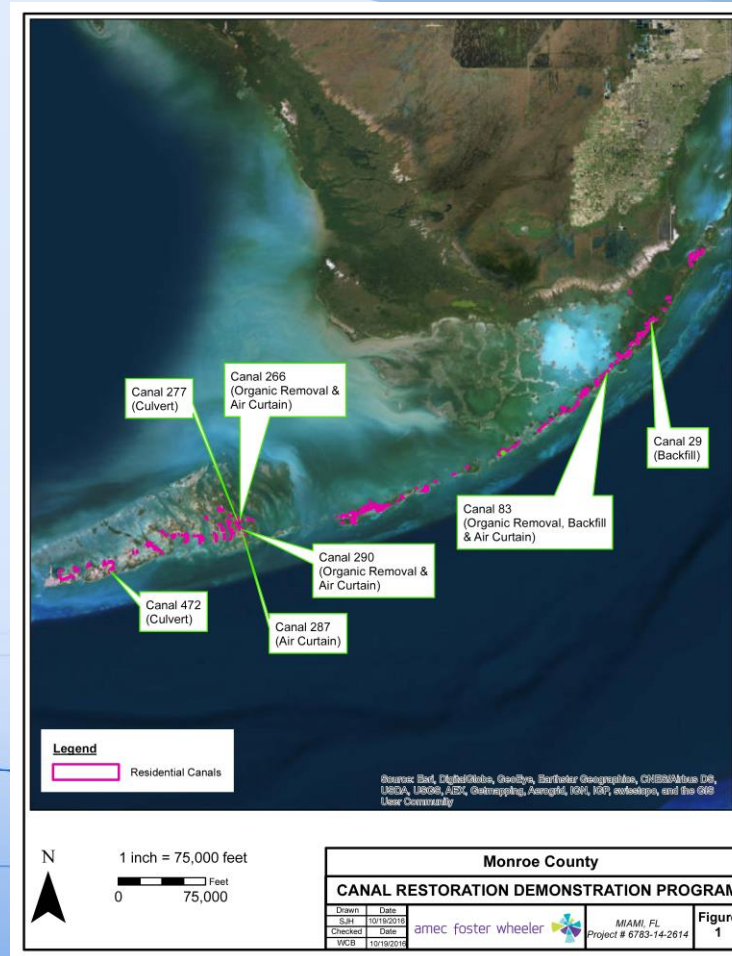


# Monroe County Canal Restoration Project Updates

## WQPP Canal Restoration Advisory Subcommittee Meeting - January 11, 2017



# Air Curtain Installation Project - Canal #290 The Avenues, Big Pine Key

- A. County completed a \$700K organic muck removal project in March 2016
- B. Homeowner weed gate was reinstalled but is unable to prevent seaweed from entering the canal
- C. Homeowners requested the County to install a new air curtain
- D. The County advertised an RFP for installation of the air curtain on December 21, 2016
- E. **DEP provided \$50K towards the \$100K construction cost**
- F. Construction to be completed by June 2017



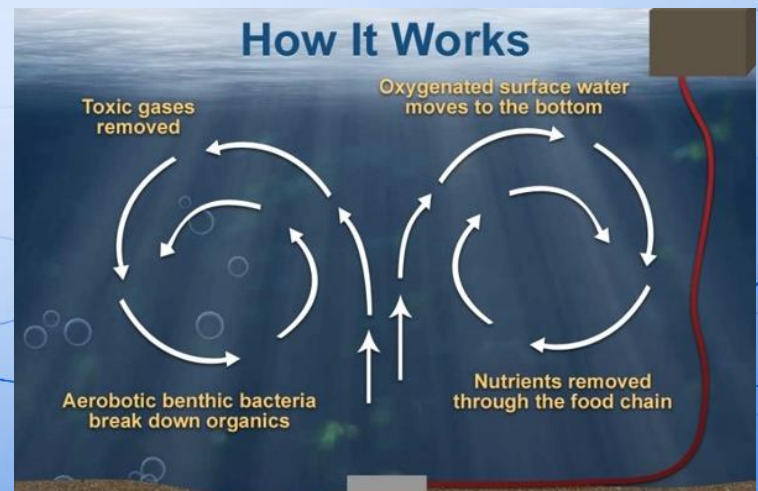
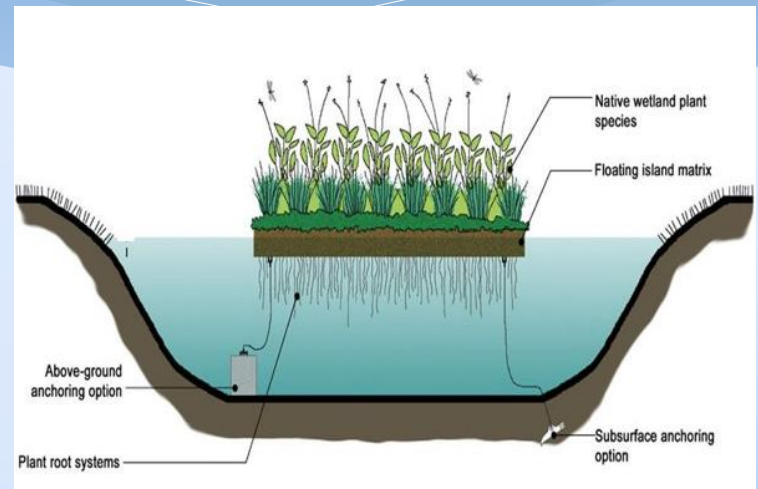
# Organic Removal, Backfilling, and Air Curtain Project - Canal #83 Rock Harbor, Key Largo

- A. Permits have been received from the federal, and state agencies. County permit is pending approval for temporary staging area.
- B. Adventure Environmental, Inc. was selected by committee based on the criteria in the RFP.
- C. \$1,524,040 Construction Contract approved by BOCC with conditions on the temporary staging area.
- D. Pre-Construction kick off meeting to discuss contractual items held on December 7, 2016.
- E. Funding paid from the \$2 Million budget last year.



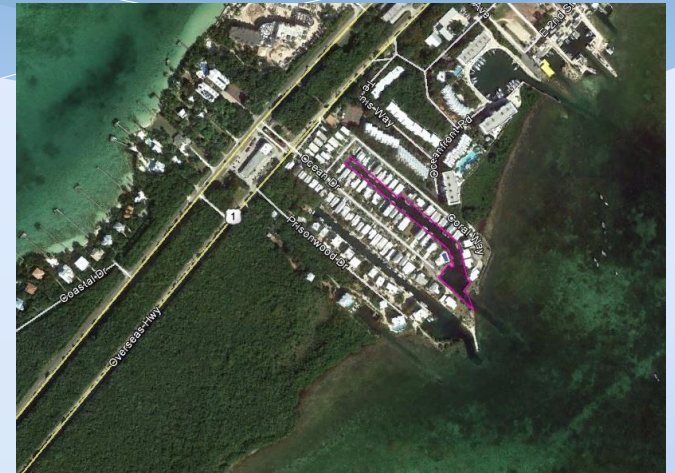
# Augmented Aeration Projects - Canals #48, #59, #79, #80, Key Largo

- A. Working on access agreements for staging equipment and RFP.
- B. Project may include augmented aeration such as bio bugs, macro algae, or applicable means of improving water quality
- C. Potential permitting issues
- D. A selection committee will evaluate the proposals based on criteria in the RFP. Does DEP, FWC or anyone else want to review the proposals?
- E. Funding for project potentially dependent on approved funding formula and funding commitment from homeowners.



# Backfilling Project - Canal #75 Rock Harbor, Key Largo

- A. Obtained site access agreement for temporary staging of material and equipment. No O&M or long term access term need for the project.
- B. Working on design, permitting, and contractor procurement
- C. Funds to be provided by FY17 \$1.5 Million State Stewardship Grant Allocation



# EPA 2016 South Florida Initiative Grant Project

- A. EPA provided \$110,582.30 to the County to fund a portion of the CMMP Part III A to address data gaps
  - B. Monroe County will provide \$17,029.75 in match funding
  - C. \$28,188 in work remains unfunded for conceptual designs.
  - D. The scope includes:
    - 1. Collection of expanded Dissolved Oxygen (DO) data for 180 Fair and 131 Poor raked canals (site visits to each)
    - 2. Collection of sediment cores from 15 canals that have documented organic detritus bottom sediment loading greater than 0.75 feet in thickness to evaluate the potential for reusing canal sediments in their planning and cost evaluation of organic removal and backfilling
- \* Grant approved at December BOCC

# Permitting Issues

## 1. SFWMD and FKNMS

- i. No issues

## 2. USACE

- a) Canal restoration technologies were added to the Jacksonville District Biological Opinion state programmatic review was submitted to NMFS PRD in 2016, pending approval. Technologies proposed for inclusion were organic removal, backfilling of deep canals, and culverts. Weed barriers were not included by National Marine Fisheries Service Protected Resources Division (NMFS PRD) and will be reviewed on a case by case basis.
- b) NMFS PRD has recommended a biological opinion for the Canal Restoration Technologies to be completed for the Keys to expedite review process.

# Canal Restoration Program Planning

- A. 2<sup>nd</sup> BOCC Canal (Financing) Workshop was held on November 14, 2016 to discuss:
  - 1. County's Canal Restoration Program
    - i. FKRAD
    - ii. Water Quality and Benthic Resources
    - iii. Poor and Fair Canal Restoration Costs (229 Canals)
  - 2. Funding mechanism
    - i. MSBU was selected as mechanism to proceed with for O&M for current Air Curtain demonstration projects
  - 3. Funding Sources
    - i. Restore funds
    - ii. Stewardship funds for FY17 approved for canal restoration program
    - iii. No future County funds available
    - iv. Residents to participate in paying capital and O&M costs
  - 4. BOCC Motions
    - i. Prior to moving forward with any future Canal Restoration expenditures, a scientific study should be completed to determine the effects of the impaired canals in the keys on near shore waters which would include an analysis of the wastewater projects and the canal restoration demonstration projects
    - ii. Funding formula for future Canal Restoration Projects to be vetted through the canal subcommittee.



# Canal Funding Opportunities

- A. RESTORE Local Pot 1 - \$478K
  - i. Application for the selected projects needs to be completed in February 2017
  - ii. Allocated in Spring 2017
- B. RESTORE Gulf Consortium Pot 3 - \$20 Million
  - i. Application for the selected projects needs to be completed by April 2017
  - ii. Allocated per year over 15 years – about \$1 Million/year
  - iii. Paid out through the State Expenditure Plan
  - iv. Funds available Fall 2018
- C. State Stewardship Act - \$0-5 Million
  - i. No guaranteed allocation per year
- D. Residents- must pay a portion of capital costs to be considered and pay 100% of O&M under an MSBU

# Future Canal Selections – Ranking Methodology

A. Subcommittee previously approved the following ranking methodology criteria for the Canal Restoration Demonstration Projects:

➤ Phase 1:

1. WQ Summary(Poor and Fair)
2. WQ Ranking (Highest to Lowest)

➤ Phase 2:

1. Ease of Implementation
2. Ease of Permitting

# Future Canal Selections – Ranking Methodology – Cont.

A. Proposed modifications needed for future canal projects with the following criteria:

➤ Phase 1:

1. **Unincorporated Monroe County**
2. WQ Summary (Poor and Fair)
3. WQ Ranking (Highest to Lowest)
4. **Restoration Cost < \$1.5 million**
5. **Completed Canal Restoration Demonstration Projects**
6. **Homeowner Financial Contribution**
7. **Signed access agreements**
8. **Signed forms from homeowners**

➤ Phase 2:

1. Ease of Implementation
2. Ease of Permitting