









# Port Everglades Master Plan Workshop Turning Notch Issue

The Board of County Commissioners of Broward County
March 11, 2008

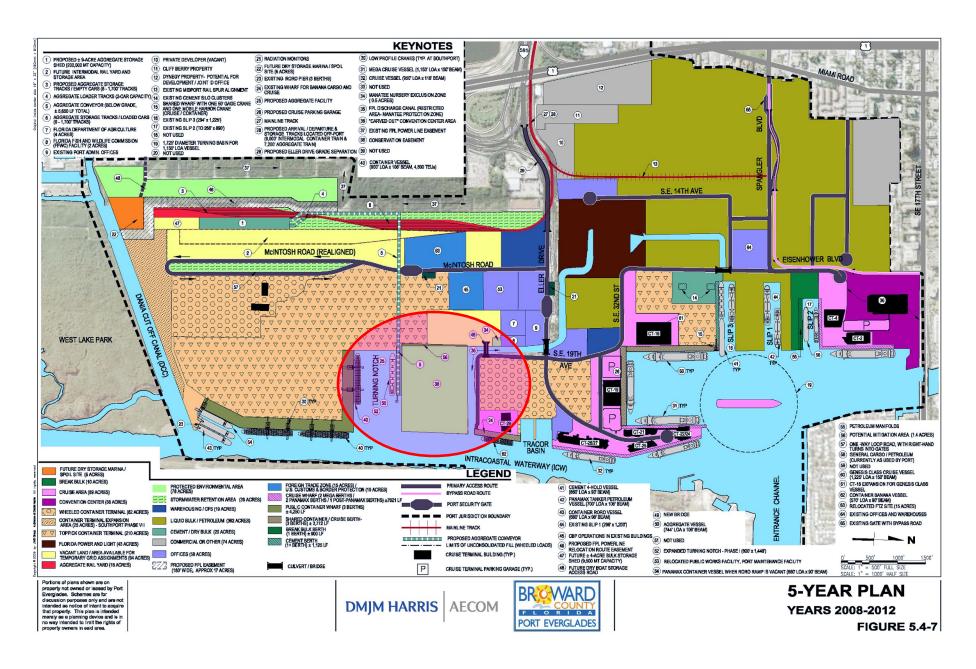


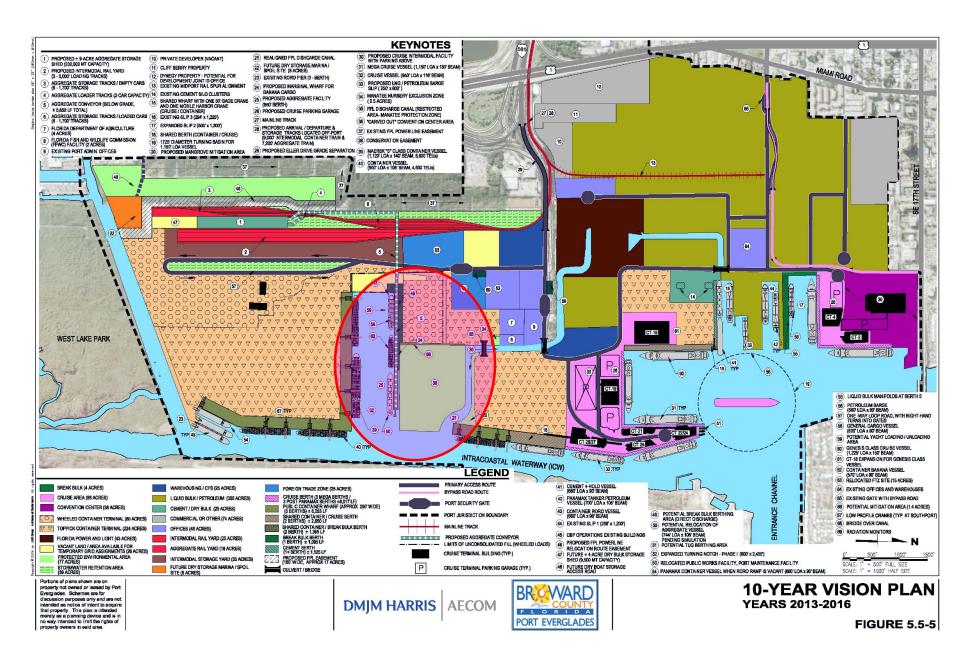


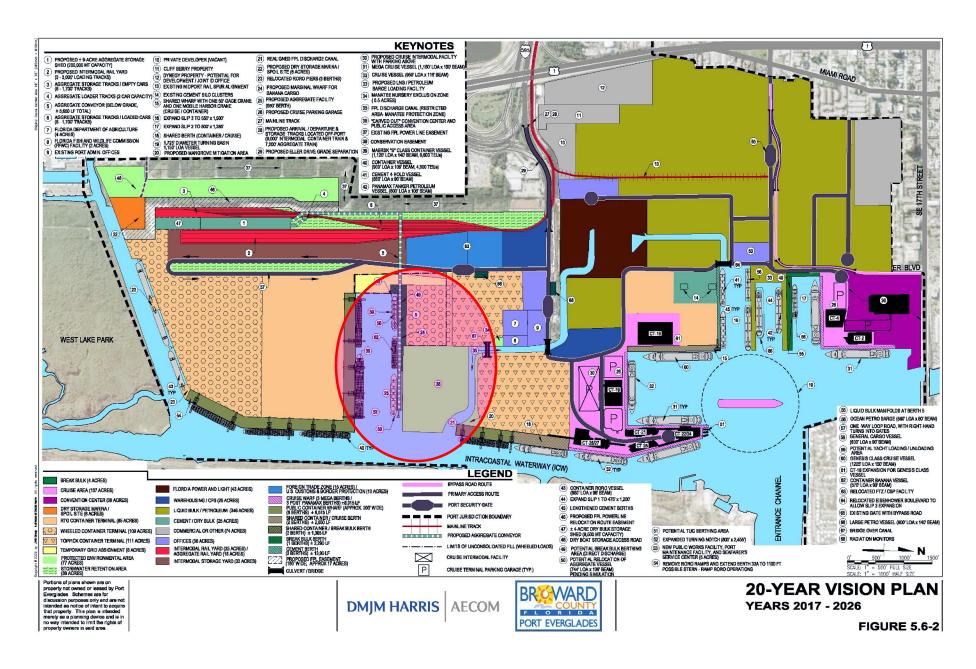










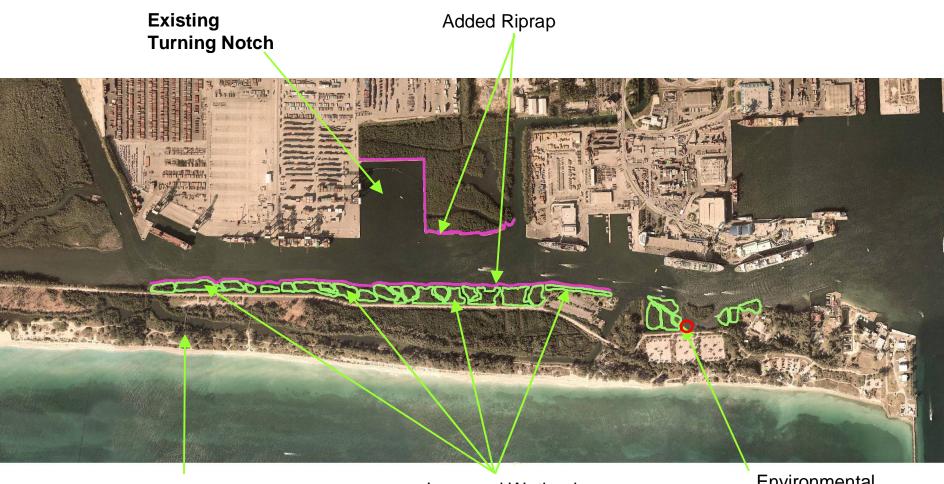


#### **Conservation Easement**

#### Historic Timeline

- **1983** Port Everglades Authority adopted the 1984 2000 Master Plan, which identified the need for the existing Turning Notch
- **1987** Permit granted for removal of 18 acres of mangroves for existing Turning Notch; Port volunteered mitigation...
  - Created 23 acres of new wetlands at John U. Lloyd Park
  - Placed over 10,000 linear feet of riprap to protect new & existing wetlands and to create new habitat at John U.Lloyd Park and Conservation Easement
  - Constructed new environmental education center at John U. Lloyd Park
  - Improved tidal flushing in 23 acres at John U. Lloyd Park
  - Created 5 acres of new wetlands in West Lake Park
  - Created 168 acres of improved flushing areas in West Lake Park
  - Mitigation cost was \$3.2 million
- 1988 Port Everglades Authority granted a 48.27 acre conservation easement to the State of Florida

### Wetland Improvements Related to Existing Turning Notch



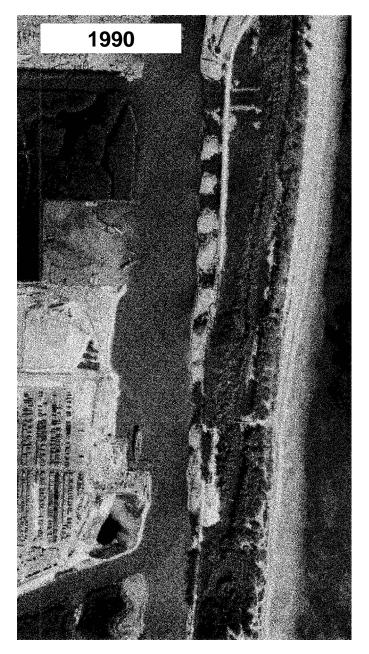
John U. Lloyd Park

Improved Wetlands

Environmental Education Center

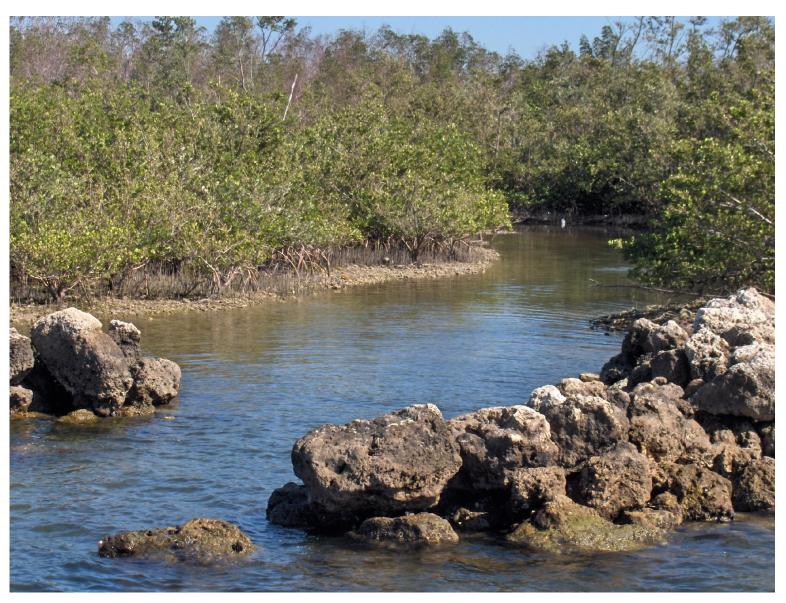


#### **Wetland Improvements**





### RIPRAP/TIDAL CHANNELS/MUD FLATS AT JOHN U. LLOYD PARK



#### **ENVIRONMENTAL EDUCATION CENTER**



#### **Aerial of Existing Conservation Easement**



#### **Turning Notch Expansion**

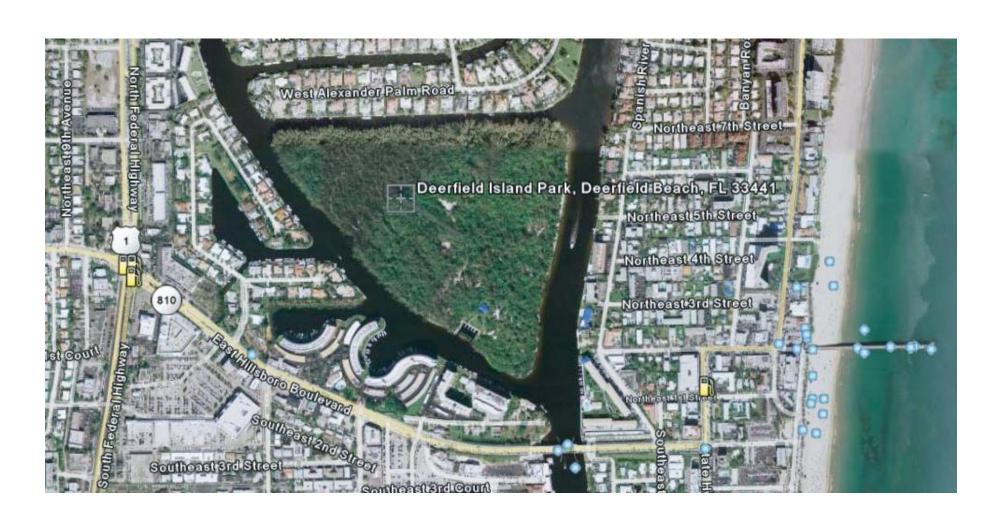
#### Historic Timeline

- 1997 Cost-Sharing Agreement with ACOE for Harbor Expansion Feasibility Study including expansion of the Turning Notch, seven Amendments to original agreement followed to the year 2006
- **2000** Agreement with Consultant to design and permit additional berth within the Turning Notch including:
  - 1. Eliminating an approximate area of 550'x 850' of mangroves
  - 2. Review surveys of the portion of the conservation easement (wetlands) area to be released by FDEP
  - 3. Research environmental mitigation opportunities
  - 4. Prepare final design documents for mitigation plan
- **2001-2006** Identified and investigated parcels for potential land swap for the 8.7 acres of the Conservation Easement
- 2006-2007 County secures Consultant to assist in lifting a portion of the Conservation Easement to meet the needs of the Port's dredging project.

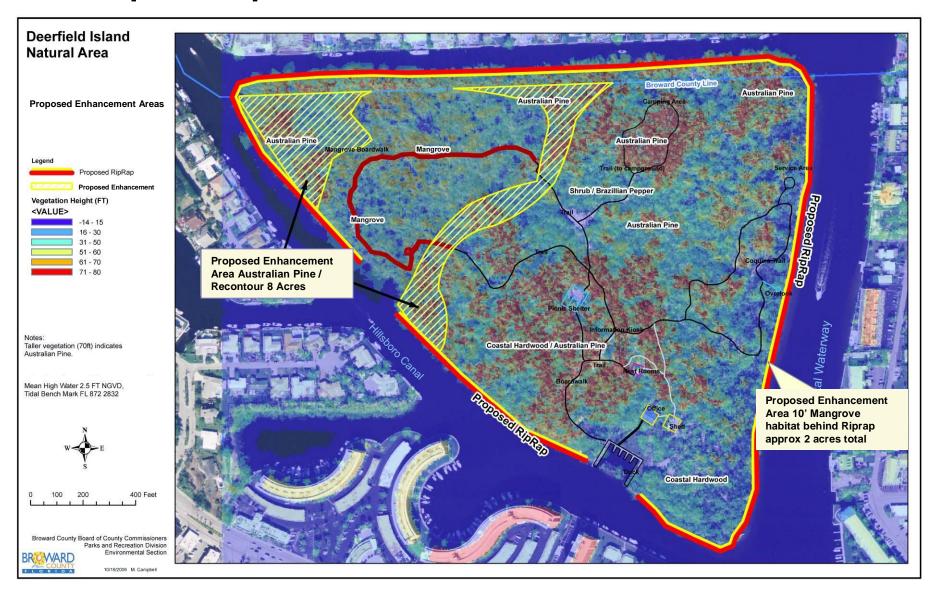
### Release of Portion of Conservation Easement Historic Timeline

- **2001** Negotiations started with FDEP for release of 8.7 acres from the Conservation Easement and a favorable response was received.
- **2002** FDEP agreed to "swap" the 19.4 acre Pavilion parcel in Dania Beach for 8.7 acres of the Conservation Easement.
- **2003** Developer purchased the 19.4 acre Pavilion parcel and the swap could not be accomplished.
- **2004** BCEPD identifies Deerfield Island as potential alternative parcel for land swap.
- 2005 The Port identified to FDEP opportunities with Deerfield Island land swap. FDEP indicated Deerfield Island was a viable land swap with enhancements pending further discussion.
- **2006** Continued discussions with existing Deerfield Island owner, FIND, and FDEP.
- **2007** FDEP further clarified the conditions for the Deerfield Island land swap.
- 2007 Engaged appraisers to appraise Deerfield Island.
- **2008** Conducted biological assessment of the 8.7 acres and the 3.2 acres in the Conservation Easement.

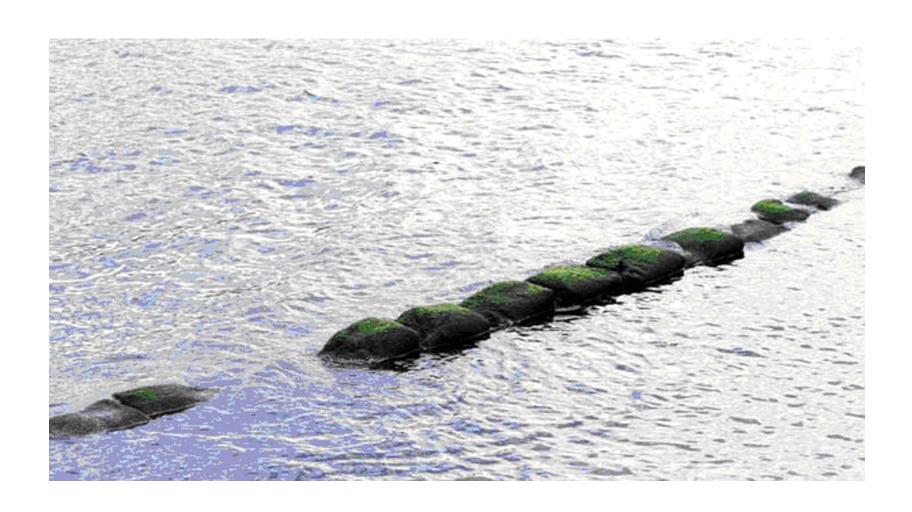
#### **Aerial of Deerfield Island**



#### Map of Proposed Enhancement at Deerfield Island



#### **Existing Riprap at Deerfield Island**



#### **Mangrove Enhancement**





#### Mitigation in West Lake Park

Historic Timeline

- 1998 Conceptual approval of Agreement with World Gate
   Associates (now defunct) for master planning, engineering
   and mitigation at West Lake Park for Port and Airport
   expansion
- 2000 to Present –

**Phase I:** Preparation of Master Mitigation Plan by Consultant for West Lake Park

**Phase II:** Acquisition of out parcels, elimination of FIND easements

**Phase III:** Preparation of construction plans and specs and permitting

- Total mitigation credits available for Port and Airport expansion 40.24 credits
- Credits available to Port Everglades
   50% or approximately 20 credits
- Expansion of Turning Notch requires approximately 5.4 credits



#### **Turning Notch Expansion**

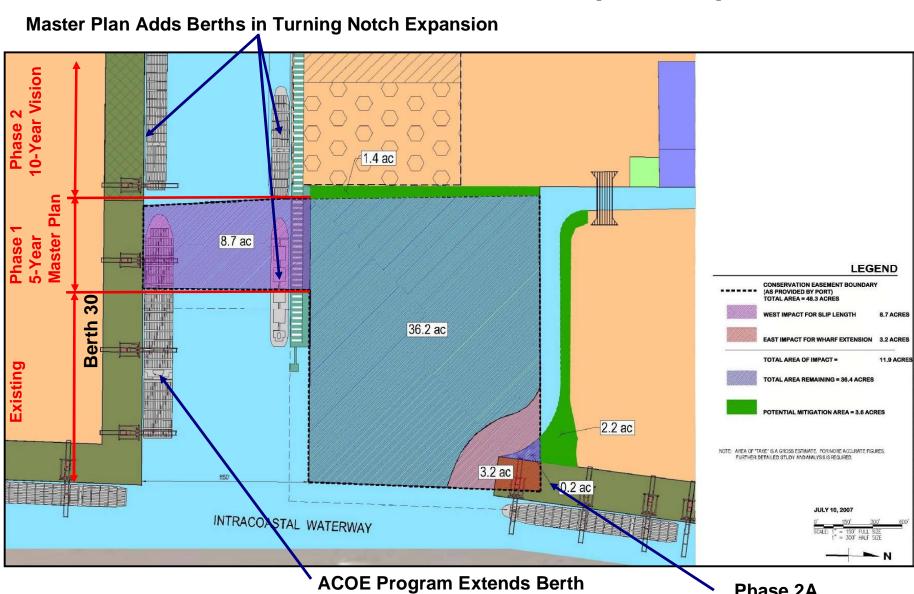
#### **ACOE Dredging Program**

- Extends Berth 30 and expands Turning Notch west into the 8.7 acres of the Conservation Easement
- Purpose to accommodate Post Panamax Container Ships
   (1138 ft LOA x 141 ft Beam x 47.6 ft Draft, capacity 7,226 TEUs) at Berth 30

#### **Master Plan Vision**

- Phase 1: Adds new bulk berth for importing crushed rock and other raw materials for cement/concrete manufacture
- Phase 2: Adds additional container and general cargo berths in old land fill site west of the 8.7 acres; no additional environmental impact
- Phase 2A: Extends Berth 29; impacts 3.2 acres of the Conservation Easement

#### **Conservation Easement Impact Map**



Phase 2A
Master Plan 10-Year Vision
Extends Berth 29

### Developed 4 Alternatives at Conservation Easement

- Alternative 1No Build
- Alternative 2
   Turning Notch Expansion Only
- Alternative 3Berth 29 Extension Only
- Alternative 4
   Master Plan Vision

### Assumptions for Quantitative Analysis

#### Alternative 1 - No Build

No infrastructure to be constructed in the Conservation Easement.

- Alternative 2 Turning Notch Expansion Only
   Phase 1 (5-Year Plan) + Phase 2 (10-Year Vision) to be constructed.
- Alternative 3 Berth 29 Extension Only
   Phase 2A (10-Year Vision) to be constructed.

#### Alternative 4 - Master Plan Vision

Phase 1 (5-Year Plan) + Phases 2 & 2A (10-Year Vision) to be constructed.

Constructing Alternative 4, as defined in the Master Plan, provides berthing advantages that increase through-put above the through-put that would be provided by combining the individual through-put for Alternatives 2 & 3.

# Alternative 1 No Build at Conservation Easement (Baseline)



	Annual Port-Wide Throughput Impact						
Planning Milestone	Estimated TEU Delta Crush TEU from Roc Throughput Baseline Ton						
5-Year (Year 2012)	1,352,000						
10-Year (Year 2016)	1,461,000						
20-Year (Year 2026)	2,266,000						



# Alternative 1 No Build at Conservation Easement (Baseline)

Total Jobs = direct, induced, indirect, and related Statewide

	Construction/	Annual		Econom	ic Impact	
Planning Milestone	Restoration Cost	Revenue Total		Annual Personal Income	Annual Economic Activity	Annual Taxes
5-Year (Year 2012)	<b>\$</b> 0	<b>\$0</b>	0	<b>\$0</b>	<b>\$</b> 0	\$0
10-Year (Year 2016)	<b>\$0</b>	<b>\$0</b>	0	<b>\$0</b>	\$0	\$0
20-Year (Year 2026)	<b>\$0</b>	<b>\$0</b>	0	<b>\$0</b>	<b>\$</b> 0	<b>\$0</b>

# Alternative 2 Turning Notch Expansion Only



	Annual Port-Wide Throughput Impact					
Planning Milestone	Estimated TEU Throughput	TEU Delta from Baseline	Crushed Rock Tons			
5-Year (Year 2012) Phase 1	1,352,000	0	0			
10-Year (Year 2016) Phase 2	1,703,000	+242,000	+4,000,000			
20-Year (Year 2026)	2,581,000	+315,000	+4,000,000			



# Alternative 2 Turning Notch Expansion Only

Total Jobs = direct, induced, indirect, and related Statewide

	Construction	Annual	Annual Economic Impact				
Planning Milestone	/ Restoration Cost	Revenue Impact	Total Jobs	Annual Personal Income	Annual Economic Activity	Annual Taxes	
5-Year (Year 2012) Phase 1	\$30,000,000 \$38,000,000	0	1				
10-Year (Year 2016) Phase 2	\$60,000,000 \$0	\$12,057,660	43,286	\$1.39 billion	\$3.85 billion	\$127.8 million	
20-Year (Year 2026)	0	\$14,337,450	55,782	\$1.77 billion	\$4.98 billion	\$163.2 million	

# Alternative 3 Berth 29 Extension Only



Planning	Annual Port-Wide Throughput Impact					
Planning Milestone	Estimated TEU Throughput	TEU Delta from Baseline	Crushed Rock Tons			
5-Year (Year 2012)	1,352,000	0	0			
10-Year (Year 2016)	1,559,000	+98,000	0			
20-Year (Year 2026)	2,407,000	+141,000	0			

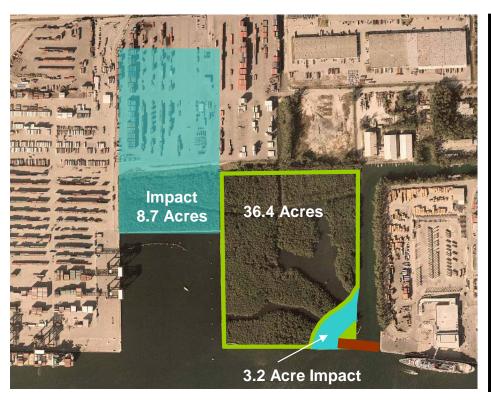


# **Alternative 3 Berth 29 Extension Only**

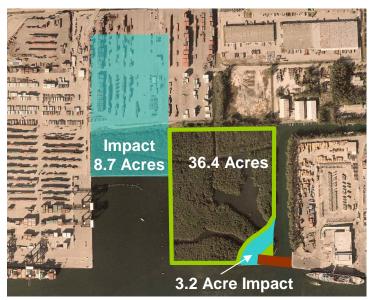
Total Jobs = direct, induced, indirect, and related Statewide

	Construction	Annual		Econom	ic Impact	
Planning Milestone	/ Restoration Cost	Revenue   Total   Jobs		Annual Personal Income	Annual Economic Activity	Annual Taxes
5-Year (Year 2012)	0	0				
10-Year (Year 2016) Phase 2A	\$10,000,000 \$14,000,000	\$3,060,540	16,768	\$517.1 million	\$1.51 billion	\$47.6 million
20-Year (Year 2026)	0	\$4,403,430	24,128	\$744.1 million	\$2.18 billion	\$68.5 million

## Alternative 4 Master Plan Vision



	Annual Port-Wide Throughput Impact					
Planning Milestone	Estimated TEU Throughput	TEU from				
5-Year (Year 2012)	1,352,000	0	0			
10-Year (Year 2016)	1,945,000	+484,000	+4,000,000			
20-Year (Year 2026)	2,896,000	+630,000	+4,000,000			



## **Alternative 4 Master Plan Vision**

Total Jobs = direct, induced, indirect, and related Statewide

Planning	Construction	Annual				
Milestone	/ Restoration Cost	Revenue Impact	Total Jobs	Personal Income	Economic Activity	Taxes
5-Year (Year 2012) Phase 1	\$30,000,000 \$38,000,000	I				
10-Year (Year 2016) Phase 2 + 2A	\$70,000,000 \$14,000,000	\$19,615,320	84,696	\$2.67 billion	\$7.59 billion	\$245.3 million
20-Year (Year 2026)	0	\$24,174,900	109,688	\$3.44 billion	\$9.84 billion	\$316.2 million

#### **Estimated Annual Throughput Impact Comparison**

Planning Milestone		Build native 1	Turning Notch (Phases 1 & 2) Alternative 2		Berth 29 Alternative 3		Master Plan Alternative 4	
	TEU Delta from Baseline	Annual Throughput of Crushed Rock (Tons)	TEU Delta from Baseline	Annual Throughput of Crushed Rock (Tons)	Trom Baseline	Annual Throughput of Crushed Rock (Tons)	Baseline	Annual Throughput of Crushed Rock (Tons)
5-year		-	0	0	0	0	0	0
10-year			+242,000	+4,000,000	+98,000	0	+484,000	+4,000,000
20-year		-	+315,000	+4,000,000	+141,000	0	+630,000	+4,000,000

#### **Estimated Annual Revenue Impact**

	No Build Alternative 1	Turning Notch (Phases 1 & 2) Alternative 2	es 1 & 2) Alternative 3 Altern	
5-year		0	0	0
10-year		+\$12,057,660	+\$3,060,540	+\$19,615,320
20-year		+\$14,337,450	+\$4,403,430	+\$24,174,900

### No Build Alternative Impact

- No environmental impact at Conservation Easement; No associated mitigation improvements at West Lake Park and no enhancement at Deerfield Island
- **Reduces** TEU throughput potential in 20 years by 630,000 TEU's equates to 2/3's of today's throughput
- **Restrains** competition with out-of-state ports for the larger container ships due to the limitation on size of Berth 30
- Impacts start-up schedule and cost participation by Port on the ICTF due to loss of private investment
- Deletes the import of crushed rock aggregate and raw materials for cement needed by the construction industry due to not having an enclosed transport / storage system for dry bulk – 4 million tons / year

### No Build Alternative Impact

Potential Statewide Loss of:

109,688 Total Jobs (direct, induced, indirect

and related)

\$ 3.44 billion Total Annual Personal Income (direct,

induced, indirect and related)

\$ 9.84 billion Total Annual Value of Economic

Activity (business services revenue and

related user output)

\$ 316.2 million Annual State and Local Taxes

At Year 2026