TECHNICAL WORKING GROUP MEETING NO. 2

Banana Bay Resort & Marina
Coconut Conference Room
December 13, 2006 ❖ 9:30 am – 3:00 pm

Agenda

- Welcome
- FKRAD Consensus Summary
- Meeting with USEPA
- Management Goals
- Stakeholders Agreement
- Schedules
- Information Requests
- Action Items

FKRAD Consensus Summary

- Formal Documentation Process
- What the Working Group Has Agreed To

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Documentation Process

- Complex Process With Discussion of Many Issues
- Formalizes Decisions as They Occur In Technical Working Group
- Attempts to Minimize Back-tracking

Consensus Summary

PROCESS ISSUES

1. While the FKRAD Report Will Be Facilitated By FDEP, It Will Be "Owned" by The Stakeholders
2. Concern That Key Stakeholders Must Participate
3. A Presentation to the Water Quality Steering Committee is Warranted
4. EPA Should Be Reminded That The Existing Program Was Endorsed
5. Lack Of Funding Is Slowing Down The Rate Of Progress On Reducing Annual Nutrient Loads

Consensus Summary

SCIENCE ISSUES

6. Nearshore Waters In The Florida Keys Are Impaired.
7. Causal Relationships Of Impairments Are Not Well Documented At This Time.
8. Existing Data Appear Reasonable To Proceed With RAD; But Not For TMDLs.
9. Local Programs Are Likely To Reduce Annual Nutrient Loads.
10. Existing Ambient Monitoring Should Be Promoted As Much As Possible To Achieve The Requirements Of The FKRAD.

FDEP-USEPA Meeting December 8th

- Meeting Objective and Purpose
- Discussion and Key Points
- Action Items

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EPA & FDEP Meeting Attendees

- **FDEP**
  - Jerry Brooks
  - Eric Livingston
  - Fred Calder
  - Pat Fricano
  - Nathan Bailey
- **Consultants**
  - Scott McClelland
  - Steve Lienhart
- **EPA**
  - Drew Bartlett
  - Fred McManus
  - Dan Scheidt
  - Allison Humphris
  - Annie Godfrey
  - Fritz Wagner
  - Richard Harvey

FDEP/EPA Meeting Purposes

- Orient EPA Staff to the Unique Conditions in the Keys
- Briefly Review Previous Studies and Management Actions
- Obtain EPA Staff Input on EPA Guidance Regarding "Reasonable Assurance" for The Florida Keys
- Identify the "Sticky" Points for the FKRAD

FDEP/EPA Meeting Conclusions

- **EPA Issues and Concerns**
  - How To Define The Impairments?
  - What Are The Targets?
    - ✓ Water Quality
    - ✓ Living Resources
    - ✓ Known Linkages
    - ✓ Other Types of Pollutants
  - How To Prove That The "Problem" Is Resolved (*Especially If Background Is Above Target*)?
  - Can "Restoration" Be Demonstrated?
  - How To Deal With "Assurance" Relative To Guidance ("Required Management Programs")
  - The RAD Must Be Sufficient To Take To Court In Response To Environmental Group Challenges

FDEP/EPA Meeting Conclusions

- **EPA Issues and Concerns** (continued)
  - How Much Load Comes From Keys And How Much Comes From Outside?
  - Can Loads Be Demonstrated?
  - Concern Over Impacts on the Reef Tract
  - Concerned About Water Quality in Canals
    - ✓ Removal of Anthropogenic Loading
    - ✓ Continuing Natural Sources (Wrack)
    - ✓ Implications of the Little Venice Canal WQ Study on Cesspits Relative to the Gradual Migration Of Nutrients (Residuals After Removal of Sources) Into the Canals
    - ✓ How Long Before These Discharges Are Insignificant?
    - ✓ Flushing of Dead-end Canals
  - Coastal Erosion And Limestone/Marl Turbidity
  - Can a "Phased RAD" Be Accommodated?

FDEP/EPA Meeting Conclusions

- **Significant EPA Comments**
  - Make Sure To Define in the RA Document
    - ✓ What You Know and Don't Know Relative to Water Quality, Causal Relations, and Relation to Living Resource
    - ✓ What You Can Reasonably Model
  - State and Local Ordinances Count Toward Commitments
  - Stakeholder Agreement Can Provide Assurances
  - We Stand A Chance Of Cleaning Up Water Adjacent To The Keys (The Bubbles) Vs. Addressing Pollutants In The Offshore Waters
  - Funding Is Recognized As A Significant Implementation Issue

FDEP / EPA Meeting Conclusions

- **Good News!**
  - "Bubble" Concept Accepted
  - No Fatal Flaws Were Identified
  - EPA Is In General Agreement With The Current FKRAD Approach
  - TMDLs Mandated by Consent Decree Aren't Due to EPA Until 2011 (We Have Some Time)
- **Conclusion:**
  Keep Moving Forward On The Current FKRAD Path

MANAGEMENT GOALS

- RAD Requirements
- General Management Goals
- Linkages

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URS Corporation

RAD Requirements

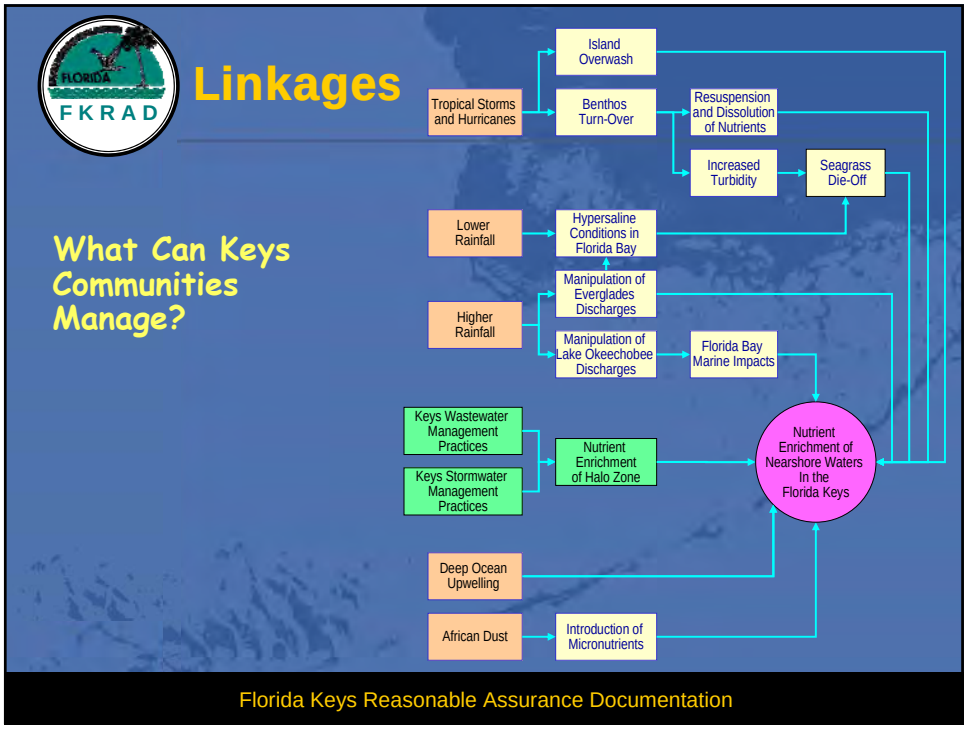
- A description of the water quality-based targets or aquatic ecological goals (interim and final) for the pollutant(s) of concern;
- the averaging period for any numeric water quality goals; and,
- a discussion of how these goals will result in the restoration of impaired designated uses.

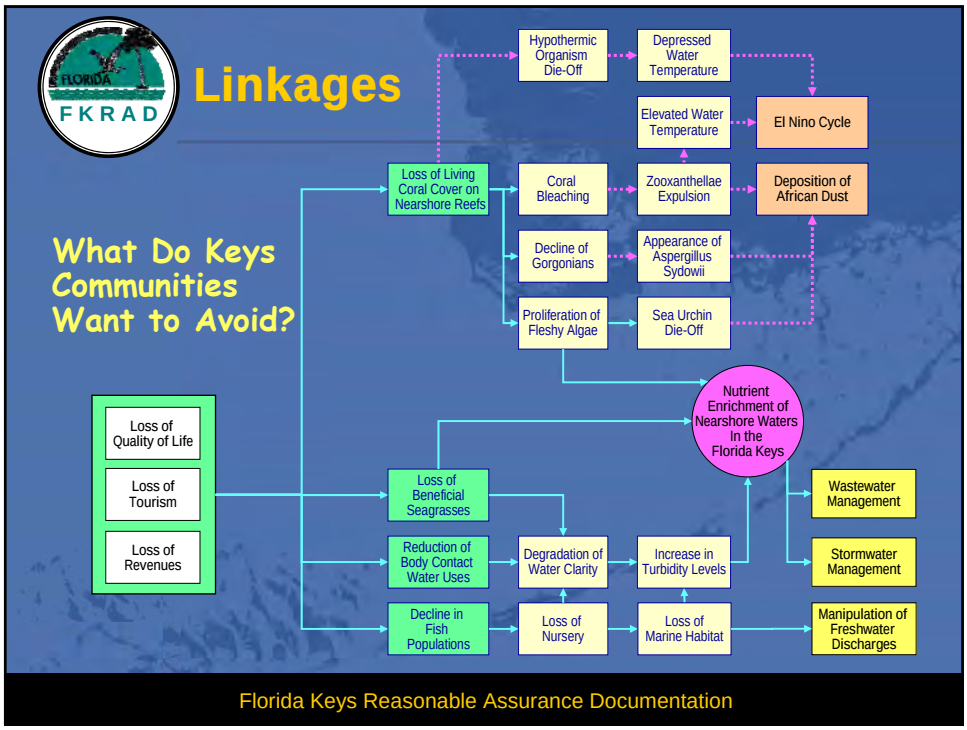
From FDEP RA Summary

General Management Goals

- **Monroe County 2010 Comp Plan:**
  - To manage future growth to enhance the quality of life, ensure the safety of County residents and visitors, and protect valuable natural resources.
- **KLWTD Wastewater Facilities Plan:**
  - To restore the health and economic vitality of the nearshore waters.
- **Monroe County Sanitary Wastewater Master Plan**
  - To provide an equitable, ecologically sound and economical implementation strategy for managing wastewater and improving the water quality in the Florida Keys.

Protect Public Health, Safety and Welfare + Protect Water Quality and the Environment


FLORIDA
FKRAD
Linkages
What Can Keys Communities Manage?
Tropical Storms and Hurricanes
Island Overwash
Benthos Turn-Over
Resuspension and Dissolution of Nutrients
Increased Turbidity
Seagrass Die-Off
Lower Rainfall
Hypersaline Conditions in Florida Bay
Higher Rainfall
Manipulation of Everglades Discharges
Manipulation of Lake Okeechobee Discharges
Florida Bay Marine Impacts
Keys Wastewater Management Practices
Keys Stormwater Management Practices
Nutrient Enrichment of Halo Zone
Nutrient Enrichment of Nearshore Waters In the Florida Keys
Deep Ocean Upwelling
African Dust
Introduction of Micronutrients
Florida Keys Reasonable Assurance Documentation


FLORIDA
FKRAD
Linkages
What Do Keys Communities Want to Avoid?
Hypothermic Organism Die-Off
Depressed Water Temperature
Elevated Water Temperature
El Nino Cycle
Loss of Living Coral Cover on Nearshore Reefs
Coral Bleaching
Zooxanthellae Expulsion
Deposition of African Dust
Decline of Gorgonians
Appearance of Aspergillus Sydowii
Proliferation of Fleshy Algae
Sea Urchin Die-Off
Nutrient Enrichment of Nearshore Waters In the Florida Keys
Loss of Quality of Life
Loss of Tourism
Loss of Revenues
Loss of Beneficial Seagrasses
Reduction of Body Contact Water Uses
Decline in Fish Populations
Degradation of Water Clarity
Loss of Nursery
Increase in Turbidity Levels
Loss of Marine Habitat
Wastewater Management
Stormwater Management
Manipulation of Freshwater Discharges
Florida Keys Reasonable Assurance Documentation

Very Localized Management Goals

Example: Return of Scallops In Tampa Bay

??????

FKRAD STAKEHOLDERS AGREEMENT OVERVIEW

- Purpose of the Agreement
- Review of Shell Creek Stakeholders Agreement
- Form and Content of the Document
- Individual Stakeholder Commitments

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URS Corporation

Purpose of the Agreement

- Identify Participants
  - Stakeholders/Implementers
  - Regulators, Programs, and Other Interests
- Define Management Activities
- Establish Responsibilities
  - What You Agree to Do In Your Community
- Anticipated Benefits
- Confirm Participation

Geographic Scope - Options

- Possibilities:
  - Whole Keys
  - Upper – Middle – Lower
  - Multiple Islands
  - Single Island
  - Single Jurisdiction
  - Some Combination of These
- EPA Questioned This and Ultimately, Must Concur With Choice

Shell Creek Stakeholders Agreement Structure

- Background
- Mission
- Guiding Principles
- Organization
  - Education, Outreach, Implementation
  - Stakeholder Involvement
  - Measures of Success
- Signatory Pages

Shell Creek Stakeholders Agreement – Analysis

Advantages of Use

- Includes Guiding Principles
- Identifies Measures of Success
- Signature Process Which Addresses EPA Requirement of "Assurance"

Disadvantages of Use

- Limited Watershed
- Simple Hydrologic Setting
- Suggests Centralized Implementation Structure
- Fails to Differentiate Responsibilities
- No Specific Management Actions

FKRAD Stakeholders Agreement

- Likely To Be Geographically Differentiated
- May Be Multiple Agreements
- No Centralized Implementing or Reporting Entity
- Specific Identification of Responsibilities and Management Actions In Agreement
- Allow 3rd Party Endorsements

Proposed Form & Content of the Stakeholder Agreement

- Background
- Mission
- Guiding Principles/Objectives
- Management Actions
- Stakeholder Commitments
- Measures of Success
- Implementation Schedule
- Signature Page(s)

Individual Stakeholder Commitments

- Specific Management Actions
- Specific Service Areas
- Investments
  - Land
  - Construction
  - Operations
- Schedule
- Reporting of Accomplishments

SCHEDULES

- Technical Working Group Meetings
- FKRAD Documents
- Stakeholder Agreements
- Stakeholder Support Activities
- Public Information and Involvement Activities

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Initial Working Schedule

- **Technical Working Group Meetings**
  - Meeting 1: November 17, 2006
  - Meeting 2: December 13, 2006
  - Meeting 3: January 25, 2007
  - FKNMS Steering Committee Meeting January 30, 2007
  - Meeting 4: **Revised Date →** February 23, 2007
  - Meeting 5: March 23, 2007
- **And Maybe . . .**
  - Meeting 6: April 26, 2007
  - Meeting 7: May 24, 2007
  - Meeting 8: June 12, 2007

Florida Keys Reasonable Assurance Documentation

Initial Working Schedule

- **Stakeholders Agreement**
  - Release of Draft Agreement: Feb/Mar 2007
  - Distribution of Final Agreement: Mar/Apr 2007
  - Execution of the Final Agreement: Apr/May 2007

  Subject to change based on additional TWG Meetings
- **FKRAD Document**
  - Digital Release of Draft Document: Jan/Feb 2007
  - Digital Release of Final Document: Mar/Apr 2007
  - Distribution of Final Printed Document: Apr/May 2007

  Subject to change based on additional TWG Meetings

Florida Keys Reasonable Assurance Documentation

INFORMATION REQUESTS

- Data On Local Problems And Issues
- Local Keys Water Quality Data
- Community Management Goals And Management Actions
- Community Issues And Concerns
- Specific Issues And Concerns That Are Unique To Keys

Steve Lienhart
URS Corporation

Information Request

- **Local Data to Fill Gaps**
  - Descriptions of Local Problems
  - Local Information on Impaired Waters
- **Existing and Pending Local Programs**
  - Water Quality Targets
  - Aquatic Ecological Goals
  - Programs and Management Actions
  - BMPs and Water Quality Capital Projects
  - Annual Regulatory, Enforcement and O&M Programs
  - Procedures for Monitoring and Reporting Results
  - Proposed Corrective Actions
- **Specific Information Needs Will Be Discussed at Each TWG Meeting**

Get Data Into STORET!

ACTION ITEMS

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Action Items

DATA AND STUDIES
- Water Quality Data NOT in FL-STORET
- Aquatic Ecosystem Data and Studies
- Data on Local Issues

IDENTIFICATION RESOURCE MANAGEMENT GOALS
- Comprehensive Plan Element
- Wastewater Plans
- Stormwater Management Plans
- Community Concerns

IDENTIFICATION OF MANAGEMENT ACTIVITIES
- Completed Projects
- Committed Plans
- Funded CIP Projects
- Unfunded CIP Projects and Program Elements
- Regulations

Next Meeting

TWG Meeting Number 3
MANAGEMENT ACTIONS

January 25th ❖ 9:30AM – 3:00PM
State Office Building, Conference Room 104
Marathon, Florida

Questions?

One Last Thought