Intracoastal Waterway Plan for Palm Beach County

Charting a Course for the Future

Preliminary Findings & Recommendations
February 2009

TREASURE COAST REGIONAL PLANNING COUNCIL

The Study Area
How The Master Plan Was Created:

Public Process:
Friday, May 9, 2008

Presenting the Citizens’ Ideas
A Few of the Things We Heard…

- increase public access to the water via parks, bridges, riverwalks
- restore spoil islands and habitat areas; allow camping and public access
- construct more public fishing piers & riverwalks
- explore water taxi programs to interconnect marine destinations
- clean and enhance canals, especially C-51
- add more canoe/kayak launch sites in ICWW and portages in canal spillways
- connect natural areas to each other
- improve upland and water transit access waterway and marine destinations
- create a County-wide water taxi system with different kinds of taxi stops
- make boat ramps more efficient with staging docks and day docks
- expand waterway destinations – day docks, spoil islands, restaurants
- remove derelict boats and clean waterway; explore mooring fields
- support marine industries with incentives and dredging (Mega-Yacht Mile)
- utilize bridge replacement to increase public access, fishing opportunities
- maintain clear views to the water
- encourage use of green buildings, LEED standards, renewable resources
- expand educational programs about natural resources, history, hydrology
- support marina villages and other marine destinations (e.g., PGA “4 Corners”)
- promote rebuilding of natural shoreline or plantings along existing sea walls

Core Public Themes

- Expand Public Access
- Protect Natural Systems
- Increase Water-Based Transportation
- Marina Villages & Destinations
- Expand Eco-Tourism & Recreation
- Sustainable Economics
Expanding Public Access

Who Uses the Intracoastal?

Boaters … of all shapes & sizes
Who Uses the Intracoastal?

Non-Boaters … of all walks of life

County Greenways/Trails Planning

Northeast Everglades Natural Area

South County Greenways and Trails Map
Public Parks

Public Parks & Preserves
Public Marinas & Boat Ramps

Riverwalks & Promenades
Waterfront Street-End Parks

A Lesson from Lantana

Street-End Parks

Neighborhood
Waterfront Access

Neighborhood
Boat Storage
Key Strategies: Public Access

• Protect Through Land Development
  – Prioritize public access as part of entitlements
  – New development & redevelopment
  – Publicly controlled easements; dedications

• Encourage Street-End Parks
  – Identify locations & opportunities
  – Develop regulations to establish & maintain facilities

Protecting Natural Systems
ICWW Characteristics

Palm Beach County ICWW

43 miles in length

30 miles of natural rivers, lakes and lagoons

13 miles of man made canal sections

Lake Worth Lagoon Restoration

- 450 sq. mile watershed
- Urban, Built-Out
- Older Construction
- Direct Discharge:
  - Inadequate
  - Untreated
- Loss of Habitat

- 49 Construction Projects
- Water Quality Projects
- Habitat Enhancement Projects
- Sewage Treatment
- 6 Artificial Reefs
- 12 Monitoring Projects
- 184 ac habitat created / restored
Habitat Enhancement

Munyon Island - 1997
John's Island - 2003
Snook Island - 2005
Peanut Island - 2005
Ocean Ridge - 2006

Snook Island
Dredge Holes in the Lagoon

Creation of Mangrove Islands

Figure 17. Dredge Hole site locations in Lake Worth Lagoon, Florida (FDOERM 2003d).
**Key Strategies: Natural Resources**

- Establish a County-Wide Stormwater Utility
  - Include properties ½-mile east & west of ICW
  - Operate through PBC utilities
  - Address stormwater treatment & canal discharges

- Develop a County-Wide Plan for Sea Level Rise
  - Minimum design criteria for infrastructure & construction adjacent to ICW
  - Standards for new/renovated seawalls
  - Additional environmental enhancements

**Expanding Recreational Opportunities & Eco-Tourism**
Snook Island

Added Public Access & Environmental Education

Eco-Tourism Opportunities

“Jewel Cove” - Lake Worth
Expanding Canoe/Kayak Access

Key Strategies: *Eco-Tourism & Recreation*

- **Expand Public Access for Spoil Islands**
  - Assemble multi-disciplinary team
  - Enable public/private participation
  - Develop prototypical facilities (e.g., primitive camping sites, canoe/kayak launches)
  - Promote educational kiosk system

- **Enhance Canoe / Kayak System**
  - Identify locations for improved portages
  - Include in greenway / blueway mapping
Increasing Water-Based Transportation

Water Taxis
Key Issues for Success Waterborne Service
Successful Service Requires Consideration of Many Variables

- Identify the right technology – performance, impact, cost
- Define a competitive service
- Quantify market demand
- Differentiate service from other initiatives
- Provide ability to compare service to other initiatives
- Identify and address key connectivity and accessibility issues
- Build regional support
- Integrate service into regional transportation system

Examples of Successful Water Service
Many Success Stories But Specific Conditions Must Exist

- Most profitable services in captive markets
- Fare-box revenues usually do not cover operating costs – 40% to 60% is typical
- Multiple sailings are essential for commuters
- Most competitive passenger services are those that cut mileage and travel time
- Services tend to operate a mix of vessels operating 15 to 35 knots – faster boats can attract more riders at significant cost
- Need strong landside connections and good management of community & environmental impacts
Successful Waterborne Services Exist Today
*Florida is Home to Many Successful Water Services*

Comparison of Florida Water Taxis

- New Smyrna Beach
- Fort Lauderdale
- Jacksonville
Successful Waterborne Services Exist Today
Palm Beach County

Water Taxi Service Assumptions

- Low speed vessels with speeds ranging from 4 knots to 15 knots
- Wake wash will be critical factor in narrow zones due to impact on property/parked vessels
- Five minute penalty assumed for loading/unloading
- Each additional stop adds five minutes
- 30 & 60 minute alternatives illustrated
- Manatee speed restrictions present throughout majority of waterway
Manatee Zone Speed Restrictions
### Water Taxi Operating Matrix

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#### Water Taxis
- Limited Network
- 30-60 Minute Headways
Water Taxis Recommended Network
30-60 Minute Headways
Potential High Speed Passenger Service

- Port of Palm Beach (and Fort Lauderdale) provided high speed service to the Bahamas in the past; both discontinued (operating costs, demand, permitting)
- Miami, Fort Myers, and Marco Island currently provide seasonal high speed service to Key West; service time competitive with auto
- Palm Beach has had some interest in service to Key West
- Service to Bahamas seen as feasible in the future based on economic recovery and build out of the Bahamian islands
Successful Waterborne Services Exist Today
Key West Express

http://www.seakeywestexpress.com/

Potential High Speed Passenger Service
Port of Palm Beach
Planned Waterway Improvements

Water Access for Deepwater Yachts
Key Strategies: Water-Based Transportation

- Initiate a Water Taxi Working Group
  - Public/private composition
  - Further evaluate “Recommended Network”
  - Identify & protect desired transit nodes
  - Adopt recommendations into TCRPC CEDS

- Explore High-Speed Ferry Service from Port
  - Analyze key routes (e.g., Florida & Bahamas)
  - Develop request for providers with PBC EDO

Creating Marina Villages & Destinations
Jupiter: Riverwalk/Marina Village
Palm Beach Gardens/North Palm Beach:
*PGA “Four Corners”*
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*PGA “Four Corners”*
West Palm Beach: *Waterfront Commons*

Lake Worth: *Jewel Cove*
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Lantana: *Public Point*
Boynton Beach: *Marina Village*

A Network of Intracoastal Destinations
Key Strategies: Marina Villages & Destinations

- Further Evaluate New Marina Villages
  - PBG/NPB ~ PGA “Four Corners”
  - Lake Worth ~ “Jewel Cove”
  - Lantana ~ “Public Point”

- Evaluate & Protect Additional Destinations
  - Conduct TOD-type analysis (visibility, access, surrounding uses)
  - Adopt appropriate FLUM & Zoning

Promoting Sustainable Economics
Economic Context

• Understanding the waterway as an economic system
• Existing demographic & market conditions
• Marine industries snapshot
• Preliminary economic outlook/forecasts
• Preliminary strategies & recommendations

Economic Context

Key Industry Sectors

- Marine Industries / Port of Palm Beach
- Hospitality / Tourism / Lodging
- “Workplace” Employment (office/industrial)
- Supporting Resident / Visitor Services (retail)
- Recreation
Study Area Overview

- From Atlantic Ocean to I-95
- 43 miles in length
- 52,700 acres
- Diverse mix of public & private uses
- Includes working & recreational waterfront

Existing Land Uses

- Notable findings:
  - 44% residential
  - Large percentage of land in institutional uses (public, civic, medical, education)
  - 9,000 acres of recreation/open space
  - 3,600 acres of “vacant” land — is it developable?
  - 6,500 acres of “workplace” uses
Study Area Demographics

- 426,500 residents in 180,000 households
- Comprises 32% of County: *fair share*
- Low densities: 3.4 HHs/acre
- If fair share is maintained, **90,000** new residents by 2020
- Suggests **38,000** new, permanent HHs (units)
- At current residential development patterns, **11,000+** acres required
- Seasonal residents likely to demand additional new units
- Growth likely to be concentrated within marina villages

Study Area Market Conditions

- **83 million SF** of “workplace” real estate provides **240,000 jobs**

- While the study area’s workplace inventory comprises 46% of County, it captures *only* 23% of absorption: **3.8 million SF/year**

- This suggests greater commercial growth in outlying County → *opportunity for intervention*
Study Area Market Conditions

- County attracts 4.7 million annual visitors—only 8% of overnight guests are foreign
- Activities include: leisure (33%), business (51%), conventions (7%)
- County contains 12,500 hotel rooms
- Marina villages contain 4,600 rooms (37% of total)
- 5-year trends: decline in annual occupancies from 73% to 63%

 marine-related jobs range from 16,500 to +/- 18,000
- Study area reportedly contains @ 6,000 jobs in +/- 350 firms

Marine Industries Snapshot

- Broadly defined industry with multiple sectors:
  - Boat building; boat dealers; shipping; repair; yacht brokers; rentals; marinas; electronics/equipment
- Marine industry “cluster” not clearly defined, difficult to quantify
- Reported county-wide marine-related jobs range from 16,500 to +/- 18,000
- Study area reportedly contains @ 6,000 jobs in +/- 350 firms
Marine Industries Snapshot

Megayacht Industry

- Highly specialized needs limit locations within Florida and US
- Development of industry cluster will require careful planning, coordination & investment
- Significant spin-off potential in sub-industry fields (e.g., carpentry, metal fabrication, marine electronics, boat manufacturing, provisioning)
- Protected industrial land use classifications & infrastructure improvements are key
Preliminary Economic Outlook

- Study area contains 240,000 jobs—44% of the County total
- If fair share is maintained, study area expected to add **50,000 new jobs** by 2020
- Suggests *demand* for up to **17 million SF** of workplace uses—where should it go?
- Marina villages expected to capture 25% of County population growth thru 2020
Key Strategies: **Sustainable Economics**

- **Establish “Working Waterfronts Task Force”**
  - Assemble & track marine industrial uses
  - Work towards model policies to protect working waterfronts
  - Evaluate financial incentives, deferred taxes, Florida “working waterfronts” designation

- **Explore Development of “Marine Industry Cluster”**
  - Identify & examine key industry sectors
  - Collect standardized industry data over multiple years

Key Strategies: **Sustainable Economics**

- **Establish “Megayacht Mile” Overlay**
  - Blue Heron Bridge south into West Palm Beach
  - Coordinate with PBC EDO & marine industry cluster
  - Inventory & assess lands, uses, skills, products
  - Amend into City & County Comprehensive Plans
  - Incorporate into TCRPC CEDS

- **Create Marine Industries Workforce Development Program**
  - Regional assessment of industry readiness
  - Training programs for employees
  - Internships & apprenticeships
  - Region-wide funding mechanism for job training
Key Strategies: Sustainable Economics

- Develop Marine District Overlay Zones
  - Working waterfront designations
  - Identify supporting ancillary uses

- Develop CIP for ICW Plan Implementation
  - Coordinate with local governments & TCRPC

- Create PBC Intracoastal Waterway Commission
  - ICW Plan implementation & funding
  - Benchmarking indicators
  - Signage & marketing theme
  - Event coordination

Thank You

www.tcrpc.org