

**Meeting Minutes**  
**WATER QUALITY PROTECTION PROGRAM CANAL**  
**RESTORATION ADVISORY SUBCOMMITTEE**

August 22, 2013

9:00 a.m. – 12:00 p.m.

Marathon Government Center, Board Meeting Room  
2798 Overseas Highway, Marathon, FL 33050

**Member and Advisory Attendees:** Gus Rios - FDEP; Steve Blackburn – EPA; George Garrett – Marathon; Susan Sprunt – Islamorada; Skip Haring – Layton; Billy Causey – NOAA; John Hunt – FWC; See attached attendance record. Rich Jones attended for Mayor Neugent.

**Members not in Attendance:** Alison Higgins – Key West; Mayor George Neugent – Monroe County, Charlie Causey; Commissioner John DeNeale – Key Colony Beach

**Advisory:** Rhonda Haag – Monroe County, Wendy Blondin – AMEC.

Attorney Peter Morris from Monroe County, Jim Fourqurean from FIU, Henry Briceno from FIU; and Kathleen Sullivan from U of Miami were welcomed as invited guests who were presenting.

**1. Introduction and Approval of the July 26 Meeting Minutes.** Gus Rios called the meeting to order at 9:00 a.m. Minutes from the July 26, 2013 meeting were approved, as moved by Susan Sprunt and seconded by Skip Haring.

**2. Update on Alternatives for Canal Backfilling.**

A) John McDougall from the University of Miami presented findings on their research for using crushed glass as a material for backfilling the canals. The results indicated that the finely ground glass contained lots of organics and debris, paper products and other debris. The larger sized broken glass did not contain as much. Results: the finely ground glass is not acceptable due to the debris and the foaming it caused in water. The larger broken glass pieces may be acceptable for use in the deeper canals, but must be cleaned first. A chemical analysis was not yet performed. Billy said fish ingest sediment, and that the debris in the glass may be harmful to the fish. He said a 2002 flushing of silicates from the Everglades caused an algae bloom. An expensive cleaning process such as a cyclone machine or an acid wash could be used to clean the glass. John Hunt motioned that the Committee not accept glass in its current form as a fill product, and George Garrett seconded. Motion passed.

B) Miami Dredge Material – County staff met with the City of Miami and the contractors from the Miami dredging project to discuss the potential use of the fill for canal backfilling. Permitting and costs were an issue. The contractor will be submitting a proposal to the County in the upcoming weeks.

C) Cudjoe Sewer Material – AMEC prepared a spec for fill material. Kevin Wilson from the County is determining if the Cudjoe sewer project will have available excess fill available.

D) Cudjoe Culvert – Homeowners on Cudjoe have asked for two culverts to be removed in order to allow a sewer line to be installed. Gus stated that the County should review the regulatory agencies that approved the permit for the installation of the permit, and to check with them to see if the culvert can be removed. Typically a culvert provides water quality benefits.

**3. Update on Demonstration Canal Criteria.**

A) Rhonda provided an update on her presentation to the County Commission yesterday. The BOCC formally accepted the suggestions, which included:

- 1) Criteria Approved by the Canal Subcommittee in selection of the top 15 canals: water and habitat Quality; potential for a restoration to provide improvement within a canal; potential for a restoration to provide improvement to near shore zones; ease of implementation of restoration; and homeowner and public benefit.

Homeowner funding for construction was approved not to be included as a criteria. Canals were grouped by restoration technology type before the ranking criteria was applied for the top 15 canals.

- 2) Individual Project costs in excess of \$1.5 million were eliminated from consideration
- 3) Criteria Approved by the Canal Subcommittee in selection of the top 5 canals: Ease of Permitting and Ease in Implementation. Homeowner match financing is not required, but offers for such will be included in the information provided to the BOCC for approval of the top 5 projects.
- 4) The County will assume responsibility for operations and maintenance for up to 3 years, to allow the canal monitoring program time to be completed. Homeowners will be required to indicate their willingness to accept responsibility for such after the 3 year period. Such willingness must be supplied and documented up front by a procedure to be worked out by the County's legal staff. The homeowners will have the 2-3 year period to legalize and finalize their financial commitment to the operations and maintenance of the restoration project.
- 5) Aerators and alternate technologies are not under current consideration.

B) Wendy provided the first working draft copy of the top 15 canals. John Hunt noted it was a draft, and that the committee needs to review it. The committee members agreed. Members were asked to email comments to Wendy by **August 30**. Members will discuss the criteria at the next scheduled meeting. Discussion ensued on whether to use 1 technology per canal, or to allow a combination if conditions dictated it. John Hunt said NOAA would be looking at the documented success of these technologies before awarding grant funds for future project applications. The monitoring must be as rigorous as possible for the demonstration projects, subject to the funds and restoration needs. We will be able to document whether a technology or combination of technologies worked in a particular canal, but may not be able to say they would work exactly the same in another canal. It was stated that the purpose of the demonstration projects is not to evaluate restoration or treatment technologies, but rather to obtain realistic information (actual data) on the construction costs, implementation schedules and permitting. This information will be used in future planning and grant applications for future projects. Steve Blackburn said that we are implementing the best available technologies. Gus Rios said our ultimate goal is to improve water quality in these canals to achieve federal and state water quality standards. Wendy mentioned this has been a source of confusion and the goals may need to be better defined by the subcommittee and in the CMMP. Using the term "demonstration" may contribute to the confusion, as these may be better defined as pilot projects. Wendy also said AMEC was asked to focus on dissolved oxygen, organics and flushing. Wastewater and stormwater nutrient reduction was not included in the scope of this project, as this is already being done through the Wastewater and Stormwater Master Plans.

**4. Homeowners Maintenance Responsibilities and Canal Access Issues.** Peter Morris, a County attorney, presented on various issues:

- a) There are various financing options for funding the operations and maintenance of projects;
- b) There are ownership obligations and the County will be scrutinizing parcel maps of the potential projects to determine the ownership obligations of the homeowners;
- c) For canal access the state of Florida holds a navigational servitude over state waters, subject to the Federal navigational servitude, and the county's home-rule authority and police power allows it to accentuate navigational rights of the public and canal-front homeowners within county waters by balancing the public interest with private interests. This gives the county authority to regulate access to most canals.

Peter and other county attorneys will be involved in the demonstration projects and the canal program in general to ensure its success. We welcome them as advisors to the subcommittee.

**5. Review and Approval of CMMP Phase 2 deliverables.** Wendy distributed Tasks 4, 5 and 6 of the CMMP. The entire draft CMMP Final Report is complete, and will be forwarded to committee members for review. Comments on the draft final report are due to Gus who will forward to Rhonda and Wendy by **September 10**. The committee will review and vote on it next month.

**6. EPA Funding of \$300,000 for water quality and benthic monitoring.** EPA is providing \$300,000 as a grant to create a water quality and benthic monitoring program for the demonstration projects. (Thanks EPA!) Such funds will be good for a period up to 4 years possibly.

Henry Briceno from FIU presented a water quality monitoring program, which included location, length, depth, lots, geometry, orientation and incorporation as elements. Parameters included total and dissolved nutrients, Chlorophyll a and dissolved oxygen. Targeted will be how far does the water need to be improved? A scorecard will measure the degrees of success. John Hunt said the controls need to be determined for each canal. Gus said we need to meet water quality standards for dissolved oxygen and turbidity. Wendy said the original goals did not include selecting restorations to focus on nutrient reduction. Billy said nutrients are bound up in sea grass, so sea grass removal would remove some nutrients.

Jim Fourqurean from FIU also presented on benthic (sea grass) monitoring. This would include monitoring of grasses like turtle grass, manager grass, etc. from the first 500 KM from shore. Chlorophyll, nitrogen and phosphorous and the amount of light reaching the canal bottom would be measured. The results will go towards supporting the larger efforts of the WQPP water monitoring program. Changes to sea grass beds can take up to 5 years.

Kathleen Sullivan from U of Miami presented on biological monitoring. This would include biodiversity and ecosystem functions tied to the number of species in a canal. Species include fishes, corals, and other flora and fauna. The poor canals are dead now. We want them to be alive. She would measure the biological diversity, invertebrates, native flora and fauna, and hypoxia after storm and high tide events. These parameters are important to the public.

The demonstration canals must be selected first before a formal proposal can be provided. FIU and U of Miami will submit proposals after notification that the 5 top projects have been approved.

**7. DEP funding.** \$100,000 is available. Proposals will be discussed at the next meeting.

**8. Letter to Permitting Agencies.** There were positive comments about the draft letter to the permitting agencies asking for a permitting team to be set up for the canal projects to assist the subcommittee and homeowners with permitting tasks and issues.

**Other:** John said there is a “National Conference on Ecosystem Restoration” sponsored by the University of FL. They may be able to support our participation in attendance.

**9. Public Comment.**

Robert Duncan from Lower Matecumbe needs the list to cross reference the canal #'s so he can determine the location of the canals. This will be posted on the Monroe County website.

Suzanna from Pump Out USA stated there are lots of small boats in canals that may need pump out assistance. She wants to ensure they aren't dumping in the canals or anywhere else.

Gus Rios said DEP has grants available for pump out assistance under the Clean Vessel Act.

**10. Next meeting date, place, and agenda topics.** The next meeting is tentatively scheduled for Friday, September 27th, from 9:00 a.m. to noon at the Marathon BOCC room. Topics include selection of the top 5 canals, DEP project funding, CMMP final report review, outreach and a legal update from the County. The meeting adjourned at 12:15 p.m.