

# PORT MANATEE MASTER PLAN 2009

## REVISED



**PORT**  
Manatee  
*The right turn on Tampa Bay*

**PAGE INTENTIONALLY LEFT BLANK**

# Port Manatee Master Plan 2009



Manatee County Port Authority

Revised July 2009

Accepted by Florida Department of Community Affairs - May 2010



**PAGE INTENTIONALLY LEFT BLANK**

## Manatee County Port Authority 2009



***“The mission of Port Manatee is to be a powerful catalyst of countywide economic growth and hub of trade-related activity, by developing diversified and competitive deepwater shipping facilities and conducting maritime-related activities in a profitable and environmentally responsible manner.”***

***Adopted in open session, June 19, 1996***

**PAGE INTENTIONALLY LEFT BLANK**

# Table of Contents

<u>Chapter</u>	<u>Title</u>	<u>Page</u>
	Manatee County Port Authority .....	i
	Mission Statement .....	i
	Table of Contents .....	ii
	List of Tables .....	v
	List of Figures .....	v
	List of Appendices .....	vii
	List of Acronyms and Terms .....	viii
	<b>Executive Summary</b> .....	<b>ES-1</b>
	<b>Port Manatee Plan /9J5 Consistency Matrix</b> .....	<b>CM-1</b>
<b>I</b>	<b>Introduction</b> .....	<b>I-1</b>
A.	Port Manatee Planning Area .....	I-1
B.	Port History .....	I-3
	1. The Early Years: Phosphate and Petroleum .....	I-3
	2. Development and Diversification through the 1980s .....	I-4
	3. Continued Expansion Recent Decades to Serve Growing Market Demands .....	I-4
C.	Corporate Environment.....	I-5
D.	Planning Background.....	I-9
	1. Manatee County Port Authority Strategic Plan FY 1993-94 to FY 1998-99 .....	I-9
	2. 1996 Trade Development and Marketing Plan .....	I-10
	3. A Strategic View of Port Manatee’s Future, 1996 .....	I-10
	4. Manatee County Port Authority Business Plan 1996-2000.....	I-11
	5. Manatee County Port Authority Business Plan Addendum 1999-2003 .....	I-12
	6. Intermodal Land Use Study, January 1998 .....	I-13
	7. Strategic Plan, General Development Plan, and Chapter 163 Master Plan, December 2002.....	I-13
	8. Truck Access and Service Facility Study, December 2003 .....	I-13
	9. Master Plan Update, December 2005 .....	I-14
	10. Port Manatee Master Planning Concepts, February 2008 .....	I-14
E.	Strategic Visioning and Tenant/Stakeholder Outreach Program .....	I-14
	1. Strategic Visioning.....	I-14
	2. Tenant and Stakeholder Outreach .....	I-16
	3. Program Conclusions.....	I-17
F.	Encouragement Zone.....	I-18
	1. Background and Characteristics .....	I-18
	2. Factors Driving Encouragement Zone Success .....	I-21
G.	Administration .....	I-21

H.	Public Involvement and Agency Coordination .....	I-22
I.	Plan Organization and Content .....	I-22
<b>II</b>	<b>Existing Conditions .....</b>	<b>II-1</b>
A.	Waterside Facilities .....	II-1
1.	Channels and Inner Harbor .....	II-1
2.	Berths .....	II-2
3.	Ship Traffic .....	II-3
4.	Navigation .....	II-5
B.	Upland Infrastructure .....	II-7
1.	Land Uses .....	II-7
2.	Tenant Leases .....	II-12
3.	On-Port Road and Rail Systems .....	II-16
C.	Ecological and Environmental Conditions .....	II-19
1.	The Marine Environment .....	II-19
2.	Manbirtee Key .....	II-21
3.	The Terrestrial Environment .....	II-22
4.	Management of Dredged Materials .....	II-27
5.	Beach and Dune Systems .....	II-27
D.	Utilities .....	II-30
1.	Potable Water .....	II-30
2.	Wastewater .....	II-30
3.	Stormwater and Drainage Facilities .....	II-30
4.	Solid Waste .....	II-30
5.	Energy .....	II-30
E.	Inland Highway System .....	II-31
1.	Strategic Intermodal System .....	II-31
2.	Existing Roadway Network Conditions .....	II-33
3.	Future Transportation Network Conditions .....	II-36
4.	Regional Access to Port Manatee .....	II-37
5.	Existing Distribution Centers .....	II-43
6.	Port Manatee Projects .....	II-46
F.	Inland Rail Network .....	II-47
1.	Class I Rail Trends .....	II-47
2.	CSXT Regional Rail .....	II-48
3.	Port of Palm Beach Inland Port Concept .....	II-50
G.	Disaster Planning .....	II-51
1.	Hurricane Evacuation Planning .....	II-51
2.	Hazardous Material and Petroleum Products .....	II-52
3.	Post-Disaster Recovery .....	II-52
H.	Security .....	II-53

<b>III</b>	<b>Market Assessment</b> .....	<b>III-1</b>
A.	Introduction .....	III-1
B.	Port Manatee Trade Overview .....	III-2
1.	Historical Trade Volumes .....	III-2
2.	Key Commodities .....	III-5
C.	National and Global Economic Trends and Forecast .....	III-10
1.	U.S. Outlook .....	III-10
2.	Global Outlook .....	III-11
D.	Florida’s Economic Outlook and Demographics.....	III-12
E.	Port Manatee Trade Volume Forecast 2007-2018 and Beyond .....	III-15
F.	Beyond the Ten-Year Planning Horizon: Port Manatee’s Long-Term Container Trade Opportunity.....	III-17
1.	Container Demand Factors.....	III-17
2.	An Overview of the U.S. Container Market Outlook.....	III-17
3.	The Central Florida Container Market.....	III-19
4.	Container Forecast for Port Manatee .....	III-25
<b>IV</b>	<b>Five- and Ten-Year Maintenance and Expansion Plan</b> .....	<b>IV-1</b>
A.	Proposed Maintenance and Expansion Improvements .....	IV-1
1.	Five-Year Maintenance and Expansion Program.....	IV-3
2.	Looking beyond the Five-Year Program: North Port Expansion.....	IV.8
B.	Impact Assessment .....	IV-12
1.	Land Uses.....	IV-12
2.	Public Access.....	IV-14
3.	Historic Resources .....	IV-14
4.	Environmental Resources.....	IV-14
5.	Utilities.....	IV-20
6.	Transportation System.....	IV-22
<b>V</b>	<b>Goals, Objectives, and Policies</b> .....	<b>V-1</b>
<b>VI</b>	<b>Capital Improvement Program and Economic Impact Summary</b> .....	<b>VI-1</b>
A.	1. Five-year Capital Improvement Plan.....	VI-1
B.	2. Funding/Financing Opportunities.....	VI-3
C.	3. Summary of Port Manatee’s Economic Impact .....	VI-4

NOTE: Chapter V has been revised since Port Authority approval in February 2008 to reflect comments from the Manatee County Planning Department and to achieve consistency with Manatee County’s amendment incorporating the *Port Manatee Master Plan* into the *Manatee County Comprehensive Plan* for transmittal to the Florida Department of Community Affairs.

**PAGE INTENTIONALLY LEFT BLANK**

## List of Tables

II.1	Existing Berth Specifications and Details at Port Manatee .....	II-2
II.2	Permitted Uses within Port Manatee Boundaries .....	II-10
II.3	Conditional Uses within Port Manatee Boundaries .....	II-11
II.4	Allowed Uses by Zone.....	II-11
II.5	Leasehold Analysis .....	II-13
II.6	SIS Facility Designations near Port Manatee.....	II-31
II.7	Planned Highway Projects in FDOT Work Program, 2009 to 2013 .....	II-46
II.8	Freight Rail Trends in Florida.....	II-48
III.1	U.S. Economic Growth: History and Forecast .....	III-10
III.2	Global Economic Growth: History and Forecast .....	III-12
III.3	Mileage Distance between Manatee and Key Florida Cities .....	III-23
IV.1	Potable Water Demand .....	IV-21
IV.2	Sanitary Sewer Demand .....	IV-21
IV.3	Electrical Demand.....	IV-22
IV.4	FDOT SIS Designations for Port Manatee and Connectors .....	IV-22
V.1	Summary of Port Manatee’s Goals, Objectives, and Policies .....	V-13
VI.1	Port Manatee’s Five-Year Capital Improvement Program .....	VI-2
VI.2	Summary of Project Grants and Other Identified Funding by Project .....	VI-4
VI.3	Summary of Port Manatee’s Total Economic Impacts.....	VI-5

## List of Figures

I.1	Port Manatee Boundaries .....	I-2
I.2	PDEZ Areas.....	I-20
II.1	Port Manatee Entrance Channel .....	II-1
II.2	Ship Calls by Length Overall in 2006.....	II-3
II.3	Berth Utilization in 2006.....	II-4
II.4	Wind Occurrences, Port Manatee, July 1996-July 2007.....	II-6
II.5	Gulfstream Pipeline Extension .....	II-7
II.6	Port Manatee Facilities Map .....	II-8
II.7	Current (2007) to Five-Year Lease Expirations .....	II-14
II.8	Six- to Fifteen-Year Lease Expirations.....	II-15
II.9	Beyond Fifteen-Year Tenant Lease Expirations.....	II-15
II.10	On-Port Road and Rail Network.....	II-16
II.11	Existing Internal Circulation and Access Areas of Interest .....	II-17
II.12	Marine Environment in Vicinity of Port Manatee .....	II-20
II.13	Soils Map .....	II-23
II.14	Wetlands Map.....	II-24
II.15	Flood Map .....	II-28
II.16	COBRA Zones .....	II-29
II.17	FDOT SIS Designations .....	II-32
II.18	Roadway Travel Lanes.....	II-34
II.19	Existing Traffic Volumes and Level of Service.....	II-35

II.20	2030 Long-Range Transportation Plan Improvements Financially Feasible Roadway Projects .....	II-36
II.21	Existing U.S.41 .....	II-37
II.22	Potential Corridors for a Port- I-75 Connector .....	II-40
II.23	Developed Lands: Existing Compared with 2060.....	II-41
II.24	Potential New Regional Corridors.....	II-42
II.25	Existing Distribution Centers .....	II-44
II.26	Major Distribution Points in Central and Southern Florida .....	II-45
II.27	Florida Rail Network Flows.....	II-47
II.28	Florida Rail Network .....	II-49
II.29	Central Florida Rail Network .....	II-49
II.30	Manatee County Evacuation Zone .....	II-52
III.1	Port Manatee Historical Tonnages 1999- 2008.....	III-3
III.2	Port Manatee Historical Tonnages by Commodity Type 1999- 2008 .....	III-4
III.3	Port Manatee Historical Trend Lines by Commodity Type 1999- 2008 .....	III-4
III.4	Key Imports: Forestry Products (HS 4410-4421) .....	III-5
III.5	Key Imports: Fruits (HS 0803, 0804, 0807) .....	III-6
III.6	Key Imports: Cement (HS 2523).....	III-7
III.7	Key Imports: Residual Fuel (HS 271019).....	III-8
III.8	Key Exports: Fertilizers (HS 310000).....	III-9
III.9	Growth of Real U.S. GDP through 2011 .....	III-11
III.10	Percent Change in Real GDP by State 2006 - 2007.....	III-13
III.11	Gross Domestic Product in Florida through 2007 .....	III-14
III.12	Gross Domestic Product in Florida: Annual Growth Rates .....	III-14
III.13	Port Manatee Volume Forecast: Traditional Markets 2007 - 2030 .....	III-16
III.14	U.S. Container Trade Forecast: 2006 - 2025 .....	III-18
III.15	Extended Central Florida Geographic Area .....	III-20
III.16	Port Manatee’s Six-County Primary Hinterland.....	III-21
III.17	Port Manatee’s Twenty-five-County Extended Hinterland .....	III-21
III.18	Central Florida Container Market Forecast .....	III-24
III.19	Tampa Bay Ports Container Market Forecast.....	III-25
III.20	Container Market Opportunity: Existing Tenants .....	III-26
III.21	Container Market Opportunity: New Terminal .....	III-27
III.22	Port Manatee Container Market and Terminal Build-out Scenario .....	III-27
IV.1	Integrated Port Boundaries and Encouragement Zone Properties .....	IV-2
IV.2	Maintenance and Expansion Program: Years One through Five.....	IV-4
IV.3	Maintenance and Expansion Program: Years Six through Ten.....	IV-9
IV.4	Maintenance and Expansion Program: Ten-Year Future Facilities Map.....	IV-11
IV.5	Seagrass and Wetlands Impacts of Proposed Expansion Program .....	IV-13
IV.6	FDOT SIS Designations for Port Manatee and Connectors .....	IV-23
VI.1	Summary of Port Manatee’s Five-Year Capital Improvement Program.....	VI-1

## List of Appendices

### Existing Conditions and Future Facilities Maps (11"x17" Tri-fold)

Port Manatee Boundaries.....	A-1
Integrated Port Boundaries and Encouragement Zone Properties .....	A-2
Maintenance and Expansion Program: Years One through Five .....	A-3
Maintenance and Expansion Program: Years Six through Ten .....	A-4
Maintenance and Expansion Program: Ten-Year Future Facilities Map .....	A-5
Future Facilities - Berth 3 and 4.....	A-6
Seagrass and Wetlands.....	A-7
Soils .....	A-8
National Wetlands Inventory.....	A-9
FEMA Zones .....	A-10
COBRA Zones.....	A-11

## List of Acronyms and Terms

ACOE	U.S. ARMY CORPS OF ENGINEERS
ARC	ACQUISITION AND RESTORATION COUNCIL
CIP	CAPITAL IMPROVEMENT PROGRAM
CCMP	COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN FOR TAMPA BAY
CSVA	COASTAL STORM VULNERABILITY AREA
CSXT	CSX TRANSPORTATION INC.
DERM	MIAMI-DADE DEPARTMENT OF ENVIRONMENTAL RESOURCES MANAGEMENT
DMMA	DREDGE MATERIAL MANAGEMENT AREA
DR-CAFTA	CENTRAL AMERICA FREE TRADE AGREEMENT WITH THE DOMINICAN REPUBLIC, BELIZE, EL SALVADOR, HONDURAS, NICARAGUA, GUATEMALA, AND COSTA RICA
DRI	DEVELOPMENT OF REGIONAL IMPACT STATEMENT
EPA	ENVIRONMENTAL PROTECTION AGENCY
FAC	FLORIDA ADMINISTRATIVE CODE
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FHWA	FEDERAL HIGHWAY ADMINISTRATION
F.S.	FLORIDA STATUTES
FPL	FLORIDA POWER AND LIGHT
FWC	FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
FWS	U.S. FISH AND WILDLIFE SERVICE
FSTED	FLORIDA SEAPORT TRANSPORTATION AND ECONOMIC DEVELOPMENT COUNCIL
FY	FISCAL YEAR
GDP	GENERAL DEVELOPMENT PLAN
GDP	GROSS DOMESTIC PRODUCT
GPD	GALLONS PER DAY
IL	INDUSTRIAL LIGHT ZONE
IH	INDUSTRIAL HEAVY ZONE
JONES ACT	THE MERCHANT MARINE ACT OF 1920, A FEDERAL STATUTE THAT REQUIRES U.S.-FLAGGED VESSELS TO BE BUILT IN THE U.S., OWNED BY U.S. CITIZENS, AND DOCUMENTED (I.E., REGISTERED, ENROLLED, OR LICENSED) UNDER THE LAWS OF THE U.S. IN ADDITION, ALL OFFICERS AND 75 PERCENT OF THE CREW MUST BE U.S. CITIZENS. VESSELS THAT SATISFY THESE REQUIREMENTS CONSTITUTE THE "JONES ACT FLEET." THE JONES ACT RESTRICTS THE CARRIAGE OF GOODS BETWEEN U.S. PORTS TO U.S.- FLAGGED VESSELS.
LOA	LENGTH OVERALL
LOS	LEVEL OF SERVICE
LRTP	LONG-RANGE TRANSPORTATION PLAN
MARAD	U.S. MARITIME ADMINISTRATION
MHHW	MEAN HIGHER HIGH WATER
MHW	MEAN HIGH WATER
MLW	MEAN LOW WATER
MLLW	MEAN LOWER LOW WATER
MPO	METROPOLITAN PLANNING ORGANIZATION
MSL	MEAN SEA LEVEL
MTL	MEAN TIDE LEVEL
NAVD	NORTH AMERICAN VERTICAL DATUM
NMFS	NATIONAL MARINE FISHERIES
NOAA	NATIONAL OCEANIC AND ATMOSPHERIC AGENCY
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
OFW	OUTSTANDING FLORIDA WATERS
PDEZ	PLANNED DEVELOPMENT ENCOURAGEMENT ZONE DISTRICT

PANAMAX.....	VESSEL WHOSE DIMENSIONS (BEAM, LENGTH, AND/OR DRAFT) ALLOW IT TO TRAVERSE THE PANAMA CANAL
POST-PANAMAX....	VESSEL TOO LARGE TO TRAVERSE THE PRESENT CONFIGURATION OF THE PANAMA CANAL
PD&E.....	PROJECT DEVELOPMENT AND ENVIRONMENTAL STUDY
PDRP.....	POST-DISASTER REDEVELOPMENT PLANS
RO/RO.....	ROLL-ON/ROLL-OFF (USED TO DESIGNATE CARGO THAT IS ROLLED ON AND OFF A VESSEL RATHER THAN BEING LIFTED ON AND OFF
SIS.....	STRATEGIC INTERMODAL SYSTEM
SSC.....	SPECIES OF SPECIAL CONCERN
SWFWMD.....	SOUTHWEST FLORIDA WATER MANAGEMENT DEPARTMENT
TBEP.....	TAMPA BAY ESTUARY PROGRAM
TCAP.....	TERRA CEIA AQUATIC PRESERVE
TEU.....	TWENTY-FOOT EQUIVALENT CONTAINER UNIT
UMAM.....	UNIFORM MITIGATION ASSESSMENT METHOD

**PAGE INTENTIONALLY LEFT BLANK**

EXECUTIVE SUMMARY



**PAGE INTENTIONALLY LEFT BLANK**

## Executive Summary

This *Port Manatee Master Plan, 2009*, consistent with the requirements of Chapter 163, Florida Statutes (F.S.), and Rule 9J-5, Florida Administrative Code, provides a framework for Port Manatee's maintenance and expansion program through the next decade and beyond. In so doing, it builds on previous planning documents that served to take the Port to its current level of development and looks into the future to identify the Port's potential opportunities and needs to expand and diversify operations, and continue generating local, regional, and statewide economic benefits.

### Port Overview

Port Manatee is a niche port focused on handling proprietary bulk and break-bulk (general cargo) commodities for selected shippers as well as an expanding volume of containerized cargoes. This semi-rural Port is located in the northwestern corner of Manatee County, adjacent to the Manatee-Hillsborough County line. The Port lies between Tampa Bay on the west and U.S. 41 on the east.



The Port's planning area discussed in this *Port Manatee Master Plan, 2009*, comprises adjacent properties devoted to Port-related uses including properties within the newly created Encouragement Zone (see Figure ES-1). Particularly appropriate in this time of economic slow down, the creation of the proximate Encouragement Zone is anticipated to attract jobs and industry to the Port and to Manatee County. Its value, however, transcends the current economic situation, as it will set the table for enhanced maritime-related business once the local and global economies have stabilized.

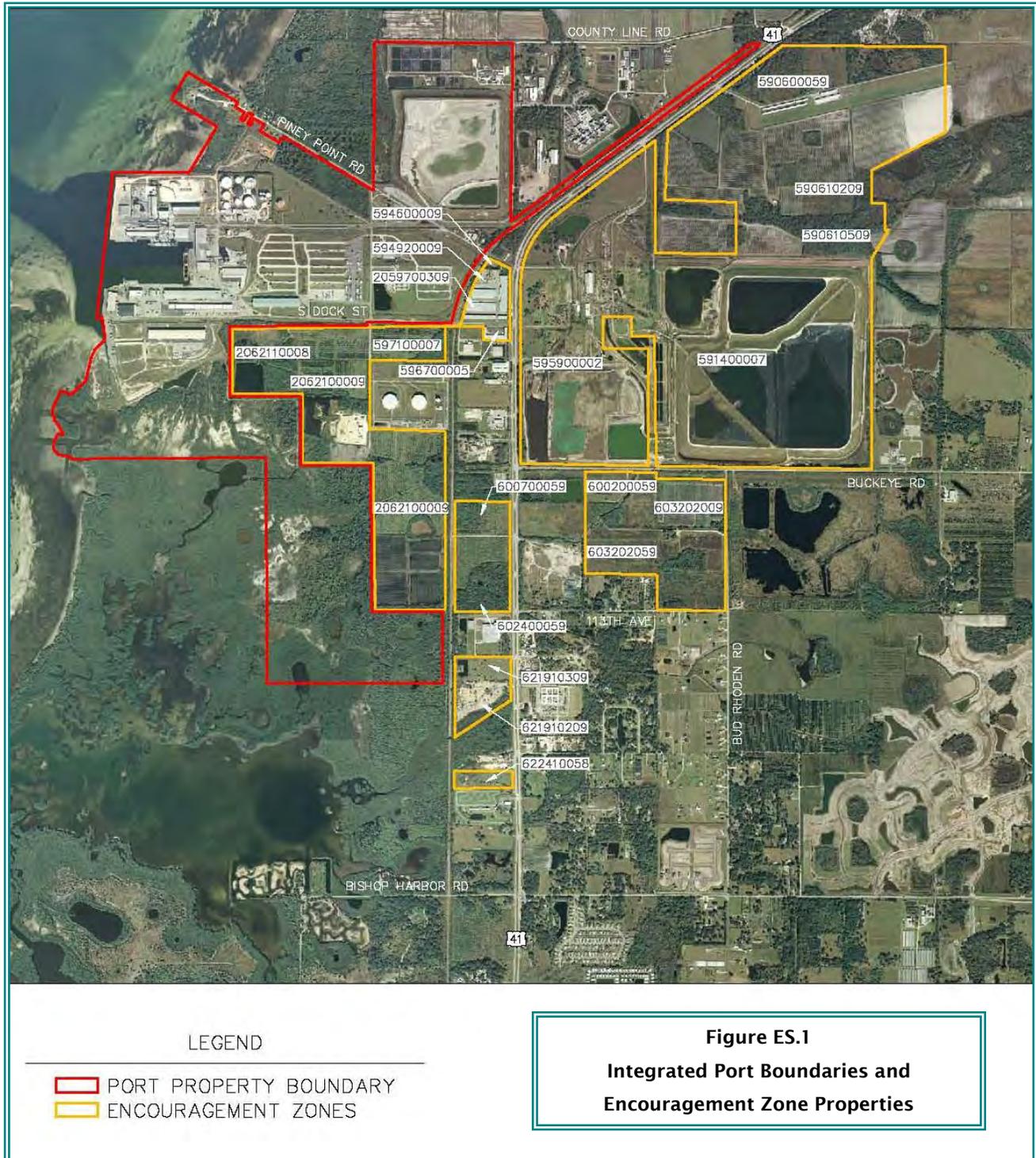
Currently, Port facilities comprise approximately 1,100 acres of land in the South Port, Central Basin, and North Port areas; a ship basin 1,588 feet long by 787 feet wide; and an access channel 2.9 miles long, 400 feet wide and 40 feet deep, which links the ship basin with the federal channel in Tampa Bay. The Port also operates its own Class III railroad that connects with the CSX Transportation (CSXT) railroad mainline just north of Piney Point Road.

Port Manatee's diversification and expansion program over the past decades has created a solid corporate mix of long-term and more recent terminal operators, stevedores, agents, and other users of these facilities. Each of the Port's primary dry bulk, break-bulk and liquid bulk terminal operators as well as the companies offering liner and stevedoring services have significant global reach, a valuable asset in these turbulent economic times.

### Strategic Visioning and Public Outreach

Throughout its planning history, the Manatee County Port Authority has been committed to open discussion with the many entities that have a stake in Port Manatee's success. Consistent with this commitment, as the first step in the planning initiative leading to this master plan, the Port

Authority held a visioning session with tenants, stakeholders, and public agencies in September 2006 to hear their thoughts about current Port operations and their views of the future.



Subsequently, in March 2007, as the master planning process got under way, interviews were held with many of the Port's tenants and stakeholders to understand their operational needs over the planning horizon.

This planning process served to define several strategic themes for Port Manatee's future, as contributed by Port Authority members and the many other session participants. From these themes, a vision for the Port's continued success emerged. These broad themes, which go beyond specific capital improvements, include:

- A broad planning horizon.
- Optimal capacity expansion.
- A proactive work force development program.
- Economic development.
- Regional cooperation.
- Innovative funding strategies.

These themes are reflected in the Port's five- and ten-year maintenance and expansion plan presented in this document.

## Market Opportunities

In February 2008, a *Port Manatee Master Planning Concepts* report, which concluded the initial phase of this planning process, was submitted to the Port Authority. That report contained a comprehensive analysis of the global marketplace and the local and regional characteristics relevant to Port Manatee's short- and long-term growth opportunities. Since that report was prepared, the global economy has suffered a dramatic downturn that has rippled across all market sectors, including housing, construction, consumer spending, and consequently, international trade.

Specific commodities that have dominated Port Manatee's imports and exports in the past decade include forestry products; food and fruit (including juices); cement, clinker and aggregates; residual fuel; and fertilizer -- some of which have been affected by the shrinking economy. Through 2006, Port Manatee showed continued growth in these commodities, reaching volumes above 9.4 million tons.<sup>1</sup> In 2007, as the economic downturn started, the Port's throughput declined to 8.8 million tons or 11.6 percent, dropping by another 5.9 percent again in 2008 to 8.3 million tons.

Until housing and commercial construction recover, the Port's construction materials imports -- one of its major commodity types -- will not pick up. Moreover, until consumers feel more confident about the economy, they will postpone buying expensive goods such as electronics and other imported items. Nevertheless, the diversity of the commodities Port Manatee handles means that it can benefit in the interim from the market sectors that have remained more robust than others. For example, perishables, such as the fruits and vegetables the Port imports, have demonstrated continued strength, even during the worst of the economic downturn. The Port's imports of tropical

---

<sup>1</sup> Years cited are fiscal years, i.e., 2006 is FY 05/06 and 2007 is FY 06/07, etc

fruits and melons are expected to exceed 525,000 tons in 2009, a 25 percent increase, despite the current economic conditions. The Port's ability to manage different cargoes and be flexible enough to accommodate short-term changes in trade and commodity mix is a real advantage during this difficult time.

Unconstrained by Port infrastructure (such as water depth, available land, and road access), Port Manatee is projected to approach 15 million tons of throughput within the planning horizon of this master plan. Consistent with past performance, imports will remain the dominant trade at the Port, accounting for over 95 percent of business. The longer-term import outlook moderates in line with the expectation that the population growth rate will slow. Export volume is forecast to decline by two-thirds, owing to the eventual waning of the Florida phosphate mines and the expectation that overseas fertilizer demand will be met largely with other sources.

As noted earlier, the Manatee County Port Authority, in addition to developing this five- and ten-year maintenance and expansion plan, wished to explore a long-term vision for the Port which included the potential for expanded container capacity. While the development of a dedicated container terminal in the North Port area would occur well beyond the planning horizon of this master plan, in the interim, the Port Authority wanted to be sure that it was doing the right things so as not to preclude its realization. As such, the market assessment considered both the imminent expansion of container-handling facilities in the South Port area and the potential of a longer-term dedicated container terminal in the North Port area.

The previously cited *Master Planning Concepts* report contains a detailed assessment of the factors driving the success of a dedicated build-out terminal. The major conclusions of that assessment include:

- The U.S. container market will continue to grow, and all-water traffic through the Panama Canal to the East Coast and Gulf Coast ports will continue to increase, particularly once the Canal's expansion project is completed in 2014.
- The greater Central Florida consumer market, the Port's extended hinterland -- with its population, convenient mileage from Port Manatee, and growing number of distribution centers -- presents a significant opportunity for Port Manatee to initiate the planning for a dedicated container terminal.
- Beyond expanded South Port operations, Port Manatee is believed to have a significant opportunity to share in the expected growth of the Central Florida container market with the Port of Tampa, which has also been developing its container-handling facilities.
- The regional container volume potential for the combined Tampa Bay ports could exceed 500,000 twenty-foot container equivalents (TEUs) by the next decade.

Port Manatee is already seeing its container market strengthen. The purchase of a mobile harbor crane in 2008 to facilitate container handling in South Port, the recent addition of container service by two carriers -- SeaBridge and HySea -- and the catalyst of the Encouragement Zone are positive factors in the Port's pursuit of new container opportunities.

Channel deepening will, however, be a long-term issue for both Port Manatee and the Port of Tampa. After the Panama Canal expansion is completed, container vessel size is projected to increase steadily, resulting in the eventual use of post-Panamax ships in the Gulf Coast trades. Fully loaded vessels capable of carrying 6,000 TEUs or more will require deeper drafts than Tampa Bay currently offers.

### **Planned Improvements and Capital Improvement Program**

In defining its five- and ten-year maintenance and expansion program, the Port's focus is on making the best possible use of its existing infrastructure in the South Port and the Central Basin areas, while incrementally adding new facilities in North Port to meet changing trends in the maritime industry and to attract new carriers, shippers, and commodities to the Port. These capital improvements have been prioritized to advance the competitive position of the Port.



To accommodate the current as well as the anticipated demand once the global economy is back on track, the Port will be pursuing capital improvement projects in five basic areas over the five-year planning horizon through 2013. These projects have been in the planning and design pipeline for a number of years and are consistent with the growth strategies of past master planning efforts:

- Development of the South Port intermodal terminal, including the expansion of Berth 12, dredging, the next phase of an intermodal container transfer yard behind Berth 12, and the purchase of a second mobile harbor crane to be used at Berth 12 as well as at other berths, as needed.
- Bulkhead rehabilitation and reconstruction of Berths 6 through 11 around the Port's Central Basin.
- General cargo facility expansion, including the construction of an intermodal cold storage transfer facility to be located behind Berths 9, 10, and 11.
- Road and railroad improvements.
- Land acquisition for future expansion.

In addition to these capital improvements, this plan also focuses on three strategic initiatives. First, in anticipation of the North Port expansion, the Port plans to immediately implement a proactive mitigation strategy to address the expected seagrass and wetlands impacts of that expansion. Second, understanding that a comprehensive regional strategy will be required to pursue the waterside and landside access improvements needed to serve the future vessels coming through the expanded Panama Canal, the Port plans to work with its sister Tampa Bay ports to achieve their common objectives of channel deepening, leading to economic development and job

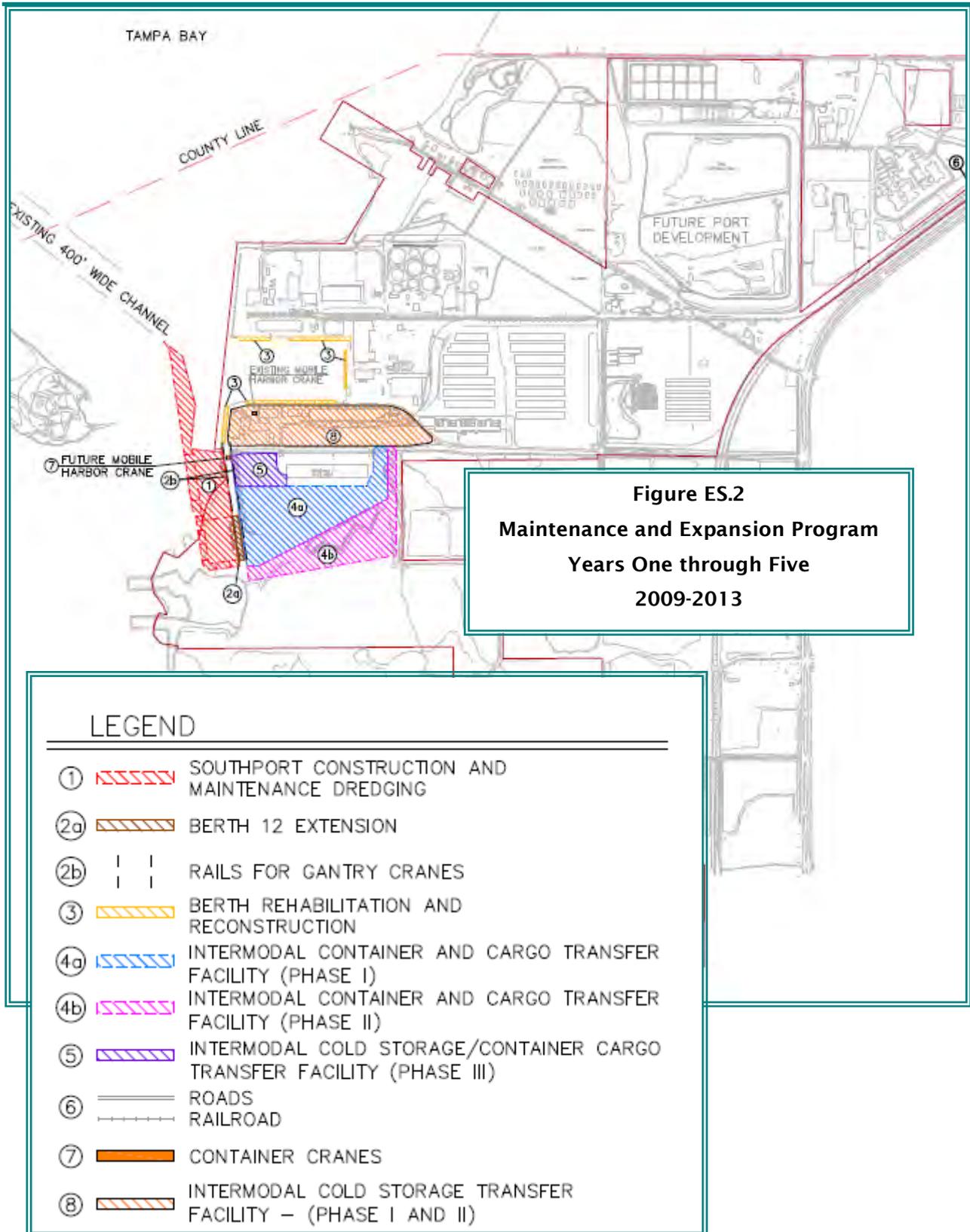
creation throughout the region. Third, the Port will be working with the county and potential users of the newly created Encouragement Zone to attract Port-related uses that would enhance the Port's economic impact on the County and the region and create additional new jobs.

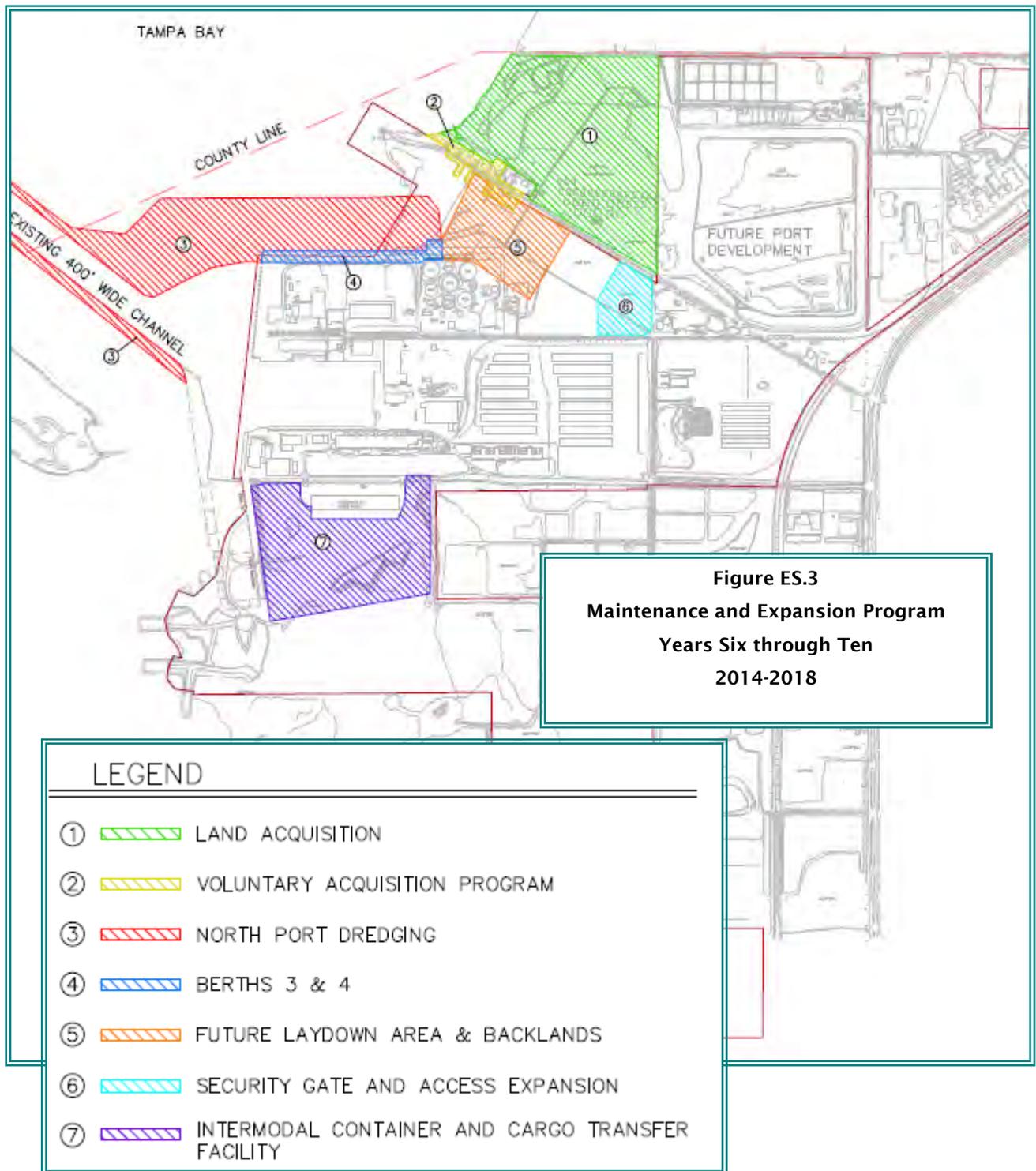
In the second five years of this planning horizon, Port Manatee has the potential to expand current Port operations further, addressing anticipated berth occupancy constraints and greatly increasing the Port's competitiveness on the global market, by using lands to the north. The Port's expansion concept through 2018 includes:

- Dredging of two berths, designated Berths 3 and 4, and bulkhead construction.
- Purchase of two rubber-tired gantry cranes.
- Design and construction of a new roll-on/roll-off ramp and marshalling area.
- Creation of a 20-acre container/lay-down yard supported with additional backlands to include intermodal and enhanced ingress and egress improvements to on-site and off-site connector roads and security checkpoints.

This capital improvement program, which provides an opportunity for further expansion beyond the planning horizon, would be phased and built as market forces drive opportunities.

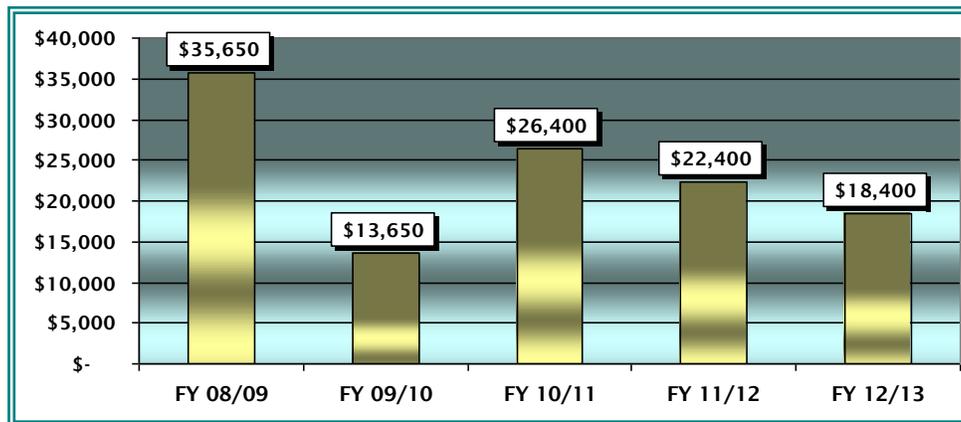
Figures ES.2 and ES.3, on the next pages, show the locations of the improvements planned over the five- and ten-year periods.





To implement the five-year maintenance and expansion program presented in this *Port Manatee Master Plan, 2009*, and achieve its identified goals and objectives, Port Manatee has developed the \$116.5 million phased five-year capital improvement plan (CIP) summarized in Figure ES.4. The Port will update this CIP yearly to reflect changes in priorities and new industry demands as well as funding resources.

**Figure ES.4**  
**Summary of Port Manatee's**  
**Five-Year Capital Improvement Program**  
**FY 08/09 - FY 12/13**



In addition to its own revenues, which are expected to increase with the anticipated growth in cargo tonnages and containerized cargo throughput, the Port expects to benefit from matching grant funding, as it has in the past. Over the years, the Port has received such funding from several sources. These include sequential matching grants from the FSTED program for projects consistent with a public deepwater port's adopted master plan, funding from the Florida Department of Transportation (FDOT) Strategic Intermodal System (SIS) and SIS Growth Management programs, and other funds from FDOT District 1's intermodal program. If additional funding becomes available through Legislative mandate or other agency sources, the Port expects to receive a share of these funds for strategic priority projects consistent with this 2009 master plan.

### **Proactive Mitigation Strategy**

The expansion of Port operations is a water-dependent need that meets the public benefit criteria defined in Florida Statutes. Regardless, the permitting of the estimated 19 acres of seagrass impacts to the Berths 3 and 4 channel and slips, envisioned beyond the five-year time frame, will require significant mitigation. The Port Authority recognizes that this mitigation should take place in the most proactive environment conceivable. This proactive philosophy creates an environment of cooperation between the Port and environmental entities for the net improvement of the environmental system as well as a potential funding source (the Port) to look at greater environmental enhancements. Preplanning and mitigation also generate the new resource prior to

major impacts to the existing seagrass, enhancing the overall system from inception of the mitigation proposal.

Three off-site mitigation options were explored as potential mitigation for anticipated seagrass impacts:

- Restoration of propeller (prop)-scarred seagrass beds.
- Restoration of dredged holes.
- Restoration of a long shore bar system.

These options represent opportunities for large-scale mitigation that could have a net benefit to the Tampa Bay estuary region.

### **External Transportation System and Future Trade Patterns**

Port Manatee, an SIS hub, has had the benefit of a relatively uncongested external transportation network by which its cargo can access regional routes, including I-275 and I-75. Within the five-year planning horizon, no significant additional congestion is anticipated on these key routes, including the Port's main access route, U.S. 41, within ten miles of the Port. No roadway capacity improvements are planned in the proximity of the Port over the next five years.

Reflecting the anticipated growth rates of Port traffic and conservatively assuming urbanized area parameters based on FDOT's generalized roadway capacity tables, the peak-hour level of traffic service was reviewed for both AM and PM in both directions of travel on U.S. 41 within three miles from the Port. This analysis demonstrated that the level of service (LOS) for traffic operations on U.S. 41 is maintained at LOS B for traffic conditions currently -- in 2008 -- and in 2013. LOS B represents a good traffic operations environment, with generally free-flow conditions.

Beyond 2013, there is reserve capacity on U.S. 41 to absorb additional traffic; however, the anticipated level of continued growth in Port traffic from new business, background traffic due to Encouragement Zone activities, and residential development to the east and south of the Port will affect the traffic loads on U.S. 41 and thus the resulting LOS. Heavy trucks now comprise about 15 percent of the daily traffic on U.S. 41 and about 50 percent at the Port entrances, increasing to about 57 percent by 2013. Truck volumes will increasingly influence U.S. 41 traffic service, particularly when the Port's South Port Intermodal Terminal comes on line and the Panama Canal expansion is completed in 2014. Thus, if Port Manatee is to avoid the accessibility issues plaguing some of Florida's other major seaports, managing access and the level of traffic service is vital in view of potential land development and anticipated changes in the traffic operations along the 3.5 miles of U.S. 41 between the Port and I-275.

To preserve the freight mobility vital to efficient Port operations, FDOT is looking at possible alternatives for enhanced access between I-75 and Port Manatee in the ongoing *Port Manatee Connector Project Development and Environmental Study*. The Port is coordinating with the study team in the process to identify and review alternatives. This connector is considered an essential improvement to facilitate Port traffic in the future.

The Port continues to monitor longer-term factors that might affect the level, mix, and mode of commodities passing through the Port as either imports or exports. One such factor is the pending development of the CSXT Intermodal Logistics Center in Winter Haven -- which is about 65 miles by rail from the Port and 50 miles by air -- and the distribution centers being developed in the area. This major hub could reshape international and domestic trade lanes for some commodities over time.

A second factor is the inland port (or intermodal logistics center) being considered for a site from 20 to 45 miles inland to the west or northwest of the Port of Palm Beach. This facility, likewise, could influence over time the pattern of trade lanes and certain commodity movements.

The Encouragement Zone, designated to the east and south of the Port, is intended to cultivate Port-related users that could use the Port as the shipping conduit for some of their commodity movements and other activities. The proximity of Port-related land uses will shorten commodity movements between the Port and the adjacent areas, minimizing the traffic impact on U.S. 41.

As a complement to the Encouragement Zone, the Port has identified the concept of a “cargo corridor” between the Port and the Encouragement Zone. This connecting corridor could possibly lie along South Dock Street and, conceptually, would provide a path to facilitate the movement of general commodities or specialized shipments between both sides of U.S. 41.

### **Port Manatee’s Economic Impact**

An economic analysis conducted for the Port Authority during the initial phase of this planning process and presented in the February 2008 *Port Manatee Master Planning Concepts* confirmed that Port Manatee contributes significantly to the economic vitality of Manatee County and the surrounding region. It creates and supports employment and associated labor income, economic output, and business taxes. These Port impacts extend beyond Manatee County to a six-county hinterland (Manatee, Sarasota, Hillsborough, Polk, Hardee, and Pinellas Counties) and the entire state of Florida. The impacts associated with Port Manatee are comparable with other major port activity impacts in the region and the state.

Table ES.1 summarizes the total economic impacts of the Port’s activities.

<b>Table ES.1</b>			
<b>Summary of Port Manatee’s Total Economic Impacts (2006)</b>			
	<b>Manatee County</b>	<b>Six-County Hinterland</b>	<b>Statewide</b>
Output (1)	\$1,448,130,200	\$2,325,006,200	\$2,380,202,000
Income (1)	\$494,548,200	\$655,810,800	\$698,508,700
Jobs (1)	14,227	18,806	20,396
Business Taxes (1)	\$64,348,800	\$79,957,600	\$85,931,200
Source: Wilbur Smith Associates			
(1) Includes direct and multiplier (i.e., indirect and induced) impacts			

## **Goals, Objectives, and Policies**

To accomplish the vision expressed in its mission statement, and comply with state requirements, the Manatee County Port Authority has identified six goals and accompanying objectives. These goals and objectives shall be carried out through specific policies for implementation during the planning period in response to market demand and the availability of funding resources. Table ES-2 summarizes the Port's identified goals objectives, and policies; these are presented in their entirety in Chapter V of this document.

Table V.1			
Summary of Port Manatee's Goals, Objectives, and Policies			
Goal	Objective	Policy	
<b>1. Economic development</b>	1.1: Infrastructure development	1.1.1: Short-term infrastructure improvements	
		1.1.2: Tenant and user service improvements	
		1.1.3: Infrastructure maintenance	
		1.1.4: Foreign Trade Zone	
		1.1.5: Future Port expansion	
	1.2: Cargo diversification and expansion	1.2.1: Marketing activities	
		1.2.2: Private businesses	
		1.3: Land development and expansion regulation	1.3.1: On-port land uses
			1.3.2: Land use changes
	1.4: Port and Encouragement Zone synergies	1.3.3: Land use compatibility	
		1.3.4: Development consistency	
		1.3.5: Guidelines and standards	
		1.3.6: General Development Plan	
		1.4.1: Encouragement Zone development	
		1.4.2: Port and Encouragement Zone interface	
	<b>2. Transportation efficiencies</b>	2.1: Deepwater access	1.4.3: Port and Encouragement Zone Coordinating Committee
2.1.1: Maintenance dredging			
2.1.2: New dredging			
2.1.3: Disposal site development			
2.1.4: Consistency with State and Manatee County Comprehensive Plans			
2.2: On-port road and rail network		2.1.5: Regional collaboration for Tampa Bay access channel deepening	
		2.2.1: On-Port road improvements	
		2.2.2: On-Port rail improvements	
2.3: Off-port access and connectivity		2.2.3: Truck service facilities and amenities	
		2.3.1: Vehicular access improvements	
		2.3.2: U.S. 41 corridor	
		2.3.3: Direct Port to I-75 connection	
		2.3.4: Rail service and connectivity	
<b>3. Environmental stewardship and sustainability</b>		3.1: Natural resource preservation and protection	3.1.1: Coastal resources
			3.1.2: Portwide best management practices
	3.1.3: Proactive mitigation / permitting program		
	3.1.4: Avoidance and minimization of water quality degradation		
	3.1.5: Water quality monitoring		
	3.2: Estuarine quality	3.2.1: Habitat inventory and protective policies	
		3.2.2: Estuarine water quality	
		3.2.3: Tidal flushing and circulation	
		3.2.4: Seagrass beds	
		3.2.5: Mitigation plans	
		3.2.6: Conservation area	
	3.3: Shoreline uses	3.3.1: Water-dependent operations	
		3.3.2: Environmental protection, enhancement, and restoration	
	3.4: Coastal High Hazard Areas	3.4.1: Coastal High Hazard Area	
		3.4.2: Use of public funds	
	3.5: Plan implementation	3.5.1: Agency and stakeholder cooperation	
		3.5.2: Interagency agreements	
	3.6: Energy conservation	3.6.1: Vehicles and buildings	
3.6.2: Operations			

Table V.1 (Continued)		
Summary of Port Manatee's Goals, Objectives, and Policies		
Goal	Objective	Policy
<b>4. Safety and security</b>	4.1: Protection from natural hazards	4.1.1: Flood Zone compliance
		4.1.2: Building code compliance
		4.1.3: Hurricane-preparedness
	4.2: Hazardous materials	4.2.1: Hazardous spill cleanup
		4.2.2: Timely information to public
	4.3: Safe operating environment	4.3.1: Safety and health measures
		4.3.2: Compliance with health and safety standards
	4.4: Port security	4.4.1: Port security plan
		4.4.2: Agency coordination
		4.4.3: New technologies
	4.5: Emergency management	4.5.1: Emergency management plan
		4.5.2: Emergency management coordination
	4.6: Post-disaster redevelopment	4.6.1: Post-disaster redevelopment procedures
		4.6.2: Post-disaster priorities
<b>5. Intergovernmental coordination</b>	5.1: Coordination with Manatee County	5.1.1: Compatibility with Manatee County's <i>Comprehensive Plan</i>
		5.1.2: Infrastructure and utility capacity
	5.2: Other agency and stakeholder coordination	5.2.1: Local, regional, state, and federal agencies:
		5.2.2: Local and regional maritime, commercial, and industrial interests
<b>6. Financial stability</b>	6.1: Budgetary process	6.1.1: Port revenues
		6.1.2: Business decision criteria
		6.1.3: Expense control benchmarks
		6.1.4: Annual capital improvement plan updates
	6.2: Funding opportunities	6.2.1: Legislative and agency awareness
		6.2.2: State and federal grants
		6.2.3: Public/private partnerships and other funding
		6.2.4: Borrowing power

# PORT MANATEE PLAN 9J5 CONSISTENCY MATRIX



**PAGE INTENTIONALLY LEFT BLANK**

## Port Manatee Master Plan /9J5 Consistency Matrix

Consistency Matrix showing Port Master Plan Compliance with Relevant Requirements of Chapter 163 - 3178, Florida Statutes and Rule 9J-5.012 Coastal Management, Florida Administrative Code.

Chapter 163-3178 Requirements	Response in Port Master Plan
<b>163.3178 Coastal management</b>	
(2) Each coastal management element required by s. 163.3177(6)(g) shall be based on studies, surveys, and data; be consistent with coastal resource plans prepared and adopted pursuant to general or special law; and contain:	
(a) A <u>land use and inventory map</u> of existing <u>coastal uses, wildlife habitat, wetland and other vegetative communities</u> , undeveloped areas, <u>areas subject to coastal flooding</u> , public access routes to beach and shore resources, <u>historic preservation areas</u> , and other areas of special concern to local government.	See Figures I.2, II-6, II-12, II.13, II.14, II.15, and II-16 and refer to narrative in Chapter II, Section C Ecological and Environmental Conditions.
(b) An analysis of the <u>environmental, socioeconomic, and fiscal impact of development and redevelopment</u> proposed in the future land use plan, with required infrastructure to support this development or redevelopment, on the natural and historical resources of the coast and the plans and principles to be used to control development and redevelopment to eliminate or mitigate the adverse impacts on coastal wetlands; living marine resources; barrier islands, including beach and dune systems; unique wildlife habitat; historical and archaeological sites; and other fragile coastal resources.	See Chapters II and IV for a discussion of relevant environmental conditions and plan impacts. See Chapter III for an assessment of the Port's socioeconomic environment and market opportunities. See Chapter VI for the financial implications of the Port's five-year capital improvement program.
(c) An analysis of the <u>effects of existing drainage systems and the impact of point source and nonpoint source pollution on estuarine water quality</u> and the plans and principles, including existing state and regional regulatory programs, which shall be used to maintain or upgrade water quality while maintaining sufficient quantities of water flow.	See Chapter II, Section D, for a discussion of the Port's stormwater management plan and facilities.
(d) A component which outlines principles for <u>hazard mitigation and protection of human life against the effects of natural disaster</u> , including population evacuation, which take into consideration the capability to safely evacuate the density of coastal population proposed in the future land use plan element in the event of an impending natural disaster.	See Chapter II, Sections G and H, for a discussion of disaster planning,
(e) A component which outlines principles for <u>protecting existing beach and dune systems from human-induced erosion</u> and for restoring altered beach and dune systems.	There are no beach or dune systems in the Port area.
(f) A redevelopment component which outlines the principles which shall be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise.	See Chapter V, Goal 4: Safety and Security.
(g) A shoreline use component that identifies public access to beach and shoreline areas and addresses the need for water-dependent and water-related facilities, including marinas, along shoreline areas. Such component must include the strategies that will be used to preserve recreational and commercial working waterfronts as defined in s. 342.07.	See Chapter V, Goal 3: Environmental Stewardship and Sustainability.
(h) Designation of coastal high-hazard areas and the criteria for mitigation	See Figure II-16 and narrative in Chapter II.

Chapter 163-3178 Requirements	Response in Port Master Plan
for a comprehensive plan amendment in a coastal high-hazard area as defined in subsection (9)....	
(i) A component which outlines <u>principles for providing that financial assurances are made that required public facilities will be in place to meet the demand imposed by the completed development or redevelopment.</u> Such public facilities will be scheduled for phased completion to coincide with demands generated by the development or redevelopment.	See Chapter VI.
(j) An identification of regulatory and management techniques that the local government plans to adopt or has adopted in order to mitigate the threat to human life and to control proposed development and redevelopment in order to protect the coastal environment and give consideration to cumulative impacts	See Chapters II and Chapter V, Goals 3 and 4.
<p>(k) A component which includes the comprehensive master plan prepared by each deepwater port listed in s. 311.09(1), which addresses <u>existing port facilities</u> and any <u>proposed expansions</u>, and which adequately addresses <u>the applicable requirements of paragraphs (a)-(k) for areas within the port and proposed expansion areas.</u></p> <p>"The appropriate local government" means the municipality having the responsibility for the area in which the deepwater port lies, except that where no municipality has responsibility, where a municipality and a county each have responsibility, or where two or more municipalities each have responsibility for the area in which the deepwater port lies, "the appropriate local government" means the county which has responsibility for the area in which the deepwater port lies</p> <p>(3) Expansions to port harbors, spoil disposal sites, navigation channels, turning basins, harbor berths, and other related inwater harbor facilities of ports listed in s. 403.021(9); port transportation facilities and projects listed in s. 311.07(3)(b); and intermodal transportation facilities identified pursuant to s. 311.09(3) shall not be developments of regional impact where such expansions, projects, or facilities are consistent with comprehensive master plans that are in compliance with this section.</p>	<p>Manatee County is Port Manatee's local government. The <i>Port Manatee Master Plan, 2009</i> addresses the requirements of paragraphs a-k to the extent they are relevant to the Port's current and planned maintenance and expansion program and the Port's semi-rural location and circumstances.</p>
(4) Improvements and maintenance of federal and state highways that have been approved as part of a plan approved pursuant to s. 380.045 or s. 380.05 shall be exempt from the provisions of s. 380.27(2).	
(5) The appropriate dispute resolution process provided under s. 186.509 must be used to reconcile inconsistencies between port master plans and local comprehensive plans. In recognition of the state's commitment to deepwater ports, <u>the state comprehensive plan must include goals, objectives, and policies that establish a statewide strategy for enhancement of existing deepwater ports, ensuring that priority is given to water-dependent land uses.</u> As an incentive for promoting plan consistency, <u>port facilities as defined in s. 315.02(6) on lands owned or controlled by a deepwater port as defined in s. 311.09(1), as of the effective date of this act shall not be subject to development-of-regional-impact review provided the port either successfully completes an alternative comprehensive development agreement with a local government pursuant to ss. 163.3220-163.3243 or successfully enters into a development agreement with the state land planning agency and applicable</u>	

Chapter 163-3178 Requirements	Response in Port Master Plan
<p>local government pursuant to s. 380.032 or, where the port is a department of a local government, successfully enters into a development agreement with the state land planning agency pursuant to s. 380.032. Port facilities as defined in s. 315.02(6) on lands not owned or controlled by a deepwater port as defined in s. 311.09(1) as of the effective date of this act shall not be subject to development-of-regional-impact review provided the port successfully enters into a development agreement with the state land planning agency and applicable local government pursuant to s. 380.032 or, where the port is a department of a local government, successfully enters into a development agreement with the state land planning agency pursuant to s. 380.032.</p>	
<p>(7) Each port listed in s. 311.09(1) and each local government in the coastal area which has spoil disposal responsibilities shall <u>provide for or identify disposal sites for dredged materials in the future land use and port elements of the local comprehensive plan as needed to assure proper long-term management of material dredged from navigation channels, sufficient long-range disposal capacity, environmental sensitivity and compatibility, and reasonable cost and transportation.</u> The disposal site selection criteria shall be developed in consultation with navigation and inlet districts and other appropriate state and federal agencies and the public. For areas owned or controlled by ports listed in s. 311.09(1) and proposed port expansion areas, <u>compliance with the provisions of this subsection shall be achieved through comprehensive master plans prepared by each port and integrated with the appropriate local plan pursuant to paragraph (2)(k).</u></p>	<p>See Chapter II, Section C, and Chapter V, Goal 2, Objective 2.1, and Policies 2.1.1 and 2.1.2 as well as narrative in Chapter IV.</p>

9J5-012 Requirements	Response in Port Master Plan
<p>(5) Port Master Plans for Deepwater Ports. A port master plan shall be prepared by or for each deepwater port for the purposes of coordinating the activities of the port with the plans of the appropriate local government; determination of compliance does not imply conceptual approval by the State for permitting purposes.</p>	
<p>(a) Deepwater ports shall prepare a port master plan and submit it to the appropriate local government for incorporation as a part of the coastal management element at least six months prior to the due date of the local government’s comprehensive plan established pursuant to law. This port master plan shall be incorporated as a part of the coastal management element, and be consistent with the goals, objectives, and policies of the coastal management element. The port master plan of a deepwater port, as it appears in the coastal management element, shall be reviewed for compliance with the criteria below.</p>	<p>Port Manatee has coordinated with Manatee County, its local government, to achieve the maximum consistency possible with the County’s <i>Coastal Management Element</i> and goals, objectives, and policies.</p> <p>It is understood that a Port Master Plan may be submitted for a <i>Comprehensive Plan</i> amendment independently of the local government’s amendment cycle.</p>
<p>(b) <u>Inventories and Analyses</u>. The deepwater port shall prepare all applicable inventories and analyses listed in <u>subsection (2)</u> for the areas they own or administer. Furthermore, the deepwater port shall inventory and analyze: <u>landside transportation</u> needed to support the deepwater port, <u>in-water facilities, maintenance of in-water facilities, management of dredged material, hazardous material handling and cleanup, and handling and cleanup of petroleum products</u>. In addition, the deepwater port shall prepare a <u>map showing the location and boundaries of port owned or administered lands</u>.</p>	<p>Chapter II provides the applicable inventories and analyses listed in subsection (2) below for the areas the Port owns. Included in Chapter II are descriptions of the landside transportation needed to support Port operations, in-water facilities, maintenance of in-water facilities, management of dredged material, hazardous-material handling and cleanup, and handling and cleanup of petroleum products. Figure I-1, shows the location and boundaries of port-owned lands.</p>
<p>(c) <u>Goals, Objectives, and Policies</u>. The deepwater port shall develop goals, objectives, and policies to address the applicable issues listed in <u>subsection (3)</u>. The goals, objectives, and policies shall be consistent with the goals adopted in the remainder of the coastal management element.</p>	<p>Chapter V presents the Port’s goals, objectives, and polices, addressing the issues listed in subsection (3) below. These have been prepared for the maximum consistency with the County’s goals.</p>
<p>(d) <u>Port Maintenance and Expansion</u>. The deepwater port shall set forth its plans for future port expansion for an initial <u>five-year period and in-water facility maintenance for at least a ten-year period</u>, and these plans shall show the <u>economic assumptions</u> used, the <u>foreseeable changes in shipping technologies and port operations</u>, the <u>estimates of types and volumes of commodities to be handled</u>, the <u>needed expansions to in-water and on-land facilities</u>, and the <u>infrastructure required</u>. The plan shall set forth requirements for maintaining in-water facilities and for the <u>management of dredged material</u> from both maintenance and expansion. The plan shall assess the <u>impact of port expansion and maintenance</u> on wetlands, beaches and dunes, submerged lands, floodplains, wildlife habitat, living marine resources, water quality, water quantity, public access, historic resources, and the land use and</p>	<p>Chapter IV describes the Port’s five- and ten-year maintenance and expansion plan. The chapter discusses the maintenance and expansion of in-water facilities; the management of dredged material for both maintenance and expansion; and the impact of port expansion and maintenance on wetlands, submerged lands, floodplains, wildlife habitat, living marine resources, water quality, water quantity, public access, historic resources, and the land use and infrastructure of adjacent</p>

9J5-012 Requirements	Response in Port Master Plan
<p>infrastructure of adjacent areas.</p>	<p>areas, where relevant, given the Port's semi-rural location and circumstances. Chapter III addresses the economic assumptions used in the plan, the foreseeable changes in shipping technologies and port operations, and the estimates of types and volumes of commodities to be handled.</p>
<p>(e) <u>Port Master Plan Integration into the Coastal Management Element.</u> If a port master plan is prepared by a deepwater port, then <u>the appropriate local government shall include the port master plan's goals, objectives, and policies and port maintenance and expansion sections in the coastal management element of its comprehensive plan.</u> The data and analyses shall be summarized as required in subsection 9J-5.012(2), F.A.C., and shall be submitted in support of the comprehensive plan.</p>	<p>Chapters IV (Five- and Ten-Year Maintenance and Expansion Plan) and V (Goals, Objectives and Policies) and/or the Executive Summary of the Plan will be submitted to Manatee County for inclusion in the <i>Coastal Management Element of the Manatee County Comprehensive Plan</i>. The entire document is provided in support of the <i>Manatee County Comprehensive Plan</i>.</p>
<p>Section (2) <u>Coastal Management Data And Analysis Requirements.</u> The element shall be based upon the following data and analyses requirements pursuant to subsection 9J-5.005(2), F.A.C.</p>	
<p>(a) <u>Existing land uses</u> in the coastal planning area shall be inventoried. Conflicts among shoreline uses shall be analyzed and the need for water-dependent and water-related development sites shall be estimated. Any areas in need of redevelopment shall be identified. An analysis of the economic base of the coastal planning area based on the future land use element shall be included. A <u>map or map series showing existing land uses</u> and detailing existing water-dependent and water-related uses shall be prepared.</p>	<p>Figure II.6 shows the Port's existing land uses.</p> <p>Figure II.1 shows the Port's channel and turning basin.</p> <p>Figure II.2 also shows the Port's existing facilities, both water-dependent and water-related.</p>
<p>(b) Inventories and analyses of the effect of the future land uses as required to be shown on the future land use map or map series on the natural resources in the coastal planning area shall be prepared including: vegetative cover, including wetlands; areas subject to coastal flooding; wildlife habitats; and living marine resources. Maps shall be prepared of vegetative cover, wildlife habitat, areas subject to coastal flooding, and other areas of special concern to local government.</p>	<p>Figures II.12, II.13, II.14, II.15, and II-16 provide relevant soils, vegetative cover/wetlands, and coastal flooding information</p>
<p>(c) An inventory and analysis of the impacts of development and redevelopment proposed in the future land use element on historic resources and sites in the coastal planning area shall be included along with a map of areas designated for historic preservation.</p>	<p>No historic resources have been identified in the Port Planning Area.</p>
<p>(d) An inventory and analysis shall be prepared of estuarine pollution conditions and actions needed to maintain estuaries including: an assessment of general estuarine conditions and identification of known</p>	<p>Chapter II, Section C discusses current environmental conditions and Chapter IV, Section B discusses plan impacts on traffic</p>

9J5-012 Requirements	Response in Port Master Plan
<p>existing point and non-point source pollution problems; an assessment of the impact of the development and redevelopment proposed in the future land use element and the impacts of facilities proposed in the traffic circulation and general sanitary sewer, solid waste, drainage, potable water, and natural groundwater aquifer recharge elements upon water quality, circulation patterns, and accumulation of contaminants in sediments; identification of actions needed to remedy existing pollution problems; and identification of existing state, regional and local regulatory programs which will be used to maintain or improve estuarine environmental quality</p>	<p>circulation, utilities, and environmental conditions.</p>
<p>(e) The following natural disaster planning concerns shall be inventoried or analyzed:</p> <p>1. Hurricane evacuation planning based on the hurricane evacuation plan contained in the local peacetime emergency plan shall be analyzed and shall consider the hurricane vulnerability zone, the number of persons requiring evacuation, the number of persons requiring public hurricane shelter, the number of hurricane shelter spaces available, evacuation routes, transportation and hazard constraints on the evacuation routes, and evacuation times. The projected impact of the anticipated population density proposed in the future land use element and any special needs of the elderly, handicapped, hospitalized, or other special needs of the existing and anticipated populations on the above items shall be estimated. The analysis shall also consider measures that the local government could adopt to maintain or reduce hurricane evacuation times.</p>	<p>Chapter II, Sections G and H, discuss natural and manmade disaster planning.</p>
<p>2. Post-disaster redevelopment including: existing and proposed land use in coastal high-hazard areas; structures with a history of repeated damage in coastal storms; coastal or shore protection structures; infrastructure in coastal high-hazard areas; and beach and dune conditions. Measures which could be used to reduce exposure to hazards shall be analyzed, including relocation, structural modification, and public acquisition.</p>	<p>Chapter II, Section G, discusses post-disaster redevelopment.</p>
<p>3. Coastal high-hazard areas shall be identified and the infrastructure within the coastal high-hazard area shall be inventoried. The potential for relocating threatened infrastructure shall be analyzed.</p>	<p>See Figures II.15 and II.16 and accompanying narrative as well as Chapter V, Goal 4.</p>
<p>(f) Beach and dune systems shall be inventoried and analyzed, including past trends in erosion and accretion, the effects upon the beaches or dunes of coastal or shore protection structures, and identification of existing and potential beach renourishment areas. The analysis shall also identify measures which could be used to protect or restore beaches or dunes.</p>	<p>See Chapter II, Section C.</p>

9J5-012 Requirements	Response in Port Master Plan
<p>(g) Public access facilities shall be inventoried, including: all public access points to the beach or shoreline through public lands, private property open to the general public, or other legal means; parking facilities for beach or shoreline access; coastal roads and facilities providing scenic overlooks; marinas; boat ramps; public docks; fishing piers; or other traditional shoreline fishing areas. The capacity of and need for the above facilities shall be analyzed. Public access facilities shall be shown on the map or map series required by paragraph (2)(a) as water-dependent uses or facilities. These inventories and analyses shall be coordinated with the recreation and open space element and any countywide marina siting plan if adopted by the local government.</p>	<p>See Chapter II, Section C.</p>
<p>(h) Existing infrastructure in the coastal planning area shall be inventoried, including: roadways, bridges or causeways, sanitary sewer facilities, potable water facilities, man-made drainage facilities, public coastal or shore protection structures, and beach renourishment projects. The demand upon, capacity of, and area served by the existing infrastructure shall be analyzed. Analyses shall be prepared which estimate future needs for those facilities listed above, and which shall address the fiscal impact in terms of estimated costs, funding sources and phasing of any needed improvements.</p>	<p>See Chapters II and IV.</p>
<p><b>Section (3) Requirements for Coastal Management Goals, Objectives, and Policies</b></p>	
<p>(a) The coastal management element shall contain one or more goal statements which establish the long term end toward which regulatory and management efforts are directed. These shall reflect the stated intent of the Legislature in enacting Section 163.3178, F.S., which is that local governments in their comprehensive plans restrict development activities that would damage or destroy coastal resources, and protect human life and limit public expenditures in areas subject to destruction by natural disasters.</p>	<p>The Port has identified six goals in Chapter V:</p> <ul style="list-style-type: none"> <li>Economic development</li> <li>Transportation efficiencies</li> <li>Environmental stewardship and sustainability</li> <li>Safety and security</li> <li>Intergovernmental coordination</li> <li>Financial stability</li> </ul> <p>Together, these goals, with their accompanying objectives and specific implementation policies, address the relevant requirements outlined in 9J5, section (3). In addition, the Port has referenced the appropriate <i>State Comprehensive Plan</i> goals, to be consistent with that document.</p>
<p>(b) The element shall contain one or more specific objectives for each goal statement which address the requirements of paragraph 163.3177(6)(g) and Section 163.3178, F.S., and which:</p>	
<p>1. Protect, conserve, or enhance remaining coastal wetlands, living marine resources, coastal barriers, and wildlife habitat;</p>	
<p>2. Maintain or improve estuarine environmental quality;</p>	

9J5-012 Requirements	Response in Port Master Plan
3. Provide criteria or standards for prioritizing shoreline uses, giving priority to water-dependent uses;	
4. Protect beaches or dunes, establish construction standards which minimize the impacts of man-made structures on beach or dune systems, and restore altered beaches or dunes;	
5. Limit public expenditures that subsidize development permitted in coastal high-hazard areas subsequent to the element's adoption except for restoration or enhancement of natural resources;	
6. Direct population concentrations away from known or predicted coastal high-hazard areas;	
7. Maintain or reduce hurricane evacuation times;	
8. Prepare post-disaster redevelopment plans which will reduce or eliminate the exposure of human life and public and private property to natural hazards;	
9. Increase the amount of public access to the beach or shorelines consistent with estimated public needs;	
10. Provide for protection, preservation, or sensitive reuse of historic resources; and	
11. Establish level of service standards, areas of service and phasing of infrastructure in the coastal planning area.	
(c) The element shall contain <u>one or more policies for each objective and shall identify regulatory or management techniques</u> for:	
1. Limiting the specific impacts and cumulative impacts of development or redevelopment upon wetlands, water quality, water quantity, wildlife habitat, living marine resources, and beach and dune systems;	
2. Restoration or enhancement of disturbed or degraded natural resources including beaches and dunes, estuaries, wetlands, and drainage systems; and programs to mitigate future disruptions or degradations;	
3. General hazard mitigation including regulation of building practices, floodplains, beach and dune alteration, stormwater management, sanitary sewer and septic tanks, and land use to reduce the exposure of human life and public and private property to natural hazards; and incorporating the recommendations of the hazard mitigation annex of the local peacetime emergency plan and applicable existing interagency hazard mitigation reports. Incorporating recommendations from interagency hazard mitigation reports shall be at the discretion of the local government;	
4. Hurricane evacuation including methods to relieve deficiencies identified in the hurricane evacuation analysis, and procedures for integration into the regional or local evacuation plan;	
5. Post-disaster redevelopment including policies to: distinguish between immediate repair and cleanup actions needed to protect public health and safety and long-term repair and redevelopment activities; address the removal, relocation, or structural modification of damaged infrastructure as determined appropriate by the local government but consistent with federal funding provisions and unsafe structures; limiting redevelopment in areas of repeated damage; and, policies for incorporating the recommendations of interagency hazard mitigation reports, as deemed appropriate by the local government, into the local government's comprehensive plan when the plan is revised during the evaluation and appraisal process;	
6. Identifying areas needing redevelopment, including eliminating unsafe conditions and inappropriate uses as opportunities arise;	
7. Designating coastal high-hazard areas and limiting development in these areas;	
8. The relocation, mitigation or replacement, as deemed appropriate by the local government, of infrastructure presently within the coastal high-hazard area when state funding is anticipated to be needed.	
9. Establishing priorities for shoreline land uses, providing for siting water-dependent and water-related uses, establishing performance standards for shoreline development, and establishing criteria for marina siting, including criteria consistent with the countywide marina siting plan if adopted by the local government, which address: land use compatibility,	

9J5-012 Requirements	Response in Port Master Plan
	availability of upland support services, existing protective status or ownership, hurricane contingency planning, protection of water quality, water depth, environmental disruptions and mitigation actions, availability for public use, and economic need and feasibility;
10. Providing, continuing, and replacing adequate physical public access to beaches and shorelines; enforcing public access to beaches renourished at public expense; enforcing the public access requirements of the Coastal Zone Protection Act of 1985; and providing transportation or parking facilities for beach and shoreline access;	
11. Historic resource protection, including historic site identification and establishing performance standards for development and sensitive reuse of historic resources;	
12. The orderly development and use of deepwater ports, if applicable, including how the local government shall cooperate with the deepwater port to resolve problems in transportation, land use, natural and man-made hazards, and protection of natural resources. Include a procedure to resolve inconsistencies between the local government comprehensive plan and the deepwater port master plan through the dispute resolution process as provided under Section 186.509, F.S., which is to be utilized in the event the local government and a deepwater port are unable to resolve the inconsistencies;	
13. Ensuring that required infrastructure is available to serve the development or redevelopment in the coastal planning area at the densities proposed by the future land use plan, consistent with coastal resource protection and safe evacuation, by assuring that funding for infrastructure will be phased to coincide with the demands generated by development or redevelopment;	
14. Protecting estuaries which are within the jurisdiction of more than one local government, including methods for coordinating with other local governments to ensure adequate sites for water-dependent uses, prevent estuarine pollution, control surface water runoff, protect living marine resources, reduce exposure to natural hazards, and ensure public access; and	
15. Demonstrating how the local government will coordinate with existing resource protection plans such as resource planning and management plans, aquatic preserve management plans, and estuarine sanctuary plans.	
Section (4) Local governments within the coastal area that participate in a countywide marina siting plan shall include the marina siting plan as part of this element. NOT APPLICABLE TO THIS PORT MASTER PLAN	
<i>Specific Authority 163.3177(9), (10) FS. Law Implemented 163.3177(1), (5), (6)(g), (8), (9), (10), 163.3178 FS. History–New 3-6-86, Amended 10-20-86, 3-23-94.</i> wetlands, water quality, water quantity, wildlife habitat, living marine resources, and beach and dune systems;	

**PAGE INTENTIONALLY LEFT BLANK**

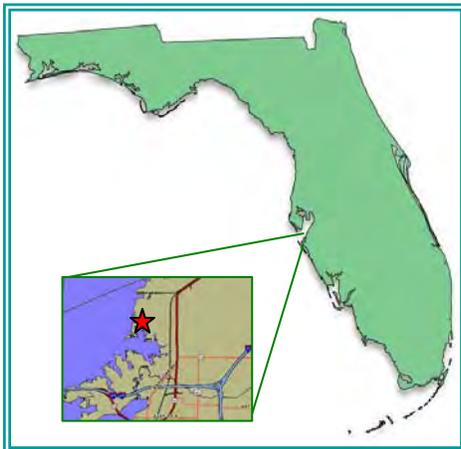
# CHAPTER I INTRODUCTION



**PAGE INTENTIONALLY LEFT BLANK**

## Introduction

This *Port Manatee Master Plan, 2009*, consistent with the requirements of Chapter 163, Florida Statutes (F.S.), and Rule 9J-5, Florida Administrative Code, provides a framework for Port Manatee's maintenance and expansion program through the next decade and beyond. In so doing, it builds on previous planning documents that served to take the Port to its current level of development and looks far into the future to identify the Port's potential opportunities and needs to expand and diversify operations and continue generating local, regional, and statewide economic benefits.



As a semi-rural port located in a rapidly developing area of Manatee County, Port Manatee is committed to preserving its competitive advantages through farsighted planning and intergovernmental coordination and cooperation. Further, as part of the larger Tampa Bay region, the Port is committed to ensuring that its activities enhance the economic development and growth of the entire region, while maintaining a position of environmental stewardship. This commitment is reflected in the Port's mission statement and in the goals, objectives, and policies that will govern the Port's development over the planning period.

### **A. Port Manatee Planning Area**

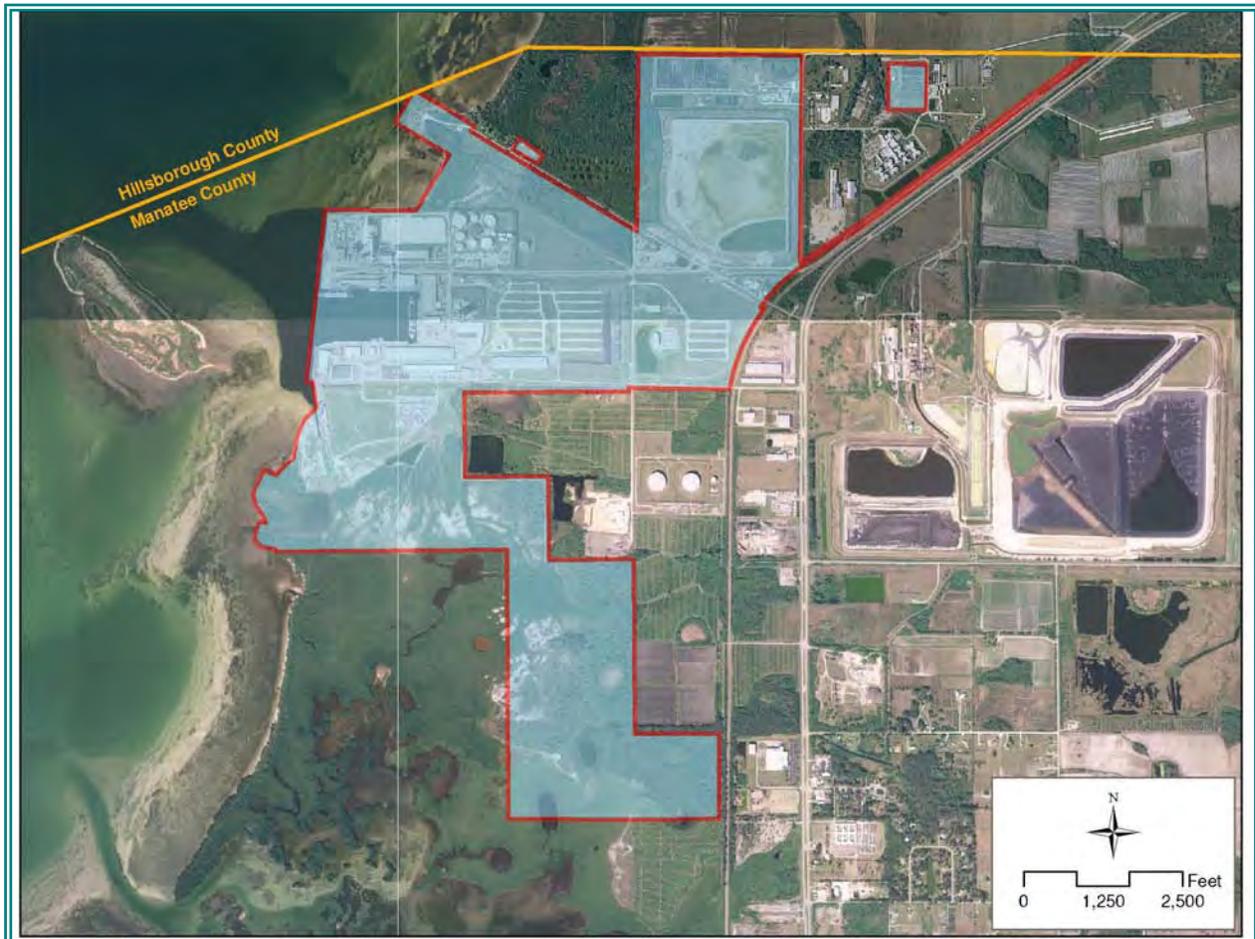
Port Manatee is located in the northwestern corner of Manatee County, close to the Manatee-Hillsborough County line. The Port lies between Tampa Bay on the west and U.S. 41 on the east. Vacant privately owned parcels of land lie to the south, along with property the Port has dedicated as a conservation easement.

The Port's access channel connects with the federal channel in Tampa Bay, which in turn connects with the Gulf of Mexico, a distance of approximately 24 miles. U.S. 41 and a parallel main line of the CSX Transportation (CSXT) railroad are both situated a few hundred feet from the Port and provide intermodal rail and highway access to the Port facilities.



The current Port boundaries are shown in Figure I.1. In addition to the area within these boundaries, this planning initiative considers properties whose acquisition would benefit Port

operations. The Port's planning area also includes adjacent properties devoted to Port-related uses as well as other properties within the newly created Encouragement Zone, discussed later in this chapter.



**Figure I.1**  
**Port Manatee Boundaries**

## B. Port History

### 1. The Early Years: Phosphate and Petroleum

In the early 1960s, a group of local business leaders envisioned the creation of a deepwater seaport to expand Manatee County's economic base. Accepting a port feasibility study that evaluated the concept, the Manatee County Board of County Commissioners acquired 357 acres near a former ferry landing in the Piney Point area of northwestern Manatee County. The county approved the establishment of the Piney Point Port and Industrial Complex, subsequently renamed Port Manatee.

In 1963, the Board of County Commissioners adopted a "Resolution Creating and Establishing the Manatee County Port Authority," pursuant to the provisions of the Port Facilities Financing Law (Chapter 315, F.S.). Manatee County voters approved a referendum to create the Port in May 1964. Court cases filed by nearby communities delayed development efforts for several years, but, in 1966, the initial lands for Port Manatee were purchased. Subsequently, the Florida Legislature passed the "Manatee County Port Authority Act" (Chapter 67-1681 of the Laws of Florida) which codified the Port Authority's powers and enabled it to issue revenue bonds for the construction of port facilities.

*"In just 38 years, Port Manatee has grown from a good idea into a major seaport."*

David L. McDonald, PPM  
Executive Director

In 1967, the Port Authority authorized \$8.6 million in revenue bonds to acquire land and construct Port Manatee. The bonds were to be repaid from Port revenues and the county's portion of the state's pari-mutuel funds, or "racetrack funds." Also in 1967, a master plan prepared for the Port recommended a north basin extending eastward almost to the CSXT main line track, and a smaller slip to the south, creating a 22-berth configuration. Phase I of this plan provided for the construction of a portion of the northerly basin. This provided four 700-foot berths and is the basic Port configuration that exists today.<sup>1</sup>



In 1969, the Port Authority issued \$6 million of the previously authorized revenue bonds. With these funds, the Port dredged the entry channel and basin and constructed the berths on the north side of the basin for dry bulk, general cargo, and petroleum products. The Interstate Commerce Commission for railroad operations issued a Certificate of Public Convenience and Necessity to the Port Authority in October 1969 entitling the Port to initiate its own terminal rail service.

The Port was officially dedicated on October 30, 1970; but the first ship to call at the new Port, the 576-foot *M/V Fermland*, delivered 2,000 tons of Korean plywood to VanPly, Inc. on August 7, 1970, 84 days before the dedication. The initial year, cargo movement through the Port was about one

<sup>1</sup> The layout of the Port and the locations of the berths discussed in this chapter are shown in Figure II.5 in Chapter II.

million tons, primarily petroleum cargo brought in by Belcher Oil Company (now TransMontaigne), which constructed storage tanks for 1.5 million barrels of petroleum on the northeast side of the basin.

Between 1969 and 1974, the Port added several facilities, including Berth 8 on the east end of the basin and Berth 5, a barge berth, on the west side. Florida Power & Light Company began planning construction of a 30-inch petroleum pipeline to service its Parrish generating plant. In addition, a transit shed with 30,000 square feet of space was built at Berth 8. Through the '70s, the Port primarily served the petroleum and phosphate industries.

## **2. Development and Diversification through the 1980s**

The 1980s saw the Port develop additional infrastructure and diversify its tenant and commodity mix. In 1985, the Port refunded its revenue bonds to refinance prior debt and fund more capital projects. These projects included the construction of the south entrance road and the installation of reefer plugs at Berth 10 on the south side of the basin for chilled containerized cargo.

Berth 7 on the north side of the basin was expanded from breasting cells to a continuous 620-foot dock to serve as a marginal wharf with rail runways for dry bulk gantry loading equipment. The railroad was upgraded to accommodate two more powerful engines and a computerized truck scale was also installed during this period.

On the east end of the basin, Berth 8 was improved for general cargo. Berth 6 was enlarged and Berth 11 was built for general cargo. More paved outside storage was provided along the east and south sides of the basin. A fresh fruit terminal/warehouse was constructed for Del Monte Tropical Fruit and a second warehouse was built for Banana Services, Inc., d/b/a/Banacol.

Berth 12 was constructed as a barge berth to serve the Paschen prestressed concrete operation for the construction of the Sunshine Skyway Bridge.

## **3. Continued Expansion in Recent Decades to Serve Growing Market Demands**

Since the mid-1990s, Port Manatee has continued to improve and expand its assets to serve growing market demands. Currently, Port facilities comprise approximately 1,100 acres of land, a ship basin 1,588 feet long by 787 feet wide, and an access channel 2.9 miles long, 400 feet wide and 40 feet deep, which links the ship basin with the federal channel in Tampa Bay.



With the completion in 2008 of Berths 4 and 5, the Port has nine improved berths totaling almost 6,702 linear feet. Another 1,584 feet of berth space will be available with the extension of Berth 12. A roll-on, roll-off berth accommodates trailers and rolling equipment. Five of the berths have underground pipelines installed to handle the loading and discharge of petroleum products.

The Port's Class III Terminal Railroad, with two switch engines and approximately 8 miles of track, connects with the CSXT Railroad. Warehouse space available for the storage of general cargo products totals more than one million square feet, including 30,000 square feet of freezer and 202,000 square feet of chill space as well as 168 reefer plugs. Other facilities include the terminal previously used for cruise operations, the Port's administrative offices, the Intermodal Center, and the new Access Control Center at the Port's north entrance.

In 2003, Chapter 67-1681 and subsequent amendments to the Laws of Florida relating to Port Manatee were recodified, reenacted, amended, and repealed and a new Manatee County Port Authority Act recreated and reenacted (Chapter 2003-351, House Bill No. 829, Laws of Florida).

## **C. Corporate Environment**

Port Manatee's diversification and expansion program over the past decades has created a solid corporate mix of long-term and more recent terminal operators, stevedores, agents, and other users. Each of the Port's primary dry bulk, break-bulk and liquid bulk terminal operators as well as the companies offering liner and stevedoring services have significant global reach, as evidenced by the brief profiles below.



- **Kinder Morgan Bulk Terminals, Inc.**, which moves phosphate product through Port Manatee, is one of the largest energy transportation, storage, and distribution companies in North America. It owns an interest in or operates approximately 43,000 miles of pipelines that transport primarily natural gas, crude oil, petroleum products, and CO<sup>2</sup>; operates more than 150 terminals that store, transfer, and handle products like gasoline and coal; and provides natural gas distribution service to over 1.1 million customers. KMI owns the general partner interest of Kinder Morgan Energy Partners one of the largest publicly traded pipeline limited partnerships in the United States. Besides its dry bulk terminal at Port Manatee, the company has several other terminals in Florida (Tampa and Fernandina) and one in Virginia. In addition, it has liquid bulk facilities, including product pipelines, in Ocala and Orlando as well as in Brunswick, Georgia.
- **Eastern Portland Cement Corp.** Eastern Cement, part of Schwab Industries, Inc., imports Type I and Type II cement from a variety of sources, including Turkey, Thailand, Venezuela, Brazil, and China. The company is one of the identified providers of cement products that the Florida Department of Transportation (FDOT) uses for its construction activities. Eastern, which has been at the Port since the 1980s, is updating its cement unloading equipment to increase its throughput and is planning to add aggregate to its commodity mix.
- **Florida Rock Industries, Inc.** Florida Rock Industries, Inc., whose predecessors began business in 1929, was incorporated in Florida in 1945 and was acquired by Vulcan Materials in November 2007. The company and its subsidiaries are principally engaged in three business

segments: construction aggregates, concrete products, and cement and calcium products. Operations are conducted in Florida, Virginia, Georgia, Maryland, Washington D.C., Tennessee, Alabama, North Carolina, and Delaware. The company also has an investment in a crushed stone plant in Charlotte County, New Brunswick, Canada.

Of particular application to Port Manatee, the Company's cement segment operates a cement plant in nearby Newberry and a limestone grinding or calcium operation in Brooksville. Cement and granulate blast furnace slag are imported into Tampa; some of the cement is sold and the balance is either blended or bagged. The slag is ground and either sold or blended and then sold. Clinker, which is an unground cement, is imported into Port Manatee and is ground into cement and sold. The limestone grinding plant in Brooksville provides product for the animal feed industry.



- **Vulcan Materials Company**, headquartered in Birmingham, Alabama, entered into a long-term lease with Port Manatee in 2000. Since that time, the Vulcan Materials Florida Division has built a construction aggregates distribution facility at the Port. Vulcan operates deepwater sales distribution yards throughout the U.S. Gulf Coast. Through these facilities, Vulcan distributes high quality limestone produced at a quarry, operated by an affiliated company, on Mexico's Yucatán Peninsula. In Florida, Vulcan operates a quarry at Brooksville, a sand mine in Polk County, and a deep-water distribution facility at Tampa. As noted above, on November 16, 2007, Vulcan Materials Company completed its acquisition of Florida Rock Industries, Inc. which is expected to diversify the geographic scope of Vulcan's operations and enhance its presence in Florida markets and in other high-growth Southeast and Mid-Atlantic states.
- **TransMontaigne Product Services, Inc.** TransMontaigne, (formerly Coastal Fuels and before that, Belcher Oil Company, one of the Port's oldest terminal operators) is part of the TransMontaigne Partners, L.P., family of companies, headquartered in Denver, Colorado. TransMontaigne Partners L.P., a refined petroleum products terminal and pipeline entity, owns terminal facilities in Tampa, Port Manatee, Fisher Island (Miami), Port Everglades, Canaveral, and Jacksonville. In addition to the Florida facilities, the company operates in Southwest Missouri and Northwest Arkansas.

Transmontaigne provides integrated terminal, storage, pipeline, and related services for companies distributing and marketing refined petroleum products and crude oil. Commodities handled include light refined products such as gasoline, distillates (including heating oil), and jet fuels; heavy refined products such as residual fuel oils and asphalt; and crude oil. The Port Manatee facility provides bunkering services for some of the Port's other tenants.

- **Citrosuco North America, Inc.** Citrosuco is one of the world's leading orange juice producers and shippers from Brazil. The company operates a fleet of four specialized tanker vessels that call at Port Manatee with concentrate and not-from-concentrate juice for use in Tropicana's Bradenton facilities and others located across Florida's citrus processing belt. Citrosuco North

America is the company's North American sales and operating entity, importing and exporting juice products.

- **Logistec USA Inc.** Logistec is one of the largest cargo-handling companies on Canada's East Coast and a growing player on the U.S. East Coast. The company employs 779 people: 349 in Canada and 430 in the U.S. The company's principal activities are marine services to industrial and shipping companies. These services consist of cargo handling and terminal operations. Other marine services include coastal transportation of cargo to Canadian Northern communities and agency services to foreign owners and operators of vessels. The company provides cargo-handling services to the marine and industrial sectors at 22 ports in Eastern Canada, the Great Lakes, and the Eastern United States. Its core business is stevedoring, the loading and unloading of ships using specialized equipment and experienced personnel. Cargoes handled typically include forest products, metals, dry bulk, fruits, grains, bagged cargoes, containers, and general cargoes.
- **Fresh Del Monte Produce Inc.** Del Monte, which provides liner service at Port Manatee, is one of the world's leading vertically integrated producers, marketers and distributors of fresh and fresh-cut fruit and vegetables as well as a leading producer and distributor of prepared fruit and vegetables, juices, beverages, snacks, and desserts in Europe, the Middle East, and Africa. The company grows, packs, ships, and distributes its own products.



Del Monte's specialty is the production of fruits such as pineapples, melons, bananas, plantains and other exotic produce, all sourced from its own farms and from select third-party growers under contract. The most important production and supply sources are located mainly in Costa Rica, Guatemala, Colombia, and Ecuador.

Fresh Del Monte Produce has 28 distribution centers in North America, including several in Florida, which provide a variety of services, including ripening, sorting, repacking, fresh cut processing, and delivery. The company imports its products through five ports: two on the East Coast (Camden and Gloucester in New Jersey), two on the Gulf Coast (Galveston and Manatee), and one on the Pacific Coast (Hueneme, in California).



- **Federal Marine Terminals, FMT,** which provides stevedoring operations at the Port, has been handling cargoes in the Great Lakes and St. Lawrence River and along the East and Gulf coasts since 1960. In addition to its facilities at Port Manatee, FMT serves ports in Indiana, Wisconsin, Ohio, Maine, New York, and North Carolina as well as in Canada. Commodities handled range from steel and machinery to forest products and containers.
- **Gearbulk, Inc.** Gearbulk is an international shipping company, which is owned 60 percent by the Norwegian Kristian Gerhard Jebsen family and 40 percent by Mitsui O.S.K. Lines and

provides transportation services for various industrial sectors. The company operates the world's largest fleet of open-hatch gantry craned vessels, specifically designed and equipped to transport unitized cargoes such as forest products and non-ferrous metals. Gearbulk is also involved in the transportation of conventional bulk cargoes and in terminal operations. It has terminals in Belgium, Argentina, the Netherlands, Taiwan, Malaysia, China, and Brazil. At Port Manatee, Gearbulk provides service for the import of lumber, plywood, aluminum, steel, wood pulp, and wrapped finished lumber; Federal Marine Terminals provides the stevedoring operations for Gearbulk. Port Manatee Forestry Terminal warehouses lumber requiring covered storage.

- **Liberty Terminals.** Liberty Terminals provides terminal operations and stevedoring and warehousing operations. In addition to its operations in Savannah, the firm provides similar services in Georgetown and Charleston, South Carolina; and in Tampa.
- **SeaBridge Freight.** SeaBridge is Port Manatee's newest tenant, having recently initiated two-way container-on-barge service to the Port from Brownsville, Texas. The initial shipments between the two ports include the export of concrete light poles and the import of tile and flooring from Mexico. Ports around the country are considering opportunities to implement "short-sea" shipping, using the nation's marine highway system. SeaBridge's four-day scheduled service marks the initiation of this type of energy-efficient operations at Port Manatee.

In February 2009, Fort Lauderdale-based **HySea Shipping** initiated ten-day containerized and break-bulk cargo service between the Port and Puerto Cortes, Honduras, marking the continued expansion of the Port's container operations.

In addition to the tenants providing diverse maritime services, Port Manatee also serves two significant energy providers: **Florida Power & Light** (FPL) and **Gulfstream**. The synergies between these two companies have helped expand the region's power generation capacity. FP&L has been able to add natural gas as a fuel at its existing oil-fired units thanks to the Gulfstream pipeline, which traverses the Gulf of Mexico from Mobile, Alabama, and enters Florida via Port Manatee.

Complementing FPL and Gulfstream in the energy field, **Port Dolphin Energy**, a Norwegian company, is planning to build a floating port 28 miles offshore for tankers to unload liquefied natural gas as well as a 42-mile pipeline to transport the gas to Port Manatee. The firm is in ongoing discussions with area residents from Anna Maria Island, Longboat Key, Holmes Beach, and Bradenton Beach about the routing of the pipeline which is being reconfigured to avoid disturbing the beach renourishment resources of these communities.

Also complementing FP&L and Gulfstream, **Vecenergy**, has purchased 240 acres adjacent to the Port, south of the FP&L tanks. In a two-phase operation, Vecenergy plans initially to install 13 250,000-barrel tanks to house gas, diesel, and ethanol products, followed by an expansion to 24 tanks. Vecenergy, a division of the Vecellio Group, provides services and products to an international customer base in established and emerging markets around the world.

In Florida, Vecenergy operates a liquid asphalt terminal at the Port of Palm Beach and will be initiating fuel-offloading services at Port Everglades as well as petroleum storage and distribution facilities at both ports. Vecenergy also provides fuel additive services to major oil companies offloading petroleum products at many ports, including Port Everglades. Through a partnership with BIDA, a leading European biodiesel technology firm, Vecenergy also has entered the biodiesel production industry.

Just outside of the Port boundaries, on U.S. 41, the **Port Manatee Commerce Center** (aka Federal Port Corporation) has 23 acres with 360,000 square feet of warehouse and office space. The company provides convenient storage for products that do not need to take up waterside acreage on the Port.

The property, across U.S. 41 from the Port's north entrance, is now owned by **HRK Holdings, LLC**. It will be used to store shipments of salt and salt products destined for the water treatment and agriculture industries and to store dredge material from the Port's Berth 12 expansion. It is expected that other users will be attracted to and accommodated on this property, with its proximity to the Port.

## **D. Planning Background**

The Manatee County Port Authority has a positive history of long-range planning. The initial master plan for the newly created Port dates back to 1966. This plan was followed by subsequent initiatives in 1973, 1979, and the early 1980s, as Port development took on new impetus. After the Local Government Comprehensive Planning Act was passed in 1985, which mandated that port master plans be prepared for incorporation into an element of the local government's comprehensive plan, the Port Authority renewed its planning efforts. In 1987, a Citizens' Advisory Committee was formed to consider appropriate goals and objectives for the Port in five areas: planning, transportation, business and finance, and trade development and to address the balance between the environment and economic growth. Preparation of the resulting *Port Master Plan* was authorized in 1988 and completed in 1989 for inclusion in the *Coastal Management Element* of the *Manatee County Comprehensive Plan*.

Since the early 1990s, the following strategic, marketing, business, and master plans have been initiated to guide Port development in a financially sound and environmentally responsive manner. These plans, with their focused goals, have served as the foundation for the current *Port Master Plan, 2009*.

### ***1. Manatee County Port Authority Strategic Plan FY 1993-94 to FY 1998-99***

On January 20, 1994, the Port Authority approved a five-year strategic plan. The Port's mission at that time was expressed as:

*Development and operation of Port Manatee as a competitive and viable deepwater shipping port to stimulate local development and serve local, state, national and international shipping needs generated by local economic development. Also, operate Port Manatee with due consideration of environmental sensitivity, with systematic land use planning.*

To achieve this mission, this plan established five goals, with accompanying objectives, and policies, which provided direction for Port development and expansion.

- **GROWTH GOAL:** *Solicit and encourage development and plan for its implementation.*
- **MARKETING GOAL:** *Develop business strategies and promotional methods to assist Port growth.*
- **SAFETY GOAL:** *Provide a safe operating environment.*
- **ENVIRONMENTAL GOAL:** *Keep the Port environmentally sensitive and responsive to growth and maintenance activities.*
- **FUNDING GOAL:** *Insure the Port maintains a fiscally sound posture as it grows and develops.*

## **2. 1996 Trade Development and Marketing Plan**

In December 1995, R.K. Johns and Associates completed the *1996 Trade Development and Marketing Plan*. That plan described the Port as a diversified ocean and intermodal hub. While primarily serving the Southwest Florida market, the Port was seen to have the potential of reaching other markets within the state and beyond. One of the major goals identified by the report was the retention of current Port customers.

The critical conclusion of this report was that the Port should follow a systemic approach to growth, building the berths and infrastructure required to realize its potential as limited facilities will limit opportunities regardless of the marketing strategy followed.

## **3. A Strategic View of Port Manatee's Future, 1996**

In 1996, when the Port had an opportunity to leverage funding for an array of capital improvement projects with matching grants under the Florida Ports Financing Commission's 1996 bond program, authorized under Section 320.20(3), F.S., the Port Authority wished to obtain consensus as to the Port's future before proceeding with the program. The resulting initiative, often referred to as the Port's Mission Plan, reviewed current conditions at the Port, including cargo and passenger trends, tenants' perspectives, and the economic impact of Port Manatee activities. The views of Authority members, staff, and tenants were identified at a vision workshop to build consensus as to the Port's future. This collaboration led to the preparation of a new mission statement, agreement as to the Port's capital improvement program, three intertwined strategies for success, three goals with accompanying objectives and policies, and financing options.

The mission statement approved by the Port Authority in 1996 as an outcome of this planning process continues to guide Port development and expansion to this day:

*The mission of Port Manatee is to be a powerful catalyst of countywide economic growth and hub of trade-related activity, by developing diversified and competitive deepwater shipping facilities and conducting maritime related activities in a profitable and environmentally responsive manner.*

The three goals identified in the *Mission Plan* were:

- ***Growth Goal:*** Solicit and encourage development and plan for its implementation.
- ***Safety Goal:*** Provide a safe operating environment.
- ***Environmental Goal:*** Keep the Port environmentally sensitive and responsive to growth and maintenance activities.

The three intertwined strategies the Port Authority agreed upon to achieve Port success were expansion, diversification, and profitability. The expansion strategy related to both the physical requirements to expand the Port and the human requirements to seek expanded business. Some of the actions recommended for the Port expansion included strategies to target and pursue “natural markets” such as Central America and the Caribbean, to strengthen partnerships with environmental agencies, to improve the Port’s intermodal network, and to develop an education program with local schools.

Diversification was identified as the underlying reason for the Port’s increased waterborne revenue on a per-ton basis as well as protection from wide swings in revenue due to changing economic conditions. The recommended diversification strategies included identifying desired businesses, redefining the Port’s image to attract potential new users; targeting expansion of the supporting network of shippers, freight forwarders, and others; and creating an “incubator program” to encourage small businesses.

The pivotal element of the three strategies was identified as profitability. Port Manatee does not have taxing authority. Without taxing ability, the Port’s primary sources of revenue are grants and operating revenues. Capital improvements must be assessed in terms of their economic return on investment, among other things. The recommended profitability strategies actions included paying constant attention to Port efficiencies, evaluating the internal Port organization, developing a comprehensive investment-decision matrix, and continuing to search for innovative financing methods.

Other keys to the Port’s success included its role within the community, and the desire of the Port Authority to be:

- An active participant in the economic well-being of Manatee County.
- A leader, motivator, and catalyst for economic growth.
- A partner in fulfilling community needs, creating jobs and business opportunities, and promoting environmental responsibility.

As part of this strategic visioning process, an economic impact study was prepared which validated the Port’s significant role as an economic generator for Manatee County and the adjacent region.

#### **4. Manatee County Port Authority Business Plan 1996-2000**

The Port itself prepared this business plan to update the *1994 Strategic Plan* and identify the candidate projects for inclusion in the Section 320.20(3), F.S., bond program. The following nine projects, needed for Port growth and development, were approved for inclusion in the program:

- Berth 9 Warehouse/Cruise Terminal.
- Intermodal/Container Yard.
- Berth 5.
- Berth 12.
- Cruise Terminal at Berth 12.
- Berth 4.
- Cold Storage at Berth 9.
- Phase II Dredging.
- Mobile Container Crane.

In addition to these nine projects, two other types of needed improvements were identified: infrastructure and opportunity. The infrastructure improvements included roads, rail and siding, warehousing and open storage, and additional space for Port maintenance and administration. Opportunity improvements included additional chill/cold storage, container yards, cranes, and intermodal facilities.

### **5. Manatee County Port Authority Business Plan Addendum 1999-2003**

The *1996 – 2000 Business Plan* was considered a working document subject to periodic revisions, one of which occurred in August 1999 when the Port Authority adopted an addendum to the Plan. Through June 1999, the Port had expended approximately \$14 million on five of the nine approved projects. Two of the projects, the Warehouse/Cruise Terminal Facility and the Intermodal Container Yard (including the chill conversion in Warehouse 2 and the Harris Intermodal Complex), were completed. Berths 4, 5, and 12 were in the permitting phase. Also, the adjacent Hendry property had been acquired.

The addendum created a ten-year capital improvement program with three priorities, A, B, and C. Priority A projects were anticipated to be funded within three years. These included:

- Intermodal Access and Improvements to the newly acquired Port property, Phase I.
- Cold Storage Facility.
- Berth 12, Phase I.
- Berth 5 Improvements.

Priority B projects were expected to be implemented within 3 to 5 years, with the understanding that changing market conditions and funding availability could shift the priorities. These projects included:

- Intermodal Access and Improvements to newly acquired property, Phase II.
- Cruise Terminal at Berth 12.
- Berth 4 Construction.
- Berth 12, Phase II.
- Maintenance Dredging.
- Channel Dredging, Phase II.
- Additional Roll-On/Roll-Off.
- Conversion of Warehouse #1 to Chill.
- Upland Property Acquisition.

Priority C projects were strictly subject to market conditions and funding availability. These included:

- Intermodal Distribution Center.
- Acquisition of two Spud Barges.
- Intermodal Container Terminal.
- Truck Holding and Queuing Area.
- Rail Track Extension.
- Rail-Mounted Gantry Loader.
- Intermodal Infrastructure Development.

- Additional Holding Tracks.
- Relocation of Vehicle Control Gates.
- Center Road Construction.

The Business Plan also reviewed project revenue generation and financing recommendations.

## **6. Intermodal Land Use Study, January 1998**

The Port Authority commissioned an *Intermodal Land Use Study* in January 1998. This study addressed future site development needs within the Port, looking at the functional land uses for the Port's various business sectors – bulk, container, specialty, cruise – and their interrelationships with intermodal cargo movements, site circulation, and site access. The study recommended a generalized land use concept addressing the needs of the business sectors, phased in stages to serve the growth in shipping activities.

The *Intermodal Land Use Study* served as a blueprint for the development of the Port in response to market demand opportunities. Several of its recommendations are reflected in the Port's *2002 General Development Plan*

## **7. Strategic Plan, General Development Plan, and Chapter 163 Master Plan, December 2002**

The *Chapter 163 Master Plan*, dated December 2002, and its companion *2002 Strategic Plan* and *2002 General Development Plan*, provided an updated comprehensive perspective on Port Manatee's mission, goals and objectives, and market opportunities. These documents also identified the Port's planned development and expansion program to achieve the defined goals and objectives and satisfy the anticipated market demand.

Again, in conjunction with this planning update, an economic impact analysis was prepared in February 2003 to identify the impact of Port operations in Manatee County.

## **8. Truck Access and Service Facility Study, December 2003**

With the expansion of Port operations and the anticipated continued growth, the Port Authority desired to consider the development of a truck servicing facility located at or near the Port. Such a facility could accommodate several useful functions, including fueling, driver amenities and services, and temporary trailer storage as well as other capabilities. The *Truck Access and Service Facility Study* explored such opportunities as they relate to the physical and operational impacts on the access points to the Port. In addition, the study considered access issues with an eye towards protecting U.S. 41, the Port's primary access route. As cited repeatedly in workshops with Port staff and the Port Authority as well as with Port tenants, keeping high-speed access to and from the Port is an essential part of the Port's vision.

The study concluded with two objectives and accompanying action items:

- Objective 1: To maintain high-speed access to the Port.
- Objective 2: To develop truck-service facilities consistent with Port security, other planning requirements, and user needs.

## **9. Master Plan Update, December 2005**

The Port's most recent adopted planning document is the *Chapter 163 Plan* Port staff prepared in December 2005 as an update to the previous Plan. This document was adopted into the *Manatee County Comprehensive Plan* in 2003. The goals, objectives, and policies included in that Plan, have been updated in this *Port Master Plan, 2009* (see Chapter V) for incorporation into the county's *Comprehensive Plan* in 2009.

## **10. Port Manatee Master Planning Concepts, February 2008**

As the prelude to preparing this *Port Manatee Master Plan, 2009*, the consultant team of PBS&J, Inc., R.K. Johns & Associates, Inc., Wilbur Smith Associates, and J.D. Sanchez Consulting, Inc., explored planning concepts to provide the Manatee County Port Authority with alternatives for the short-term and long-term expansion of the Port. From these alternatives, several concepts were retained for refinement into the five- and ten-year master plan presented in this document and for the Port's longer-term build-out future, beyond the five- and ten-year time frame.

## **E. Strategic Visioning and Tenant/Stakeholder Outreach Program**

Throughout its planning history, the Manatee County Port Authority has been committed to open discussion with the many entities that have a stake in Port Manatee's success. Consistent with this commitment, as the first step in this master planning initiative, the Port Authority held a visioning session with tenants, stakeholders, and public agencies in September 2006 to hear their thoughts about current Port operations and their views of the future. Subsequently, in March 2007, as the master planning process got under way, interviews were held with many of the Port's tenants and stakeholders to understand their operational needs over the planning horizon.

### **1. Strategic Visioning**

Approximately 70 people attended the Port Authority's September 2006 daylong visioning work session. Attendees included Port tenants, users, and staff; representatives from agencies such as FDOT and the U.S. Army Corps of Engineers (ACOE); and other interested entities such as the Tampa Bay Pilots Association.

The morning was devoted to a presentation summarizing the Port's accomplishments in the past decade and a glimpse of future opportunities, followed by a discussion of broad policy and planning subjects important to the Port's future development and expansion. These discussions set the tone for the afternoon's facilitated exchange about more specific planning topics. They also provided confirmation of how the Port has lived up to the mission statement crafted in 1996; how it has implemented its strategies for success; and how it has fulfilled its civic, environmental, operational, and financial responsibilities.

**Policy and Planning Framework.** The policy and planning topics summarized below created a framework for the Port's future development and expansion decisions, as presented in Chapter IV:

- **The importance of communication.** Port Manatee has received many awards for its communication initiatives. The Port Authority's philosophy about communication extends to the importance of sharing its plans with its tenants and users and having two-way discussions, as exemplified by the visioning session itself.
- **Environmental stewardship.** Port Manatee has also received many awards for its environmental initiatives and the Port Authority believes that integrity and ingenuity are the keys to achieving the desired balance between the Port's development needs and its commitment to the environment.
- **Operating as a business.** The Port Authority's philosophy is that the Port must operate as a business. This philosophy, as implemented over the past ten years, has resulted in a thriving enterprise. The consensus is that the Port, like any business, must pay its way, with the help of grants needed to implement costly capital improvements.
- **Community involvement.** The Port's success in creating the Propeller Club and receiving an award as the "Southwest Chapter of the Year" is just one example of initiatives to involve the community's business interests and the public with the Port. Other examples include the Port's tram tours, taken by more than 5,000 people, and the annual Chamber of Commerce's "Ship Shape Showcase."
- **"Money goes to a Plan."** The ten years since the previous visioning initiative and planning process, which led to the Port's participation in the 1996 Florida Ports Financing Commission bond program, under Chapter 320.20(3), F.S., have brought significant operational growth to the Port. This growth - more than \$200 million in capital improvements, paid for in part with 50 percent matching grants -- has increased the Port's local, regional, and statewide economic impact.
- **Corridor preservation.** At the time of the visioning session, the state was looking at a direct Port Manatee to I-75 connector and the Port Authority encouraged FDOT to pursue what is now an ongoing Planning, Development and Environmental (PD&E) study for the preferred corridor option. Enhancing Port access has the additional benefit of facilitating regional mobility and hurricane evacuation.

The Port does not want to be in the same situation as other urban ports which find themselves constrained by surrounding land uses that prevent expansion and constrain access. In the immediate term, the Port must maintain current U.S. 41 access and look at options to preserve a rail corridor, perhaps running east and west.

- **Future energy needs.** The Port, like similar economic engines, relies on a stable energy supply to function efficiently and safely; this is not only essential for Port efficiency, but also for energy conservation and sustainability.
- **Opportunities to diversify the Port's business mix and expand the Port's container throughput.** The impacts of changing trade routes, larger ships, possible new commodities, future market conditions, and expanding competition were all considered. Of

particular importance was a discussion of how expanded container operations would fit into the Port's mix of existing cargo.

- **Regional cooperation.** However the Port chooses to expand, new opportunities exist for all Port users. Panama Canal expansion, scheduled for completion in 2014, is expected to enhance options for bulk shippers as well as for container carriers. Canal expansion should also stimulate new regional cooperation in Tampa Bay to explore jointly whatever improvements are required to allow larger ships to call at both Port Manatee and the Port of Tampa. The opportunities are not to be perceived as a competition in Tampa Bay, but, rather, as "a rising tide that lifts all boats."

**Development and Expansion Considerations.** Specific planning and operational considerations that would influence Port development and expansion decisions were also discussed during the strategic visioning session. These included such questions as

- How far ahead should the Port Authority plan?
- What kind of cargo is appropriate? What about tenant diversity?
- Is cruise an option for the Port?
- How can the Port Authority enhance economic development and job growth in the community and beyond?
- How can the Port Authority preserve Port waterside and landside access?
- What types of technology should the Port invest in to enhance efficiency and security?
- How do the participants envision the Port's future growth? What is most important?

**Summary of Strategic Themes.** The answers to the above questions served to define several strategic themes for Port Manatee's future, both from Port Authority members and from the many other session participants. From these themes, a vision for the Port's continued success emerged. These broad themes, which go beyond specific capital improvements, include:

- A broad planning horizon.
- Optimal capacity expansion.
- A proactive work force development program.
- Economic development.
- Regional cooperation.
- Innovative funding strategies.

These themes are reflected in the Port's five- and ten-year maintenance and expansion plan presented in Chapter IV.

## 2. Tenant and Stakeholder Outreach

As a follow-up to the September 2006 visioning work session, the consultant team interviewed twenty-five Port tenants and stakeholders -- including representatives of the Tampa Bay Pilots,

the ACOE, CSXT, and others -- in January 2007. The consensus from the interviews was that operational efficiencies and throughput could be improved with several comparatively low-cost additions and completion of ongoing projects:

- The purchase of one or more shore cranes to speed loading and unloading, thereby clearing berths more quickly. The Port, in a public/private partnership with Logistec, subsequently acquired a mobile harbor crane, which was dedicated in January 2008.
- Additional warehousing that is less dispersed than at present.
- Circulation and queuing improvements (i.e., a staging area and traffic flow plan) to facilitate pick-up and discharge.
- Navigational improvements to avoid delays in entering and leaving Port.
- Completion of ongoing projects: Berth 12, warehousing, paving, staging areas, traffic plan.

These recommendations are also reflected in the Port's five- and ten-year maintenance and expansion plan described in Chapter IV.

### 3. Program Conclusions

The comments from the strategic visioning and outreach program, as summarized below, were used to inform the master planning concepts presented to the Port Authority in February 2008<sup>2</sup> and subsequently refined in this *Port Manatee Master Plan, 2009*.

- The Port should enhance the efficient use of on-Port infrastructure, both to help existing users to grow and to attract potential new markets. It should manage berth occupancy, as berth availability is a critical operational factor.
- The Port should keep an open mind in pursuing expansion options. Expansion involves landward growth (extending Port boundaries), waterside growth (deepening channel and berths), and exploring possible off-site parcels or even off-shore opportunities. Waterside land should be maintained for valuable cargo by looking at off-site storage opportunities.
- The Port should maintain adequacy of the road and access system and pursue the strategic Port-I-75 connector.
- The Port should look at a plan for dredge material management and reuse, as a key element of dredging projects, and to free up space for more productive uses.
- If the Port is to expand, it should consider a proactive environmental mitigation program to address the impacts of expansion.

Finally, the Port should keep its mission statement as a valid guidepost for the future. It has served Port Manatee well in the ten years since its crafting, balancing Port development with environmental stewardship.

---

<sup>2</sup> See *Port Manatee Planning Concepts*, February 2008, prepared by PBS&J, Inc.

## **F. Encouragement Zone**

### **1. Background and Characteristics**

In the last decade, Port Manatee has experienced strong and diversified growth in the global marketplace. This growth, the result of the Manatee County Port Authority's prudent capital investment in strategic capacity-enhancing projects, has created thousands of jobs in Manatee County and the Port's extended hinterland and is generating several billion dollars of regional economic benefits (see Chapter VI).

Now, as the Port Authority looks to the future, it has perceived an opportunity that other, more urban seaports do not have. This is the opportunity to expand the Port's economic impact by creating incentives for owners of undeveloped property to the east and south of the Port to utilize their property for Port-related businesses in an innovative Port Manatee Encouragement Zone. As the name implies, the Encouragement Zone concept is intended to encourage owners of land in proximity to the Port to develop their property for Port-related uses by facilitating that development in a variety of ways, including accelerated permitting and other incentives.

As discussed elsewhere (see Chapter III), Port Manatee's potential market is broadening, and will continue to do so as Florida's population increases over the next decades. By 2018, Florida's 19.1 million population is expected to grow by 2.8 million, reaching 21.9 million.<sup>3</sup> By 2030, Florida is expected to be home to 25.3 million people. Central Florida, the Port's extended hinterland, represents a sizable share of that population growth. Many of the Port's current tenants foresee increases in the volume of their commodities moving across Port docks, whether to serve the expanding local and regional markets, or farther locales.

By policy, the Port finances its capital improvements from its own revenue streams and matching state and federal grants. It does not have the resources to acquire and develop land for supporting uses that are not directly related to the core business of the Port -- moving cargo as expeditiously as possible. Consequently, the Port sees the value in partnering with the private sector so that each partner can contribute what it is best suited to do. In the Encouragement Zone, the Port's trade and cargo-generating capacity would be leveraged to the mutual benefit of the Port and the neighboring landowners.

Given these factors, the Encouragement Zone concept was perceived to have the following benefits as a transitional or aspirational planning mechanism:

- It would create mutual synergies for the Port and neighboring property owners.
- Development incentives would attract diverse, but related land uses that expand the county's tax base.
- The private sector would have the flexibility to react quickly to commercial opportunities, and develop facilities that otherwise might take years to permit and build.

---

<sup>3</sup> Source: Florida Demographic Estimating Conference, February 2008 and the Florida Demographic Database, August 2008.

- The Port would be able to use its resources to build new berths and docks, rather than warehouses and other facilities that are not water-dependent.
- The Port would remain competitive and escape the fate of land-locked competitors.
- The Port's ability to stimulate well-paying jobs would be enhanced.

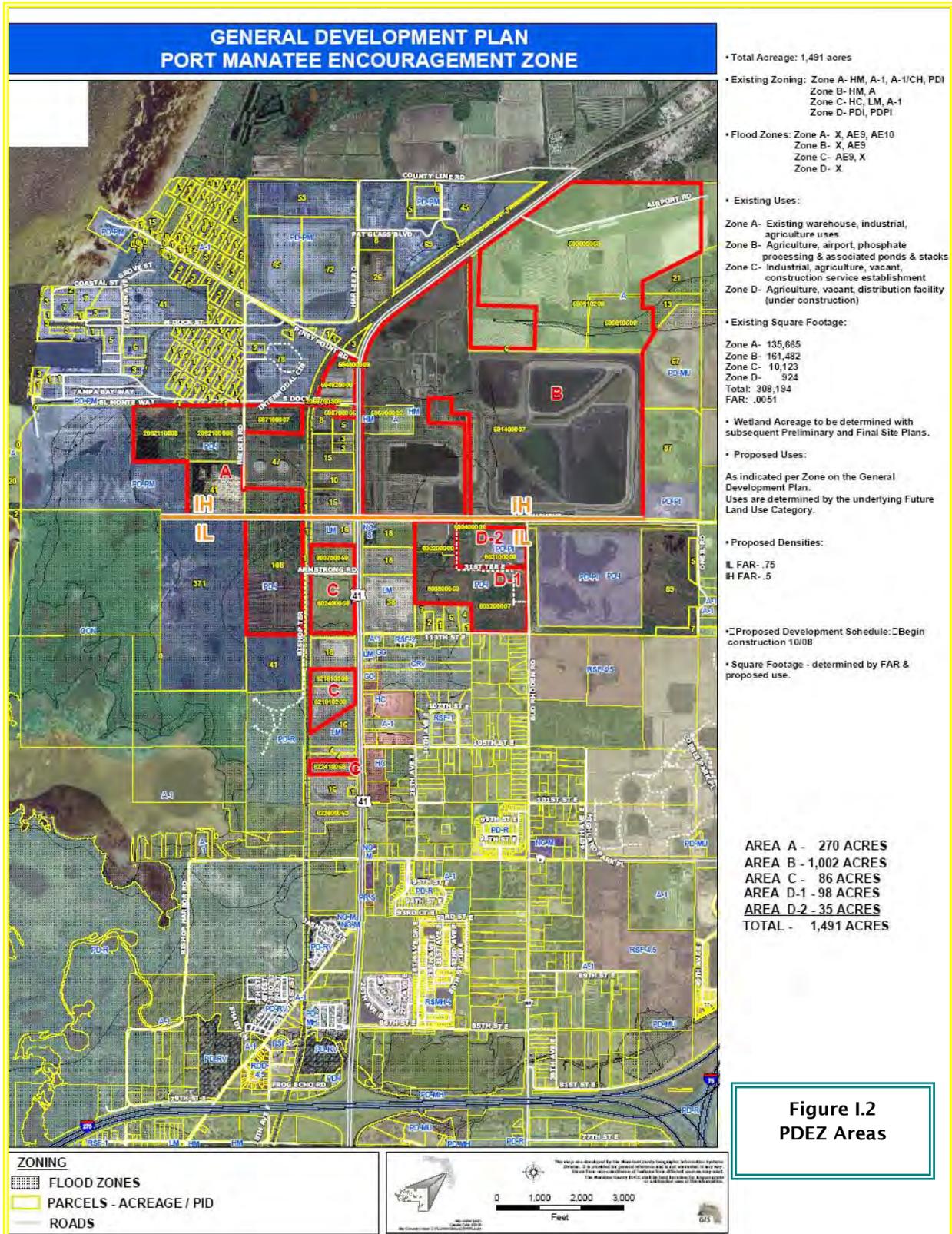
In February 2008, recognizing that the Encouragement Zone concept would facilitate a greater range of employment-based uses near Port Manatee and help strengthen the economic health of Manatee County, the Manatee County Board of County Commissioners authorized planning staff to initiate the rezoning and comprehensive plan changes needed to implement the concept.

Subsequently, in August 2008, the Board of County Commissioners, after considering public comment and Planning Commission and Planning staff recommendations, adopted Ordinance 08-63 amending Chapter 6 of the county's Land Development Code to add Section 603.21, which created the Planned Development Encouragement Zone (PDEZ) District. The PDEZ District, which comprises four areas (A, B, C, and D, as shown in Figure I.2) is intended to provide for land development with uses compatible with and supportive of the economic health of Port Manatee and Manatee County. Areas A and B are both located largely within the existing IH (Industrial Heavy) Future Land Use Category. Areas C and D are located in the existing IL (Industrial Light) Category. Each area has its own list of allowable uses, setbacks, and heights. Among the diverse permitted uses are light and heavy manufacturing, warehousing, research and development activities, outdoor storage, agricultural uses, and certain public use facilities.

Ordinance 08-63 stipulates that the most intensive uses shall generally be located on lands closest to Port Manatee. Less intense uses shall be located further to the south and east. In addition, the ordinance provides that consideration be given to connectivity between the Port and PDEZ sites and between PDEZ site locations and the eventual Port -I-75 Connector and other frontage roads, as needed.

For property owners in the PDEZ, consideration is being given to local impact fee options and accelerated county permitting privileges. For example, individual property owners will be able to proceed to final site plan and building permit submittals without further public hearings. The county may also pursue legislative Development of Regional Impact (DRI) exemptions for PDEZ projects, similar to those authorized for projects consistent with a Port's Master Plan. Depending on the nature of their businesses, property owners would also have an opportunity to be part of the Port's Foreign Trade Zone. The Port could assist landowners who develop their property for Port-related uses in marketing to businesses around the world. In creating the PDEZ, Manatee County rezoned some existing industrial lands to the new PDEZ and established a General Development Plan (GDP) for the property owners who have opted to participate.

As a second phase of the Encouragement Zone concept, Manatee County is pursuing an amendment to its *Comprehensive Plan*, creating the North County Gateway -- a Future Land Use Overlay Category -- to provide property owners to the east of the Encouragement Zone options to develop Port-related/Port-supportive, light industrial facilities, while maintaining compatible uses.. This amendment is also intended to attract businesses to the North County and increase Port Manatee's economic impact on the county as well as creating good, well-paying jobs



## **2. Factors Driving Encouragement Zone Success**

In summary, the following factors are expected to drive PDEZ success:

- Consistency of the PDEZ with the Port’s mission statement and long-time Port goals, as expressed in the Port’s planning documents.
- Available adjacent land for distribution centers and other Port-related businesses.
- Supportive landowners.
- Growth in the Port’s hinterland markets.
- Development of direct access between the Port and I-75.
- Rail connections with the CSXT.
- The potential economic benefits of public and private sector synergies.

Particularly in this time of economic slow down, the PDEZ is anticipated to attract jobs and industry to Manatee County and to the Port. Its value, however, transcends the current economic situation, as it will set the table for enhanced maritime-related business once the local and global economies have stabilized

## **G. Administration**

As stated previously, the Manatee County Port Authority operates under the Manatee County Port Authority Act, recreated and reenacted in 2003 (Chapter 2003-351, House Bill No. 829, Laws of Florida).

Port Manatee functions as a landlord port. In its landlord capacity, the Port leases land to private terminal operators and licenses stevedoring companies to handle cargo; these entities are then responsible for their own operations. The Port provides support services to users of its berths, aprons, and storage areas, building and maintaining berths, channels, storage facilities, on-site road and rail, intermodal transportation facilities, and other necessary Port infrastructure.

The Manatee County Port Authority, which sits separately as the Manatee County Board of County Commissioners, administers the Port. The Port Authority consists of seven members elected from specific districts for staggered four-year terms.

Day-to-day administrative and operational tasks are carried out under the direction of the Executive Director, who reports to the Port Authority. At present, the Port has 62 full-time employees, and an additional 16 part-time employees. Approximately 1,100 tenant employees perform various services on the Port.



## **H. Public Involvement and Agency Coordination**

During the master planning process, the Manatee County Port Authority held two public meetings to solicit input concerning this *Port Master Plan, 2009* from those interested in the Port's development activities. The first meeting was a duly noticed workshop, held in December 2008, to review a draft of the five- and ten-year maintenance and expansion portion of the plan. The second meeting, held in February 2009, was a duly noticed public hearing to approve the plan for transmittal to the county for its review and subsequent submittal to the Department of Community Affairs and other review agencies as an amendment to the *Coastal Management Element* of the county's *Comprehensive Plan*.

In the course of this planning process, the following agencies were contacted or their plans reviewed to coordinate the Port's initiatives with the latest initiatives of these entities:

- Florida Department of Community Affairs.
- FDOT, District 1.
- Manatee County Planning Department.
- Manatee County Metropolitan Planning Organization.
- Southwest Florida Regional Planning Council.

Each of these agencies as well as the others required by statute, are to receive copies of the final plan for review and comment, in accordance with the procedures defined in Chapter 163, F.S., and Rule 9J-5, Florida Administrative Code.

## **I. Plan Organization and Content**

Following this introductory chapter, Chapter II continues with an overview of existing conditions and facilities at the Port. It summarizes existing land and shoreline uses, the intermodal transportation network, utilities, and ecological and environmental conditions; and addresses the Port's plans for natural disasters, hazardous material handling and clean-up, and petroleum products handling and clean-up. Chapter III reviews market trends and forecasts relating to Port operations. Chapter IV discusses the Port's five- and ten-year maintenance and expansion plan, describing planned expansion and development improvements based on the identified market trends and user needs. This chapter also provides an impact assessment of the anticipated activities on land use, public access, historic resources, environmental resources, utilities, and the transportation system. Chapter V presents the Port's mission statement and outlines the Port's goals, objectives, and policies, while Chapter VI translates the Port's five-year plan into a phased implementation program, with a five-year capital improvement plan, based on estimated construction costs and potential funding opportunities.

# CHAPTER II EXISTING CONDITIONS



**PAGE INTENTIONALLY LEFT BLANK**

## Existing Conditions

This chapter reviews Port Manatee’s existing infrastructure, summarizing the Port’s waterside facilities, its land uses, its natural resources, and its road and rail systems. This information provides the framework for the Port’s five- and ten-year maintenance and expansion plan presented in Chapter IV.

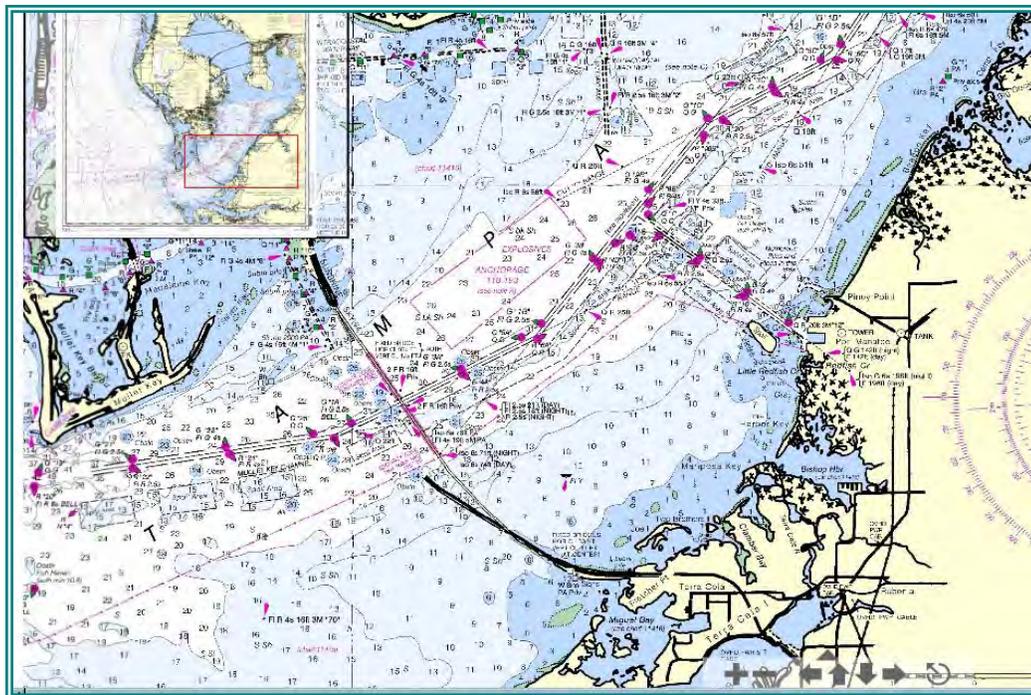
### A. Waterside Facilities

The following narrative describes the existing navigational conditions and berths at Port Manatee, based on available information from current sources and the consultant team’s analyses and stakeholder interviews.

#### 1. Channels and Inner Harbor

The Port’s existing waterside facilities include a ship basin 1,588 feet long by 787 feet wide by 39 feet deep, and an access channel 2.9 miles long and 400 feet wide which links the ship basin with the Tampa Bay Channel in Tampa Bay. The current channel depth restrictions, despite the authorized depth of 40 feet, are 39 feet in the main channel into Tampa Bay and 37 feet in the approach channel to Port Manatee. Figure II.1 shows the Port’s Entrance Channel from the National Oceanic and Atmospheric Agency’s (NOAA) Navigation Chart # 11415.

Figure II.1  
Port Manatee Entrance Channel



## 2. Berths

Table II.1 shows the physical dimensions of Port Manatee’s existing berths and the primary uses and commodities loaded and unloaded at the respective berths. Data were provided by the Port.

The Port’s twelve berths, including newly opened Berths 4 and 5 and the soon-to-be implemented Berth 12, are all public berths. Although tenants have preferences for the specific berths at which their commodities can be loaded or unloaded most efficiently, the berths are open to all the Port’s users and the Port, when needed, allocates a berth space on a first-come, first-served basis.

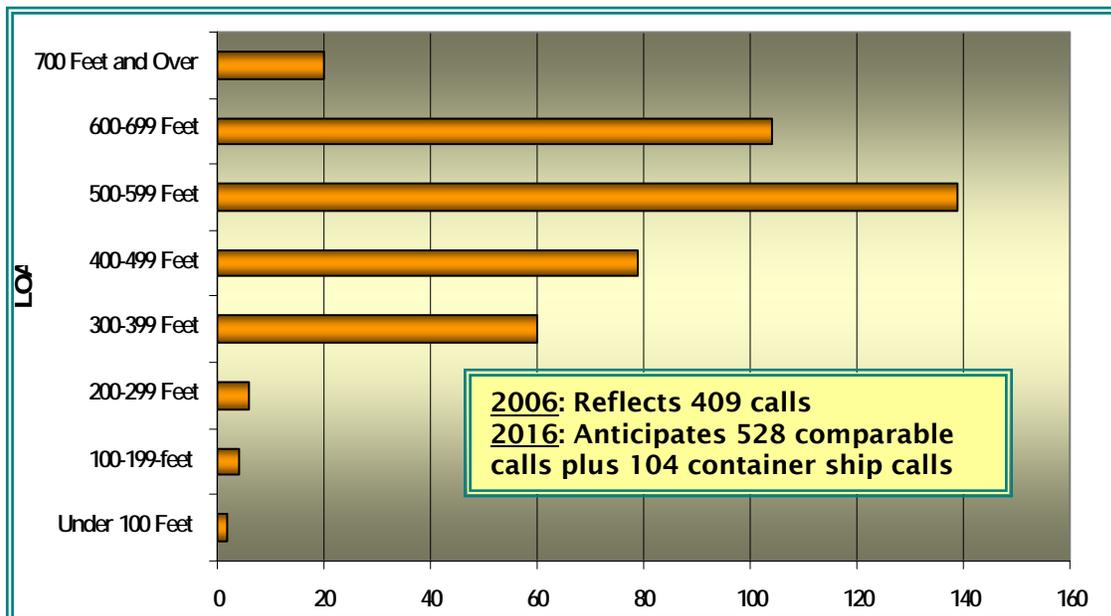
Table II.1 Existing Berth Specifications and Details at Port Manatee.				
Berth	Length (linear feet)	Draft (feet)	Uses and Primary Commodities Handled	Rail and Dockside Equipment
4 and 5	1,200	40	Dry bulk. Public.	1,440-foot, 4,000-tons-per-hour-capacity conveyor system. Rail service.
6	645	40	Dry bulk, liquid bulk, break-bulk, containers. Public.	Port-owned covered conveyor system to cement mill and silos. Rail service.
7	840	40	Dry bulk, liquid bulk, break-bulk. Public.	Two fixed gantry conveyor loaders. Petroleum pipeline to tank farm. Rail service.
8	786	40	General cargo, containers, break-bulk, freeze, chill, RO/RO, liquid bulk, project cargo. Public.	Pneumatic cement discharge system to silos. Petroleum pipeline to tank farm. Dockside bunkering.
9	808	40	RO/RO, general cargo, break-bulk, containers, liquid bulk, project cargo. Public.	Petroleum pipeline to tank farm. Dockside bunkering. Rail service.
10	780	40	General cargo, containers, liquid bulk, break-bulk. Public.	Petroleum pipeline to tank farms. Dockside bunkering.
11	580	40	General cargo, break-bulk, containers, liquid bulk. Public.	
12	1,000*	20*	General cargo, containers. Public.	
<b>Total</b>	<b>6,639</b>			

\*To be extended to 1,584 feet and 40-foot draft in 2009.  
Source: Port Manatee

### 3. Ship Traffic

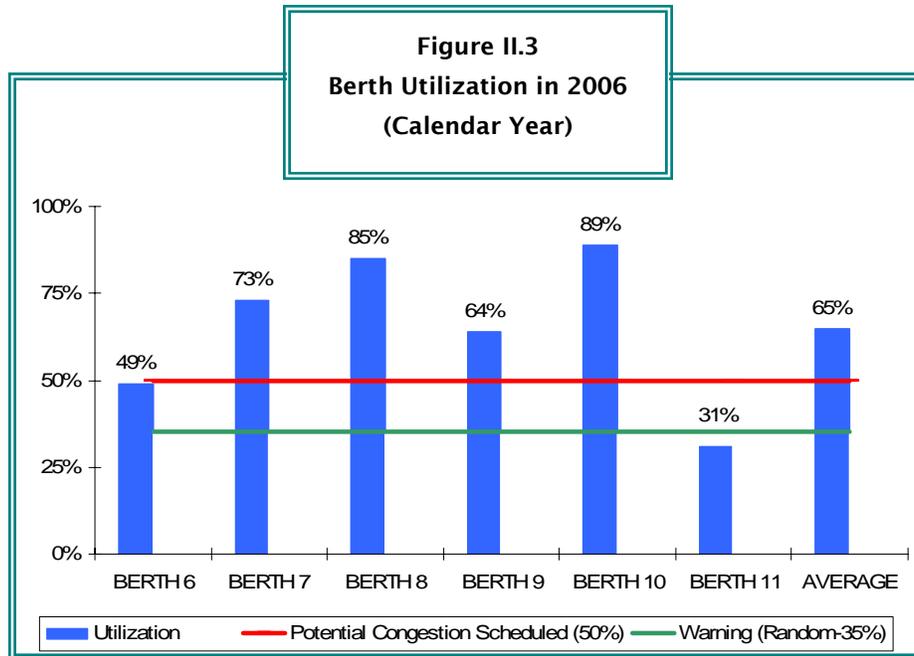
**Number and Characteristics of Ship Calls.** In 2006, a representative year prior to the economic slowdown, Port Manatee had 500 ship calls by diverse vessels ranging from small barges to Panamax ships. Of the 500 ship calls, 409 were by ships carrying significant commodity loads. As shown in Figure II.2, of the 409 calls in 2006, almost-two thirds were 500 feet or more in length overall (LOA).

**Figure II.2**  
**Ship Calls by Length Overall in 2006**



Based on the market forecasts presented in Chapter III, it is anticipated that, by 2016 or a few years later given the economic slowdown, the Port will have 528 comparable calls. If the Port pursues the long-term development of dedicated container and mixed use facilities in the North Port area, it is possible that an additional 104 container ships could call at the Port by 2016, or soon thereafter. With the purchase of the mobile harbor crane and the completion of Berth 12, container ships could be calling at South Port even sooner.

**Berth Utilization.** Berth congestion was one of the issues raised by those interviewed during this planning process. As the Port’s analysis of berth utilization in 2006, the representative year used for this analysis, confirms (see Figure II.3), four of the six berths in operation during the year exceeded the recommended percentage of occupancy.



Among the most congested berths were Berth 8, used to unload cement cargoes from ships that have lengthy dwell times and to handle other commodities when available; and Berth 10, which is used for varied commodities, including petroleum, lumber, and other general cargo.

With the opening of Berths 4 and 5 and the expansion of Berth 12, it is assumed that some of the current berth congestion will be temporarily ameliorated. Analysis of which users call at which berths revealed, however, that berth capacity will be reached at some of the berths starting in 2013 or soon thereafter.<sup>1</sup> This analysis can be summarized as follows:

- Assuming the use of Berths 6 through 11, with an average 2.5 days per call and 70 percent maximum berth utilization:
  - Berth 10 would reach capacity in 2013.
  - Berth 11 would reach capacity in 2015.
  - Berth 6 would reach capacity in 2025.
- Adding Berths 4, 5, and 12 will promote more optimal berth assignments and reduce conflicts and delays, even with the addition of container ship calls at Berth 12.
- Additional longer berths would be required for a 5,000-TEU container ship in 2016; a 4,000-TEU ship could use Berth 12.

<sup>1</sup> The dates given in this analysis assumed a continuation of the trends experienced at the Port prior to the economic downturn in 2008. As discussed in Chapter III, it is now assumed that these trends will reassert themselves by 2011, and that only the identified time frames will change by several years.

- With a 2,800-foot wharf at a dedicated North Port container terminal, new container business would not be constrained.

Given the lead times for permitting and construction, these dates are not that far off and validate the Port's wisdom in starting to plan now for the facilities needed to match the anticipated growth with adequate capacity.

#### 4. Navigation

**Navigational Requirements.** Captains from the Tampa Bay Pilots Association pilot the commercial ships entering and leaving Tampa Bay. The pilots must operate under a set of rules and restrictions imposed by the United States Coast Guard and the Tampa Bay Harbor Safety Committee. Following are the restrictions and guidelines specific to Port Manatee and its approach channel, taken from the *2007 Tampa Bay Pilots Association Ports Guide (Facility Operational Guidelines Revised 8/07)*.

- <27- foot draft anytime.
- 27-foot to 33-foot draft, 0.3-knot current or less. Drafts over 33 feet, slack water.
- LOA 700 to 800 feet - maximum 0.5-knot current.
- LOA over 800 feet and Post-Panamax, slack water all drafts.
- Maximum LOA 900 feet, maximum draft 37 feet plus tide.
- Max 2 moves per slack water.
- For drafts > 36 feet', 1 vessel per tide.

These imposed restrictions on the entrance channel into Port Manatee, from the main channel turn off into Tampa Bay to the Port itself, are a result of the following navigational challenges:

- The Port's approach channel lies perpendicular to the main current flow in Tampa Bay. This leads to difficulties when navigating large displacement, deep-draft, lower-horse-power vessels through that channel and into/out of the Port.
- The channel is relatively narrow, allowing for only one-way traffic of larger ships
- The "right turn" can be navigated only at slack tide due to:
  - The constricted mobility in the channel to make the turn.
  - Relatively high currents in the channel outside of slack tide.
  - The orientation of the current to the approach channel.

The Sunshine Skyway Bridge should pose no issue to most of the ships calling at the Port. The bridge has a vertical clearance of 175 feet at the centerline and a central span width of 875 feet. While the air draft of some of the largest super Post-Panamax ships could present a problem, it is not likely that the Port would attract these larger ships. The draft and beam of the ships are a different matter and it is envisioned that the channel itself would need to be enlarged (both in width and depth) to account for the potential increase in the size of vessels calling the Tampa Bay ports in the long term.

**Water Levels and Tidal Currents in Tampa Bay.** Tidal datum information is taken from NOAA's, National Ocean Service published bench mark sheet for Station ID 8726384, Port Manatee, Tampa Bay, Florida, and is summarized below referenced to mean lower low water (MLLW):

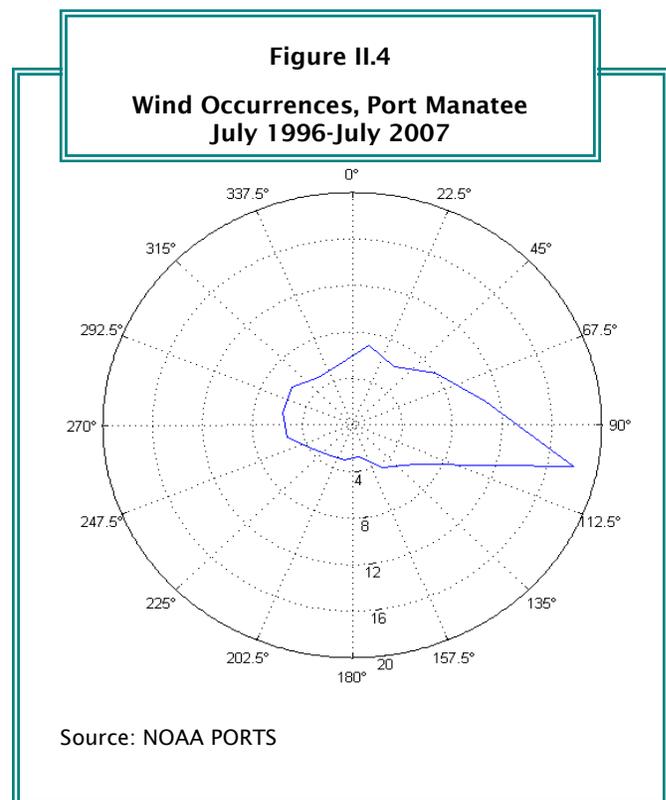
- Highest Observed Water Level (09/17/2000) = 4.44 Feet
- Mean Higher High Water (MHHW) = 2.19 Feet
- Mean High Water (MHW) = 1.92 Feet
- North American Vertical Datum-1988 (NAVD) = 1.56 Feet
- Mean Sea Level (MSL) = 1.17 Feet
- Mean Tide Level (MTL) = 1.14 Feet
- Mean Low Water (MLW) = 0.36 Feet
- Mean Lower Low Water (MLLW) = 0.00 Feet
- Lowest Observed Water Level (01/10/2001) = -1.84 Feet

From this information, the water level ranges on average from -1.2 feet NAVD88 to 0.36 feet NAVD88, with a total excursion of 1.56 feet. The diurnal range, as listed in the *2007 Tampa Bay Pilots Association Ports Guide*, is 2.19 feet.

Maximum current information taken from the *2007 Tampa Bay Pilots Association Ports Guide* at the Sunshine Skyway Bridge shows a maximum flood tide of 1.3 knots at 60 degrees and a maximum ebb tide of 1.1 and 235 degrees.

**Winds.** Wind data was acquired from the NOAA "PORTS" program station located at Port Manatee. The data cover July 1996 to July 2007 and consist of measurements of sustained wind and gust velocity every six minutes. Figure II.4 shows a wind rose for the data set, which illustrates the predominant wind directions at the Port for that time frame. The predominant direction is east and east southeast (approximately 100 degrees from north), with about 18 percent of the wind occurrences falling within this band.

The average sustained wind speed within this band is approximately 4.5 knots, with a maximum recorded wind speed of 28 knots. Considering all directions, the average sustained wind speed is 6.4 knots, with a maximum recorded wind speed of 51 knots. Therefore, while the predominant wind direction is from the east, the higher wind speeds were recorded outside of this directional band.



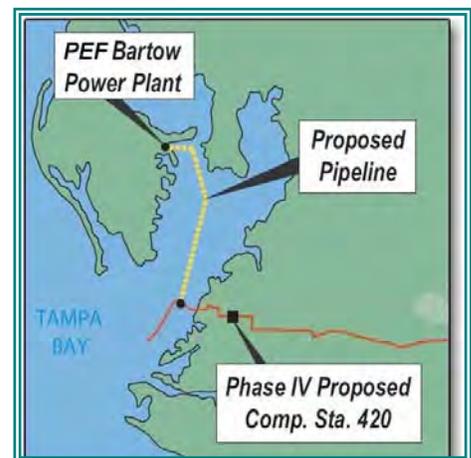
From this preliminary review of the data set, the winds within the Port vicinity, on average, are parallel to the approach channel and any east-west oriented berths. The berths most affected by the predominant winds are Berths 5, 11, and 12, due to their north-south orientation. Other than extreme events, significant delays to shipping due to operational winds are unlikely.

In summary, the Port does not appear to have any significant operational delays due to winds or waves. The Port does, however, appear to have significant delays due to tidal currents, but that is due to the channel orientation not the severity of the currents (2 knots).

**Pipelines.** Consideration needs to be taken in planning and design of any future changes to the channels due to the proposed installation of a second Gulfstream natural gas pipeline under the Port Manatee approach channel (see Figure II.5). The pipeline needs to be laid deep and wide enough to accommodate future increases in ship size and thus channel dimensions. As the channel gets deeper, it must also be widened to allow for a proper stable slope, and the pipeline must be laid so as not to impede this growth.

In addition, the proposed Port Dolphin pipeline, discussed in Chapter I, needs to be addressed.

**Figure II.5**  
**Gulfstream Pipeline Extension**



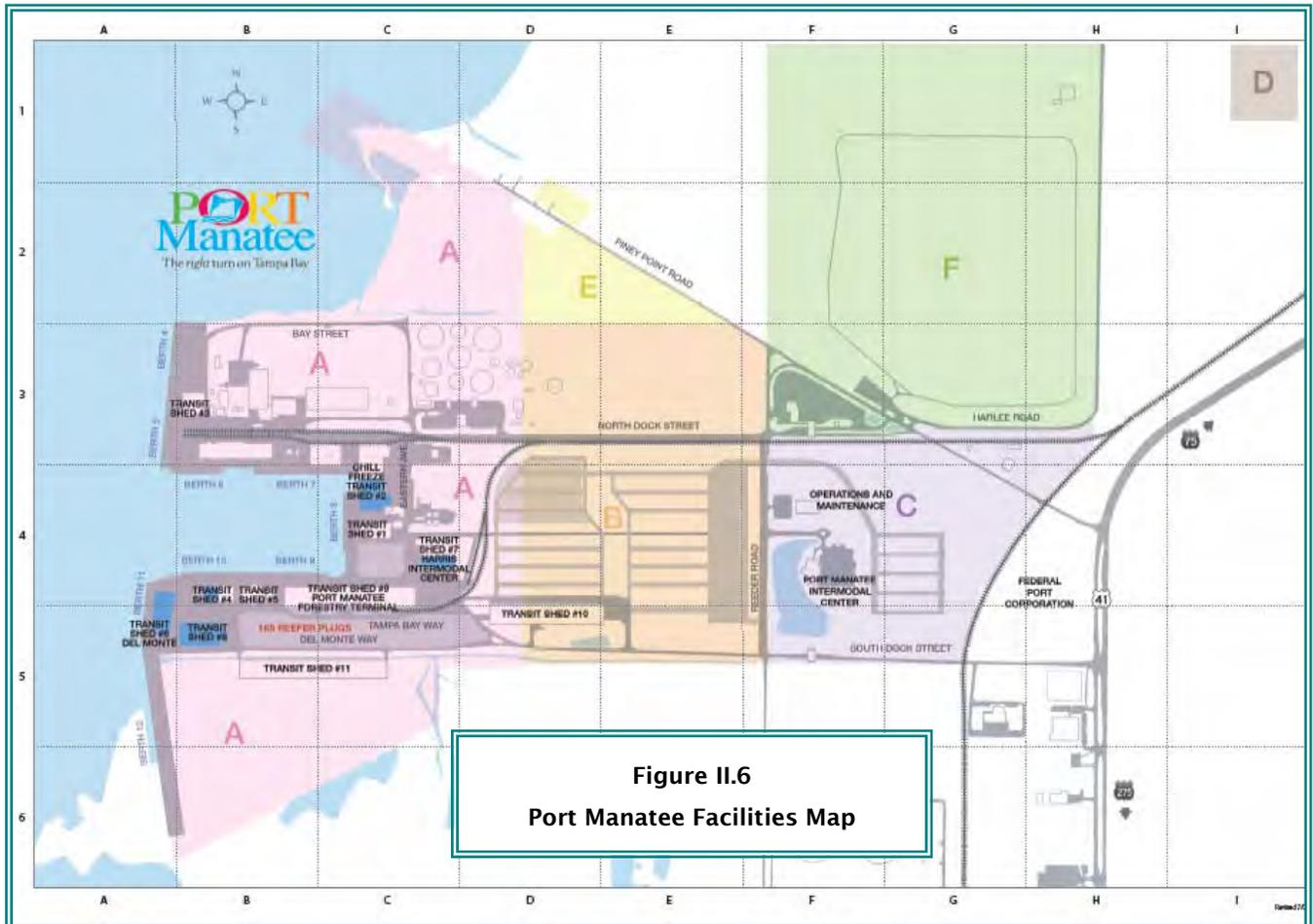
## **B. Upland Infrastructure**

### **1. Land Uses**

Port Manatee occupies approximately 1,100 acres, including several properties purchased within the last decade to keep up with demand. The Port also leases an additional 62 acres (a spoil island) from the State of Florida.

In addition to the more than 6,600 linear feet of berthing outlined in Table II.1, the Port's acreage includes more than one million square feet of public warehouse and office space, of which 202,000 square feet are devoted to chill or freeze space.

For designating permitted and conditional uses in the Port planning area, the Port property is divided into seven zones, as depicted in Figure II.6, the Port's Official Facilities Map.



**Figure II.6**  
**Port Manatee Facilities Map**

Zone A, which surrounds the Port's center basin, is the area of greatest maritime activity. This zone, with its nine berths, serves the primary functions associated with ocean shipping and is the determinant of current Port capacity

The northerly portion of South Port is included in Zone A, and is further subdivided into Zones A-1, A-2, and A-3:

- Zone A-1 comprises approximately 75.29 acres and is suitable for all Zone A uses.
- Zone A-2 consists of approximately 28.31 acres that contain some uplands and significantly impacted wetlands; these are intended for Zone A uses, subject to federal, state, regional, and local permitting and consistency with the Manatee County Comprehensive Plan.
- Zone A-3, comprising approximately 90.39 acres, is an area of disturbed marine wetlands, exotic plants, and disturbed uplands and is proposed for restoration and mitigation activities, subject to federal, state, regional, and local permitting and consistency with the Manatee County *Comprehensive Plan*.

Zone B, which extends behind the central portion of Zone A, supports Port tenants' needs for

storage that is away from the docks, yet proximate to them. Open and covered dry storage and dry warehousing are important in this zone.

Zone C, an extension of Zones A and B, supports typical industrial/commercial land uses, which do not need to be “on the docks.” Offices, ship stores, repair services, some warehousing, outside storage, and similar professional, commercial, and service industries are appropriate for this zone and additional structures could be built in this area.

Zone D comprises land owned by the Port, but not immediately accessible to the waterfront. Scrap steel has been stored on the site in the past, but the economics of moving cargo to or from the docks to this zone are not favorable. In the past, the Port sold approximately 50 acres to Manatee County for use as a detention facility. The Port now owns approximately 27 acres, which consists of a former scrap yard and land adjacent to the CSXT rail siding for future expansion of rail facilities.

Zone E, in combination with the northernmost portion of Zone A, is the potential location for long-term development to accommodate the Port’s future market demand.

Zone F is the current site of the Port’s upland dredge spoil-disposal facility, which may eventually be reclaimed. Also located in this zone are the Port’s new Access Control Center, truck scales, and a fish hatchery.

Zone G is the southerly approximately 220.01 acres of the South Port tract (formerly the Hendry property) that comprises predominantly environmentally sensitive lands with some isolated uplands; this property is to be used only for mitigation, restoration, outdoor educational opportunities, passive recreational uses, other passive public use opportunities and conservation purposes, whichever are appropriate.

The Port’s Foreign Trade Zone 169 covers the Port’s entire 1,106 acres. Two off-site sub zones have also been permitted: Aso Corporation in Sarasota and the Port Manatee Commerce Center, adjacent to the Port’s eastern boundary.

Table II.2 summarizes the permitted uses within the Port’s boundaries. Table II.4 summarizes the conditional uses.

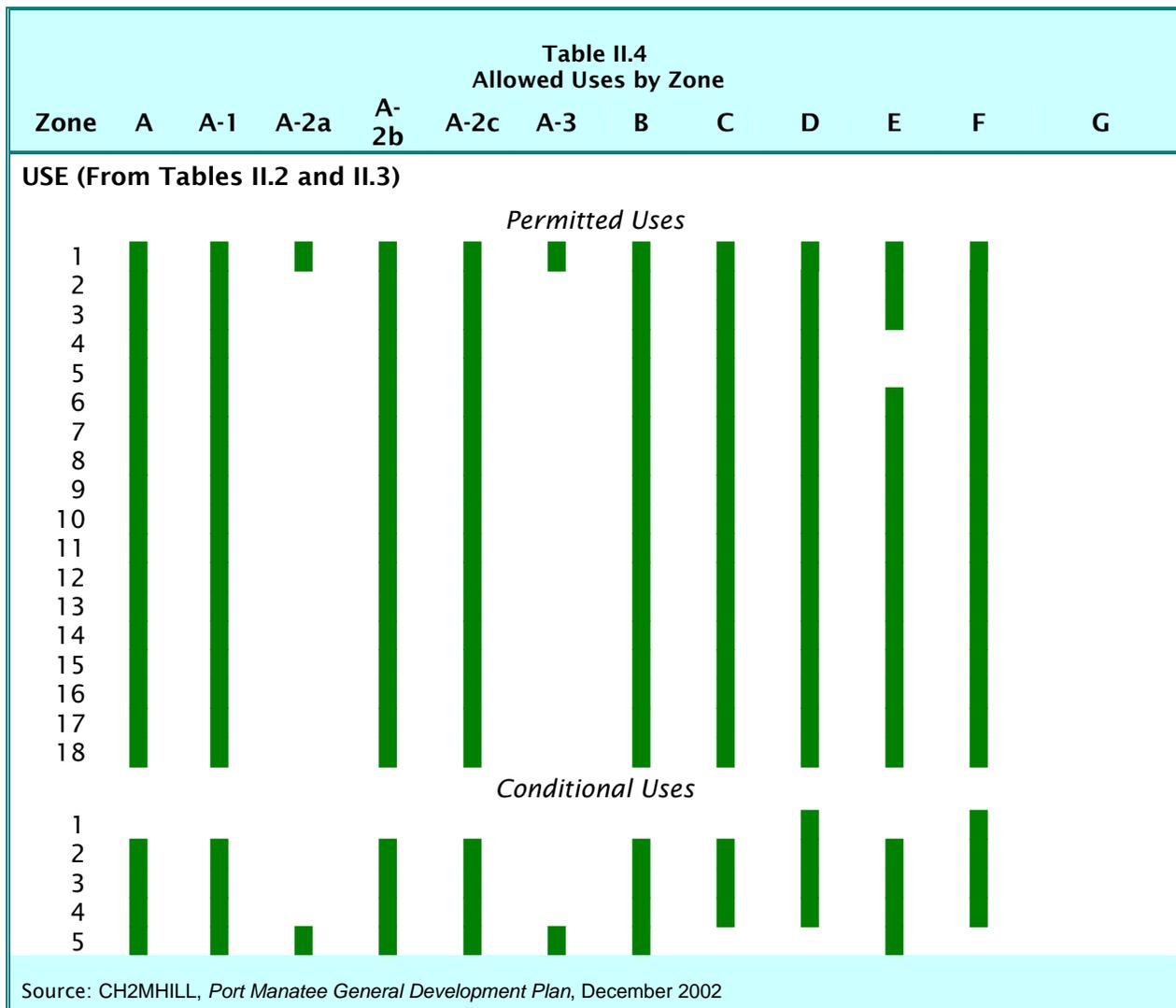
**Table II.2**  
**Permitted Uses within Port Manatee Boundaries**

1. Seaport uses including:	2. Agriculture and Agricultural Processing
a. Anchorage areas, berths, docks, dolphins, jetties, moles, mooring facilities, piers, public landings, quays and wharves	3. Business services
b. Grain bins, silos, storage tanks, storehouses, terminal facilities, transit sheds, warehouses and open storage areas	4. Chemical processing
c. Cableways, conveyors, cranes, derricks, elevators, lifts and tramways	5. Financial institutions
d. Canals, channels, harbors, slips, tidal basins, turning basins and waterways	6. Industrial service establishments
e. Bridges, catwalks, causeways, depots, oil tanks and pipelines	7. Manufacturing and products assembly
f. Breakwaters, bulkheads, drydocks, and locks	8. Mini-warehouses
g. Bunkers and vessel fuelers	9. Motor vehicle repair
h. Cargo handling water related	10. Office uses
i. Cold storage plants, icing plants, refrigeration plants and pre-cooling plants	11. Outdoor storage
j. Berthing, docking, mooring vessels; repairing vessels; and servicing vessels	12. Personal services
k. Loading, unloading and storing cargo	13. Restaurants
l. Earthmoving and dredged materials reclamation and storage	14. Truck terminals
m. Harbor pilots	15. Warehouse/distribution centers
n. Intermodal terminals	16. Wholesale trade establishments
o. Tug operators	17. Neighborhood retail sales
p. Marine terminal operators	18. General retail sales uses
q. Ship chandlers	
s. Shipping agents	
t. Stevedores	

Source: CH2MHILL, *Port Manatee General Development Plan*, December 2002

Table II.3 Conditional Uses within Port Manatee Boundaries	
1.	Correctional facilities
2.	Emergency facilities
3.	Public utilities
4.	Railroad terminals and facilities
5.	Seawalls

Table II.4 summarizes the uses allowed within each zone, as shown on Figure II.5.



## **2. Tenant Leases**

To help the Port Authority and staff make future strategic decisions, and plan for possible relocations that might enhance the Port's operational patterns and expansion potential, the consultant team analyzed the Port's current leaseholds. This analysis, prepared in 2007, identified the expiration dates of tenant leases over the five-, ten-, and twenty-year planning horizons, using data provided by the Port. The information provided in this section is presented only to provide a basis for decision-makers to better visualize how they might plan for any future expansion that would ultimately be endorsed and adopted by the Board.

As shown in Table II.5, leasehold expirations were bracketed into three categories, starting in 2007 -- "Current Year to Five Years Out," "Six to Fifteen Years Out" and "Sixteen Years and Beyond" -- to provide Port administration with a comprehensive picture of when and which particular leaseholds will expire. This information suggests the time certain "windows of opportunity" when the Port could potentially reposition existing land uses for other revenue-producing activities and reorient operational patterns to optimize the use of the Port's limited water side and land side properties.

Figures II.7, II.8, and II.9 show overlays of the areas within the Port that will come available for negotiated renewal or potential tenant relocations both within the five- and ten-year planning horizons in this Master Plan and beyond. Since several leases have been renewed since these figures were prepared, as shown in Table II.5, these figures do not reflect those changes.

Table II.5 Leasehold Analysis			
Port Tenant	Lease Expiration Date	Years Remaining	Description
Fresh Del Monte Produce	12/31/2007*	New lease: 4	* Renewed through 12/31/12 Five-year option from expiration date
Williams - Gulfstream (office lease)	12/31/2007*	New lease: 4	*Renewed through 12/31/12
PMFT Arrow Terminals (106,857 square feet)	5/14/2007*	New lease: 5	*Renewed through 12/31/12
PMFT Arrow Terminals (W7)	5/14/2007*	New lease: 2	*Renewed through 5/1/09
Federal Marine Terminals (Zones B and C)	7/31/2008*	New lease: .6	*Renewed through 3/31/09
CH2M Hill (formerly Gee & Jenson)	10/31/2009	1.5	
Federal Marine Terminals (W3)	3/31/2009	2	Renewed 4/1/2007 - 3/31/2009
PMFT Arrow Terminals (388,000 square feet)	5/1/2009	2	Year to Year - Zone B
PMFT Arrow Terminals (W9, W10, W11)	7/1/2012	5	After C/O on Warehouse 11
Verizon (formerly GTE)	4/30/2014	7	
Liberty Terminals	12/31/2015	8.5	
Vulcan	3/31/2017	10	Berth 5 - C/O - 3/27/2007
Port Manatee Ship Repair	10/31/2019	12.5	
TransMontaigne (formerly Coastal Fuels)	4/30/2020	13	
Florida Rock (formerly LaFarge)	8/6/2020	13	
Kinder Morgan (4 remaining leases)	5/1/2021	14	
Kinder Morgan (3.16 Acres)	9/19/2031	24	
Eastern Cement	7/1/2056	49	





### 3. On-Port Road and Rail Systems

**On-Port Road Network.** As shown in Figure II.10, Port Manatee has a fairly simple trunk roadway system that has served the Port well since its inception. Two access roadways link surface traffic from U.S. 41 westward into the Port: – Piney Point Road to the north connecting to the North Gate, and South Dock Street to the south connecting to the South Gate. South Dock Street extends westward to the Berth 11 docks. From the North Gate, North Dock Street extends westward to Eastern Avenue, a north-south street connecting North Dock Street and South Dock Street. The other north-south street on the Port is Reeder Road which extends from Piney Point Road southward past South Dock Street to the Port boundary, serving private parcels through a special security gate manned by the Port. Similarly, Piney Point Road continues northwesterly from the North Gate for non-secure access to several residential parcels. Also connecting into Piney Point Road near the North Gate, but outside the security perimeter, is Harlee Road which provides access to several governmental facilities to the northeast.

**Figure II.10**  
**On-Port Road and Rail Systems**



Figure II.11 summarizes the existing circulation and access elements at the Port that are of particular interest; these are discussed below.

In the next several years, it is anticipated that further enhancement of on-site circulation corridors will become necessary. Selective improvement will continue the reasonably good and relatively uncongested on-site circulation and access the Port and its users enjoy today. Despite this

generally good circulation, however, on peak days and/or during peak seasons for various tenant activities, there can be "hot spots" of congestion experienced at various locations (see the red ovals on the adjacent figure). These are usually related to dockside circulation when fruit shipments are

being processed, when lumber ships are being unloaded and the lumber moved to storage sheds nearby, and when there are surges in the movement of cement off-site. On occasion, some of these movements can overlap in the same hours and days.

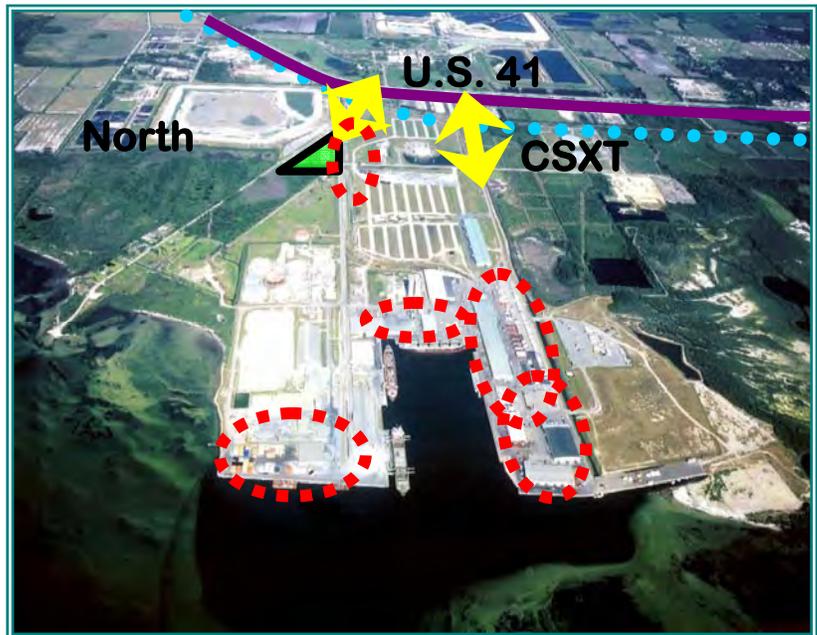
These transitory issues can be addressed by a combination of operational strategies and selective pavement additions. Operational strategies refer to actions that better manage and organize the flow of individual and/or competing cargo

movements within wharf areas storage or truck loading areas. These are generally inexpensive, and involve modifying traffic flow patterns, reducing conflict points, and minimizing the number of vehicles in the immediate area of congestion. These strategies can include loop flow patterns and establishing specified approach and departure routes for tractor-trailer trucks, "live" management of right-of-way at conflict points, planning and managing peaking patterns and conflicts, and staging trucks to be loaded just outside the loading area to reduce congestion. Operational strategies can be complemented by selected physical improvements, additional traffic flow or turning lanes, staging areas, and permanent traffic flow patterns.

Traffic operations at the North Gate have improved as security-processing methods have been refined and become familiar and routine to staff, truck operators, and site visitors. The exit-processing lane has become operational, which has also enhanced traffic movements. The North Gate operates smoothly and does not experience any significant delays.

One operational area that offers an opportunity for refinement is the staging of trucks to facilitate efficient unloading of ships and movement of related cargos to on-site storage or off-site customer destinations. Presently, the fruit ships and lumber ships present the most significant routine issues in this regard, although at times movement of aggregate and cement do also. From a Port security standpoint, it is preferable not to clear trucks involved in coordinated wharf-area cargo movements too early, because they can become an on-port security issue. This is an acceptable strategy, assuming that clearing security at the North Gate is a reliably short-duration process so that the flow of trucks dockside is unbroken from a tenant standpoint. It is also preferable should a truck

**Figure II.11**  
**Existing Circulation and Access Areas of Interest**



service center ever be developed on or near the Port as it can serve as a layover area for trucks which arrive at the Port at off-hours and well before shipments can be delivered or picked up.

It seems reasonable that the North Gate should be defined as the main Port entrance for trucks and for visitors who may need day passes as the security pass processing is housed there. The South Gate could be used on a regular basis for entering and exiting tenants' employees with security passes, and at some times for expedited departure of properly controlled cargo movements which do not need the special security resources of the North Gate, including the scale. This is being done periodically now for the movement of some lumber movements by truck to off-site customer destinations or to the private storage warehouses immediately east of the Port grounds.

The South Gate has been connected electronically (computers, security databases, voice communication, and cameras) to the main security center at the North Gate so that it can serve as an efficient remote adjunct to the North Gate. Nevertheless, to manage the capital investment in facilities, systems, and staffing at the South Gate, it is important to regulate who may use that gate to establish a predictable volume of users without special security credential issues that can be processed within staffing resources, within short processing times, and within security standards. Hours of operation at the South Gate may be restricted to manage labor costs as well.

**On-Port Rail.** The Port rail system connects to the CSXT railroad mainline just north of Piney Point Road with a curved track connection. North of this connection is a set of three siding tracks used for train makeup and car storage paralleling the single CSXT track. The main Port trackage runs due west from the CSXT past the North Gate along the south side of North Dock Street to the bulk terminal areas at Berths 6 and 7. In the portion between Eastern Avenue and Reeder Road, two parallel siding tracks are used for train car movements and storage. A branch track, which departs from the main Port track east of Eastern Avenue, curves southward and then westward to run along a segment of the south side of Warehouse 9.

Through tenant and off-site user interviews, anticipated growth of existing commodity throughput, and future increases in new commodity market share, all indicators point to a need for the Port to enhance its existing railroad transport capabilities. Currently, the Port's approximately eight miles of rail track, with its two switch engines, nine crossings, and 240-car capacity, is confined to the export of phosphate and occasional other shipments by varied tenants.

Historically, the Port's terminal railroad was designed to provide flexibility and customer service for on-port tenants and to provide an alternative transport interchange service with CSXT just outside the Port's gates. Not much emphasis was given to create a "profit center" from railroad operations or to provide regularly scheduled added value services to entice tenants and off-port clients to utilize the railroad as much more than a "switching service."

Today, rail service should preferably be viewed as a variable in the mix of transportation alternatives to be made available to customers, particularly those that will require enhanced rail capabilities to improve turn times both domestically and internationally (container operations, juice not from concentrate, etc.). New customers will demand enhanced rail interchange operations as a condition to locating at the Port. Through interviews, CSXT has expressed a willingness to negotiate with the Port the potential for enhanced interchange and potential trackage rights

agreements that would benefit both the Port and railroad, provided the Port's terminal railroad were to take the necessary steps with the Surface Transportation Board to become a certified public convenience and necessity Class III carrier.

Given CSXT's major changes in mainline railroad service in Florida decisions regarding how Port Manatee's railroad fits into this picture is more important than ever; particularly with the potential for future market capture of container operations that the Port is considering and the growth in the Central Florida region.



## **C. Ecological and Environmental Conditions**

### **1. The Marine Environment**

The marine environment in the vicinity of Port Manatee is a highly productive system. Two aquatic preserves exist just north and south of lands owned by the Port. To the north is the Cockroach Bay Aquatic Preserve and to the south is the Terra Ceia Aquatic Preserve. As aquatic preserves, these areas are designated as Outstanding Florida Waters (OFW) by the State of Florida. This designation provides additional regulatory protection for activities that could degrade water quality.

A 480-acre motorized vessel restriction zone has also been established as a condition of Florida Department of Environmental Protection (FDEP) Permit No. 0129291-002 EI for the Port's previous expansion. This designation is specifically for the protection of seagrasses that abut Port Manatee as well as manatees. The aquatic preserves and this 480-acre area are a mixture of productive sea grass beds and shallow unvegetated bottom habitat as shown in Figure II.12.

Seagrass meadows are one of the most productive habitats in the estuarine/marine environment. Both protected and non-protected marine species utilize seagrass beds through all, or portions, of their life cycle. Seagrass beds are important nursery habitats for commercially and recreationally important fish species. Protected species that may use seagrass habitat include the endangered West Indian manatee (*Trichechus manatus*), and the endangered leatherback (*Dermochelys coriacea*) and hawksbill (*Eretmochelys imbricate*) sea turtles, and the threatened loggerhead (*Caretta caretta*) sea turtle.



**Figure II.12**  
**Marine Environment in Vicinity of Port Manatee**

The Florida Fish and Wildlife Research Institute (FWRI) are tasked with aerial surveys of manatees throughout Florida. FWRI maintains a database of manatee mortality in the state (<http://ocean.floridamarine.org>). Two manatees were observed, during aerial surveys in 1997 and 1998 in the vicinity of Port Manatee. Since 1974, three manatee deaths have been documented near the Port, but none were attributed to Port operations. FWRI also maintains a turtle-stranding database from 1986 to 1999; during that time, three stranded loggerhead turtles were observed in the vicinity of Port Manatee in 1994, 1996, and 1997.

## **.2. Manbirtee Key**

A 60-acre dredge material management area (DMMA) is located west of Port Manatee in the vehicle restriction zone. In 2003, this island was successfully restored to provide nesting habitat for the threatened least tern (*Sterna antillarum*) and other shoreline and wading bird species. The restoration of the management island included the creation of tidal creek habitat, least tern nesting habitat, and the removal of nuisance and exotic vegetation. More than 80 bird species have been documented by the Audubon Society of Florida since the restoration was completed. The restored island also provides nesting, loafing, resting, and breeding habitat for members of the wading bird guild that have been designated as Species of Special Concern (SSC) by the State, including: little blue heron (*Egretta caerulea*), roseate spoonbill (*Ajaia ajaja*), and the reddish egret (*Egretta rutescens*).



The island was created in the 1960s from material dredged to create Port Manatee's main shipping channel. Dense vegetation covered most of the 60-acre site, making it unappealing for terns, willets, and plovers looking for a place to raise their young.

Excerpts from a June 2007 article in the *Tampa Tribune* detail the successes of this makeover:

*Almost four years after the makeover was completed, the island has surpassed Audubon's expectations and welcomed an unexpected guest - the Wilson's plover. "We think this is one of the largest breeding colonies of Wilson's plovers in the state of Florida, maybe even the largest," said Ann Hodgson, Gulf Coast ecosystem science coordinator for Audubon of Florida...*



*Audubon estimates there are about 6,000 Wilson's plovers in the United States, including an estimated 100 pairs in Tampa Bay. This year's survey by local Audubon biologists estimates 30 to 40 pairs on Manbirtee Key. Also tallied this year*

*are about 100 least tern nests and 35 to 45 nesting pairs of willets...*

*More than 80 species of birds have been spotted on the island.<sup>2</sup> Many forage in the man-made tidal creek system or stop to rest in the mangrove thickets that have sprouted since backhoes and mechanical shovels sculpted the island into a variety of habitats...*

*Horseshoe-crab shells litter the shoreline. Hodgson said that the crab's eggs are the favorite food of the red knot, another coastal bird being monitored by Audubon because of declining population figures...*

*Midway through the island's nesting season, gray kingbirds soared above the mangroves, where they prefer to raise their young. Stalking the shallows between the Port and the island is a reddish egret, a rare species that disappeared from Tampa Bay in the mid-20th century but started making a comeback in the 1970s...*

*The biggest nesting action, however, occurs on the key's Tern Hill, a mound of earth topped with a plateau of sand, shell, and rock. Willets, terns, and the Wilson's plover carve tiny depressions, or scrapes, in the soil to cradle their eggs...*

*Audubon biologists visit the colony and count nests twice a month in breeding season and monthly the rest of the year.*

The Environmental Protection Agency (EPA) has recognized Port Manatee for its efforts to restore seagrass in its surrounding waters and for creating Manbirtee Key, which now serves as a seabird haven. The Port also received the 2006 EPA Guardian Award for these efforts.

### 3. The Terrestrial Environment.

The Port area can be split into three zones. The central area is the working port and is 100 percent developed for Port activities. Open areas are either grass fields set aside for future development or are swales or stormwater facilities for the purpose of water quality protection of the near shore aquatic environment. To the south (south of Berth 12) lies the area formerly known as the Hendry property, a portion of which the Port designated for environmental protection and as mitigation for other Port activities. To the north is the area proposed for future expansion. Terrestrial habitats discussed are a combination of coastal uplands, coastal wetlands, and freshwater wetlands located in the North Port and South Port areas.

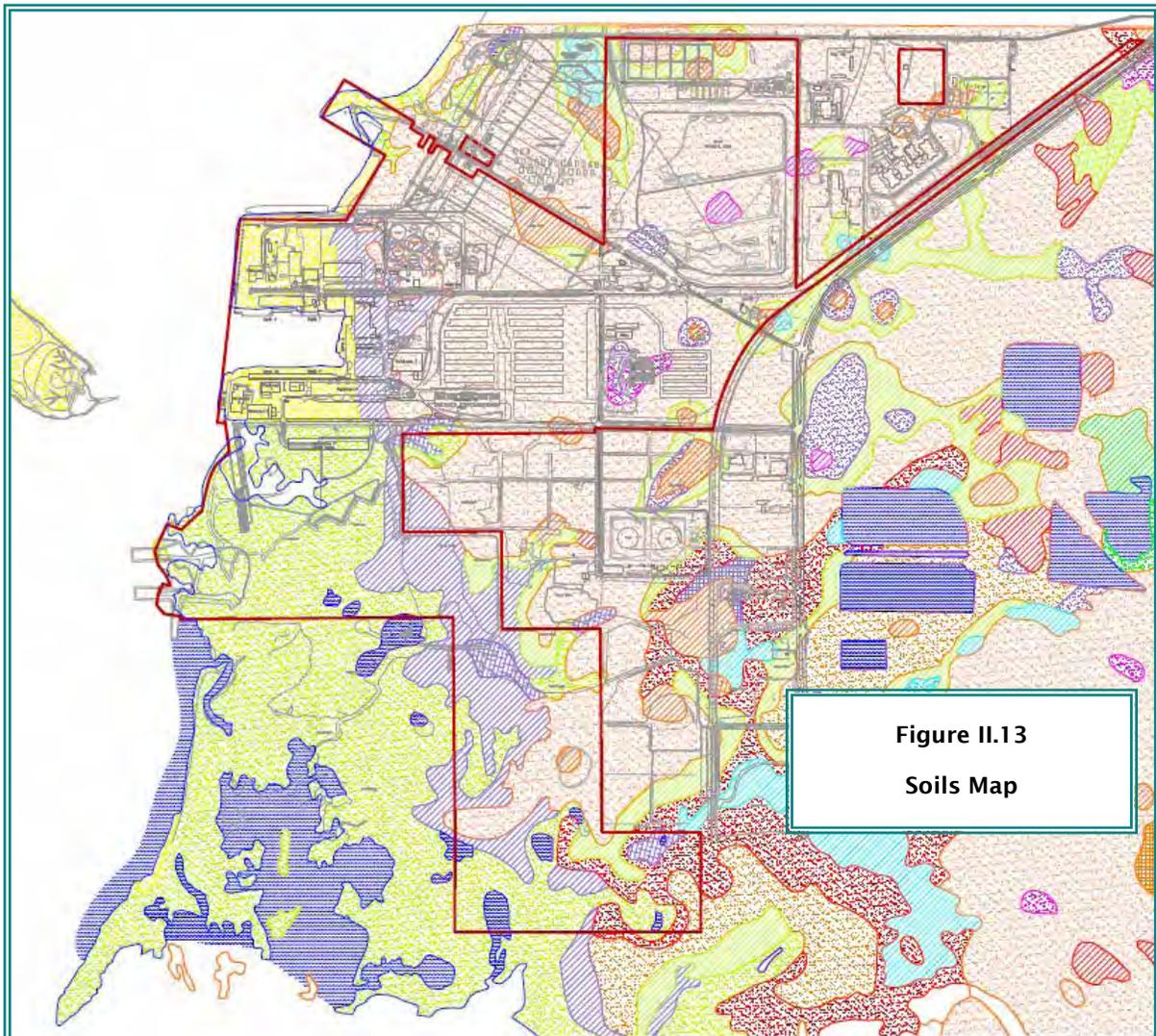
**Soils.** Figure II.13 shows the variety of soils within the Port and adjacent areas, based on the *Manatee County Soils Atlas*.

**Wetlands.** Figure II.14 shows the wetlands in the Port area, based on the *National Wetlands Inventory*.

The following narrative discusses the uplands and wetlands in the North Port and South Port areas.

---

<sup>2</sup> According to Audubon of Florida, 120 species are now present on Manbirtee Key.

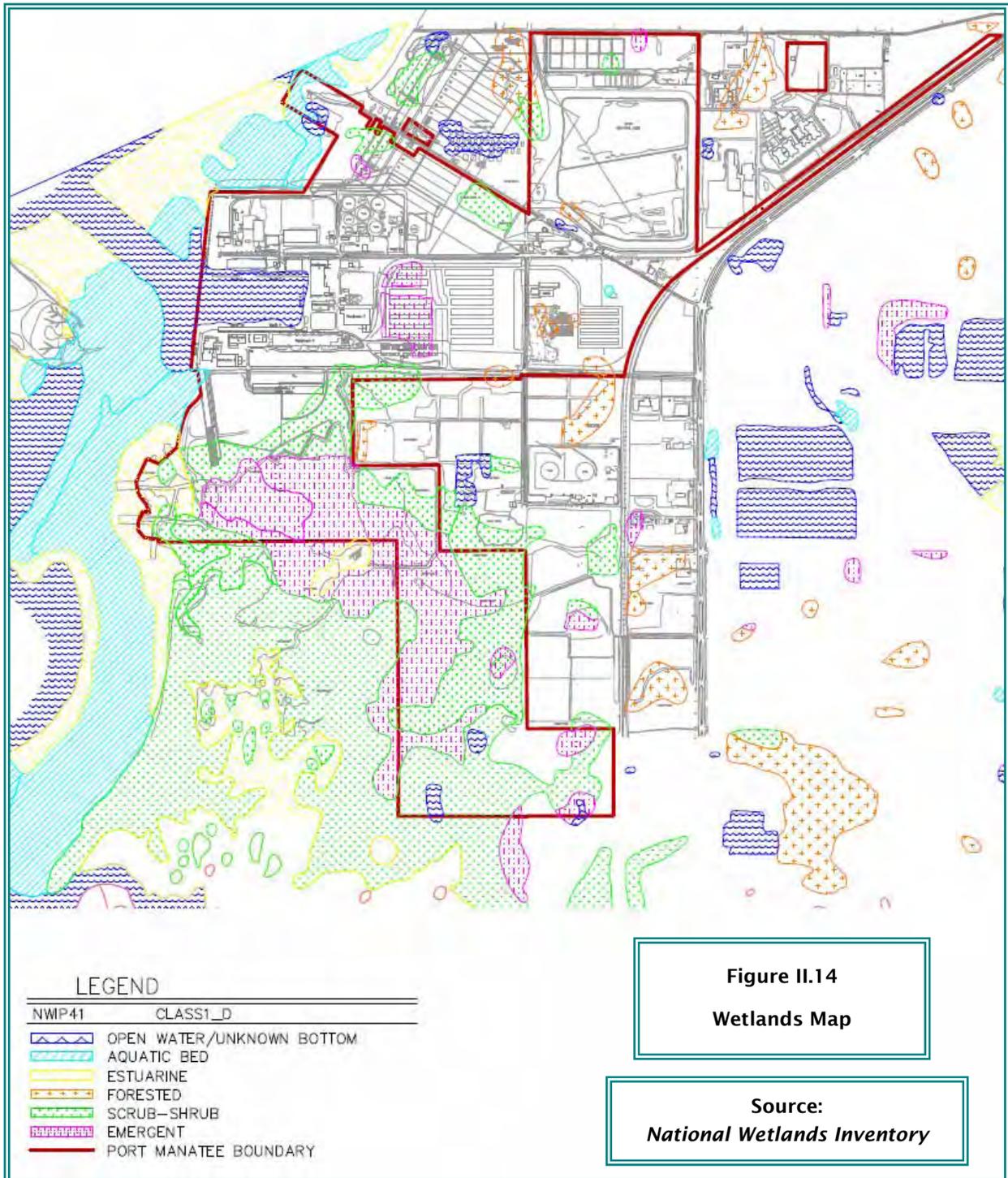


**Figure II.13**  
**Soils Map**

LEGEND

MUID	MUNAME	MUID	MUNAME
81005	BRADENTON FINE SAND; LIMESTONE SUBSTRATUM	81033	MYAKKA FINE SAND; TIDAL
81007	CANOVA; ANCLOTE AND OKEELANTA SOILS	81034	OKEELANTA MUCK; TIDAL
81008	CANAVERAL FINE SAND; 0 TO 5 PERCENT SLOPES	81038	PALMETTO SAND
81009	CANAVERAL SAND; FILLED	81039	PARKWOOD VARIANT COMPLEX
81010	CANAVERAL SAND; ORGANIC SUBSTRATUM	81044	ST. JOHNS-MYAKKA COMPLEX
81011	CASSIA FINE SAND	81045	TAVARES FINE SAND; 0-5 % SLOPES
81012	CASSIA FINE SAND; MODERATELY WELL DRAINED	81048	WABASSO FINE SAND
81013	CHOBEE LOAMY FINE SAND	81053	WOLFERT-KESSON ASSOCIATION
81014	CHOBEE VARIANT SANDY CLAY LOAM	81099	WATER ***
81016	DELRAY COMPLEX		— PORT MANATEE BOUNDARY
81017	DELRAY-EAUGALLIE COMPLEX		
81020	EAUGALLIE FINE SAND		
81022	FELDA FINE SAND		
81025	FLORIDANA FINE SAND		
81026	FLORIDANA-IMMOKALEE-OKEELANTA ASSOCIATION		

**Source:**  
**Manatee County Soils Atlas**



**North Port Area.** The North Port area includes undeveloped lands north of the developed Port property, bordered by Piney Point Road, and the current DMMA adjacent to Harlee Road. The Port is pursuing the purchase of existing residential property in this zone on a voluntary only basis. Uplands in this area include disturbed lands and spoil areas. Wetlands in this area include mangrove shorelines, wetland forested mixed, and freshwater marsh. The North Port area also includes the Piney Point public boat ramp.

#### **North Port Uplands.**

- **Disturbed Areas.** The vast majority of the North Port area has been disturbed/alterd by past land use activities. The dominant vegetation observed in these areas is Brazilian pepper (*Schinus terebinthifolius*). Disturbed areas provide reduced habitat value to wildlife species.
- **Dredge Material Disposal Areas.** This upland land use category is used to identify the DMMA north of Harlee Road. The area is vegetated by weedy ruderal species typical of disturbed sites. Although the area does not provide ideal habitat for protected species, several wading birds have been observed resting in the spoil area. The Port has implemented measures to discourage use of the site by bird species.

#### **North Port Wetlands**

- **Mangrove Shorelines.** Mangroves are located along the shoreline of the North Port area. Species observed in this area include red mangrove (*Rhizophora mangle*), white mangrove (*Avicennia germinians*), and black mangrove (*Laguncularia racemosa*). Shorelines with mangroves typically provide foraging and nesting opportunities for protected bird species, small mammals, and small reptiles. Mangroves provide shoreline erosion protection and buffering from storms and contribute detritus to nearshore estuarine/marine habitats.
- **Wetland Forested Mixed.** Wetland forested mixed habitat may include hardwood species and conifer plant species such as laurel oak (*Quercus laurifolia*), sweetbay (*Magnolia virginiana*), and slash pine (*Pinus elliottii*). Most of the wetland forested mixed habitat in the North Port area, however, is dominated by the nuisance/exotic Brazilian pepper. Wetland forested mixed habitat may provide foraging and nesting opportunities for protected bird species, small mammals, and small reptiles.
- **Freshwater Marsh.** One freshwater wetland is located in the North Port area, west of the DMMA. The freshwater wetland was constructed by the Port for mitigation purposes. The marsh system is currently vegetated by nuisance species such as cattails (*Typha* sp.) and the exotic Brazilian Pepper. Freshwater marshes may provide foraging and nesting opportunities for wading birds, small mammals, and small reptiles.

**South Port Area.** For the most part, the South Port area comprises the former Hendry parcel. This approximately 414-acre property was acquired by the Port in March 1997 and used in part as mitigation for future Port expansion of Berth 12. This area abuts the Terra Ceia Aquatic Preserve and provides a substantial buffer between developed lands and the Aquatic Preserve, providing

protection from stormwater discharge as well as maintaining the shoreline in a high quality natural condition for foraging, nesting, and nutritional inputs into the seagrasses of the Aquatic Preserve.

### South Port Uplands

- **Pine Flatwoods.** Pine flatwoods are habitats dominated by a plant canopy of slash pine and sparse cabbage palm (*Sabal palmetto*), with a groundcover of saw palmetto (*Serenoa repens*). Pine Flatwoods habitat may provide foraging and nesting opportunities for small mammals and small reptiles.
- **Brazilian pepper.** Brazilian pepper is a nuisance/exotic plant, suppressing growth of native plant species. This habitat provides limited nesting and resting opportunities for small mammals and small reptiles.
- **Live Oak.** Live Oak habitat is dominated by a plant canopy of live oak (*Quercus virginiana*) and sparse cabbage palm. Plant groundcover is dominated by saw palmetto. This native plant habitat may provide nesting, resting, and feeding opportunities for small mammals and small reptiles.
- **Cabbage Palm.** Cabbage Palm is the dominant canopy plant species of this habitat. Sparse live oak and laurel oak are also present. Plant groundcover is dominated by saw palmetto. This native plant habitat may provide nesting, resting, and feeding opportunities for small mammals and small reptiles.
- **Australian Pine.** Australian Pine habitat is dominated by a canopy of the nuisance/exotic plant Australian pine (*Casuarina* sp.). Australian pine coverage is dense in areas, inhibiting the growth of native plant species and reducing the use of this habitat by wildlife species.

### South Port Wetlands

- **Mangrove Swamps.** This habitat is similar in species composition to the mangrove shoreline habitat located in the North Port area. Species observed in this area include red mangrove, white mangrove, and black mangrove. Mangrove swamp habitat in the South Port area is more expansive than the mangrove shorelines in the North Port area and may provide foraging and nesting opportunities for protected bird species, small mammals, and small reptiles. A moderate amount of Brazilian pepper, growing on spoil areas, was observed in areas of this habitat.
- **Saltwater Marsh.** Saltwater marsh habitat is dominated by the plants cordgrass (*Spartina* sp.) and needlerush (*Juncus roemerianus*). Scattered mangroves and buttonwood (*Conocarpus erectus*) were also observed in this area. Salt marshes are important sources of detritus for the near shore aquatic environment. Salt marshes provide feeding, nesting, and resting habitat for wading birds; during periods of low tide, this habitat may be used by small mammals and small reptiles.
- **Tidal Flats.** Tidal flats are sparsely or non-vegetated portions of the shore that are protected from wave action. Tidal flats are characterized by an alternating cycle of

submergence and emergence caused by tidal action. Many species may use tidal flats throughout the tidal cycle.

**Areas Subject to Coastal Flooding.** Flood zones in the Port planning area are shown in Figure II.15, based on the latest Federal Emergency Management Area (FEMA) Flood Insurance Maps. Most of the Port's land area is located in the AE Zone, which is subject to the 100-year flood. The waterside area of the Port is in the VE Zone which is subject to the 100-year flood, with wave hazards.

Figure II.16 shows the areas of the Port subject to the Coastal Barrier Resources Act (COBRA) of 1982 and later amendments, which banned the sale of federal flood insurance for structures built or substantially improved on or after a specified date. Only a portion of South Port is in a COBRA zone.

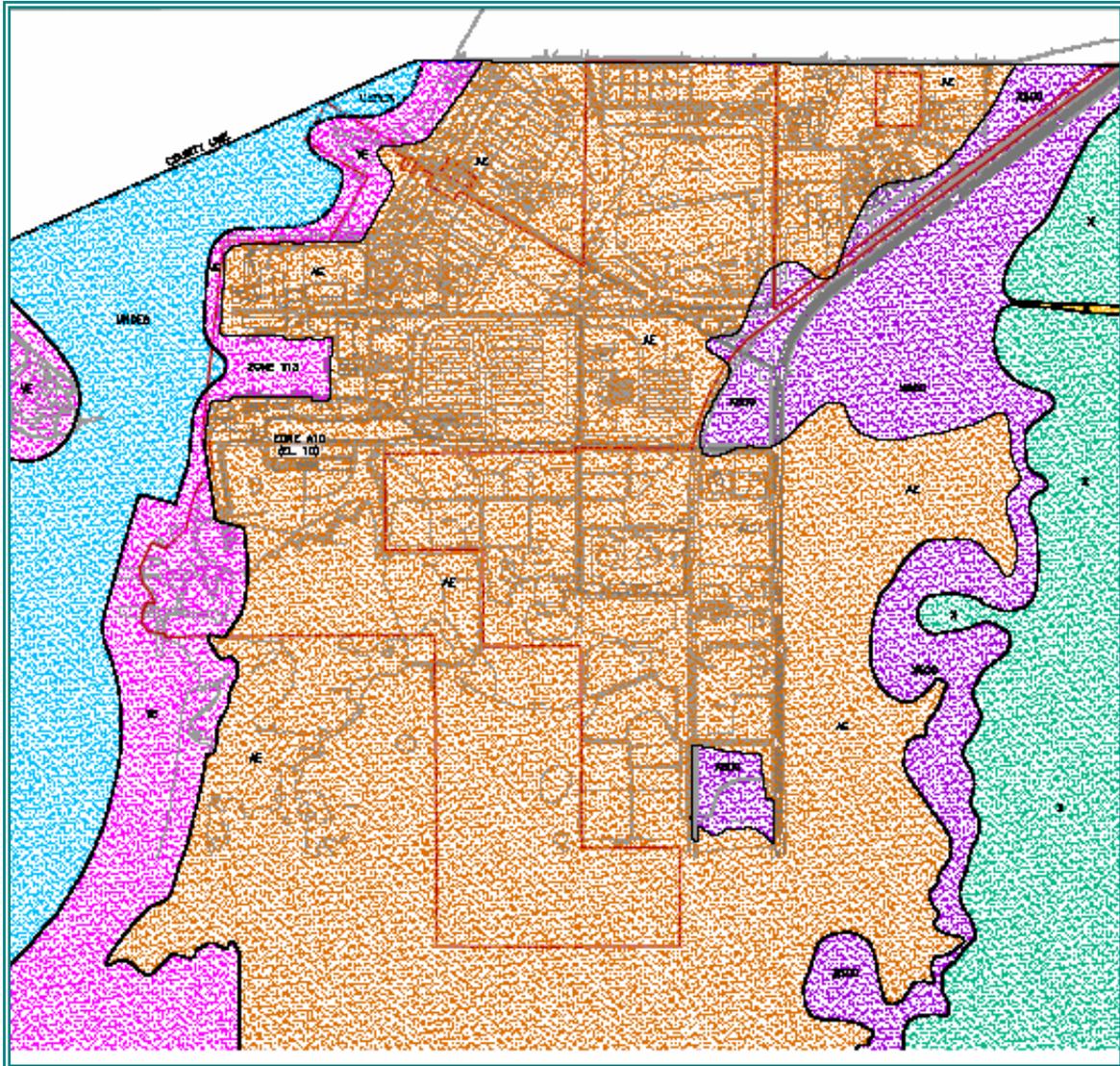
#### **4. Management of Dredged Materials**

Management of dredge material is an important component of Port operations. Management strategies must focus both on regular maintenance activities that must be performed to insure navigability and on new dredging. A few options are available to handle the disposal of dredged material. The Port's current policy is to utilize upland disposal in designated areas.

Two upland disposal sites are available for future dredging activities. The Port can use both its on-site DMMA area and the Piney Point facility off-site, for which it has recently concluded contractual arrangements with HRK Holdings.

#### **5. Beach and Dune Systems**

No beach or dune systems are in the Port area and thus are not affected by Port operations.



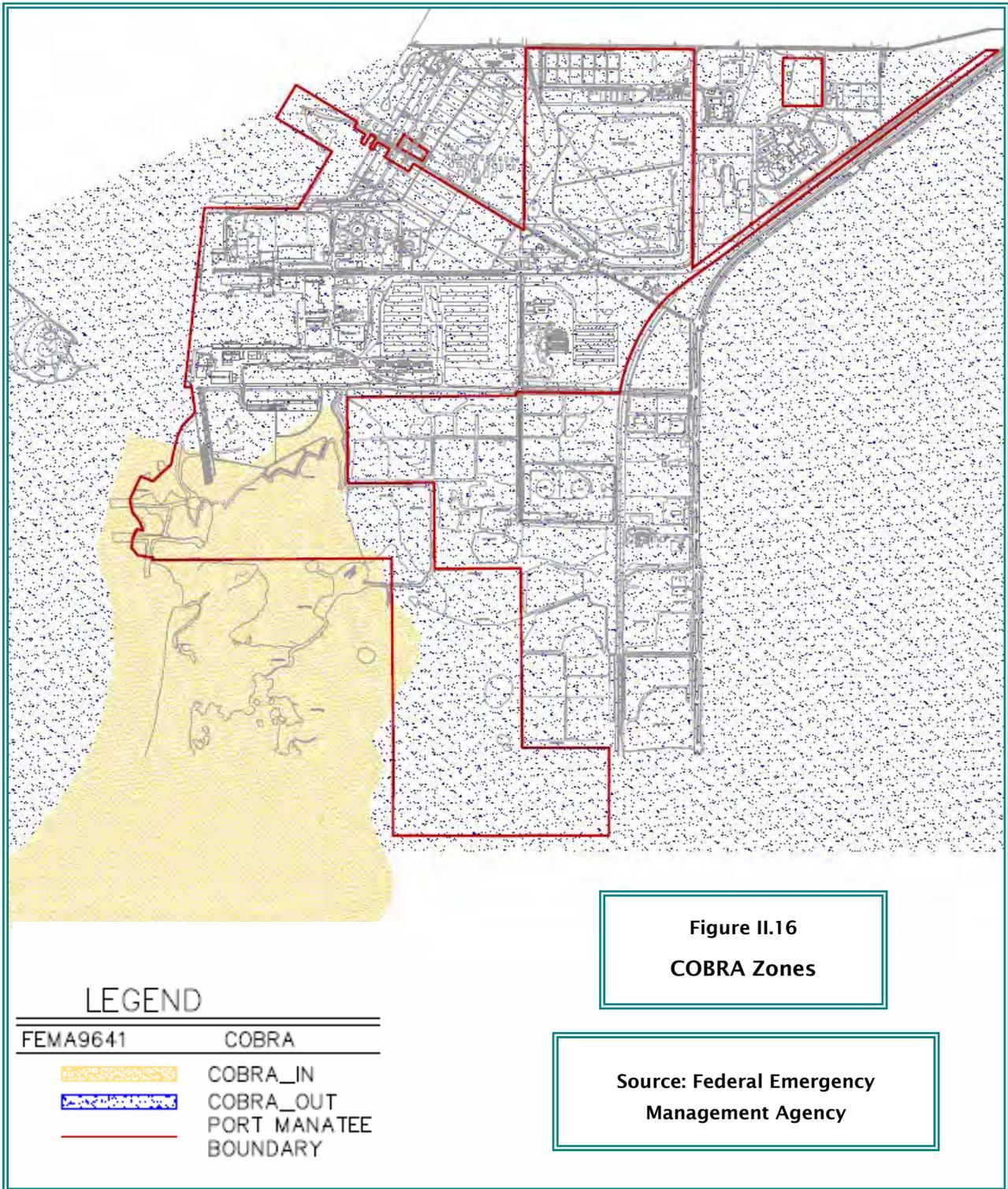
**LEGEND**

FEMAS641	ZONE
	A
	AE
	UNDES
	VE
	X
	X500
	PORT MANATEE BOUNDARY

Figure II.15

Flood Map

Source: Federal Emergency  
Management Agency



## **D. Utilities**

### **1. Potable Water**

Manatee County Utilities Department provides potable water to the Port. The Port and its tenants purchase water on a retail basis, as metered customers. The water used for public (personal) consumption, drinking, cleaning, sanitary uses represents about 25 percent of the metered commercial uses, but are not discharged to the wastewater treatment facility. These public potable water uses are estimated at 7,500 gallons per day (gpd) while the commercial uses are 26,500 gpd, based on meter readings provided by the Port.

The existing water lines serving the Port are currently being decommissioned. The 10-inch and 14-inch diameter water lines are being replaced by the utility department with a new 16-inch diameter potable water line due to problems associated with the two older lines. This new, larger potable water system will be provided with adequate capacity for current demand and is expected to be adequate for the demand generated by expanded future operations (see Chapter IV).

### **2. Wastewater**

Manatee County Utilities Department provides sewage collection and treatment for the Port and its tenants. The Port is served by the North County wastewater treatment facility, located approximately two miles east of I-75. Discharges are estimated at 6,200 gpd. Plant capacity is adequate to treat the Port's current demand and is expected to be adequate for the demand generated by future operations.

### **3. Stormwater and Drainage Facilities**

Port Manatee maintains a comprehensive stormwater management system approved by Manatee County and the Southwest Florida Water Management District. The system consists of a network of swales and other conveyance structures and stormwater management ponds. The existing stormwater system meets the requirements for flooding attenuation and water quality.

### **4. Solid Waste**

An independent contractor collects solid waste at the Port. Those services are competitively bid on a regular basis, as set by the Port Authority. Port operations generate minimum solid waste. Tenants generate variable amounts, but these uses are generally low, as cargo is not broken down but transshipped. Solid waste generated on Port property is disposed of at the Manatee County facilities, specifically the Lena Road Landfill. This facility has capacity to handle current uses as well as the solid waste to be generated by expanded future operations.

### **5. Energy**

Florida Power and Light provides for the Port's power requirements. Each tenant is individually metered as well as those assets specifically owned by the Port such as lighting, security, offices, and other components in the operational areas. The major electrical demands are from the chiller warehousing and reefer plugs (outlets designed to maintain refrigerated containers operational). The fees are the responsibility of the individual tenants. Based on meter readings provided by the

port, .present demands from the Port and its tenants are on the order of 700 to 1000 kilowatt-hours, depending on the season.

## E. Inland Highway System

### 1. Strategic Intermodal System

In 2003, Florida’s Legislature and Governor established the Strategic Intermodal System (SIS). The SIS comprises a statewide network of high priority transportation facilities and services including the state’s largest and most significant commercial service airports, spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways. The SIS is intended to enhance Florida’s economic competitiveness by focusing limited state resources on transportation facilities that are critical to Florida’s economy and quality of life.

Port Manatee is a designated hub and is classified as an SIS deepwater seaport. Access to the Port is provided via a series of SIS connectors, including an SIS rail corridor and SIS waterway, as listed in Table II.6 and illustrated in Figure II.17. U.S. 41 is the designated SIS roadway connector, providing a direct connection between Port Manatee and I-275. I-275 and I-75 are both designated SIS highways and provide connections between the SIS connector and the rest of the state.

<b>Table II.6</b>	
<b>SIS Facility Designations near Port Manatee</b>	
<b>SIS Classification</b>	<b>Facility</b>
SIS Highways	Interstate 75
	Interstate 275
SIS Rail Corridors	CSXT Line from Bradenton North to Tampa
SIS Waterway	Gulf Intracoastal Waterway and Shipping Lanes
SIS Road Connector	U.S. 41 from I-275 to Piney Point Road (a County Road) to Port Entrance
SIS Rail Connector	On-port Class III Railroad (owned and operated by Port Manatee) from Seaport Property Line to CSX Line
SIS Waterway Connector	Port Manatee Waterway connector to Gulf Intracoastal Waterway

From a rail standpoint, the Port is connected to the CSXT SIS rail corridor via an SIS rail connector. The designated SIS rail connector is owned by the Port, and consists of a segment of the on-port Class III railroad connecting to the CSXT railroad. Access to the SIS waterway is provided via an SIS waterway connector between the Port and the Gulf Intracoastal Waterway.

**Figure II.17**  
**FDOT SIS Designations**



## 2. Existing Roadway Network Conditions

Most of the roadway access system for the Port currently consists of four travel lanes (two in each direction), with the exception of I-75 and portions of I-275, as illustrated in Figure II.18. U.S. 41 and I-275 are primarily four-lane highway facilities, with I-275 being a controlled access facility and U.S. 41 being a limited access facility.

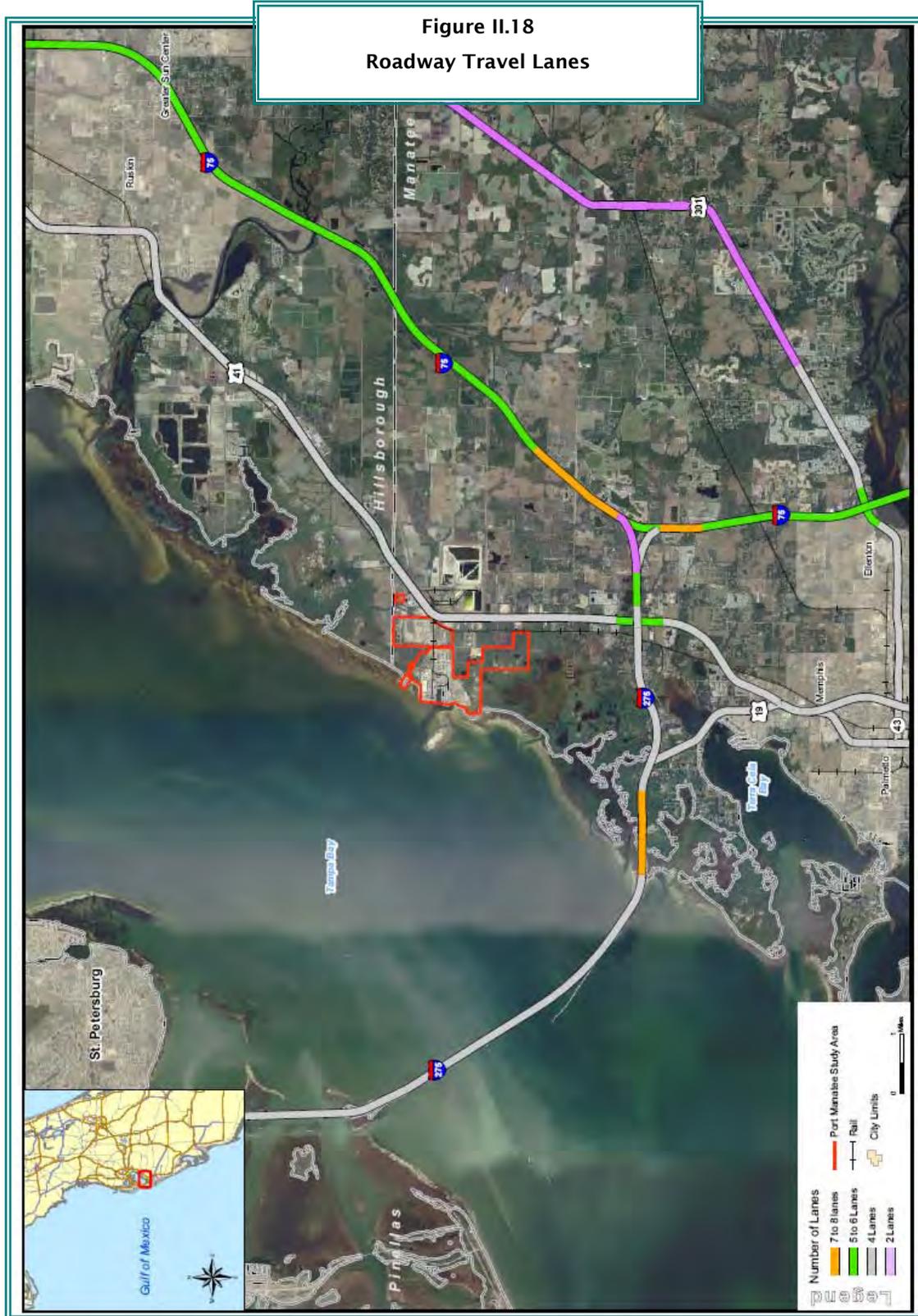
Year 2005 daily traffic volumes near Port Manatee range from 9,000 to 10,000 vehicles per day along U.S. 41 to more than 80,000 vehicles per day along I-75, as illustrated in Figure II.19. Daily traffic volumes along I-275 are much less than the traffic volumes along I-75; this difference illustrates that I-75 is a statewide facility with considerable amounts of through trips, while I-275 is more of a regional facility, providing access to St. Petersburg and Tampa. Year 2008 data in the same area show daily volumes that are slightly less than those in 2005, reflecting the effects of the current economic downturn.

Existing traffic operations are evaluated by conducting a capacity/level of service (LOS) analysis. Roadway capacity is defined as the maximum number of vehicles that can be accommodated on a roadway facility during a particular period under prevailing roadway, traffic, and control conditions. An important result of a capacity analysis is the determination of LOS.<sup>3</sup>

As illustrated in Figure II.19, the majority of roadways near Port Manatee are operating at acceptable LOS C or better, meaning that traffic volumes are below capacity and the roadways are providing acceptable traffic operations.

---

<sup>3</sup> LOS is a qualitative measure of operating conditions at a location and is directly related to the volume-to-capacity ratio along roadways. LOS is given a letter designation ranging from A to F (free flow to heavily congested), with LOS C considered the limit of acceptable operation for SIS facilities. For example, LOS can be related to the grading scale of a report card: A – Excellent, B – Good, C – Average, D – Acceptable, E – Needs improvement, and F – Failing. The LOS along major roadways near Port Manatee was determined utilizing the generalized planning analysis tables in the Florida Department of Transportation’s (FDOT) Quality/Level of Service Handbook.





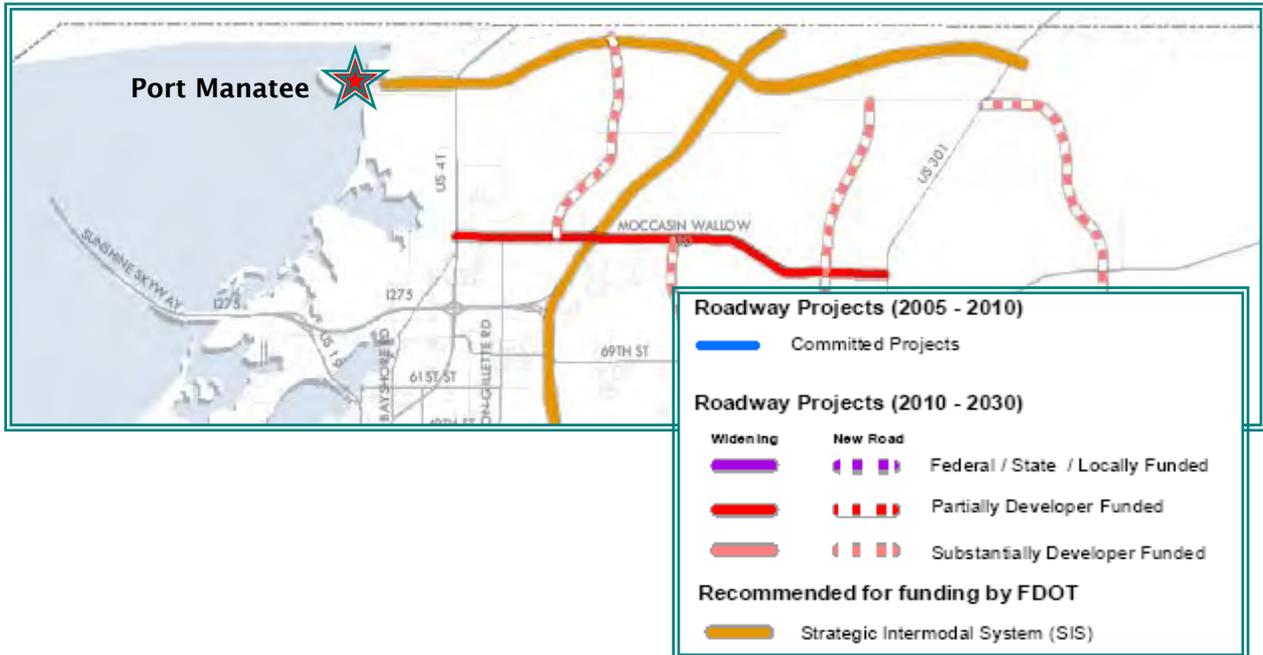
### 3. Future Transportation Network Conditions

**Future Improvements.** The Florida Department of Transportation (FDOT) maintains a five-year Work Program of projects, which are typically considered “committed” improvements. Funding sources for projects in the Work Program are considered firm, although projects in this program are sometimes delayed due to revenue shortfalls at the state level. FDOT has programmed various improvement projects in the Port vicinity, including safety, resurfacing, and maintenance projects. None of the roadway-related projects around the Port add roadway capacity. The latest available Work Program covers the period from 2009 to 2013, and was last updated in January 2009.

In terms of long-term projects, the FDOT SIS Cost Feasible Plan does not contemplate at present any road capacity projects on I-275, U.S. 41, and I-75 in the Port vicinity through 2035. The ongoing Project Development and Environment (PD&E) Study of a new Port connection between I-75 and the entrance to the Port is discussed later in this section

The 2030 Sarasota-Manatee Long Range Transportation Plan (LRTP) identified needed road improvements across the two-county area. The improvements proposed in the 2030 Financially Feasible Plan in northern Manatee County are shown in Figure II.20.

**Figure II.20**  
**2030 Long Range Transportation Plan**  
**Financially Feasible Roadway Projects**



The plan envisions widening of local roads east of U.S. 41, mainly due to increasing residential development. Funding for the I-75 widening, as shown on the map, is currently in question; but efforts are ongoing to identify funding sources

The only road capacity project in the vicinity is Moccasin Wallow Road between U.S. 41 and U.S. 301, and a north-south arterial that is developer-sponsored. There are no funded improvements to I-75, I-275, and U.S. 41. The legend for I-75 and the Port Connector indicates FDOT support, but no committed funding. The Sarasota-Manatee LRTP is being updated to 2035, but will not be completed until later in 2009.

While no widening of U.S. 41 is planned, traffic volumes are forecast in 2030 to have increased significantly, especially south of Moccasin Wallow Road approaching I-275. Forecasts do not show that the capacity of U.S. 41 is exceeded; nevertheless, traffic operations will not be the free-flow conditions that exist today in the largely rural setting that prevails, at least during morning and evening peak periods of travel.

#### **4. Regional Access to Port Manatee**

The principal highway access route to Port Manatee is U.S. 41, with most traffic approaching from the south to I-275 and thence to I-75. A small percentage of vehicles use Moccasin Wallow Road from U.S. 41 south of the Port to connect directly with I-75, and a larger share uses U.S. 41 north from the port to reach I-75 through Ruskin.

**U.S. 41 Corridor.** U.S. 41, shown in Figure II.21, is the most important access link for Port Manatee, for it provides the primary connection to the regional I-275 and I-75 corridors.

**Figure II.21**  
**Existing U.S. 41**  
(On the left, looking south, and on the right looking west across US 41 at Piney Point Road)



Thus, if Port Manatee is to avoid the accessibility issues plaguing some of Florida's other major seaports, managing access and the level of traffic service is vital in view of potential land development and anticipated changes in the traffic operations along the 3.5 miles of U.S. 41 between the Port and I-275.

While the U.S. 41 corridor between I-275 and the seaport is largely undeveloped at this time, it has a Class 7 designation, the lowest level access management class under FDOT rules. The 2030 LRTP indicates a significant increase in traffic volumes on U.S. 41, approaching the capacity of the existing roadway in the half-mile segment north of I-275. Continuing residential development has been projected for the area north of I-275 and west of I-75, though in the short-term the economic climate has dampened new development activity.

With an existing daily volume on U.S. 41 north of I-275 at approximately 10,000 daily vehicles, it is evident that future growth will substantially change the traffic operational environment on U.S. 41. While the 2030 projected volume is nominally within the capacity of the existing 4-lane roadway, peak-period traffic speeds will be reduced and the level of traffic service LOS will drop from B today to D in 2030 at the south and closer to I-275. This increase in traffic volume will be accompanied by a corresponding decrease in traffic speeds from the currently posted 65 miles per hour to an estimated 30 to 35 miles per hour in peak hours.

FDOT, which maintains an access management classification system for roads in its network, classifies U.S. 41, shown in the adjacent photograph, as Functional Class 14 – Urban Other Principal Arterial. Standards are associated with each classification level relating to the spacing of full and partial median openings as well as driveways. U.S. 41 is categorized as a Class 7 facility, which is the lowest classification level in FDOT's access management system. Class 7 is typically assigned to developed urban areas and seems inconsistent with the role of U.S. 41.



Conformance to access management standards can be analyzed in tabular form. As part of a prior study for the Port, such an analysis was performed to review access control standards relative to the existing median openings on U.S. 41 between I-275 and Airport Road north of the Port near the County Line.

The analysis of the existing median openings in terms of Class 7 and Class 5 access management designations suggests that a Class 5 (45 mph or less posted speed limit) designation could be achieved with the closure of existing median openings that do not serve cross streets and with some modifications to existing access in two limited areas. Conformance to a Class 5 (over 45-mph posted speed limit) designation would require more analysis and closure of some medians serving existing driveways or intersecting streets. Likewise, conformance to a more restrictive Class 3 designation would entail an even more substantial reworking of access, but could be considered.

In terms of driveway connections, Access Class 7 allows driveways at a uniform spacing of 125 feet. Class 5 requires a spacing of 440 feet (12 driveways per mile) for speed limits over 45 mph and

245 feet (21 driveways per mile) for speed limits of 45 mph or less. For Access Class 3, the respective spacings are 600 feet (8 driveways per mile) and 440 feet (12 driveways per mile).

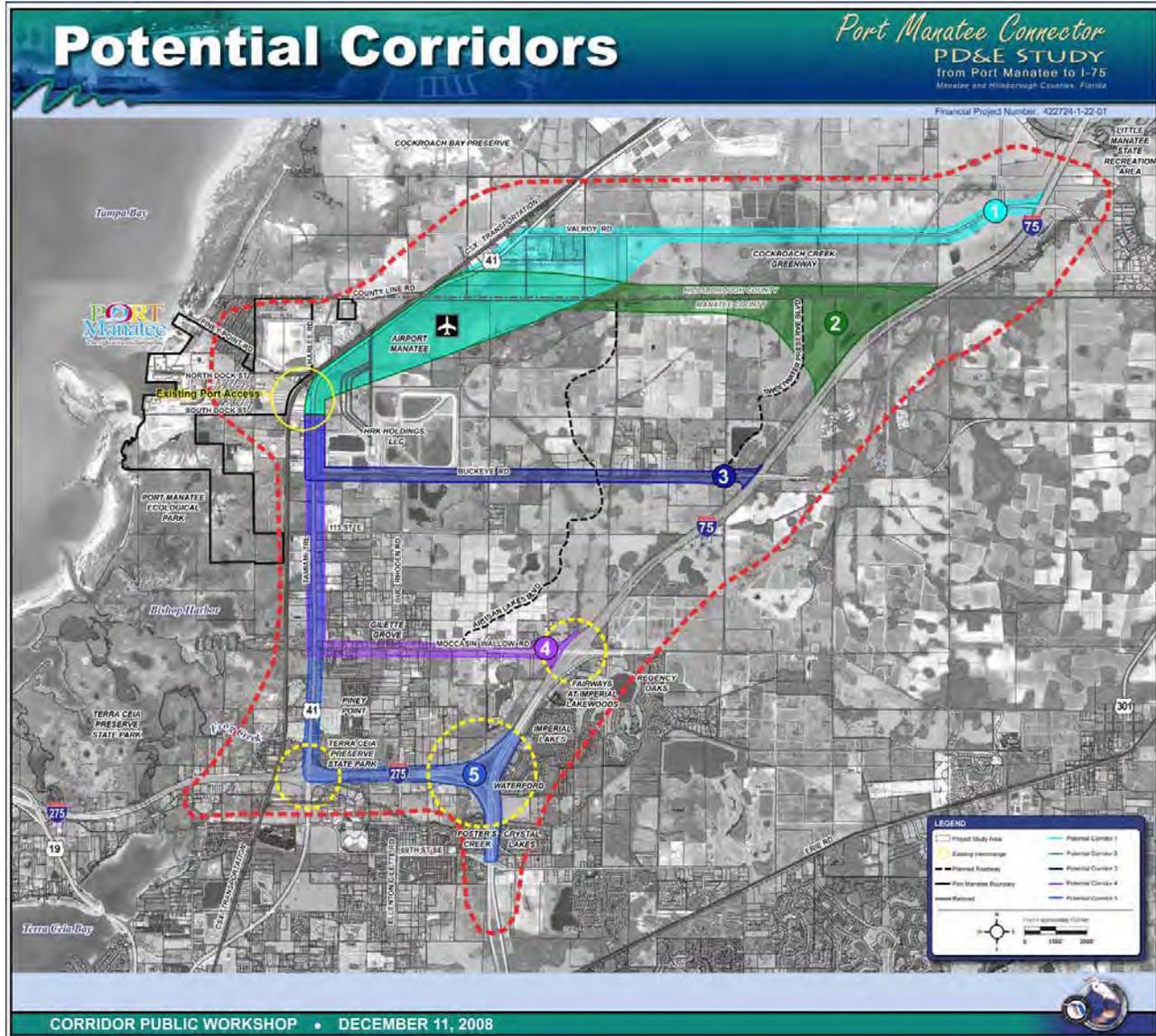
It is recommended that the Port pursue further a change in the access management designation with the FDOT District 1 access management staff with the objective of managing the corridor for optimum access control at minimal cost. It may also be worthwhile to pursue possible improvements to U.S. 41, at least south of Moccasin Wallow Road, using access management as one of the tools, with regard to the significant traffic growth projections anticipated for this section of U.S. 41, to the benefit of both Port access and the anticipated development activity and its associated traffic.

**I-75 Port Connector Corridor.** As noted earlier, the Port has expressed ongoing interest in developing a direct access connection to I-75. Previously, FDOT District 1 had commissioned a *Port Manatee Corridor Feasibility Study* to consider a connection between the Port and I-75. The 2006 Feasibility Study, conducted by FDOT, examined six potential alignments, including the existing corridor. Subsequently, FDOT initiated the current PD&E Study of the Port - I-75 connector. Funding for design and construction of this new connector is dependent upon the results of the PD&E study, and the companion Environmental Impact Study, with an anticipated completion date by mid-2011. In the Sarasota-Manatee MPO *2030 Long-Range Transportation Plan*, the new Port connector is identified as traversing northeast from the Port entrance to connect with I-75 at a new interchange northeast of the Port.

The PD&E study will identify the best route and determine the need for this facility. Figure II.22 shows the identified conceptual access corridors that will be further analyzed in the study, including the possibility that the Port Connector might one day be the western terminus of a potential east-west cross-state road corridor. The SIS Cost Feasible Plan does include a \$20 million entry for the Port Connector corridor; this amount of funds would support some preliminary engineering and/or selective and limited right-of-way acquisition.

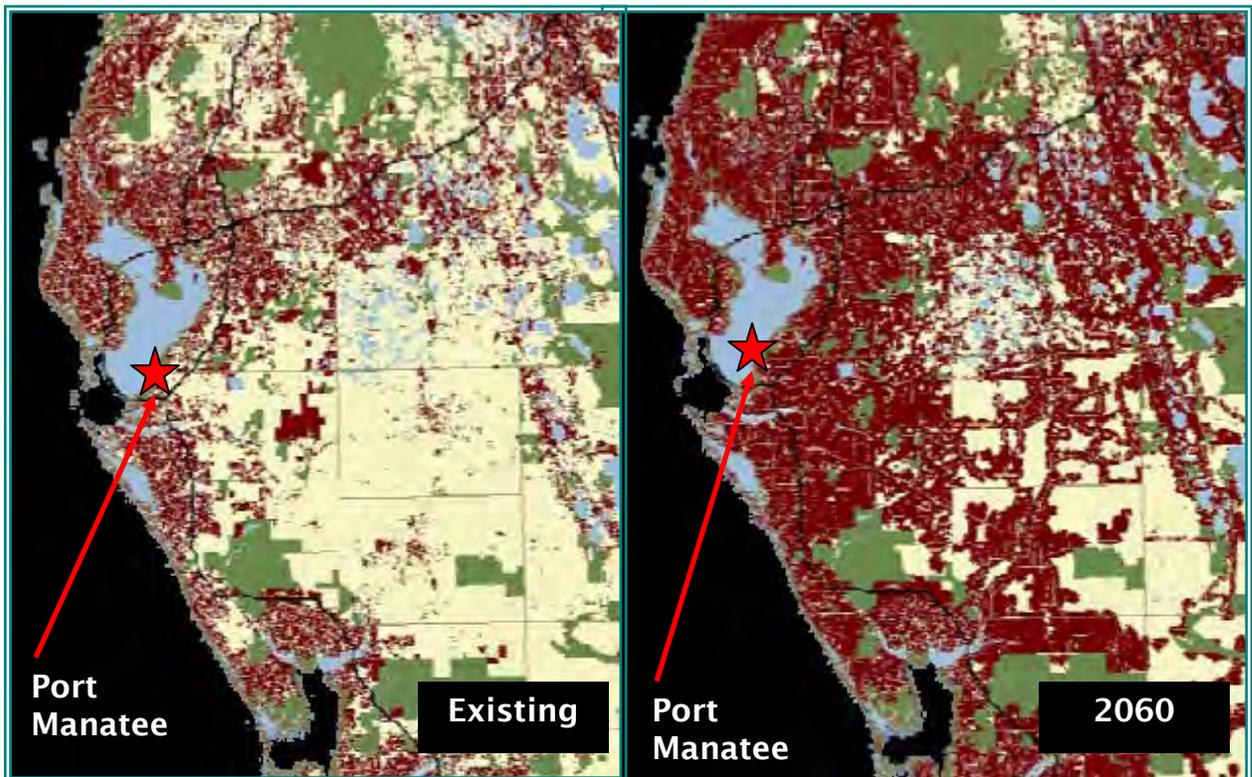
Since this study started, the Port has maintained an ongoing involvement in the study process, as its findings could influence long-term Port access options and funding opportunities.

**Figure II.22**  
**Potential Corridors for a**  
**Port- I-75 Connector**



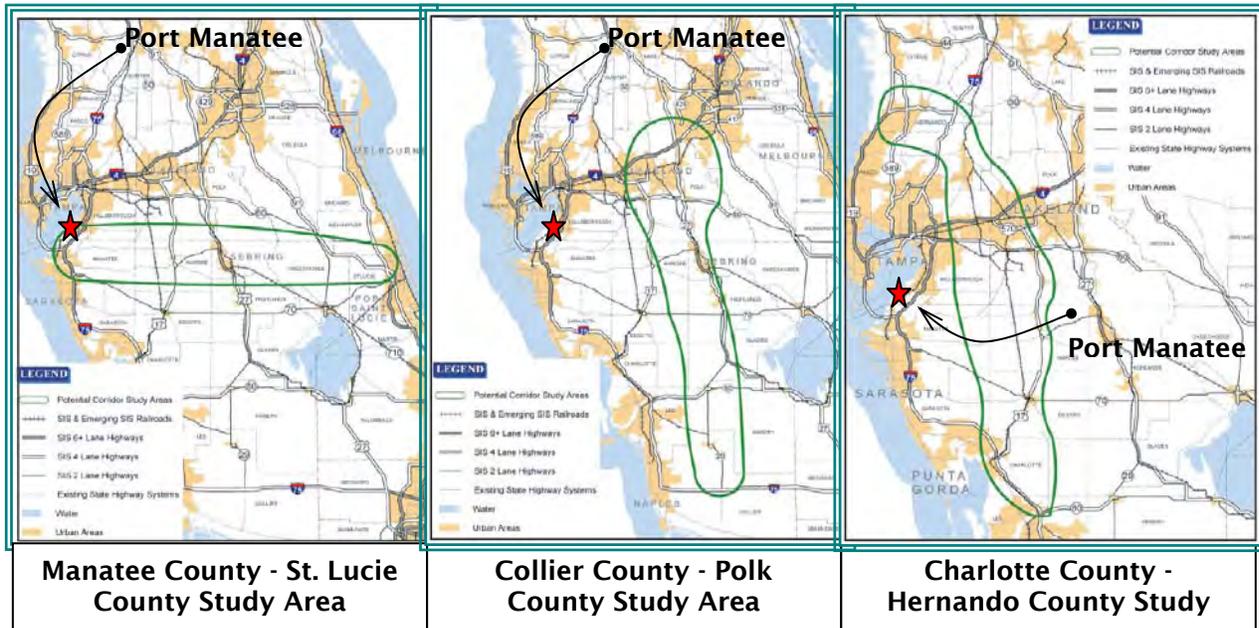
**Regional Corridors.** Florida is a dynamic state and continues to experience significant population growth. The group 1,000 Friends of Florida in its research project "Florida 2060" noted that the state population is estimated to roughly double from 18 million today to 36 million in 2060. Using mapping and land use planning techniques, it developed a view of how land development in 2060 across the state might look, as shown in Figure II.23 below.

**Figure II.23**  
**Developed Lands: Existing Compared with 2060**



As part of FDOT's ongoing statewide system planning, prior analysis of long-term traffic forecasts showed that the principal highway corridors across the state will experience much more widespread congestion without increased corridor capacity and new trunk corridors. To this end, FDOT had been developing a "Future Corridors" action plan that has two key strategies: reuse and/or redesign of key existing statewide corridors (which include I-75 and I-4 in the Tampa Bay region), and potential development of new regional corridors. The three regional corridors in the vicinity of Port Manatee are shown in Figure II.24 below.

**Figure II.24  
Potential New Regional Corridors**



All three of these new corridors are of interest to Port Manatee, but especially the Manatee County-St. Lucie County Study Area which could provide a high-speed link to the east coast of Florida that does not exist presently in Central Florida. This route would conceivably have its western terminus at I-75 at a point not far from Port Manatee. This route has been considered in the planning for the Port Manatee- I-75 Connector.

Active investigation of these corridors is not currently progressing, due to ongoing transportation network funding issues. Such potential new statewide corridors would require a conceptual level screening to further assess need and feasibility. Not all such corridors will likely be found feasible, partly because of the significant level of cost in developing a new corridor, and partly because some of the corridors are competing with each other and with the option to augment capacity in existing primary highway corridors. Because of the anticipated long-term development in the Port vicinity, and its implications for continued efficient Port access, Port Manatee should continue to monitor the planning in these corridors through its communications with FDOT, District 1, and the Sarasota-Manatee MPO.

## 5. Existing Distribution Centers

A distribution center is a warehouse or other specialized building stocked with products to be re-distributed to retailers or wholesalers. Distribution centers are the foundation of the retailing network as they allow a retail location to stock vast numbers of products without incurring high transportation costs. The locations of distribution centers in relation to port facilities provide important information concerning efficient highway access between products arriving at seaports and being transported to a distribution center. In today's economy, shippers and carriers are attracted to ports that have convenient distribution centers, thereby reducing transportation costs.

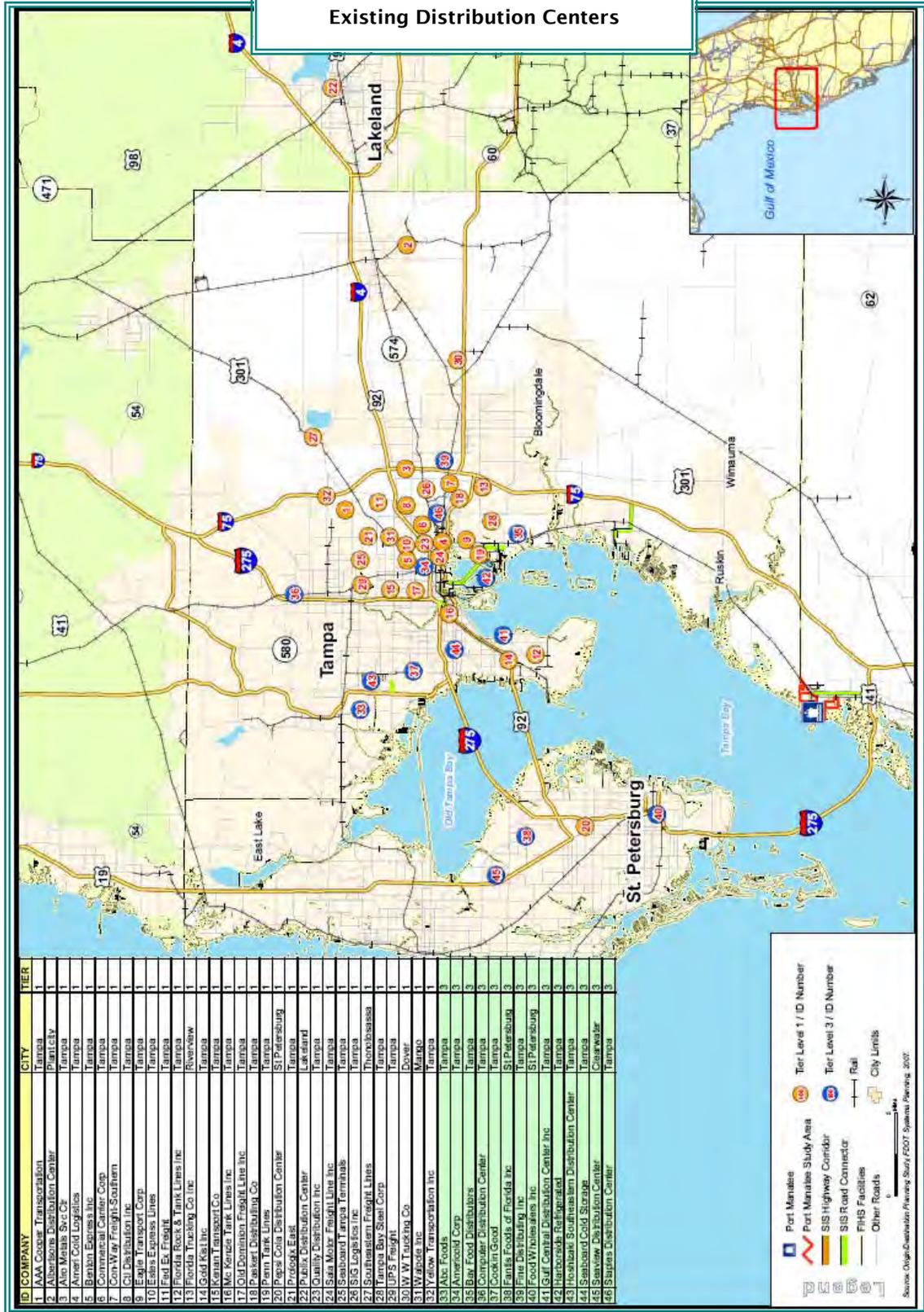
The FDOT Systems Planning Office previously conducted an Origin/Destination Planning Study, which included an effort to identify and classify significant distribution centers located within the State. At the time, a total of 164 distribution centers were identified within the state and classified into three tiers, based on their estimated size and significance: 23 were classified as Tier I centers, 18 classified as Tier II centers, and 123 classified as Tier III centers.

The Tier I centers represent some of the larger and best known retailers in Florida, including Dollar General, Domino's Pizza, NAPA, Publix, Sam's Club, Walgreen's, and Wal-Mart. Tier II centers included a few retailers as well as a number of distribution centers that handle a vast array of products. Tier III centers include other smaller retailers and several smaller multi-company centers.

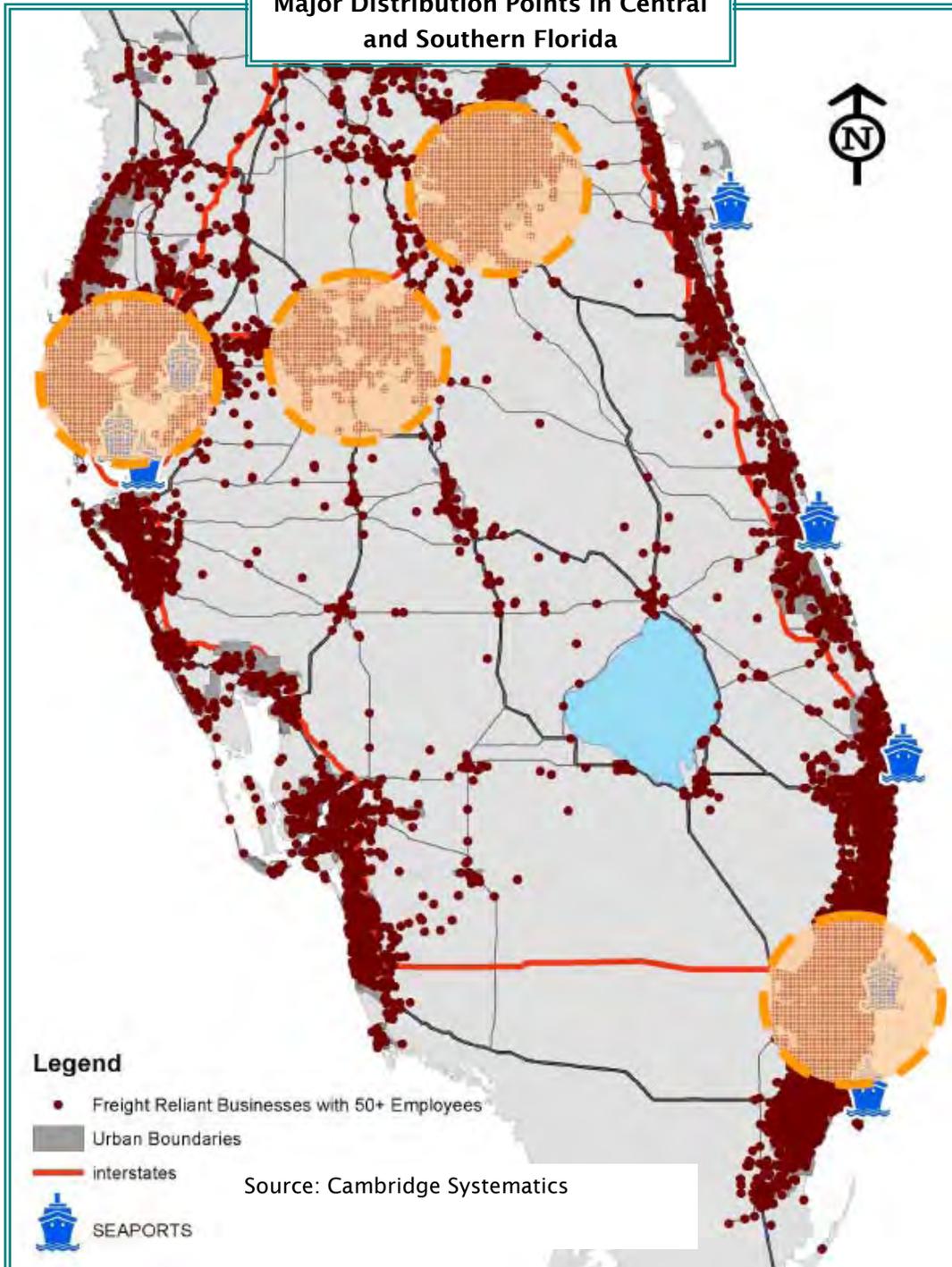
Seventeen distribution centers are located within the four-county region surrounding Port Manatee (Manatee, Sarasota, Hillsborough, and Pinellas counties). Three of these are classified as Tier I centers, including the Albertsons Distribution Center in Plant City, the Gold Kist Distribution Center in Tampa, and the Pepsi Cola Distribution Center in St. Petersburg. The remaining 14 distribution centers are classified as Tier III centers, as illustrated on Figure II.25. All of the distribution centers are located north of Port Manatee in Hillsborough or Pinellas Counties, with none identified in Manatee or Sarasota Counties.

An alternative perspective on the freight transport environment in Central Florida is the distribution of "freight dependent" businesses with 50 or more employees, as shown in Figure II.26. It is seen that the pattern of such businesses largely follows population. The geographic location of Port Manatee positions the Port to serve metropolitan Tampa, the I-4 corridor, and the west coast of Florida extending south to Naples. It also has an impact on the Port's long-term plan to develop additional containerized cargo capacity, as discussed in Chapter III.

**Figure II.25**  
**Existing Distribution Centers**



**Figure II.26**  
**Major Distribution Points in Central and Southern Florida**



## 6. Port Manatee Projects

As discussed in Chapter VI, Port Manatee funds its seaport improvement projects with the help of grants from a variety of funding sources, including Chapter 311, F.S., funds; Section 320.20(3), F.S., bond program funds; FDOT discretionary intermodal funds; and SIS and SIS Growth Management funds. Projects currently programmed for Port Manatee using these funding sources are identified in Table II.7<sup>4</sup>. The availability of state funding for these types of projects requires a local match from Port Manatee, which is usually 50 percent of the cost of the project.

**Table II.7**  
**Planned On-Port Projects in FDOT Work Program, 2009 to 2013**

Project	Item No.	Type of Work	Year					Total
			2009	2010	2011	2012	2013	
Port Manatee	410665-1	Seaport Capacity Project	\$2,000,000					\$2,000,000
Port Manatee Capital Improvements	405447-1	Seaport Capacity Project	\$600,000					\$600,000
Port Manatee Capital Improvements	408188-1	Seaport Capacity Project	\$1,400,000					\$1,400,000
Port Manatee Capital Improvements	417988-1	Seaport Capacity Project	\$4,000,000	\$2,000,000				\$6,000,000
Port Manatee Capital Improvements	422590-1	Seaport Capacity Project				\$6,372,390		\$6,372,390
Port Manatee Capital Improvements	418315-1	Seaport Capacity Project	\$1,400,000					\$1,400,000
Port Manatee South Channel Access Dredging	417077-1	Seaport Capacity Project	\$900,000	\$1,900,000	\$1,500,000	\$1,867,000	\$2,194,000	\$8,261,000
Port Manatee Connector (SIS Connector)	422724-1	PD&E/EMO Study	\$48,333					\$48,333
<b>Total</b>			<b>\$10,248,333</b>	<b>\$3,900,000</b>	<b>\$1,500,000</b>	<b>\$8,239,390</b>	<b>\$2,194,000</b>	<b>\$26,081,723</b>

Source: FDOT Work Program, 2009-2013, updated January 25, 2009.

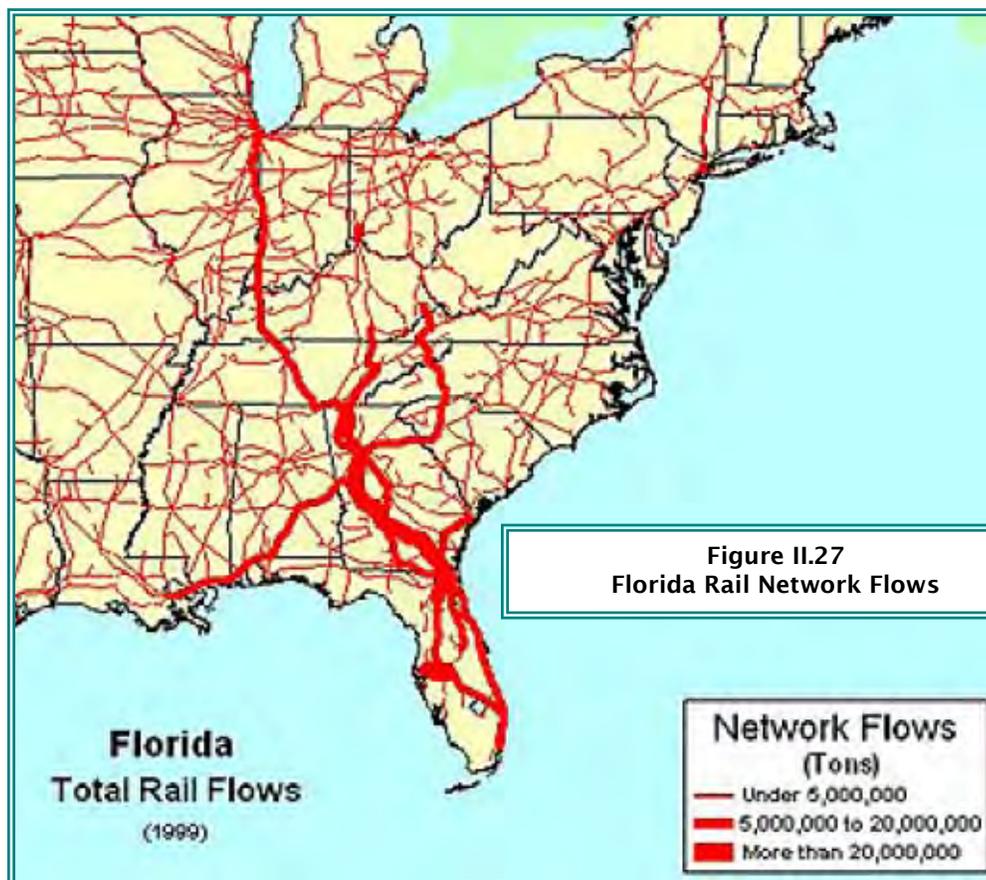
<sup>4</sup> Given budgetary shortfalls, these entries may be subject to modification.

## F. Inland Rail Network

### 1. Class I Rail Trends

Rail freight movement tonnages within, to, or from Florida are summarized in Figure II.27. Florida rail shipments are strongly influenced by bulk shipments of aggregates from South and Central Florida and phosphates from Central Florida. Otherwise, Florida rail shipments are dominated by southbound shipments of consumer products, building materials, coal shipments to power plants, and raw materials for the industrial markets.

Shipment patterns are historically highly imbalanced by inbound southbound movements, with much less actual volume northbound. Due to economic rail haul distances, rail freight movements are dominated by bulk commodity movements within the state, and longer distance inbound shipments from out-of-state. Figure II.27 shows that out-state rail shipments are highly oriented along the I-75 corridor to Atlanta and limited points beyond, including Chicago and Appalachian coal sources, with a branch of activity to Savannah, most likely the seaport with its inbound shipments of Far East consumer goods.



The Federal Highway Administration (FHWA) *Freight Analysis Framework* database, which provides existing and projected freight movement outlooks by modes shows that the use of rail within Florida will be relatively flat, as will be rail shipments from Florida out of state (see Table II.8). Due

to population growth, however, shipments to Florida from out of state are expected to continue grow dramatically, tripling by 2030.

**Table II.8**  
**Freight Rail Trends in Florida**

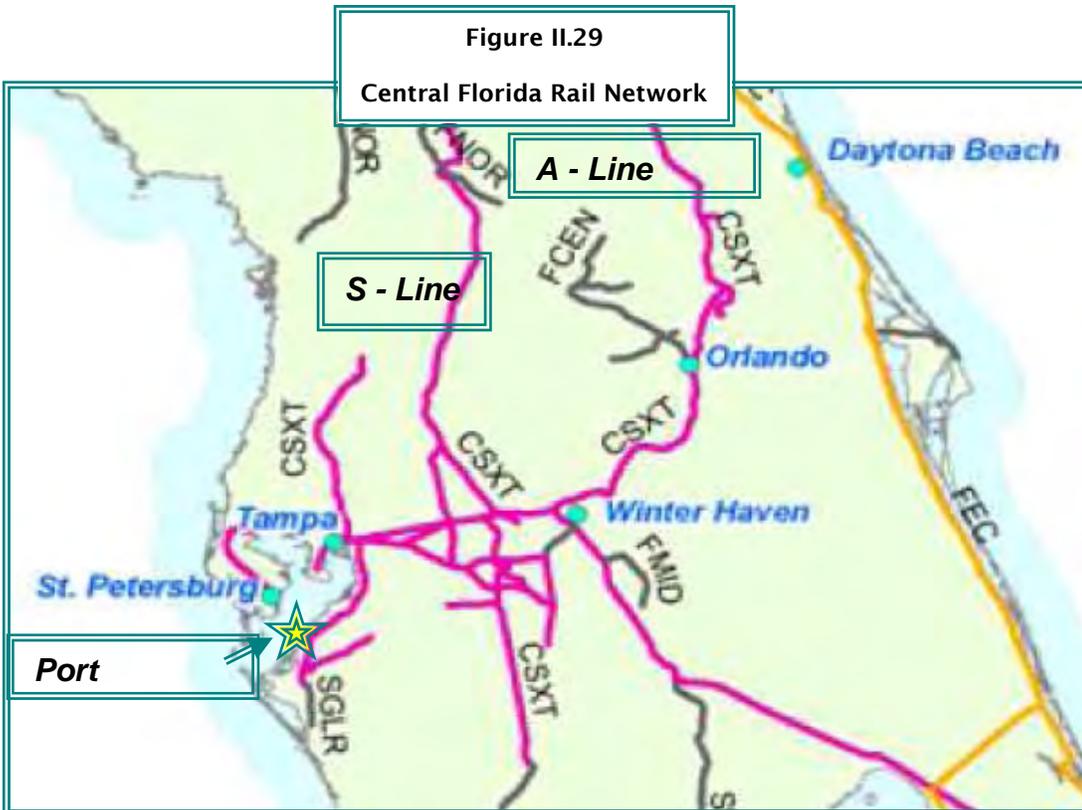
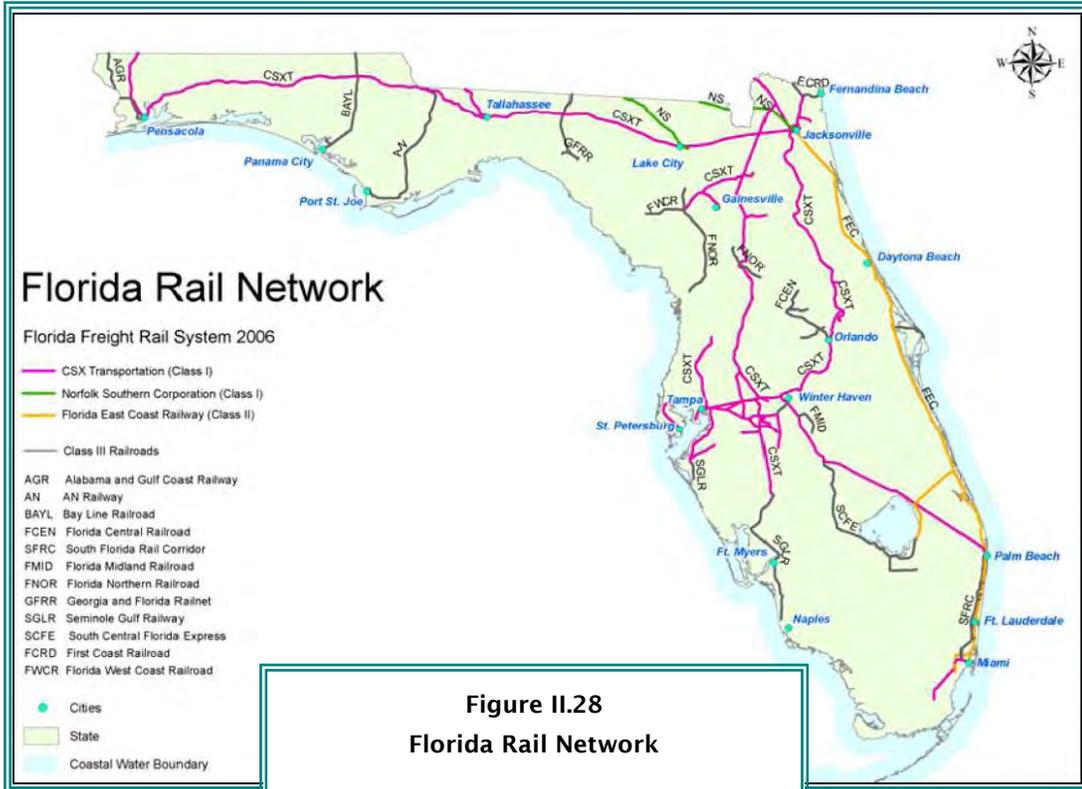
YEAR	Within Florida	From Florida to Out of State	To Florida from Out of State
2002	60.4 Million Tons 11% of all freight	16.9 Million Tons 23% of all freight	36.8 Million Tons 18% of all freight
2035	55.7 Million Tons 5% of all freight	14.2 Million Tons 15% of all freight	113.1 Million Tons 21% of all freight
Percent Change in Tonnage	-7.8%	-16.0%	+207.3%

**Source:** Federal Highway Administration *Freight Analysis Framework* database

## 2. CSXT Regional Rail

CSX Corporation, based in Jacksonville, owns companies providing rail, intermodal and rail-to-truck trans-load services that are among the nation's leading transportation entities, connecting more than 70 river, ocean, and lake ports as well as more than 200 short line railroads. Its principal operating company, CSX Transportation, Inc. (CSXT) operates the largest railroad in the eastern United States with a 21,000-mile rail network linking commercial markets in 23 states, the District of Columbia, and two Canadian provinces. Port Manatee's rail access is provided through the CSXT rail corridor running along U.S. 41 adjacent to the Port.

**CSXT Florida System.** CSXT operates two major rail lines in peninsular Florida, dubbed the A and S -lines (see Figures II.28 and II.29). The A-line runs through Jacksonville and Orlando, roughly following I-95 and I-4 into Polk County. The S-line runs through Baldwin and Ocala slightly west of the center of the state; a Federal Railroad Administration Class III single track mainline serves Port Manatee and Bradenton to the south from Tampa's Yeoman Yard.



The two lines touch near the Florida-Georgia border, then split and intersect again only in north central Polk County. There they essentially merge in an east-west line between Auburndale and a spot just west of downtown Lakeland. Historically and to date, this mainline averaged between 10 and 20 million gross ton-miles of freight traffic per year. The line continues southeast to the north of Lake Okeechobee to West Palm Beach where it then generally parallels I-95 southward into central Miami-Dade County and the Hialeah Yard, connecting to two branch lines serving rock pits and industrial customers.

As discussed earlier in this chapter, Port Manatee operates its own Class III terminal railroad with two switch engines and approximately eight miles of on-site and exchange track connecting to the CSXT main line. The terminal railroad was created solely to provide flexibility and convenience to on-site tenants and has performed this function admirably to this day. To take the Port to the next level of growth and expansion, however, decisions should be considered as to whether the terminal railroad itself should be expanded in function or outsourced to others to provide new and higher levels of service to accommodate expected growth.

**Winter Haven Integrated Logistics Center.** An agreement between the State of Florida and CSXT, originally proposed in 2006, proposes consolidating most of CSXT's existing and future freight rail traffic in Florida onto the S-line (the trunk line that serves the Tampa region and Port Manatee). This agreement is contemplated to include the development of a new "state-of-the-art" Integrated Logistics Center located just south of Winter Haven. The new CSXT Integrated Logistics Center is to sit on city-owned property next to the rail line that runs southeast of Winter Haven.

The Winter Haven rail hub, when complete, will bring a major container distribution center to nearby south central Florida with truck access to all parts of the state and rail access to the rest of the country. The Winter Haven Integrated Logistics Center is designed to take advantage of Florida's long-term population and economic growth and could enhance service to Port Manatee tenants and its developing markets. This bodes very well for the long-term expansion plans envisioned by Port Manatee in the form of general commodity and possibly container transport (both domestic and international), as projected in the market analysis presented in Chapter III.

**Juice Train Efficiencies.** CSXT and the Tropicana juice processing plant in Bradenton jointly collaborated to improve juice train efficiency, reducing transit time to New Jersey and improving on-time delivery reliability. This approach affords Port Manatee the opportunity to participate in increasing rail cargo volumes and service efficiencies. Given the existing condition and traffic on the CSXT rail line serving Port Manatee, no significant rail improvements are contemplated over the next 10 years.

### **3. Port of Palm Beach Inland Port Concept**

Faced with constrained land capacity at its existing facility, the Port of Palm Beach proposed the development of an inland port in western Palm Beach County, or as it is now called, the Port of Palm Beach Intermodal Logistics Center. The initial feasibility study of the proposed concept conducted by FDOT cast a broad net to see whether the inland port could benefit other deepwater ports in the southern half of the state. That study found that the biggest beneficiary would probably be the Port of Palm Beach itself and the communities and business interests in Palm Beach County.

Subsequently, FDOT initiated a second feasibility study for the proposed facility to address market and economic impact issues. Multiple efforts are continuing to secure project approval and funding.

While a central distribution hub in South Florida could provide new or better opportunities for South Florida ports to compete in existing or new markets, the jury is still out as to the potential benefit to the Tampa Bay ports, particularly with the development of the more proximate Winter Haven Integrated Logistics Center. Port Manatee's eventual distribution activities along the I-4 corridor in the Tampa Bay/Orlando region could be served more easily through that new facility.

## **G. Disaster Planning**

Port Manatee has prepared for natural and manmade disasters by developing appropriate policies and procedures for staff and tenants to follow in the case of such emergencies. These include:

- Hazard Material Management Plan.
- Hurricane Preparedness Plan.
- Ship Security Plan.
- Marine Firefighting Plan.
- Bomb Threat Checklist.
- Weapons of Mass Destruction Procedures.
- Safety Program.
- Anti-Terrorism Response Plan.

### **1. Hurricane Evacuation Planning**

The Port has a detailed hurricane contingency plan that is kept updated and distributed to Port staff and tenants. The plan is reviewed at the beginning of the hurricane season as well as prior to each possible hurricane to ensure that department heads know what their responsibilities are in case a hurricane materializes and that contact information for the Port's tenants, contractors, and other key people is accurate. The procedures to follow in case of a hurricane watch or warning are described and the persons responsible for carrying them out and securing the Port are identified.

The plan emphasizes preparedness, organization, and communication and addresses every aspect of Port operations:

- Moving barges and ships to a safe location out of the Port.
- Maintaining liaison with the Coast Guard.
- Shutting down and protecting warehouses, offices and other structures.
- Securing equipment.
- Removing objects that could be moved by the wind from the docks and other locations.
- Coordinating evacuation and return plans with tenants.



## **H. Security**

Port Manatee, like all of Florida's 14 public deepwater ports, has prepared a security plan to comply with the state's seaport security standards, as described in Chapter 311.12, Florida Statutes. The Port has established the whole Port as a restricted access area and has implemented the mandated permitting requirements for those entering the restricted area, including background checks and credentialing for those employed at the Port or accessing the Port on a regular basis. The Port's security program includes such features an access control center at the North Gate, shown in the photographs to the right, and a secured South Gate, lighting upgrades, fencing, and technological improvements.



**PAGE INTENTIONALLY LEFT BLANK**

# CHAPTER III MARKET ASSESSMENT



**PAGE INTENTIONALLY LEFT BLANK**

## Market Assessment

This chapter sets the stage for Port Manatee's new five-year and ten-year maintenance and expansion program by assessing the competitive marketplace opportunities that influence the Port's expansion. Accordingly, it summarizes the Port's activities in recent years, and identifies the characteristics of the local and regional hinterland community the Port serves. In addition, as the Manatee County Port Authority wishes to understand the Port's long-term opportunities, the market analysis and forecast extend beyond the ten-year planning horizon and, in particular, explore the Port's potential long-term demand for additional container capacity.

### A. Introduction

The previously cited *Master Planning Concepts* report submitted to the Manatee County Port Authority in February 2008 contained a comprehensive analysis of the global marketplace and the local and regional characteristics relevant to Port Manatee's short- and long-term growth opportunities. Since that report was prepared, the global economy has suffered a dramatic downturn that has rippled across all market sectors, including housing, construction, consumer spending, and consequently, international trade.

Seaports across the country are experiencing the effects of this downturn. For a while, the shrinking value of the dollar against other currencies helped promote U.S. exports; by the fall of 2008, however, as the dollar began to strengthen, exports became less attractive in foreign markets, and both imports and exports declined. At a January 2009 conference addressing the anticipated shifts in trade routes resulting from the opening of the Panama Canal expansion, which is still scheduled for 2014, the consensus of economists was that 2009 and 2010 will be difficult years for the global economy, and that a sustained upswing perhaps will not occur until 2011.<sup>1</sup>

Until housing and commercial construction recover, the Port's construction materials imports -- one of its major commodity types -- will not pick up. Moreover, until consumers feel more confident about the economy, they will postpone buying expensive goods such as high-definition TVs and other imported commodities. Nevertheless, the diversity of the commodities Port Manatee handles means that it can benefit in the interim from the market sectors that are doing better than others are. For example, perishables, such as the fruits and vegetables the Port imports, have demonstrated continued strength, even during the worst of the economic downturn. The Port's ability to manage different cargoes and be flexible enough to accommodate short-term changes in trade and commodity mix is a real plus during this difficult time.

As a niche port, Port Manatee has also been able to take advantage of unique opportunities to serve local and regional project cargo needs, as when the Sunshine Skyway Bridge was being rebuilt or

---

<sup>1</sup> *Shifting International Trade Routes*, January 15 and 16, 2009, sponsored by the American Association of Port Authorities, the Maritime Administration, and the Tampa Port Authority.

the Gulfstream pipeline was being laid. The Port expects to serve in a similar capacity when the future Port Dolphin pipeline is being laid. At present, the new SeaBridge barge service is exporting heavy concrete pipe for wind turbines in Texas.

What does the changed global economy mean for the market analysis performed for Port Manatee to forecast probable growth? The economic recession and trade downturn are not like the hurricane that set New Orleans back for years. Cycles come and go. The fundamentals of trade have not changed in this downturn: carriers will still want to move their ships most efficiently, while addressing the needs of their retail and commercial clients. Looking ahead, the state of Florida, including the Port's growing Tampa Bay and Central Florida hinterlands, will still need consumer goods and construction materials, and other commodities. People will still move to Central Florida and someday will again be buying high-definition TVs and the other commodities imported from the Far East. Retailers will anticipate the upturn in consumer spending and will build more distribution centers closer to the buyers. In addition, to accommodate these commodities, they will need additional container-port capacity

Consequently, while the Port's forecast trade volumes for the short term may be lower for a few years than previously forecasted, the longer-term trade forecast is expected to prove accurate as it incorporates cyclical factors that affect global economies every ten years or so. In other words, future trade growth peaks and valleys have been averaged into the annual growth rate.

The essential rationale for the analysis presented in the *Master Planning Concepts* report thus remains valid. Only the time frame has changed. The balance of this chapter summarizes that analysis, with a few adjustments and updated information, when available, to reflect identified market changes.

## **B. Port Manatee Trade Overview**

### **1. Historical Trade Volumes**

Port Manatee is a niche port focused on handling proprietary bulk and break-bulk (general cargo) commodities for selected shippers as well as an expanding volume of containerized cargoes. Figure III.1 tracks the Port's historical trade volumes since 1999, based on information from Port records.

As Figure III.1 shows, Port Manatee maintained peak performance in 2005 and 2006<sup>2</sup> with volumes above 9.4 million tons both years. In 2007, the Port's tonnage declined by a million tons to 8.8 million tons or 11.6 percent, dropping by another 5.9 percent again in 2008 to 8.3 million tons.

---

<sup>2</sup> Port data cover fiscal years, i.e., 2005 is FY 04/05 and 2006 is FY 05/06, etc

**Figure III.1**  
**Port Manatee Historical Tonnages**  
 (in millions of tons)  
 1999-2008

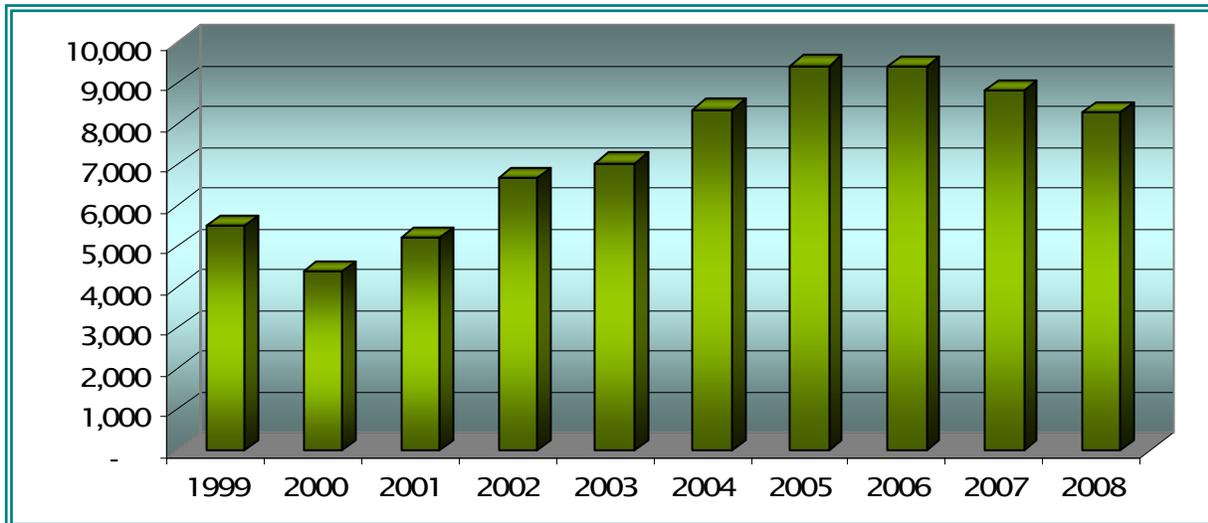


Figure III.2 shows the same data by the Port’s commodity types: liquid bulk cargoes, dry bulk cargoes, general cargoes, and, in the latest period, containerized cargoes, while Figure III.3 illustrates the tonnage patterns for these cargo types since 1999.

Traditionally, Port Manatee is viewed as an import gateway for raw materials related to Florida construction and as an entry point for Central American fruit destined throughout the Southeast. The Port has a smaller presence in the state’s fertilizer export trade and handles backhaul export cargo for its key inbound customers.

In terms of cargo mix, liquid bulk cargoes, led by pipeline natural gas, have dominated the Port’s trade volume, accounting for nearly 60 percent of Port tonnages. Other liquid cargoes include fuel and juices. Dry bulk commodities typically hold a 27 percent share of Port volume, primarily comprising cement/aggregates and fertilizers. The remaining 13 percent of general cargo at the Port includes forest products, fruit, steel, aluminum, and other construction materials as well as both containerized cargo and heavy lift cargo.

Figure III.2  
Port Manatee Historical Tonnages by Commodity Type  
(in millions of tons)  
1999-2008

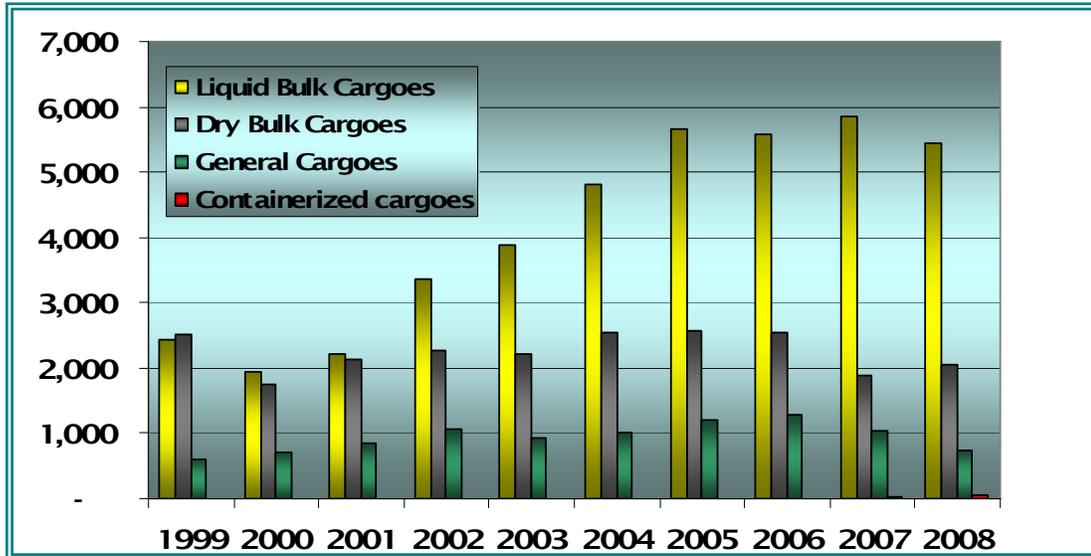
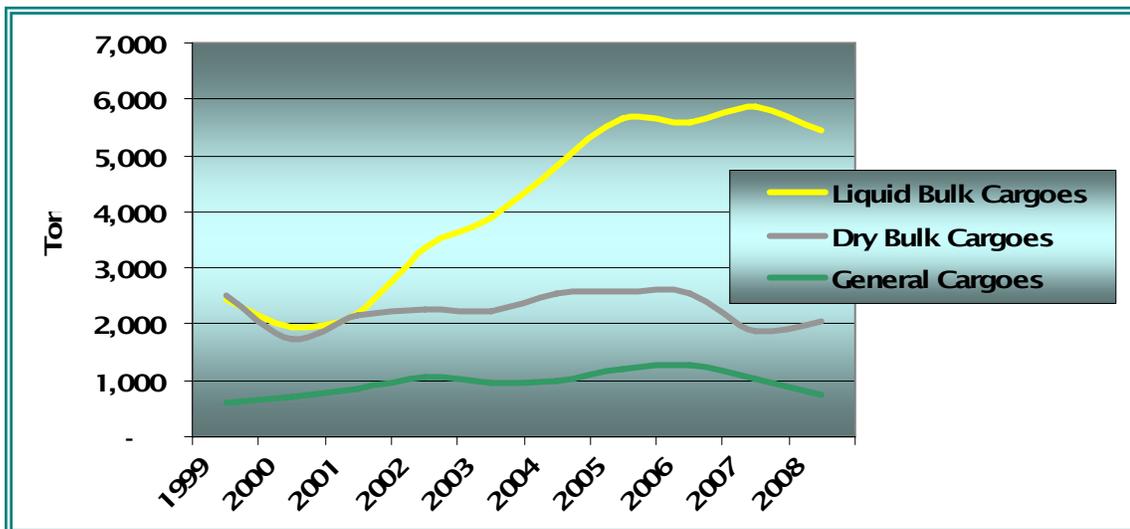


Figure III.3  
Port Manatee Historical Trend Lines by Commodity Type  
(in millions of tons)  
1999-2008

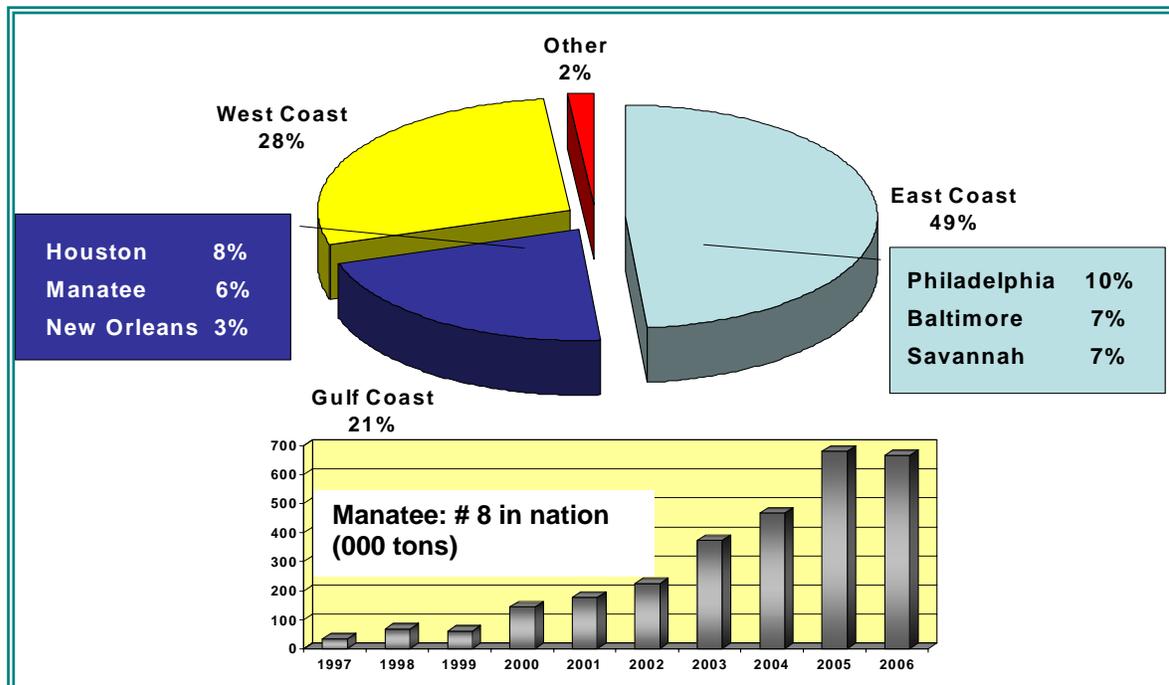


## 2. Key Commodities

Specific commodities that have dominated Port Manatee’s imports and exports include wood products; food and fruit (including juices); cement, clinker and aggregates; residual fuel; and fertilizer. The following narrative discusses each of these commodity types, based primarily on data preceding the economic downturn as it is expected that the Port will retain its position in these markets once the economy strengthens. With the impetus anticipated from port-related activities in the Encouragement Zone, it is also expected that the Port will see new business opportunities materialize.

**Forestry products.** As shown in Figure III.4, Port Manatee has been the eighth largest American gateway for imported lumber. Within the Gulf of Mexico, the Port competes with the Port of Houston, which handles both containerized and break-bulk wood product shipments. Manatee’s volume had grown substantially through 2006, first in response to hurricane rebuilding and then paralleling the unprecedented boom in Florida housing. Subsequently the bottoming out of both commercial and residential building negatively impacted the imported forest product trade. Overall, the Port’s cargoes in this trade have dropped about 30 percent. Based on the overall volumes, however, this commodity type still remains one of the Port’s most significant and, once the construction industry stabilizes, it is expected that Port Manatee will once again be an important gateway for imported lumber as well as other types of wood products such as wood pulp.

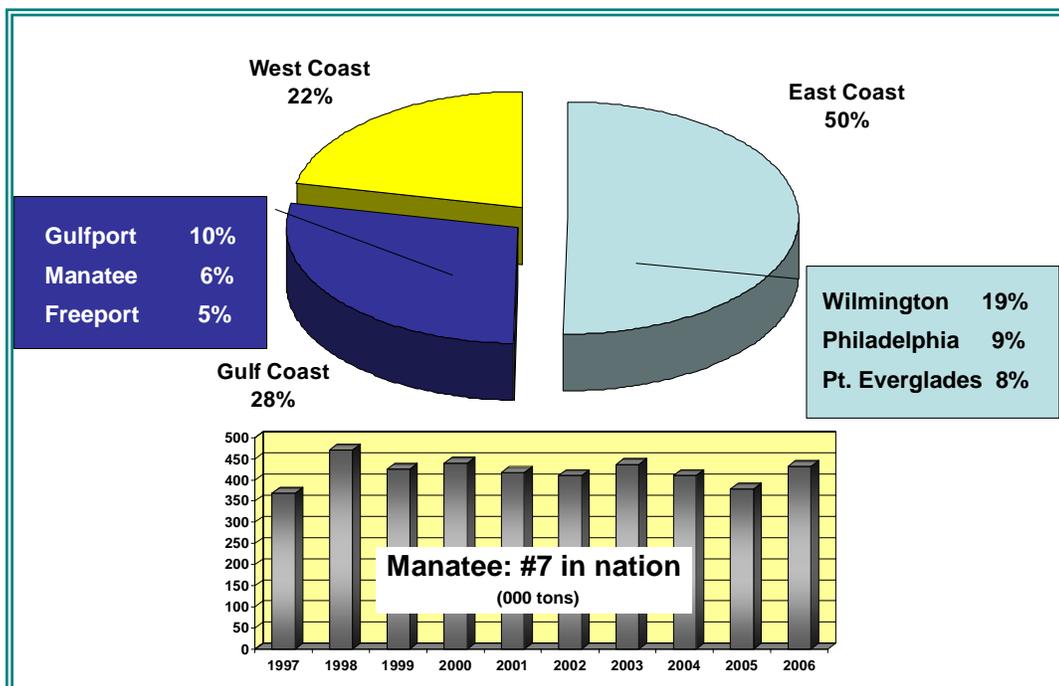
Figure III.4  
Key Imports: Forestry Products (HS 4410-4421)



**Food and Fruit.** At over 400,000 tons, the fruit business at the Port has been the second largest general cargo trade. The primary import commodities are bananas, pineapples, and seasonal melons. As shown in Figure III.5, Manatee has ranked seventh in the nation among the seaports importing these commodities and competes regionally with the Port of Gulfport and Port Everglades. Nearly 100 percent of the fruit trade is sourced in two countries: Costa Rica with 75 percent and Guatemala with 25 percent. Both of these countries are part of the U.S.'s Central America Free Trade Agreement (DR-CAFTA) with the Dominican Republic, Belize, El Salvador, Honduras, Nicaragua, Guatemala, and Costa Rica. Sporadically, the Port's two key carriers in this trade import from Ecuador and Colombia.

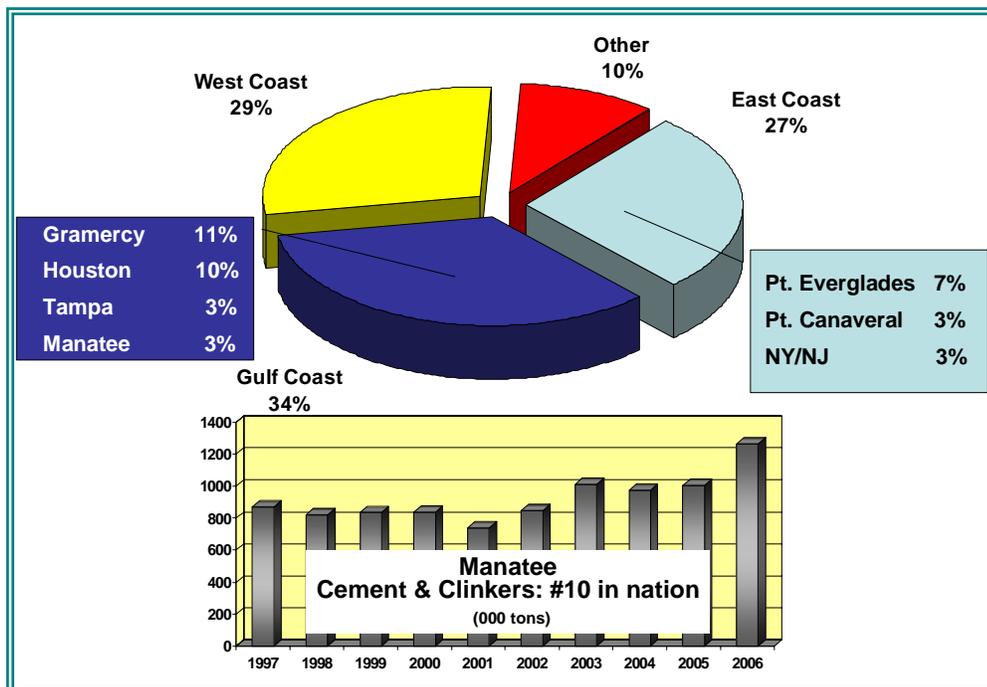
Despite the economic downturn, this trade has not only remained comparatively stable for the Port, but has even shown a recent up tick. For example, the Port's imports of tropical fruits and melons are expected to exceed 525,000 tons in 2009, a 25 percent increase, despite the current economic conditions.

**Figure III.5**  
**Key Imports: Fruits (HS 0803, 0804, 0807)**



**Cement, Clinker, and Aggregates.** The cement trade is spread across multiple ports in the U.S. with Manatee having ranked tenth prior to the economic downturn, holding a 3 percent share, as shown in Figure III.6. Only a few ports on the Gulf and West Coasts account for more than 10 percent of total imports, reflecting both the local nature of cement usage, high inland transport costs, and the diversity of global supply. These commodities are heavily dependent on the residential and commercial construction markets. While cement imports are expected to remain at low levels for several years to come, aggregate imports are expected to increase more quickly as the Port is currently negotiating a substantial increase in aggregates with its tenants.

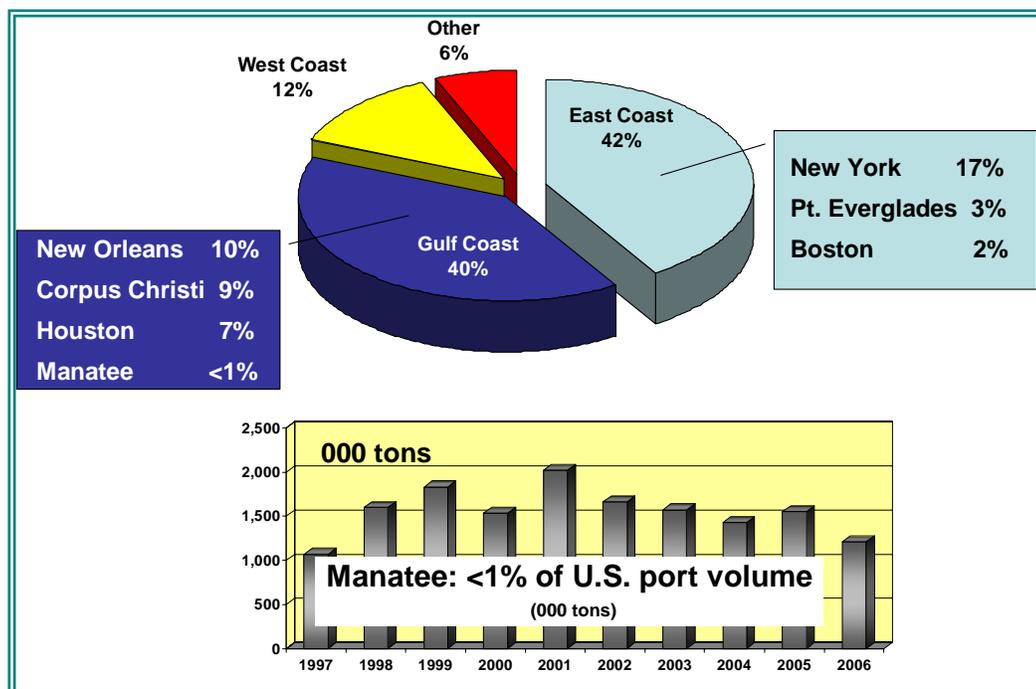
**Figure III.6**  
**Key Imports: Cement (HS 2523)**



**Residual Fuel.** Port Manatee is an entry point for the residual fuel oil (bunker C) Florida Power and Light (FPL) imports as an energy source for its electricity generation plants. The Port handled 1.2 million tons of residual fuel in 2006, down from a high of over 2 million tons in 2001. FPL has the option of burning either fuel oil or natural gas, and the cost of competitive sources is critical to the delivered price of electricity. While overall electricity demand has expanded in line with population growth, uneven price increases among competing fuel sources have shifted use and affected residual oil imports.

The trend towards a greater use of natural gas at Manatee is mirrored throughout the state. The U.S. Department of Energy reported that, after a 41 percent gain in import volume in 2005, Florida ports experienced a 50 percent drop in residual fuel oil imports in 2006. Overall, among U.S. ports, as shown in Figure III.7, Manatee has been a small importer, handling less than 1 percent of bunker C volume. The arrival of Vecenergy at the Port is, however, expected to significantly increase the Port's liquid bulk throughput with the development of a large tank farm adjacent to the South Port area.

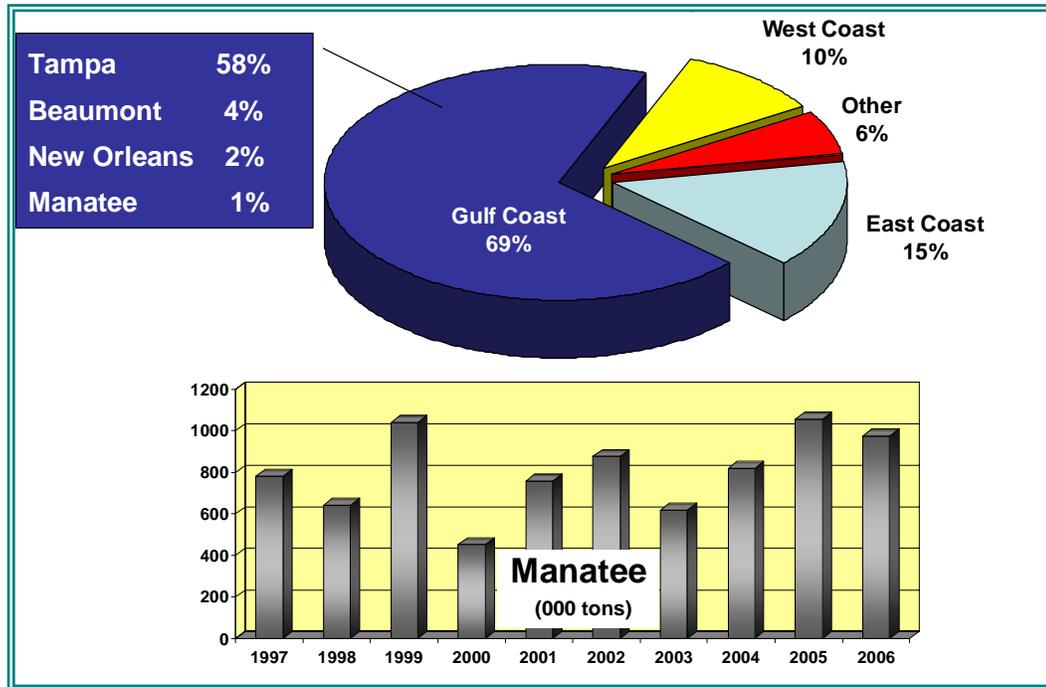
**Figure III.7**  
**Key Imports: Residual Fuel (HS 271019)**



**Fertilizer.** Port Manatee has a comparatively small share of the fertilizer trade, as shown in Figure III.8. The U.S. Geological Service provided the following summary of the industry in 2006:

*U.S. phosphate rock production and use dropped to 40-year lows in 2006 owing to a combination of mine and fertilizer plant closures and lower export sales of phosphate fertilizers. China has surpassed the United States as the largest phosphate rock producer. Since late 2005, two phosphate rock mines and four fertilizer plants were closed permanently and one mine was temporarily closed.*

Figure III.8  
Key Exports: Fertilizers (HS 310000)



In 2006, 75 percent of Manatee’s fertilizer exports, which emanate from Florida’s proximate Bone Valley phosphate mines, were destined for Japan, the leading buyer for the past three years. South Africa was the only other destination for the Port’s exports in 2006. In prior years, as many as ten countries imported fertilizer shipped via Manatee; however, the U.S. Geological Survey noted in its annual review that more countries were utilizing their own domestic or regional resources

Today, according to the International Fertilizer Association, cited in a May 2008 *Florida Trend*, article “it appears that world phosphate stocks are low, while the rate of growth in demand has doubled every year for the past three years...[However,] China has transitioned from the largest importer to the second-largest exporter of processed phosphate. Chinese competition remains, and Morocco and other players are ramping up production. A large Saudi Arabian plant is coming online.”

## C. National and Global Economic Trends and Forecast

### 1. U.S. Outlook

Since the last economic slowdown in 2001, America had steadily improved its financial health through a mix of job growth, stable prices, low interest rates, tax breaks, business investment, and government spending. Until 2007, all of these economic positives had boosted consumer confidence, as manifest in booming retail sales and a robust housing market. Current estimates are, however, that the U.S. and the rest of the globe are likely to be in a stagnant economic cycle for a few more years, perhaps not picking up momentum until 2011.

Economic cycles are unavoidable, due to external “shocks” triggered by events such as a spike in oil prices or other factors such as the implosion of the housing market and the tightening of credit. The consensus survey of economists consulted for the market assessment presented in the *Master Planning Concepts* report had anticipated that the U.S. would experience a moderate pace of expansion throughout this decade, with gross domestic product (GDP) growth rates in the 3.0 to 3.5 percent range through 2010. The leading maritime consultants based their trade forecasts, shown in Table III.1, on a similarly restrained, but sustainable, U.S. economic performance through 2025. While it is clear that the short-term forecast must be modified to reflect the downturn, as noted earlier, the longer term 3 percent growth in GDP still appears to be reasonable when projecting economic performance as far ahead as 2025.

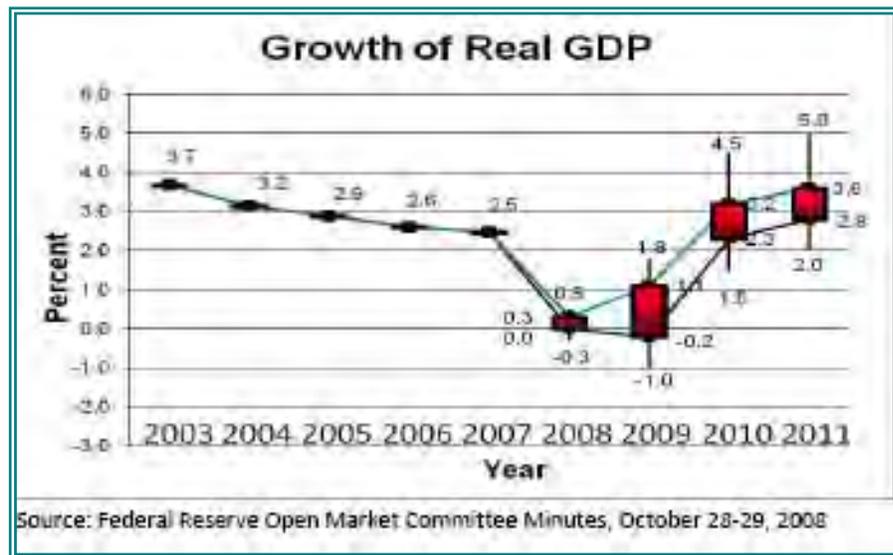
**Table III.1**  
U.S. Economic Growth: History and Forecast

	CAGR %			Estimate	Forecast	
	1984-2004	2005	2006	2007	2005-2015	2015-2025
Real GDP	3.1%	3.6%	3.3%	2.2%		
R. K. Johns					3.2%	3.0%
Ocean Shipping					3.2%	3.1%
Global Insight					3.2%	2.8%
Drewry Shipping/JP Morgan					3.4%	3.0%
EIU (Economist Intelligence Unit)					3.0%	2.8%

Figure III-9 shows the latest GDP forecast for the economy released by the Federal Reserve in the Federal Open Market Committee minutes in October 2008. According to the source cited:

*There is considerable uncertainty for 2009 with a range of -1.0 to +1.8 percent growth of GDP and a central tendency forecast of -0.2 to +1.1 percent. A marked improvement is forecast for 2010 with a GDP growth range of +1.5 to +4.5 percent and a central tendency forecast of +2.3 to +3.2 percent growth. The forecast also includes 2011 with a forecast range of +2.0 to +5.0 and a central tendency forecast of +2.8 to +3.6 percent, which is closer to what one would expect for long-term growth.*

Figure III.9  
Growth of Real U.S. GDP through 2011



## 2. Global Outlook

U.S. trade performance is reliant upon the health of the global economy, the value of the dollar, and the shift in consumer goods manufacturing to low labor cost nations such as China and India. China continues to be “the world’s factory,” although growth there has slowed as well, as it has throughout the world, including in another economic leader, India.

Table III.2 summarizes the global growth picture, by selected countries and regions, through 2025, assuming the caveats expressed above concerning the short-term growth rate. The current thinking, as expressed in the *Annual Energy Outlook 2009 Early Release Summary Presentation* of the Energy Information Administration, is that real GDP will grow by 2.5 percent per year through 2030 with the nation’s population, labor force, and productivity growing at annual rates of 0.9 percent, 0.7 percent, and 1.9 percent, respectively.

In 2005, Deutsche Bank released a report on the prospective global economy in 2025 in which it highlighted the fact that “*the USA will still be the world’s largest and richest economy.*” The analysis identified the following trends:

- Despite the rise of countries like Turkey and Ireland, the overall economic outlook for Europe is subdued, with growth averaging only 2 percent yearly.
- In Asia, population growth and aging will play a critical role in economic success. South America’s future will remain closely tied to political permanence and its vast commodity-based trades. Middle East diversification beyond oil will help this region’s long-term economic outlook.

**Table III.2  
Global Economic Growth: History and Forecast**

(Real GDP, % change)					
Region / Country	Estimate		Forecast		
	2006	2007	2008	2005-2015	2015-2025
Japan	2.2%	2.3%	1.9%	1.7%	1.2%
China	10.7%	10.0%	9.5%	6.4%	5.3%
Other Asia	5.4%	5.5%	5.8%	4.8%	4.3%
India	9.2%	8.4%	7.8%	5.4%	5.2%
Europe	2.6%	2.3%	2.3%	2.0%	2.0%
Middle East	5.7%	5.5%	5.5%	4.4%	3.9%
Africa	5.5%	6.2%	5.8%	4.2%	3.6%
South America	3.8%	4.6%	4.0%	4.0%	4.0%
World Average	5.4%	4.9%	4.9%	3.9%	3.6%

Source: IMF, Global Insight, and R. K. Johns analyses

- By 2025, one-third of Japan’s population will have reached retirement age, a factor that will slow the country’s consumption and trade. Conversely, China will continue to excel over the next twenty years with the world’s fastest economic growth fueling income and consumption. Within twenty years, China’s population will be more than twice that of Europe.
- By the next decade, India will have about the same population as China. Given India’s higher education level and English-speaking background, Deutsche Bank expects the country to integrate quickly with developed economies and rapidly expand its share of global trade. With growth averaging over 5 percent per annum, India will surpass both Japan and Germany as one of the largest economies by 2025.

Today, however, as in the U.S., the previous rapid GDP growth in China, India, Japan, and the European Union has stalled, dropping down to under 5 percent in the case of Japan and the European Union and just above 5 percent in the case of India and China. Nariman Behraves, the chief economist at IHS Global Insight was quoted in the Financial Post, December 15, 2008, as saying that “...the United States and world economies are about to suffer one of the worst recessions in the postwar period. Most measures of economic and financial activity look like they fell off a cliff in September and October, and have been deteriorating at an alarming rate ever since. IHS Global Insight now believes that global growth will be in the 0.0-0.5 percent range during 2009, compared with 2.7 percent in 2008. The jury is still out as to how quickly the global economy will rebound and reach the forecast GDP levels. It is worth observing, however, that international trade typically outperforms the nation’s GDP and is expected to continue that trend

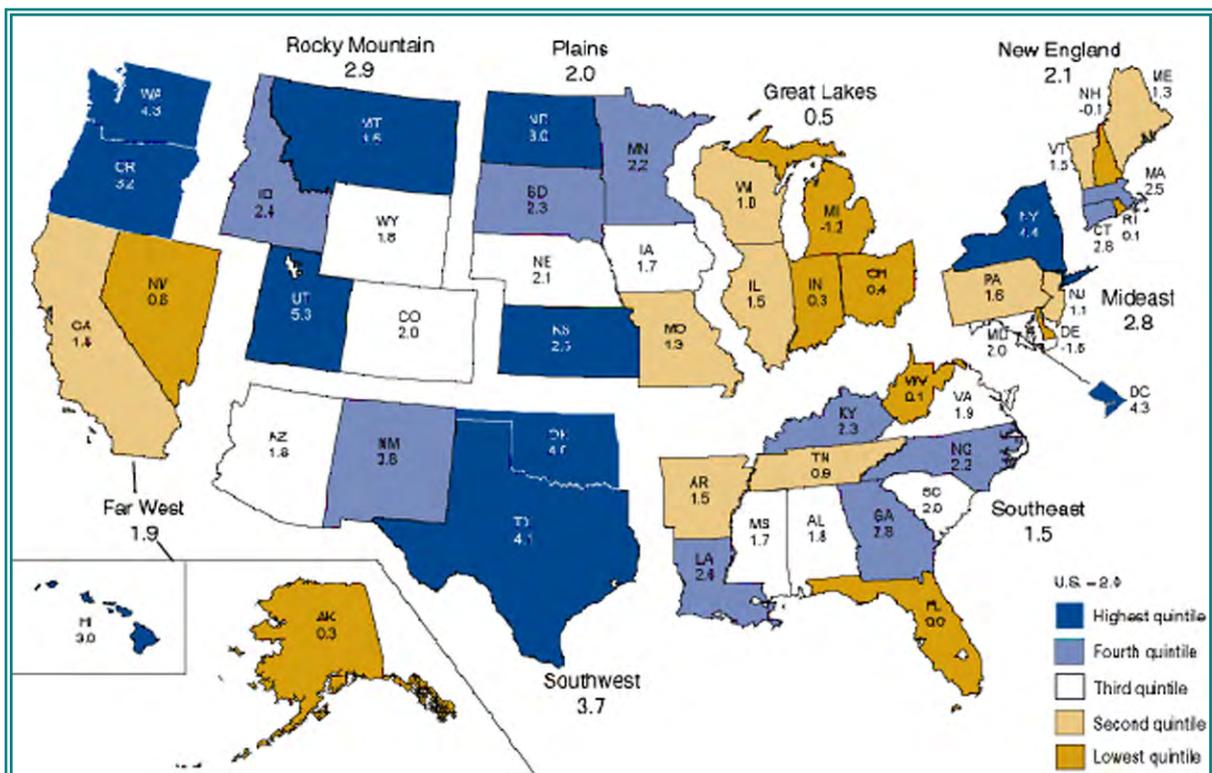
## **D. Florida’s Economic Outlook and Demographics**

Florida is the nation’s fourth most populous state and is second only to New York along the Eastern seaboard. The state’s more than \$750 billion economy and 18.9 million people account for about

5.4 percent of the nation's economic output. Additionally, Florida is a significant force in international trade. According to U.S. Commerce Department, Bureau of Economic Analysis, figures, Florida produced over \$59 billion in exports and consumed \$56 billion in imports in 2007.

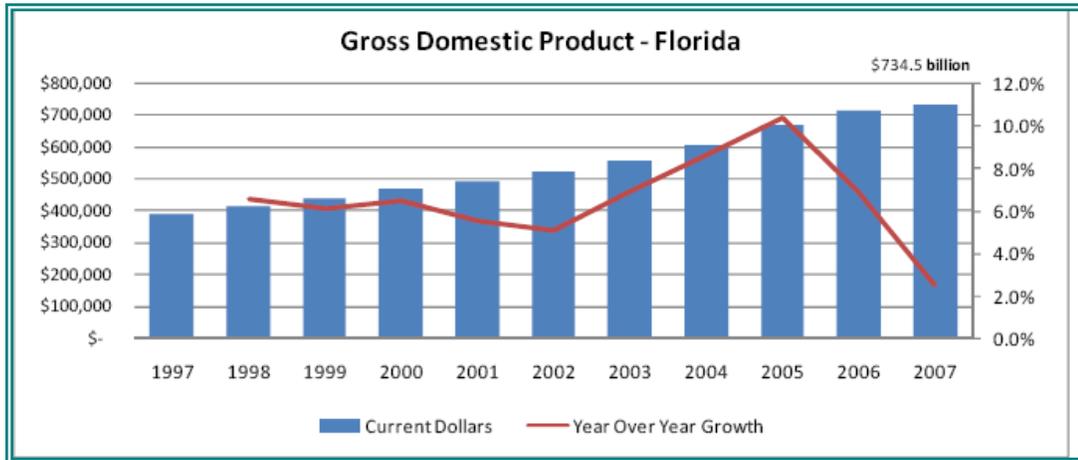
Change in GDP has been increasingly used to compare the economic health of states. While Florida has outperformed the nation for the better part of a decade, some of the activity in 2004 and 2005 was the result of the response to major hurricanes. Between 1996 and 2006, the state's GDP rose on average 4.7 percent annually, well above the national average. Florida's growth now, however, is decelerating. In 2006, Florida's economy expanded 4.2 percent, and the state had the twelfth fastest growth rate nationally and was tied for first in the East with North Carolina. By the end of 2007, the state's gross domestic product was in the lowest quintile nationwide, as shown in Figure III.10, from Florida's Office of Economic and Demographic Research, October 2008 and the U.S. Bureau of Economic Analysis. The state now ranks 47<sup>th</sup> in the nation and 35<sup>th</sup> in per capita level.

**Figure III.10**  
**Percent Change in Real GDP by State 2006-2007**

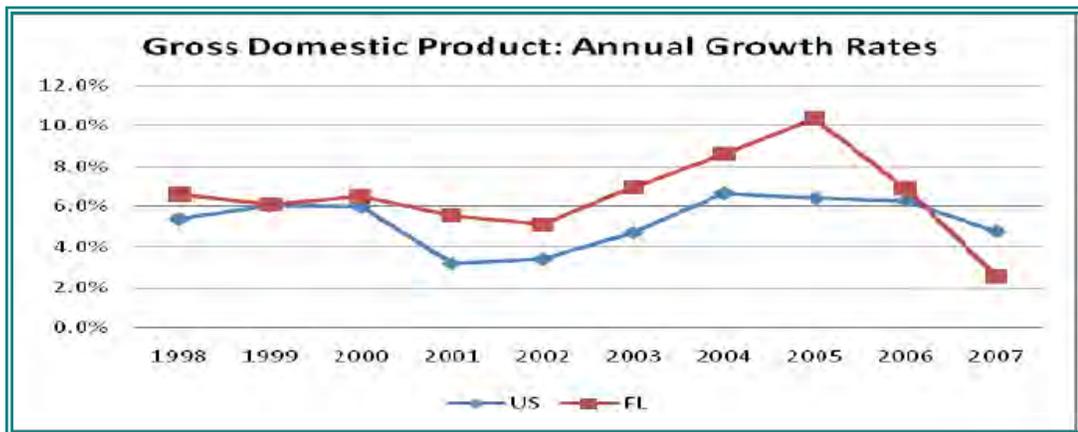


Figures III.11 and III.12 show the decline in Florida’s current GDP, as reported in the *Southwest Florida Regional Economic Indicators* report, December 2008, by the Regional Economic Research Institute, Florida Gulf Coast University

**Figure III.11**  
**Gross Domestic Product in Florida through 2007**



**Figure III.12**  
**Gross Domestic Product in Florida: Annual Growth Rates**



This dramatic decline for Florida has been especially noticeable in the housing and construction markets. Even several years ago, Global Insight, a reputable macroeconomic forecasting company, opined in *International Construction* magazine, “Florida is the state with the most challenges over the next five years. It will have three major metropolitan markets among the nation’s slowest growing residential regions in the near term.” This caution for a more subdued outlook for Florida’s housing industries was echoed by the University of Florida Department of Finance,

Insurance and Real Estate's recent survey findings, "We don't think any thoughtful person would expect sales to go back to where they were a year or so ago, that was probably an overheated condition and it was extraordinary."

There is, however, a bright spot in the current economic outlook, according to Enterprise Florida, and that is the state's global export trade. In its winter 2008 *Economic Bulletin*, Enterprise Florida reports that

*International trade has been the fastest growing sector in Florida's economy since 2007. Despite the current economic climate, export sales have emerged as a notable bright spot as evidenced by the latest trade statistics for the first 10 months of 2008.*

*According to the U.S. Department of Commerce, export sales of Florida products have increased by 25.3 percent through October of 2008, far exceeding the nation's growth of 16.2 percent.*

*Florida ranks behind only Texas, California, New York and Washington as an exporter but has outperformed all the major exporting states in 2008 including those. Each had double-digit increases in 2008, but not higher than Florida's, which has exported \$46.8 billion in goods, already beating the record \$46.2 billion in export sales achieved in 2007.*

Considering all these factors, this *Port Manatee Master Plan, 2009*, reflects a conservative but realistic forecast approach. Florida's overall economy is expected to strengthen, with the annual growth in GDP estimated to range between 3.7 and 4.8 percent through 2025, slightly below historical performance. The diversity of manufacturing, services, tourism, and trade, along with the growing population of the Port's primary and extended hinterlands, as discussed later in this chapter, are projected to keep the economy in a balanced, but moderate growth path.

## **E. Port Manatee Trade Volume Forecast 2007-2018 and Beyond**

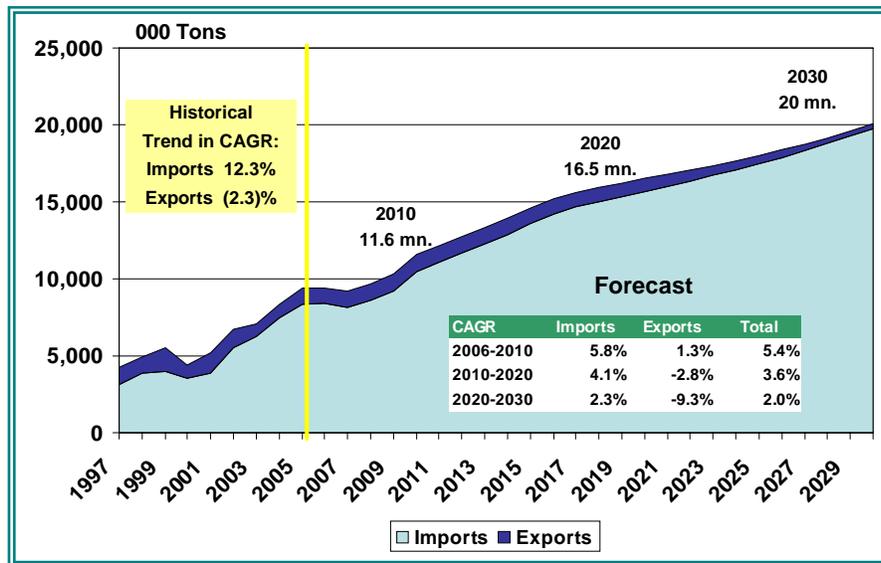
Unconstrained by Port infrastructure (such as water depth, available land, and road access), Port Manatee is projected to approach 15 million tons within the planning horizon of this master plan. Consistent with past performance, imports will remain the dominant trade at the Port, accounting for over 95 percent of business. The longer-term import outlook moderates in line with the expectation that population growth will slow.

Export volume is forecast to decline by two-thirds, owing to the eventual waning of the Florida phosphate mines and the expectation that overseas fertilizer demand will be met largely with domestic supply.

Figure III.13 shows the forecast for the Port's traditional import and export markets through 2030. In examining this forecast, one should remember that, as the earlier years will not live up to the estimates, the whole forecast should be extended by several years.

Figure III.13

Port Manatee Volume Forecast: Traditional Markets  
2007 - 2030



The main components of this forecast include:

- Annual average growth of 3.2 percent for the Port’s base commodities through 2030, assuming the anticipated rebound in trade by 2011.
- Volume milestones: 15 million tons by the middle of the next decade (the ten-year planning horizon), and 20 million tons by 2030.
- Import volume to advance an average 3.6 percent, with growth across multiple products.
- Likely introduction of wood pulp import trade will help offset eventual maximization of pipeline gas transmission in the next decade.
- Export volume to drop by two-thirds as Florida phosphate mining declines.

This forecast extends well beyond the five- and ten-year planning horizon of this master plan to give the Port Authority a sense of how to plan for the long term. As noted earlier, given the dramatic economic downturn since the forecast was prepared, it is clear that this forecast must be pushed out by several years, probably until 2010 or 2011. As the forecast incorporates typical business cycles, the overall forecast trend is considered valid as long as the time frame is extended.

## **F. Beyond the Ten-Year Planning Horizon: Port Manatee's Long-Term Container Trade Opportunity**

### **1. Container Demand Factors**

As noted earlier, the Manatee County Port Authority, in addition to developing this five- and ten-year maintenance and expansion plan, wished to explore a long-term vision for the Port which included the potential for expanded container capacity. As such, the market assessment considered both the imminent expansion of container-handling facilities in the South Port Area and the potential of a longer-term dedicated container terminal in the North Port area. While the development of a dedicated container terminal in the North Port area would occur well beyond the planning horizon in this master plan, in the interim, the Port Authority wanted to be sure that it was doing the right things so as not to preclude its realization.

The *Master Planning Concepts* report presented to the Port Authority in February 2008 contains a detailed assessment of the factors driving the success of a dedicated build-out terminal; in this section, only the major conclusions of that assessment are highlighted. These conclusions include:

- The U.S. container market will continue to grow, and all-water traffic through the Panama Canal to the East Coast and Gulf Coast ports will continue to expand.
- The greater Central Florida consumer market, with its population, convenient mileage from Port Manatee, and growing number of distribution centers presents a significant opportunity for Port Manatee to initiate the planning for a dedicated container terminal
- The container volume potential for the combined Tampa Bay ports could exceed 500,000 twenty-foot container equivalents (TEUs) by the next decade.
- Port Manatee, complementing the Port of Tampa's container capacity, could handle more than 1 million TEUs by 2025 - 2030.

Port Manatee is already seeing its container market strengthen. The purchase of the mobile harbor crane in 2008 to facilitate container handling, the recent addition of container service by two carriers (SeaBridge and HySea), and the catalyst of the Encouragement Zone are positive factors in the Port's pursuit of new container opportunities.

### **2. An Overview of the U.S. Container Market Outlook**

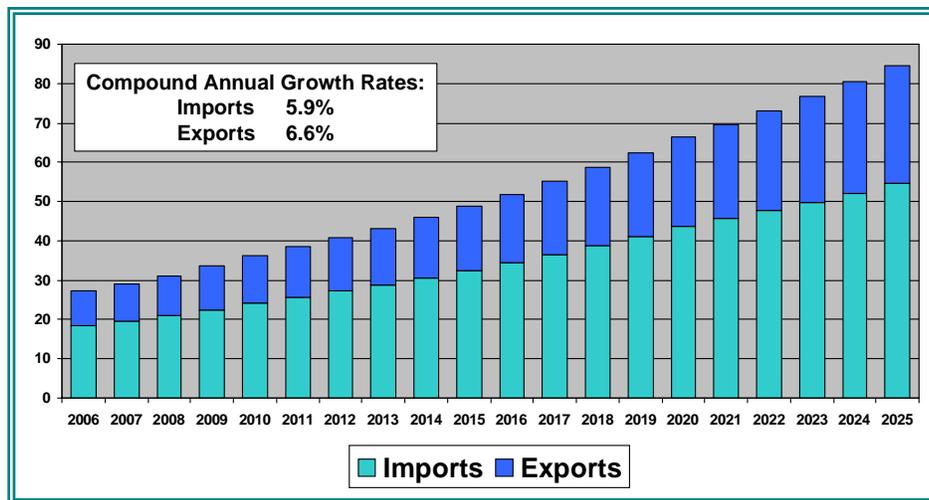
Total U.S. import container volume is projected to grow at a pace consistent with the nation's economic expansion. The ability of the Panama Canal to handle larger vessels once its ongoing expansion is completed in 2014 is seen as an impetus for a significant gain in volume and market share for the all-water trade from Asia to both East and Gulf Coast ports. The all-water import market from North Asia totaled 2.6 million TEUs in 2006. Trade volume had been projected to double by 2015, and top 13 million TEUs by 2025. In 2006, 35 percent of all container imports at East and Gulf Coast ports originated in North Asia. By 2025, the Asian share has been expected to reach 56 percent of all containers. With the container trade dramatically affected by the economic downturn, these forecasts are subject to change.

The outlook for U.S. exports depends on the strength of the global economy, the competitiveness of American products, and the manufacturing dominance of China. The growth in Chinese production of goods, ranging from textiles to televisions, has fostered a buildup in raw material requirements for which the U.S. is currently a significant supplier, including commodities such as fiberboard and chemicals.

The strength of the U.S. dollar has an influence on the nation’s import and export balance and total volume of trade. At present, the dollar has strengthened from its earlier lows, but it is anticipated that the downward pressures on the dollar will resume, auguring a period of prolonged, gradual depreciation. This will again benefit American exports that compete on price, including agricultural goods and foods. With increased global competition in base commodities, including China’s ability to provide more of its own materials, American container export volume growth, on average, is forecast of 5 percent per year through 2025.

By 2018, nationwide, container volume is forecast to approach 60 million TEUs and by 2025, U.S. container trade will top 80 million TEUS. Over the period shown in Figure III.14, total container volume growth is forecast to increase at a 6.1 percent annual average rate, resuming historical standards.

**Figure III.14**  
**U.S. Container Trade Forecast: 2006 – 2025**  
(in million TEUS, loaded containers)



Source: R. K. Johns

### **3. The Central Florida Container Market**

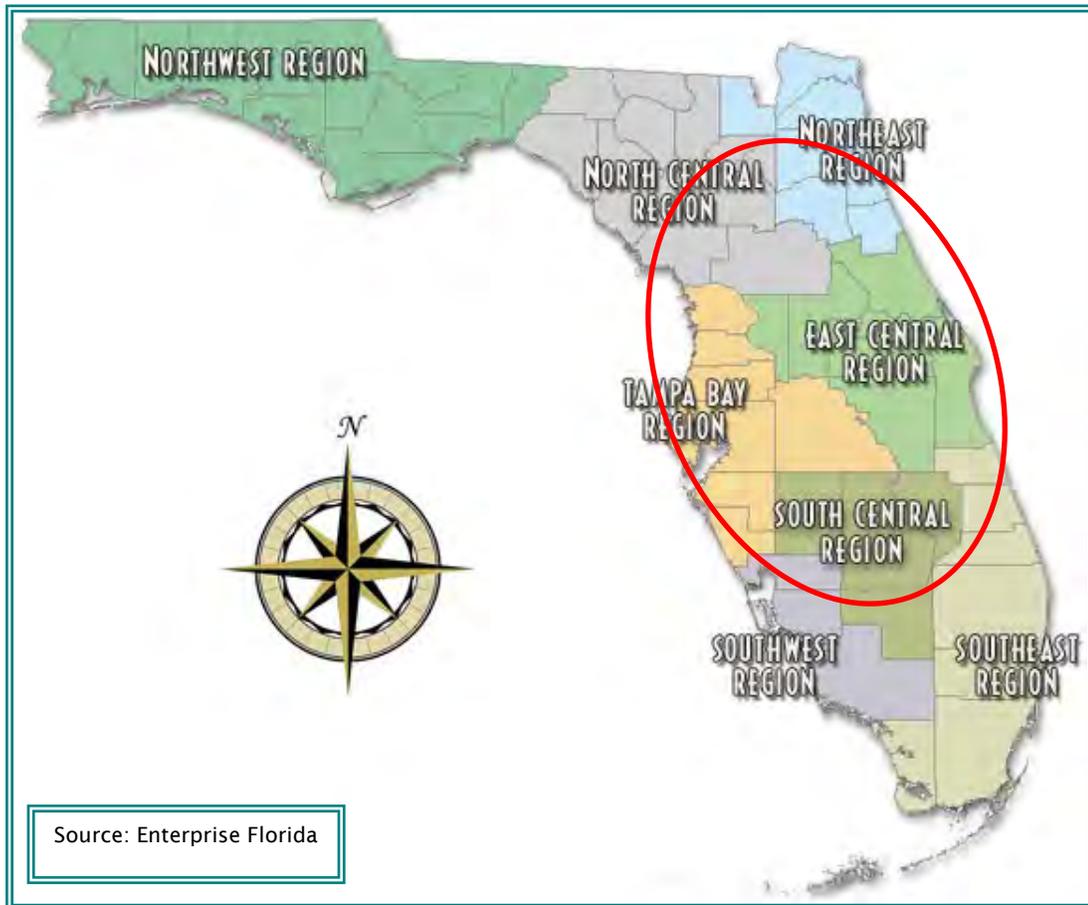
Prior to the economic downturn, the greater Central Florida region, the Tampa Bay ports' extended hinterland, had become a top prize market for retail importers. Nearly 9 million people -- about 49 percent of Florida's total population -- now live within a two-hour drive of Tampa Bay. Signs point to this region as a continuing growth leader in population, income, jobs, and consumer spending. This outlook has attracted the attention of both local and national retailers eager to satisfy increased consumer demand for all kinds of merchandise, especially imported goods from places like China, Italy, and Brazil; these goods are predominantly containerized.

Like the millions of people in the Tampa Bay area who rely on an efficient highway network to travel considerable distances in two hours, international freight seeks the most efficient, less congested route. For the shipper, a 25-day ocean voyage for a container traveling from Hong Kong to Miami, as an example, is only as effective as the last 220 road miles to final delivery at the retail distribution center in Kissimmee. If delays at any discharge port or in long-distance trucking turn that "last mile" into days instead of hours, shippers will find another way.

The Tampa Bay ports -- both Port Manatee and the Port of Tampa -- can be that "other way" for Central Florida shippers. The demand projections indicate that the current import volume for this region totals about 250,000 TEUs, accounting for 30 percent of the state's total inbound trade. This regional market is forecast to double in size by 2018. Export volume, at about one-fifth the level of imports, is expected to grow at a steady 4 to 6 percent pace throughout the next decade. Today, about 90 percent of this containerized cargo reaches Central Florida via ports such as Miami, Everglades, Jacksonville, and Savannah. With a strong outlook for all container ports, it is reasonable to project that the Tampa Bay ports could achieve a 50 percent share of the Central Florida container market within ten years or fifteen years.

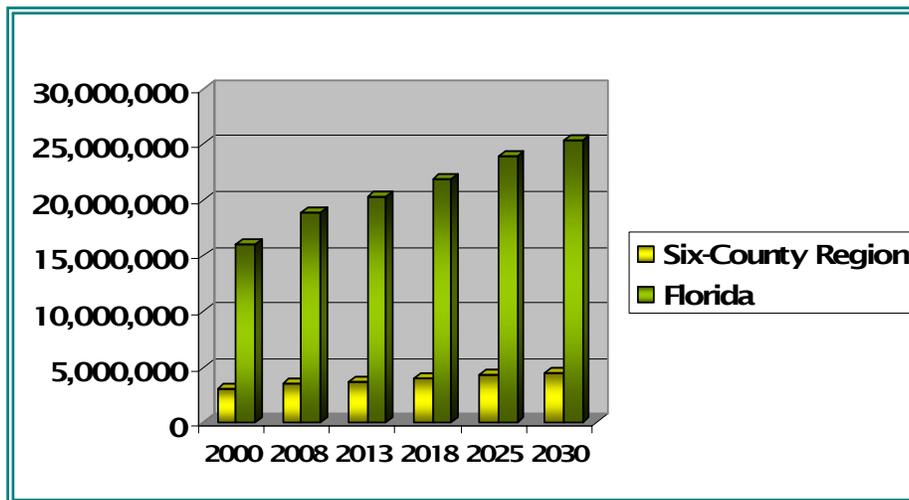
The Central Florida geographic area, as defined by Enterprise Florida ([www.eflorida.com/floridaregions](http://www.eflorida.com/floridaregions)), comprises twenty-five counties grouped into four regions -- Tampa Bay, Southwest Florida, East Central Florida, and South Central Florida -- as shown in Figure III.15.

**Figure III.15**  
**Extended Central Florida Geographic Area**

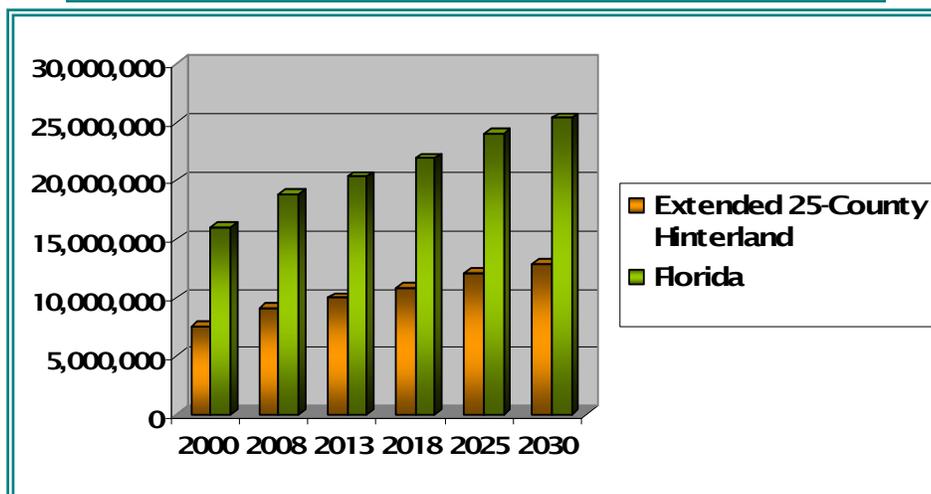


The six-county primary hinterland market served by Port Manatee includes a population of 3.5 million, 18 percent of state's total in 2008, as shown in Figure III.16. The greater twenty-five county hinterland, shown in Figure II.17 represents a population of 9.2 million people, 48.7 percent of the state total. By 2018, the end of the planning period, this greater hinterland will be home to 10.9 million people, almost 50 percent of the state's population, which is forecast to reach 21.9 million people in that year.

**Figure III.16**  
**Port Manatee's Six-County Primary Hinterland**



**Figure III.17**  
**Port Manatee's Twenty-five-County Extended Hinterland**



Of the twenty-five counties in the greater Central Florida market, fourteen are at least 60 miles (driving distance) closer to Port Manatee than to either the Port of Jacksonville or the Port of Miami/Port Everglades. The time saving on a round-trip truck haulage to these counties from Port Manatee would be a significant positive factor in attracting container business. For another five counties, Port Manatee offers the shorter road transit, although the time saving is less than an hour each way (less than 60 miles). For three counties, Port Manatee is about equally distant as another Florida port gateway. For just three Central Florida counties (Hendry, Marion and Volusia), Port Manatee is a longer road transit although, arguably, still a competitive alternative, depending on trucking costs and the availability of two-way paying lifts (see Table III.3 on the next page).

Port Manatee, in discussions with local trucking companies, has been told the round-trip fee could be lower if truckers can make at least four round-trips per day. Similar economics are likely to apply to other localities in the Tampa Bay area that offer the potential for multiple round-trips per day. Therefore, container trade in all twenty-five counties in Central Florida could be considered as market potential for Port Manatee.

Intermediate staging in warehouses and distribution centers influences the actual final destination of an inbound container. For example, Rooms to Go has twenty retail locations in Central Florida, but all imports are trucked from the port of entry directly to its distribution center in Lakeland. The import containers destined for these Central Florida distribution centers are likely now moving inbound via the Port of Miami/Port Everglades and the Port of Savannah. The Port of Jacksonville is not yet a major port for Asian trade, although it is developing sophisticated container terminals to handle Post Panamax ships. Lowes is known to have tested the use of the Port of Tampa to bring a small number of containers directly to its new distribution center near Kissimmee. Kmart currently cross-docks all its South Atlantic imports at Savannah and loads domestic trucks for delivery at regional distribution centers.

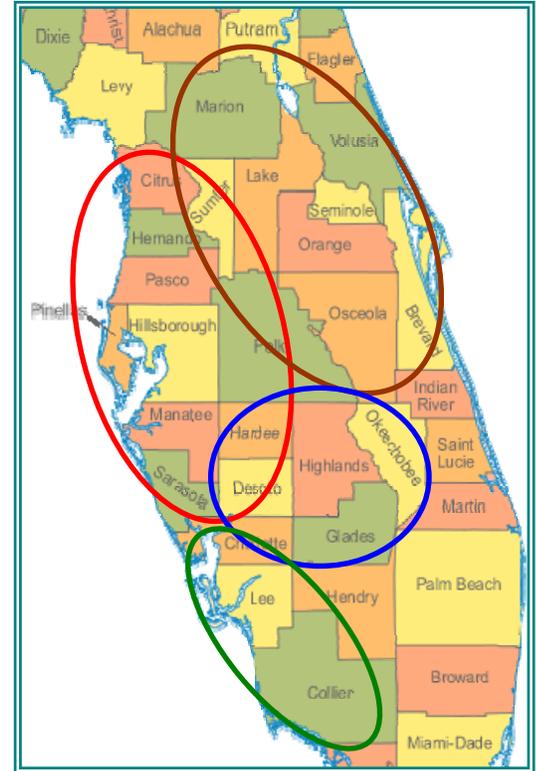
**Table III.3**  
**Mileage Distance between Manatee and Key Florida Cities**  
**(highlight presents +60 mile one-way advantage for Manatee)**

Tampa Bay Market		Miles to:		
County	Representative City	Palmetto (Manatee)	Miami	Jacksonville
Citrus	Beverly Hills	119	326	130
<b>Hernando</b>	Spring Hill	85	314	182
<b>Hillsborough</b>	Tampa	44	283	224
<b>Manatee</b>				
<b>Pasco</b>	Dade City	74	292	168
<b>Pinellas</b>	Clearwater	40	288	245
<b>Polk</b>	Lakeland	66	241	194
<b>Sarasota</b>	Sarasota	14	234	270

East Central Florida Market		Miles to:		
County	Representative City	Palmetto (Manatee)	Miami	Jacksonville
Brevard	Melbourne	177	189	176
<b>Lake</b>	Groveland	107	260	170
Marion	Ocala	130	300	105
Orange	Orlando	114	240	140
<b>Osceola</b>	Kissimmee	106	223	161
Seminole	Winter Springs	134	255	135
Sumter	Bushnell	94	294	143
Volusia	Daytona Beach	168	268	90

South Central Florida Market		Miles to:		
County	Representative City	Palmetto (Manatee)	Miami	Jacksonville
<b>Desoto</b>	Arcadia	54	207	254
Glades	Palmdale	112	132	264
<b>Hardee</b>	Wauchula	52	230	231
Hendry	Clewiston	144	99	296
<b>Highlands</b>	Sebring	82	172	226
Okeechobee	Okeechobee	117	138	246

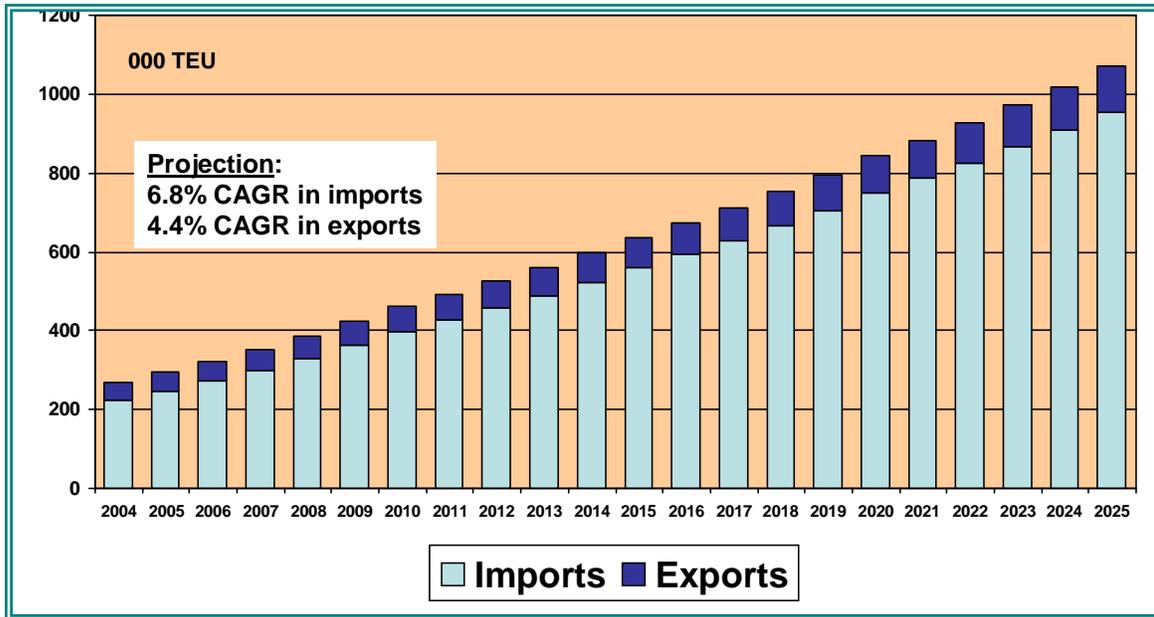
Southwest Florida Market		Miles to:		
County	Representative City	Palmetto (Manatee)	Miami	Jacksonville
<b>Charlotte</b>	Punta Gorda	68	184	313
Collier	Naples	131	127	376
<b>Lee</b>	Fort Myers	90	160	335



Source: Rand McNally

Figure III.18 shows the total Central Florida import market potential, as forecasted prior to the economic downturn.

**Figure III.18**  
**Central Florida Container Market Forecast**

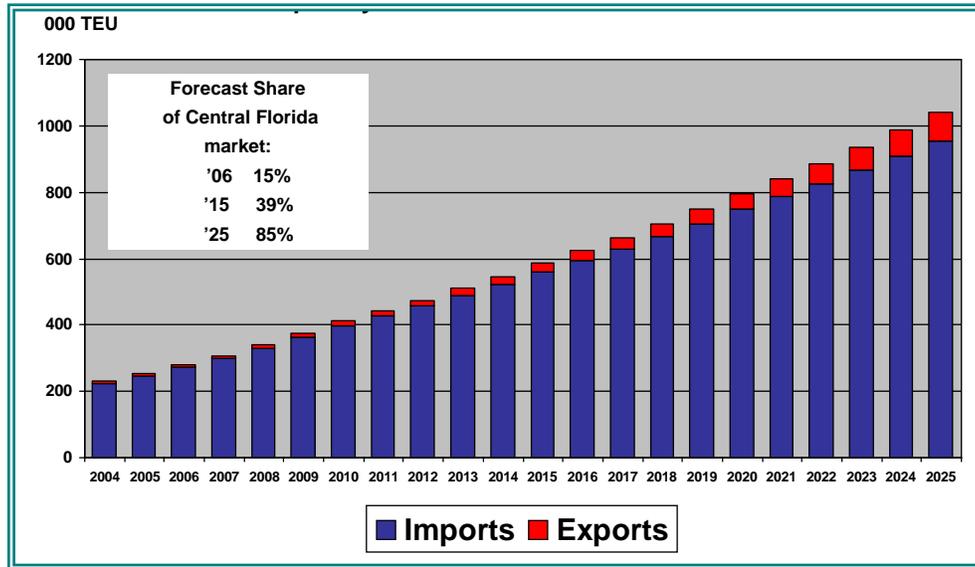


By 2018, the potential Central Florida container market (loaded containers) is projected to approach 800 TEUs. Owing to the significant imbalance between loaded imports and exports, the Central Florida market is expected to generate a considerable number of empty container lifts at the Tampa Bay ports. This will be the trend at all key Asian trade gateways, as carriers need to reposition containers back to the Far East for reloading.

Volume is critical to making such operations run efficiently. Therefore, it may take years before a retailer is willing to shift a significant amount of import business to a feeder port in Tampa Bay instead of using hubs such as the Port of Savannah or the Port of Miami/Port Everglades. It is projected that it will take 12 to 15 years for the Tampa Bay ports to capture 50 percent or more of the local market owing to the established direct services available in southern Florida, northeastern Florida, and Georgia.

Using a steady, moderate gain in penetration of the Central Florida container trade, a “base-case” market for the Tampa Bay ports develops, as shown in Figure III.19.

**Figure III.19**  
**Tampa Bay Ports Container Market Forecast**

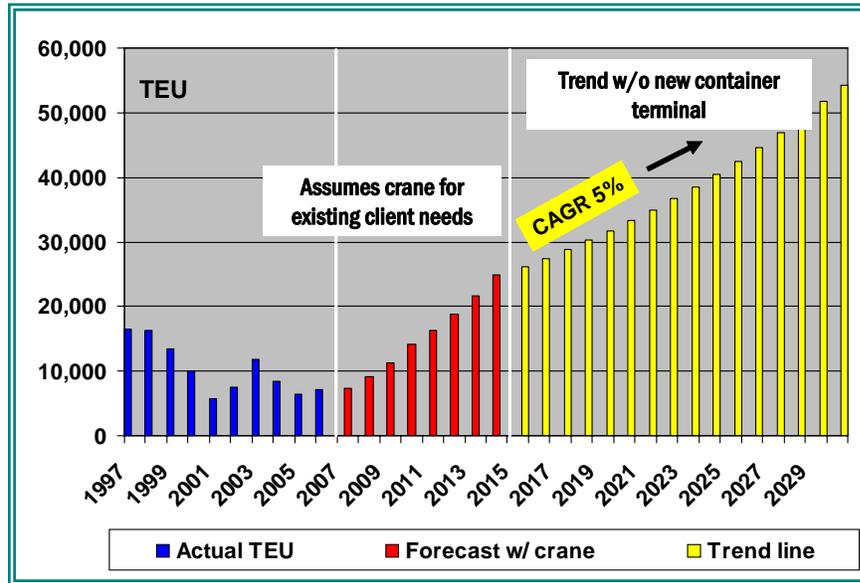


#### 4. Container Forecast for Port Manatee

Over the past ten years, Port Manatee has handled between 5,000 and 10,000 TEUs annually for existing break-bulk carriers moving containers on ship deck. The cargo mix is traditionally refrigerated fruit, with some containers for backhaul export cargo such as kraft liner board. As has been highlighted in past master plans and confirmed by tenant interviews, more containerized cargo would be handled at Port Manatee if a mobile crane were available at multiple berths. Now that the Port has acquired such a crane, has seen its existing perishable throughput increase, and has added new service, such as the SeaBridge and the HySea operations, it is expected that the Port’s container volumes at South Port will indeed increase.

The forecast for client container business in the South Port area is shown in Figure III.20.

**Figure III.20**  
**Container Market Opportunity: Existing Tenants**

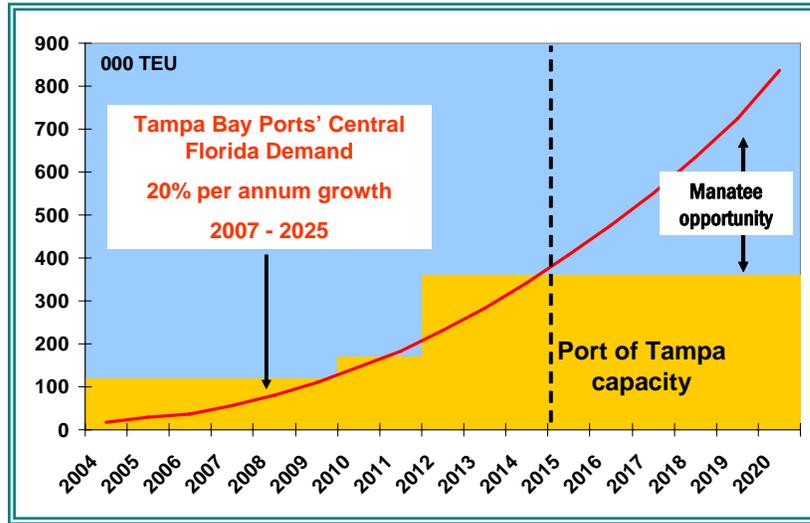


Beyond expanded South Port operations, Port Manatee is believed to have a significant opportunity to share in the expected growth of the Central Florida container market with the Port of Tampa. Dredging will, however, be a long-term issue for both ports. After the Panama Canal expansion, container vessel size is projected to increase steadily, resulting in the eventual use of post-Panamax ships in the Gulf Coast trades. Fully loaded vessels capable of carrying 6,000 TEUs or more will require deeper drafts than Tampa Bay currently offers. Channel and berth dredging will thus be a requirement at both Tampa and Manatee.

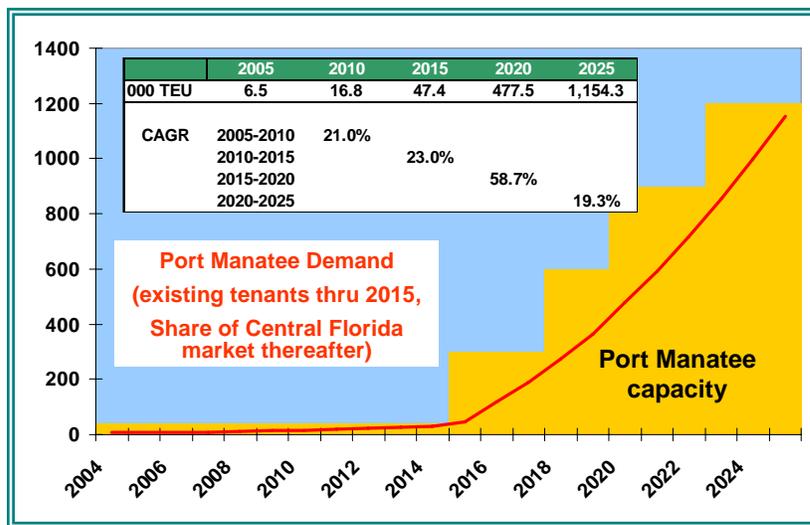
The North Port development to be accomplished in Years Six through Ten of this master plan will serve the Port’s anticipated growth through the planning horizon and, if demand warrants, serve as the stepping-stone to later implementation of the Port’s build-out concept. As shown in Figure III.21, as a complement to the Port’s South Port container-handling facilities, long-term development of a dedicated container terminal in the North Port area could fill the “growth gap” in Central Florida demand not served via the Port of Tampa or other ports.

Port Manatee’s container terminal build-out is assumed to be timed to market demand. As such, an eventual need is envisioned for a dedicated facility with 200 acres for container storage. The very strong import market expectation, coupled with only moderate growth in exports, will result in a considerable number of empty container moves; these empties are included in the projections shown in Figure III.22.

**Figure III.21**  
**Container Market Opportunity: New Terminal**



**Figure III.22**  
**Port Manatee Container Market and Terminal Build-out Scenario**



Clearly, the above demand assumptions, market forecast, and competitive port outlook, as well as the time shifts resulting from the economic downturn, present elements of unpredictability.

**PAGE INTENTIONALLY LEFT BLANK**

# CHAPTER IV FIVE-YEAR AND TEN-YEAR MAINTENANCE AND EXPANSION PLAN



**PAGE INTENTIONALLY LEFT BLANK**

## Five- and Ten-Year Maintenance and Expansion Plan

This chapter summarizes the short-term (Years One to Five) and the longer-term (Years Six to Ten) maintenance and expansion program Port Manatee has planned to serve its tenants and to accommodate future demand. It also includes an assessment of the impacts the proposed plan will have on land uses, public access, historic resources, environmental resources, utilities, and the external transportation system.

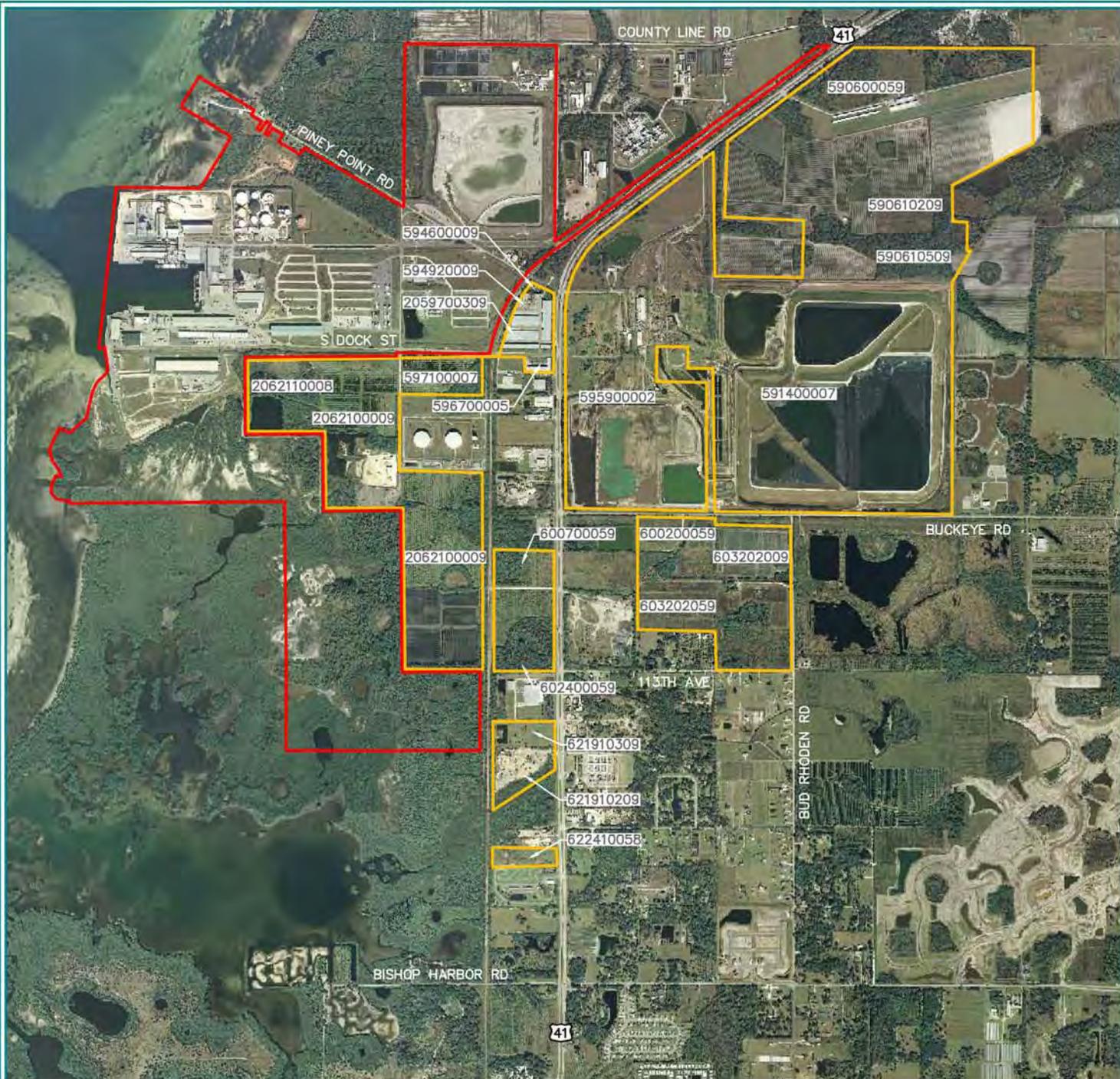
In planning these improvements, the Port's focus is on making the best possible use of its existing infrastructure in the South Port and the Central Basin areas while incrementally adding new facilities required to meet changing trends in the maritime industry and to attract new carriers, shippers, and commodities to the Port. A later chapter (Chapter VI) translates the identified needs into a five-year capital improvement plan. These capital improvements have been prioritized to advance the competitive position of the Port.

As a result of the strategic visioning and tenant outreach program conducted with the Port Authority and Port tenants and stakeholders as part of this master planning process (see Chapter I), the Port has identified a long-term (thirty-year) North Port build-out plan based on the future demand for containerized cargo. This *Port Manatee Master Plan, 2009* documents the planning horizon over the next ten years (2009-2018).

### **A. Proposed Maintenance and Expansion Improvements**

At the end of the Fiscal Year 2007/2008, Port Manatee's cargo throughput was 8.3 million tons. This tonnage was divided as follows: 70 percent liquid bulk, 20 percent dry bulk, and 10 percent general cargo, including containerized commodities in more than 6,300 twenty-foot equivalent container units or TEUs. Because of the global economic downturn, this tonnage declined from the Port's previous high of 9.4 million tons in 2005 and 2006, but is expected to resume its upward trend as the economy stabilizes.

When the forecasts for this master plan were prepared, the Port anticipated increasing the cargo moving across its docks to an annual level of approximately 12 to 14 million tons by FY 2012/2013. This objective was predicated on the completion of the projects identified for implementation in the five-year period and the corresponding increases in container-handling capacity at Berth 12. With the economic downturn, this tonnage objective may require more than the first five years predicted in this master plan. The development of the adjacent Encouragement Zone, which is anticipated to attract Port-related uses, is, however, expected to stimulate maritime activity through the Port and may compensate in part for the slowdown of traditional Port operations. Figure IV.1 shows the synergies between the integrated Port and the Encouragement Zone.



LEGEND

- PORT PROPERTY BOUNDARY
- ENCOURAGEMENT ZONES

Figure IV.1  
Integrated Port Boundaries and  
Encouragement Zone Properties

## **1. Five-Year Maintenance and Expansion Program**

To accommodate the anticipated demand once the global economy is back on track, the Port will be pursuing capital improvement projects in five basic areas over the five-year planning horizon. These projects have been in the planning and design pipeline for a number of years and are consistent with the growth strategies of past master planning efforts:

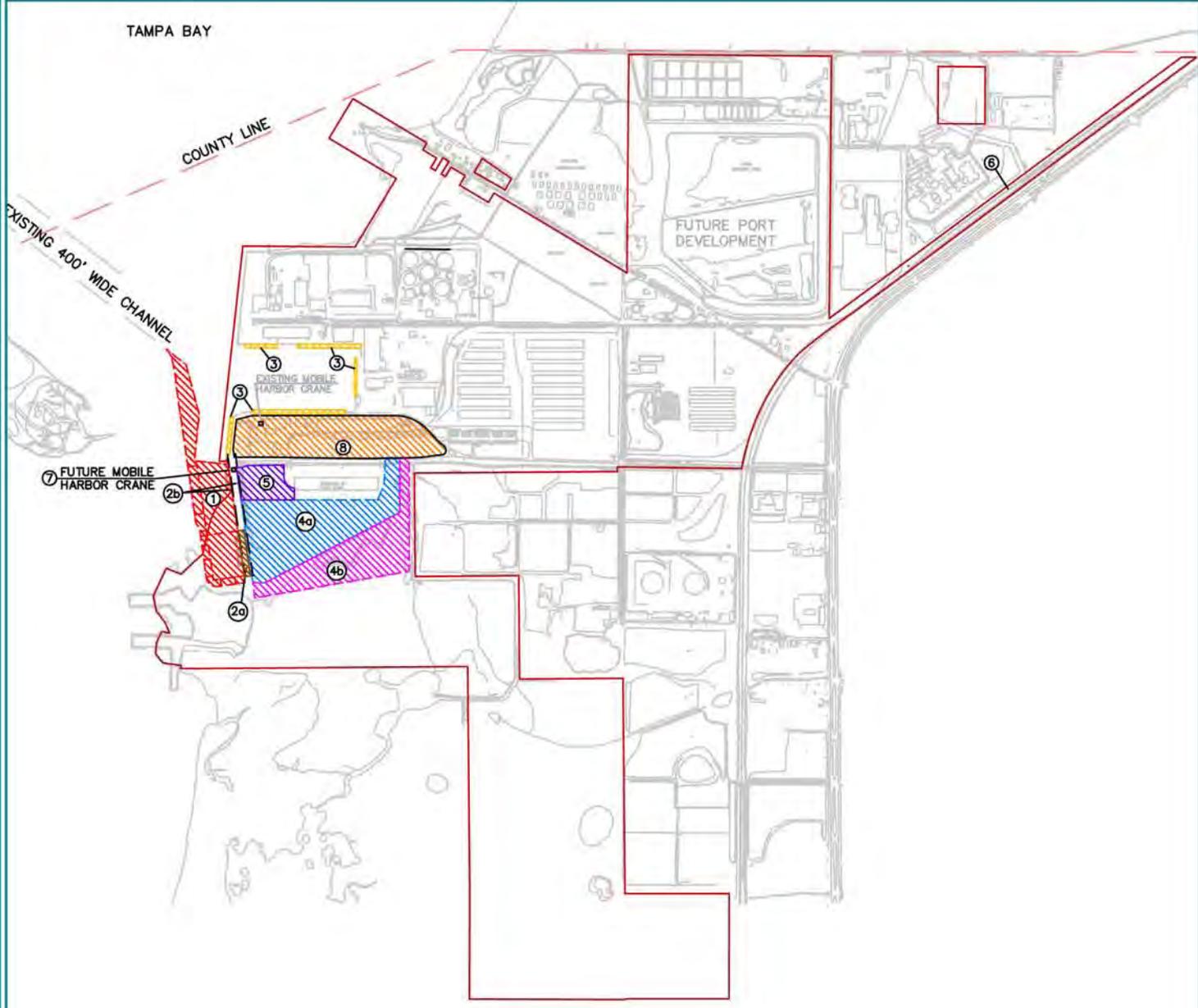
- South Port development, including the expansion of Berth 12, dredging, the next phase of an intermodal container transfer yard behind Berth 12, and the purchase of a second mobile harbor crane to be used at Berth 12 as well as at other berths, as needed.
- Bulkhead rehabilitation and reconstruction of Berths 6 through 11 around the Port's Central Basin.
- General cargo facility expansion, including the construction of an intermodal cold storage transfer facility to be located behind Berths 9, 10, and 11.
- Road and railroad improvements.
- Land acquisition for future expansion.

In addition to these capital improvements, this plan also focuses on three strategic initiatives. First, in anticipation of the North Port expansion, the Port plans to immediately implement a proactive mitigation strategy to address the expected seagrass and wetlands impacts of that expansion. Second, understanding that a comprehensive regional strategy will be required to pursue the waterside and landside access improvements needed to serve the future vessels coming through the expanded Panama Canal, the Port plans to work with its sister Tampa Bay ports to achieve their common objectives of channel deepening, leading to economic development and job creation throughout the region. Third, the Port will be working with the county and potential users of the newly created Encouragement Zone to attract Port-related uses that would enhance the Port's economic impact on the county and the region and create additional new jobs.

Figure IV.2 shows the footprints of the planned new facilities in the five-year planning horizon.

The five-year maintenance and expansion plan for Port Manatee includes eight major project categories for an estimated total of \$116.5 million. As discussed in Chapter VI, and detailed in Table VI.1, all of these proposed improvements will be phased and financed according to funding availability and appropriation.

COUNTY LINE  
EXISTING 400' WIDE CHANNEL



LEGEND

- ① SOUTHPORT CONSTRUCTION AND MAINTENANCE DREDGING
- ②a BERTH 12 EXTENSION
- ②b RAILS FOR GANTRY CRANES
- ③ BERTH REHABILITATION AND RECONSTRUCTION
- ④a INTERMODAL CONTAINER AND CARGO TRANSFER FACILITY (PHASE I)
- ④b INTERMODAL CONTAINER AND CARGO TRANSFER FACILITY (PHASE II)
- ⑤ INTERMODAL COLD STORAGE/CONTAINER CARGO TRANSFER FACILITY (PHASE III)
- ⑥ ROADS  
 RAILROAD
- ⑦ CONTAINER CRANES
- ⑧ INTERMODAL COLD STORAGE TRANSFER FACILITY - (PHASE I AND II)

Figure IV.2  
Maintenance and Expansion Program  
Year One through Five  
2009-2013

**South Port Development.** The South Port development envisioned in the first five years of this planning program comprises several components, designed to enhance the Port's capacity to both serve its existing tenants and capture new business, including additional throughput of containerized cargoes.

- **Construction and Maintenance Dredging.** This program is expected to include completion of Berth 12 construction dredging for South Port, including the maintenance dredging of the federal access channel and maintenance dredging of Berths 4 through 11 and the Central Basin, with dredge material pumped cross-port to upland disposal facilities across U.S. 41 at HRK's reclaimed Piney Point gypsum stacks. The project includes installation of necessary infrastructure such as pipe crossings for pumping dredged material beneath the CSX Transportation (CSXT) railroad and U.S. 41.
- **Berth 12 Expansion.** During this time frame, the Port will essentially complete the build-out of the Berth 12 wharf behind the existing bulkhead, including the installation of crane rails along the entire length of the wharf.
- **Intermodal Container and Cargo Transfer Yard (Phases I and II).** The Port will continue the development of the back lands and lay-down/storage area contiguous to Berth 12 at South Port, specifically for handling anticipated increases in Caribbean and cross-Gulf container business over the next five years. As demand warrants, specialized cargo-handling equipment will be purchased to support operations at Berth 12, including two rail-mounted gantry container cranes.
- **Second Mobile Harbor Crane.** The Port Authority purchased "Big Joe" a mobile, multi-use harbor crane in January 2007; took delivery of the crane in November 2007; and placed it into revenue service on December 19, 2007. To enhance the use of Berth 12 as well as other berths when needed, the Port plans to purchase a second crane similar to the first (a mobile harbor crane having a lift capacity of 29 metric tons at 164 feet from the crane centerline). The anticipated later acquisition of rail-mounted gantry container cranes for the South Port container yard will be necessary to satisfy additional demand, not to replace the mobile harbor cranes.

The following components are planned to complement this South Port development program:

- Additional railroad access and additional storage track capacity.
- Related roadway improvements and enhancements for improved access.
- Additional warehouse capacity.
- Additional mast lighting and security enhancements.

**Berth Rehabilitation and Reconstruction.** First built in the mid-1970s, Berths 6, 7, 8, 9, 10, and 11 have reached their design life and are due for major rehabilitation over the next four years. Emergency repairs were required on Berth 8 some eight years ago due to collapse. To avoid further deterioration and perhaps collapse, the Port will rehabilitate, upgrade, and reconstruct Berths 6, 7,

8, 9, 10, and 11. Improvements will include shoring up aprons and refurbishing/replacing pilings to accommodate heavy lift mobile cranes.

**Road and Railroad Improvements.** The Port will continue to upgrade and rehabilitate existing roads and railroad tracks within the Port jurisdiction, as required, including rail-tie replacement, ballast, resurfacing, and drainage improvements. Funds will also be used for maintenance of the existing locomotives. This work will be done to maintain a good state of repair and in anticipation of increased volumes and loads associated with additional bulk and containerized cargo throughput.

**Vehicular Access.** Given existing levels of automobile and truck traffic, there has previously been little need to expand roadways and add turning lanes at intersections. The principal change in Port access and circulation over the last few years has been the construction of the Access Control Center at the North Gate and the associated approach lanes, pavement, and adjacent parking.

To address the general near-term access and circulation needs identified from the anticipated growth in truck traffic from existing commodities and expanded cargo operations, the following improvements have been identified:

- **Widen Piney Point Road to 4 lanes:** This county road carries the majority of existing Port traffic presently (about 75 percent) including most heavy trucks, and this is not likely to change. The widened road would serve as the primary entrance road, would better handle transitory peaks, and accommodate occasional truck breakdowns on the entrance road. A raised median with landscaping, improved signage, and lighting is recommended for safety and visual quality as the main entrance road.
- **Add turn lanes to the North Dock Street/Reeder Road intersection:** This work would consist of northbound and southbound right-turn lanes, and an improved northbound-to-eastbound turning radius to the Port exit. Directional guide signing, road lighting, and intersection traffic controls would be included. As part of the Eastern Cement expansion, an access road will be built eastward from the firm's facility along the south side of the Port's railroad, connecting to Reeder Road, just south of North Dock Street.
- **Add turn lanes to the South Dock Street/Reeder Road intersection:** This work would consist of an eastbound left-turn lane, and improved southbound-to-westbound turning radius to the Central Basin and South Port areas. Directional guide signing, road lighting, and intersection traffic controls would be included.
- **Construct a South Port access road:** This two-lane road would connect from South Dock Street just east of the east end of new Warehouse 11 southward and then westward into the South Port multi-use facility. This connection would help to segregate traffic associated with the multi-use facility from other existing movements.
- **Expand the truck staging area:** An allowance was included for additional surfacing for a truck staging area nearby the North Gate.

- Develop an updated and integrated master guide-signage system; one option would be to use letter designations for Port sectors (e.g., S - South Port, etc.) for inbound movements and gate designations (e.g., North Gate and South Gate) for outbound movements.

**Rail Access.** In the South Port area, 968 linear feet of track each could be required (4,776 linear feet total, including 1,872 linear feet of lead track) for multi-use facility access to serve expected growth and allow tenants multi-modal flexibility in shipping commodities, should they need the option. Spacing between these tracks should be in the 50- to 100-foot range to allow for easy ingress and egress of trucks, bobtails, and chassis and provide for the potential use of straddle cranes for limited container operations. The proposed rail enhancement in the Berth 12 area would also provide the Port with the ability and flexibility (as lease terms expire) to shift on-site use for break-bulk or containers within this 61-acre location, as market conditions change.

A lead track of approximately 1,872 linear feet would be required, with a switch tie-in to existing track just behind Eastern Cement to accommodate this configuration. Depending on actual realized growth in rail-related commodity movements in the future, direct rail paralleling South Dock Street in an east-west alignment to the CSXT mainline might be preferred. In any event, additional on-site rail accommodations are planned in the initial years of the Berth 12 development.

#### **Intermodal Cold Storage Transfer Facility (Phases I and II)**

The Port plans to construct a 58,000-square-foot intermodal cold storage transfer facility behind Berths 9, 10 and 11. This facility is needed to provide the expanded capacity required by existing tenants to accommodate anticipated increases in fruit and perishable transshipment over the next five years. This phased action will consolidate and improve the Port's cold storage infrastructure. Specifically, Phase I of this project will entail construction of the consolidated warehouse facility and the ancillary support infrastructure, such as plugs for refrigerated containers.

Phase II will focus on landside efficiency improvements for transfer of fresh produce from ship to truck and the possible conversion of present administrative facilities to cold storage use.

#### **Land Acquisition**

The Port envisions purchasing lands contiguous to the Port for future development. Land purchases will be focused primarily on procurement of the property north of the Port to be used for the long-term landside development of the North Port container complex. Some of these lands are presently under a consent order by the state and may require some level of environmental clean-up. That issue will be dealt with as part of the land purchase negotiations.

#### **North Port Permitting and Mitigation Program**

The Port will immediately begin environmental permitting and advance mitigation for the planned North Port expansion. The development of a conceptual permitting and proactive mitigation program in the early years of this planning horizon is necessary to frame a total mitigation program and to achieve mitigation success prior to construction. This will help avoid the cost of increased mitigation ratios associated with lag time, increase the viability of mitigation, and provide greater

reliability of a fixed construction date. The mitigation will require permitting, construction, and monitoring activities, and is expected to span approximately seven years.

## 2. Looking beyond the Five-Year Program: North Port Expansion

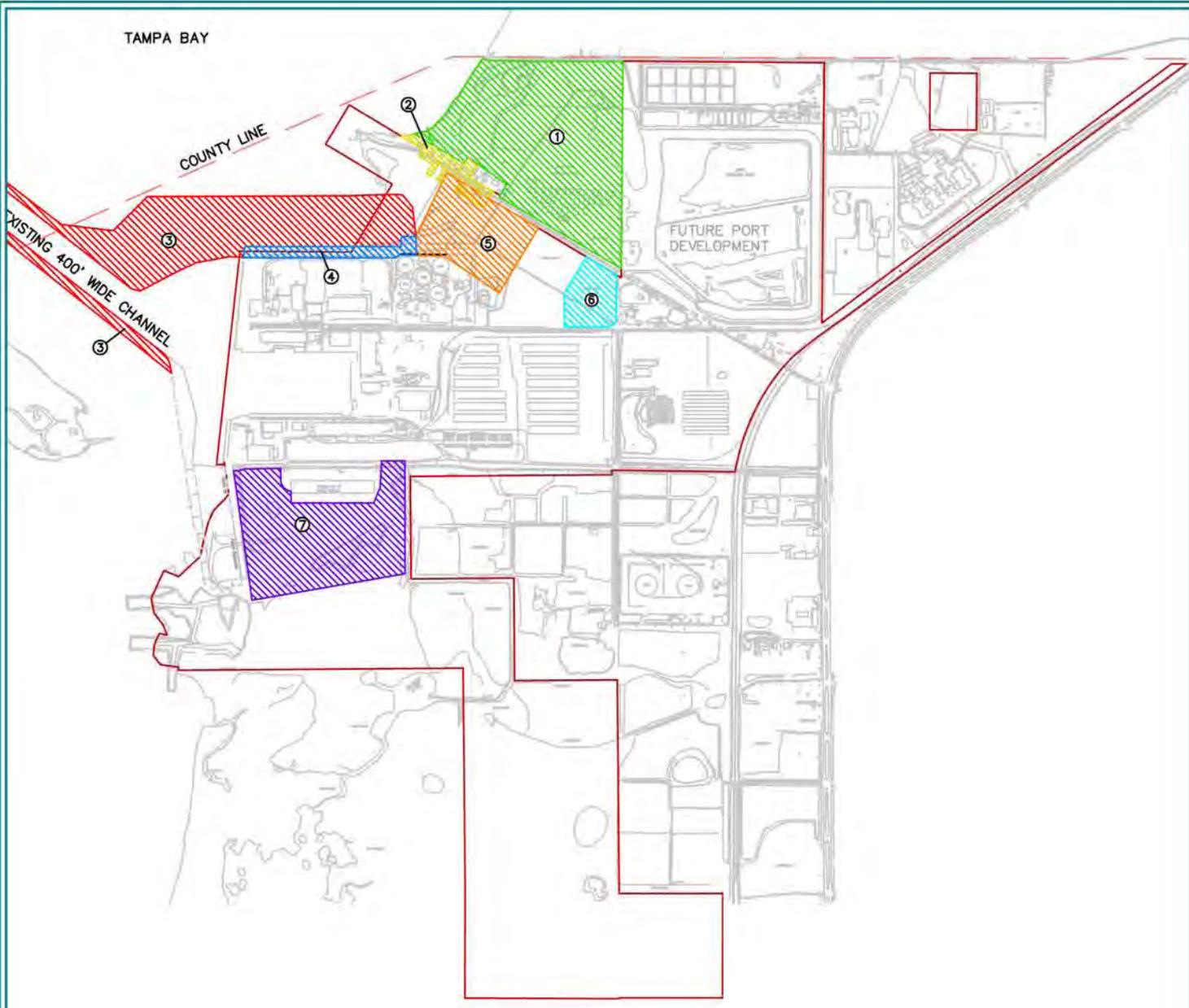
**Major Components of North Port Expansion.** Port Manatee has the potential to expand current Port operations further and greatly increase the Port's competitiveness on the global market by using lands to the north. The Port's expansion concept through 2018 includes the dredging of two berths, designated Berths 3 and 4, the design and construction of a new roll-on/roll-off ramp, creation of a container/lay-down yard supported with additional backlands to include intermodal and enhanced ingress and egress improvements to on-site and off-site connector roads and security checkpoints. This capital improvement program, outlined below, would be phased and built as market forces drive opportunities:

- Extension of Berth 5.
- Construction of the Berths 3 and 4 wharf and apron.
- Dredging of Berths 3 and 4 to 42 feet.
- Development of a roll-on/roll-off ramp and marshalling area.
- 20-acre lay-down area.
- Roadways.
- Two rubber-tired gantry cranes.

Figure IV.3 shows the footprints of the planned new facilities in the Years Six through Ten planning horizon.

**Waterside Development.** The North Port concept includes construction of new Berths 3 and 4, immediately north and adjacent to Berth 5. Cost considerations and design can be accommodated to allow these berths to be constructed and dredged independently, if desired. Construction of Berths 3 and 4 is proposed 130 feet north of the present north corner of Berth 5. Offsetting this bulkhead will allow for construction of the bulkhead and apron space for associated infrastructure without interfering with existing and ongoing Port operations or leases.

Initial dredging for this development is recommended to be at 40 feet, plus two feet over dredge, consistent with the present operational depth of the access channel. The operational width of the Phase I channel would be 400 feet. Incidental dredging would also be necessary to expand the turning basin for access to Berths 3 and 4. The new turning basin would have a radius of 750 feet, allowing for safe movements of a 965-foot-long ship. Panamax ships, i.e., ships that can traverse the Panama Canal as it exists today, typically handle 4,500 to 6,000 TEUs and have a maximum length of 960 feet and maximum width of 106 feet.



LEGEND

- ① LAND ACQUISITION
- ② VOLUNTARY ACQUISITION PROGRAM
- ③ NORTH PORT DREDGING
- ④ BERTHS 3 & 4
- ⑤ FUTURE LAYDOWN AREA & BACKLANDS
- ⑥ SECURITY GATE AND ACCESS EXPANSION
- ⑦ INTERMODAL CONTAINER AND CARGO TRANSFER FACILITY

Figure IV.3  
 Maintenance and Expansion Program  
 Year Six through Ten  
 2014-2018

A roll-on/roll-off ramp is proposed for the east end of Berth 3, sharing the dockside structure. The roll-on/roll-off ramp anticipates the variety of ships that might call on the facility without impacting North Port operations. Roll-on/roll-off storage and marshalling would be accomplished in the backlands east of Berth 3. The North Port area provides direct roadway access to the Port main gate utilizing existing enhanced infrastructure.

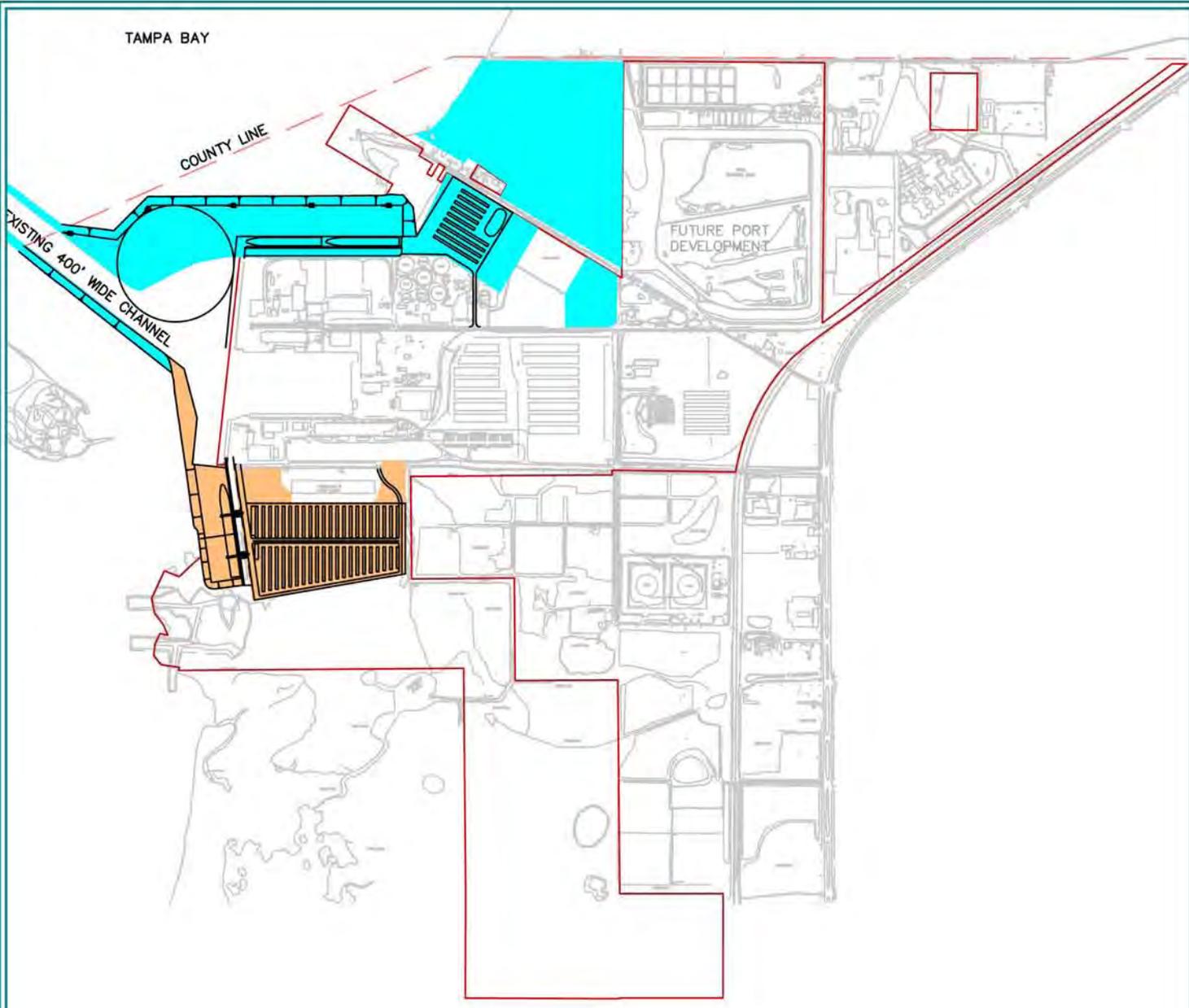
When completed, this expansion will provide approximately 2,000 linear feet of new berthing capacity (Berths 3 and 4), will add 130 linear feet to the existing Berth 5, and add 26,000 square feet of wharfage along the new berths. This added capacity will allow for berthing two 965-foot or smaller ships concurrently. Bulkhead design will accommodate a future 50-foot dredge depth.

**Landside Development.** Quayside, to serve the two new deepwater berths, it is anticipated that a 10-foot buffer will be designed for vessel marshalling and ship-to-shore utility connections; 10 feet behind the buffer area allows for vehicle access and a rubber-tired mobile crane (anticipated) or rail-mounted gantry track and crane (if the throughput mix changes). Given the recommended design area, one to four cranes could be employed for operations. An additional 100 feet of apron space is planned for load and offload activities. Operationally, the tenants currently leasing land areas to the south of Berths 3 and 4 could upgrade their facilities for better dockside cargo transfer or, based on expiration of lease agreements, be offered incentives to relocate to more appropriate areas away from waterside operations. A recommended 20-acre lay-down area will be constructed directly to the north and east of Berth 3, including accommodation for roll-on/roll-off operations.

Access improvements will be made to improve freight circulation to and from these new berths. These access improvements may include the following:

- **Access Area Expansion:** To facilitate increased Port traffic from the continued growth of existing commodity categories as well as the additional traffic associated with the expanded North Basin, the area northwest of the Reeder Road/North Dock Street intersection is proposed to be partially paved. This improvement would ease the movement of vehicles from the North Gate to the expanded North Port area, as well as the existing Central Basin and expanded South Port zones. It is presumed that part of this area would be delineated for more direct exit maneuvers from the North Gate area to on-Port destinations, and a portion would be used for short-term on-Port staging of vehicles into high-activity ship-unloading zones.
- **Signalization of Piney Point Road/U.S. 41 intersection,** in cooperation with the Florida Department of Transportation (FDOT), assuming traffic signal warrants are met.
  - Additional roadways from the North Gate security area to the North Port berths are presumed to be built, along with the site and pavement improvements for this area. The additional cargo traffic may necessitate some expansion of the traffic processing lanes at the North Gate from the existing four lanes, depending upon demand levels and peaking patterns.

Figure IV.4 shows the total Port improvements envisioned for completion over the ten-year planning horizon.



LEGEND

-  FIRST FIVE YEARS
-  YEARS SIX THROUGH TEN

Figure IV.4  
Maintenance and Expansion Program  
Ten-Year Future Facilities Map

## **B. Impact Assessment**

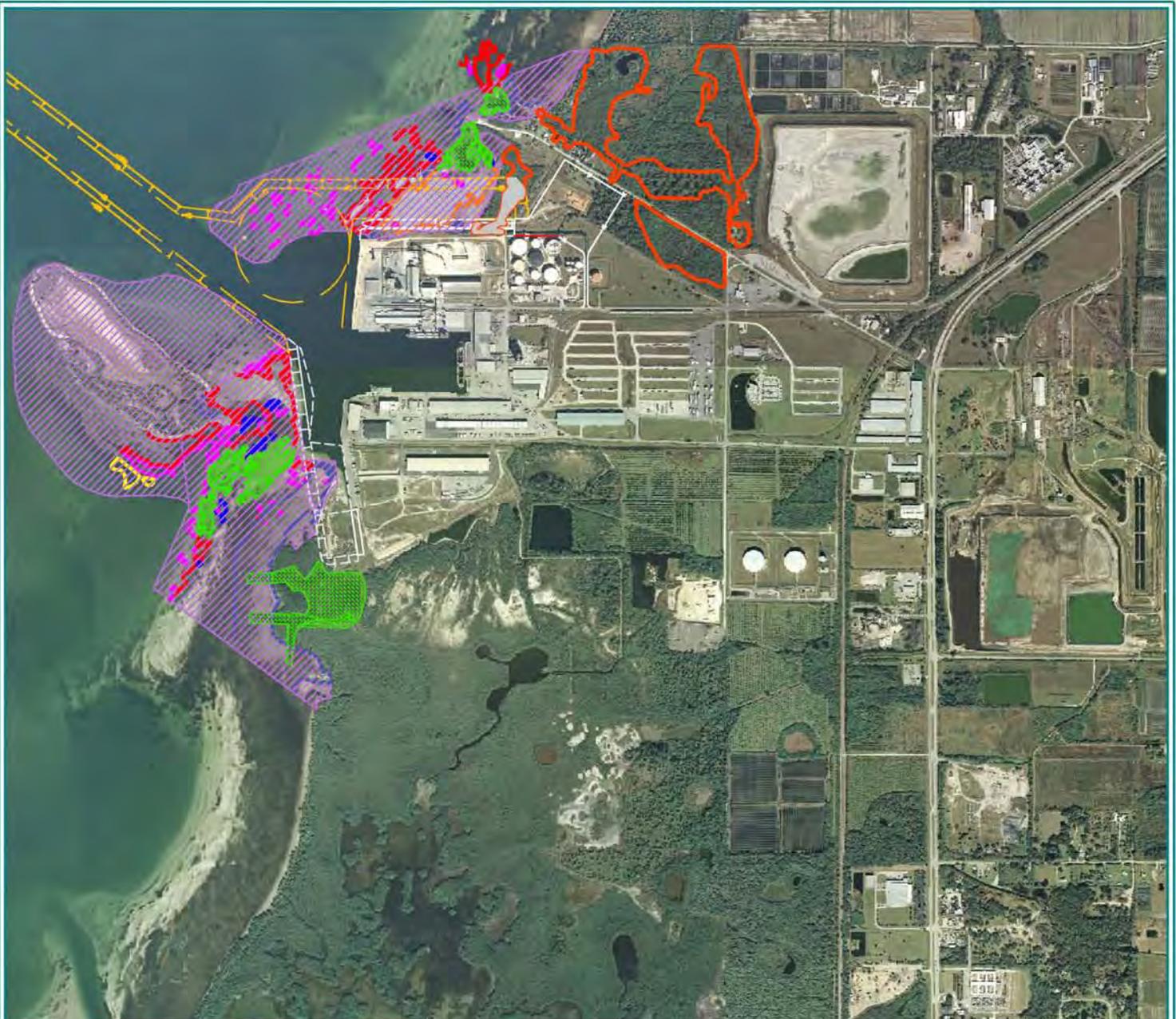
### **1. Land Uses**

**Years One through Five: South Port Terminal Expansion.** The planned five-year improvements will occur on land already developed for Port purposes and are consistent with the Port's zone designations. The South Port terminal expansion, including dredging, the extension of Berth 12, and development of the Berth 12 backlands, is anticipated in the first five years of this *Port Manatee Master Plan, 2009*, subject to receipt of identified matching grant funding or use of other funding mechanisms. These expansion projects have been in the planning and design stage over the last five or so years. Impacts for dredging of the berth, wetland impact, and land uses have been reviewed and permitted. Seagrass impacts have been mitigated and construction has been approved.

**Years Six through Ten: North Port Development.** The North Port development will require the construction of Berths 3 and 4, adding 2,000 linear feet of new berths, a new apron suitable for mixed cargoes and rubber-tired cranes, a roll on/roll off ramp, and approximately 20 acres of new lay-down areas. This development is also consistent with the Port's zone designations.

Construction of Berths 3 and 4 will require channel dredging and enlarging of the turning basin at Berth 5. This construction is contingent upon the successes of the Berth 12 operations and resultant new demand, funding, and Port Authority approval of the specific program components.

This development program is expected to result in 19 acres of direct seagrass impact. Seagrass impacts will occur in part in a manatee/seagrass protection zone established as mitigation (DEP Permit No. 0129291-002 EI) for the Port's previous navigation and bulkhead improvements project. Figure IV.5 shows the seagrass and wetland areas expected to be impacted by the expansion program presented in this master plan.



**SEAGRASS LEGEND & IMPACTS**

	GRASS-H	12,023 sf
	GRASS-H_T	580,396 sf
	GRASS-OPEN_WATER	901 sf
	GRASS-T	62,588 sf
	GRASS-T_H	170,810 sf
	GRASS-T_S	
	TRANSPLANT MITIGATION AREAS	
	PROPOSED IMPACTS	826,718 sf/19 ac
	SITES 8-9	

**WETLANDS LEGEND & IMPACTS**

	WETLANDS	141,776 sf
	PROPOSED IMPACTS	141,776 sf/3 ac

Figure IV.5  
Seagrass and Wetlands Impacts of  
Proposed Expansion Program

## 2. Public Access

Port Manatee's diverse maritime activities render the Port inappropriate for open public access. Furthermore, in this era of heightened security, where the entire Port has been designated as a restricted area, open public access cannot be allowed. The one exception to this prohibition is the guided tours that the Port conducts periodically to familiarize the public with this county resource.

The public is, of course, invited to noticed meetings and controlled access is allowed for this purpose.

## 3. Historic Resources

The maintenance and expansion program delineated in this plan will not impact any known historic resources. If the Port acquires additional properties, it will ascertain whether any historic resources are present on those properties.

## 4. Environmental Resources

**Permitting Overview.** The expansion of Port operations is a water-dependent need that meets the public benefit criteria defined in Florida Statutes. Regardless, the permitting of 19 acres of seagrass impacts to the Berths 3 and 4 channel and slips, envisioned beyond the five-year time frame, will require significant mitigation. The Port Authority recognizes that this mitigation should take place in the most proactive environment conceivable. This proactive philosophy creates an environment of cooperation between the Port and environmental entities for the net improvement of the environmental system as well as a potential funding source (the Port) to look at greater environmental enhancements. Preplanning and mitigation also generate the new resource prior to major impacts to the existing seagrass, enhancing the overall system from inception of the mitigation proposal.

Both federal and state agencies have a goal of no net loss of wetlands. The county's policies and regulations require preservation of wetlands wherever possible, and protection of wetlands is preferred to destruction and mitigation due to the temporal loss of ecological value and uncertainty regarding the ability to recreate certain functions associated with wetlands. Impacts to wetlands and seagrass are regulated by the Florida Department of Environmental Protection (FDEP) (Environmental Resource Permit) and the U.S. Army Corps of Engineers (ACOE) (Section 404 Permit). These agencies stress minimization and avoidance measures for wetland and seagrass impacts.

The U.S. Fish and Wildlife Service (FWS), Environmental Protection Agency (EPA), National Marine Fisheries (NMFS), and the Florida Fish and Wildlife Conservation Commission (FWC) will review and comment on both the federal and state permit applications. In addition to reviewing environmental impacts, the FDEP will provide proprietary authorization to use sovereign submerged lands (Chapter 18-21 Florida Administrative Code (FAC)).

A conceptual permitting scheme that will allow a mitigation plan to be folded into a program while overall project permits are being secured will allow the mitigation to reach a maturity level during the permitting process and before berth construction begins. Credits will be available for project

impacts prior to the impact occurring, significantly reducing the mitigation risk and the ratio of mitigation credits to impact required for the project.

An Ecosystem Team Permitting process to acquire environmental permits for the project may be warranted. This process encompasses a streamlined and efficient permitting approach that is designed to achieve an overall “Net Ecosystem Benefit,” protecting the public health and the environment and providing active public involvement. The process would include participation by federal, state, and local permitting agencies as well as commenting agencies and would include all of the environmental permits required by these agencies

**Proactive Mitigation Opportunities.** Several mitigation opportunities have been identified for the Port to pursue during this planning period.

**Uniform Mitigation Assessment Method.** Wetland and seagrass impacts anticipated from future Port development beyond the five-year program will be assessed using the Uniform Mitigation Assessment Method (UMAM) (Chapter 62-345, FAC). UMAM was adopted in 2004 to replace the ratio method used in determining the amount of mitigation that a project would require. UMAM is used to assess the current functions of wetland or seagrass habitat versus some future condition, whether that future condition is degraded (impact) or improved (mitigation).

**Waterside-UMAM.** A preliminary functional loss score was developed for the North Port development in Years Six through Ten and beyond. Impact calculations have been developed from information provided by the Port and represent current available data. Future impacts may be different from those presented in this document, given modifications that have been performed to promote seagrass establishment and increases seagrass bed density. Present day, impact areas are a mixture of consolidated and patchy seagrass beds that may include areas of soft bottom benthic habitat currently devoid of aquatic vegetation. The estimated UMAM value for 19 acres of seagrass impacts is 11.

The preliminary functional loss was derived by scoring the impact areas as fully functional (mitigation success) taking into account their location within a seagrass and manatee management area.

**Waterside-Mitigation Options.** The Port Authority recognizes the importance of environmental protection and minimization of impacts. The present Port expansion highlights the capacity of the Port Authority to develop and generate a successful seagrass mitigation program. Evidence is provided in the form of:

- Sign off by FDEP that present seagrass mitigation meets or exceeds the permitted requirements.
- Awards in multiple environmental categories for environmental stewardship.
- Testimonials from knowledgeable environmental scientists on their successful conclusions.

The Port Authority is expected to identify a proactive mitigation strategy that establishes new seagrass or creates opportunities for new seagrass beds to be established before allowing the

dredging of Berths 3 and 4. The mitigation program will be designed and constructed to create a net ecosystem benefit for the region.

For wetlands, new on-site options are limited; therefore, teaming with Manatee County to develop a program to secure credits for improvements to wetlands on county-owned conservation lands would provide the greatest overall benefit. To arrive at an appropriate mitigation plan, the following steps are anticipated.

- Investigate potential mitigation alternatives.
- Develop a comprehensive mitigation program.
- Proceed with conceptual permitting.
- Begin mitigation planning and construction as soon as possible prior to impacts.

The focus of the investigation for potential mitigation alternatives will be regional, radiating from the Port area. In particular, the Tampa Bay Estuary Program (TBEP) has a focus of expanding seagrass beds within the Bay by both water quality improvement and large-scale restoration projects.

The selected alternatives will be developed into a comprehensive mitigation plan with program/project expectations. The plan will include the proposed design, costs, timeline, monitoring requirements, and credit scheme that will include a projected number of credits and the time when they will become available.

Three off-site mitigation options were explored as potential mitigation for anticipated seagrass impacts. These options are presented to demonstrate that there are opportunities for large-scale mitigation which could have a net benefit to this area. Options include:

- Restoration of propeller (prop)-scarred seagrass beds.
- Restoration of dredged holes.
- Restoration of a long shore bar system.

Each of these mitigation options is discussed below. Although mitigation ratios are no longer used to determine mitigation needs, ratios can still be used to provide an acre-to-acre comparison of impacts to mitigation. Preliminary mitigation ratios are provided for each mitigation option. The ratios were developed by scoring each proposed mitigation option. Although general mitigation sites are noted, the discussion below does not identify specific mitigation sites. As detailed previously, off-site mitigation is focused on areas in proximity to the Port.

**Restoration of Propeller-Scarred Seagrass Beds.** Seagrass scarring is a recognized problem throughout Florida (Sargent et al. 1995). Tampa Bay is second in the state in the percentage of prop-scarred seagrass (CCMP 2006). Mitigation projects have been undertaken to restore prop scars at Port Manatee, Key West (SFWMD permit number 44-00318-P), and in other coastal areas of the state.

The TBEP has identified restoration of select seagrass scarring sites as an action plan within the *Comprehensive Conservation and Management Plan for Tampa Bay* (CCMP). Sargent et al (1995) identified approximately 2,990 acres of severe and moderately scarred seagrass beds in Manatee County. More than 50 percent of the severe and moderately scarred seagrass beds identified in the county were found within the Terra Ceia Aquatic Preserve (TCAP) (TCAP 2007). The most severe scarring within the TCAP has been mapped within Miguel Bay and Bishop Harbor (TCAP 2007).

Based on its draft management plan, the TCAP is currently focused on reducing the frequency of propeller scarring by improving both on-the-water markings and boater education. An opportunity exists to mitigate some of the anticipated seagrass impacts resulting from Port expansion. Updated surveys of seagrass scarring in the TCAP would need to be performed to determine the actual acres available for mitigation.

Restoration of prop scars can be accomplished by planting or backfilling to natural grade to allow natural recruitment. Successful programs have included the use of sediment-filled fabric tubes, which help maintain the sediments in place. Planting would involve harvesting of plant material from an impact site or other donor site and transferring the material to prop scars. In general, restoration of prop scars is of medium risk, with many successful projects completed throughout Tampa Bay.

**Restoration of Dredged Holes.** Dredged holes are borrow areas, constructed in coastal waters, to provide fill for adjacent construction projects. The ACOE is actively assessing different opportunities to manage dredging and dredged material (CCMP 2006, TBEP 2005). Although the TBEP's focus on re-filling dredged holes is towards providing an alternative method for the management of dredging and dredge material (CCMP 2006), re-filling of dredge holes has an ancillary positive benefit on benthic habitat.

The TBEP studied eleven borrow areas to determine possible management options (TBEP 2005). The study focused on borrow areas in Old Tampa Bay and Hillsborough Bay. Dredged holes studied ranged in size from 10 to over 100 acres, for a total area of 453 acres. The study determined that, of the eleven holes under review, habitat values could be enhanced by the filling or partial filling of four holes, totaling approximately 150 acres (TBEP 2005).

Filling of borrow areas has been accomplished in Miami-Dade County as a pilot project conducted by the county's Department of Environmental Resources Management (DERM) (Miami Harbor, Final Environmental Impact Study (FEIS) 2004). Anecdotal evidence of this pilot project indicates moderate seagrass recruitment once the borrow area was re-filled. Restoration of a 24-acre site within a borrow area was also proposed for the recent dredging of Miami Harbor (Miami Harbor, FEIS 2004). In Tampa Bay, the re-filling of a dredge hole near Lassing Park, Hillsborough County, was successfully colonized by seagrass once filled to natural grade (EPC 2007).

The extent of borrow areas within the Lower Tampa Bay is unknown. A review of available aerials identified areas of past dredging within the TCAP. These areas may provide limited restoration potential, given their size. Further study is required to adequately identify borrow areas in proximity to the Port and the efficacy of this mitigation option.

Preliminary UMAM analysis for this restoration method generates a mitigation ratio of 5.8 to 1. Although the estimated mitigation ratio is much less than for the restoration of propeller scars, the extent of dredge holes available for mitigation is likely limited. This mitigation option, as a stand alone, is unlikely to provide full compensation for expansion alternatives with greater seagrass impacts. In addition, because this method has been used in limited circumstances, the risk to implement this option is higher than for the restoration of prop-scarred seagrass.

**Restoration of Longshore Bars.** The TBEP has set as a goal the recovery of approximately 12,000 acres of seagrass habitat in Tampa Bay, for a total coverage of seagrass equal to that present in 1950 (CCMP 2006). To achieve this goal, the TBEP and other agencies have focused on improvements in water quality; such improvements have achieved an average increase of approximately 250 acres of seagrass per year (CCMP 2006). Although water quality has improved dramatically in Tampa Bay, re-colonization of seagrass has not occurred in all areas of the Bay (Lewis 2002). It is acknowledged that seagrass recovery has slowed and that other parameters, aside from water quality, are influencing seagrass colonization (CCMP 2006, Fonseca et al 2002).

One focus of interest is the restoration of longshore bars that were once prevalent in Tampa Bay (Lewis et al 1985, 2002). It is theorized that the longshore bar system provided a physical barrier, reducing the wave and storm energy providing a sheltered area that would support seagrass colonization. Another benefit that the restoration of longshore bars may provide is a beneficial use of dredged material.

Fonseca et al (2002) modeled the effects of longshore bars at eight sites within Tampa Bay, concluding that the placement of emergent bars should provide habitat areas that would be conducive to supporting the re-colonization of seagrass. In particular, the model indicated that areas of the eastern Tampa Bay, such as Cockroach Bay and Wolf Creek, could be improved. The study did not examine the potential effects of waves generated by shipping traffic.

Preliminary UMAM analysis achieves a mitigation ratio of 12.5 to 1. This mitigation option presents the opportunity to restore large areas of seagrass habitat, but has not been established as a restoration method. Because the method has not been tested, the risk of implementing this option is high.

**Off-Site Mitigation.** In general, mitigation is best accomplished when located on site or in proximity to the area being impacted. Off-site mitigation is allowed in cases where on-site mitigation or preservation is not feasible, as determined by the Southwest Florida Water Management District (SWFWMD) Basis of Review (BOR) (rules adopted by reference in Chapter 62-330, FAC by the FDEP). Based on a review of applicable rules, administrative guidance for mitigation, Port property currently available for mitigation projects, and in consideration of the Port's expansion needs, mitigation projects conducted off-site would be of greater function and value than typical on-site mitigation.

Off-site mitigation may require the Port to acquire property for the express purpose of mitigation. Opportunities exist to partner with federal, state, and local agencies working on restoration projects in the Tampa Bay area. Manatee County, through its Conservation Lands Management Department, is performing large-scale countywide restoration projects. The off-site mitigation

needed to mitigate expansion alternatives with larger wetland impact acres will require substantial land area.

The Acquisition and Restoration Council (ARC) has ranked acquisition of parcels adjacent to the TCAP as a priority (Florida Forever Five-Year Plan 2007). The SWFWMD was able to acquire the Terra Ceia Isles property and is currently restoring native habitats on this parcel. Other parcels targeted for acquisition may provide some or all of the mitigation needed to fully compensate proposed impacts of Port development proposed for Years Six through Ten.

Based on a preliminary UMAM analysis, off-site restoration yields a mitigation ratio in the range of 4.2 to 8.4 acres of mitigation per acre of impact. Costs associated with this option include land acquisition, mitigation design, and mitigation implementation. The state, through the SWFWMD and the FDEP, is actively pursuing mitigation projects throughout Tampa Bay, reducing the availability of mitigation opportunities.

**Mitigation Banking/ ROMAS.** Mitigation banking and the use of regional off-site mitigation areas (ROMAs) are alternative methods to perform off-site mitigation. Mitigation banks are generally set up by private industry, whereas ROMAs are set-up by public entities to mitigate several projects. Mitigation banks and ROMAs generate credits by improving a site. Those credits are then available to use as mitigation for projects. Mitigation Banks and ROMAs reduce both risk and the time needed to fully offset an impact. Currently, one private mitigation bank operates within the Tampa Bay watershed.

#### **Dredge Material Management**

Management of dredge material is an important component of Port operations. Management strategies must focus both on regular maintenance activities performed to insure navigability, and on new dredging planned for Berth 12 and, subsequently, Berths 3 and 4. The Port's current policy is to utilize upland disposal in designated areas.

Two upland disposal sites are available for future dredging activities. The Port maintains an on-site dredge disposal area near Harlee Road. The Port has also negotiated the use of lined storage areas across U.S. 41 on HRK property. The ultimate goal is to remove the on-site dredge material management area and establish that area for Port backlands operations.

#### **Stormwater Management**

Port Manatee maintains a comprehensive stormwater management system approved by Manatee County and the SWFWMD. The system consists of a network of swales and other conveyance structures and stormwater management ponds. The existing stormwater system meets the requirements for flooding attenuation and water quality.

The main portions of the Port are adequately serviced by this stormwater system. The Berth 12 area, to be completed over the next five years, has an existing storm-water pond. As the Berth 12 facility is enlarged, the pond and conveyance will be modified to meet the new geometry and development. The components of the system currently in existence meet the local and state

regulatory requirements. Modifications to the system with the build-out of Berth 12 have been anticipated through a conceptual permit. Final approval of Phase I is pending.

The North Port expansion construction at Berths 3 and 4 will require additional stormwater management consideration in the form of water quality controls and conveyance. Conceivably, the Port could add up to 60 acres of impervious surface in the North Port area. With the proximity to the Bay, conveyance issues are localized and will not affect properties outside the Port jurisdiction. Water quality will continue to be a critical issue, due to the existence of the Aquatic Preserves north and south of the Port and the viable seagrass bed immediately offshore. The Port has identified water quality objectives and policies to address this issue (see Chapter V, Objective 3, Policy 3.2.2).

The Port will initiate a conceptual permit process over the next few years to prepare for the anticipated construction. Market forces will drive the actual schedule of construction and stormwater design will be conducted to meet the requirements imposed by construction. These designs will follow the blueprint agreed upon in the conceptual permit.

## **5. Utilities:**

**Potable Water Supply.** Between 2009 and 2013, the first five years of this master plan, the Port expects an incremental increase of potable water demands proportional to the growth that Berth 12 activities will have on Port operations. An increase in Port traffic of over 50 percent is anticipated in this time frame, representing 2,000 new trips beyond existing conditions.

Years 2014 to 2018 are anticipated to be slower growth periods for the Port as the operations constructed between 2009 and 2013 are brought on line and realized in actual usage. This period will also be used to design and build the new berths in the North Port area, but this will not create additional potable water demand until well after build-out in 2018. Projected user traffic is expected to continue to increase by an additional 60 percent over 2013 levels this growth is included in the 2018 demand estimate in Table IV.1 on the next page.

As noted in Chapter II, a new, larger potable water system being installed at the Port will be provided with adequate capacity for current demand and is expected to be adequate for the demand generated by expanded future operations.

Table IV.1			
Potable Water Demand			
Potable Water Demands	Port Operations Gallons/Day	Personnel/Users Gallons/Day	Total Gallons/Day
Present (2008)	26,500	7,500	34,000
Years One - Five (2013)	29,000	11,000	40,000
Years Six - Ten (2018)	34,700	17,800	52,500

**Sanitary Sewer.** The need for additional sanitary sewer capacity directly follows the potable water demands for the Port. Based on growth and additional demands on potable water, the capacity at the wastewater treatment plant servicing this area over the planning horizon is shown in Table IV.2. Plant capacity is adequate to treat the Port's current demand and is expected to be adequate for the demand generated by future operations.

Table IV.2	
Sanitary Sewer Demand	
Sanitary Sewer Demands	Gallons/Day
Present (2008)	6,200
Years One - Five (2013)	9,300
Years Six - Ten (2018)	14,900

**Electrical Supply.** Growth at the Port between 2009 and 2013 will include the build-out of Berth 12 and associated backlands. This growth will take place over the next five years as these facilities come on line. The major energy impact will be from the cold storage facility in the South Port area, which will add 58,000 square feet of cold storage and increase the chiller space by approximately 25 percent. In addition, an increase of up to 50 percent is anticipated for the reefer plugs needed to accommodate the anticipated growth in the volume of perishable cargo imported into the Port.

The addition of a new crane will have limited effect on the energy supply as the crane is mobile and generates its own power through on-board motors and generators. The backlands area will add high mast lighting and security demands with limited additional power loads from warehousing. The demand from additional ship calls will be relatively small; energy needs for the additional

vessels are handled by their own on board generators. This represents a demand growth of about 10 percent over the present usage in general port growth.

Between 2014 and 2018, the Port will add Berths 3 and 4, with associated warehousing and backlands. Without a clear picture of tenant plans, it is difficult to estimate demand; however, with the addition of these facilities an increase on the order of 20 percent beyond the energy requirements of 2013 could be expected. These demands will not be required until Berths 3 and 4 are operational which is outside the ten-year planning horizon for this master plan.

Table IV.3 Electrical Demand	
Electricity Demand	Kilowatt-hours (average)
Present (2008)	800
Years One - Five (2013)	1200
Years Six - Ten (2018)	1470

## 6. TRANSPORTATION SYSTEM

**Port Manatee’s External Access System.** As discussed in Chapter II, Port Manatee is a designated hub on Florida’s Strategic Intermodal System (SIS) and is classified as an SIS deepwater seaport. Access to Port Manatee is provided via a series of SIS connectors, as identified in Table IV.4 and illustrated in Figure IV.6. U.S. 41 is the designated SIS roadway connector, providing a direct connection between Port Manatee and I-275. I-275 and I-75 are both designated SIS highways and provide connections between the SIS connector and the rest of the state.

Table IV.4 SIS Designations for Port Manatee and Connectors	
SIS Classification	Facility
SIS Highways	Interstate 75
	Interstate 275
SIS Rail Corridors	CSXT line from Bradenton north to Tampa
SIS Waterway	Gulf Intracoastal Waterway and shipping lanes
SIS Road Connector	U.S. 41 from I-275 to Piney Point Road (a county road) to Port entrance
SIS Rail Connector	On-Port Class III railroad (owned and operated by Port Manatee) from seaport property line to CSXT line
SIS Waterway Connector	Port Manatee waterway connector to Gulf Intracoastal Waterway

From a rail standpoint, the Port is connected to the CSXT SIS rail corridor via an SIS rail connector. The designated SIS rail connector is owned by the Port, and consists of a segment of the on-Port Class III railroad connecting to the CSXT railroad. Access to the SIS waterway is provided via an SIS waterway connector between the Port and the Gulf Intracoastal Waterway.

**Figure IV.6**  
**FDOT SIS Designations for Port Manatee**  
**and Connectors**



**Port Trip Generation.** The volume of new trips to be generated by the Port's five- and ten-year expansion and maintenance program will depend on the types of new commodities moving through the Port and their origins and destinations. For this impact assessment, these are assumed to be a continuation of the commodity mix the Port is currently experiencing, with an incremental increase as the container movements grow at Berth 12 and as Berths 3 and 4 come on line, attracting new customers to the Port. Rail is expected to play a potential role in the transport of bulk and other commodities. Use of rail is, however, relatively low at present, and specific to particular commodity shipments.

Trips to and from the Port are a function mainly of the cargo volumes, cargo mode split between trucks and rail, and employment at the Port. To characterize the trip generation associated with the Port, Port tonnages by commodity for 2008, and as forecast for 2013 (Year Five of this plan), were used. The basis for this trip generation is the set of forecasts by commodity for the Port as presented elsewhere in this report (see Chapter III).

Using an analysis of trip generation by commodity prepared as part of FDOT's 1998 access study for the Port, trip generation rates for the Port by commodity type were applied to forecast tonnages. These trip generation rates incorporate the movements of both employees and cargo.

For container TEUs, a separate trip generation rate was developed and applied. For the purposes of this analysis, it was assumed that the rail mode split would remain at current levels, relatively low, although this may change with the development of Encouragement Zone uses and other factors. Application of the trip generation rates yielded total daily trips in and out of the Port for both automobiles and heavy trucks. The share of heavy truck trips is forecast to increase from approximately 50 percent in 2008 to about 57 percent in 2013. Any growth in rail movements would, of course, be beneficial in reducing vehicular traffic.

**Traffic Service Review and Findings.** Estimations of forecast traffic volumes on U.S. 41 were developed by reviewing the growth in U.S. 41 traffic volumes over the 2000-2008 period. This review indicates that U.S. 41 volumes are growing at a rate of 2.7 to 4.0 percent per year, depending upon the segment. These growth rates were applied to existing peak-hour traffic volumes for the AM and PM peak hours to develop estimated peak-hour volumes for the 2013 planning horizon. To these volumes were added the projected Port traffic growth to 2013, using peaking, directional, and cardinal distribution factors from 2008. An allowance was made for non-Port traffic accessing the Port entrance roadways from Reeder Road, Harlee Road, and the residences on the west end of Piney Point Road. All 2008 traffic data were derived from the recent *Port Manatee Connector PD&E Study - Final Existing Conditions Traffic Memorandum* (November 2008).

Based on this approach, total Port tonnage is projected to grow at a compounded annual rate of 6.4 percent per year. Port vehicular trips are projected to increase from approximately 3,650 daily trips in 2008 to 5,550 daily trips in 2013. Over the 5-year period, this is a compound growth of about 8.3 percent per year. Reflecting these growth rates and conservatively assuming urbanized area parameters using the Florida DOT generalized roadway capacity tables, the peak-hour level of traffic service for both AM and PM in both directions of travel on U.S. 41 within three miles from the

Port (from I-275 northward to north of Valroy Road in Hillsborough County), including projected Port traffic, was reviewed. This analysis demonstrates that the level of service (LOS) for traffic operations on U.S. 41 is maintained at LOS B for traffic conditions currently (in 2008) and in 2013. LOS B represents a good traffic operations environment, with free-flow uncongested conditions.

Beyond 2013, there is reserve capacity on U.S. 41 to absorb additional traffic; however, the anticipated level of continued growth in Port traffic from new business, background traffic due to Encouragement Zone activities, and residential development to the east and south of the Port will affect the traffic loads on U.S. 41 and thus the resulting LOS.

**Other Transportation Considerations.** Chapter II describes and illustrates the roadway network truckers use to carry commodities to and from the Port. The Port has had the benefit of an uncongested network by which its cargo can access regional routes, including I-275 and I-75. Within the five-year planning horizon, no significant congestion is anticipated on these key routes within 10 miles of the Port. No roadway capacity improvements are planned in the proximity of the Port over the next five years.

In the ongoing *Port Manatee Connector PD&E Study*, FDOT is looking at possible alternatives for enhanced access between I-75 and Port Manatee to address anticipated future traffic. The study, initiated earlier in 2008, has completed the data collection phase and has conducted stakeholder meetings in the study area, the latest of which presented possible connector corridors based on an assessment of study area conditions and constraints. Beginning in 2009, specific alignment options will begin to be developed and travel demand modeling performed to assess the level and distribution of travel patterns in the study area with and without the proposed facility. The Port is coordinating with the study team in the process to identify and review alternatives. This connector is considered an essential improvement to facilitate Port traffic in the future.

The Port continues to monitor longer-term factors that might affect the level, mix, and mode of commodities passing through the Port as either imports or exports. One such factor is the pending development of the CSXT Intermodal Logistics Center in Winter Haven -- which is about 65 miles by rail from the Port and 50 miles by air -- and the distribution centers being developed in the area (see Chapter II). This major hub could reshape international and domestic trade lanes for some commodities over time.

The Port is also monitoring other developments such as the Inland Port (or Intermodal Logistics Center) being considered for a site from 20 to 45 miles inland to the west or northwest of the Port of Palm Beach. This facility, likewise, could influence over time the pattern of trade lanes and certain commodity movements. As discussed in Chapter II, Port Manatee has fielded queries regarding the routing of various specific shipments or longer-term contracts for commodities relating to the larger Central and Southeast Florida hinterlands. As global shipping logistics evolve, and as the Panama Canal expansion comes on line, continuing opportunities are expected to present themselves to Port Manatee, the closest Florida port to the Panama Canal.

The Encouragement Zone, designated to the east and south of the Port, is intended to cultivate Port-related users that could use the Port as the shipping conduit for some of their commodity movements and other activities. While the county's new PDEZ designation redefines voluntary land

uses within the zone, much of the affected area was industrial in its classification, and the new zone should facilitate that same type of use, with an emphasis on a linkage to the Port. The proximity of Port-related land uses will shorten commodity movements between the Port and the adjacent areas, minimizing the traffic impact on U.S. 41.

As a complement to the Encouragement Zone, the Port has identified the concept of a “cargo corridor” between the Port and the Encouragement Zone. This connecting corridor could possibly lie along South Dock Street and, conceptually, would provide a path to facilitate the movement of general commodities or specialized shipments between both sides of U.S. 41. If an independent path separated from public roads were developed, then, for example, the vehicles moving the commodities on the “cargo corridor” would not need to meet public road size and weight requirements and would benefit users of both the Port and the Encouragement Zone.

# CHAPTER V GOALS, OBJECTIVES, AND POLICIES



**PAGE INTENTIONALLY LEFT BLANK**

## Goals, Objectives, and Policies

The Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163, Florida Statutes, as implemented through Chapter 9J-5, Florida Administrative Code, requires that port master plans include goals, attainable objectives, and specific implementation policies to measure a port's progress in achieving its adopted goals. This chapter presents the six goals, objectives, and policies the Manatee County Port Authority has identified to comply with state requirements and implement the *Port Manatee Master Plan, 2009*, over the planning period in response to market demand and the availability of funding resources.

Underlying these goals, objectives, and policies, which reflect the Port Authority's commitment both to local and regional economic growth and to the sustainability of the surrounding ecosystems, is the Port's mission statement:

*"The mission of Port Manatee is to be a powerful catalyst of countywide economic growth and hub of trade-related activity, by developing diversified and competitive deepwater shipping facilities and conducting maritime-related activities in a profitable and environmentally responsible manner."*

- Adopted in open session, June 19, 1996  
by the Manatee County Port Authority

**Goal 1: Economic development.** To expand Port Manatee's important contribution to the economy in Manatee County, the Port Authority shall develop, maintain, and improve Port Manatee as a competitive and viable deepwater port to serve local and regional shipping needs, while providing for the environmental sustainability of Manatee County and the surrounding region.

To achieve this goal -- which is consistent with Goal 21 (The Economy) of the *State Comprehensive Plan*, addressing economic stability, job opportunities, and increased per capita income for the state's residents and with Manatee County's economic development initiatives -- the Port shall implement a phased maintenance and expansion program of facility improvements, property acquisition, and diversification of cargo operations, and shall develop synergies with the Encouragement Zone and North County Gateway Overlay District, as described elsewhere in the *Port Master Plan*. Beyond the five-year time frame, the Port will implement the improvements needed to lay the groundwork for its long-term build-out plan, consistent with demand and funding availability.

Objective 1.1: **Infrastructure development.** The Port shall provide adequate Port facilities, consistent with the need for trade, industry, and commerce growth.

Policy 1.1.1: **Short-term infrastructure improvements.** During the five-year planning period, the Port shall implement infrastructure improvements, increasing berth capacity and efficiency, expanding cargo-handling areas, acquiring additional cranes and other equipment, and pursuing further capital improvements, as necessary to serve forecasted demand. The extension of Berth 12, dredging of the channel and development of the backlands serving that berth, rehabilitation and upgrading of aging berths, and portwide intermodal improvements are among the key infrastructure improvements envisioned for this period, subject to funding availability.

Policy 1.1.2: **Tenant and user service improvements.** Port Manatee believes its immediate responsibility is to help its existing tenants and Port users better serve their customers, thereby creating new jobs and economic opportunities. To improve tenant and user operations, the Port shall expand and upgrade dry and cold storage facilities, purchase needed equipment, improve paving to handle heavier equipment, and make other infrastructure improvements, subject to funding availability.

Policy 1.1.3: **Infrastructure maintenance.** The Port shall provide adequate maintenance and upkeep of in-water and upland infrastructure to gain the best use from its facilities. Bulkhead rehabilitation is high on the list of Port priorities and will be implemented as soon as funds are available.

Policy 1.1.4: **Foreign Trade Zone.** The Port shall maintain its designation as a Foreign Trade Zone (No. 169) and pursue expansion of the designation to other areas, including the Encouragement Zone, as feasible.

Policy 1.1.5: **Future Port Expansion:** To prepare for long-term expansion; the Port shall pursue the acquisition of additional shoreline and upland properties, and expand and improve berths and backlands to provide the supporting infrastructure needed for future Port operations, subject to financial feasibility.

Objective 1.2: **Cargo diversification and expansion.** Mindful of the inevitability and unpredictability of market changes, the Port shall maintain the diversity of its cargo base to sustain balanced volumes of general and bulk cargo.

Policy 1.2.1: **Marketing activities.** The Port shall maintain the diversity of its cargo base by marketing the Port to shippers and carriers active in the break-bulk, bulk, and containerized cargo trades.

Policy 1.2.2: **Private businesses.** The Port shall encourage private port-related businesses to construct and utilize appropriate facilities at the Port or in the adjacent Encouragement Zone (see Objective 1.4).

Objective 1.3: **Land development and expansion regulation.** The Port shall pursue economic development opportunities that are compatible with Port operations while avoiding or minimizing impacts to environmental resources on and adjacent to the Port.

Policy 1.3.1: **On-Port land uses.** The Port shall ensure that land uses are consistent with the *Manatee County Land Development Code* and maximize the use of Port property, and shall

allow land uses within the Port for manufacturing, processing, and assembly activities that are customarily associated with ports and Foreign Trade Zones.

Policy 1.3.2: **Land use changes.** The Port shall coordinate efforts with the Manatee County Planning Department to obtain any land use changes in the *Manatee County Comprehensive Plan* which may be needed for consistency with the proposed uses of newly acquired or redeveloped Port properties. Lands sought after by the Port will be acquired only through voluntary sales of individual tracts.

Policy 1.3.3: **Land use compatibility.** The Port shall reduce any land use conflicts by installing and maintaining adequate buffer zones between Port property and adjacent potentially incompatible land uses.

Policy 1.3.4: **Development consistency.** The Port shall pursue development in a manner consistent with the *Port Master Plan* and with the goals, objectives, and policies in the *Manatee County Comprehensive Plan*.

Policy 1.3.5: **Guidelines and standards.** The Port shall develop, adopt, and maintain development, architectural and landscaping guidelines and standards by December 31, 2011 which provide consistency, security, and safety in new development and redevelopment at the Port.

Policy 1.3.6: **General Development Plan.** The Port shall have a current General Development Plan, approved by the Port Authority and by the Board of County Commissioners, which reflects any amendments to the *Port Master Plan* that generate changes to the previously approved General Development Plan.

Objective 1.4: **Port and Encouragement Zone synergies.** The Port shall support the development of the adjacent Encouragement Zone, to provide locations for maritime-related uses that would enhance Port utilization, thereby attracting job-creating manufacturers and other employers to the region and leveraging their benefit to the county.

Policy 1.4.1: **Encouragement Zone development.** The Port shall encourage the development of manufacturing, warehouses, distribution centers, and a range of other light and heavy industrial uses in the Encouragement Zone to provide a diversified tax base and create jobs utilizing local manpower resources.

Policy 1.4.2: **Port and Encouragement Zone interface.** The Port shall work with property owners in the Encouragement Zone and with local and state agencies to develop the intermodal network that will facilitate the movement of cargo back and forth between the Port and the Encouragement Zone. Among the opportunities being considered is a cargo corridor that would traverse U.S. 41 (see Policy 2.3.1).

Policy 1.4.3: **Port and Encouragement Zone Coordinating Committee.** The Port shall support the creation of a Committee by December 31, 2011 to coordinate initiatives between Port tenants and Encouragement Zone property owners and shall participate on that Committee to help promote Encouragement Zone use and pursue opportunities to facilitate the permitting process.

**Goal 2: Transportation efficiencies.** The Port Authority shall cooperate with local, regional, state, and federal agencies and with private entities responsible for transportation infrastructure (water, road, and rail) connectivity to ensure that the intermodal transportation system -- the intermodal highway -- essential to Port operations is in place.

**Objective 2.1: Deepwater access.** The Port shall pursue maintenance and other dredging activities to provide the channel, turning basin, and berth water depths needed to serve existing and future users. The channel and turning basin connecting to the Tampa Bay shipping lane are Port Manatee's waterway connectors on the state's Strategic Intermodal System.

**Policy 2.1.1: Maintenance dredging.** The Port shall undertake maintenance dredging within the berthing and turning basin areas when necessary to ensure safe navigational conditions for the ships calling at its facilities.

**Policy 2.1.2: New dredging.** The Port shall undertake new channel, turning basin, and berth dredging, as required to serve the new fleet of larger ships forecast to call at the Port and the anticipated market growth.

**Policy 2.1.3: Disposal site development.** The Port, in coordination with the U.S. Army Corps of Engineers and the Florida Department of Environmental Protection, shall plan for its long-term dredge disposal needs. These needs may be accommodated either at an upland disposal site such as that provided on the former Piney Point property now owned by HRK Holdings or some other disposal alternative agreed to by all the reviewing agencies.

**Policy 2.1.4: Consistency with State and Manatee County Comprehensive Plans.** The Port shall pursue water-depth maintenance, new dredging activities, and the management of dredge material in a manner consistent with the *State Comprehensive Plan* and the *Manatee County Comprehensive Plan*.

**Policy 2.1.5: Regional collaboration for Tampa Bay access channel deepening.** The Port shall pursue collaborative efforts with its sister Tampa Bay ports and with the Tampa Bay Pilots Association to advance the study of deepening the Tampa Bay channel to accommodate the anticipated larger ships resulting from the Panama Canal expansion.

**Objective 2.2: On-Port road and rail network.** The Port shall continue to improve its internal road and rail network to serve expanded and relocated operations and facilitate on-Port circulation.

**Policy 2.2.1: On-Port road improvements.** The Port shall construct new roads and improve intersection capacity and circulation; install signs and other traffic control devices; and develop capacity queuing, parking, security processing, and approach areas for trucks, tractors, and trailers, as needed to support Port growth.

**Policy 2.2.2: On-Port rail improvements.** The Port shall continue to maintain and improve the on-Port rail infrastructure needed to serve Port users. From the Port property to the CSX Transportation (CSXT) line, the on-Port Class III railroad, owned and operated by the Port, is the Port's Strategic Intermodal System (SIS) rail connector.

Policy 2.2.3: **Truck service facilities and amenities.** The Port may develop truck-service facilities and amenities to serve its growing trucker population, consistent with Port security, other planning requirements, and user needs.

Objective 2.3: **Off-Port access and connectivity.** The Port shall collaborate with other governmental agencies and private interests to protect and enhance vehicular access and the flow of commodities between the Port and regional transportation facilities. These entities include the Florida Department of Transportation (FDOT), the Sarasota-Manatee Metropolitan Planning Organization (MPO), and the CSXT.

Policy 2.3.1: **Vehicular Access improvements.** To maintain and expand the high-speed intermodal access and connections needed for the efficient movement of goods to and from its facilities, the Port shall work with the FDOT and the MPO to gain priority funding for needed improvements to roads over which Port truck traffic must travel. Such roads include the Port's SIS connector -- I-275 to U.S. 41 to Piney Point Road to the Port's entrance -- as well as potential cargo corridors connecting the Port with the Encouragement Zone to facilitate the transfer of containerized and non-containerized commodities between the sites.

Policy 2.3.2: **U.S. 41 Corridor.** The Port shall pursue contacts with the FDOT District 1 access management staff to configure existing median openings and driveways to higher access management standards appropriate for the segment of U.S. 41 from the Port south to I-275. In addition, the Port shall coordinate with the FDOT to provide input regarding planning for the U.S. 41 corridor between the Port and I-275 from a freight and goods movement standpoint, including consideration of grade separations at the intersections of U.S. 41 with Piney Point Road and with South Dock Street.

Policy 2.3.3: **Direct Port to I-75 Connection.** The Port shall collaborate with the FDOT in the ongoing study of the proposed direct Port to I-75 connector to ensure that the eventual corridor alignment and design are consistent with the Port's planned future expansion and accommodates the needs of Encouragement Zone property owners as well as those in the North County Gateway Overlay District.

Policy 2.3.4: **Rail service and connectivity.** The Port shall work with the CSXT to identify and pursue improvements to the off-Port rail infrastructure and operations, which could facilitate goods movement by maximizing rail service and interchanges for the Port and its related industries, including access to adjacent Encouragement Zone properties.

**Goal 3: Environmental stewardship and sustainability.** The Port Authority shall develop and operate Port Manatee according to the goals in the *Port Master Plan* in a manner that avoids and minimizes adverse impacts on the natural environment and shall, where feasible, mitigate unavoidable impacts of such Port development and operation on the functions of the natural ecosystem. Port Manatee is committed to preserving and protecting the quality of the environmental resources within its purview and shall conserve and protect those resources, consistent with continued Port maintenance and expansion goals. This goal is consistent with Goal 5, Policy (b) 1 (Health) and Goal 11, Policies 4 and 6 (Energy) in the *State Comprehensive Plan*.

Objective 3.1: **Natural resource preservation and protection.** In carrying out its day-to-day operations and its expansion activities, the Port shall conserve, protect and, where possible, enhance coastal resources, including wetlands, marine life, and wildlife habitat. In so doing, the Port shall cooperate with federal, state, regional, and local agencies in developing sound environmental policies and measures to minimize the environmental impacts of Port development and operations. The Port recognizes the intent of Goal 9, Policies 1 and 7 (Natural Systems) in the *State Comprehensive Plan*, to protect natural systems and will do so to the extent consistent with Port development and expansion needs.

Policy 3.1.1: **Coastal resources.** The Port shall evaluate specific and cumulative impacts on coastal resources before undertaking maintenance and expansion activities and shall take measures to minimize or avoid negative impacts and to mitigate for damage that cannot be avoided. Such determinations will require completion of an impact avoidance and minimization analysis that clearly demonstrates the necessity of the proposed impacts, consistent with the permitting requirements of the Florida Department of Environmental Protection and the U.S. Army Corps' of Engineers' regulations regarding the protection of marine resources.

Policy 3.1.2: **Portwide best management practices.** The Port shall identify and provide best management practice environmental guidelines for staff and tenants to observe in conducting their operations.

Policy 3.1.3: **Proactive mitigation / permitting program.** The Port shall initiate a proactive mitigation and permitting process to prepare the way for implementation of a long-term build-out plan.

Policy 3.1.4: **Avoidance and minimization of water-quality degradation.** The Port shall ensure no net loss of seagrasses in the development of its water-dependant facilities. In the event of an unavoidable permitted impact to seagrasses, such impact shall be mitigated consistent with the requirements of the permitting authorities. Permitted mitigation may include restoration or creation of seagrass beds, water quality improvements, participation in diverse Tampa Bay conservation programs, or a combination of these or other mitigation measures.

Policy 3.1.5: **Water-quality monitoring.** The Port shall continually monitor water quality to ensure its standard of avoidance and minimization of water quality degradation for the basin and surrounding water bodies is not violated. This standard shall be in accordance with an approved water-quality monitoring plan that includes existing data and standards as well as additional monitoring necessary to establish conditions trends. The monitoring program shall be periodically reevaluated in conjunction with the Manatee County Natural Resources Department to ensure the appropriateness of the plan in ascertaining compliance with the standard of avoidance and minimization of water-quality degradation.

Objective 3.2: **Estuarine Quality.** The Port shall maintain and, where appropriate, improve the quality of the estuarine environment within Port Manatee and the surrounding area.

Policy 3.2.1: **Habitat inventory and protective policies.** The Port shall maintain a current inventory and map of unique and productive terrestrial and aquatic habitats that exist in the Port's

vicinity which could be adversely affected by Port activities, and shall implement the environmental policies and statements in the *Port Master Plan* to manage Port facilities in a manner that will protect natural habitat.

Policy 3.2.2: **Estuarine water quality.** The Port shall limit specific and cumulative impacts on water quality by implementing its present master drainage plan and National Pollutant Discharge Elimination System (NPDES) stormwater pollution prevention plan, and amending these plans accordingly for Port expansion, providing reasonable assurances that the water standards for the Bay in proximity to the Port will not be violated. This policy is consistent with Goal 7, Policies 10 and 12 (Water Resources) as well as Goal 15, Policy 6 (Land Use) of the *State Comprehensive Plan*.

Policy 3.2.3: **Tidal flushing and circulation.** The Port shall ensure that tidal circulation and flushing are maintained as the development program is implemented.

Policy 3.2.4: **Seagrass beds.** The Port shall continue monitoring its manatee/seagrass management area and shall dredge in a manner that avoids to the maximum extent feasible and minimizes adverse impacts on existing seagrass beds.

Policy 3.2.5: **Mitigation plans.** The Port shall Implement approved mitigation plans addressing measures to be taken should Port facilities adversely affect productive terrestrial and aquatic habitat existing in the Port's vicinity.

Policy 3.2.6: **Conservation area.** The Port shall continue to maintain the property designated as a conservation area (the former Hendry property) in a manner consistent with the conservation designation.

Objective 3.3: **Shoreline Uses:** The Port shall prioritize shoreline uses for essential water-dependent operations, preserving shoreline not essential to water-dependent operations for environmental protection.

Policy 3.3.1: **Water-dependent operations.** Along the shoreline designated as Berths 1 through 12 (existing and proposed), the Port shall give priority to port-related water-dependent uses, specifically the temporary mooring of vessels (ships and barges) for loading and unloading cargo, fuel, or ship stores. Within these areas, wetland buffers will not be required. The priority use of uplands associated with these berths shall be the ancillary and support facilities for efficient cargo movement.

Policy 3.3.2: **Environmental protection, enhancement, and restoration.** Along all shorelines within the Port other than those for existing or proposed berths or ramps, the Port shall give priority to environmental protection, enhancement, and restoration.

Objective 3.4: **Coastal High Hazard Areas:** The Port shall follow Manatee County's requirements for Coastal High Hazard Areas) (CHHA\_

Policy 3.4.1: **Coastal High Hazard Area.** The CHHA as identified in the *Manatee County Comprehensive Plan*, shall be designated the CHHA within Port Manatee.

Policy 3.4.2: **Use of Public Funds.** Within the designated CHHA, the Port shall use public funds only to support water-dependent uses and associated ancillary and accessory facilities, consistent with the *Port Master Plan* and with the goals, objectives, and policies of the *Manatee County Comprehensive Plan*.

Objective 3.5: **Plan implementation.** The Port shall be proactive in coordinating its development efforts with local, state, and federal permitting agencies and with private stakeholders to ensure development and operations are carried out in accordance with the public interest and regulatory requirements and promote environmental sustainability.

Policy 3.5.1: **Agency and stakeholder cooperation.** The Port shall continue to cooperate with local, regional, and other governmental agencies and stakeholders, including environmental interests, to ensure that environmental planning and management activities are coordinated. Among the requisite agencies and stakeholders are the Florida Department of Environmental Protection, the Southwest Florida Water Management District, the Tampa Bay Estuary Program, and the Tampa Bay Pilots Association.

Policy 3.5.2: **Interagency Agreements.** The Port shall encourage implementation of contracts and memorandums of understanding between the Port and the appropriate state agencies with the intent of preventing estuarine pollution, controlling surface water runoff, protecting marine resources, and reducing exposure to natural hazards.

Objective 3.6: **Energy conservation.** The Port shall be proactive in implementing energy conservation measures that promote sustainability. This objective is consistent with Goal 11 (Energy) of the *State Comprehensive Plan*.

Policy 3.6.1: **Vehicles and buildings.** The Port shall initiate efforts to reduce greenhouse gas emissions. These efforts may include over time converting Port and tenant equipment to alternative fuels, transitioning the Port's fleet of service vehicles to fuel-efficient models, and promoting the use of energy-efficient designs in new buildings at the Port, as feasible.

Policy 3.6.2: **Operations.** The Port shall initiate efforts to implement energy-saving measures in its operations. These efforts may include transitioning mobile harbor cranes to shore power, promoting the use of rail rather than truck to move commodities on and off the Port, and identifying opportunities to reduce idling time for trucks moving through the Port's facilities, as feasible.

**Goal 4: Safety and security.** The Port Authority shall reduce exposure of human life and property to harm by natural hazards through use of hazard mitigation and hurricane evacuation measures. The Port shall strive to protect Port employees, tenants, users, and the public as well as Port facilities from acts of terrorism or criminal activities through safety and security programs.

Objective 4.1: **Protection from natural hazards.** The Port shall implement the measures required by Manatee County and other agencies to protect human life and property from natural hazards, including airborne hazards, and will work with Manatee County in implementing the *Local Mitigation Strategy Plan*.

Policy 4.1.1: **Flood Zone compliance.** The Port shall ensure that any habitable, non-residential buildings in special flood hazard areas are designed and constructed to reduce the potential for flooding and wind damage. All structures within the defined flood zones (AE and VE) shall be constructed in accordance with the provisions specified in Manatee County's Ordinance 89-10 and the Florida Building Code (2007 with 2009 revisions). Buildings and parking areas shall also be designed and constructed in accordance with the provisions of Rule 62-25, Florida Administrative Code. Under the county's requirements, properties with no direct outfall to the Bay shall be capable of attenuating a 25-year-frequency, 24-hour-duration\_rainfall event. This policy is consistent with Goal 15, Policy 6, of the *State Comprehensive Plan*, with respect to the potential for flooding.

Policy 4.1.2: **Building Code compliance.** The Port shall ensure that all buildings are designed and constructed in accordance with the Florida Building Code (2007 with 2009 revisions) and as approved by Manatee County.

Policy 4.1.3: **Hurricane-preparedness.** The Port shall maintain an up-to-date hurricane evacuation contingency plan, ensuring that it is consistent with county and state emergency plans and procedures, and shall encourage all persons within the Port area to be familiar with Port evacuation requirements to ensure the safe evacuation of the Port during times of hurricanes or other disasters.

Objective 4.2: **Hazardous Materials.** The Port, working with other governmental agencies, shall maintain procedures to respond to hazardous material spills (see Policy 4.5.1).

Policy 4.2.1: **Hazardous spill cleanup.** The Port shall comply with appropriate federal, state, regional, and local regulations and procedures for the safe and expedient cleanup of hazardous spills.

Policy 4.2.2: **Timely information to public.** The Port shall cooperate with governmental agencies to provide complete and timely information to the public in the event of a hazardous material spill.

Objective 4.3: **Safe operating environment.** The Port shall reduce the potential of harm from manmade disasters by implementing safety and security programs for Port employees, tenants, users, and visitors.

Policy 4.3.1: **Safety and health measures.** To provide a safe operating environment, the Port shall implement required safety and health measures and ensure that operations are conducted to the maximum extent possible in accordance with those measures.

Policy 4.3.2: **Compliance with health and safety standards.** The Port shall ensure its operations comply with applicable health and safety standards.

Objective 4.4: **Port security.** The Port shall strive to protect Port employees, tenants, users, and the public as well as the facilities at the Port from acts of terrorism or criminal activities.

Policy 4.4.1: **Port security plan.** The Port shall maintain and implement the security plan mandated and approved under state and federal guidelines, consistent with funding availability.

Policy 4.4.2: **Agency coordination.** Port Manatee shall coordinate with the appropriate agencies including the Federal Bureau of Investigation, the U.S. Coast Guard, the Florida Department of Law Enforcement, and the Manatee County Sheriff's office in implementing the Port's security plan and making any changes required by new development.

Policy 4.4.3: **New technologies.** The Port shall participate in local, state, and federal efforts to implement new anti-threat technologies that will facilitate cargo and passenger movements and help protect the Port and its users.

Objective 4.5: **Emergency management:** The Port shall endeavor to protect Port employees, tenants, users, and the public, as well as the facilities at the Port and the surrounding areas in various emergencies.

Policy 4.5.1: **Emergency management plan.** Port Manatee shall maintain an Emergency Management Plan to respond to emergencies at the Port and shall ensure that Port staff and tenants are familiar with the provisions of its emergency management plan.

Policy 4.5.2: **Emergency management coordination.** The Port shall coordinate with state, regional, and local emergency management agencies to maintain and update emergency management procedures.

Objective 4.6: **Post-disaster redevelopment:** Port Manatee shall maintain a post-disaster redevelopment plan that provides for the elimination of hazardous conditions, the restoration of Port services, and the reconstruction of facilities. This plan shall be consistent with the *Port Master Plan*, the conclusions of Manatee County's ongoing pilot program to develop a *Post-Disaster Redevelopment Plan*, and the relevant goals, objectives, and policies of the *Manatee County Comprehensive Plan*.

Policy 4.6.1: **Post-disaster redevelopment procedures.** The Port shall utilize the post-disaster redevelopment procedures defined in the *Post-Disaster Redevelopment Plan* to reduce or eliminate exposure of human life and property to natural hazards. The Port shall provide input to and comment on the Plan to protect the Port's economic viability and operational efficiency.

Policy 4.6.2: **Post-disaster priorities.** Following a disaster, the Port Director or his designee shall give first priority to removal of hazardous conditions necessary to protect the public health and safety, second priority to restoring essential port services, and third priority to long-term repair and redevelopment activities.

**Goal 5: Intergovernmental coordination.** Port Manatee shall coordinate its development, operational, and expansion efforts with appropriate governmental agencies and shall facilitate initiatives to promote economic development opportunities in Tampa Bay. This goal is consistent with Goal 25, Policy 7 (Plan Implementation) of the *State Comprehensive Plan*, which addresses the integration of systematic planning capabilities at all levels of government, with an emphasis on the coordination of regional problems, issues, and conditions.

Objective 5.1: **Coordination with Manatee County.** The Port shall support the plans and programs of Manatee County, including economic development initiatives that expand opportunities in

industry, manufacturing, and trade, and shall coordinate its planning and development initiatives with the appropriate county departments.

Policy 5.1.1: **Compatibility with Manatee County's *Comprehensive Plan*.** The Port shall coordinate its planning and development efforts with the Manatee County Planning Department to ensure that planned projects and land uses at the Port are compatible with and support the programs and policies contained in the *Manatee County Comprehensive Plan*. The Port shall also evaluate proposed amendments to the *Manatee County Comprehensive Plan*, particularly the *Coastal Management Element*, as to potential impacts on Port activities.

Policy 5.1.2: **Infrastructure and utility capacity.** The Port shall coordinate with Manatee County to ensure the provision of adequate infrastructure and utilities for Port operations and shall meet adopted level-of-service standards for potable water, wastewater, drainage, solid waste, and traffic circulation. The standards shall be consistent with the goals, objectives, and policies of the *Manatee County Comprehensive Plan*.

Objective 5.2: **Other agency and stakeholder coordination.** The Port shall coordinate its development and expansion program with applicable agencies to promote sound planning and economic growth.

Policy 5.2.1: **Local, regional, state, and federal agencies.** In addition to Manatee County agencies, the Port shall cooperate with the Tampa Bay Florida Regional Planning Council; the Sarasota-Manatee MPO; the Southwest Florida Water Management District; the Florida Departments of Transportation, Community Affairs, and Environmental Protection; the U.S. Army Corps of Engineers and the U.S. Coast Guard; and other applicable agencies in implementing the goals, objectives, and policies of the *Port Master Plan*.

Policy 5.2.2: **Local and regional maritime, commercial, and industrial interests.** To help achieve its primary goal of economic development, the Port shall cooperate with other Tampa Bay interests and stakeholders, including the other Tampa Bay seaports, as they seek to expand the region's commercial and industrial base (see Policy 2.1.5).

**Goal 6: Financial stability.** Port Manatee shall implement measures to maintain its financial capability and fiscally sound posture as it implements its development and expansion program.

Objective 6.1: **Budgetary process.** The Port shall continue to follow a budgetary process for long-term planning which balances Port revenues, operating expenses, and capital expenditures needed to satisfy the anticipated market demand and capture new market share.

Policy 6.1.1: **Port revenues.** The Port shall keep abreast of tariffs and fees charged by other competing seaports and shall maintain a competitive fee structure.

Policy 6.1.2: **Business decision criteria.** The Port shall base business decisions on revenue trends, returns on investments, and cash flow trends.

Policy 6.1.3: **Expense control benchmarks.** The Port shall consult with the financial advisor and County Clerk to establish benchmarks for expense control.

Policy 6.1.4: **Annual capital improvement plan updates.** The Port shall update its capital improvement plan annually to reflect budgetary and market changes, prioritizing its project implementation to obtain the best return on facility investments, and shall comply with state mandates for the submission of annual capital improvement plan updates to Manatee County.

Objective 6.2: **Funding opportunities.** The Port shall pursue diverse funding opportunities to accelerate the rate at which it can implement its capital improvement program.

Policy 6.2.1: **Legislative and agency awareness.** The Port shall participate in ongoing efforts to maintain legislative and agency awareness of the Port's economic impact on the region and the importance of its needs being addressed in the state's budget process.

Policy 6.2.2: **State and federal grants.** The Port shall actively seek matching grant funds from state and federal sources.

Policy 6.2.3: **Public/private partnerships and other funding sources.** The Port shall explore opportunities for public/private partnerships, joint ventures, and lease purchases to expedite development of the maritime and industrial facilities needed for economic development and job creation.

Policy 6.2.4: **Borrowing power.** The Port shall utilize its borrowing power to fund Port growth and/or maintenance projects within the norms of sound financing criteria.

Table V.1 on the next two pages summarizes the above goals, objectives, and policies.

Table V.1		
Summary of Port Manatee's Goals, Objectives, and Policies		
Goal	Objective	Policy
<b>1. Economic development</b>	1.1: Infrastructure development	1.1.1: Short-term infrastructure improvements
		1.1.2: Tenant and user service improvements
		1.1.3: Infrastructure maintenance
		1.1.4: Foreign Trade Zone
		1.1.5: Future Port expansion
	1.2: Cargo diversification and expansion	1.2.1: Marketing activities
		1.2.2: Private businesses
	1.3: Land development and expansion regulation	1.3.1: On-port land uses
		1.3.2: Land use changes
		1.3.3: Land use compatibility
		1.3.4: Development consistency
		1.3.5: Guidelines and standards
		1.3.6: General Development Plan
	1.4: Port and Encouragement Zone synergies	1.4.1: Encouragement Zone development
		1.4.2: Port and Encouragement Zone interface
		1.4.3: Port and Encouragement Zone Coordinating Committee
<b>2. Transportation efficiencies</b>	2.1: Deepwater access	2.1.1: Maintenance dredging
		2.1.2: New dredging
		2.1.3: Disposal site development
		2.1.4: Consistency with State and Manatee County Comprehensive Plans
		2.1.5: Regional collaboration for Tampa Bay access channel deepening
	2.2: On-port road and rail network	2.2.1: On-Port road improvements
		2.2.2: On-Port rail improvements
		2.2.3: Truck service facilities and amenities
	2.3: Off-port access and connectivity	2.3.1: Vehicular access improvements
		2.3.2: U.S. 41 corridor
		2.3.3: Direct Port to I-75 connection
		2.3.4: Rail service and connectivity
<b>3. Environmental stewardship and sustainability</b>	3.1: Natural resource preservation and protection	3.1.1: Coastal resources
		3.1.2: Portwide best management practices
		3.1.3: Proactive mitigation / permitting program
		3.1.4: Avoidance and minimization of water quality degradation
		3.1.5: Water quality monitoring
	3.2: Estuarine quality	3.2.1: Habitat inventory and protective policies
		3.2.2: Estuarine water quality
		3.2.3: Tidal flushing and circulation
		3.2.4: Seagrass beds
		3.2.5: Mitigation plans
		3.2.6: Conservation area
	3.3: Shoreline uses	3.3.1: Water-dependent operations
		3.3.2: Environmental protection, enhancement, and restoration
	3.4: Coastal High Hazard Areas	3.4.1: Coastal High Hazard Area
		3.4.2: Use of public funds
	3.5: Plan implementation	3.5.1: Agency and stakeholder cooperation
		3.5.2: Interagency agreements
	3.6: Energy conservation	3.6.1: Vehicles and buildings
3.6.2: Operations		

Table V.1 (Continued)		
Summary of Port Manatee's Goals, Objectives, and Policies		
Goal	Objective	Policy
<b>4. Safety and security</b>	4.1: Protection from natural hazards	4.1.1: Flood Zone compliance
		4.1.2: Building code compliance
		4.1.3: Hurricane-preparedness
	4.2: Hazardous materials	4.2.1: Hazardous spill cleanup
		4.2.2: Timely information to public
	4.3: Safe operating environment	4.3.1: Safety and health measures
		4.3.2: Compliance with health and safety standards
	4.4: Port security	4.4.1: Port security plan
		4.4.2: Agency coordination
		4.4.3: New technologies
	4.5: Emergency management	4.5.1: Emergency management plan
		4.5.2: Emergency management coordination
	4.6: Post-disaster redevelopment	4.6.1: Post-disaster redevelopment procedures
		4.6.2: Post-disaster priorities
<b>5. Intergovernmental coordination</b>	5.1: Coordination with Manatee County	5.1.1: Compatibility with Manatee County's <i>Comprehensive Plan</i>
		5.1.2: Infrastructure and utility capacity
	5.2: Other agency and stakeholder coordination	5.2.1: Local, regional, state, and federal agencies:
		5.2.2: Local and regional maritime, commercial, and industrial interests
<b>6. Financial stability</b>	6.1: Budgetary process	6.1.1: Port revenues
		6.1.2: Business decision criteria
		6.1.3: Expense control benchmarks
		6.1.4: Annual capital improvement plan updates
	6.2: Funding opportunities	6.2.1: Legislative and agency awareness
		6.2.2: State and federal grants
		6.2.3: Public/private partnerships and other funding
		6.2.4: Borrowing power

# CHAPTER VI CAPITAL IMPROVEMENT PROGRAM AND ECONOMIC IMPACT SUMMARY



**PAGE INTENTIONALLY LEFT BLANK**

## Capital Improvement Program and Economic Impact Summary

### A. Five-Year Capital Improvement Plan

To implement the five- and ten-year maintenance and expansion program presented in this *Port Manatee Master Plan, 2009*, and achieve its identified goals and objectives, Port Manatee has developed the phased five-year capital improvement plan (CIP) detailed in Table VI.1 on the next page. This approximately \$116.5 million plan comprises the Port's five-year infrastructure expansion and renovation program, as described in Chapter IV. The Port will update this CIP yearly to reflect changes in priorities and new industry demands.

Figure VI.1 summarizes the Port's anticipated annual capital expenditures over the five-year period. Several projects in the CIP are dependent on demand and funding and will be implemented accordingly.

**Figure VI.1:**  
**Summary of Port Manatee's**  
**Five-Year Capital Improvement Program**  
**FY 08/09 - FY 12/13**

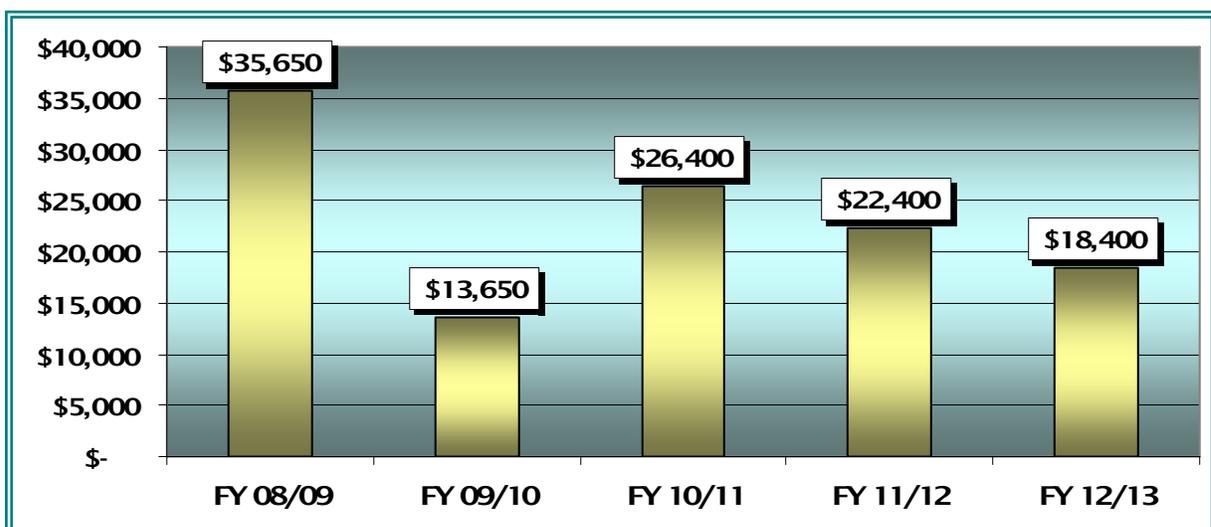


Table VI.1						
Port Manatee Five-Year Capital Improvement Program (\$000)						
PROJECT	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	Total
<b>South Port Container Capacity Expansion</b>						
Construction dredging for Berth 12 / maintenance dredging elsewhere in Port	\$22,000	\$ -	\$ -	\$ -	\$ -	\$22,000
Berth 12 extension, including crane rails	-	-	6,000	4,000	-	10,000
Intermodal container and cargo transfer yard (Berth 12 backlands)	7,000	7,000	-	-	10,000	24,000
Container crane	4,000	-	-	-	-	4,000
<b>Intermodal Cold Storage Capacity Expansion</b>						
Phase I: Consolidated intermodal cold storage transfer warehouse and support infrastructure behind Berths 8, 10, and 11	-	-	10,000	10,000	-	20,000
Phase II: Landside efficiencies and possible conversion of administrative facilities to cold storage						
Phase III: Expansion of cold storage or container-related infrastructure, based on demand	Beyond five-year time frame					
<b>Berth Maintenance and Upgrades</b>						
Rehabilitation and reconstruction of Berths 6, 7, 8, 9, 10, and 11	-	2,000	4,000	4,000	4,000	14,000
<b>Intermodal Improvements</b>						
Portwide road and rail upgrade and rehabilitation	-	2,250	4,000	-	-	6,250
<b>North Port Expansion Preliminaries</b>						
Land purchase options	2,000	-	-	-	-	2,000
Voluntary property acquisition program	400	400	400	400	400	2,000
Proactive permitting and environmental program	250	2,000	2,000	4,000	4,000	12,250
<b>TOTAL CAPITAL PROJECTS</b>	<b>\$ 35,650</b>	<b>\$ 13,650</b>	<b>\$26,400</b>	<b>\$22,400</b>	<b>\$18,400</b>	<b>\$ 116,500</b>

## **B. Funding and Financing Opportunities**

In addition to its own revenues, which are expected to increase with the anticipated growth in cargo tonnages and containerized cargo throughput, the Port expects to benefit from matching grant funding, as it has in the past. Over the years, the Port has received such funding from several sources. These include sequential matching grants from the Florida Seaport Transportation and Economic Development (FSTED) Council program for projects consistent with a public deepwater port's adopted master plan, funding from the Florida Department of Transportation (FDOT) Strategic Intermodal System (SIS) and SIS Growth Management programs, and other funds from FDOT District 1's intermodal program.

The FSTED program includes the ongoing Chapter 311, Florida Statutes (F.S.), matching grant program for seaport development and intermodal projects as well as the Sections 320.20(3) and 320.20(4), F.S.), Series 1996 and 1999 bond allocations, respectively. The Port had several projects, totaling \$23,889,632 million, approved for matching funding under the two bond programs. The funds from these programs, which allowed the Port to complete the major capital projects in its previous master plans (as outlined in Chapter I), have now been expended and the Port is seeing the benefit of these projects in its expanded capacity to accommodate new business as well as in the economic impact of the Port.

Table VI.2, on the next page, shows the Port's current matching grants and those anticipated over the five-year planning horizon. These include both Chapter 311 and SIS program funds. Of the total \$24,875,000 million, the Port has spent \$1,474,629 million, leaving \$23,400,371 million in future funds. If additional funding becomes available through Legislative mandate or other agency sources, the Port expects to receive a share of these funds for strategic priority projects consistent with this 2009 master plan.

In addition to state funding, several types of federal grants are available to the Port. Channel deepening and maintenance funding assistance is available from the U.S. Army Corps of Engineers. Other available funds are available as direct (usually matching) grants for established programs.

The Port has also been able to leverage funds for capital improvements using commercial paper, special purpose bonds, and public/private partnerships with tenants and other users, and expects to continue funding specific projects in this manner.

As required by state legislation (Section 163, 3187), the Port is committed to updating its CIP annually, for submittal to its local government -- Manatee County -- and subsequent transmittal to the Department of Community Affairs.

<b>Table VI.2</b>	
<b>Summary of Project Grants and Other Identified Funding by Project</b>	
<b>(As of December 2008)</b>	
<b>Project</b>	<b>Source / Program</b>
<b>South Port Container Capacity Expansion</b>	
Construction dredging for Berth 12 / maintenance dredging elsewhere in Port	\$10.125 million SIS funds, \$7.875 million Port funds
Berth 12 extension, including crane rails	\$6 million private partner and \$4 million grants
Intermodal container and cargo transfer yard (Berth 12 backlands)	50% private partner, \$6,000,000 SIS/311, \$3,000,000 grants, and balance Port funds
Container Crane	50% private partner and 50% 311 grant
<b>Intermodal Cold Storage Capacity Expansion</b>	
Phase I: Consolidated intermodal cold storage transfer warehouse and support infrastructure behind Berths 8, 10, and 11	Special purpose bonds
Phase II: Landside efficiencies and possible conversion of administrative facilities to cold storage	
Phase III: Expansion of cold storage or container-related infrastructure, based on demand	Beyond five-year time frame
<b>Berth Maintenance and Upgrades</b>	
Rehabilitation and reconstruction of Berths 6, 7, 8, 9, 10, and 11	50% grant and 50% commercial paper
<b>Intermodal Improvements</b>	
Portwide road and rail upgrade and rehabilitation	50% private partner, 50% grants
<b>North Port Expansion Preliminaries</b>	
Land purchase options	100% Port funds
Voluntary property acquisition program	100% Port funds
Proactive permitting and environmental program	100% Port funds

## **C. Summary of Port Manatee's Economic Impact**

An economic analysis conducted for the Port Authority during the initial phase of this planning process and presented in the February 2008 *Port Manatee Master Planning Concepts* confirmed that Port Manatee contributes significantly to the economic vitality of Manatee County and the surrounding region. It creates and supports employment and associated labor income, economic

output, and business taxes. These Port impacts extend beyond Manatee County to a six-county hinterland (Manatee, Sarasota, Hillsborough, Polk, Hardee, and Pinellas Counties) and the entire state of Florida. The impacts associated with Port Manatee are comparable with other major port activity impacts in the region and the state.

Table VI.3 summarizes the total economic impacts of the Port’s activities.

<b>Table VI.3</b>			
<b>Summary of Port Manatee’s Total Economic Impacts (2006)</b>			
	<b>Manatee County</b>	<b>Six-County Hinterland</b>	<b>Statewide</b>
Output (1)	\$1,448,130,200	\$2,325,006,200	\$2,380,202,000
Income (1)	\$494,548,200	\$655,810,800	\$698,508,700
Jobs (1)	14,227	18,806	20,396
Business Taxes (1)	\$64,348,800	\$79,957,600	\$85,931,200
Source: Wilbur Smith Associates			
(1) Includes direct and multiplier (i.e., indirect and induced) impacts			

Specific details of the economic analysis include the following:

- Port-dependent activity directly employs 2,445 people at the Port, generating \$408.0 million in output.
- These Port activities generate a significant multiplier effect on Manatee County, resulting in total Port-dependent impacts of 9,100 jobs and \$781.6 million in output.
- The Port-dependent impacts extend across the six-county hinterland, totaling 11,336 jobs and \$1.5 billion in output (including the multiplier effect).
- Statewide Port-dependent impacts total 12,448 jobs and \$1.5 billion (including the multiplier effect).
- Port-related impacts associated with firms that use Port Manatee as well as other ports, result in 5,127 jobs in Manatee County, 7,470 jobs in the six-county hinterland, and 7,948 jobs statewide (including the direct and indirect impacts).

**PAGE INTENTIONALLY LEFT BLANK**



## Existing Conditions and Future Facilities Maps (11"x17" Tri-fold)

- A-1 Port Manatee Boundaries
- A-2 Integrated Port Boundaries and Encouragement Zone Properties
- A-3 Maintenance and Expansion Program: Years One through Five
- A-4 Maintenance and Expansion Program: Years Six through Ten
- A-5 Maintenance and Expansion Program: Ten-Year Facilities Map
- A-6 Future Facilities - Berth 3 and 4
- A-7 Seagrass and Wetlands
- A-8 Soils
- A-9 National Wetlands Inventory
- A-10 FEMA Zones
- A-11 COBRA Zones

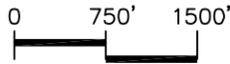
**PAGE INTENTIONALLY LEFT BLANK**

H:\CIVIL\Port Manatee\Maps\NorthPort-Concept-Maps\Aerial.dwg 02/09/2009 11:10:47 AM



LEGEND

— PORT PROPERTY BOUNDARY

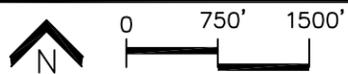


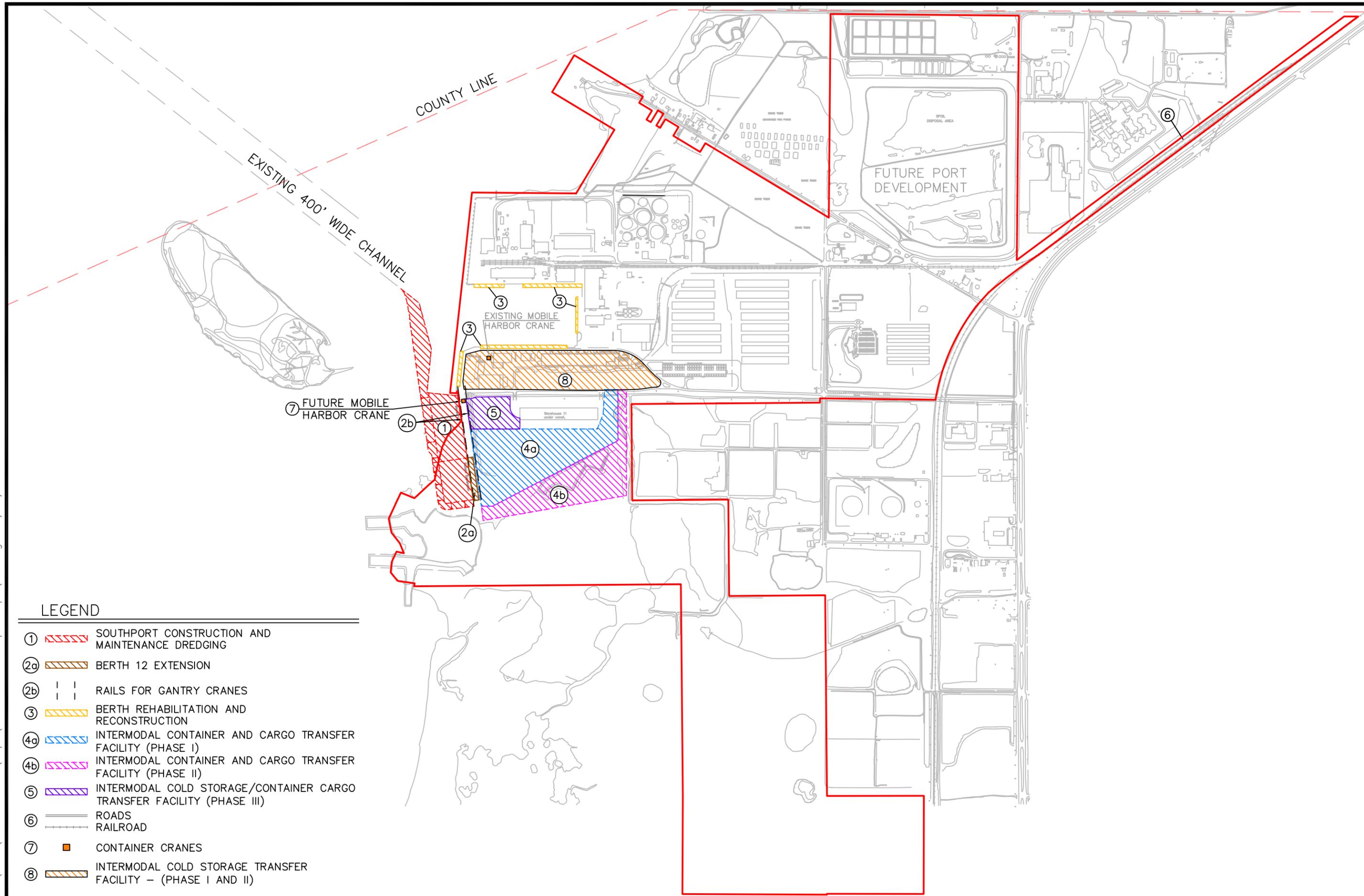
H:\CIVIL\Port Manatee\Maps\NorthPort-Concept-Maps\Encouragement-Zone.dwg 02/09/2009 10:44:56 AM



LEGEND

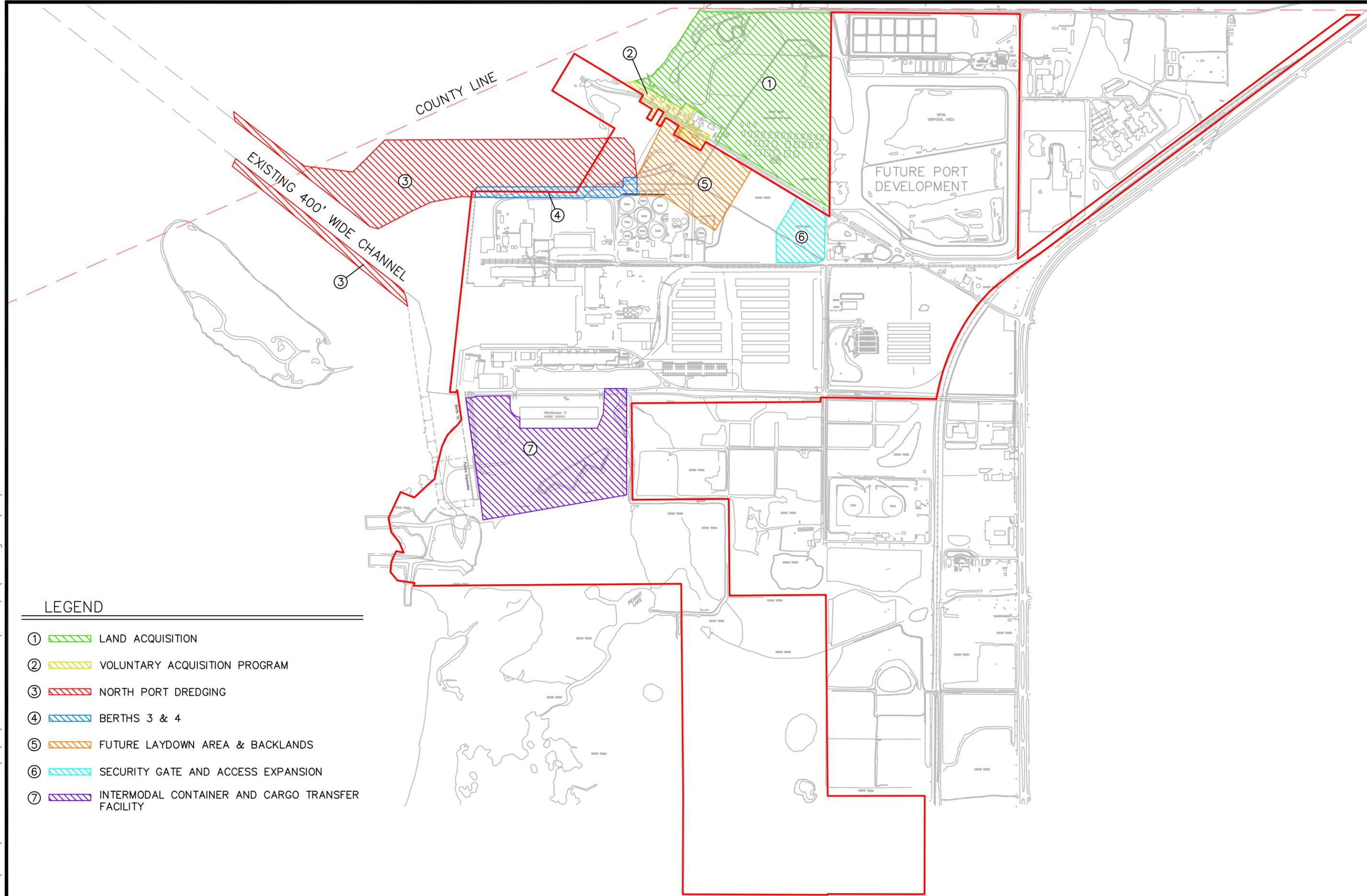
- ▭ PORT PROPERTY BOUNDARY
- ▭ ENCOURAGEMENT ZONES





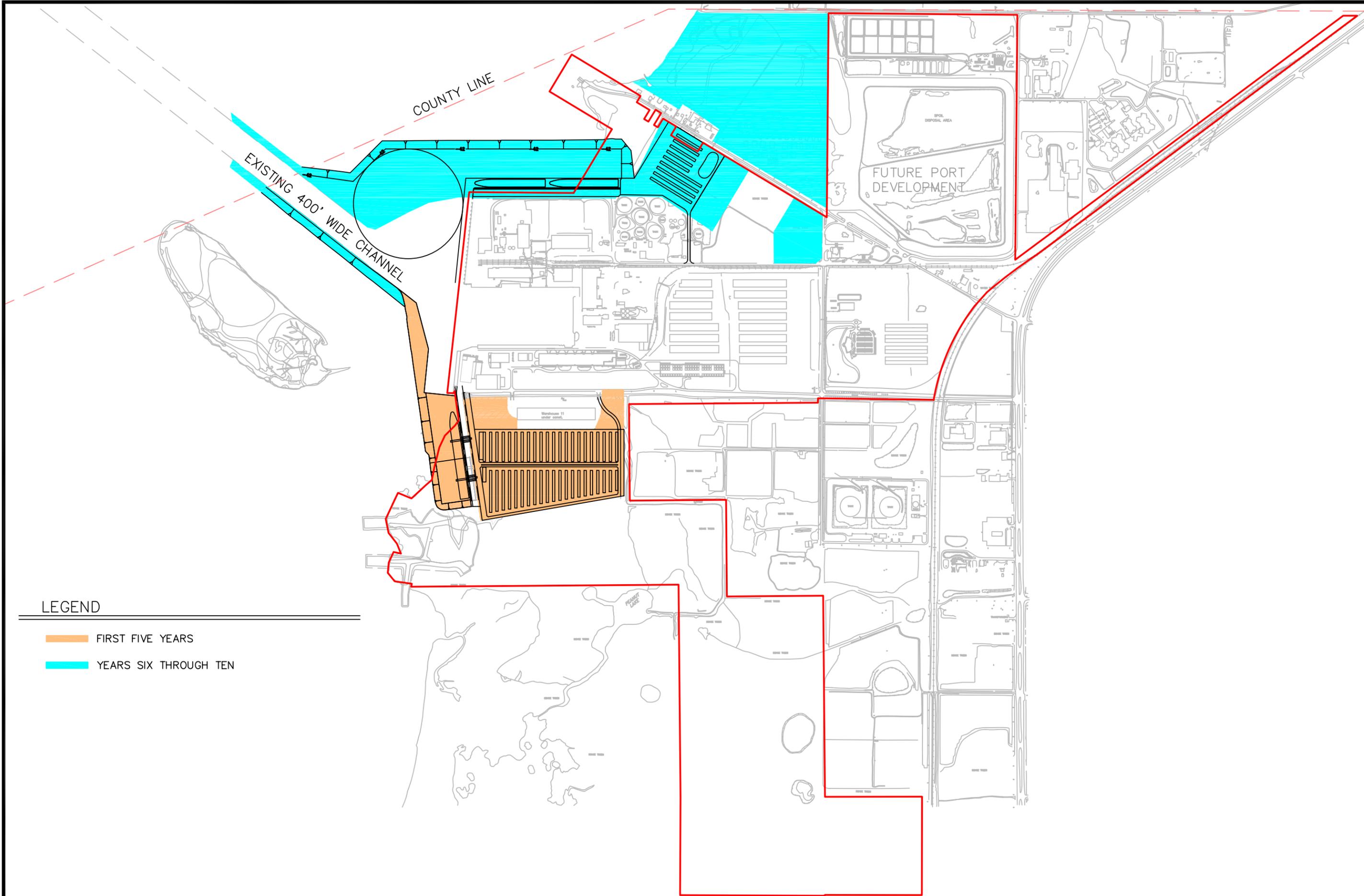
LEGEND

- ① SOUTHPORT CONSTRUCTION AND MAINTENANCE DREDGING
- ②a BERTH 12 EXTENSION
- ②b RAILS FOR GANTRY CRANES
- ③ BERTH REHABILITATION AND RECONSTRUCTION
- ④a INTERMODAL CONTAINER AND CARGO TRANSFER FACILITY (PHASE I)
- ④b INTERMODAL CONTAINER AND CARGO TRANSFER FACILITY (PHASE II)
- ⑤ INTERMODAL COLD STORAGE/CONTAINER CARGO TRANSFER FACILITY (PHASE III)
- ⑥ ROADS  
 RAILROAD
- ⑦ CONTAINER CRANES
- ⑧ INTERMODAL COLD STORAGE TRANSFER FACILITY - (PHASE I AND II)



LEGEND

- ① LAND ACQUISITION
- ② VOLUNTARY ACQUISITION PROGRAM
- ③ NORTH PORT DREDGING
- ④ BERTHS 3 & 4
- ⑤ FUTURE LAYDOWN AREA & BACKLANDS
- ⑥ SECURITY GATE AND ACCESS EXPANSION
- ⑦ INTERMODAL CONTAINER AND CARGO TRANSFER FACILITY



LEGEND

- FIRST FIVE YEARS
- YEARS SIX THROUGH TEN



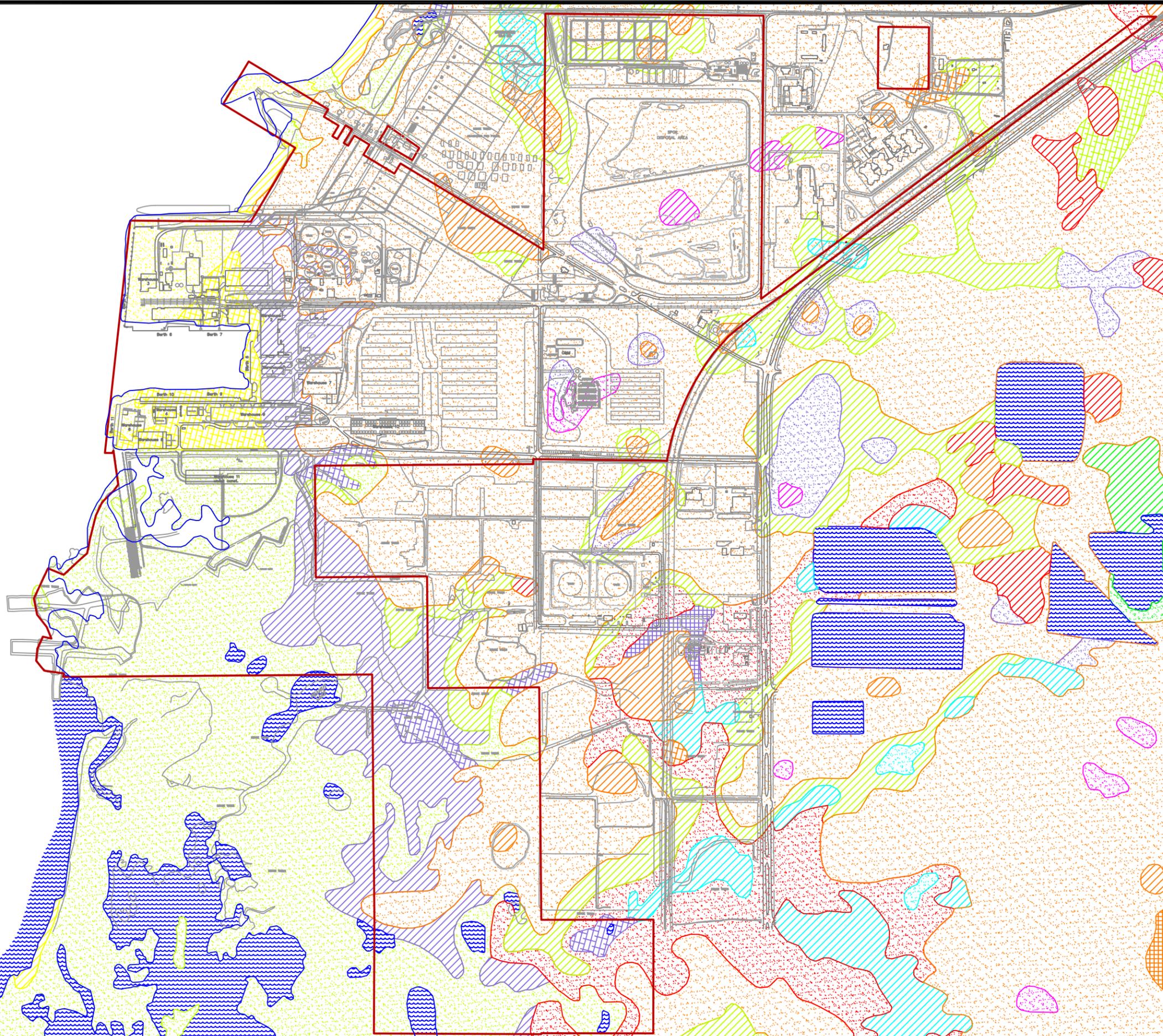
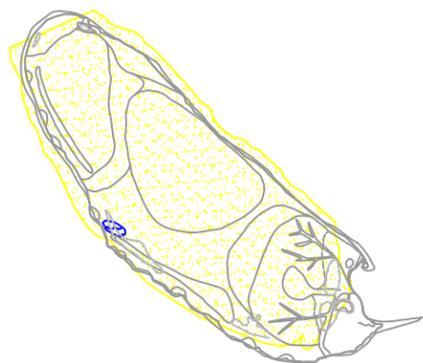


SEAGRASS LEGEND & IMPACTS

	GRASS-H	12,023 sf
	GRASS-H_T	580,396 sf
	GRASS-OPEN_WATER	901 sf
	GRASS-T	62,588 sf
	GRASS-T_H	170,810 sf
	GRASS-T_S	
	TRANSPLANT MITIGATION AREAS	
	PROPOSED IMPACTS	826,718 sf/19 ac
	SITES 8-9	

WETLANDS LEGEND & IMPACTS

	WETLANDS	141,776 sf
	PROPOSED IMPACTS	141,776 sf/3 ac

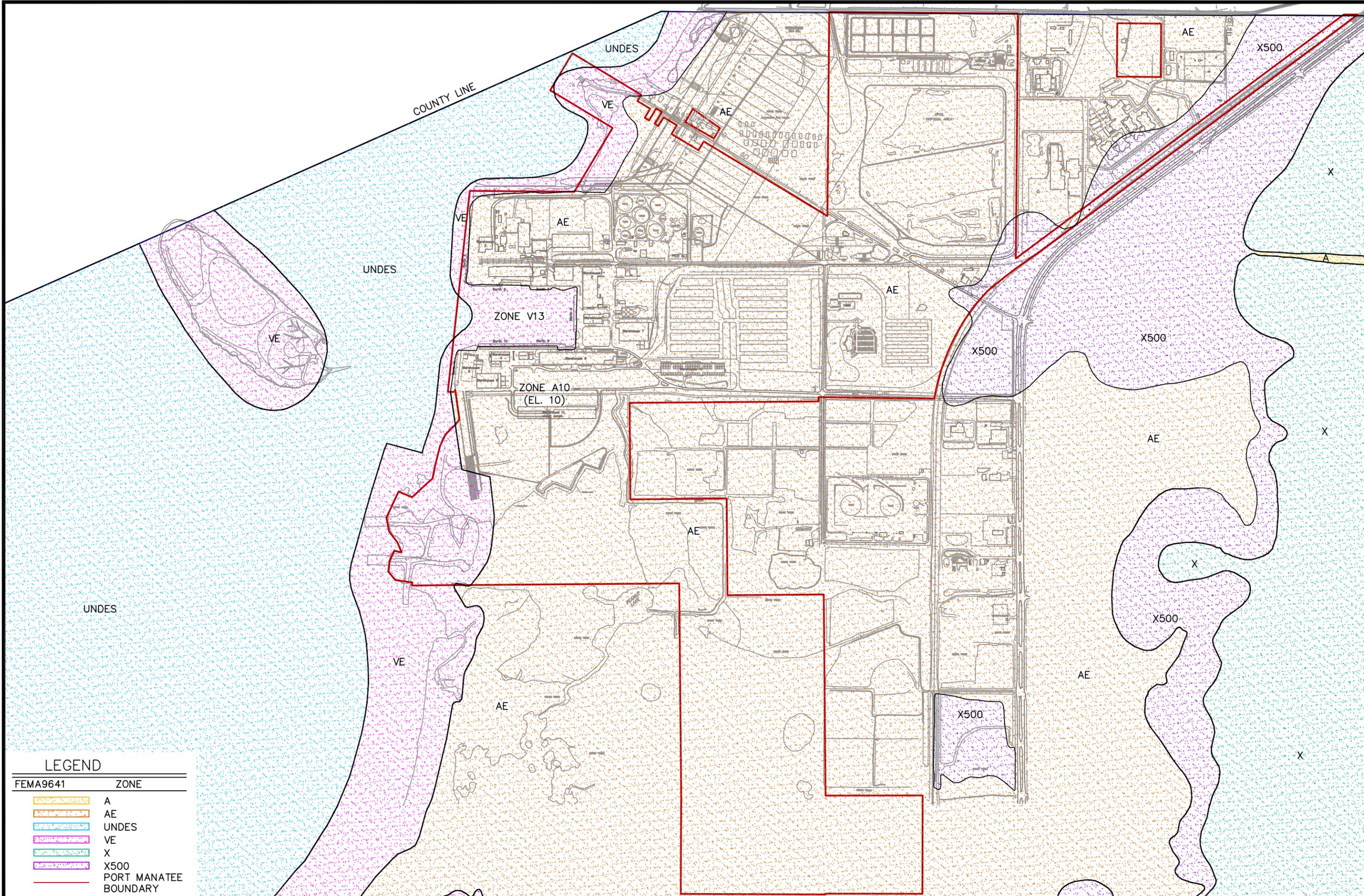


LEGEND

MUID	MUNAME
81005	BRADENTON FINE SAND; LIMESTONE SUBSTRATUM
81007	CANOVA; ANCLOTE AND OKEELANTA SOILS
81008	CANAVERAL FINE SAND; 0 TO 5 PERCENT SLOPES
81009	CANAVERAL SAND; FILLED
81010	CANAVERAL SAND; ORGANIC SUBSTRATUM
81011	CASSIA FINE SAND
81012	CASSIA FINE SAND; MODERATELY WELL DRAINED
81013	CHOBEE LOAMY FINE SAND
81014	CHOBEE VARIANT SANDY CLAY LOAM
81016	DELRAY COMPLEX
81017	DELRAY-EAUGALLIE COMPLEX
81020	EAUGALLIE FINE SAND
81022	FELDA FINE SAND
81025	FLORIDANA FINE SAND
81026	FLORIDANA-IMMOKALEE-OKEELANTA ASSOCIATION
81033	MYAKKA FINE SAND; TIDAL
81034	OKEELANTA MUCK; TIDAL
81038	PALMETTO SAND
81039	PARKWOOD VARIANT COMPLEX
81044	ST. JOHNS-MYAKKA COMPLEX
81045	TAVARES FINE SAND; 0 TO 5 PERCENT SLOPES
81048	WABASSO FINE SAND
81053	WOLFERT-KESSON ASSOCIATION
81099	WATER
	PORT MANATEE BOUNDARY

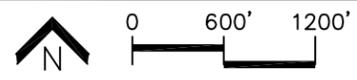


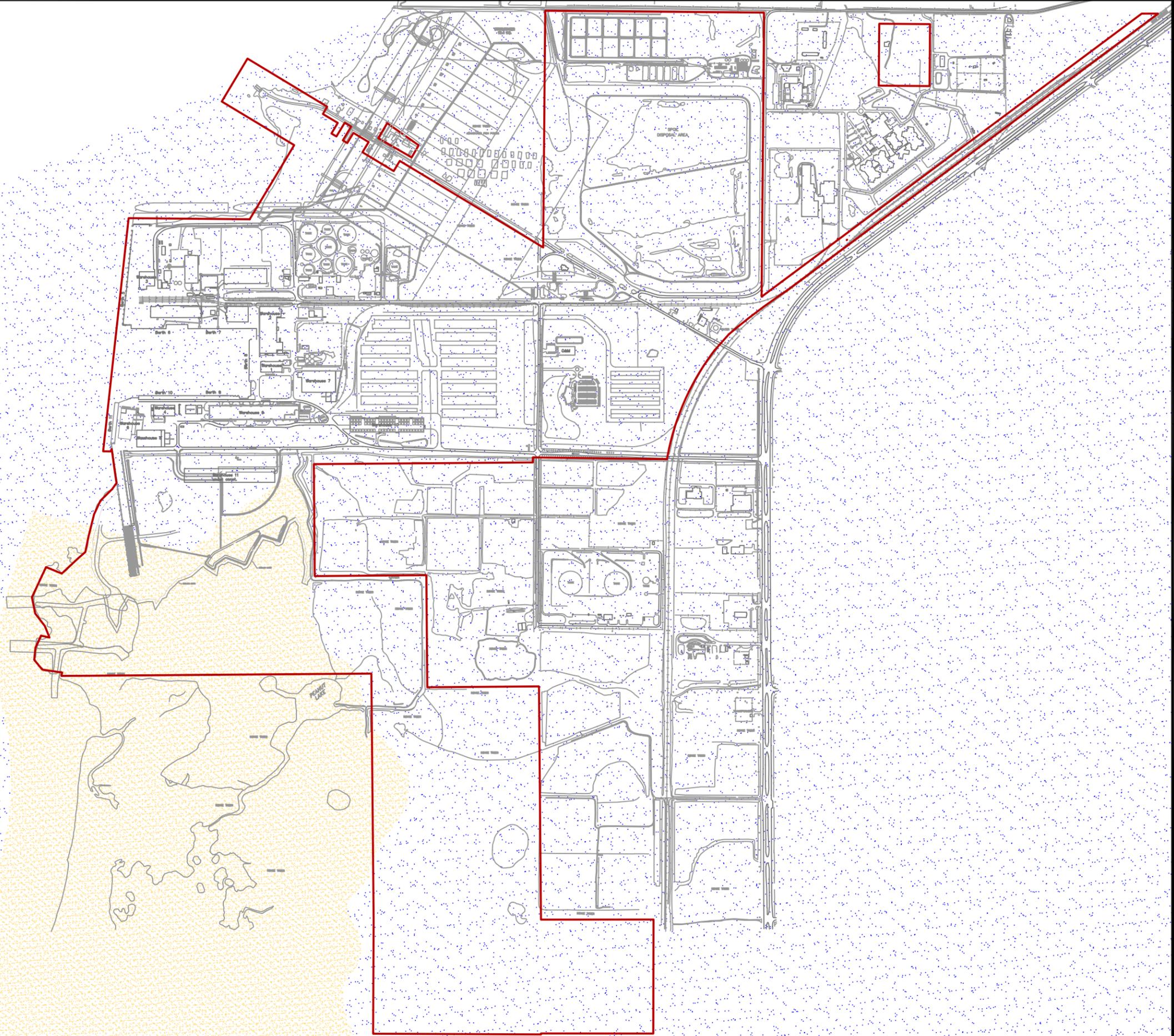
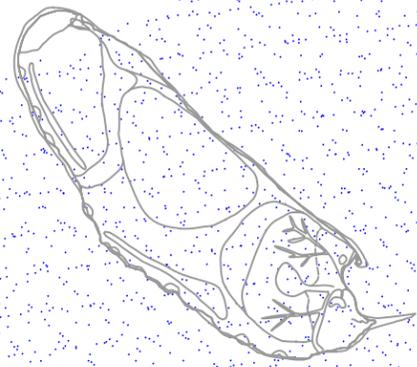
H:\CIVIL\Port Manatee\Maps\NorthPort-Concept-Maps\FEMA Zones.dwg 07/02/2009 12:43:15 PM



**LEGEND**

FEMA9641	ZONE
	A
	AE
	UNDES
	VE
	X
	X500
	PORT MANATEE BOUNDARY





LEGEND

FEMA9641	COBRA
	COBRA_IN
	COBRA_OUT
	PORT MANATEE BOUNDARY



