

Meeting Minutes
WATER QUALITY PROTECTION PROGRAM CANAL
RESTORATION ADVISORY SUBCOMMITTEE

July 12, 2013

9:00 a.m. – 12:00 .m.

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

Member and Advisory Attendees: Gus Rios - FDEP, Mayor George Neugent – Monroe County, John DeNeale – Key Colony Beach; George Garrett – Marathon; Susan Sprunt – Islamorada; (new member); Skip Haring – Layton; Billy Causey – NOAA; Charlie Causey, John Hunt – FWC (new member). See attached attendance record.

Members not in Attendance: Steve Blackburn – EPA and Alison Higgins – Key West

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

1. Introduction and Approval of the June 14 Meeting Minutes. Gus Rios called the meeting to order at 9:10 a.m. The pledge of allegiance followed. Minutes from the June 14, 2013 meeting were approved. A new member was presented for approval: John Hunt from FWC. He was accepted. A welcome was extended to Roman Gastesi, County Administrator, and Mike Forster – Islamorada Councilman.

2. Presentation: A *Microbes Bioremediation Methods* presentation was provided by Jim Rhyne. Microbes have been used in the Keys since 1986, and were used to restore lagoons, the Blue Hole on Big Pine, etc. They clean up dirty water by using natural methods. John Larkin helped volunteers to clean up Blue Hole. They are non-pathogenic and eat cellulose which is often in the form of dead vegetative matter attached to silt on the canal bottoms. The decay process reduces algal blooms and increases dissolved oxygen which helps restore water health. Bio spikes sink quickly to the silt on the bottom, and are used in canals that have a higher contaminant loading. The company also has a proprietary blend designed for low nutrient environments. They safely and economically remove the decomposed vegetative matter in water, and can be used in fresh or salt water. Although Mr. Rhyne mentioned several examples of the use of this product, he did not provide data demonstrating the product had been used successfully in a salt water environment such as the Keys canals.

Gus Rios said DEP has not evaluated it yet. Billy Causey says there is some validity to microbes, whether they are used before or after other canal restorations. John Hunt said that we need more information, including the data and test results, and also see the biology and chemistry, to determine if this can be used in Keys canals. Billy agreed to send the information to two microbial scientists, Matt Tepski from the University of FL and Kim Ritchie from MOTE Marine, to review and provide comments.

3. Update on Topics Discussed at the July 10, WQPP Steering Committee Meeting- Gus Rios provided an update of the topics discussed at the July 10 WQPP Steering Committee meeting, as follows:

a) Wendy Blondin provided an update on the CMMP Phases 1 and 2

b) Steering Committee voted to allow the Canal Restoration Committee to select the criteria for the demonstration projects. Wendy had sent the criteria in advance to the Steering Committee for review.

c) Steering Committee voted to form a canal permitting team, and will send a letter from the co-chairs of the Steering Committee.

Action Item: John Hunt moved to have the team prepare a letter, and have Gus take the lead and bring a draft of the letter to the July 19th meeting. Susan Sprunt will assist. Billy Causey seconded. Motion passed.

d) Steering Committee voted to allow the Canal Restoration Committee to select the projects for funding from DEP (potential up to \$100,000) and also from EPA (potential up to \$300,000).

e) Steering Committee will prepare an op-ed letter to address the progress of canal restoration and related water quality issues and the importance of the program. They will mention the Florida Keys Reasonable Assurance Documents (RAD), impaired waters, County comprehensive plan, etc. A recent Key West Citizen editorial did not support the importance of the program. They will also mention that wastewater management actions will not fix all of the canal water quality problems. Some water quality problems, such as bad odors, and accumulation and decomposition of organic matter, are caused by the poor design (geometry, orientation and depth) of these canal systems. Canal restoration is a next step to improving water quality in the Keys, and it is a priority of the WQPP Steering Committee. People don't understand the connection between canal water quality and near shore waters. Clean water brings visitors and is critical for the economy of the Keys. Roman arranged for an editorial board meeting with the Key West Citizen next week to discuss the canal restoration program.

Action item: Billy Causey will take the lead on the first op-ed piece- and will respond to what's been said in the media. Mayor Neugent, Rhonda, Gus and John Hunt will join. This will be prepared quickly and be based on facts and science. Mayor Neugent moved to have the letter ready by July 19th. We will prepare an outline for further pieces at next week's meeting.

4. **Update on the Canal Bathymetric Work**– Wendy Blondin provided a presentation on the Bathymetric work. Work was completed by June 21st, on schedule. Out of 502 canals, only 20 were not completed, and that was because of access issues by the survey boat. This was a very good project as survey data, canal profiles and depth information that was gained from these projects will be used for future restoration projects. The information will be placed on the County web site. The data were presented in GIS and Google Earth Pro formats. Information was presented on canal depths in the Keys, ranging from 1 foot to >40 feet. Sediment ranged from <1 foot to >4 feet. Ten sediment samples were collected from throughout the Keys, Arsenic and copper were the two exceedences found, but not in any large amounts. The fill from these canals can still be mixed with clean fill and used for other land based purposes such as road fill. This will save the County money because it isn't required to be sent to a hazardous waste landfill.

5. **Update on the Phase 2 Canal Management Master Plan (CMMP)**– Wendy provided a presentation on the updates of Phase 2. All canals in the County and cities are being evaluated. AMEC is preparing an updated database on dissolved oxygen, turbidity and water quality information that is being gathered. A different "ranking" process is being used for the CMMP versus the demonstration projects. In the CMMP canals are being grouped by "good", "fair" and "poor" only. All canals will be included in the grouping process. In the demonstration projects ranking, canals will be ranked in numerical order by the selection criteria. Only the top 15 will be included, 3 for each restoration technology. The draft of the final report of the CMMP is due August 20th to Rhonda. The final is due September 30th.

6. **Alternatives for Canal Backfilling** – The County is looking at fill alternatives as a way to lessen the cost of canal backfilling projects. Rhonda is working with Waste Management to determine if the crushed glass from their Broward plant can be used as an alternate for fill. The University of Miami has agreed to take the samples and perform analyses to determine the effect on dissolved oxygen. These results will then be provided to DEP. So far, the size of the crushed glass appears acceptable. This method has already been tested in the Bahamas, under the watch of University of Miami staff. Also being researched is fill from the Miami Dredge project, expected to begin in August. The team is researching the costs and methods of delivery to the Keys. Wendy is comparing the total cost with pea rock and local fill prices to determine if it is cost feasible.

7. **Demonstration Canal Selection Criteria** – Wendy provided an update on the Demonstration Canal progress. There is different, more detailed, criteria being used for the demonstration projects than the CMMP. She is only including canals from unincorporated Monroe County – as the funds being used for the canal demonstration projects are from unincorporated Monroe County. The municipalities have been invited to join in the demonstration projects review, and would only need to provide funding for the review of canals in their municipality. AMEC will provide a minimum list of 15 canals to Monroe County for the demonstration projects. There is a total of 502 canals

throughout the County, but only 332 are in unincorporated Monroe. Further, there are only 107 canals ranked “poor” in unincorporated Monroe, so these are what AMEC will review for the demonstration projects. A list of draft evaluation criteria was handed out. Criteria included water quality, public benefit, homeowner funding support, ease of permitting, project implementability, potential to provide improvement to sensitive resource, cost of canals, geographic distribution of projects, and existing restoration technology in use but not working. The team reviewed each of the criteria, but didn’t have time to complete discussion. The agenda item was tabled for a special meeting next week to further discuss. Time is of the essence, as AMEC has a deliverable due date in August for the selection of the projects.

8. **DEP and EPA Funding** – Gus announced that DEP has up to \$100,00 in funding and USEPA has up to \$300,000 in potential funding available for the canal restoration program. Gus reminded the team that previous funding has been used for county-wide benefit, not just in unincorporated Monroe or any particular city. Also, Gus mentioned that his department would prefer the FDEP funding be used in construction, engineering or projects supporting the successful completion of canal restoration rather than just on water quality monitoring. Previous grants funded Phase 1 and 2 of the Canal Master plan and the Bathymetric work. Potential uses of funding discussed include:

- a) water quality monitoring
- b) benthic community monitoring
- c) economic benefit analysis of the canal restoration program
- d) outreach support
- e) mitigation banking criteria research (for potential funding of canal restoration projects)
- f) seed money for a city demonstration project (this wouldn’t be a county-wide benefit)
- g) match for an unincorporated Monroe demonstration project (this wouldn’t be a county-wide benefit)
- h) future grant application preparation tasks
- i) completion of the bathymetric work for the remaining 20 canals
- j) research in the *alternate technologies* for restoration

There wasn’t enough time to further discuss the funding, so the item was tabled until the next meeting.

9. **Public Outreach Update** – Rhonda announced the new Canal Restoration page on the County website which contains the meeting agendas, minutes, presentations and other good information on the canal program. It can be accessed by going to the homepage, then clicking on Canal Restoration. Rhonda spoke on radio 104.1 on July 10th about the canal restoration program.

10. **Public Comment**

Curtis Brown said we need to reach out to the homeowners that don’t live here. If we build a structure, and it needs repair, who will be called for repairs?

John Gardner from Vertex provided information on aeration systems that may be useful to help maintain the restored projects. He offered to donate the equipment and labor for one of the demonstration projects so that we could test it.

Bob Duncan from Caloosa Cove is doing repairs to their jetty. It is difficult to get homeowner participation and dollars from homeowners. It will take time to coordinate participation and funding, and that will slow down the program. He requested a list of canals for Islamorada.

Mike Forster, Islamorada Council member - is interested in the DEP and EPA funds for restoration of Treasure Harbor. He will work with the Village to be an active partner in the program. He stated we need to meet with all of the newspapers in the county to get the information out.

Barry Wray – is concerned about backfilling costs.

11 **Next meeting date, place, and agenda topics.** The next meeting will be Friday, July 19th, from 9:00 a.m. to noon at the Marathon BOCC room. Topics include demonstration selection criteria, funding and the permitting letter.

The meeting adjourned at 1:10p.m.