



Port Everglades Master/Vision Plan Update Stakeholder Meeting

January 28, 2010

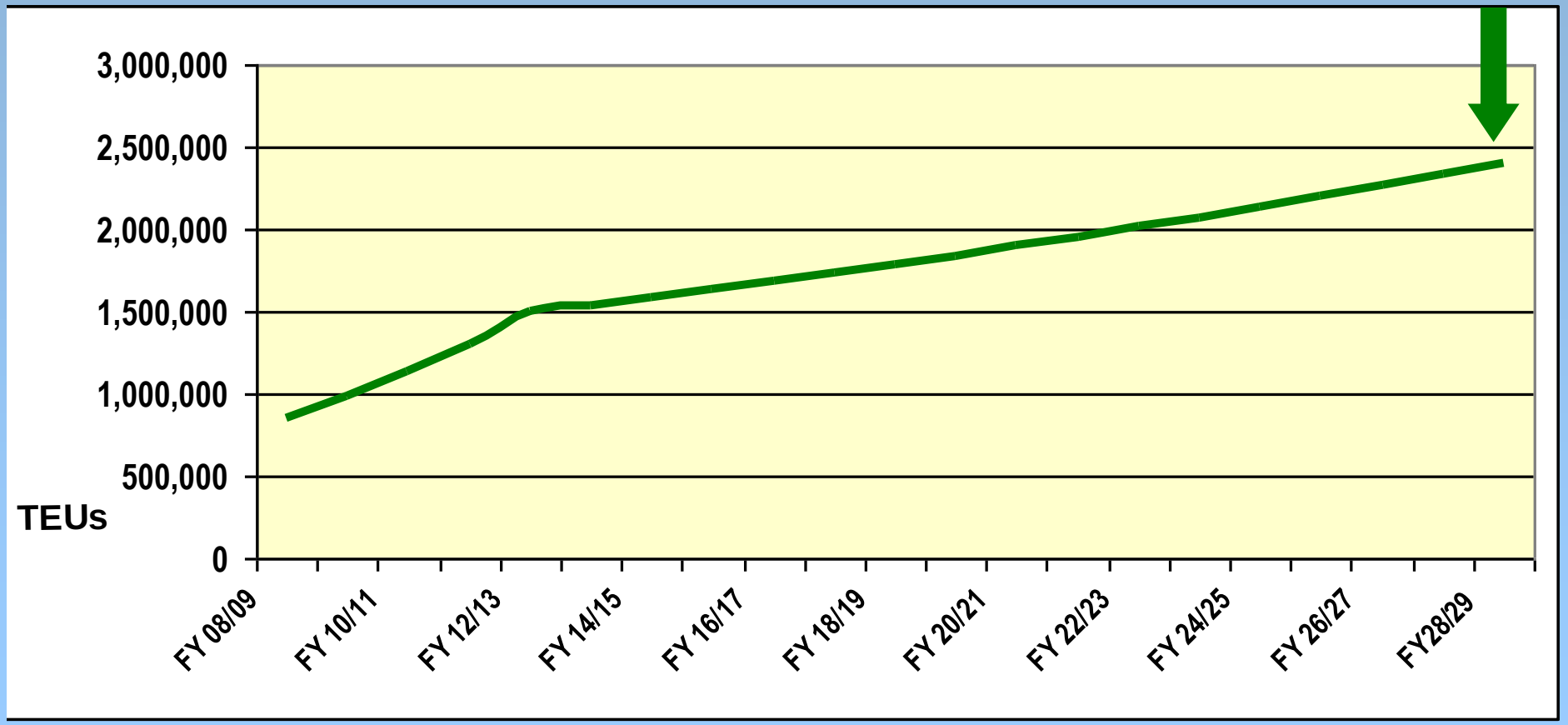
Agenda

- **Updated Market Assessments** determine ….
- **Master Plan Facility/Infrastructure Needs** requiring ….
- **Berth Expansion** into ….
- **Turning Notch with Upland Enhancement** and…
- **Airport (FLL) Interface** and incorporating results from….
- **ACOE Deepening & Widening Study** and ….
- **Your Input and Comments** needed to prepare ….
- **Recommendation for Locally Preferred Plan (LPP)**

Updated Market Assessments

Containerized Cargo

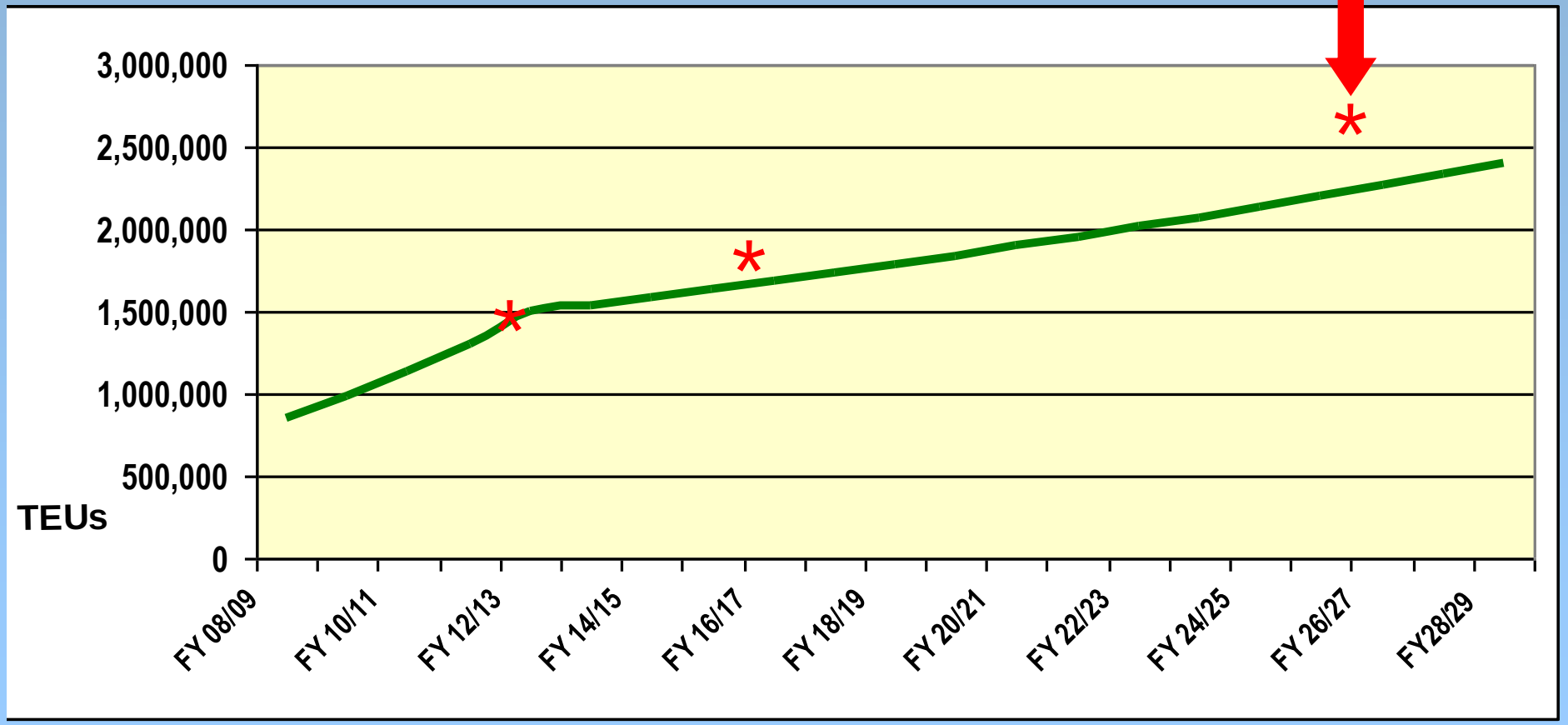
FY 28/29:
2.4 million TEUs



Updated Market Assessments

Containerized Cargo

2006 Forecast for 2026
2.7 million TEUs



* 2006 Forecast for years- 2012, 2016 & 2026

Facility/Infrastructure Needs

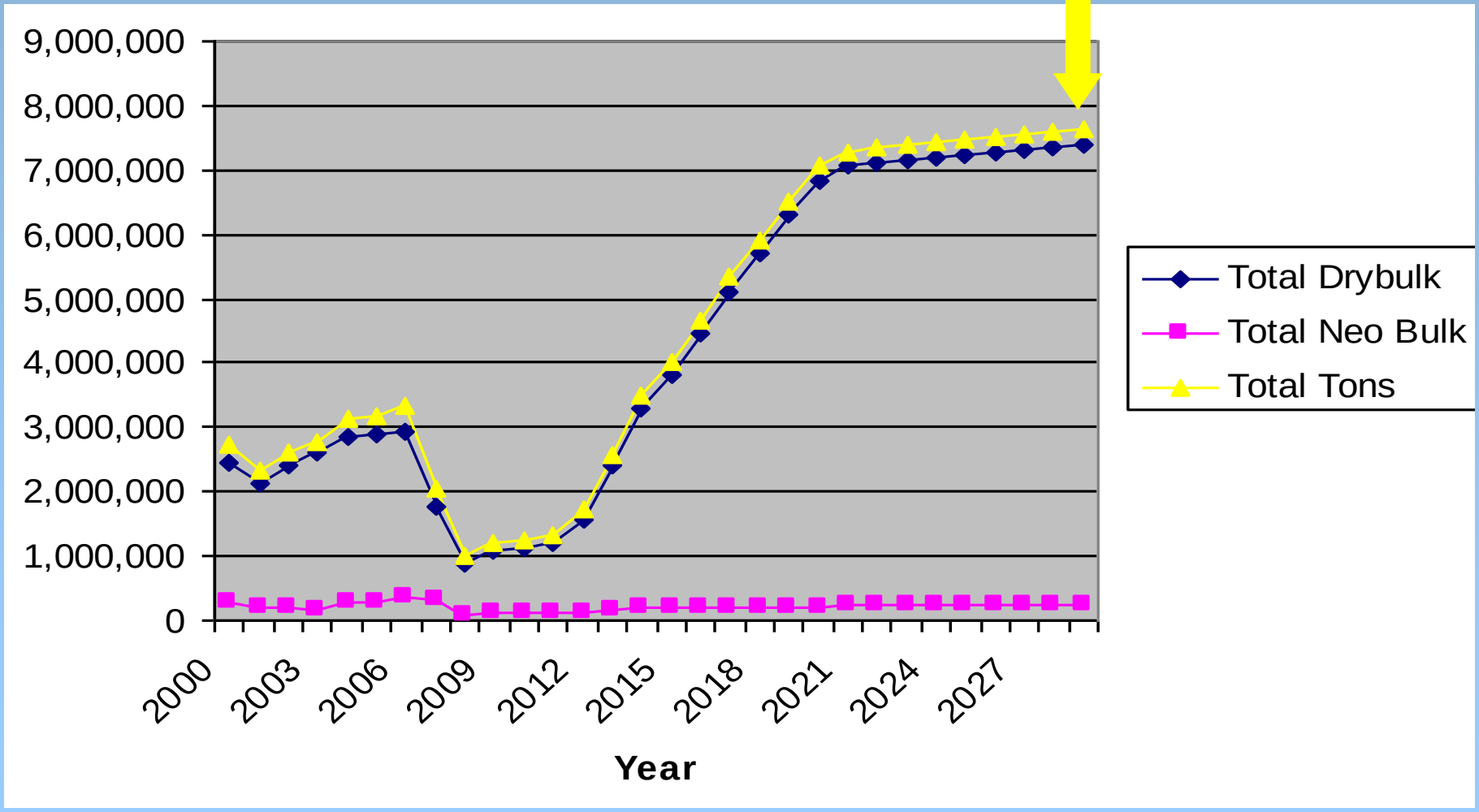
Containerized Cargo

- Berth fully laden 7,000-TEU ship on first inbound calls
- Provide 50-foot channel depth
- Add additional berths with additional ship to shore cranes for 4,800- to 6,000-TEU vessels
- Develop Intermodal Container Transfer Facility (ICTF) – rail to Southport
- Increase container storage density at terminals

Updated Market Assessments

Dry Bulk and Neo-Bulk Cargo

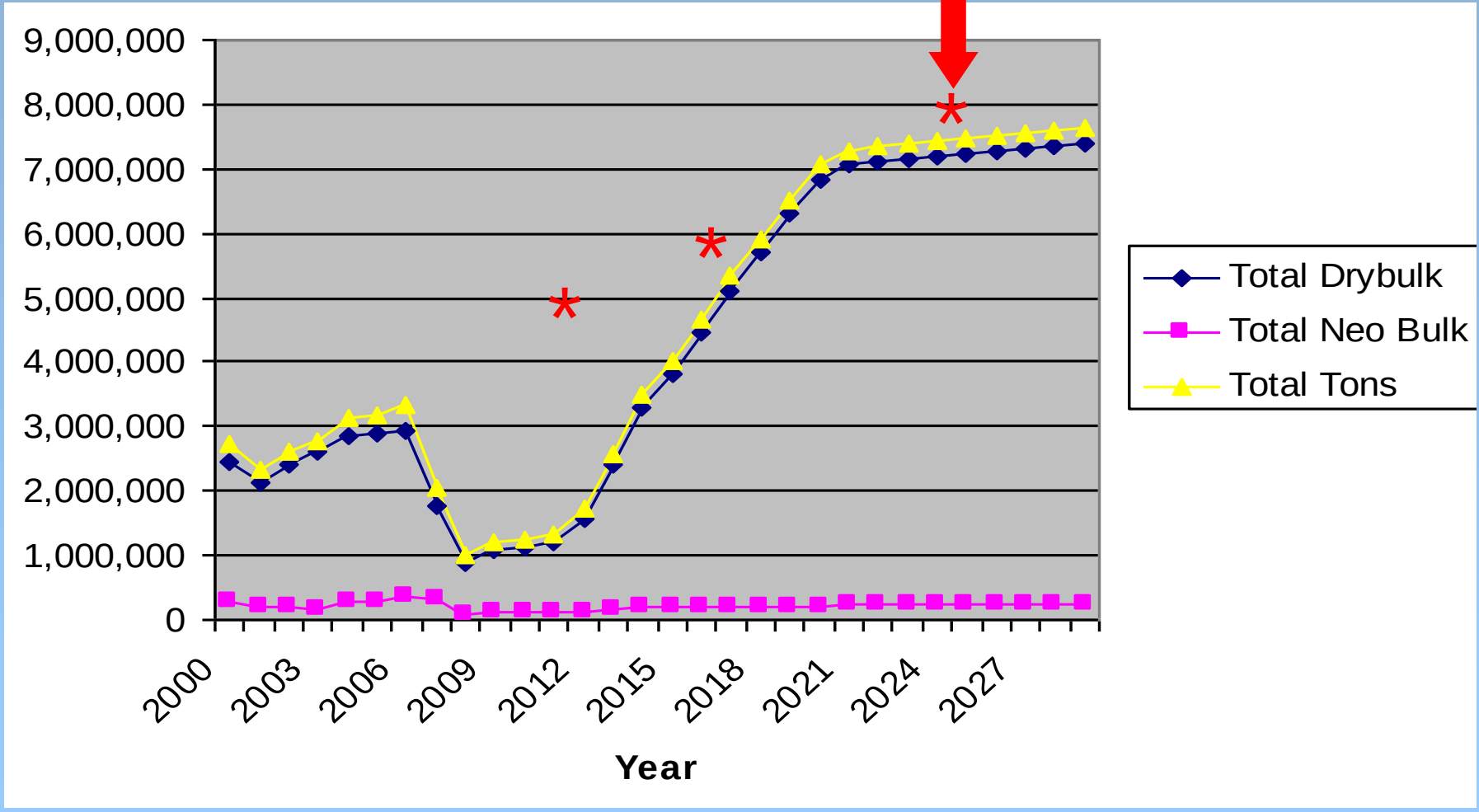
FY 28/29:
7.6 million tons



Updated Market Assessments

Dry Bulk and Neo-Bulk Cargo

2006 Forecast for 2026
8.0 million tons



* 2006 Forecast for years- 2012, 2016 & 2026

Facility/Infrastructure Needs

Dry Bulk Cargo

- Construct new berth for ship to import crushed rock/aggregate
- Provide enclosed storage and rail-loading facility – rail to Southport

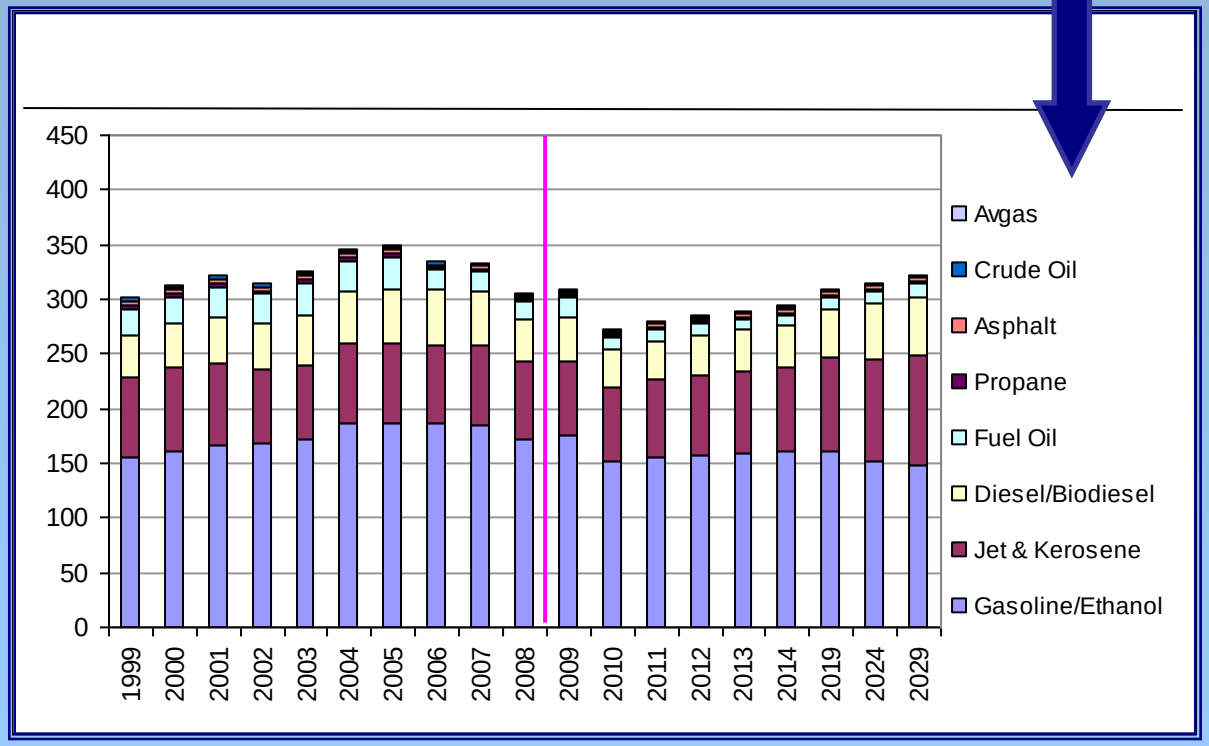
Neo-Bulk Cargo

- No new major infrastructure needed

Updated Market Assessments

Liquid Bulk (Petroleum)

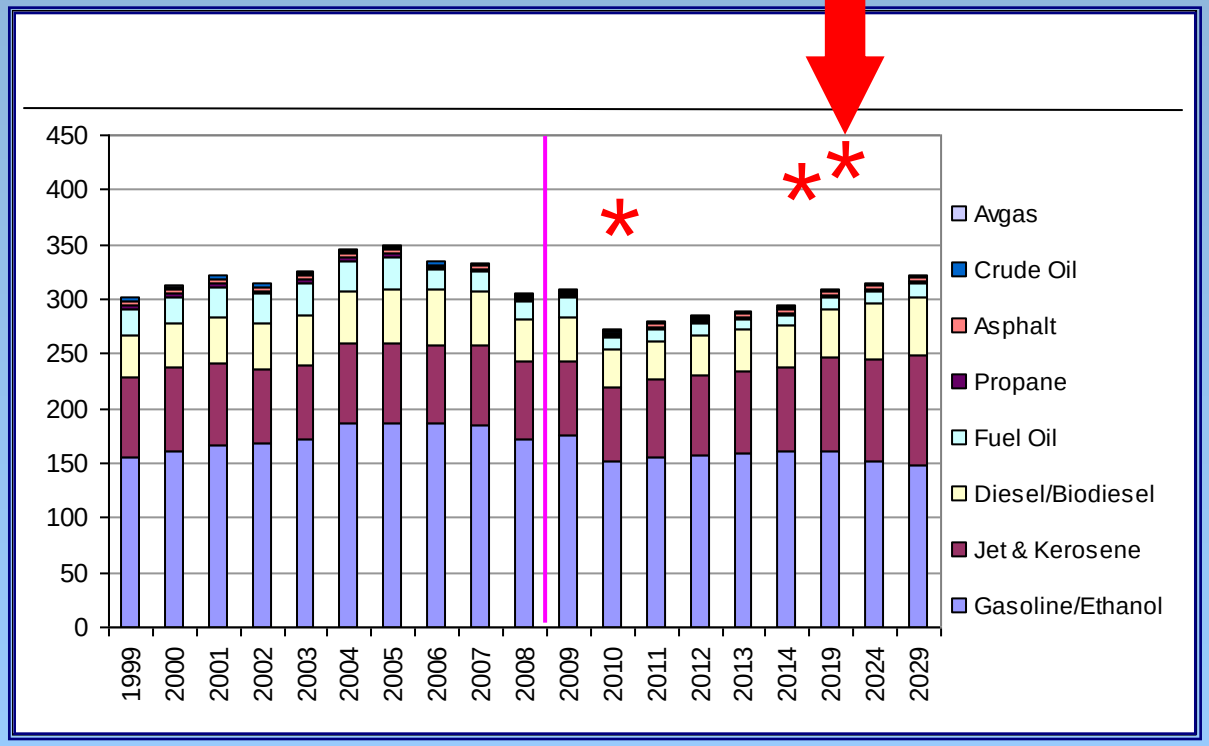
FY 28/29:
323,000 barrels per day



Updated Market Assessments

Liquid Bulk (Petroleum)

2005 Forecast for 2020
435,000 barrels per day



* 2005 Forecast for years- 2010, 2015 & 2020

Facility/Infrastructure Needs

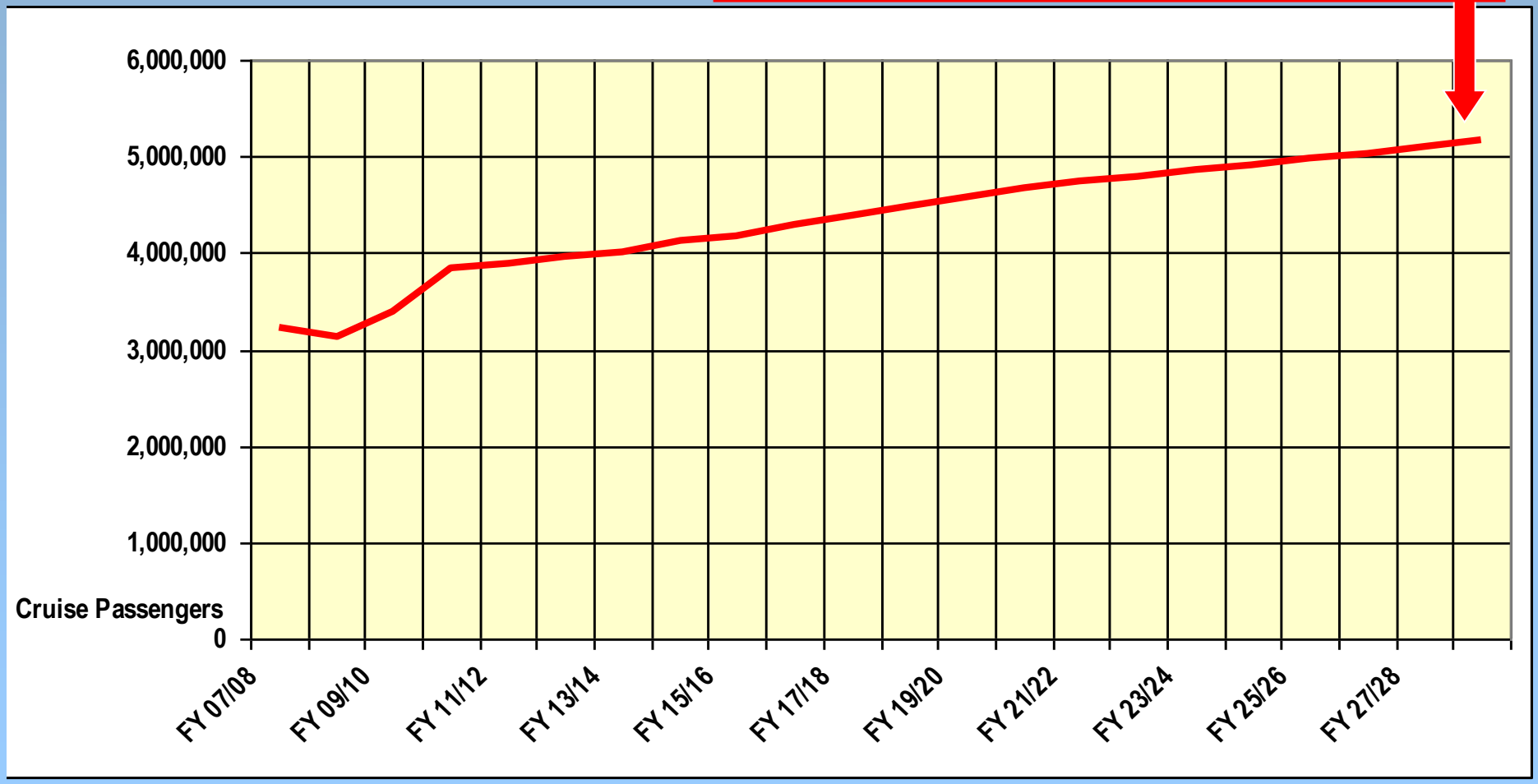
Liquid Bulk

- **Berth potentially larger fully laden foreign tankers**
- **Widen and deepen petroleum slips, when bulkheads require replacement**
- **Improve dock piping systems to accommodate re-configured piers and multiple products**

Updated Market Assessments

Cruise

FY 28/29:
5.1 Million Passengers *

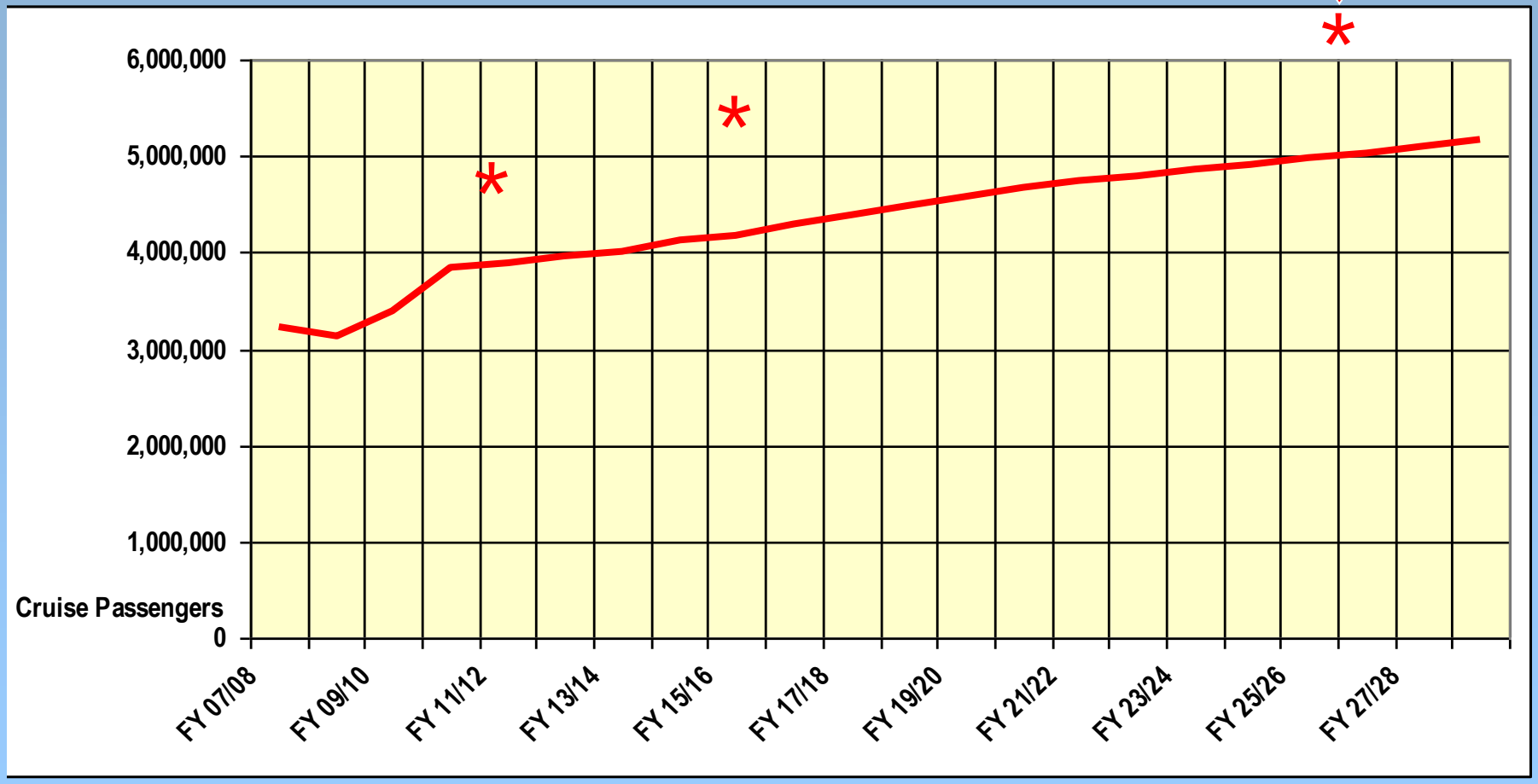


*** Multi-Day & Daily Revenue Passengers**

Updated Market Assessments

Cruise

2006 Forecast for 2026
7.0 Million Passengers *



*** Multi-Day & Daily Revenue Passengers**

* 2006 Forecast for years- 2012, 2016 & 2026

Facility/Infrastructure Needs

Cruise

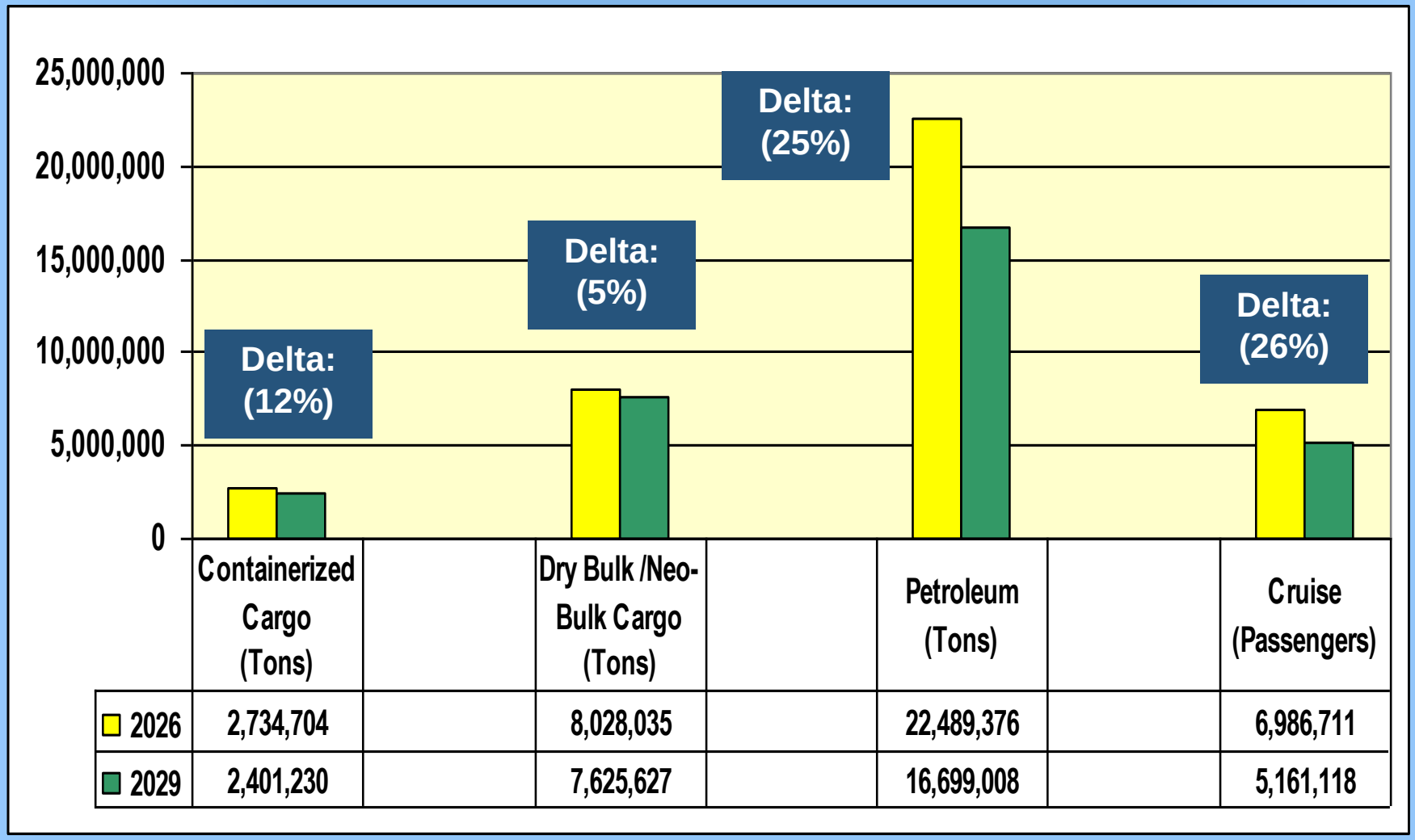
- Lengthen and widen Slip 2
- Accommodate larger cruise ships on Intracoastal Waterway
- Expand cruise terminals
- Expand parking facilities
- Improve intermodal access

Summary of Market Assessments

Business Line	*Forecast Level*	*Current Projections Milestone Year*			*2006 Master Plan Assessments*		*Delta (%)*
		2014	2019	2029	2020	2026	
Cruise (Revenue Passengers)	Most Likely Total	4,014,910	4,471,527	5,161,118		6,986,711	
	Conventional	3,628,746	4,108,975	4,839,204		5,962,471	
	Daily / Non-Conventional	386,164	362,552	321,914		1,024,240	
Needs Assessment				5,161,118		6,986,711	(26%)
Containerized Cargo (TEUs)	Low	981,592	1,137,934	1,529,289		1,841,443	
	Local Markets +	1,387,132	1,608,066	2,161,106			
	Plus 10% Intermodal	1,541,258	1,786,740	2,401,230		2,734,704	
Needs Assessment				2,401,230		2,734,704	(12%)
Non-Containerized Cargo (Dry Bulk / Neo-bulk) (Tons)	Low	1,650,260	1,836,236	2,061,698		3,238,080	
	Base	2,412,498	2,722,126	3,067,348		4,276,566	
	High	3,476,035	6,517,482	7,625,627		8,541,842	
Needs Assessment				7,625,627		8,028,035	(5%)
Liquid Bulk Cargo (Petroleum) (Barrels per Day)		294,000	310,000	323,000	435,000		
(Barrels per Year)*		107,310,000	113,150,000	117,895,000	158,775,000		
(Tons per Year)**		15,199,717	16,026,912	16,699,008	22,489,376		(25%)

* Based on 365 days per year. ** Based on an average of 7.06 barrels per ton.

Comparison of 2006 Master Plan (for 2026) and 2009 Master Plan Update (for 2029)



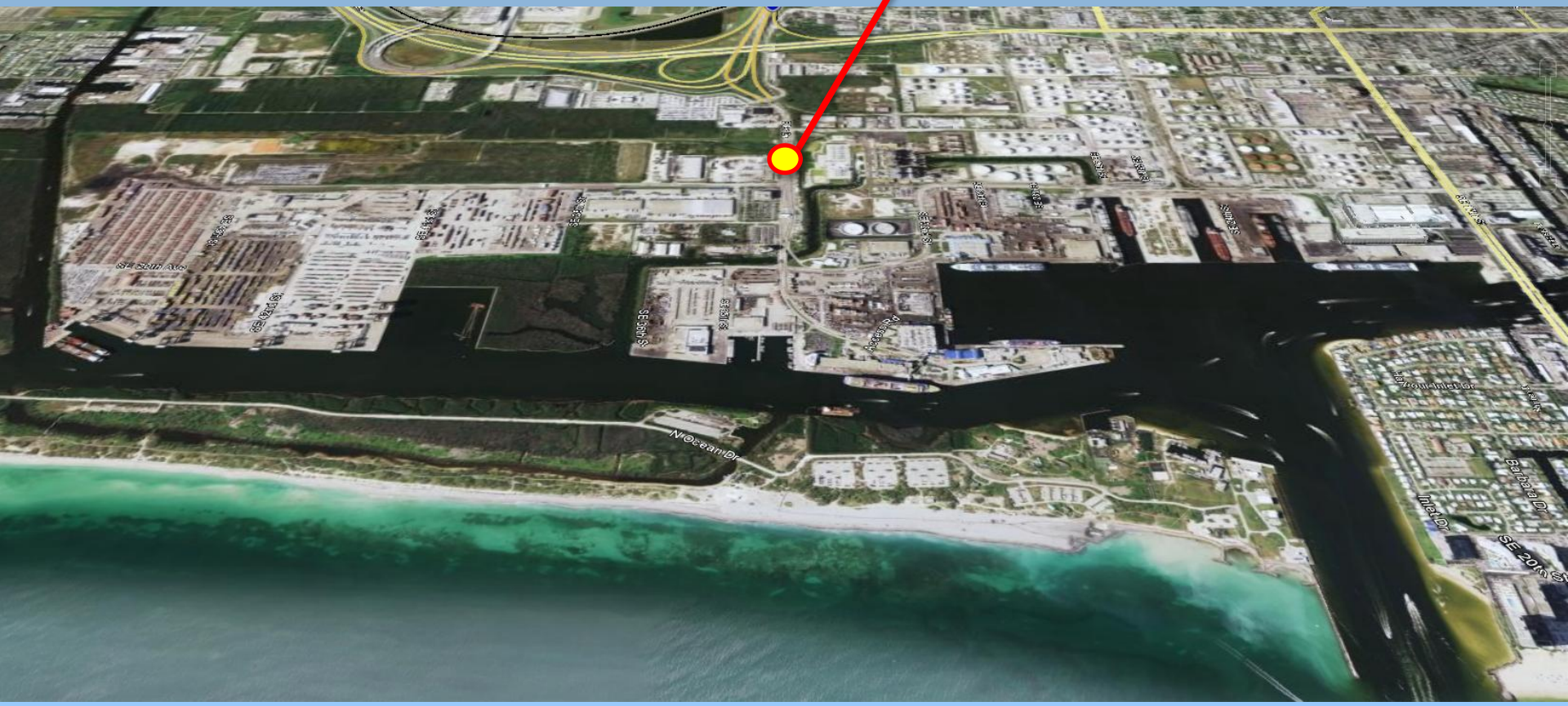
	Containerized Cargo (Tons)		Dry Bulk /Neo-Bulk Cargo (Tons)		Petroleum (Tons)		Cruise (Passengers)
2026	2,734,704		8,028,035		22,489,376		6,986,711
2029	2,401,230		7,625,627		16,699,008		5,161,118

Summary of Facility/Infrastructure Needs

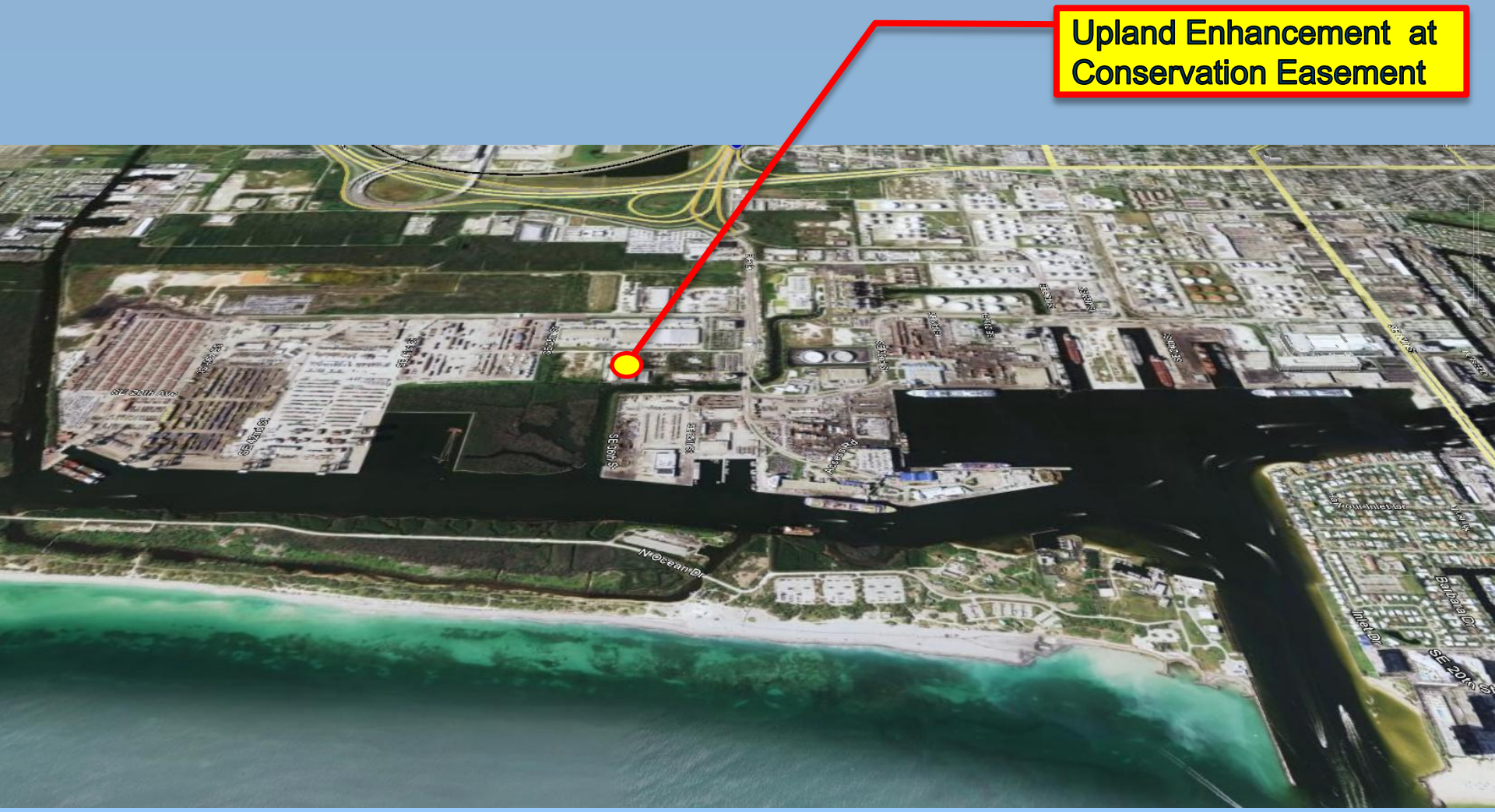
Over 20 year planning horizon

- Ability to berth fully laden Post-Panamax vessels; 7,000 TEUs
- More and longer cargo berths
- Rail to Southport and ICTF
- New berth for crushed rock/aggregate ship
- Longer cruise berths
- Deeper and wider petroleum slips
- Upland improvements to terminals and intermodal access

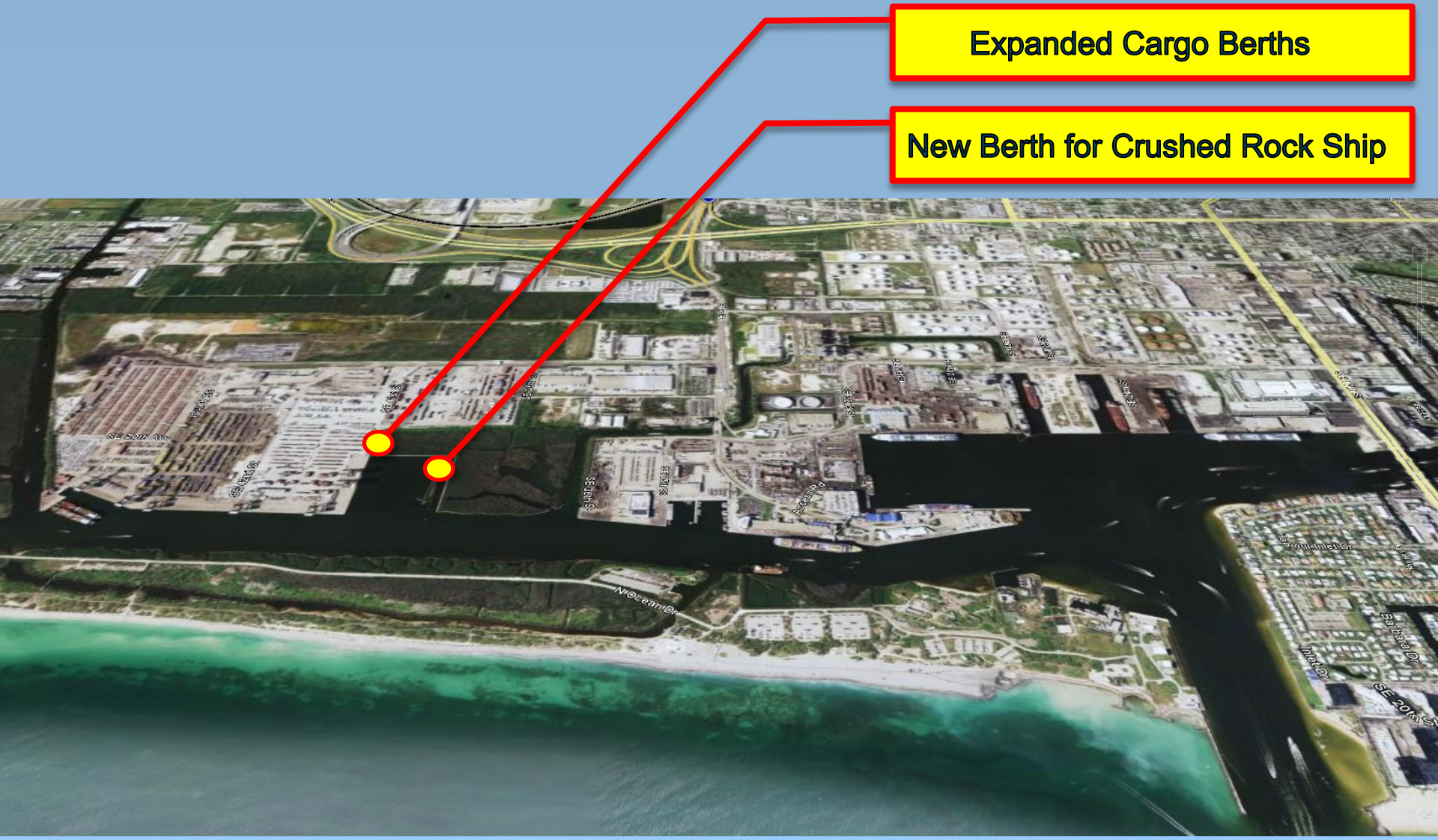
Port Everglades



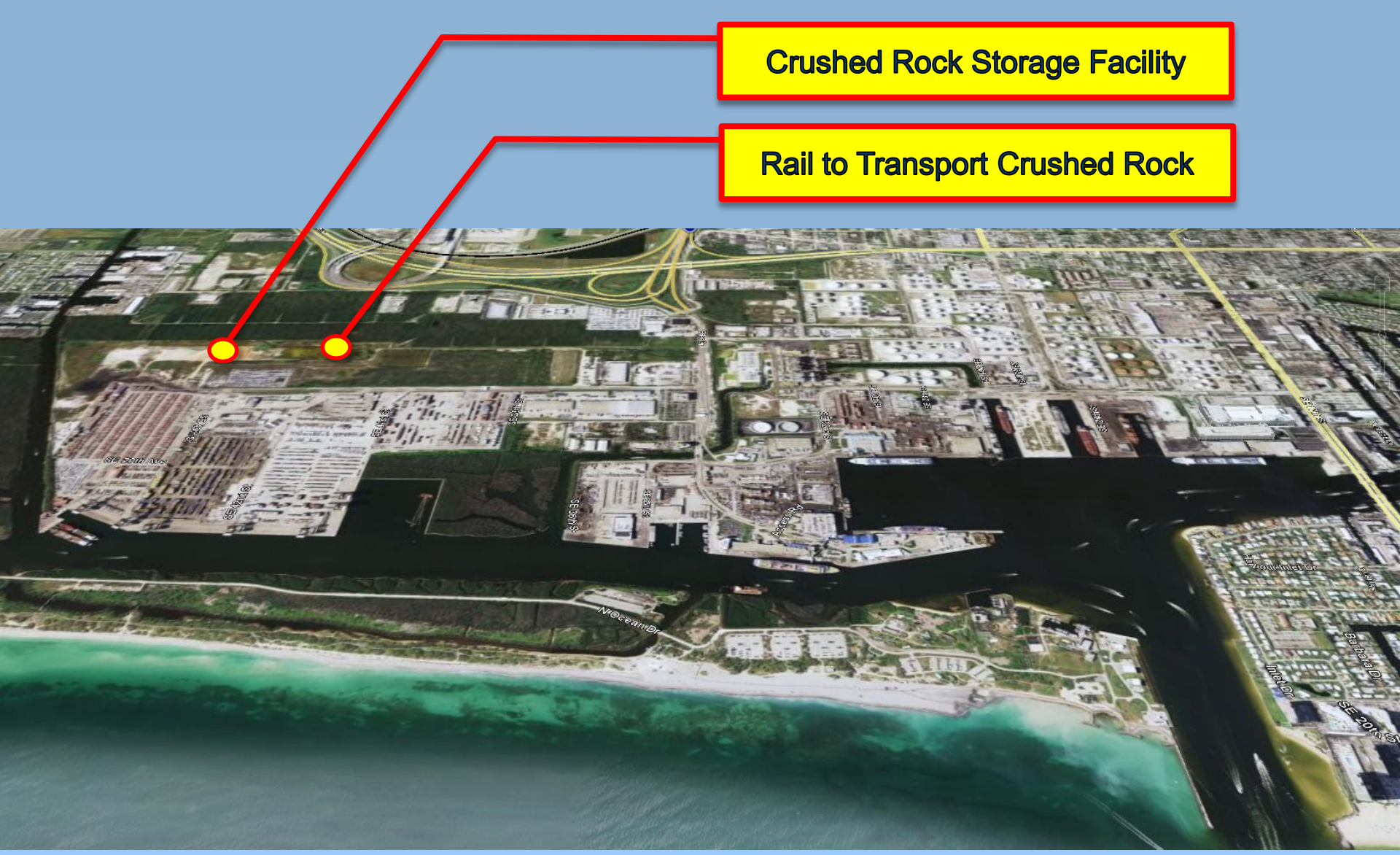
Rail to Southport requires grade separated crossing



Upland Enhancement to permit partial release of Conservation Easement



New Berths require Turning Notch Expansion



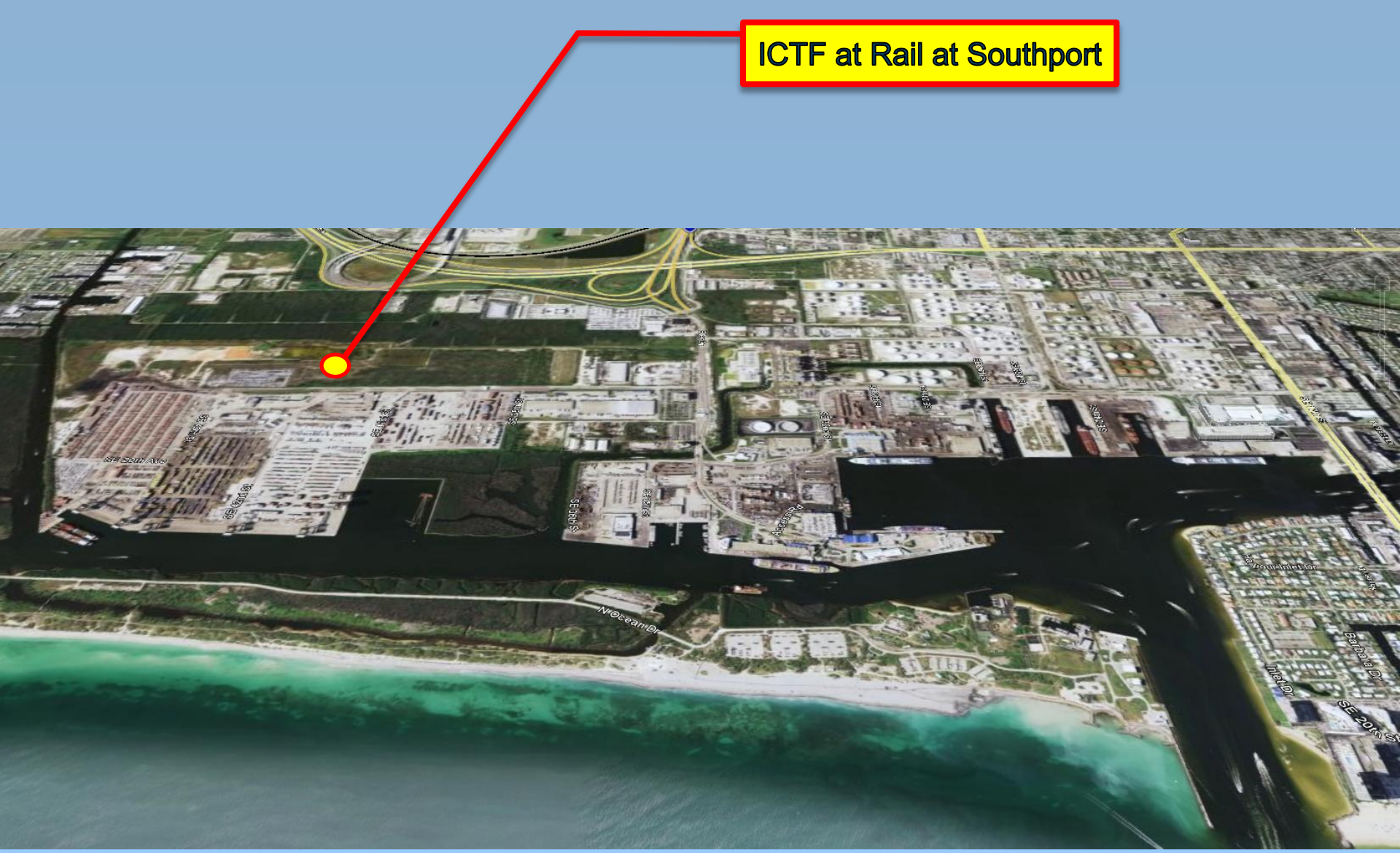
Crushed Rock Facility delivers Rail to Southport

Fully Laden Post Panamax Ship Access to Southport

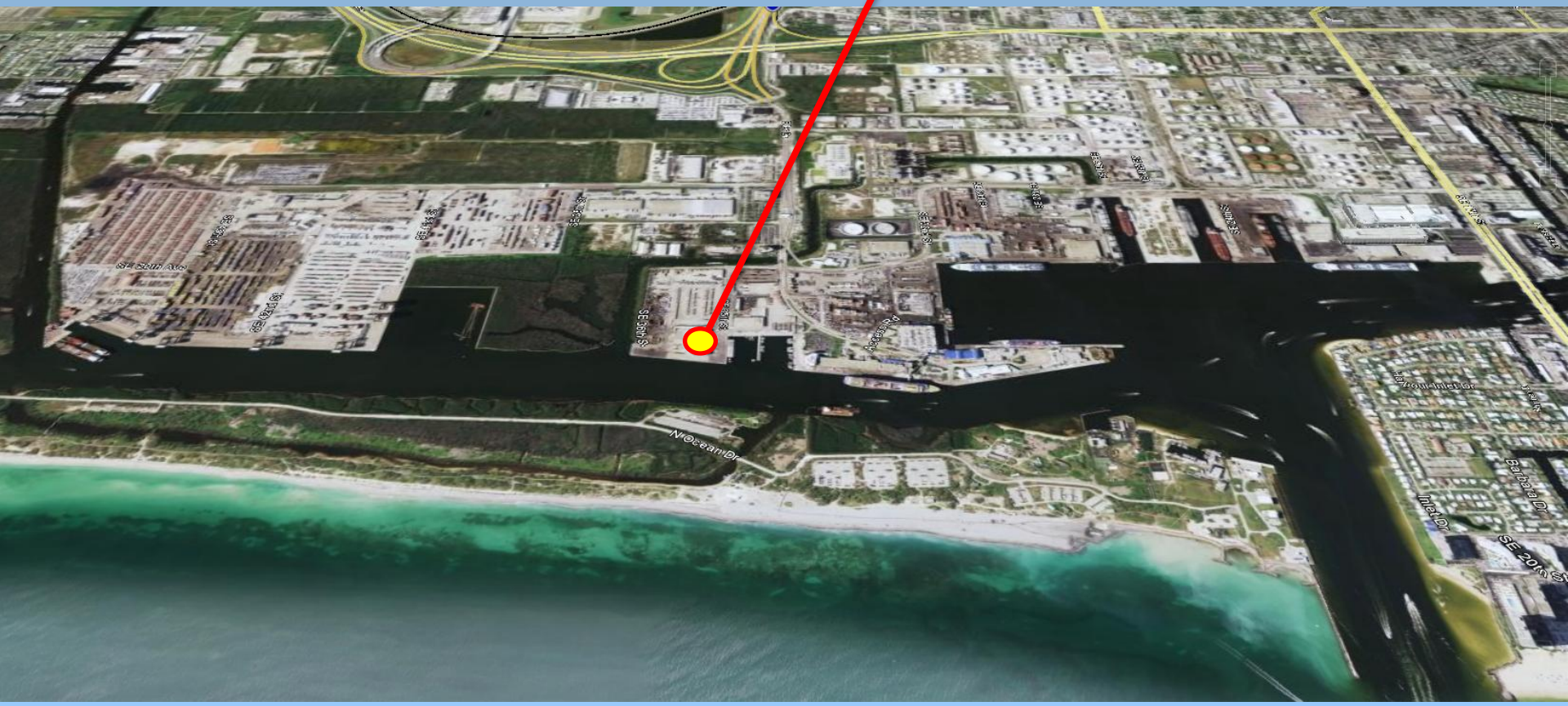
- **Optimized water depths by areas**
- **Mitigation Plans**

Relocate RO/RO Vessels to Dania Cut-Off Canal or Turning Notch

Added LO/LO Berth



Added Cargo Berths + Post Panamax Ships + ICTF increases both Containerized & Bulk Cargo Throughput



- Removal of office building not needed

Cruise Terminal Improvements at CT2, CT19, CT21 & CT26

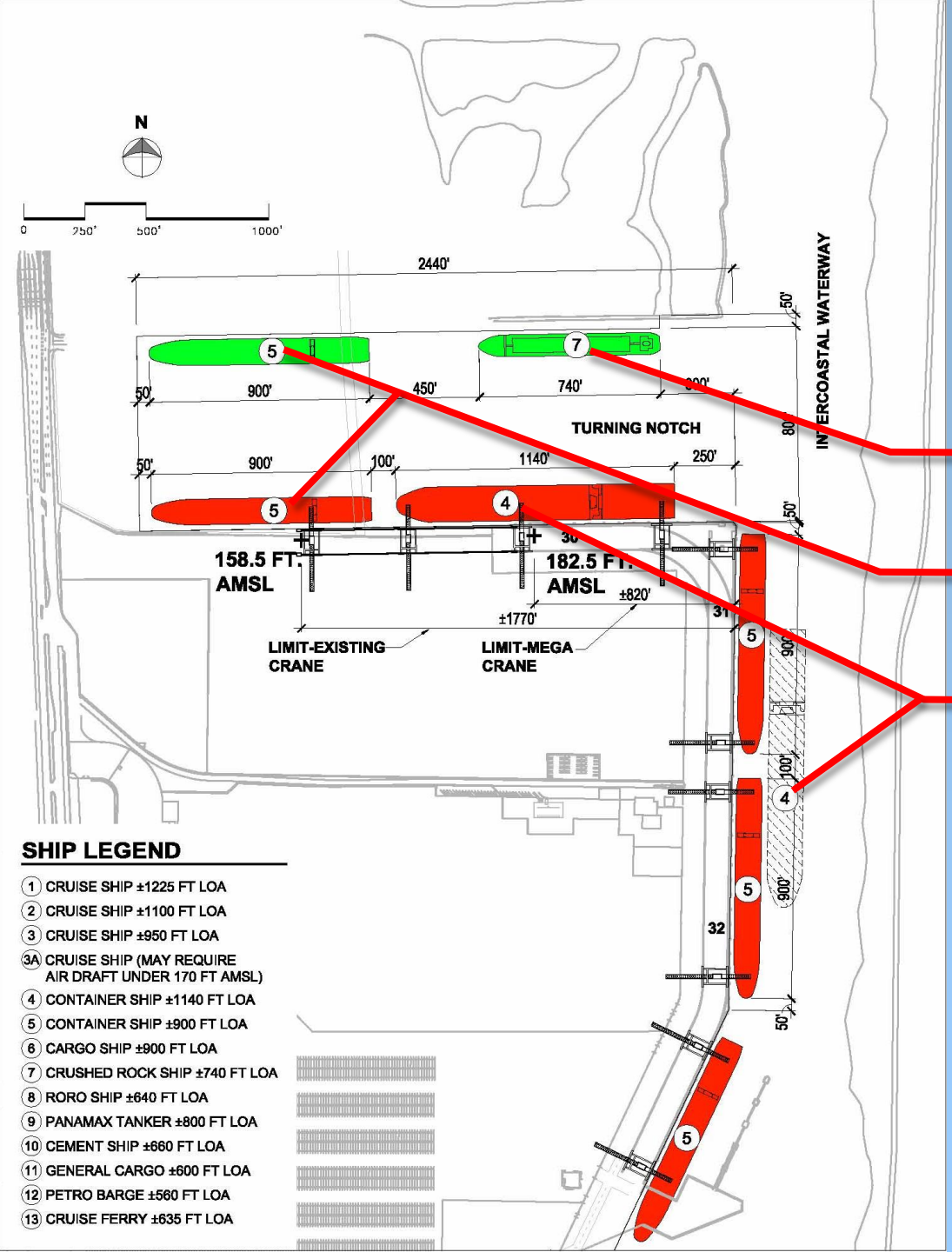
Add Parking Capacity

Bulkhead Reconstruction to accommodate larger Vessels

Cruise Terminal Improvements at CT 4

Lengthen & Widen Slip 2

Cargo Ship Berthing At Expanded Turning Notch



Crushed rock bulk cargo ship

Panamax cargo ships

Post Panamax cargo ships

Conservation Easement – Upland Enhancement

- **8.68 acres is replaced with approximately 16.57 acres**

Conservation Easement – Upland Enhancement

- **Existing 48.48 acres of Conservation Easement changes to approximately 60 acres of Fee Simple Area**

Airport (FLL) Interface – Airspace Obstruction Study

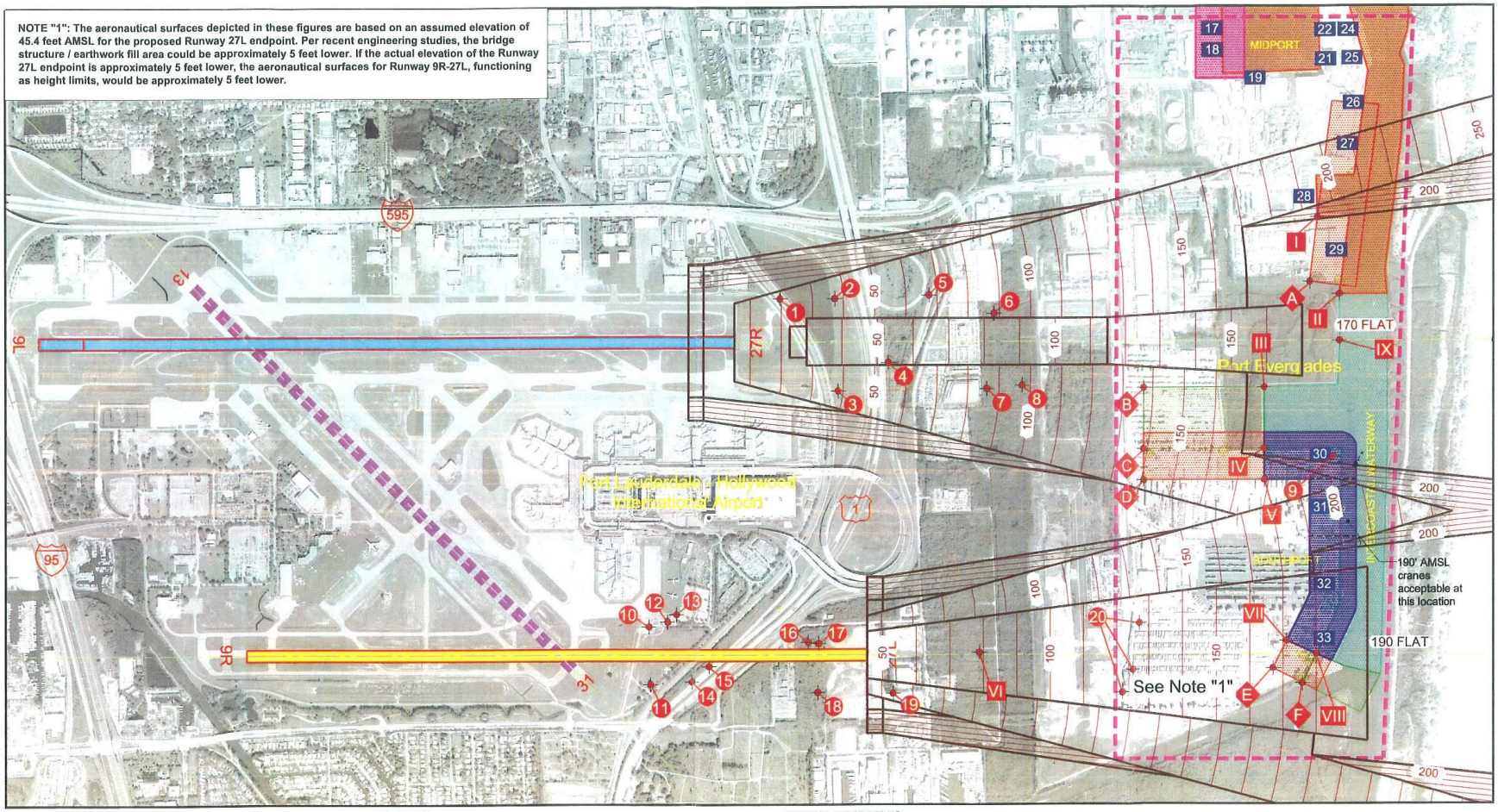


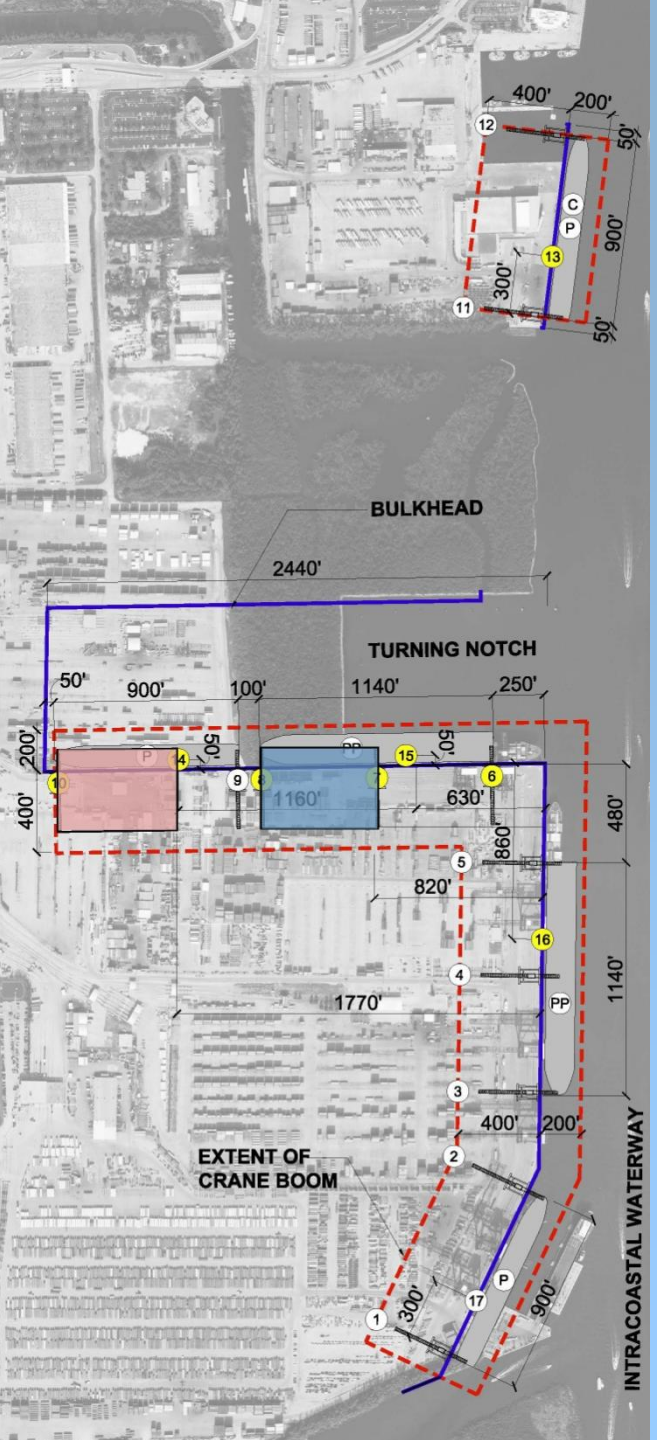
Figure 16
LOWEST COMPOSITE SURFACE OVER STUDY AREA PROPOSED CONDITIONS
Airspace Obstruction Study
Port Everglades Cranes and Vessels
Fort Lauderale-Hollywood International Airport
June 2009

JACOBS CONSULTANCY
Airport Management Consulting

Airport (FLL) Interface

Ship Heights

- **‘S’ Class Container Ship_____182.44 Ft. AMSL**
- **Cruise Ship_____greater than 200 Ft. AMSL**



Object Heights Requiring FAA Approval

- Ships over 170-Feet AMSL in Intracoastal Waterway east of FLL north runway
- Post Panamax cranes in blue area
- Panamax cranes in pink area

Comparison of Master Plan / ACOE Studies

Master Plan

- Determine market assessment for each business line over 20-year planning horizon
- Determine facility needs to accommodate projected throughput
- Evaluate benefits / costs and environmental impact to recommend facility improvements

ACOE Deepening & Widening Study

- Determine water borne transportation cost benefits by use of Waterways Analysis & Deepening Models (input from Port & Master Plan Consultant) over 50-year planning horizon
- Evaluate benefits / costs and environmental impact to recommend deepening depths & widening improvements of the waterways

Master Plan / ACOE Study Concepts

Master Plan (benefits based on achieving throughput in 20 years)	ACOE Waterways Analysis & Deepening Models (benefits based on waterborne transportation savings)
• Waterways to accommodate fully loaded Post Panamax vessels to Southport	- Supports Concept – NED Plan will likely provide cost sharing
• Turning Notch expansion to add cargo berths & capacity	- Supports Concept – NED Plan will likely provide some cost sharing
• Deeper & wider petroleum slips to accommodate Aframax vessels to Northport	- Likely not in NED Plan at this time
• Development of Dania Cut-Off Canal for increased berth capacity	- Likely not in NED Plan at this time

What We Need:

- **ACOE National Economic Development (NED) Plan**
- **Ship / crane height approval by Airport & FAA**
- **Acceptance of Upland Enhancement Plan and partial Conservation Easement release by FDEP**
- **Your input / comments to assist in preparation of a recommended Locally Preferred Plan for Deepening and Widening the Port's Waterways**

Next Steps

- **Review of ACOE National Economic Development Plan**
- **Preparation of recommendation by Port Staff for a Locally Preferred Plan (LPP)**
- **Presentation to and approval by the Broward County Board of County Commissioners**
- **To review this presentation and ask questions or comment; go to:**

www.portevergladesmasterplan.com