---|---|---|---|---|
| **Waterbody** | **Total Nitrogen** | **Total Phosphorus** | **Fecal Coliform** | **Fecal Coliform (SEAS Classification)** | **Copper** | **Iron** |
| South Indian River (below SR 60) WBID: 5003B1 | X | X | X | X | X | X |
| South Indian River (above Fort Pierce Inlet) WBID: 3190 | | | | X | | |

*Source: Florida Department of Environmental Protection.*

The Watershed Assessment Section of the DEP Division of Environmental Assessment and Restoration uses the best available information to identify waterbodies and water segments (WBIDs) that are not meeting the applicable water quality standards and designated uses based on the Impaired Waters Rule, Chapter 62-303 and Florida's Surface Water Quality Standards, Chapter 62-302, F.A.C.

Figure 2: Map of Waterbody IDs




WBIDs 5003B1 and 3190 are both categorized as Class II waters, which have a designated use of shellfish propagation or harvesting. WBIDs 5003B1 and 5003B2 are set to be retired and merged to one large WBID as 5003B3.

# 2.0 Pumpout Facility Information


Figure 3: Map of Pumpout Facilities

There are eight marinas with pumpout facilities within approximately two miles of the proposed no-discharge zone. Seven marinas are accessible to the public and one marina is a private facility restricted to members. Pumpout facilities located outside of the proposed waters are considered adequate and reasonably available to vessel operators as vessels typically travel through the length of the preserve to access inlets to the Atlantic Ocean. Additionally, as state-owned submerged lands, aquatic preserves are bound in conservation to maintain their natural condition, with additional criteria required in the permitting of new marina facilities directly within the boundaries of the aquatic preserve.

Five of the eight marinas are designated as a Clean Marina with DEPs Clean Marina Program. This is a voluntary designation program with a proactive approach to environmental stewardship. The program encourages marinas, boatyards and marine retailers to incorporate best management practices (BMPs) that exceed regulatory requirements. To become designated as a Florida Clean Marina, facilities must meet regulatory requirements and implement BMPs designed to protect Florida's waterways and address critical environmental issues such as sensitive habitats, waste management, stormwater control, spill prevention and emergency preparedness.

A more specific description of the location and type of each marina's pumpout facilities is provided below. Sources include personal communication with marina owners, the Waterway Guide, and Florida Department of Environmental Protection Clean Marina Program records.

**Causeway Cove Marina (914A):** This marina is located approximately 1.25 miles south of the proposed no-discharge zone. The marina operates one stationary pumpout located on the Bermuda Dock, which is available to the public for $5.

**Fort Pierce City Marina (1P):** This marina is located approximately 1.6 miles south of the proposed no-discharge zone and is publicly owned and operated marina. The marina operates one stationary pumpout available to the public for $5. This is a designated Clean Marina facility.

**Harbor Isle (953A):** This marina is located approximately 1.2 miles south of the proposed no-discharge zone. The marina operates one in-slip stationary pumpout system available to the public for $5. This is a designated Clean Marina facility.

**Pelican Yacht Club (1006A):** This marina is located approximately 1.3 miles south of the proposed no-discharge zone. The marina operates one stationary pumpout located at the fuel dock and is available to the public for $5.

**Quail Valley River Club (891A):** This marina is located approximately 1.55 miles north of the proposed no-discharge zone. The marina operates one stationary pumpout located at the boathouse and is available to the public for $5. This is a designated Clean Marina facility.

**Riverside Boatyard and Marina (2350P):** This marina is located on the southwest border of the proposed no-discharge zone. The pumpout at this facility is for private members only.

**Safe Harbor Harbortown Marina (983A):** This marina is located less than $1/10^{th}$ of a mile south of the proposed no-discharge zone. The marina operates one stationary pumpout located at the fuel dock and is available to the public for $15. This is a designated Clean Marina facility.

**Vero Beach Municipal Marina (921A):** This marina is located approximately 2.05 miles north of the proposed no-discharge zone. The marina operates one stationary pumpout located at the fuel dock with two stanchions. It is available to the public for $5. This is a designated Clean Marina facility.

Additionally, there are septic truck haulers that might be able to provide pumpout service to boats, if necessary. Below are two such companies that have an operational area that includes the vicinity of the Indian River-Vero Beach to Fort Pierce Aquatic Preserve.

**Marine and RV Pumping ToGo**: This hauler offers pumpouts to boats from a land-based truck. They are open Monday to Satuday 7am - 7pm and have an emergency line. They charge a maximum of $250 for a pumpout, it's mostly determined on how far the boat is from the truck. Their service area is from Miami to Ft. Pierce.

**Coastal Tank:** This hauler offers pumpouts to boats (primarily mega yachts) from a land-based truck. They provide services 24x7, charging between $650 - $1,300. Price is determined based on several factors including if they have another job in the area, or if the vessel needing the pumpout is in route to an existing job, and if the customer and other neighboring vessels will work together to all use the service at the same time. Their service area is from Key West to Florida/Georgia boarder on the Atlantic coast, but they may be able to accommodate Gulf coast vessels as well. They are based out of Ft. Lauderdale.

Table 4: Facility Locations

| Facility Name | Latitude | Longitude |
|---|---|---|
| Causeway Cove Marina | 27.457004 | -80.312597 |
| Fort Pierce City Marina | 27.449768 | -80.321713 |
| Harbour Isle | 27.461319 | -80.308278 |
| Pelican Yacht Club | 27.465942 | -80.303091 |
| Quail Valley River Club | 27.643185 | -80.361676 |
| Riverside Boatyard & Marina | 27.479460 | -80.333915 |
| Safe Harbor Harbortown | 27.466945 | -80.328212 |
| Vero Beach Municipal Marina | 27.657674 | -80.370216 |

Table 5: Facility Types

| Facility Name | Private | Stationary | Mobile | Portable |
|---|---|---|---|---|
| Causeway Cove Marina | | 1 | | |
| Fort Pierce City Marina | | 1 | | |
| Harbour Isle | | 1 | | |
| Pelican Yacht Club | | 1 | | |
| Quail Valley River Club | | 1 | | |

| | | | | |
|---|---|---|---|---|
| Riverside Boatyard & Marina | 1 | | | |
| Safe Harbor Harbortown | | 1 | | |
| Vero Beach Municipal Marina | | 1 | | |
| Total | 1 | 7 | 0 | 0 |

Table 6: Facility Operation Information

| Facility Name and Contact Information | Map Code | Ho | Fee | Operating Capacity |
|---|---|---|---|---|
| **Causeway Cove Marina**<br>601 Seaway Dr<br>(772) 242-3552 | 914A | 9 am - 5 pm | $5.00 | 25 gallons per minute |
| **Fort Pierce City Marina**<br>1 Ave A<br>(772) 464-1245 | 1P | 6:30 am - 5:30 am | $5.00 | 50 gallons per minute |
| **Harbour Isle**<br>801 Seaway Drive<br>(772) 46-19049 | 953A | 9:30 am - 1:30 pm (Mon- Fri)<br>10 am - 1 pm (Sat-Sun) | $5.00 | 105 gallons per minute |
| **Pelican Yacht Club**<br>1120 Seaway Dr<br>(772) 464-2700 | 1006A | 11:30 am - 9 pm (Wed - Sat) 8 am - 6pm (Sun) | $5.00 | 40 gallons per minute |
| **Quail Valley River Club**<br>2345 Hwy A1A<br>(772) 492-2020 | 891A | 9:30 am - 4 pm | $5.00 | - |
| **Riverside Boatyard & Marina**<br>2350 Old Dixie Highway<br>(772) 464-5720 | 2350P | 8 am - 7pm (Mon-Sat) | Private | - |
| **Safe Harbor Harbortown**<br>1936 Harbortown Dr<br>(772) 466-7300 | 983A | 7 am - 5 pm | $15.00 | 25 gallons per minute |
| **Vero Beach Municipal Marina**<br>3611 Rio Vista Dr<br>(772) 978-4960 | 921A | 8 am - 5 pm | $5.00 | 25-30 gallons per minute |

*Sources: Personal communication with marina owners and Florida Department of Environmental Protection Clean Boating Program records. Florida marinas in this region do not have adjusted seasonal hours.*

Table 7: Facility Accessibility

| Facility Name | Water Depth | Vessel Draft Limitation |
|---|---|---|
| Causeway Cove Marina | 5.6’ | 4.6’ |
| Fort Pierce City Marina | 7.6’ | 6.6’ |
| Harbour Isle | 9.0’ | 8.0’ |

| | | |
|---|---|---|
| Pelican Yacht Club | 6.0’ | 5.0’ |
| Quail Valley River Club | 8.0’ | 7.0' |
| Riverside Boatyard & Marina | 6.0’ | 5.0’ |
| Safe Harbor Harbortown | 6.5’ | 5.5' |
| Vero Beach Municipal Marina | 8.0’ | 7.0’ |

*Sources: WaterwayGuide.com*

The authorized depth of the Intracoastal Waterway throughout the proposed no discharge zone is 12 feet. Further south outside the proposed No Discharge Zone, the authorized depth is 10 feet. Some vessels that could transit the Intracoastal Waterway located within the proposed No Discharge Zone and yet not be able to access some or all the marinas listed in Table 7. However, those boats that might be excluded by draft from marinas within or near the proposed No Discharge Zone are not going to be resident boats since they cannot access the marinas for dockage. These “draft excluded” boats would simply be passing through onto a destination outside of the No Discharge Zone. Those transient vessels, with Type I or Type II Marine Sanitation Devices should be able to refrain from discharge for 30 to 60 minutes they are passing through the proposed No Discharge Zone. Therefore, no exclusion are expected.

Table 8: Facility Disposal Method

| Facility Name | Disposal Method |
|---|---|
| Causeway Cove Marina | Fort Pierce Utilities Authority |
| Fort Pierce City Marina | Fort Pierce Utilities Authority |
| Harbour Isle | Fort Pierce Utilities Authority |
| Pelican Yacht Club | Fort Pierce Utilities Authority |
| Quail Valley River Club | City of Vero Beach Wastewater Treatment Plant |
| Riverside Boatyard & Marina | Holding Tank - Contracted Collection Service |
| Safe Harbor Harbortown | Fort Pierce Utilities Authority |
| Vero Beach Municipal Marina | City of Vero Beach Wastewater Treatment Plant |

*Source: Florida Department of Environmental Protection, Office of Resilience and Coastal Protection’s Clean Boating Program*

Table 9: Wastewater Treatment Plants

| Wastewater Treatment Plant | County | Permit Number | Compliance with Effluent Limits | Permitted Capacity (*MGD AADF) | Permit issued | Permit Expires | Expansion |
|---|---|---|---|---|---|---|---|
| City of Vero Beach Wastewater Treatment Plant | Indian River | FLA021661 | Yes | 4.5 | 9/12/2019 | 10/1/2024 | Yes |
| Fort Pierce Utilities Authority | Saint Lucie | FL0027278 | Yes | 10.0 | 01/23/2023 | 01/22/2028 | No** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

*Source: Florida Department of Environmental Protection*

** AADF – Annual average daily flow; MGD – million gallons per day.*

*** Fort Pierce Utilities Authority is in the process of relocating the facility from a barrier island to the mainland.*

The stationary pumpout facilities located at Causeway Cove Marina, Fort Pierce City Marina, Harbour Isle, Pelican Yacht Club, and Safe Harbor Harbortown are connected to the Fort Pierce Utilities Authority (FPUA). The FPUA Wastewater Treatment Plant (WWTP) is in the process of relocating the facility five miles inland from its current location on a barrier island with a fully operational date in late 2027. The new facility is anticipated to be rated at 8 million gallons per day (MGD) average daily flow with a peak of 24 MGD and can be increased to 30 MGD to accommodate future growth of the service area. The most recent compliance inspection did find some deficiencies regarding reporting, exceedances and unresolved discharges from 2021 to 2023. The exceedances involved total suspended solids and carbonaceous biochemical oxygen demand. In addition, there were some exceedances for fecal coliform in the biosolid that is hauled offsite to composting facility.

The stationary pumpout facilities at Quail Valley River Club and Vero Beach Municipal Marina are connected to the City of Vero Beach WWTP which is currently in compliance with applicable effluent guidelines. Vero Beach WWTP has two discharge methods, a Class I injection well and a slow-rate public access irrigation system (R-001). In the past five years, there have been five exceedances of total suspended solids in the R-001, although these were low exceedances. In addition, there have been 119 groundwater exceedances, but these mirror background levels as the facility is close to the coast and has significant groundwater quality fluctuations from tidal influence. Vero Beach WWTP is anticipating constructing a new wastewater treatment facility, projected to be operational by early 2027. This will replace and relocate the current facility further inland, expanding maximum capacity to 5 MGD. Capacity analysis projections demonstrated that Vero Beach would not exceed current design capacity within a five year or 10-year timeframe. Based on best available information, it is not anticipated that capacity loads of the associated WWTPs would be meaningfully impacted by the likely increase in number of sewage pumpouts as a result from the no discharge designation.

Riverside Boatyard & Marina has a holding tank that is emptied via a private collection service. The operator is a licensed contractor that is required to properly dispose of the effluent as dictated by law.

As part of the compliance procedures, wastewater treatment facilities in Florida submit a capacity analysis report to the Florida Department of Environmental Protection when the three-month average daily flow of the for the most recent three consecutive months exceeds 50% of the permitted capacity (Florida Administrative Code 62-600.405).

# 3.0 Vessel Population and Usage in Proposed Area

With more than one million registered recreational boats in Florida as well as 300,000 visiting vessels annually, 2,200 marinas, 8,400 miles of shoreline, 7,000 lakes and 51,000 miles of rivers and streams, the state ranks first in the nation in boating activity. The number of recreational boats in the vicinity of the aquatic preserve was gathered using boat registration data from Florida Department of Highway Safety and Motor Vehicles (FLHSMV). All motorized vessels operating in Florida's public waterways must be titled and registered with FLHSMV. There are some exceptions: vessels owned by the U.S. Government, State of Florida or its political subdivisions; federally documented vessels; a vessel already covered by a registration number in full force and effect which was awarded to it pursuant to a federally approved numbering system of another state or by the United States Coast Guard in a state without a federally approved numbering system, if the vessel is not located in this state for a period of more than 90 consecutive days; and vessels from a country other than the United States temporarily used, operated or stored on the waters of this state for a period that is not more than 90 days. Florida does not have any data nor any mechanism to estimate the numbers of transient vessels in state waters. Florida is a year-round boating and fishing destination. There are no slow or off seasons.

Table 10: Vessel Population by Type in Indian River County and Saint Lucie County

| | | **Boats by Type** | | |
|---|---|---|---|---|
| **Total County** | **Total Boats** | **Recreational** | **Commercial** | **Other *** |
| Indian River | 10856 | 10494 | 313 | 49 |
| Saint Lucie | 15199 | 14622 | 510 | 67 |
| Total | 26055 | 25116 | 823 | 116 |

Source: *2021 Florida Department of Highway Safety and Motor Vehicles*
**Other is defined as registration for dealers, boats that are not titled, but for sale.*

Table 11: Recreational Boats in Indian River County and Saint Lucie County by Length

| | **Recreational Boats** | | |
|---|---|---|---|
| **County** | **<26'** | **26'<40'** | **>40'** |
| Indian River | 9325 | 851 | 163 |
| Saint Lucie | 12509 | 1618 | 367 |
| Total | 21834 | 2469 | 530 |

*Source: 2021 Florida Department of Highway Safety and Motor Vehicles*
*Note: The category for motorized canoes is not included in Table 11, but is included int eh overall numbers presented in Table 10.. This includes 128 for St. Lucie County and 155 for Indian River County.*

Vessel tracking methods indicate high use occurs throughout the area, both inside and outside the preserve boundary, without significant seasonal variation. The Indian River-Vero Beach to Fort Pierce Aquatic Preserve encompasses only a portion of the Intracoastal Waterway and there are

marinas outside the aquatic preserve both north and south; therefore, a percentage of coverage within the two counties was used to estimate the number of vessels that could be found within the aquatic preserve boundary (e.g. boundary of the proposed no-discharge zone). The boundaries of the Indian River-Vero Beach to Fort Pierce Aquatic Preserve proposed no-discharge zone encompasses approximately 25% of the water area within Indian River and St Lucie counties. So, the number of recreational vessels registered for each county is multiplied by 25% to obtain the estimated vessel population required for the Recreational Vessel Worksheet.

Table 12: Approximate Recreational Boats in Proposed No-Discharge Zone by Length

| County | Recreational Boats | | |
|---|---|---|---|
| | **<26'** | **26'<40'** | **>40'** |
| Indian River | 2331 | 213 | 41 |
| Saint Lucie | 3127 | 405 | 92 |
| Total | 5459 | 617 | 133 |

*Source: 2021 Florida Department of Highway Safety and Motor Vehicles.*

## 3.1 Recreational Vessel Worksheet

**Part 1: Calculate the total number of recreational vessels with MSDs**

| | | | |
|---|---|---|---|
| A | | 5459 | Total number of recreational vessels less than 26 feet |
| | X | 20% | Percent of vessels 25 feet or less with MSDs (assume 20% if unknown) |
| | | 1091.8 | Number of recreational vessels 25 feet or less with MSDs |

| | | | |
|---|---|---|---|
| B | | 617 | Total number of recreational vessels 26 feet to less than 40 feet |
| | X | 50% | Percent of vessels 26 - 39 feet or less with MSDs (assume 50% if unknown) |
| | | 308.5 | Number of recreational vessels 26 - 39 feet with MSDs |

| | | | |
|---|---|---|---|
| C | | 133 | Total number of recreational vessels 40+ feet |
| | X | 100% | Percent of vessels 40+ feet or less with MSDs (assume 100% if unknown) |
| | | 133 | Number of recreational vessels 40+ feet with MSDs |

**Add calculations A+B+C together for the total number recreational vessels with MSDs: 1533.3**

**Part 2: Calculate the estimated number of vessels needing pumpout service**

| | | | |
|---|---|---|---|
| D | | 1533.3 | Total number of recreational vessels with MSDs |
| | X | 40% | Peak occupancy rate (assume 40% if unknown) |
| | | **613.32** | **Number of recreation vessels needing pumpout service** |

**Part 3: Calculate the number of recreational vessels supported by existing pumpout facilities in the proposed area**

| | | | |
|---|---|---|---|
| E1 | | 4 | Vessels served per hour at Causeway Cove Marina (use 4 if unknown) |
| | X | 24 | Hours of operation during peak use |
| | | 96 | Number of vessels served by pumpout |

| | | | |
|---|---|---|---|
| E2 | | 4 | Vessels served per hour at Fort Pierce City Marina (use 4 if unknown) |
| | X | 33 | Hours of operation during peak use |
| | | 132 | Number of vessels served by pumpout |

| | | | |
|---|---|---|---|
| E3 | | *4 | Vessels served per hour at Harbour Isle (use 4 if unknown) |
| | X | 10 | Hours of operation during peak use |
| | | 40 | Number of vessels served by pumpout |

| | | | |
|---|---|---|---|
| E4 | | 4 | Vessels served per hour at Pelican Yacht Club (use 4 if unknown) |
| | X | 29 | Hours of operation during peak use |
| | | 116 | Number of vessels served by pumpout |

| | | | |
|---|---|---|---|
| E5 | | 4 | Vessels served per hour at Quail Valley River Club (use 4 if unknown) |
| | X | 19.5 | Hours of operation during peak use |
| | | 78 | Number of vessels served by pumpout |

| | | | |
|---|---|---|---|
| E6 | | 4 | Vessels served per hour at Riverside Boatyard (use 4 if unknown) |
| | X | 22 | Hours of operation during peak use |
| | | 88 | Number of vessels served by pumpout |

| | | | |
|---|---|---|---|
| E7 | | 4 | Vessels served per hour at Safe Harbor Harbortown (use 4 if unknown) |
| | X | 30 | Hours of operation during peak use |
| | | 120 | Number of vessels served by pumpout |

| | | |
|---|---|---|
| E8 | *4 | Vessels served per hour at Vero Beach Municipal Marina (use 4 if unknown) |

| | | | |
|---|---|---|---|
| | X | 27 | Hours of operation during peak use |
| | | 108 | Number of vessels served by pumpout |

**Add results of part E calculations together for total number of vessels served by existing pumpout facilities: 778**

**Result: Compare the number of recreational vessels needing pumpout service (613.32) with the number of vessels served by existing pumpout facilities (778).**

* Harbour Isle has an in-slip system and could likely service more than 4 boats per hour. Vero Beach Municipal Marina has two stanchions and could service 8 vessels per hour.

## 3.2 Overview of Commercial Vessel Population

In addition to the recreational vessel population, there are also commercial marinas and operations in the vicinity of the Indian River-Vero Beach to Fort Pierce Aquatic Preserve. According to the FLHSMV, there are 823 commercial vessels registered in Indian River and Saint Lucie counties. Local knowledge, in addition to a brief mention in the United States Coast Guard's 2018 *Waterways Analysis and Management System for Intracoastal Waterway Miles 925-1005* indicate that the commercial vessels in this area are typically in fishing and boating industries, such as construction, charter boats, and towing. Not all commercial vessels registered in both counties will require pumpout services as they are not required to be equipped with MSDs since they are under 26 feet according to data from the FLHSMV. There are 186 commercial boats that would be required to have some type MSDs. For commercial vessels over 40 feet, Dayboat Seafood is the only marina in the vicinity of Indian River-Vero Beach to Fort Pierce Aquatic Preserve. The boundaries of the Indian River-Vero Beach to Fort Pierce Aquatic Preserve proposed no-discharge zone encompasses approximately 25% of the water area within Indian River and St Lucie counties. So, not all of the commercial vessels would be in or near this Indian River-Vero Beach to Fort Pierce Aquatic Preserve since the aquatic preserve does not encompass all the waterways of the counties.

Table 13: Commercial Boats in Indian River County and Saint Lucie County by Length

| County | Commercial Boats | | |
|---|---|---|---|
| | **<26'** | **26'<40'** | **>40'** |
| Indian River | 248 | 57 | 8 |
| Saint Lucie | 389 | 89 | 32 |
| Total | 637 | 146 | 40 |

*Source: 2021 Florida Department of Highway Safety and Motor Vehicles.*

**Florida Atlantic University – Harbor Branch Campus:** While this private marina facility formerly serviced a 200-foot ocean research vessel, it now consists of a small boat basin. These are all trailer boats for research operations within the shallow waters in the vicinity of the Indian River-Vero Beach to Fort Pierce Aquatic Preserve and are small enough not have holding tanks or a requirement for installed toilets.

**Dayboat Seafood:** This marina is located just inside the Indian River-Vero Beach to Fort Pierce Aquatic Preserve boundary, located on the extreme southern end of the aquatic preserve, western or mainland shore, immediately adjacent to Intracoastal Waterway. Access depth is approximately 6 feet.

A 48-slip marina owned and operated by Dayboat Seafood for the express purpose to offload and resupply commercial long-line fishing boats. This marina services a fleet of small commercial long-line fishing boats. The boats range in size from 40 to 60 feet. The boats are typically operated by a crew of 2 to 4. As the name "Dayboat" implies, the boats are not equipped to operate offshore more than 24 hours at a time. The boats typically depart the marina in the late afternoon destined to fishing grounds in the Atlantic Ocean. The boats will fish overnight, returning to the marina the next day to offload the night's catch and resupply. As the marina is located on the southern border of the aquatic preserve, the boats travel southward about 500 meters through the aquatic preserve, then depart the IRL through Fort Pierce Inlet to the Atlantic Ocean. Therefore, the boats do not typically travel through the aquatic preserve.

According to the facility and fishing fleet owner, this facility does not have a sewage pumpout, but there are landside bathroom facilities. The vessels that do have heads do not have holding tanks or treatment systems. While underway, vessels equipped with a head, will lock the head so it cannot be used until the vessel is beyond the 3-mile limit. Designation of a no discharge zone will not affect operations as the vessels are operated offshore. The facility has a private diesel fuel pump to service the commercial fishing fleet.

While the facility states it can accommodate vessels up to 80 feet, if there was a need to access a pumpout, there are marinas nearby that could accommodate if the vessel could navigate the draft limitations for the marina.

# 4.0 Education and Enforcement Plans

## 4.1 Education

Education and promotion of environmental stewardship of Florida's waterways has been a central component of the Florida Department of Environmental Protection, Office of Resilience and Coastal Protection's Clean Boating Programs including the Clean Vessel Act, Clean Marina, Clean Boater and Clean Boating Partnership programs. The goal of the Clean Boating Programs is to promote a clean marine environment by building partnerships with marinas and boaters and educating the community about the importance of keeping Florida waters clean to reduce water pollution and improve water quality. These programs also provide outreach to marinas and their boaters.

Funding through the Clean Vessel Act Grant Program supports Florida Sea Grant's Clean Vessel Act Education Coordinator (Coordinator) staff member. The Coordinator populates and manages the Pumpout Nav Marina Pumpout Finder application. The app shows boaters where the nearest public pumpouts, mobile pumpout vessels, and sewage dump stations are located; provides educational information on how and why to properly dispose of sewage waste; and displays No Discharge Zones in the map feature with a pop-up description and link for more information. The Coordinator is charged with developing and implementing a comprehensive education program to give boaters the knowledge, tools, and resources they need to properly dispose of sewage. This will include education on new No Discharge Zones after they go into effect.

## 4.2 Enforcement

Florida law requires that a) every vessel 26 feet or more in length which has an enclosed cabin with berthing facilities, b) every houseboat, and c) every floating structure that has an enclosed living space with berthing facilities or working space with public access be equipped with a toilet properly connected to an appropriate United States Coast Guard certified and labeled marine sanitation device. Vessels 26 feet or more in length may instead be equipped with a portable toilet that can be removed from the vessel for proper disposal of the waste. Florida law also requires every vessel owner, operator, and occupant to comply with United States Coast Guard regulations pertaining to marine sanitation devices and with the United States Environmental Protection Agency regulations pertaining to areas in which the discharge of sewage, treated or untreated, is prohibited (Chapter 327.53, F.S.).

In addition, the owner or operator of a live-aboard vessel as defined in Chapter 327.02(23), F.S., or a houseboat as defined in Chapter 327.02(17), F.S., that is equipped with a marine sanitation device must maintain a record of the date and location of each pumpout of the marine sanitation device. These records must be maintained for 1 year to document compliance with United States Coast Guard requirements pertaining to proper operation of the marine sanitation device and proper disposal of collected waste (Chapter 327.53, F.S.).

A violation of this section of Florida law is a noncriminal infraction punishable by issue of a citation. Each violation shall be a separate offense. Each offense carries a civil penalty of up to $250. If any prohibited discharge is ongoing or continuous, a penalty of up to $250 may be assessed for each day the violation continues. The owner and operator of any vessel shall be jointly and severally liable for the civil penalty imposed (Chapters 327.53 and 327.73, F.S.).

Furthermore, a vessel or floating structure in violation of this section of Florida law is declared a nuisance and a hazard to public safety and health. The owner or operator of a vessel or floating structure cited for violating this section of Florida law shall, within 30 days following the issuance of the citation, correct the violation for which the citation was issued or remove the vessel or floating structure from the waters of the state. If the violation is not corrected within 30 days, law enforcement officers charged with the enforcement of Chapter 327.70, F.S., shall apply to the appropriate court in the county in which the vessel or floating structure is located to order or otherwise cause removal of such vessel or floating structure from the waters of the state at the owner's expense (Chapter 327.53, F.S.).

In addition, Chapter 327.521(1), F.S., states: Effective immediately upon approval by the United States Environmental Protection Agency of a no-discharge determination for the waters of the United States within the boundaries of aquatic preserves as described in F.S. 258.39, all waters within such areas are designated no-discharge zones within which a person may not discharge sewage of any type, whether treated or untreated, from any vessel or floating structure.

Florida laws pertaining to operation of marine sanitation devices and prohibition of sewage discharge from vessels and floating structures are enforced by the Florida Fish and Wildlife Conservation Commission Division of Law Enforcement and its officers, the sheriffs of the various counties and their deputies, municipal police officers, and any other law enforcement officer (Chapter 943.10, F.S.). These law enforcement officers may cause any inspections to be made of all vessels, enforce all provisions of these laws, and may order the removal of any vessel deemed to be a hazard to public safety (Chapter 327.70, F.S.).

An organized network exists among the various law enforcement agencies addressing nuisance, hazardous, and abandoned vessels throughout Florida. This collaborative network facilitates training, sharing of investigative information, technical assistance, and funding assistance. Upon designation of a no-discharge zone within an aquatic preserve, the Florida Fish and Wildlife Conservation Commission Division of Law Enforcement will add that topic to its training and information program. As is standard practice with new laws and rules, periods of both officer and then public education will transition into enforcement of the newly adopted no-discharge zone.

Enforcement for the proposed no-discharge zone will follow Chapter 327.521, F.S., to be enforced by officers of the Florida Fish and Wildlife Conservation Commission, officers of the Florida Department of Environmental Protection, Deputies of the Indian River County Sheriff's Office and Deputies of the Saint Lucie County Sheriff's Office.

> (1) Effective immediately upon approval by the United States Environmental Protection Agency of a no-discharge zone determination for the waters of the United States within the boundaries of aquatic preserves identified in Chapter 258.39, F.S., all waters of this state within such areas are designated no-discharge zones within which a person may not discharge sewage of any type, whether treated or untreated, from any vessel or floating structure.
>
> (2) A person who violates this section commits a noncriminal infraction, punishable by a civil penalty of up to $250. If any discharge prohibited by this section is ongoing or continuous, the person may be assessed a penalty of up to $250 for each day the violation continues.
>
> (3)(a) The owner or operator of a vessel or floating structure convicted a second time for violating this section shall, within 30 days after the conviction, remove the vessel or floating structure from the waters of this state. For purposes of this paragraph, the term "conviction" means a disposition other than acquittal or dismissal.
>
> (b) If the vessel or floating structure remains on the waters of this state in violation of this subsection, law enforcement officers charged with the enforcement of this chapter under Chapter 327.70, F.S., shall apply to the appropriate court in the county in which the

vessel or floating structure is located to order or otherwise cause the removal of such vessel or floating structure from the waters of this state at the owner's expense.

(c) If the owner cannot be found or otherwise fails to pay the removal costs, Chapter 328.17, F.S., shall apply. If the proceeds under Chapter 328.17, F.S. are not sufficient to pay all removal costs, funds appropriated from the Marine Resources Conservation Trust Fund pursuant to Chapter 327.53(6)(b), F.S. or Chapter 328.72(15)(c), F.S. may be used.

# 5.0 Letter of Support

December 17, 2021

Daniel Blackman
Regional Administrator
United States Environmental Protection Agency
Main Regional Office - EPA Region 4
61 Forsyth Street SW
Atlanta, GA 30303

Dear Mr. Blackman,

On behalf of Florida's Treasure Coast, we are writing this letter to document the shared Tri-County support between Indian River, St. Lucie and Martin Counties of establishing No-Discharge Zones (NDZs) in waters within the boundaries of aquatic preserves here in the Sunshine State, specifically along Florida's central east coast.

During the 2021 Florida Legislative Session, the Legislature passed CS/CS/SB 1086: Operation and Safety of Motor Vehicles and Vessels, which upon approval by the U.S. Environmental Protection Agency (EPA), designates state waters within aquatic preserves as NDZs where a person may not discharge sewage of any type, treated or untreated from any vessel or floating structure. We understand the Florida Department of Environmental Protection is currently working with the U.S. EPA Region 4 Office to gather information on the NDZ designation process and will work with the Agency to provide the materials necessary to complete the formal designation request.

We look forward to the successful implementation of designating NDZs along Florida's Indian River Lagoon. The Lagoon is one of the most biodiverse bodies of water in the world, and this designation strengthens the commitment by the state and local governments across the Treasure Coast to restore and improve the health of the Indian River Lagoon.

Should you have any questions or need further assistance during the review process, please do not hesitate to reach out to us.

Sincerely,

Peter O'Bryan, Chairman
Indian River County Board of County Commissioners

Sean Mitchell, Chairman
St. Lucie County Board of County Commissioners

Doug Smith, Chairman
Martin County Board of County Commissioners

# 6.0 References

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