The Intracoastal Waterway in Palm Beach County: Charting the Future

May 9, 2008
Treasure Coast Regional Planning Council

Commissioner
Jeff Koons

Palm Beach County Commission
David Roach
Executive Director

*Florida Inland Navigational District*

The History, Access, and Economics of the Intracoastal Waterway in Palm Beach County
"LOCAL SPONSOR" OF THE ATLANTIC INTRACOASTAL WATERWAY IN FLORIDA

DISTRICT BOUNDARIES

- Appointed Commissioners
- Six staff members
- Levy ad valorem tax
- Admin. 1.5% of budget

DISTRICT PROGRAMS
- Land Acq. & Mgmt.
- Assistance Programs
- Public Information

THE BEGINNING OF THE INTRACOASTAL WATERWAY IN FLORIDA

CONSTRUCTED BY A PRIVATE COMPANY, THE FLORIDA EAST COAST CANAL COMPANY BETWEEN 1881 AND 1912

A LADDER OR BUCKET DREDGE WAS USED TO CREATE CANALS CONNECTING THE EAST COAST LAGOONS AND RIVERS

THE RESULTING 5 FT DEEP AND 50 FOOT WIDE WATERWAY WAS OPERATED AS A TOLL CANAL
THE BEGINNING OF THE INTRACOASTAL WATERWAY IN PALM BEACH COUNTY

Palm Beach County ICW
43 miles in length
30 miles of natural rivers, lakes and lagoons
13 miles of man made canal sections
The existing waterway was owned by Harry Kelsey, a Canadian developer who was constructing the town of Lake Park in Palm Beach County.

The Florida Inland Navigation District was created in 1927 by the Florida Legislature to be the local sponsor of the waterway.

Waterway enlarged in the 1930’s to 100 feet wide and 8 feet deep.
German submarines off of the east coast of the United States torpedoed many cargo ships, causing Congress to authorize the enlargement of the Intracoastal Waterway to provide a safe and protected route for these ships.

**Palm Beach County ICW Segment**

43 miles in length

20 miles in the Lake Worth Lagoon

10 feet deep

125 feet wide
WATERWAY ACCESS

15 boat Ramps

37 Open to the Public Marinas

Waterfront parks

Boardwalks

BOATER FACILITIES

Lake Park Marina

Phil Foster Boat Ramps
NON-BOATER FACILITIES

ECONOMIC IMPACTS OF THE WATERWAYS OF PALM BEACH COUNTY
COMMERCIAL ECONOMICS

- 127 Charter/rental boats
- 30 Port of Palm Beach Tenants
- TOTAL ECONOMIC OUTPUT $503.8 Million
- TOTAL JOBS 3,660
- TOTAL PERSONAL WAGES $161.9 Million

RECREATIONAL BOATING IN PALM BEACH COUNTY

- 38,103 Registered boats
- 1 vessel per 33 residents
- 605,500 Yearly Boating Trips
- Hundreds of visiting vessels
- 48% trailered
- 35% in private slip
- 9% commercial dry storage
- 7% commercial wet slip
WATERWAY RELATED BUSINESSES

915 Businesses

41% located on the waterway

Most employ 4 or less people

RECREATIONAL BOATING ECONOMICS

• TOTAL ECONOMIC OUTPUT $1.42 Billion
• TOTAL JOBS 12,510
• TOTAL PERSONAL WAGES $512 Million
TOTAL WATERWAY ECONOMY OF THE WATERWAYS OF PALM BEACH COUNTY

- TOTAL ECONOMIC OUTPUT $2 Billion
- TOTAL PERSONAL WAGES $688 Million
- TOTAL JOBS 16,505

THANK YOU!
Rob Robbins
Deputy Director

*Palm Beach County*
*Dept of Environmental Resource Management*

Lake Worth Lagoon
Intracostal Waterway
Palm Beach County, Florida

*Palm Beach County*
*Department of Environmental Resources Management*
A Little History...

- Historically a fresh water lake
- 130 years of change...
  - 1877 - First inlet opened
  - 1915 - Lake Worth Inlet permanent
  - 1917 - South Lake Worth Inlet (Boynton)

Lake Worth Lagoon

- 20 miles long
- ½ mile wide
- 6 Ft. Avg. Depth
- 2 Inlets
Accomplishments – Habitat & Stormwater Projects

- 49 Construction Projects
  - 24 Water Quality Projects
  - 22 Habitat Enhancement Projects
  - 3 Sewage Treatment Projects (+ Westgate)
  - 6 Artificial Reefs
- 12 Monitoring Projects
- 184 acres of habitat created or restored
  - 67 ac Mangroves
  - 64 ac Submerged Aquatic Vegetation
  - 14 ac Artificial Reef
  - 39 ac Maritime Hammock

Munyon Island - 1997  John's Island - 2003  Brook Island - 2005
Peanut Island - 2005  Ocean Ridge - 2006
Munyon Island: 1992 - 1997

Pre-construction

Phase 2

Completed
John’s Island Restoration

- Remove exotics
- Restore 1.7 acres of existing mangroves
- Restore 1.4 acres of tropical hammock
- Remove 17K cu yards of fill to construct flushing channels
- Create 3.3 acres of mangrove wetland
Snook Islands Natural Area

- Place 1.2 million cu. yd. of material in deep holes
- Grade to wetland elevations
Town of Palm Beach Mangrove Planter
- Approximately 2,000 Linear Feet of Mangrove Habitat

Before

After

9/1/2005

Water Quality: Boynton Beach 20 Outfalls
- Prior to Retrofit, No Stormwater Treatment Except for Swales
- Retrofits for 20 Outfalls along Lake Worth Lagoon
- Continuous Deflective Separation (CDS) Units
- Drain-Pacs with PVC Mesh Liner
Stormwater Treatment

S-155 Control Structure
Muck Sediment

- 423 acres where muck is >1 ft
- Extensive shallow deposits
- Inhibits SAV
- Resuspension
- Highest concentration in the central section near the C-51 canal
Dredging Production

- 500 cy Muck/day
- Chemically “dewatered”
Elements of a Manatee Protection Plan

- Manatee Protection (Speed) Zones
- Public Education and Outreach
- Manatee Habitat Protection/Enhancement
- Compilation of Manatee Data, Protection Strategies
- Boat Facility Siting Plan (controversial!)
Where are the manatees?

Where are the boats?
Summary
Boat Facility Siting Policy

<table>
<thead>
<tr>
<th>Siting Category</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted</td>
<td>No limit</td>
</tr>
<tr>
<td>Preferred</td>
<td>10:100</td>
</tr>
<tr>
<td></td>
<td>Public ramps - no limit</td>
</tr>
<tr>
<td>Conditional</td>
<td>6:100</td>
</tr>
<tr>
<td>Non Preferred</td>
<td>1:100</td>
</tr>
<tr>
<td></td>
<td>Public ramps and day docks - 10 max</td>
</tr>
<tr>
<td>Exclusionary</td>
<td>Non-motorized only</td>
</tr>
</tbody>
</table>

Note: Criteria do not apply to single-family docks.

Facility Siting - Countywide
Facility Siting - North County

Facility Siting - North LWL
Facility Siting - Central LWL

Facility Siting - South LWL
Facility Siting - South County

Program Funding

Manatee Protection Fund (MPF)
- $1,000,000/yr from Ad Valorem
  - Outreach / Studies $100,000
  - Speed Zone Law Enforcement $200,000
  - Habitat Restoration $7000,000
South Cove Restoration Project - Conceptual Plan
View to the north from Royal Park Bridge
South Cove Restoration Project - Conceptual Plan
View to the South from Flagler Drive

South Cove Restoration Project - Conceptual Plan
View of boardwalk
Palm Beach County Intracoastal Waterway: Charting the Future
ACTION ITEMS:

II. To create a public/private partnership with the League of Cities, Florida Inland Waterways District, PBC EDO, PBC MPO and the Environmental Resource Center to develop an Intercoastal Waterways Economic Master Plan. Palm Beach County has an opportunity to capitalize on its unique assets of the Intercoastal Waterway by creating a regional economic strategy that builds on its unique environmental assets.

Examples shown throughout the world where cities have capitalized on environmental and cultural assets to shore their regional economies. They have done so by linking natural features such as botanical gardens, museums, and zoos to new and existing transportation corridors that include trails, buses, and water taxi. Such a system is feasible for PBC's downtown areas along the Intercoastal Waterway.
Leadership by Palm Beach MPO

PLANNING FACTORS:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase the accessibility and mobility options available to people and for freight;
5. Protect and enhance the environment, promote energy conservation, and improve quality of life;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system.
The Intracoastal as an Economic System

Marine Industries

Working Waterfronts
Waterfront Destinations

Economics of Ecotourism
The Intracoastal as a Transportation System

Many Types of Boat Users

From Kayaks to Mega Yachts & More
Many Types of Non-Boat Users

Water Taxis
Connecting Marina Villages

Fort Lauderdale Water Taxi

Your ticket allows unlimited boardings from any of our 11 stops throughout Fort Lauderdale!
New Smyrna Beach Water Taxi

Jacksonville Water Taxi
Connecting Marina Villages

Upland Transportation Options?

Multi-Modal Connections
The Intracoastal as a Public Access System
Northeast Everglades Natural Area

Paddling Trails?
Riverwalks & Promenades

Bridges = Public Access
Places for Boats to Go

The Charrette Process
Two Constants

Behind Every Great Plan

Involve Everyone!
“Public sentiment is everything. With public sentiment nothing can fail; without it, nothing can succeed.”

A Clear Vision for the Future
“Vision isn’t forecasting the future, it is creating the future by taking action in the present.”

Porras & Collins, *Built to Last: Successful Habits of Visionary Companies* 1994

Components of an Intracoastal Plan

- Places for all kinds of people
- Places for all kinds of boats
- Balance of sustainable economy with natural resources
- Connections on the Intracoastal
- Connections to & from the Intracoastal
- Public spaces, parks and plazas
- Transportation and mobility
- An implementation plan

"The best way to predict the future is to create it."

Peter F. Drucker
What is Expected of You Today

The Public Process: Planning for the Future
DAY 1: 10:00 AM – 3:00 PM
The Citizen’s Ideas

DAYS 2 through 7
We work all day ...

... and into the night
Studio: Open to the Public (9 AM – 9 PM)
Rinker 1310 Classroom
(Saturday through Wednesday)

DAY 7: Thursday May 15 – 4 PM
Presentation of Work in Progress
PBAU – Gregory Lecture Hall
Charrette Rules

- Sign your name
- Select a team member to present
- Argue with your pencils
- This is not an art contest
- Don’t think about money
- There is no bad idea
- Don’t get caught in small details
- No speeches
- 15min. warning
- HAVE FUN!!

When I Say Go
Ready…
Set…
GO!

The Intracoastal Waterway in Palm Beach County: Charting the Future
Public Planning Charrette
May 9, 2008

TREASURE COAST REGIONAL PLANNING COUNCIL