East Central Florida Estuarine Restoration Team (ECERT) and the Indian River Lagoon National Estuary Program IRLNEP

Implementing a Network Governance Model for Enhanced IRL Restoration and Stewardship

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Acknowledgements
- Kathy Hill (AdCom Director)
- Belheim “Frank” Sakuma (COO)
- NERT Members
Northeast Florida Estuary Restoration Team (NERT)

• Created 2010
• Recognized a Problem:
  – Habitat restoration in Northeast FL was not strategic nor was it comprehensive.
• Solution:
  – Develop and implement regional and systematic habitat restoration planning approach through coordination with partners.
  – Focus on salt marsh, oyster reef, mangrove and seagrass habitats.
• Outcomes
  – N.E. FL Habitat Restoration Plan (2014)
  – To hear about NERT Progress: RAE Concurrent Session 2 Monday 2:00-3:00 pm in Parish Room
Model Example: Network Governance
NERT
Grassroots Alliance Focused on Coordinated Habitat Restoration

The Right People
Collaborative Environment
Best Available Restoration Science
Next Logical Step “Expand Network South”

Apply the Estuarine Habitat Restoration Planning Guide for FL to IRL

NERT steering committee provides leadership transition for ECERT

Align NERT & ECERT with the Reorganized IRLNEP
East Central Florida Estuarine Restoration Team (ECERT)

Restoration Partners
IRL-NEP Reorganization
What We Know…

Complex System

3 Waterbodies
Mosquito River
Banana River
Indian River

156 mi long
Straddles temperate & sub-tropical biological provinces
High Biological Diversity
Narrow/Shallow
Poorly Flushed - 5 inlets to ocean
Mostly Wind-Driven System

6 Counties/45 Cities
1.6 Million Residents
Multiple Agency Oversight
Economic Value ~ $7.6 B (ECF &TC RPCs, 2016)
Chronic Algal Blooms
Northern & Central IRL

- 2011 Algal Superbloom
- 2011 Secondary Bloom
- 2012 Brown Tide
- 2013 Brown Tide
- 2013 Unusual Mortalities
- 2015-2016 Green Bloom
- 2016 Brown Tide
- 2016 Extensive Fish Kill
- 60%+ Loss Of Seagrass Beds
- Fish Mortality Events

Photo: Tim Kozusko. Haulover Canal, Indian River Lagoon. August 2012
In Southern IRL

Combination of Impacts

Chronic Stressors
- Acute Events
- Connected Complex Watersheds
Bottom Line: Everglades Restoration is Connected to IRL Restoration

Billions of gallons discharged
1998
2013 Lost Summer
2016 Lost Year
Responding to a Changing Ecosystem

• IRL NEP Designated 1990 & Established in 1991. (Host for 25 years – SJRWMD).

• 2011-2013 Events provided a catalyst to rethink the NEP structure & increase annual funding.

• IRL Council created as a new Florida Special District through Interlocal Agreement (Feb. 2015).

• IRL Council designated as new host of the IRL NEP Program (January 8, 2016).
IRLNEP Leading Change
Network Governance

The scale & complexities of natural resource management require that individuals and organizations:

- Work across agencies, jurisdictions, and land ownerships.
- Exchange ideas, build relationships, identify common interests, explore options.
- Work together.
- Solve problems of mutual interest.
- Recognize that we cannot solve a particular problem or issue by working alone.

IRL NEP Management Conference Structure

“Network Governance”

IRL Council

Management Board & Finance Subcommittee

STEM Advisory Committee

Citizen Advisory Committee

Contributing Scientists and Engineers

IRLI² (Innovators & Investors)

Citizen Ambassadors

Florida Sunshine Laws Apply

IRL Council/NEP staff support all levels of the Management Conference

Committee interactions with the general community are for fact finding and knowledge gathering only.
IRL Council

Management Board

- Bob Ulevich (Chair Management Board), Polymath Consulting Services, Inc.
- Jeff Beal, Florida Fish & Wildlife Conservation Commission
- Vanessa Bessey, FL Dep't. Agriculture & Consumer Services
- Blais, Quentin L. Hampton Associates
- Bill Tredik, St. Johns River Water Management District
- Tom Carey, Volusia County
- Dr. Anthony Catanese, Florida Institute of Technology
- Mark Crosley, Florida Inland Navigation District
- Jim David, Citizen
- Megan Davis, FAU/Harbor Branch
- Stephany Eley, Space Coast League of Cities
- Monte Falls, City of Vero Beach
- Joseph Falzone, Financial Subcommittee
- Chris Ferraro, FL Department of Environmental Protection
- Layne Hamilton, USFWS, Merritt Island NWR
- Clay Henderson, Stetson University
- Linda Hudson, Treasure Coast League of Cities
- Dianne Hughes, Martin County
- Mitch Hutchcraft, SFWMD, King Ranch

- George Jones, Ocean, Research and Conservation Association
- Bill Kerr, BKI, Inc. Consulting Ecologists
- Kathy LaMartina, South Florida Water Management District
- Vince Lamb, Citizen
- Barbara Lenczewski, FL Department of Economic Opportunity
- Mike Littell, US Sailing Center, Financial Subcommittee
- Mike McCabe, Melbourne-Tillman Water Control District
- Robert Musser, Canaveral Port Authority
- Judy Orcutt, Citizen
- Lynne Phillips, NASA/Kennedy Space Center
- Marty Smithson (Vice Chair), Sebastian Inlet Tax District
- Thomas Stratton, Financial Subcommittee
- Laurilee Thompson, Brevard County Tourist Development Council
- Charles Vogt III, Florida Department of Health
- Joel Zwemer, Citizen, Financial Subcommittee
- Captain Frank Catino (Chair) IRLNEP Citizens’ Advisory Committee
- Chuck Jacoby, SJRWMD, Chair, STEM Advisory Committee
Citizens Advisory Committee

Volusia County (4)
- Katie Tripp
- Jessie Wayles
- Billy Rotne
- Dennis Dickerson

Brevard County (5)
- Leesa Souto
- Keith Wisten
- Frank Catino
- Mike Coneen
- Sam Lopez

Indian River County (4)
- Ken Grudens
- Gary Ritter
- Heather Stapleton
- Cynthia Vande Voorde Hall

St. Lucie County (3)
- David Brigida
- Dave Carlson
- Billy Gibson

Martin County (4)
- Becky Bruner
- Zack Jud
- Crystal Lucas
- Jim Moir

IRL NEP Community Alliance

Volusia County

Brevard County

Indian River County

St. Lucie County

Martin County

IRL Council/IRL NEP Staff
Science, Technology, Engineering & Monitoring Advisory Committee

**STEM AC**
(Advisory to IRL NEP)

- UCF
- FAU/HBOI
- UF
- FFWCC
- SJRWMD
- SFWMD
- SWCD
- FIT
- Stetson
- Bethune Cookman
- ERAU
- DSC
- EFSC
- IRSC
- ORCA
- MRC
- FOS
- TNC
- HSWRI
- Smithsonian
- MDC
- Independent

**IRL Council/IRL NEP Staff**

**STEM Community Task Forces/Working Groups (Fact-Finding)**

- Volusia County Staff
- Brevard County Staff
- Indian River County Staff
- St. Lucie County Staff
- Martin County Staff

**Driving CCMP revision with best available science**

- Example: Climate Change SLR Task Force
- Example: Habitat Restoration (NERT/ECERT)
- Example: HAB/Nutrient Task Force (IRL Consortium)
- Example: Economic Analysis
Change Leadership vs. Change Management

Effective stewardship of a complex, large scale estuary requires a network governance model that is able to respond and adapt to changing ecological, social, political and economic landscapes.
The Indian River Lagoon

“One Lagoon – One Community – One Voice”