

Monroe County, Islamorada and Marathon Canal Restoration Project Updates FKNMS WQPP Steering Committee Meeting – April 18, 2019



Rhonda Haag
Monroe County

wood.

Greg Corning
Wood



Peter Freeza
Islamorada



George Garrett
Marathon

Presentation Topics

- 1. USDA NRCS Marine Debris and Sediment Removal**
- 2. RESTORE funding**
- 3. Canal Restoration Projects – Canal #266 Air Curtain; Canal 132 Injection Well; Canal 257 – Air Curtain / Culvert**
- 4. EPA Grant - Canal Management Master Plan - Guidance Document for municipalities and unincorporated Monroe County**
- 5. Canal / RAD Monitoring**

1. USDA NRCS Marine Debris and Sediment Removal

- **172** canals approved for **marine debris removal** have been completed
- 4 approved Temporary Disposal Management Areas (TDMAs) throughout the 6 areas have been cleaned out.
- **10** canals for **sediment removal** and the anticipated start date is April 15, 2019.
 - DSR#3 – Big Pine Key - **5** canals
 - DSR#5A - Islamorada - **2** canals
 - DSR#5B – Marathon - **3** canals



Sediment Removal - Permit Status

- **DSR#3 – Big Pine Key**
 - USACE – Notice of intent issued, waiting on FDEP authorization to issue
 - FDEP – Waiting on SSL determinations
 - FKNMS – permit issued
 - County – permit application submitted, pending authorization
- **DSR#5A - Islamorada**
 - USACE – Waiting on final authorization
 - FDEP – permit issued
 - FKNMS – permit issued
 - Village – permit application submitted, pending authorization
- **DSR#5B - Marathon**
 - USACE – permit issued
 - FDEP – permit issued
 - FKNMS – permit issued
 - City – permit issued



Project Metrics to date

1. **100% Canals Cleared of Debris**
 - 172 out of 172 canals complete
2. **0% Canals Cleared of Sediment**
 - 0 out of 10 canals complete
3. **43% of the Budget Spent**
 - \$19.5 Million of \$45.8 Million Construction Budget
4. **100% of the original Schedule complete**
 - 220 days out of 220 days of original schedule
5. **89% of the original Schedule complete**
 - 60 Day extension approved – new end date of **May 20, 2019**.
 - 248 days out of 280 days of original schedule
 - Based on delays with receiving the permits, contingency for delays such as staging area approvals, weather, dewatering, and hauling logistics, the County has submitted a **90 day no cost time extension** for the **10 approved sediment removal canals**. If approved by NRCS it would extend the schedule from **May 20, 2019 to August 18, 2019**.



NRCS Grant Summary

▪ NRCS Funds Available -	\$49.2 Million
▪ Monitoring	- 3.4 Million
▪ Debris and sediment removal	- <u>28.2 Million</u>
Funds Remaining	\$17.6 Million

County staff seeking NRCS approval for formerly rejected canals and additional time extension:

- Estimated **145** for marine debris removal
- Estimated **24** for sediment removal
- Hopeful entire \$49 Million NRCS budget would be spent
- Completion date of **October 31, 2019** estimated.

2. RESTORE FUNDING

A. RESTORE Local Pot 1 - \$1.2 Million

- i. TNC - \$578K; Monroe County - \$478K; Islamorada - \$128K
- ii. Applications submitted to Treasury
- iii. TNC grant awarded; subrecipient agreement on April BOCC
- iv. County and Islamorada pending award

B. RESTORE Gulf Consortium Pot 3 - \$19 Million

- i. Application for the selected projects to be completed and submitted no later than October 4, 2019
- ii. Paid out through the State Expenditure Plan
- iii. Must follow federal grant guidelines, rules and restrictions

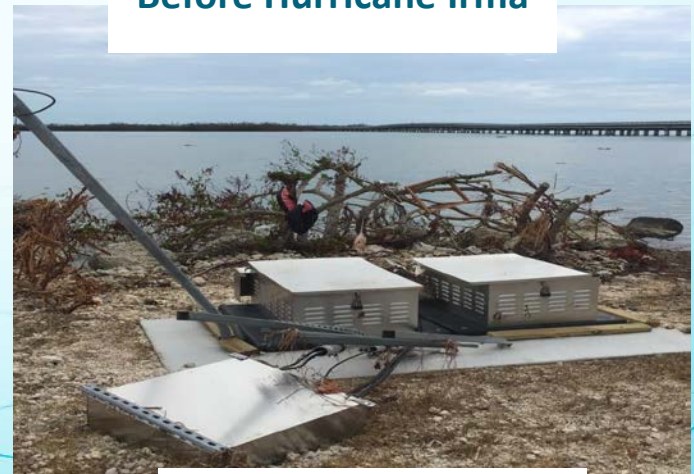
3. Canal Restoration Projects

Canal #266 Air Curtain – Big Pine Key

1. Air curtain destroyed in Hurricane Irma
2. Minor redesign required by FEMA for increased resilience
3. Design, permitting and procurement assistance for Canal #266 air curtain on Witters Lane on Big Pine Key is underway.
4. County setting up \$75/month/lot assessment to pay for operations and maintenance: 1st ASSESSMENT!



Before Hurricane Irma

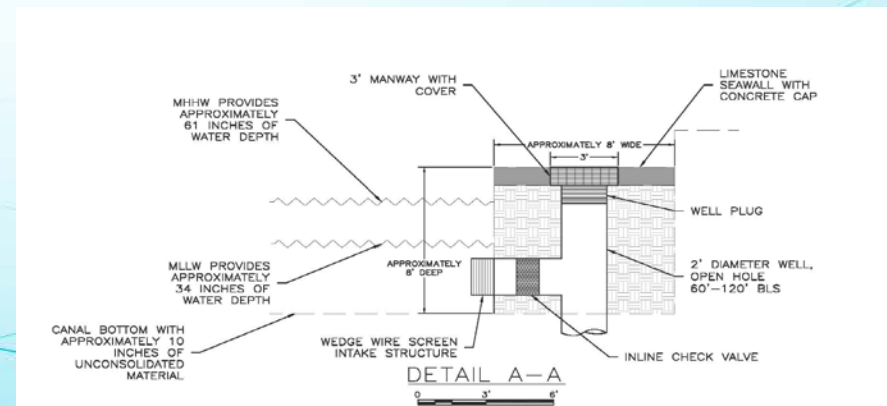
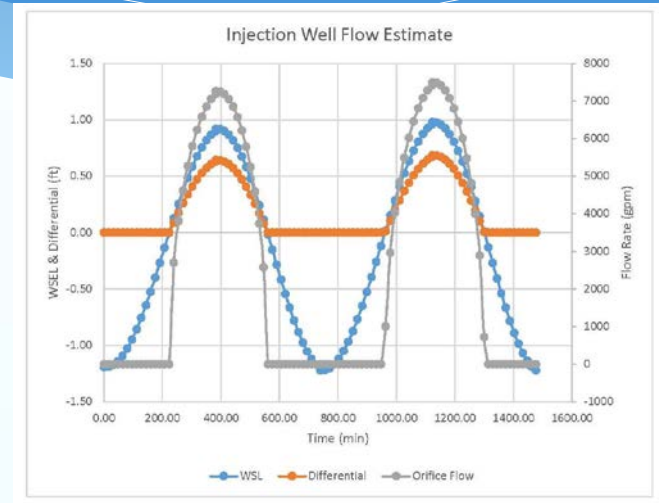


After Hurricane Irma

Canal Restoration Project

Canal #132 Injection Well - Islamorada

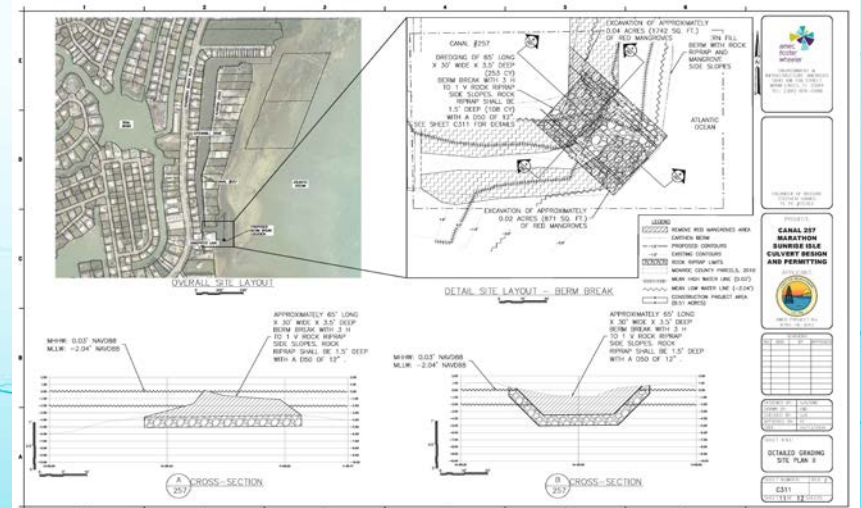
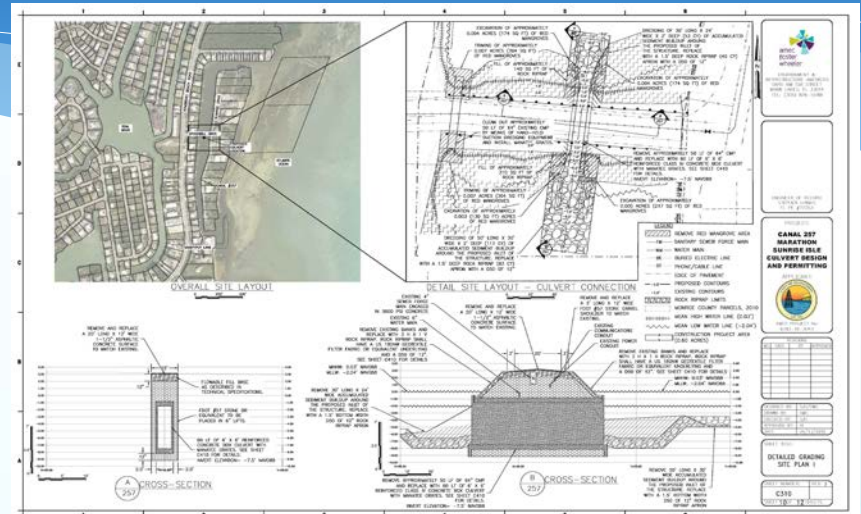
1. Evaluate the feasibility of using a **gravity flow injection well** to increase circulation in poor flushing residential canal system
2. Conceptual design is a gravity flow injection well system comprised of a wedgewire intake structure, a check valve, and a two foot diameter injection well.
3. Constructed of a two foot diameter PVC casing advanced to sixty feet below land surface, with an open hole interval from 60 feet to 120 feet below land surface
4. Estimated that a maximum injection rate of approximately **700 gallons per minute**
5. Pre application meeting with FDEP held on April 15, 2019



Canal Restoration Project

Canal #257 Air Curtain / Culvert - Marathon

1. Residents just completed a maintenance dredging for the northern section of the canal.
2. City is working on finalizing the RFP for the culvert and berm break that was designed using FDEP WQ protection funds
3. City is reviewing proposal from Wood for the design, permitting, and procurement for an air curtain at north side of the Canal



4. EPA Grant - Canal Management Master Plan - Guidance Document

EPA provided a \$100,456 Grant to the County to complete Scope of Work:

Task 1: Update CMMP database

- update water quality summaries (Good, Fair and Poor)
- lessons learned from the implementation of the canal restoration demonstration projects
- FIU water quality and benthic monitoring results

Task 2: Update to the CMMP to develop a Guidance Plan

Evaluate strategies to reduce costs as part of a countywide implementation of canal restoration technologies:

- economies of scale
- effect of grouping similar technologies into a single project
- grouping restorations on a geographical basis
- pre-qualifying vendors
- policy and assessment criteria

2018 EPA Grant Task 2 – Guidance Document

The purpose of this document is two fold:

- 1. Establish a framework for the selection of canal restoration projects**
- 2. Provide strategies for implementation of canal restoration projects**

Document outline / key topics to be presented:

- Program introduction and brief program summary,**
- Approval framework and document acceptance,**
- Process of implementing canal restoration projects,**
- Strategies for improving cost efficiencies.**

Canal Restoration Guidance Document

4-Step Process

Step 1:

In December 2018, a preliminary outline was developed and reviewed with select a group of stakeholders which included:

- Officials from local municipalities, the US EPA, and the FDEP
- Working group recommended presenting a revised outline to the WQPP Steering Committee

Step 2: Revise outline based on recommendations from the review team

Based on recommendations, the document focuses on three key aspects:

- Approval framework and document compliance
- Implementation guidance (e.g. contracting, design, permitting, bidding, construction, and oversight)
- Cost efficiencies

*Discussion regarding canal monitoring and detailed history were eliminated as key topics.



Canal Restoration Guidance Document

4-Step Process (continued)

Step 3: Develop a draft document that will be made available for review by stakeholders.

- A draft copy will be provided on Monroe County's Canal Restoration Website,
- Comments can be submitted via email.

Step 4: Revise guidance document and adoption by users



5. Canal and RAD Water Quality Monitoring

1. Canal Water Quality Monitoring

- a) TAC has reviewed and provided comments on the scope of work
- b) Contract to be taken to May 22nd BOCC for approval

2. RAD Water Quality Monitoring

- a) Monroe County executed contract with U of Miami on August 15th, 2018
- b) FDEP providing 50% match funding; Monroe County providing 50% match funding
- c) FDEP reviewing QAPP
- d) U of Miami has completed a dry run of all stations within the Florida Keys to understand logistics
- e) Need to complete ILA's with County and municipalities to split expenses

• Monroe County	\$116,539.66
• Marathon	\$ 22,198.03
• Key West	\$ 16,648.52
• Islamorada	\$ 19,423.28
• Layton	\$ 5,549.51

Presentation Summary

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- 2. RESTORE funding for canal projects**
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The End