Florida Keys Reasonable Assurance Documentation Technical Working Group Meeting 2 December 13, 2006 Meeting Minutes

This is a summary of the second Technical Working Group (TWG) Meeting held December 13, 2006 at the Banana Bay Resort Coconut Conference Room among the Florida Department of Environmental Protection (FDEP) and representatives of stakeholders that comprise the TWG. The purpose of the meeting was to discuss FDEP's December 18 meeting with EPA, FKRAD management goals, and stakeholder requests for data and management activities. The meeting was attended by representatives of City of Key West, City of Layton, City of Marathon, Florida Keys Aqueduct Authority (FKAA), Monroe County, U.S. EPA, Florida Department of Transportation (FDOT), and Wildlife Ecology and Conservation (WEC). A copy of the meeting agenda and sign-in sheet are appended to this document.

DISCUSSION

Florida Keys Reasonable Assurance Document (FKRRAD) Consensus Summary

- The documentation process will be complex involving the discussion of many issues. It is important to ensure opportunities for participation, make sure everyone agrees to the process, and formalize decisions as they occur in order to avoid backtracking.
- The following are issues TWG participants reached consensus on during the first *TWG* meeting on November 17, 2006:
    - FDEP and its contractors will assist in developing the FKRAD; however, the document will be owned by the stakeholders.
    - Participation of all stakeholders will facilitate development of the FKRAD and add credibility to the commitments expressed in the document.
    - A presentation on development of the FKRAD to the National Marine Sanctuary Water Quality Protection Program Steering Committee at their January 30 meeting is warranted.
    - EPA should be reminded that several years ago as a member of the Steering Committee it endorsed the wastewater and stormwater pollution control process.
    - Funding dictates the progress of nutrient load reducing activities.
    - Near shore water in the Florida Keys are impaired, although the causal relationships of impairment are complex and not well documented at this time.

- Existing data (quantity and quality) appear reasonable to justify proceeding with the FKRAD, but not a TMDL.
- Local programs will more than likely reduce annual nutrient loads into near shore waters (approx. within 500 ft of the islands).
- Ambient monitoring should be promoted to achieve the requirements of the FKRAD.

- The Village of Islamorada has expressed its interest and support of the FKRAD. FDEP will call the Mayor of Islamorada, a member of the Steering Committee, to encourage the Village's participation in TWG meetings.

Summary of FDEP-EPA Meeting

- FDEP, along with its consultants (URS and CDM), met with EPA on December 18, 2006, to discuss the FKRAD process in order to get EPA's opinion and guidance on the development of the document.
- Central questions raised in the meeting were:
  - How does one define impairment in the Florida Keys? What are the water quality, living resources, known linkages, and types of pollutant targets?
  - When is a goal achieved and how do you demonstrate that?
  - If EPA requests improvement beyond near-shore waters, how does that affect efforts related to the FKRAD?
- There are many resources and results associated with the Keys Carrying Capacity Study (CCS), such as modeling efforts that stakeholders could use. CCS has set targets, in particular for algae blooms that could be used to set targets for the Keys. Output of the CCS model could be used to estimate baseline conditions for the Florida Keys model.
- Efforts accomplished through the CCS are significant. If establishing Reasonable Assurance appears not appropriate, the CCS could contribute most of the effort needed to establish a Keys TMDL.
- Reasonable assurance would be provided to EPA through stakeholder agreements referenced or incorporated in the FKRAD. The Department and EPA would hold stakeholders responsible for commitments.
- EPA accepted the concept of drawing "bubble zones" around the islands and concentrating the FKRAD efforts on these inshore and near shore waters directly affected by activities on the Keys.
- A question remains as to how does one demonstrate restoration?
- Stakeholders cannot reduce nutrient loading beyond a level they generate. What if nutrient loading reducing programs are not enough to achieve management goals?

- Given the existence of influences external to the Keys on water quality and living resources, how do stakeholders determine the extent of influences on water quality degradation caused by humans versus influences caused by the environment?
- Unfortunately, it is difficult to determine the extent of influences from humans and the natural environment on nutrient and contaminant levels. EPA focuses on water body impairments rather than the causes of impairments. EPA will look for violations of water quality and demand corrective action.
- It will be difficult to predetermine if the stakeholders will be able to reach water quality targets specified in the FKRAD by reducing human induced nutrient loading into impaired water bodies. At this point, reducing human induced nutrients is the most that can be done within reasonable constraints.
- According to Mr. McClelland, the RAD will not place obligations on stakeholders to address conditions beyond the stakeholders' control.
- Through contractors, FDEP will provide needed water quality impact analysis, to the extent possible, for the FKRAD process.
- Little Venice monitoring of wastewater discussed with EPA. EPA is aware of these programs and wanted more information about canals.
- EPA is concerned about the health of the reef tract, that the occurrence of diseased corals has been rising, and that the declines could be caused by nutrients and pollutants being discharged into the Keys' water.
- EPA suggested implementing a phased FKRAD; the first phase would consist of developing reasonable assurance of nutrient loading reducing activities and the second would consist of implementation and monitoring of activities.
- EPA also expressed concern about water quality in canals. Questions would arise regarding the number of canals that would be included in the FKRAD. The consensus is that every canal is a detail and effort beyond the stakeholder's means. Furthermore, FDEP opposes removal of plugs from canals as a means to flush dead-end canals because it may affect water quality in outstanding Florida Waters
- Regarding recent proposed changes to the Florida Administrative Code (F.A.C.) and the reclassification of canals to ditches, the current code applies the same water quality standards to different water bodies. For example, man-made canals constructed for drainage is subject to the same standards applied to a natural river, such as the Suwannee River. Current water body classifications required by the Clean Water Act are not robust enough to recognize water quality standards for all water bodies. The proposed changes would create standards conducive to determining water quality standards to particular water bodies.

- EPA and DEP determined that while there are complex issues to be addressed, no fatal flaws were identified at this point with the FKRAD process and that the FKRAD is the path to take, not TMDL.
- EPA acknowledges that funding will play a significant role in the implementation of commitments. Also, stakeholders should consider including state and local ordinances as part of their commitments.
- TMDLs mandated by consent decree are due in 2011, so in case EPA does not approve the FKRAD, stakeholders will have enough time to determine TMDLs for the Florida Keys using much of the information gleaned in drafting the RAD.

TWG Discussion on Management Goals and Other Contents of the RAD

- Stakeholders will need to include a description of water quality-based targets or aquatic ecological gals for the nutrients of concern, averaging period for numeric water quality goals, and a discussion of how these goals will result in the restoration of impaired designated uses. The main intent of these requirements is to determine the driving force behind the impairment problem in the Keys.
- Water quality-based targets should be linked to specific local management goals that one can monitor, like seagrass trends and fish populations. It is important to characterize changes in trends that can be associated with spatial influences.
- Five potential management goals that the FKRAD could address include over-fishing of the snapper-grouper complex and its effect on reef health, decline in populations of queen conch in near shore waters, coral diseases caused by sewage pollution, decline in population of Rock Beauty fish, and seagrass response to water clarity or eutrophication.
- Mr. Kruczynski (USEPA) mentioned that over-fishing has been found to have a direct effect on the declining health of the reefs and should be addressed in the FKRAD. He stated that over fishing of groupers and snappers from the reefs allowed parrotfish to proliferate. Parrotfish eat coral, and that extra "munching" is causing reef degradation. The group might want to consider contacting Dr. Jerry Ault for more information about the negative effects on the Florida Keys ecosystem.
- Queen conch population has not rebounded since they were protected from harvest in 1987. According to Mr. Rios (FDEP), queen conch cannot reproduce in near shore waters. Mr. Kruczynski mentioned that there was a possibility of reproductive interference from the presence of endocrine disruptors in the near shore waters.
- Coral diseases, specifically the white pox in branching corals, may be linked to sewage pollution. Scientists have cultured the bacterium that causes the disease and found it to be infectious.

- There is a decline in population of Rock Beauty, an offshore reef fish, due to a reduction in seagrass. Rock Beauty depends on seagrass to look for food. Reduction in seagrass has been linked to a reduction in Rock Beauty population.
- Dr. Jim Fourqurean from Florida International University has done studies on seagrass response to eutrophication and how the response is influenced by nutrient limitation.
- The prohibition of sponge harvesting was also suggested as a management goal. The consensus is that a small number of folks are involved in sponge harvesting and that a small percentage of the sponges are actually taken from the reefs. Furthermore, portions of sponges are left in the reefs allowing the sponges to regenerate. The issue of sponge harvesting will not be included in the FKRAD as it is tangential to the focus on nutrients.
- Ms. Mannix-Lachner (City of Key West) asked if the RAD would recognize conditions over which local governments have no control so as not to place unrealistic expectations on municipalities to address such conditions. For example, seaweed (wrack) and muck on Key West beaches has caused water quality degradation and attracts birds that each insects around the wrack. Unable to prevent the presence of birds and other living creatures in and around the water, the City of Key West has little or no control over the water degradation caused by the defecation of the birds. In such a case, to what extent will Key West be held responsible for water quality degradation caused by birds and other living creatures?
- There are many causes of pollution through numerous contaminants. Coliform, for example, is an issue and is a cause for water quality degradation, however, the focus of the FKRAD will be impairments caused by nutrients. Stakeholders are encouraged to continue activities, such as testing outfalls and sanitary sewers to determine levels of influence on water quality degradation by humans.
- Stakeholders are encouraged to document activities that are known to cause human load of contaminants and provide a reasonable record of activities in case the FKRAD process is questioned or challenged.

FKRAD Stakeholder Agreement Overview

- The purpose of the agreements will be to identify participants (stakeholders/implementers versus regulators and third parties), define management activities, establish responsibilities, list anticipated benefits, and confirm participation.
- The general consensus regarding the geographic scope of the FKRAD is to continue the process for all of the Keys. The geographic scope could be modified during the development process depending on the level of participation from all stakeholders such that a RAD can be developed for individual islands, for

individual planning units (i.e., lower Keys, middle Keys, and/or the upper Keys) or any combination thereof.

- Shell, Prairie, and Joshua Creek reasonable assurance Stakeholder Agreement was considered at this point as a prototype for the Florida Keys agreement.
- Inclusion of guiding principles, identification of success measures, and signature process are some advantages of using an agreement structure similar to the Shell Creek Agreement.
- The Shell, Prairie, and Joshua Creek Agreement, however, was created for a scenario with a limited watershed, simple hydrologic setting, suggests a centralized implementation structure, does not differentiate responsibilities, and contains no specific management actions.
- The FKRAD agreements could be geographically differentiated and consist of multiple agreements to guard against the lack of participation from individual stakeholders or where reasonable assurance might not be proven in certain areas. Noncompliance by one party should not cause others to also be out of compliance.
- There was a concern expressed that EPA may not accept a RAD that lacks a single party responsible for routine reporting. EPA may not want to chase down individual participants in the event of non-compliance.
- Mr. McClelland suggested that the stakeholders can consider using the Water Quality Steering Committee as a monitoring agent.
- The bulk of the details regarding commitments and management actions will be included in the main FKRAD document. The agreements will contain some detail on the commitments (about one paragraph for each commitment) with references to the main document. The more detail stakeholders can provide on each commitment and management action, the greater the chances of FDEP and EPA approval.
- Mr. Lienhart will distribute an example write-up to demonstrate how the commitments and management actions will fit into the FKRAD, appendices, and agreements.
- It was suggested by URS that the stakeholder agreements may contain a background section, mission statement, guiding principles and objectives, management actions, stakeholder commitments, measures of success, implementation schedule, and signature pages.
- It was suggested that an executive summary should be included summarizing the stakeholder agreements for the benefit of those signing the agreements that were not involved in the FKRAD development process.
- If one participant causes another to violate their commitments, it is likely that the causing participant will violate their own permit.

- As long as a participant meets commitments, that participant has fulfilled the terms of the agreement and should not be held accountable for another's negligence. Inactivity by one participant does not affect success of the remainder of entities.
- There are always going to be issues that overlap that probably won't be addressed in the FKRAD, but stakeholders should strive to highlight all the good things taking place.

Schedules

- The third TWG meeting is scheduled for January 25, 2007.
- A digital version of the draft FKRAD will be sent to stakeholders between January and February 2007. A digital version of draft agreements will be distributed between February and March 2007.
- The upcoming TWG meetings will be held at the FDEP building in Marathon, subject to confirmation.
- FDEP will put together short 10-minute presentation that the TWG can use present ideas to other participants.
- FDEP will coordinate with EPA on making RAD presentation to the Steering Committee on January 30.

Information Requests

- If water quality data does not appear in STORET, then team does not have it. Make sure all relevant data are uploaded in STORET.
- Stakeholders need to submit descriptions of local problems, local information on impaired waters, water quality targets, aquatic ecological goals, BMPs and water quality capital projects, annual regulatory and enforcement programs, procedures for monitoring and reporting results, and proposed corrective actions.
- The amount of detail and commitment will have to be discussed between municipality and FDEP to determine what should be included in RAD.
- Performance measure data are typically not uploaded to STORET.
- Funding is a major implementation issue and participants were encouraged to associate and define programs that are or will be funded through grants. Include caveats in FKRAD for proposed programs that will require funding that has not been confirmed yet.