

Port Everglades:
Master/Vision Planning for the Future, Today.

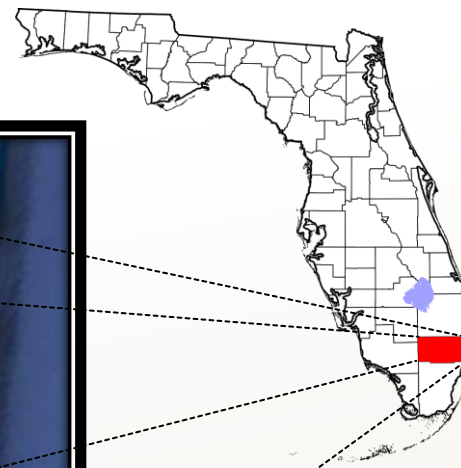
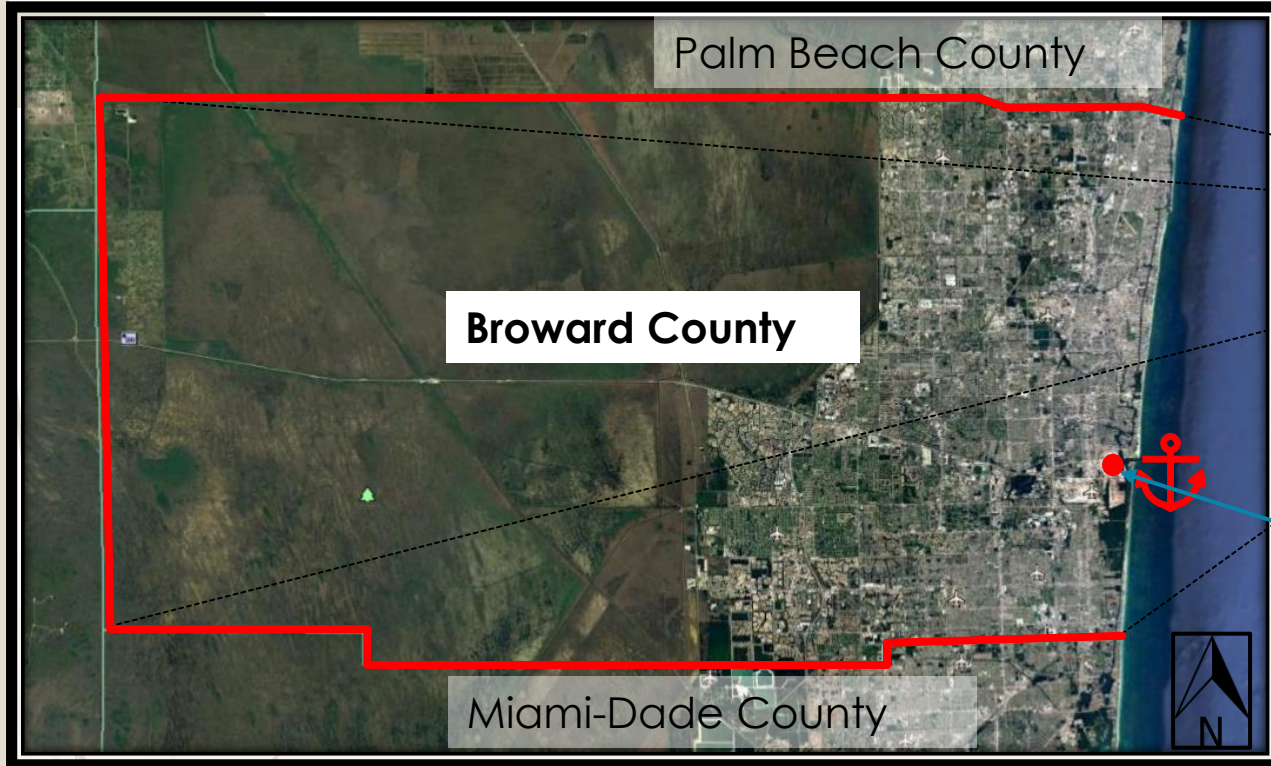
Presentation to NACAA

By

Dr. Natacha J. Yacinthe, Ph.D., AICP, PPM

December 16, 2020







Port Everglades Location

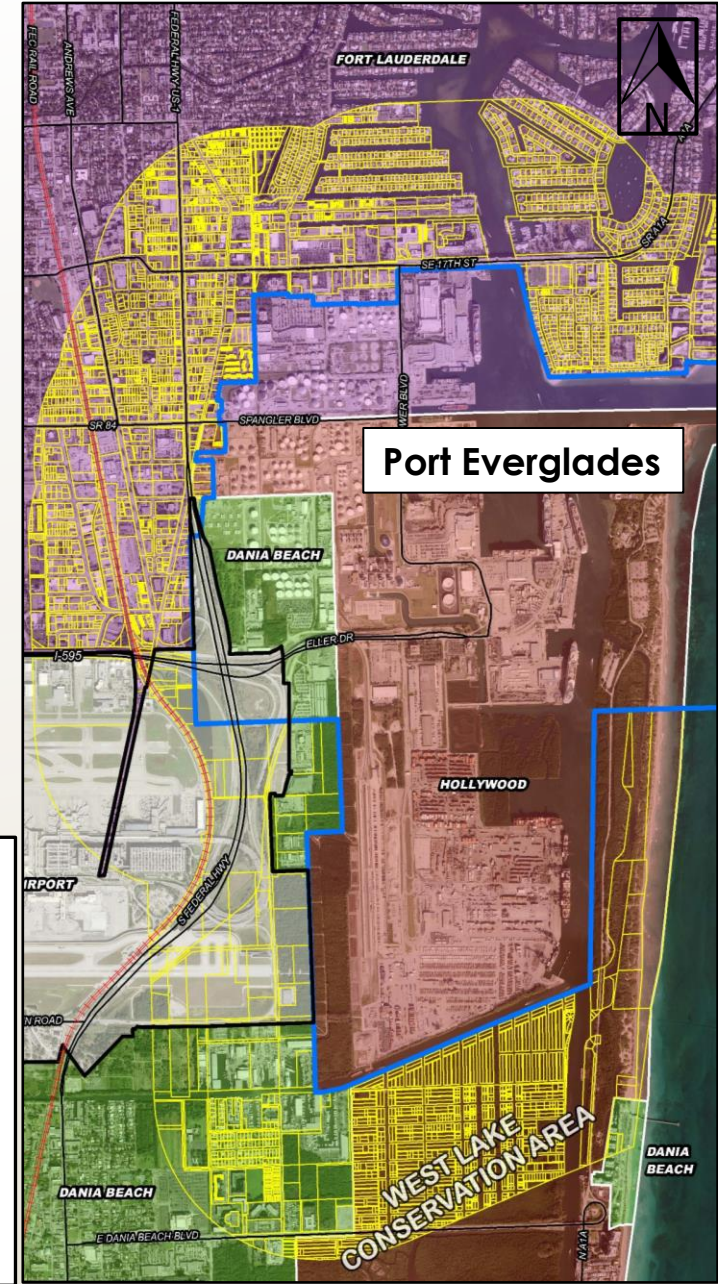


Port Everglades

Mission Statement

Port Everglades is Florida's powerhouse global gateway. A respected leader in trade, travel and financial stability, we create economic and social value by working in partnership with world-class clients. We achieve advancements focusing on efficient facilities, trade and cruise expansion, jobs growth, safety, security and **environmental stewardship** for our customers, stakeholders and community.

-  Port Everglades PJA
-  Hollywood – 71.3%
-  Fort Lauderdale – 13.3%
-  Dania Beach – 13.4%
-  Unincorporated BC – 2%
-  Airport/BCAD



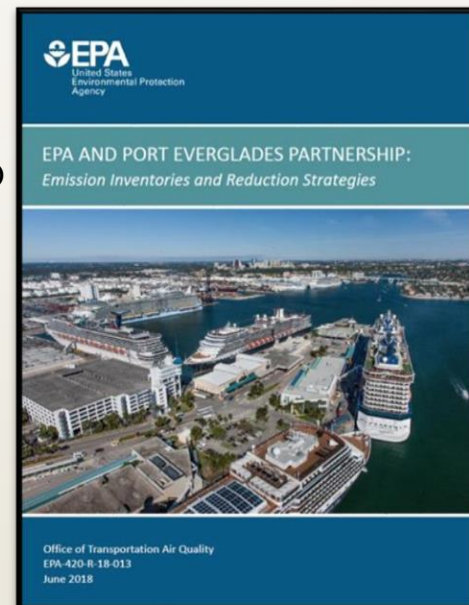
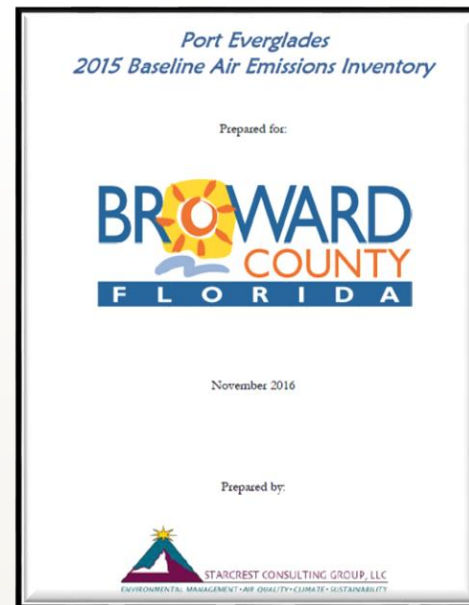
EPA-Port Everglades Partnership

Port Everglades:

- Developed an activity-based inventory for port facilities and operations
 - 95% of customers participated in a voluntary and confidential survey
- Provided technical and policy support to EPA's project activities

EPA:

- Supported development of the Port's baseline emissions inventory
- Developed baseline emissions estimates for mobile source corridors outside the Port
- Developed future Business as Usual inventories and emission reduction scenarios
- Documented methods, lessons learned, and practical examples that EPA can share with stakeholders
- Incorporated learnings into recent update of EPA's Port Inventory Guidance
- In 2016 EPA and Broward County's Port Everglades launched a voluntary partnership to study mobile source emissions at ports.
- In 2018 Port Everglades and EPA (Region 4 Office and the Office of Transportation and Air Quality) worked together to release a collaborative report showcasing lessons learned and methods that other ports can use to:
 - Develop baseline and future year emission inventories
 - Conduct scenario analysis to evaluate potential emissions reduction benefits from different types of technologies and operational strategies.



June 2018 - EPA, Port Everglades Report Shines Light on New Methods for Analyzing Potential Air Pollution Reductions

EPA-Port Everglades Partnership

Methods and lessons learned that can be applied to other ports

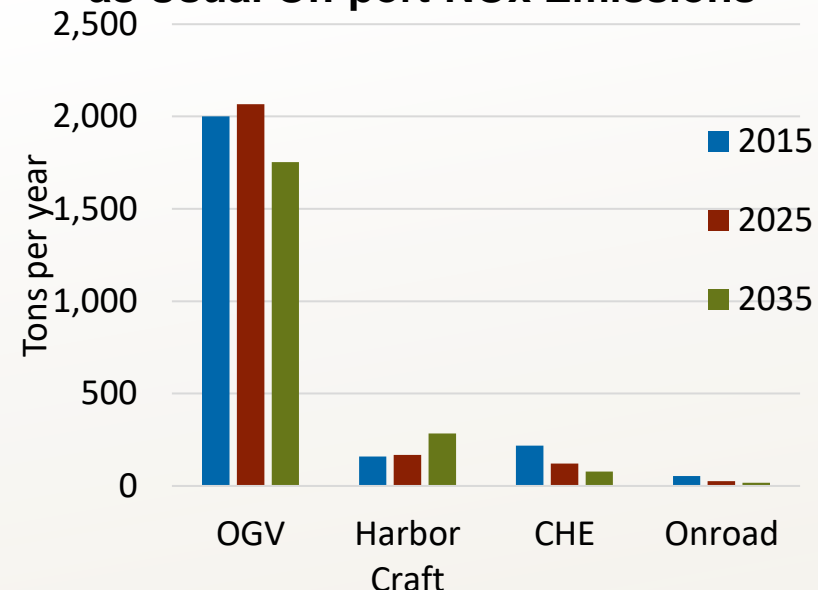
Examples:

- Terminal surveys to support baseline inventory development
- Methodology to analyze Automatic Identification System (AIS) data
- Scenario analyses using local data

Some of the methods and lessons learned highlighted in the EPA-PEV Partnership Report include:

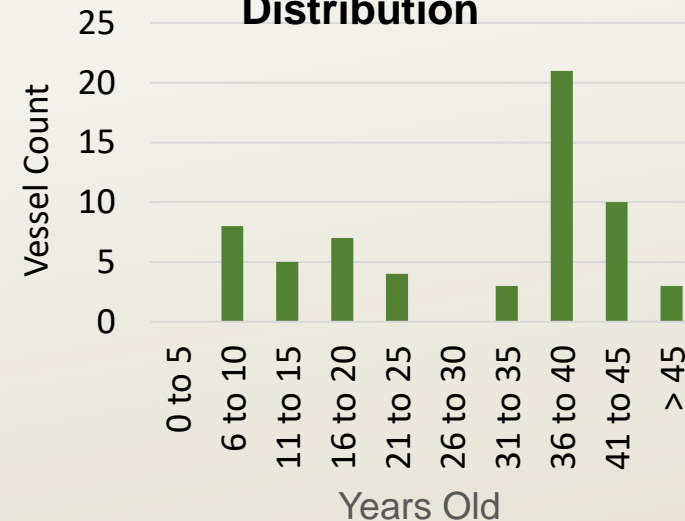
- Insights into baseline inventory development process, including efforts required for data collection
- Methods for analyzing AIS data
- Critical to getting good information was having good relations with our tenants. Again over 90% of our tenants provided us operational data. They didn't have to participate, but we wouldn't have had a successful project without them. As we moved forward with planning decisions, we continue to foster

PEV Baseline and Projected Business as Usual On-port NOx Emissions



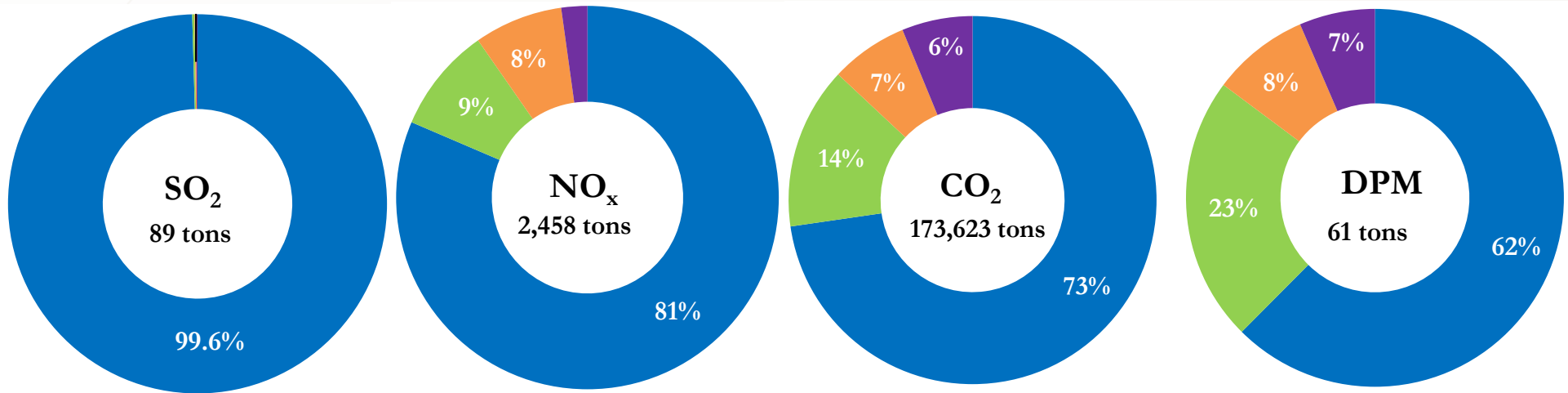
Note: NOx on-port rail emissions are <2 tons per year.

PEV Harbor Craft Age Distribution



EPA-Port Everglades Partnership *Baseline Inventory*

Port Everglades 2015 Baseline Emissions Inventory



- Ocean-going vessels
- Cargo handling equipment
- Harbor craft
- On-road vehicles
- Locomotives

- Like most seaports, ocean-going vessels are the largest source sector at Port Everglades.
 - Cruise was the biggest sector at the port followed by cargo and petroleum.

Several port-related emissions inventories have been completed in the U.S. over the past few years. **This was the first one developed in Florida.**

Port Everglades Master/Vision Plan Third Update: Guiding Principals

Increase Capacity

- Add berths where possible
- Facilitate operational improvements to increase intensity of asset utilization portwide

Enhance Efficiency

- Increase adjacency of berths and upland acreage for related uses
- Reduce intra-port movement to minimize traffic and operating costs
- Minimize double-handling and repositioning of cargo, people and equipment

Maintain Flexibility

- Plan for expected conditions without precluding unexpected conditions

Facilitate Integration

- Activate synergies between related uses (i.e. Automated People Mover)
- Optimize land use and transportation network to provide best possible level of service

Preserve the Environment

- Proactively address known Port-related environmental impacts

Project Decision Matrix

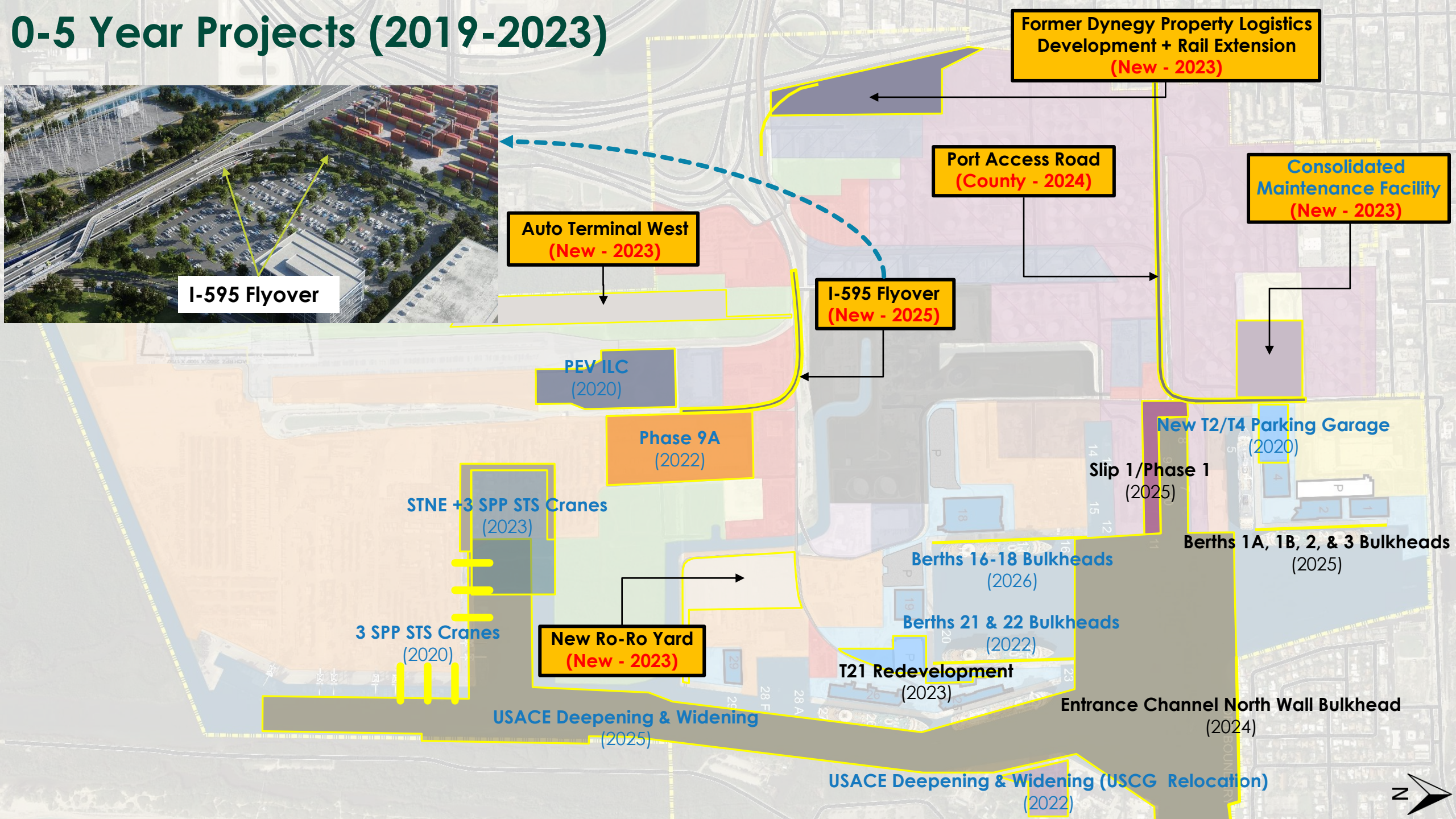
Category	Evaluation Criteria		
Competitiveness	Capacity	Efficiency	Integration
Economics	Return on Investment (ROI)	Flexibility	Economic Impacts
Sustainability	Asset Preservation	Environmental Stewardship	Resiliency

High (H)

Moderate (M)

Low (L)

0-5 Year Projects (2019-2023)



5-10 Year Projects (2024-2028)

Griffin Road Extension/NE 7th Avenue Improvements
(New - 2026)

McIntosh Road Realignment
(New - 2027)

Container Terminal Reconfiguration
(New - 2028)

Phase 9C-1
(New - 2025)

Ro-Ro Yard Expansion
(New - 2027)

T29 Redevelopment
(2027)

T26 Redevelopment
(New - 2030)

Griffin Road Extension/NE 7th Ave. Improvements

APM/Rail Extension
(County - 2028)

Break-bulk Yard
(2026)

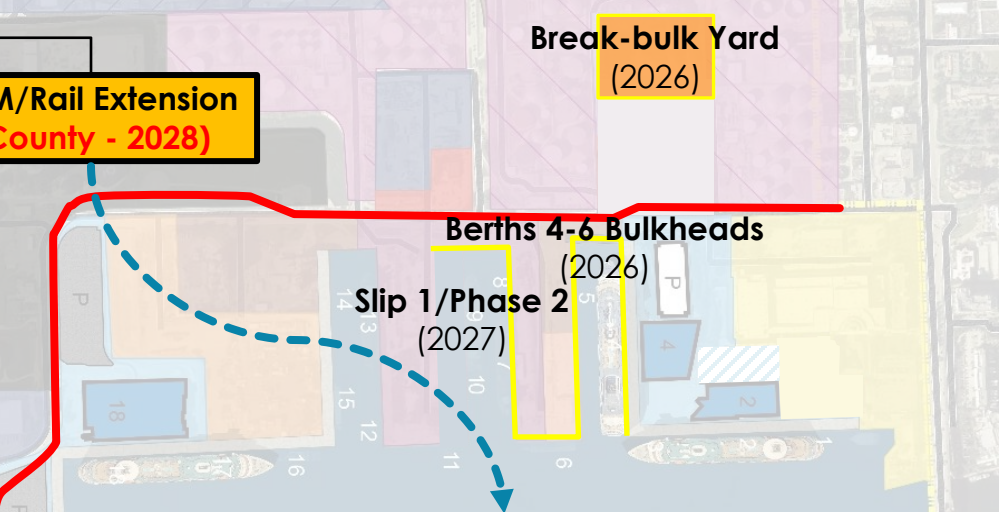
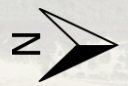
Berths 4-6 Bulkheads
(2026)

Slip 1/Phase 2
(2027)

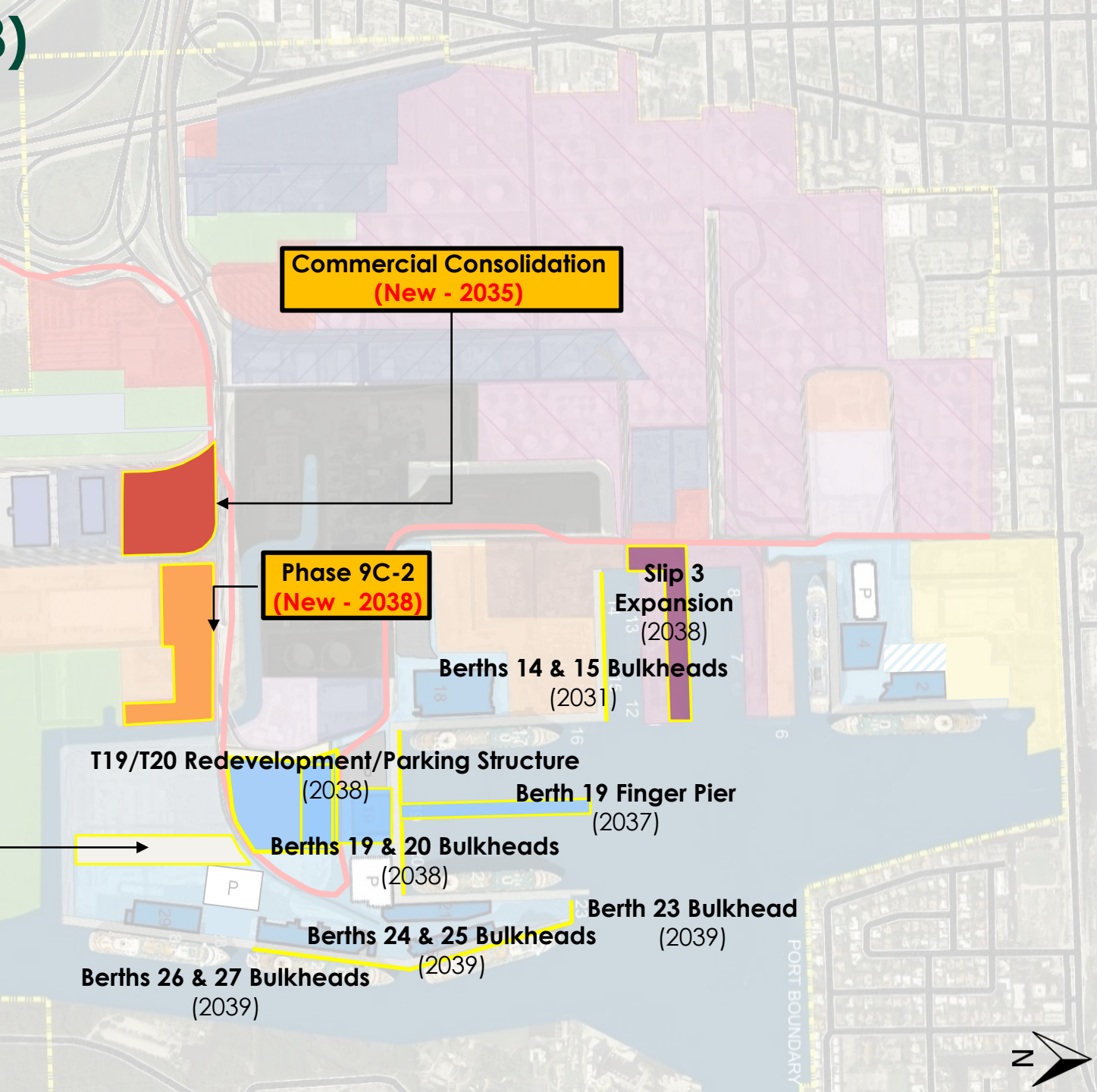
Berth 32 Bulkhead
(2023)

Berth 29 Bulkhead
(2026)

Tracor Basin Fill



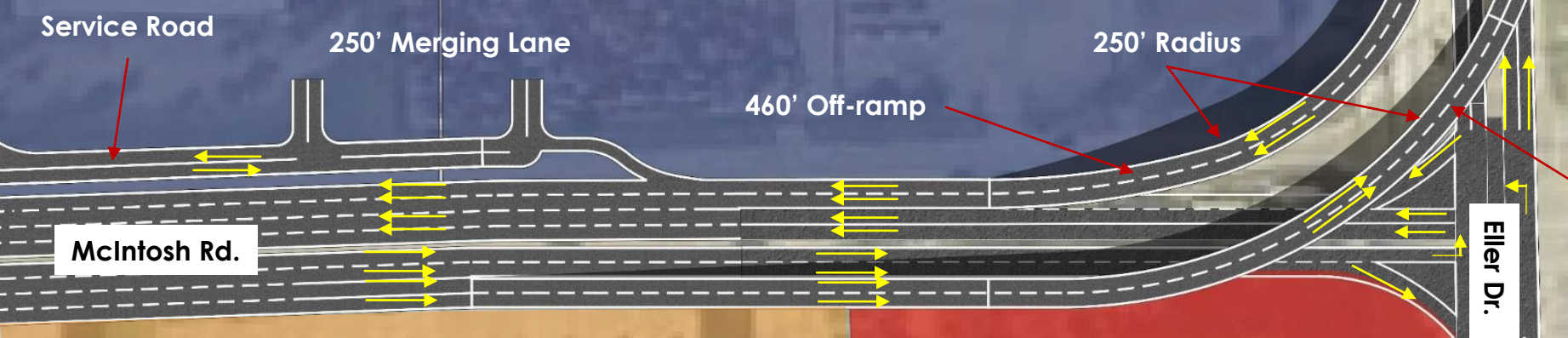
10-20 Year Projects (2029-2038)



I-595 Flyover: 2021-2025



Chiquita Warehouse
Service Road



- This project would separate Southport traffic, from Midport traffic via Eller Dr
- A separate Traffic Study was conducted as part of the Master/Vision Plan update; it shows that when combined with additional future Southport transportation improvement projects, the I-595 flyover greatly improves truck-related congestion at the intersection of Eller Dr. and McIntosh Rd.
- Traffic consist mostly of trucks moving containers into and out of the Port's container terminals and/or the ICTF.
- Multi-lane bi-directional grade separation that links McIntosh Road directly to I-595.
- Reduce Idling/Congestion at Eller Dr./McIntosh Rd.



Griffin Rd Extension/NE 7th Ave Improv.: 2024-2026

Expanded 4 Lane NE 7th Ave.

Wetland/Vacant/FPL Transmission Lines

McIntosh Road Realignment: 2024-2027

FEC ICTF
(43 acres)

McIntosh Road

Private (Commercial)

PEV ILC

PEV ILC

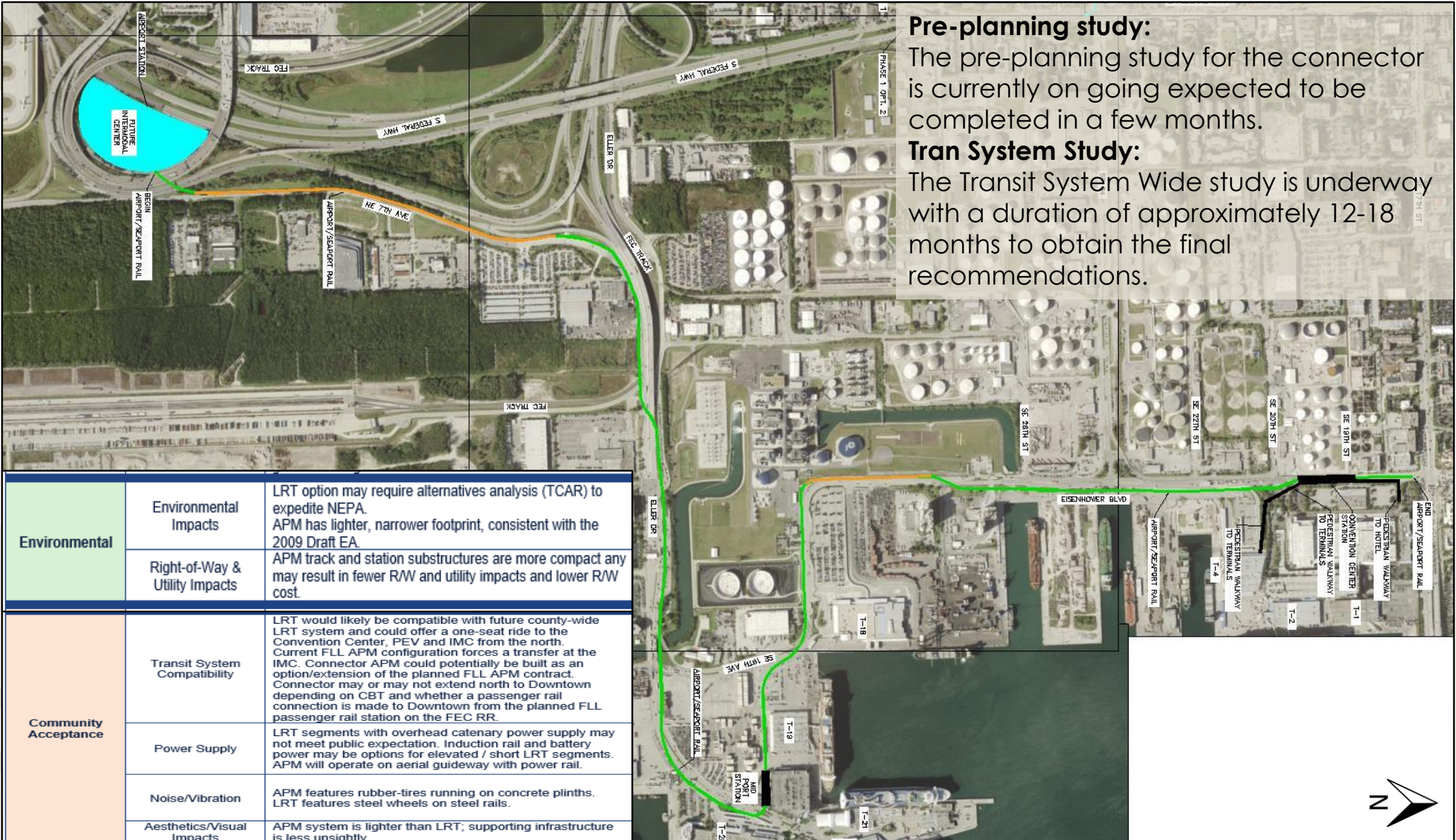
Chiquita
Warehouse

Project includes:

- Proposal for secondary access into the Port
- Realignment of McIntosh Road to the west
- Extension and widening of Griffin Road between new McIntosh Road southern terminus and NE 7th Avenue
- Expansion of NE 7th Avenue to four lanes (two in each direction)
- Eller Drive and NE 7th Avenue intersection improvements

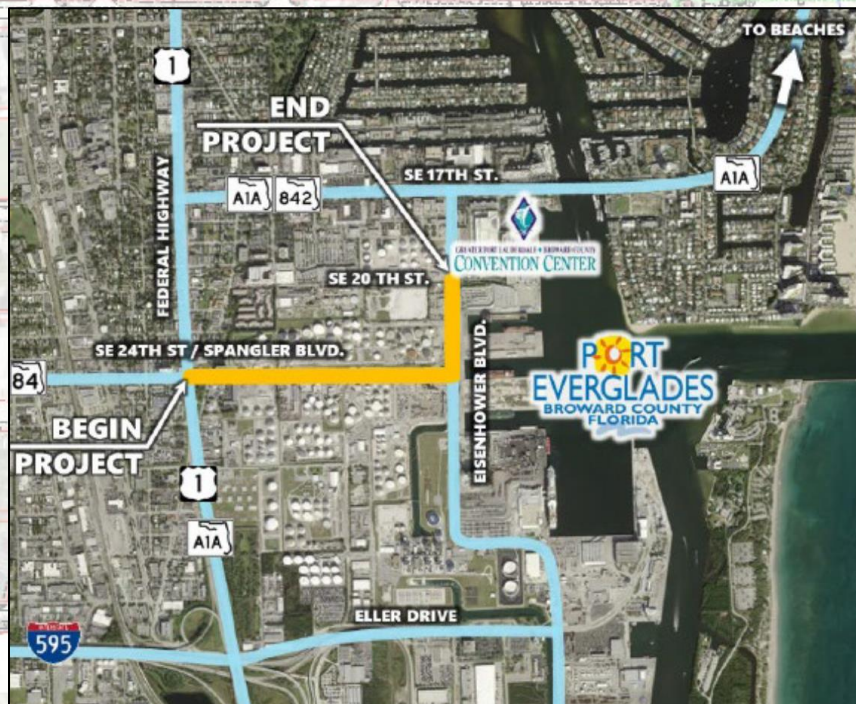


Airport to Seaport Connector



Port Access Road: 2019-2024

Project	Category	Evaluation Criteria				
Port Access Road						
Competitiveness	Capacity	L	Efficiency	L	Integration	M
Economics	Port ROI	L	Flexibility	M	Economic Impacts	L
Sustainability	Asset Preservation	L	Environmental Stewardship	L	Resiliency	L



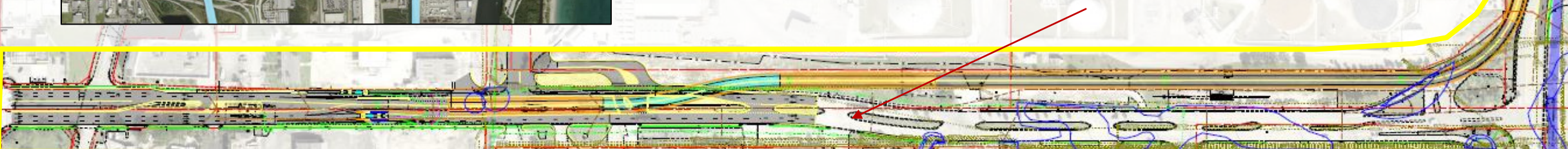
The proposed Bypass is anticipated to significantly reduce traffic volumes on US 1 between SR 84 and SE 17th Street, as well as on SE 17th Street between US 1 and Eisenhower Boulevard.

These reductions in volume will provide congestion relief and improve traffic operations along US 1 and SE 17th Street. The congestion relief resulting from the project will also yield corresponding safety benefits with anticipated crash reductions on US 1 and SE 17th Street.

It will also provide an alternate route for traffic coming from the airport to get to the convention center or beach.

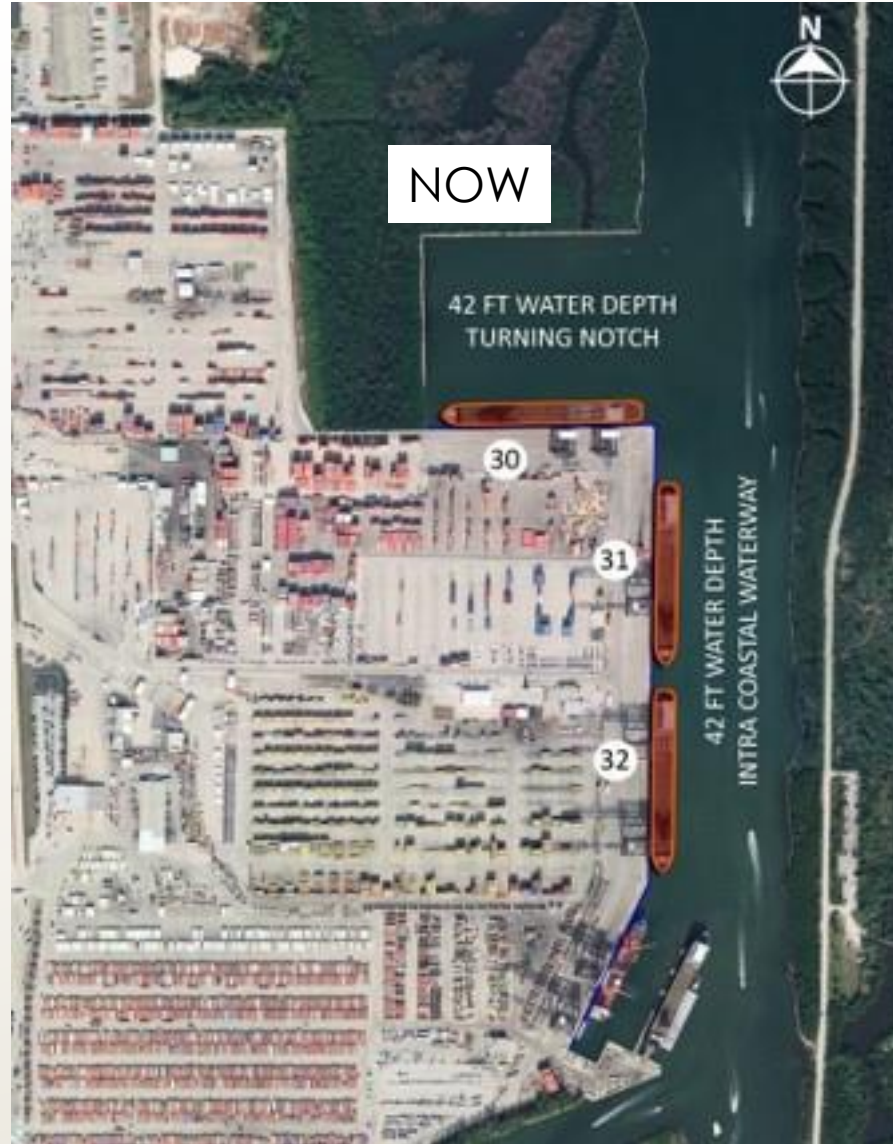
New County Road

Connects US1 northbound to SE 17th Street via partial grade separation over existing road (SR84/Spangler Blvd & Eisenhower Blvd)



Southport Turning Notch Extension

- Lengthens existing turning notch from about 900 feet to 2,400 feet.
- Includes 16.5 acres mangrove mitigation efforts, upland enhancements and the West Lake Park mitigation



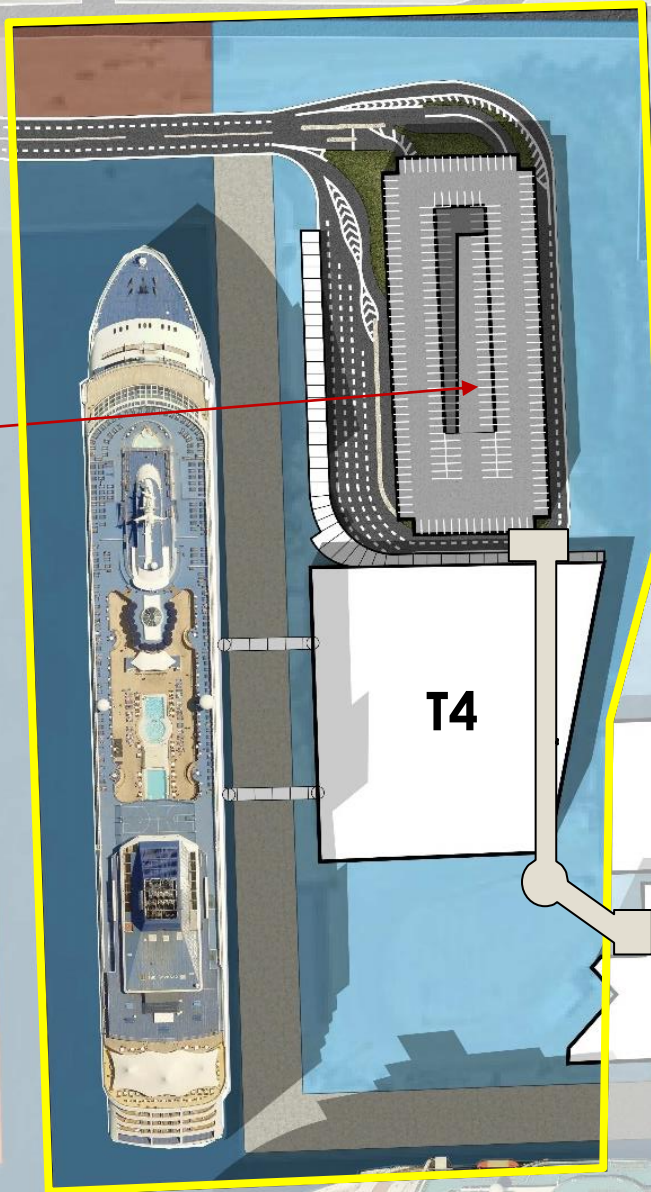
Project	Category	Evaluation Criteria					
STNE							
	Competitiveness	Capacity	H	Efficiency	H	Integration	H
	Economics	Port ROI	M	Flexibility	H	Economic Impacts	H
	Sustainability	Asset Preservation	L	Environmental Stewardship	H	Resiliency	H



T2/T4 Parking Garage

Project	Category	Evaluation Criteria				
T2/T4 Parking Garage						
Competitiveness	Capacity	M	Efficiency	H	Integration	H
Economics	Port ROI	M	Flexibility	M	Economic Impacts	L
Sustainability	Asset Preservation	L	Environmental Stewardship	M	Resiliency	L

T2/T4 Parking Garage

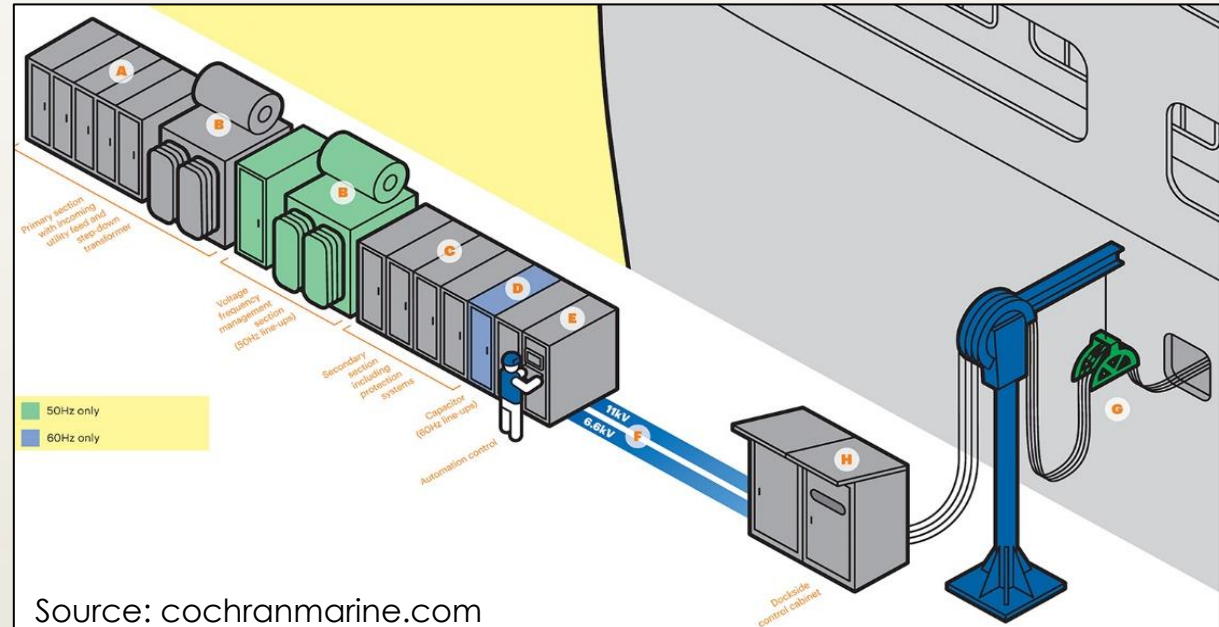


- 79,775 SF (footprint)
- 1,818 total parking spaces
- 4 Parking Decks
- 2 additional parking decks for future expansion
- (Solar Power) Top deck (5ft deck) to produce up to 1.3 Kilowatts of daily power. Any excess of power not used by PEV to be sold to the Utility Company



Shore Power

- Previously considered by Port Everglades in 2009 and 2014
- The principal challenges with implementing shore power on a multiple berth basis at PEV are:
 - Availability of electricity
 - Sourcing sufficient electricity to service the loads required
 - Cost
 - Competitive factors
- Even without shore power, what we are seeing is that vessels/operations are getting cleaner



Source: cochranmarine.com

Upland Habitat Restoration

- Most landscaping native.
- Removing Florida Exotic Pest Plant Council Categories I-II plants
- Facilities maintenance planting native Broward species for replacement landscaping
- Certified Wildlife Habitat
- Committed to optimizing habitat in green areas



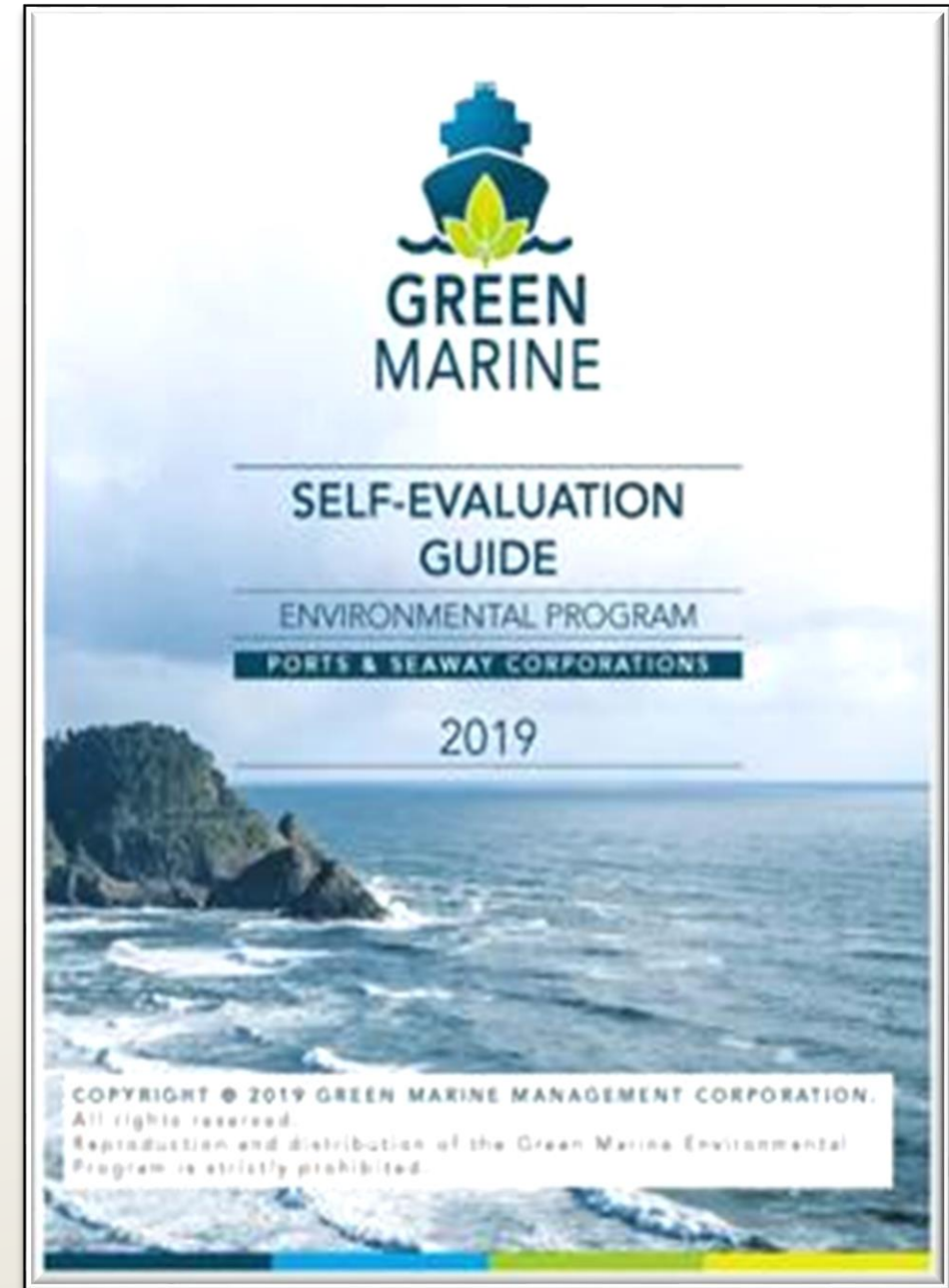
Green Marine Certification

Green Marine's environmental program makes it possible for ports, terminal operators, and shipping companies to voluntarily **reduce their environmental footprint** through a comprehensive program that addresses key environmental issues and criteria using performance indicators including **air emissions, community impacts, and environmental leadership. (Voluntary joined 2013)**

- 2019 scores:
 - 5/5 – Greenhouse Gases and Air Pollutants
 - 5/5 – Spill Prevention and Community Impacts
 - 5/5 – Environmental Leadership

The Port recently won three prestigious national awards of excellence for leading the way in port sustainability practices:

- **The National Association of Environmental Professionals' (NAEP) 2020 Environmental Excellence Award.**
- **North American Marine Environment Protection Association's (NAMEPA) 2020 Marine Environment Protection Award for Ports.**
- **American Association of Port Authorities' (AAPA) 2020 Award of Excellence.**





**Thank you
Port Everglades:
Master/Vision Planning for the Future, Today.**

**Dr. Natacha J. Yacinthe – Port Everglades Seaport Planning Manager/
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To access the adopted Master/Vision Plan visit:

www.porteverglades.net/construction/master-vision-plan/master-plan-reports

Email: PortEverglades@Broward.org