

Connecting Reuse and Water Use: A Report of the Reuse Stakeholders Meetings

Florida Department of Environmental Protection

February 23, 2009

Introduction

Reuse of reclaimed water is crucial to meeting Florida's future water demands. Water reuse involves taking domestic wastewater, giving it a high degree of treatment, and using the resulting high-quality reclaimed water as a substitute for surface or groundwater, or for a new beneficial purpose. Reuse helps conserve potable water supplies by replacing potable water for certain non-potable uses. In addition, reclaimed water can help recharge groundwater supplies. Used effectively, reclaimed water can play a significant role in meeting the water demands that are projected to grow by two billion gallons a day between 2005 and 2025. In some areas of the State, reuse of reclaimed water also protects water quality by reducing the discharge of treated wastewater into water bodies.

In 2006, Florida's Water Reuse Program was the first recipient of the U.S. Environmental Protection Agency Water Efficiency Leader Award. In 2007, Florida led the nation in reuse, using about 664 million gallons a day (mgd) of reclaimed water to for a beneficial purpose. A total of 475 large domestic wastewater treatment facilities made reclaimed water available for reuse. These facilities served 432 reuse systems.

However, Florida realizes only a fraction of reuse opportunities. In 2007, a total of 76 large domestic wastewater treatment facilities did not provide reuse of any kind. These unused capacities have the potential to expand the availability of reclaimed water in the state. The 2008 Legislature enacted legislation that prohibits ocean discharge of treated wastewater by 2025 except as a back-up to a reuse system. Sixty percent of the water currently being discharged in ocean outfalls will have to be reused for a beneficial purpose, increasing reclaimed water use by at least 180 mgd by 2025. The Florida Department of Environmental Protection (Department or DEP) and the water management districts (WMDs) are committed to promoting efficient and effective water management to help conserve the State's natural resources. Reuse is an important part of this commitment.

The 2007-2008 drought highlighted the need to use all sources of water efficiently. As a drought resistant source, reclaimed water is an important part of the mix of alternative supplies of water that can help meet growing demands during variable climate conditions. The need to supplement reclaimed water during times of drought, however, can increase seasonal demands for potable water. Reclaimed water should also be recognized as a valuable commodity for which there are demands that may exceed the supply, resulting in the need for efficient use.

During the 2008 legislative session, a number of reuse issues prompted proposed legislation. The proposals raised several areas of concern regarding the respective roles of local governments, utilities, and the water management districts related to reclaimed water. In lieu of

legislation, the Department, with input provided by interested parties and stakeholders, agreed to review emerging reclaimed water issues, particularly those related to the regulation of reuse under the consumptive use permitting program. The Department held three public meetings to discuss impediments, incentives, policy clarifications, and concerns regarding reclaimed water issues as they relate to consumptive use permitting and regional water supply planning. The Department much appreciates the input provided by all who participated. Particular thanks are extended for the participation and assistance of the Florida Section of the American Water Works Association and the Florida Water Environment Association (FWEA), including the FWEA Utility Council, and the water management districts.

All parties agreed that the goal of the workshops was to develop specific ideas on how to enhance and promote the use of reclaimed water in relation to consumptive use permitting policies. Meeting attendees included representatives from the Department, the five water management districts, local government, utilities, and other parties with interest in reuse. Each meeting built on discussions from the previous meetings. There was consensus on some, but not all, topics. For those topics on which stakeholders continued to have different views, the exchange improved understanding of other viewpoints. Attendees expressed interest in continuing discussions in other collaborative forums.

The sections below provide an overview of the workshops held, the issues discussed, and the recommendations that reflect the general consensus of the stakeholders.

The Three Workshops

At the August 18, 2008 meeting (agenda and meeting summary in Appendices A and B), DEP asked attendees to identify and prioritize reuse issues and concerns for discussion. The eight major categories in priority order were:

1. Regulatory Authority
2. Offsets
3. Irrigation
4. Supplementation (Augmentation)
5. Funding
6. Optimization of Resource
7. Aquifer Storage and Recovery / Aquifer Recharge / Indirect Potable Reuse
8. Mandatory Reuse Zones

These topics overlap, meaning that discussion of one topic often involves discussion of others. The Department also asked attendees to identify general principles that all could agree on, even if the principle could not be implemented at this time. Attendees agreed on twelve general principles (Appendix B), and selected “Optimize use of reclaimed water to achieve water resource goals” as the overarching principle. (PowerPoint presentations are available on-line at: <http://www.dep.state.fl.us/water/reuse/news.htm>.)

At the September 16, 2008 meeting (agenda and meeting summary in Appendices C and D), attendees discussed the top three categories identified at the previous meeting. The Department

presented a draft document on irrigation policies (Appendix E) and asked for attendee comments. The St. Johns River Water Management District (SJRWMD) presented draft rule concepts showing how DEP's draft irrigation policy might be implemented for irrigation water use in their district. The Department also led discussions comparing water reuse requirements among the water management districts, and distinguishing between different uses of the term "offset." A major utility concern was identifying who would get the "credit" when an offset was created. (PowerPoint presentations are available on-line.)

At the November 19, 2008 meeting (agenda and meeting summary are in Appendices F and G), DEP presented a draft proposal to connect the reclaimed water planning process of utilities more closely with the regional water supply planning process undertaken by the water management districts (Appendix H). The Department also summarized the comments on the draft irrigation policy presented at the September meeting, and gave an update on the activities of the statewide Reuse Coordinating Committee. The FWEA Utility Council presented a set of suggested tools for promoting efficient reclaimed water use, along with proposed methods for implementation (Appendix I). The Southwest Florida Water Management District (SWFWMD) made a presentation on a planned pilot project using reclaimed water for aquifer recharge. (Other PowerPoint presentations are available on-line.)

Key Issues

At the three meetings, reuse stakeholders reached consensus on some issues and agreed discussions needed to continue on others. Continued dialog among utilities, DEP, WMD regulators, WMD water supply planners, and water users on these topics is important to promote reuse throughout Florida.

A brief summary of the issues discussed is given below.

Regulatory Authority

- *Issues:* Regulatory authority overlaps many issues, particularly irrigation and mandatory reuse zones. It quickly became apparent that the three stakeholder meetings would not be able to resolve different views on the respective authority over reclaimed water held by water utilities, local governments, the water management districts, and DEP. The fundamental difference between some of the utilities and the regulators is that many utilities view reclaimed water as a product they create and over which they should have sole discretionary use and control. The water management districts' view is that reclaimed water falls under the legislative grant of jurisdiction to regulate the consumptive use of water under Part II of Chapter 373, F.S.; therefore, the districts are authorized to regulate its use, as they have been doing for many years, and may apply requirements for efficient use. Recognizing the fundamentally different legal views of some of the parties, the attendees nonetheless developed some innovative proposals to move toward the common goal of optimizing the use of reclaimed water.

One important concern for the water management districts was reconciling their exclusive grant of authority over water use regulation with mandatory reuse zones

established by local governments. To address this concern, the St. Johns River Water Management District and one of its local governments developed language for inclusion in mandatory reuse zone ordinances requiring reclaimed water use in these zones, unless the district authorizes another water source. This provides for both the local government's and the district's goal of promoting reuse, but allows a water management district to identify when a different lower quality water source, such as on-site stormwater, brackish water or saline water, may be more appropriate for use rather than reclaimed water. The SJRWMD recommended using this approach in other regions where mandatory reclaimed water use zones are proposed. South Florida Water Management District's (SFWMD) existing rules provide for implementation of local government zones in coordination with the consumptive use permitting program.

Another approach discussed was linking reclaimed water plans more closely with regional water supply planning. This approach resulted from a utility proposition that the water management districts should consider utility wastewater planning as utility permit applications are being reviewed. Currently, the water management districts develop regional water supply plans to meet future needs, sometimes without adequate input from reclaimed water providers or DEP's wastewater program. This can be a problem when reclaimed providers make a capital investment in distributing reclaimed water to an area not anticipated in the regional water supply plan. By including reclaimed water providers and DEP up front in the regional water supply planning process, districts and providers collaboratively can work out where it is best to utilize reclaimed water *before* providers invest capital in a specific project. This voluntary process also could benefit reclaimed water providers by allowing their projects to be explicitly included in the regional water supply plan, thus making them potentially eligible for Water Protection and Sustainability Program funding.

- *Outcomes:* Attendees generally were in favor of establishing a better linkage between reclaimed water planning and regional water supply planning.

Offsets

- *Issues:* Some of the concern and disagreements about “offsets” arose from different usages of the term in the consumptive use permitting process. Stakeholders identified two different meanings of the term “offset” in consumptive use permitting:
 - 1) “Mitigation offsets” or use of reclaimed water to prevent an adverse impact that would otherwise occur as a result of other groundwater or surface water withdrawal, such as use of reclaimed water to prevent salt water intrusion, and
 - 2) “Substitution (credit) offsets” where reclaimed water replaces existing uses of other groundwater or surface water by one user, allowing a different user to increase potable quality groundwater or surface water withdrawals with no net adverse effect on the environment. (In the meetings, attendees used the terms “substitution offsets” and “offset credits” interchangeably, highlighting the desirability to have one consistent term. In this paper, we use the term “offset credit” for this concept.)

Appendix D and the on-line presentation explain these concepts more thoroughly. Attendees generally acknowledged that the mitigation offset concept makes sense whenever reclaimed water supplies could be used to offset or prevent adverse impacts that would otherwise occur from water withdrawals. Several water management districts reported that mitigation of impacts using reclaimed water already has been permitted. Attendees generally agreed that the offset credit concept only makes sense in areas where traditional sources of water are limited or capped. SWFWMD's Southern Water Use Caution Area (SWUCA) is an example of a location where this concept has been implemented. Regarding offset credits, the following questions arose: Who gets credit? How long do credits last?

Offset credits are important to utilities because if they are available, then they must be reliable elements of their long-range planning. Planned offset use may extend beyond the duration of a consumptive use permit. Utilities want assurance they will not lose the credit if they make the initial capital investment in reclaimed water. Still, allowing reclaimed water providers to realize the benefits of credits for future use raises additional questions: Would a credit system become water "banking"? Could the result of using a credit be an increase in per capita use of water, even in areas under withdrawal caps? Can such credits be sold or transferred to other entities, and if so, under what constraints?

- *Outcomes:* There was general consensus that mitigation offsets used to address adverse impacts have been demonstrated to be feasible, and appear to be an option under existing consumptive use permitting rules. With respect to offset credits, it would be valuable to clear away some of the confusion and achieve more consistency in use and application of the term "offset" among areas with supplies that are capped, particularly in service areas located within more than one water management district. There appeared to be some agreement that the entity taking the action to reduce potable quality water use (usually the reclaimed water provider) should receive any available credit. This and other questions need further discussion.

Irrigation

- *Issue:* Three of the five water management districts have year-round conservation rules in place for a portion or all of their districts. These districts currently are engaged in or have recently concluded rulemaking to implement new, expanded, and/or modified year-round landscape irrigation conservation measures to improve water conservation. The discussion centered around the appropriateness and authority of the water management districts to impose the same irrigation restrictions on reclaimed water use, as are applied to other water sources. The districts explained that reclaimed water supplies are increasingly insufficient to meet nonpotable water demands and there is documented reclaimed water irrigation use in amounts significantly exceeding landscape needs. Additionally, there have been several challenges to WMD permitting actions that authorize potable quality or other groundwater or surface water supplies to augment reclaimed water systems used for irrigation. Environmental groups and local

governments question why districts should authorize augmentation when reclaimed water irrigation use is inefficient.

While all agreed in principle that reclaimed water should be used efficiently, reclaimed water systems around the state vary in degree of maturity. Early in the development of reclaimed water systems, unrestricted use of reclaimed water provides an incentive for users to accept reclaimed water, and such use may replace undesirable surface water disposal. Over time, as demand for reclaimed water increases, the need for more efficient use becomes more important to individual utilities' being able to meet these customer demands.

Utilities sell products, including potable and reclaimed water. As businesses, utilities seek to make the best use of their water products for their given circumstances. Some utilities view irrigation restrictions as inappropriate interference with their business operations. They are concerned that reclaimed water irrigation restrictions will diminish the incentive for potential users to take this product, may result in more effluent disposal, may require funds to construct expensive storage facilities, or may reduce income derived from the sale of reclaimed water.

In addition, many utilities believe that certain landscape irrigation restrictions for reclaimed water do not give enough consideration to wastewater plant disposal permit requirements. They view day and time restrictions as ineffective ways to manage this resource. Other measures to promote irrigation efficiency, such as rain or soil moisture sensors, may be preferable. A couple of utilities remarked that reuse efficiency needs to be balanced with disposal efficiency. Some utilities urged that reclaimed water use efficiency be addressed through review of each utility's consumptive use permit rather than through a "one size fits all" limitation on their customers' reclaimed water use.

As result of this discussion, DEP distributed for discussion a draft irrigation policy (Appendix E). Although the discussion focused on landscape irrigation, DEP intended this draft policy to apply to all irrigation types. The St. Johns River Water Management District presented an example of how the draft irrigation policy might be implemented in a proposed rule concerning general consumptive use permits for irrigation-type water use. Although the proposed rule kept day and time-of-day restrictions for landscape irrigation, it also included a new provision that allowed utilities to determine when compliance with these restrictions was infeasible, and to allow irrigation on additional days.

- *Outcome:* Attendees offered many comments on the draft irrigation policy but did not reach consensus. However, partly as a result of the discussions at the stakeholders meetings and with utilities in rulemaking workshops, SWFWMD and SJRWMD removed the proposed day-of-the week and hour-of-day restrictions on reclaimed water use from their proposed year-round landscape irrigation rules to allow further discussion and deliberation by the WMDs and stakeholders. SFWMD had removed day-of-the-week restrictions before the meetings started. Discussions related to irrigation restriction rules for reclaimed water are continuing. One concept under discussion is addressing

reclaimed water irrigation efficiency through a utility's consumptive use permit requirements, rather than through a rule that regulates the individual landscape irrigator.

Supplementation

- *Issue:* Supplementation (also called augmentation) is the addition of potable water, groundwater, or surface water to reclaimed water to increase reclaimed water supplies, particularly during the dry season when demands are highest. For some utilities, the opportunity to supplement reclaimed water with other water sources helps promote a higher percentage use of reclaimed water because it makes availability to a larger number of users more reliable. Several of the water management districts reported that they had allocated supplemental water supplies to utilities that are using reclaimed water to meet irrigation demands. However, some environmental organizations and other local governments have opposed supplementation of reclaimed water with higher quality water, particularly surface water. They claim that irrigation use of reclaimed water is inefficient and therefore that supplementation with higher quality water is inappropriate.

Another regulatory question of interest to the stakeholders was: At what point is supplemented water no longer considered alternative water supply or reclaimed water, especially as related to irrigation restrictions? As with irrigation restrictions in general, utilities felt that additional restrictions should not be applied to irrigation using supplemented reclaimed water. The water management districts believed that the use of supplemental higher quality water increased the need to ensure that the water was used efficiently.

- *Outcome:* There was general agreement that reclaimed water supplementation is a key strategy to be considered when reclaimed water is used to meet irrigation demands. There was no resolution on specific measures to use to increase the efficiency of reclaimed water irrigation use or when supplemented water is no longer considered reclaimed water for the application of irrigation restrictions.

Funding

- *Issue:* Utilities would benefit from funding assistance to expand reuse systems in their service areas.
- *Outcome:* Attendees agreed that restoration of funding to the Water Protection and Sustainability Program Trust Fund is essential to further implementing reuse throughout Florida.

Optimization of Reclaimed Water Resources

- *Issues:* Attendees agreed that "Optimize use of reclaimed water to achieve water resource goals" is the overarching principle for reuse systems. Ideally, this means reclaimed water should be used in a way that both is efficient and helps to meet overall water demands or other water resource goals. For existing reclaimed water systems,

efficiency standards may have to be achieved over time depending on the maturity and operational constraints of the system. Stakeholders recognized that the best use of reclaimed water varies throughout Florida depending on water demands and needs such as irrigation, industrial use, or groundwater recharge. Treatment requirements, regulatory constraints, and costs for groundwater recharge with reclaimed water are currently being explored at several locations in the state.

- *Outcomes:* Attendees agreed all stakeholders collectively should strive to optimize the use of reclaimed water. Better integration between reclaimed water system planning and regional water supply planning, as discussed above, could assist in this effort.

Aquifer Storage and Recovery (ASR)

- *Issue:* At the first meeting, attendees identified questions regarding the regulation of ASR wells for reclaimed water storage, but did not discuss this topic in depth at subsequent meetings.
- *Outcome:* The discussion was very limited and specific issues were not well-defined.

Aquifer Recharge and Indirect Potable Reuse

- *Issue:* No aquifer recharge or indirect potable reuse (Part V of Chapter 62-610, F.A.C.) systems currently operate in Florida. However, there is interest in this reuse activity and there are several projects under consideration in the Tampa Bay area and in South Florida. At the third meeting, SWFWMD presented a the Tampa Bay area project involving a study of the potential for aquifer recharge using reclaimed water.
- *Outcome:* Attendees agreed that aquifer recharge projects in Florida should be pursued and studied.

Mandatory Reuse Zones

- *Issues:* Mandatory reuse zones that prohibit the use of other water sources when reclaimed water is provided can be an effective way to promote reclaimed water use. The water management districts' position is that local government ordinances for these zones must be coordinated with the appropriate water management district or include a provision that reclaimed water is required to be used unless the water management district approves another source. The utilities indicated that DEP and the water management districts should support and encourage local governments' adopting and implementing such zones. Some attendees expressed the opinion that local government establishment of such zones should not require water management district approval or involvement.

The FWEA also asked the water management districts to support these zones by limiting permit exemptions from reclaimed water use and not allowing the drilling of new private wells in the designated zones. The water management districts generally exempt small

quantity irrigators from the requirement to obtain individual water use permits. The St. Johns Water Management District no longer allows, under its general permit by rule, the use of groundwater from private irrigation wells when reclaimed water is supplied by a utility. Although someone with an irrigation well can apply for a permit to use groundwater, it would be permitted only if the user can demonstrate that it is infeasible to use the reclaimed water.

Several attendees pointed out that domestic uses of water are exempt from the districts' permitting requirements.

- *Outcome:* Attendees agreed that when utilities construct systems delivering reclaimed water to a service area, water users should use those reclaimed water supplies unless it is economically, technically or environmentally infeasible. Water management districts indicated that they would continue to ensure that such users use the reclaimed water whenever feasible, consistent with each district's rules. This could be achieved through a combination of local government designated mandatory reuse zones and water management district consumptive use permitting rules. Attendees did not reach firm consensus on any additional actions to be taken on this issue.

Goal-Based Water Conservation Plans

- *Issues:* The Florida Water Environment Association suggested that the Conserve Florida program be updated to include the efficient and effective use of reclaimed water. They also indicated a concern about the existing statutory requirement to provide reasonable assurance that an alternative goal-based plan will achieve effective water conservation at least as well as the local water management district's standard requirements. In addition, the FWEA said that this comparison requirement can be an impediment to using the Conserve Florida Guide to propose goal-based water conservation plans. The current statute can be interpreted to necessitate the development of both a goal-based plan and a standard water conservation plan for comparison, or require that the permit applicant quantify the savings that would be realized when the districts' current conservation requirements are implemented by consumptive use permittees. However, given the nature of some of the water management districts' water conservation requirements, a quantitative side-by-side comparison may not be feasible. Additionally, the statutory term "goal-based" may be a misnomer and not understood by many people.
- *Outcomes:* The FWEA suggested revising statutory language to ensure robust water conservation plans but avoid requiring the goal-based—standard plan comparison. They also suggested that it may be desirable to change the term "goal-based" to "cost-effective," "flexible," or "feasible" water conservation plans. The water management districts stated that they needed some sort of standard to measure goal-based plans against. Attendees agreed to continue working on possible statutory language.

Communication and Coordination

- *Issues:* Consistent messages from state, regional, and local governments should include explaining the water supply challenges facing Florida, the value of all water resources, the benefits of using Florida-friendly landscapes, and what it means to “irrigate efficiently.” Also, the FWEA suggested government agencies could increase visibility by increasing funds for the Mobile Irrigation Labs program.

The FWEA offered a new proposal for increasing communication while promoting reuse: providing a formal process whereby a reclaimed water provider could comment on a consumptive use permit applicant’s reuse feasibility study when the applicant reports reuse is not feasible. In this situation, the reclaimed water provider may have ways to make reuse feasible that the applicant is not aware of. Reclaimed water providers want the opportunity to present this information for district evaluation. The Districts generally were supportive of receiving provider input, but expressed concern that waiting for provider comments could conflict with statutory time clocks. To implement this idea, providers would have to commit to a quick turn-around time for their comments.

- *Outcome:* Each water management district agreed to explore an informal mechanism to provide reclaimed water providers a commenting opportunity on reuse feasibility determinations in the consumptive use permitting process.

Economic Feasibility

- *Issue:* In 2007, the Southwest Florida Water Management District’s Governing Board approved a district reclaimed water task force recommendation that considers reuse economically feasible only if it costs the same or less than the user’s existing water supply. Many stakeholders expressed concern about such a policy, suggesting that the multiple benefits and costs of reuse need to be considered as a whole and that reclaimed water should not automatically be considered economically infeasible if it costs more than the user’s existing water supply. Other water management districts reported that they routinely have required reuse to be implemented even when the cost is more than continuing to use groundwater. The Department considers the task force recommendation to be inconsistent with the Water Resource Implementation Rule, Section 62-40.416(1), F.A.C.
- *Outcome:* Stakeholders can communicate their concerns to the Southwest Florida Water Management District. The Department of Environmental Protection already has sent a letter to the district voicing concern about this policy and asking that it not be implemented.

Recommendations

The stakeholder process was not designed to reach full consensus in only three meetings. The Department believes, however, that consensus generally exists to move forward with the following recommendations:

Legislative

1. Restore funding to the Water Protection and Sustainability Program for alternative water supply development, and protect this funding from reallocations. This funding is critical for expanding reuse throughout Florida and increasing a potential drought resistant source. In the first three years, the Water Protection and Sustainability Program, including the water management districts' match, provided about \$422.6 million for alternative water supply development, representing about 11% of the total construction costs. Water suppliers committed to providing about \$2.7 billion toward project construction, representing about 72% of the total costs. Reclaimed water project construction costs, at about \$1.3 billion, accounted for approximately 35% of all alternative water supply project costs. Providing seed money for construction promotes reuse implementation and expansion throughout Florida.
2. Incorporate proposed language changes in Section 373.0361(1), F.S. (Appendix H) that will include DEP and wastewater treatment utilities explicitly in the regional water supply planning process.
3. Expand the Conserve Florida Program to include the evaluation of reclaimed water. Work with water management districts and the reclaimed water providers to identify appropriate language revisions to Section 373.227, F.S. These changes may include replacing the existing statutory requirement obligating a comparison between a goal-based plan and a water management district's water conservation requirements with more useable criteria, and replacing the term "goal-based" water conservation plan with more appropriate terminology for reuse applications.

Agency Actions

4. The Department and the water management districts should develop consistent definitions and approaches for the use of offsets in the consumptive use permitting program. These changes should be codified in the district consumptive use permitting rules and possibly in DEP's statewide Water Resource Implementation Rule (Chapter 62-40, F.A.C.).
5. The water management districts should explore mechanisms to allow reclaimed water providers to comment on the reuse feasibility findings of consumptive use permitting applicants. The districts should receive information from the applicable reclaimed water provider identifying the locations and quantities of available reclaimed water. If such information has been provided, the district should consider that information, during its review of a consumptive use permit application, when evaluating the ability of the applicant to use reclaimed water.

Appendix A

August 18, 2008 Meeting Agenda

Reuse Stakeholders Meeting

Conference Room, Orlando Utility Commission
3800 Gardenia Avenue, Orlando (map on other side)
August 18, 2008, 10:00 a.m. – 1:00 p.m.

Agenda (updated)

Topic: Discuss impediments, incentives, policy clarifications, and concerns regarding reclaimed water issues as they relate to consumptive use permitting

1. Welcome
2. Introduction
 - Overview of Process
 - Current Roles
 - Statutes and Rules
3. Identification of Issues and Concerns
4. Discussion
 - General Principles
 - Prioritization of Issues/Concerns
5. Plan for Next Meeting

Appendix B

August 18, 2008 Meeting Summary

1st Reuse Stakeholders Meeting Summary

Orlando Utility Commission
3800 Gardenia Avenue, Orlando
August 18, 2008, 10:00 a.m. – 1:00 p.m.

I. Welcome (Janet Llewellyn, Bevin Beaudet)

A. Introduction of meeting leaders, WMD and DEP representatives at the front table, and participants by phone.

B. Meeting Purpose (Bevin): WMDs/DEP need to hear from reclaimed water providers and understand the differences in how utilities provide reclaimed water across the state. A number of issues prompted legislation during the 2008 legislative session and still need to be addressed.

II. Introduction - PowerPoint (Janet)

A. Meeting Focus: Discuss impediments, incentives, policy clarifications, and concerns regarding reclaimed water issues as they relate to consumptive use permitting (CUP). Find ways to help all parties work together more easily. Identify reuse and CUP program areas that need improvement.

B. Meeting Is Not: The meeting is not intended to be a forum to focus on every issue related to reuse.

C. Other PowerPoint Topics: roles of the different entities, statutes and rules governing the activities of the different entities, reuse strategies already identified in 2003, and ocean outfall legislation.

D. End Product: A DEP report with recommendations to address reuse/consumptive use issues.

E. Future Meetings: Meetings have been planned for August 18, September 16, and October 17, 2008. This discussion identified a misunderstanding among participants – many thought the three planned meetings would be the same meeting content provided at different locations, whereas the meeting leaders understood the meetings to be a continuing series of three (or more, if needed) meetings that progressively worked on issues identified in previous meetings. Janet asked utility participants if new issue/concern information would be identified in the September meeting if the same meeting content were presented; utility representatives said no, the same issues would come up. The group decided future meetings would build on each other. Many participants asked if the September meeting could be held in a more central location, such as Orlando. Some participants wanted to change the October 17 meeting date. Janet and Bevin agreed to look into these changes.

III. Identification of Issues and Concerns (All)

A. Process: Each participant introduced him/herself and identified up to three issues of particular concern. DEP staff wrote issues down on paper charts (organized by broad issue) posted on the walls, and WMD staff took notes. The resulting content recorded on the charts and notes is given below:

B. Regulatory Authority

- Regulation vs. over-regulation
- Unintended consequences of regulation
- Regulations over irrigation with reclaimed water

- Balance between encouragement of reuse and over-regulation
- Avoid unnecessary litigation
- Protection of users of reclaimed water
- Local control (local regulations)
- Jurisdiction - Reuse operating permits and liabilities to providers for reuse in areas where providers have no jurisdiction
- Reuse operating permit vs. wastewater operating permit
- Permitting requirements – distribution to permitted vs. unpermitted areas (equity)
- Definition: When does reclaimed water become a “water in the State?”
- Incorporate reuse into agricultural regulations/business
- Regulation of private wells

C. Offsets

- Important incentive
- Definition and implementation differences
- Policy consistency
- Trade potable offsets with agricultural and other nontraditional partners
- Reuse credits/reduction in per capita requirements

D. Irrigation Restriction Practices

- Implications of time-based restrictions
- Local control (govern as a local issue)
- Restrictions force disposal of reclaimed water and less reuse, need more disposal options and more disposal flexibility
- Restrictions increases surface water discharge, raise TMDL issues
- Storage
- Pressure to divert reclaimed water to residential irrigation; need diversification
- Policing citizens – time and cost, equitable enforcement
- Private well regulation and enforcement (also an equity issue)
- Continued customer access
- Working with consultants, system design
- Year-round restrictions

E. Supplementation

- Limitations on supplemental sources
- Critical for maximizing use of reclaimed water
- Needed to meet user demand
- Definitions: At what point is blended water no longer considered alternative water supply (AWS) or reclaimed water as related to irrigation restrictions? At what point is blended water no longer considered effluent?
- Need to design systems for supplementation (70% design capacity)
- Cost-effective storage

F. Mandatory Reuse Zones

- Definition and implementation
- Economic feasibility

G. Funding

- Grant funding

H. ASR

- Regulation as reclaimed water

I. Indirect Potable Reuse

- Aquifer recharge

J. Other

- Additional disposal options
- Wet weather discharge/RIBS
- Recognition that reuse is a business for a utility
- Recognition of utilities' large investment to fully implement reuse systems
- Equitable cost distribution (taxing some users when others use septic tanks)
- Resource optimization/best use and assistance to utilities to accomplish this
- Reuse feasibility (including end-user costs, letting market forces direct the reclaimed water approach)
- More communication and collaboration among utilities/WMDs
- Development of common language/approach
- Reuse promotion, education and awareness
- Specific opportunities for reuse (golf course, ranch representatives)
- Mature vs. new reuse systems; one size does not fit all
- Conservation

IV. Discussion – Prioritization of Issues/Concerns (ALL)

A. Process: Janet summarized the major issues raised by attendees and asked participants to vote on their top three issues. Note that all identified issues will be addressed in the discussion as time allows; the purpose of voting is simply to prioritize the discussion. Participants also noted that many issues overlap.

B. Issue Ranking (number of votes)

- Regulatory Authority (18)
- Offsets (17)
- Irrigation (16)
- Supplementation (12)
- Funding (6)
- Optimization of resource (6)
- ASR/Reclaimed Regulation (4)
- Mandatory Reuse Zones (2)

V. Discussion – General Principles (All)

A. Process: Participants were asked to identify general principles all could agree on, even if we are not able to implement the principle at this time.

B. Principles:

- Reduce dependence on potable quality water for non-potable uses
- Encourage use of reuse quality water
- Ensure reliable disposal
- Encourage efficient use of reclaimed water (discourage wasteful use)
- Appropriate quality for use intended
- **Umbrella Goal/Overarching Principle: Optimize use of reclaimed water to achieve water resource goals**
- Encourage landscapes that minimize the need for supplemental water
- Ensure protection of protection of public health and safety
- Collaborative effort among DEP, WMDs, utilities, local governments, and users in promoting reclaimed water
- Ensure protection of the environment in implementing reclaimed water reuse
- Promote cost effective and economically feasible solutions/tools to increase use of reclaimed water
- Promote public education/understanding of reuse (including consumer and environmental groups)

VI. Discussion – Regulatory Authority

A. Questions: Why do we regulate reclaimed water? What are we concerned about? What are we trying to achieve?

B. Reasons:

- Protect public health and safety
- Optimize water resources (conserve potable quality resources)
- Meet growing demand
- (End-user certainty—Is this a contract issue?)

VII. Plan for Next Meeting

A. Location: Scheduled for September 16 in Boca Raton. Janet and Bevin will look into moving the meeting to Central Florida.

B. Topics: Participants agreed to continue the discussion, focusing on the first four priority issues:

- Regulatory Authority
- Offsets
- Irrigation
- Supplementation

Appendix C

September 16, 2008 Meeting Agenda

Reuse Stakeholders Meeting

Orange County Utilities
9150 Curry Ford Road, Orlando (map on back)
September 16, 2008, 10:00 a.m. – 3:00 p.m.

Agenda

Topic: Continuation of the discussion on reclaimed water issues as they relate to consumptive use permitting. Focus topics for this meeting are: irrigation, regulation, offsets, and supplementation of reclaimed water.

1. Welcome
2. Summary of August 18 Meeting (Janet Llewellyn)
3. Irrigation
 - Proposed SJRWMD Rule Concepts (Hal Wilkening)
 - Draft DEP Policy Statement (Janet Llewellyn)
 - Discussion
4. Regulatory Authority
 - Comparison of WMD Reuse Requirements (WMD Staff)
 - Discussion
5. Offsets
 - Presentation on Common Understanding of Terms (Janet Llewellyn)
 - Discussion
6. Supplementation
 - Issue Refinement (Utilities / Bevin Beaudet)
 - Discussion
7. Plan for Next Meeting

Appendix D

September 16, 2008 Meeting Summary

2nd Reuse Stakeholders Meeting Summary

Orange County Utilities
9150 Curry Ford Road, Orlando
September 16, 2008, 10:00 a.m. – 3:00 p.m.

I. Welcome (Janet Llewellyn)

II. Summary of August 18 Meeting – PowerPoint (Janet)

Janet presented a brief summary of the first Reuse Stakeholders meeting, held August 18, 2008. Participants at that meeting voted to discuss the four topics on today's agenda (irrigation, regulatory authority, offsets, and supplementation). Materials from the first and second meetings are available on DEP's reuse web site at:

<http://www.dep.state.fl.us/water/reuse/news.htm>.

Note: Each segment of Janet's PowerPoint presentation referenced in this summary is included in the one DEP presentation available on the web site above.

III. Discussion Topic: Irrigation

A. Proposed SJRWMD Rule Concepts – PowerPoint (Hal Wilkening)

Hal made a presentation on SJRWMD's proposed changes to the rule requirements for Irrigation-type water use, focusing on the reclaimed water provisions. The presentation is available at the web site.

Additional points/clarifications:

- This draft rule is a work in progress—it incorporates suggestions from the last meeting and is still being reviewed and commented on by district stakeholders. The draft rule applies to users falling under the general permit; CUP holders may have different requirements.
- The draft rule emphasizes efficiency in all landscape irrigation, including reclaimed water reuse. This is particularly important in light of current challenges to two CUP applications seeking supplemental water for reclaimed water irrigation. The $\frac{3}{4}$ " per zone and 1 hour per zone irrigation figures are based on IFAS studies, and are intended to be a step toward changing user behavior and reaching the goal of using reclaimed water sources more efficiently.
- From last meeting, the district understood that utilities might need more irrigation days and more flexibility in choosing the days. The revised draft rule includes a utility notification process to allow irrigation on more than two days per week during Daylight Savings Time and one day per week during Eastern Standard Time (the one day per week is a new provision, too). The notification process does not require SJRWMD pre-approval, and it does not re-open a utility's CUP. However, the next time the utility comes in for a five-year review, modification, or renewal, the district will evaluate the utility's water conservation plan, including its reclaimed water use.

- The draft rule still specifies days of the week by address, with the new provision to increase the number of irrigation days per week through the notification process. Time-of-day restrictions are still in place without change.
- The provision not to water during rain events was meant to address complaints the district receives about irrigation during rain storms. A couple of participants advised this item does not need to be addressed in the rule and that sometimes rain amounts are tiny and irrigation with reclaimed water still is needed.
- Send comments or suggestions on the draft rule to:

Norma Messer
 St. Johns River Water Management District
 4049 Reid Street
 Palatka, FL 32177-2529, or
 nmesser@sjrwmd.com

B. Draft DEP Policy Statement – PowerPoint + Handout (Janet)

Janet went over the draft irrigation policy, sent out before the meeting, item by item. Hal's presentation was an example of how this policy might be implemented.

Additional points/comments:

- The draft policy is directed at irrigation because this was the interest of the participants at the August 18 meeting. Efficient use encompasses more than just landscape irrigation, such as recreation and industrial/commercial reclaimed water uses.
- The goal of the policy is optimal use (meaning full and efficient use of reclaimed water), and not just for irrigation. Utilities advised the terms full use and efficient use still need definition.
- The language in this document is intended as high-level policy language and is less specific than SJRWMD's proposed rule language. Policy language is a tool for assuring consistency among WMD rules. The WMDs implement the policy and must use more specific language to do so. One topic to be addressed is whether or not all WMDs should have rules that are alike, or if there can be some differences among them. Once there is consensus on the policy, we need to decide if it should be placed in Chapter 62-40, FAC, or elsewhere.
- Stakeholders need to identify the best use for the reclaimed water before there is capital investment by the utilities. For example, installing irrigation pipes is very costly, and once a utility invests in using reclaimed water for irrigation, it is difficult later to change to, or invest more money in, a non-irrigation use such as aquifer recharge.
- Bullet 4 - Additional suggestions:

- Need to explore the balance between irrigation efficiency vs. disposal efficiency, recognizing that when utilities develop a reclaimed water system for irrigation they base it on a certain design and a specific storage amount. If there is too much reclaimed water, it had to be disposed of by deep well or discharge to surface water. Disposal efficiency can be low even if irrigation efficiency is high.
- Need to add language that encourages use of rain sensors and other technology. Technological devices can induce much more efficiency than restriction by day and time.
- Bullet 7 – Stakeholders need to develop criteria to evaluate when meeting day-of-week irrigation restrictions is not feasible.
- Bullet 8 – We need to know how much reclaimed water is being used in order to determine if the use is efficient.
- Bullet 10 – Could Water Protection and Sustainability Program funds be used by coastal communities for aquifer recharge or rapid infiltration basins? Yes, if it is tied to making additional water available for use.
- Bullet 11 – Additional suggestions:
 - Need stronger language to support (and perhaps require?) local ordinances, especially because local governments may resist adopting ordinances. Need to reference the *Landscape Irrigation & Florida-Friendly Design Standards* booklet. Also, need to address what a utility can do when local governments won't adopt ordinances.
 - Need to focus on the use of technology (rain sensors, etc.)—it is often more effective than education in terms of dollars spent.
 - Last line, change “times” to “efficiency” to broaden the scope.
 - Supplementation needs to be addressed.
- Bullet 12 (suggested addition) – Need a bullet identifying who (provider or user) has the responsibility for efficient reclaimed water use. Some utilities thought this responsibility should lie with the user, not the provider, because efficient use requires the passing of local ordinances and is beyond the authority of the utility. End users could be required to use rain sensors, etc., to assure efficiency, rather than days-of-week. SJRWMD thought this was a joint responsibility of providers and users. In some cases, the utility is both the provider and user. In all cases, the provider is responsible for meeting the reasonable-beneficial test and for evaluating reuse feasibility, and the user is responsible for following irrigation restriction days/times.

- Comments are due to by October 7, 2008 to:

Carolyn Voyles
Office of Water Policy
FL Dept. of Environmental Protection
2600 Blair Stone Road, MS 46
Tallahassee, FL 32399-2400
carolyn.voyles@dep.state.fl.us

IV. Discussion Topic: Regulatory Authority

A. Comparison of WMD Reuse Requirements – PowerPoint + Handout (Janet & WMD Staff)

As requested by participants at the last meeting, Janet went over a handout and a PowerPoint table comparing reclaimed water requirements among the water management districts. WMD staff answered questions about individual district requirements. SRWMD currently is in rulemaking; in many cases, their “No” answer to a question may become “Yes” in March 2009.

The discussion focused on three main topics: feasibility, permitting, and efficiency:

- **Economic Feasibility (#3)** – The determination of economic feasibility is hard to grapple with and it gets resolved through discussion with the WMD. SFWMD has economic feasibility criteria in their Basis of Review. SJRWMD uses consultants to evaluate economic feasibility. This district advised that participants probably wouldn’t want specific numeric standards because one size does not fit all. A list of evaluation factors or a standardized evaluation process might be valuable, but the WMDs need flexibility to look at the economic situation of the applicant. SWFWMD advised that an applicant requesting to go back to a “standby” CUP because reclaimed water is now more expensive will be evaluated according to the same criteria as in the initial CUP—is use of reclaimed water feasible? Reclaimed water use cannot be abandoned simply because it costs a few cents more.
- **How would feasibility work in this situation:** It might be feasible to send reclaimed water to a golf course, but from the utility’s perspective, this may not be the best place to send it because of low demand by the golf course (i.e., not a good utility customer, so it is not desirable to run lines to that end user) and there may be a better customer elsewhere? SJRWMD – This situation could be a basis to say it’s not technically feasible to serve the golf course.
- **What if a user is too small to need a CUP?** They may decide they don’t need reclaimed water and want to irrigate from small wells. SFWMD exempts small users. SWFWMD reported that some local governments regulate reclaimed water through local ordinances. SJRWMD uses their general permit for small domestic wells, but this may no longer be needed, and they are re-examining this issue.
- **Utilities and WMDs would benefit from working together on Master Water Plans and development of reclaimed water plans.** For example, lots of home owner associations and golf courses were getting well water permits in areas planned

for reclaimed water lines. A better partnership could prevent this situation from occurring.

- SFWMD requires end users to report reclaimed feasibility annually, and they must take reclaimed water if feasible, even if it is in the middle of a CUP (#5). The district tries to link a utility's annual report with where reclaimed lines will go. The rules do not require a small general permit holder to use reclaimed water—maybe the SF program has matured beyond these rules.
- Availability (#6) – WMDs will know about reclaimed water availability from utilities. SJRWMD and SFWMD also meet with DEP regional offices to learn what the reclaimed water situation is.
- Conservation Plans (#7) – The question was oddly worded. The use of reclaimed water has to be addressed, but it may or may not be addressed in a conservation plan.
- Reporting Amount of Reclaimed Water Provided (#9) – The question was oddly worded. All permittees report this information annually to DEP.
- Metering (#11) – In SRWMD, where reclaimed interlocal agreements have been executed, the local governments meter end users. SFWMD leaves metering up to the utility, but requires a master meter for subdivisions and large users. Some utilities do meter smaller users because metering and volume based rates reduce demand.
- Efficiency (#13) – If there is no CUP and only a reclaimed water user, what authority allows one to require efficient use? A 2nd District Court of Appeals decision that found reclaimed water is water. The regulatory authority includes not only natural water, but also harnessed water or water that is a product, meaning the CUP program extends to secondary users and purchasers of water.

When does reclaimed water from a facility become able to be re-permitted to someone else? In SJRWMD, if the wholesale customer isn't in the master CUP, and the amount is in excess of 100,000 gpd, then they must get a secondary CUP.

If reclaimed water is water and the state can regulate it, can a WMD decide recharge is best and require this use rather than allowing a utility to sell the water to a paying customer? No, the Legislature prohibits this when the water is already under contract.

Aren't WMDs redirecting reclaimed water between users when limiting irrigation to specific days of the week? No, this is only an efficient water use issue, not a redirection issue.

- Mandatory Reuse Zones (#15) – Mandatory Reuse zones have been established in three districts: SFWMD, SRWMD, and SJRWMD, mostly for irrigation. In SJRWMD, the pre-emptive authority issue was resolved by including language in local ordinances requiring reclaimed water use, unless the district required otherwise. This allowed the utility to use the most logical lowest quality source, which sometimes may be another source such as storm water. DEP

recommends having similar pre-emption clauses in local ordinances establishing mandatory reuse zones.

V. Discussion Topic: Offsets

A. Common Understanding of Terms – PowerPoint (Janet)

Janet gave a short presentation on offsets as impact avoidance vs. offsets that reduce use (credit). The concepts presented were acceptable to the WMDs. The discussion focused on who gets credit for reduced use offsets and how long credits last.

Issues/points were:

- Who gets the credit? The person taking the action to reduce use gets the credit. In the golf course example, the City (provider of reclaimed water) gets the credit.

What if a user, such as a citrus grove, goes out of business? DEP indicated that the water used would go back into the pot and others can apply for it.
- How long do credits last? The utilities voiced great concern that a credit might be lost if not used immediately. They noted that even if the utility does not use the credit immediately, they may have planned to use the credited amount as a future water source in their Master Water Plan. This planned future use may extend beyond the current permit period. Utilities need some assurance they will not lose the credit, if they are going to make the capital investment in reclaimed water. SWFWMD does not take the credit back. The credit is tied back to the utility at CUP renewal. SWFWMD has not encountered this situation yet.
- At what point does not using a credit become water banking? (To be addressed)
- The concept of offset as credit appears in SWFWMD's Regional Water Availability rule and Lake Okeechobee Service Area, and in SWFWMD's SWUCA rules— areas where you can't otherwise get a CUP for additional water from specific sources. It may not make sense to expand these criteria to other areas.
- Water conservation requires utilities to make a capital investment, so why is it not an offset? Because a utility is required to be doing conservation in order to get a permit. Some utilities don't think of conserved water as a source because the amount may not be dependable. Still, as above, some utilities said they need some assurance they will not lose the amount of conserved water if they are going to make the capital investment. Also, some utilities said conservation requirements may need to be paced so that they don't upset the financial engine of the utility. On the other hand, conservation is a method to avoid or delay the need to develop the more expensive AWS.
- WMDs and DEP do not object to adding conservation to the definition of AWS.

VI. Discussion Topic: Supplementation

Time ran out before we reached this topic. It will be on the agenda for the next meeting.

VII. Plan for Next Meeting

A. Date

Participants agreed to move the next meeting's date from October 17 to November 19 in Orlando, from 10 am to 3 pm, location TBA. (Since the meeting, the location has been confirmed. We will meet at the same facility—Orange County Utilities.)

B. Reminder

The due date for comments on the draft irrigation policy is October 7.

Appendix E

DEP Draft Irrigation Policy

Issue: Assuring Efficient Use of Reclaimed Water in Irrigation

- Florida continues to strongly encourage and promote the reuse of reclaimed water.
- Reuse is a critical component of meeting the state's existing and future water supply needs while sustaining natural systems.
- Reclaimed water is a valuable water resource. The state goal is to use reclaimed water as efficiently and effectively as any other water source.
- Day-of-week and hours-of-the-day irrigation restrictions are important tools, among others, in assuring that the use of reclaimed water for irrigation is efficient and is not wasted.
- It is recognized that different reclaimed water systems will exhibit different levels of maturity. For example, newer systems often will face challenges in developing their customer bases and will be inclined to offer incentives for the use of reclaimed water that are based on unrestricted use. Older, more mature systems will be much more likely to use efficiency measures in an effort to conserve their resource and to be able to serve additional customers with their limited supplies.
- In some cases, day-of-week restrictions on irrigating with reclaimed water may not be feasible at this time. There can be unintended consequences with regard to management of wastewater discharges. For example, unless there is a sufficient number of customers, along with sufficient storage available (or to be constructed), there may be times of excess reclaimed water, which will require disposal via discharging to surface water or by deep well injection. It is recognized that the state goal cannot be achieved immediately for all reclaimed water systems.
- The burden of demonstrating that compliance with day-of-week restrictions is not feasible falls on the generator of reclaimed water. The state and water management districts, in consultation with stakeholders, should develop criteria for determining when it is not feasible to meet the day-of-week restrictions that other users do. If it is demonstrated that it is not feasible to comply immediately, there should be a process to identify the steps needed, and a timetable for those steps to be taken, that will result in compliance with the state goal of efficient use of reclaimed water in the future.
- Metering of reclaimed water use and implementation of volume-based rates for reclaimed water service should be implemented as a means for promoting efficient and effective use of reclaimed water. According to the *Water Reuse for Florida, Strategies for Effective Use of Reclaimed Water*, less than half of Florida's reclaimed water utilities currently meter reclaimed water service and employ volume-based user charges. Reclaimed water should not be viewed as "too cheap to meter." It is a valuable resource and consumers need appropriate price signals to balance local supply and demand.

- Water supply utilities are required to develop a water conservation plan when applying for a new or modified consumptive use permit to withdraw water. The WMDs should review the conservation plan and ensure that appropriate steps are being taken to increase the efficiency of use of reclaimed water in order to meet the state goal, including expansion of the distribution system to include additional customers, additional storage for reclaimed water, diversification of uses of reclaimed water, and metering and development of appropriate volume-based rates structures that balance local supply and demand.
- The WMDs and DEP can provide cost sharing and other incentives to utilities to implement metering and volume-based rate structures (e.g., offer loans or grants that include as a condition the use of metering and volume-based rates, or consider longer duration permits for utilities that implement reuse efficiency measures).
- Reclaimed water education programs, and local policies and ordinances regarding landscaping, should promote the efficient use and conservation of reclaimed water, with local ordinances concerning irrigation times being consistent with WMD irrigation rules.

Appendix F

November 19, 2008 Meeting Agenda

Reuse Stakeholders Meeting

Orange County Utilities
9150 Curry Ford Road, Orlando (map on back)
November 19, 2008, 10:00 a.m. – 3:00 p.m.

Agenda

Topic: Continuation of the discussion on reclaimed water issues as they relate to consumptive use permitting.

1. Welcome (Janet Llewellyn)
2. Summary of September 16 Meeting (Janet)
3. Update on Small Group Regulatory Authority Discussion (Janet)
4. Reuse Coordinating Committee Activities (Shanin Speas-Frost)
5. Draft DEP Irrigation Policy Statement (Janet)
 - Summary of Comments
 - Discussion
6. FWEA Utility Council Proposed Concepts (Alan Oyler)
 - Discussion
7. Indirect Potable Reuse/Groundwater Recharge (SWFWMD)
 - SWFWMD Pilot Project Presentation
8. Next Steps (Janet)

Appendix G

November 19, 2008 Meeting Summary

3rd Reuse Stakeholders Meeting Summary

Orange County Utilities
9150 Curry Ford Road, Orlando
November 19, 2008, 10:00 a.m. – 3:00 p.m.

I. Welcome (Janet Llewellyn, DEP)

II. Summary of Previous Meetings – PowerPoint (Janet)

Janet presented a brief summary of the first and second Reuse Stakeholders meetings, focusing on issues identified and prioritized at the August 18, 2008 meeting. The top four topics were: irrigation, regulatory authority, offsets, and supplementation. During the September 16, 2008 meeting, Janet presented a draft irrigation policy and asked for attendee comments, and SJRWMD presented proposed rule concepts illustrating how the draft irrigation policy might be implemented. Janet also led discussions comparing water reuse requirements among the water management districts, distinguishing between different uses of the term “offset” (reduced use vs. mitigation), and identifying who should get credit when an offset is created.

Materials from all three meetings are available on DEP’s reuse web site at:

<http://www.dep.state.fl.us/water/reuse/news.htm>.

III. Update on Small Group Regulatory Authority Discussion (Janet)

Janet presented a concept paper discussing how the reclaimed water planning process could be integrated into the WMDs’ regional water supply planning process. Regional water supply plans identify areas that are anticipated to need additional water in the next 20 years and ways to obtain that water. Often, more potable water is “created” by using reclaimed water for non-potable uses, such as irrigation. Utilities that provide reclaimed water also make plans, sometimes independently, on where it is best to send their reclaimed water. Sometimes, utilities are contacted to help implement regional water supply plans after the utilities already have invested money to provide reclaimed water elsewhere.

The proposed concept is for the WMDs, utilities, and DEP’s Wastewater Program to work together during the development of regional water supply plans to try to match areas identified in the plan as needing reclaimed water with utility plans to provide reclaimed water, *before* utilities make any capital investment. This new process would be voluntary. It especially could benefit a utility if their reclaimed water project is listed in the regional water supply plan, thus making it eligible for alternative water supply funding.

Making this change would require an amendment to Chapter 373.0361(1), F.S. Other issues that still remain to be worked out include: how augmentation would fit in to this process, the possibility of regionalization of reclaimed water, and the possibility of involving interested utilities in the groundwater permitting process.

IV. Reuse Coordinating Committee Activities – PowerPoint (Shanin Speas-Frost, DEP)

Shanin described which agencies participate in the Reuse Coordinating Committee and their roles in reuse, as well as what this informal committee does. She briefly went over a few topics from the November 18, 2008 Committee meeting to illustrate the kinds of issues discussed at their semi-annual meetings. The November 18 meeting notes are available from Shanin. She can be reached at: 850-245-8610 or shanin.speasfrost@dep.state.fl.us.

V. Draft DEP Irrigation Policy Statement (Janet)

Janet reviewed the comments received at the September 16 meeting and those submitted afterwards. There still was not much consensus on the draft policy. Issues that need further discussion are: the importance of disposal during irrigation, ways to achieve efficiency other than through day-of-the-week restrictions, stakeholder development of irrigation restriction criteria, and assistance with the use of ordinances. Two of the comments received were on the St. Johns River Water Management District's draft rule concepts; these were forwarded to that district for their consideration.

VI. FWEA Utility Council Proposed Concepts - PowerPoint (Alan Oyler, FWEA)

Alan proposed five methods for expanding the availability and efficient use of reclaimed water. The presentation is available on the web site.

Additional points/clarifications:

- **Utility – District Coordination**
 - Attendees agreed that all parties would benefit from continuing to increase communication between utilities and water management districts. This is particularly important when trying to match reclaimed water availability with reclaimed water customers.
 - Some utilities wanted a definition of feasibility. SJRWMD advised that it was difficult to define many specifics for feasibility and still maintain the flexibility utilities desire. This district briefly described how evaluating economic feasibility might work for a golf course reporting reuse is infeasible. For example, the district would look at what other golf courses in the area pay for reclaimed water and what fees local courses charge their customers.
 - SWFWMD mentioned a problem with economic feasibility in their district. The district's Governing Board approved a District reclaimed water task force recommendation that reuse is economically feasible only if it costs the same as or less than the user's existing water supply. Attendees agreed that cost was not the only important component in economic feasibility. Reclaimed water can cost more than the user's existing water supply and still be economically feasible.
 - For implementation, water management districts would need assurances that utility information on feasibility was accurate. This could involve more rules and more reporting. In addition, the districts were concerned that

waiting for provider comments could interfere with the permitting time clock. To implement this idea, providers would have to commit to a quick turn-around time for their information submittal. There also would have to be a way to work through situations when permit applicants and reclaimed water providers could not reach agreement.

- Some utilities reminded attendees that their not commenting on the FWEA proposal did not necessarily mean agreement.
- Janet asked the water management districts to come up with plans for how including utility reviews might work in their districts.

- **Mandatory Reclaimed Water Zones**

- Janet reviewed the pre-emption issue. The districts are concerned about how their exclusive water use permitting authority relates to these zones. They want to keep their discretion to use locally available, lower-quality alternative sources in order to extend reuse elsewhere. To address this concern, the St. Johns River Water Management District developed language for inclusion in local ordinances saying that reclaimed water use is mandatory in these zones, unless the district requires otherwise.
- SJRWMD pointed out that just because a mandatory reuse zone existed, it didn't mean that reuse was inherently feasible in the zone. The feasibility test still had to be met within the zone. Janet said there was little experience with feasibility in these zones at present, but the feasibility issue would have to be considered in the future.
- Utilities said they needed DEP and local water management district support in getting local governments to adopt and enforce these ordinances. The FWEA asked the water management districts to support these zones by limiting permit exemptions (for domestic wells) from reclaimed water use and by not allowing the drilling of new private wells in the designated zones. Some attendees pointed out that domestic uses of water are exempt from the district's permitting requirements, and therefore cannot be restricted through consumptive use permitting. However, the districts could limit irrigation wells in these areas or place conditions on the types of wells.
- There was general support for the FWEA's concepts except in the few cases where the water management district knows an alternate, lower quality source of water is available.

- **Irrigation Education**

- Attendees agreed that more work on this topic is needed. This includes teaching homeowners how to properly use their irrigation systems.

- **Offsets**

- Offset credits make sense only where potable quality water availability is capped or limited.

- There is agreement that the entity taking action reduce potable water use (usually the reclaimed water provider) gets the credit.
- FWEA said the term “statewide” meant there would be statewide consistency among the water management districts—not that there would be a statewide rule.
- Offset credits are not retroactive. Some utilities disagree and wanted to get credit for past offsets they created.
- There was much discussion on the concept of irrevocable credits. Florida water law does not allow water management districts to convey permanent water rights. Still, how long credits last is important because utilities plan to use offset credits not only in the present, but also in the future as part of their Master Water Plans. This planned use can extend beyond the current permit period. Utilities want assurance they will not lose the credit, if they are going to make the initial capital investment in reclaimed water. FWEA suggested perhaps the entity receiving the credit should get a “first right of refusal” during permit renewal.
- Allowing reclaimed water providers to keep credits for future use raises additional questions: When does a credit become water banking? Does Florida want to develop a water market?
- Some attendees didn’t want an applicant to receive an “entitlement” to reclaimed water through the consumptive use permitting process.
- SWFWMD stated that the FWEA proposal did not include the idea that an offset could be used to benefit the environment.
- SJRWMD was concerned that reclaimed water use should not become a justification for allowing an increase in per capita use.
- Attendees agreed that stakeholders need to move forward on creating a consistent framework for the use of offsets. DEP suggested that the 2009 timeframe may be too ambitious.

- **Goal-based Conservation Plans**

- FWEA indicated the statutory requirement to provide reasonable assurance that the goal-based plan will achieve effective water conservation at least as well as the local water management district’s standard requirements, as written, created an impediment to utilities’ using the *Conserve Florida Guide* to develop goal-based plans. Meeting this requirement can be interpreted to necessitate development of both a goal-based plan and a standard water conservation plan for comparison, and either doubles the work needed for plan development (if two plans are developed) or prevents a meaningful comparison (if only one plan is developed). DEP explained the statutory language was intended to prevent the state from losing ground in the reuse progress Florida already had made, but a quantitative comparison is usually not feasible. Some utilities thought water management district permit reviewers were not familiar with “goal-based”

plans; consequently, they steered applicants toward using the standard district plan.

- Many attendees, including both utilities and districts, could not define the term “goal-based.” They suggested the term was a misnomer and should be replaced by a different term indicating flexibility. There was no agreement on a replacement term.
- Some water management districts summarized *Guide* use within their districts. SJRWMD supports goal-based plans, but they struggle with the meaning of “goal-based.” They understand the need for plan flexibility, but also need a comparison standard for evaluating goal-based plans. SWFWMD is working out some kinks in using the *Guide*. SWFWMD does not have consensus in using the *Guide*. Their Governing Board wants utilities to use all feasible ways to conserve water.

VII. Indirect Potable Reuse/Groundwater Recharge (Mark Barcelo, SWFWMD)

Mark presented the details of an aquifer recharge feasibility study SWFWMD is undertaking to assess the feasibility of recharging the Upper Floridan Aquifer to improve the aquifer and create future groundwater withdrawals. Attendees are very much interested in seeing the results, when they are available. The presentation is available on the web site.

VIII. Next Steps (Janet)

Janet stated that this was the last of the planned meetings. The discussions on the unresolved topics will continue through other forums.

Appendix H

Reclaimed Water – Regional Water Supply Planning Integration

Key concepts and legislative amendment for how reclaimed water planning process should integrate with the RWSP process

Draft 11/04/08

Key concepts:

I. Expansion of RWSP Participants

- a. Within the current WMD regional water supply planning (RWSP) process, increase the scope of participants to enable an enhanced focus on reclaimed water, to include direct participation of DEP wastewater and reclaimed water regulatory program staff, and wastewater utilities willing to participate.
- b. The participation of DEP's wastewater and reclaimed water regulatory program staff with the water management districts staff will better enable, at a planning level, identification of regulatory criteria and issues to anticipate in permitting in order to yield inclusion of reclaimed water project options that are more likely to satisfy district and DEP permit requirements.

II. Advantages of Participation

The wastewater utilities who participate will have the advantage of proposing their specific project options for the future, for possible inclusion on the list of alternative water supply (AWS) project options in the RWSP. Inclusion of the projects would confer the same status and benefits as other AWS projects (potential AWS funding from WSP, public interest presumption).

III. Coordination and Identification of Feasible Water Supply Development Options

This planning process should enable coordination with water managements to develop projects that help match available reclaimed water supplies with reasonable-beneficial uses and

other potentially achievable water resource benefits (e.g. water supply, water quality, environmental) and thereby identify water supply development project options for inclusion in the RWSP. The RWSP should also, on a planning level, identify those reclaimed water reuse based water supply development project options that appear to be permissible and financially and technically feasible.

IV. Key information used in this planning process:

- a. inventory of reclaimed water supplies by location (current and projected for 20 year planning horizon)
- b. uses of reclaimed water by WWTP location, currently and as proposed by wastewater utilities over the 20 year planning horizon
- c. inventory of potential water supply demands by location, that could potentially be met by existing or projected reclaimed water supplies over the 20 year planning horizon
- d. inventory of specific proposals for water supply development projects that could be implemented by utilities to create more water supply by use of reclaimed water
- e. master facility plans, other planning studies already conducted, and existing reclaimed water contracts between utilities and users regarding availability and use of reclaimed water within the planning area

Proposed statutory amendment to 373.0361(1) necessary to implement the approach outline above:

373.0361 Regional water supply planning.—

(1) The governing board of each water management district shall conduct water supply planning for any water supply planning region within the district identified in the appropriate district water supply plan under s. 373.036, where it determines that existing sources of water are not adequate to supply water for all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems for the planning period. The planning must be conducted in an open public process, in coordination and cooperation with local governments, regional water supply authorities, government-owned and privately owned water **and wastewater** utilities, multijurisdictional water supply entities, self-suppliers, **the department**, and other affected and interested parties. The districts shall actively engage in public education and outreach to all affected local entities and their officials, as well as members of the public, in the planning process and in seeking input. During preparation, but prior to completion of the regional water supply plan, the district must conduct at least one public workshop to discuss the technical data and modeling tools anticipated to be used to support the regional water supply plan. The district shall also hold several public meetings to communicate the status, overall conceptual intent, and impacts of the plan on existing and future reasonable-beneficial uses and related natural systems. During the planning process, a local government may choose to prepare its own water supply assessment to determine if existing water sources are adequate to meet existing and projected reasonable-beneficial needs of the local government while sustaining water resources and related natural systems. The local government shall submit such assessment, including the data and methodology used, to the district. The district shall consider the local government's assessment during the formation of the plan. A determination by the governing board that initiation of a regional water supply plan for a specific planning region is not needed pursuant to this section shall be subject to s. 120.569. The governing board shall reevaluate such a determination at least once every 5 years and shall initiate a regional water supply plan, if needed, pursuant to this subsection.

(2) Each regional water supply plan shall be based on at least a 20-year planning period and shall include, but need not be limited to:

(a) A water supply development component for each water supply planning region identified by the district which includes:

1. A quantification of the water supply needs for all existing and future reasonable-beneficial uses within the planning horizon. The level-of-certainty planning goal associated with identifying the water supply needs of existing and future reasonable-beneficial uses shall be based upon meeting those needs for a 1-in-10-year drought event. Population projections used for determining public water supply needs must be based upon the best available data. In determining the best available data, the district shall consider the University of Florida's Bureau of Economic and Business Research (BEBR) medium population projections and any population projection data and analysis submitted by a local government pursuant to the public workshop described in subsection (1) if the

data and analysis support the local government's comprehensive plan. Any adjustment of or deviation from the BEBR projections must be fully described, and the original BEBR data must be presented along with the adjusted data.

2. A list of water supply development project options, including traditional and alternative water supply project options, from which local government, government-owned and privately owned utilities, regional water supply authorities, multijurisdictional water supply entities, self-suppliers, and others may choose for water supply development. In addition to projects listed by the district, such users may propose specific projects for inclusion in the list of alternative water supply projects. If such users propose a project to be listed as an alternative water supply project, the district shall determine whether it meets the goals of the plan, and, if so, it shall be included in the list. The total capacity of the projects included in the plan shall exceed the needs identified in subparagraph 1. and shall take into account water conservation and other demand management measures, as well as water resources constraints, including adopted minimum flows and levels and water reservations. Where the district determines it is appropriate, the plan should specifically identify the need for multijurisdictional approaches to project options that, based on planning level analysis, are appropriate to supply the intended uses and that, based on such analysis, appear to be permissible and financially and technically feasible. The list of water supply development options must contain provisions that recognize that alternative water supply options for agricultural self-suppliers are limited.

3. For each project option identified in subparagraph 2., the following shall be provided:

a. An estimate of the amount of water to become available through the project.

b. The timeframe in which the project option should be implemented and the estimated planning-level costs for capital investment and operating and maintaining the project.

c. An analysis of funding needs and sources of possible funding options. For alternative water supply projects the water management districts shall provide funding assistance in accordance with s. 373.1961(3).

d. Identification of the entity that should implement each project option and the current status of project implementation.

(b) A water resource development component that includes:

1. A listing of those water resource development projects that support water supply development.

2. For each water resource development project listed:

a. An estimate of the amount of water to become available through the project.

b. The timeframe in which the project option should be implemented and the estimated planning-level costs for capital investment and for operating and maintaining the project.

c. An analysis of funding needs and sources of possible funding options.

d. Identification of the entity that should implement each project option and the current status of project implementation.

(c) The recovery and prevention strategy described in s. 373.0421(2).

(d) A funding strategy for water resource development projects, which shall be reasonable and sufficient to pay the cost of constructing or implementing all of the listed projects.

(e) Consideration of how the project options addressed in paragraph (a) serve the public interest or save costs overall by preventing the loss of natural resources or avoiding greater future expenditures for water resource development or water supply

development. However, unless adopted by rule, these considerations do not constitute final agency action.

(f) The technical data and information applicable to each planning region which are necessary to support the regional water supply plan.

(g) The minimum flows and levels established for water resources within each planning region.

(h) Reservations of water adopted by rule pursuant to s. 373.223(4) within each planning region.

(i) Identification of surface waters or aquifers for which minimum flows and levels are scheduled to be adopted.

(j) An analysis, developed in cooperation with the department, of areas or instances in which the variance provisions of s. 378.212(1)(g) or s. 378.404(9) may be used to create water supply development or water resource development projects.

(3) The water supply development component of a regional water supply plan which deals with or affects public utilities and public water supply for those areas served by a regional water supply authority and its member governments within the boundary of the Southwest Florida Water Management District shall be developed jointly by the authority and the district. In areas not served by regional water supply authorities, or other multijurisdictional water supply entities, and where opportunities exist to meet water supply needs more efficiently through multijurisdictional projects identified pursuant to paragraph (2)(a), water management districts are directed to assist in developing multijurisdictional approaches to water supply project development jointly with affected water utilities, special districts, and local governments.

(4) The South Florida Water Management District shall include in its regional water supply plan water resource and water supply development projects that promote the elimination of wastewater ocean outfalls as provided in s. 403.086(9).

(5) Governing board approval of a regional water supply plan shall not be subject to the rulemaking requirements of chapter 120. However, any portion of an approved regional water supply plan which affects the substantial interests of a party shall be subject to s. 120.569.

(6) Annually and in conjunction with the reporting requirements of s. 373.536(6)(a)4., the department shall submit to the Governor and the Legislature a report on the status of regional water supply planning in each district. The report shall include:

(a) A compilation of the estimated costs of and potential sources of funding for water resource development and water supply development projects as identified in the water management district regional water supply plans.

(b) The percentage and amount, by district, of district ad valorem tax revenues or other district funds made available to develop alternative water supplies.

(c) A description of each district's progress toward achieving its water resource development objectives, including the district's implementation of its 5-year water resource development work program.

(d) An assessment of the specific progress being made to implement each alternative water supply project option chosen by the entities and identified for implementation in the plan.

(e) An overall assessment of the progress being made to develop water supply in each district, including, but not limited to, an explanation of how each project, either alternative or traditional, will produce, contribute to, or account for additional water being made available for consumptive uses, an estimate of the quantity of water to be

produced by each project, and an assessment of the contribution of the district's regional water supply plan in providing sufficient water to meet the needs of existing and future reasonable-beneficial uses for a 1-in-10 year drought event, as well as the needs of the natural systems.

(7) Nothing contained in the water supply development component of a regional water supply plan shall be construed to require local governments, government-owned or privately owned water utilities, special districts, self-suppliers, regional water supply authorities, multijurisdictional water supply entities, or other water suppliers to select a water supply development project identified in the component merely because it is identified in the plan. Except as provided in s. 373.223(3) and (5), the plan may not be used in the review of permits under part II unless the plan or an applicable portion thereof has been adopted by rule. However, this subsection does not prohibit a water management district from employing the data or other information used to establish the plan in reviewing permits under part II, nor does it limit the authority of the department or governing board under part II.

(8) Where the water supply component of a water supply planning region shows the need for one or more alternative water supply projects, the district shall notify the affected local governments and make every reasonable effort to educate and involve local public officials in working toward solutions in conjunction with the districts and, where appropriate, other local and regional water supply entities.

(a) Within 6 months following approval or amendment of its regional water supply plan, each water management district shall notify by certified mail each entity identified in sub-subparagraph (2)(a)3.d. of that portion of the plan relevant to the entity. Upon request of such an entity, the water management district shall appear before and present its findings and recommendations to the entity.

(b) Within 1 year after the notification by a water management district pursuant to paragraph (a), each entity identified in sub-subparagraph (2)(a)3.d. shall provide to the water management district written notification of the following: the alternative water supply projects or options identified in paragraph (2)(a) which it has developed or intends to develop, if any; an estimate of the quantity of water to be produced by each project; and the status of project implementation, including development of the financial plan, facilities master planning, permitting, and efforts in coordinating multijurisdictional projects, if applicable. The information provided in the notification shall be updated annually, and a progress report shall be provided by November 15 of each year to the water management district. If an entity does not intend to develop one or more of the alternative water supply project options identified in the regional water supply plan, the entity shall propose, within 1 year after notification by a water management district pursuant to paragraph (a), another alternative water supply project option sufficient to address the needs identified in paragraph (2)(a) within the entity's jurisdiction and shall provide an estimate of the quantity of water to be produced by the project and the status of project implementation as described in this paragraph. The entity may request that the water management district consider the other project for inclusion in the regional water supply plan.

(9) For any regional water supply plan that is scheduled to be updated before December 31, 2005, the deadline for such update shall be extended by 1 year.

Appendix I

FWEA Utility Council Presentation

Tools for Promoting the Efficient & Effective Reuse of Reclaimed Water

Reclaimed Water Policy Workshop
November 19, 2008

Florida Water Environment Association

Introduction

- Basic Concepts
 - FWEA UC, DEP, & WMDs all share the goal of promoting the efficient and effective reuse of reclaimed water.
 - Reclaimed water is a valuable resource, and only through thoughtful deliberation and cooperative policy development can we realize its full potential.

Policy Goals

- Five proposed policy tools designed to...
 - Expand the availability of reclaimed water for reuse
 - Add new agricultural, industrial, commercial, and residential reclaimed water customers
 - Decrease stress on Florida's potable water supplies
 - Achieve efficient and effective reuse without eroding a utility's ability to make local operational decisions

Proposed Policy Tools

1. Increase Utility - Water Management District Coordination
2. Mandatory Reclaimed Water Zones
3. Irrigation Education
4. Offsets Using Reclaimed Water
5. Goal-Based Water Conservation Plans

Utility-WMD Coordination

- **Basic Concept:** Policies should be in place to ensure that when a reclaimed water provider makes reclaimed water available, the applicable WMD will direct consumptive use permit applicants to use that reclaimed water.
- **Action:** Provide procedures to ensure that when considering a consumptive use permit application, district staff will communicate with the local reclaimed water provider to determine whether reclaimed water is available.

Utility-WMD Coordination

- **How it would work:**
 - Reclaimed water provider provides info to the WMD identifying the locations and quantities of available reclaimed water.
 - WMD considers that information when evaluating the ability to use reclaimed water as part of the review of a consumptive use permit application.
 - If the consumptive use permit applicant provides analysis concluding that using reclaimed water is not feasible, then the WMD transmits that analysis to the reclaimed water provider for comment.
 - If the WMD ultimately determines that reclaimed water cannot be used, then the staff report for the permit application to the governing board explains that decision and a copy of the explanation is provided to the reclaimed water provider for review and comment.
 - Any comments from the reclaimed water provider then presented to the Governing Board.

Mandatory Reclaimed Water Zones

- **Basic Concept:** Local governments need enhanced authority to direct water users away from traditional water supplies to available reclaimed water supplies.
- **Action:** Empower local governments to designate mandatory reclaimed water zones in areas where the reclaimed water provider has committed to provide reclaimed water for applicable non-potable water uses.

Mandatory Reclaimed Water Zones

- **How it would work:**
 - Local government establishes a mandatory reclaimed water zone.
 - Applicable WMD directs consumptive use permit applicants to use that reclaimed water, absent an affirmative demonstration by the permit applicant that reclaimed water is not appropriate for their proposed water use.
 - WMDs limit exemptions or general permits for private wells in mandatory reclaimed water zones.

Irrigation Education

- **Basic Concept:** Ordinances and rules restricting residential irrigation are difficult to enforce, and the public is less likely to follow good irrigation practices if the value of these practices is not understood.
- **Action:** DEP, WMDs, and reclaimed water providers should expand coordinated efforts to educate the public that all water resources have value and should be used efficiently and effectively.

Irrigation Education

- How it would work:
 - A consistent message from state, regional, and local government entities can reduce per capita water use in Florida.
 - The education initiative should include explaining the water supply challenges facing many areas of our state, the benefits of using Florida-friendly landscapes, and what it means to “irrigate efficiently.”
 - Regulatory agencies and local governments should consider increasing funds for currently underfunded initiatives, such as the Mobile Irrigation Labs program.

Offsets Using Reclaimed Water

- Basic Concept: A regulatory program is needed facilitate the efficient and effective use of reclaimed water as well as promote smart growth in water restricted areas.
- Action: Establish a regulatory program to promote the use of reclaimed water as a replacement for existing water uses and as a mitigation tool.

Offsets Using Reclaimed Water

- Attributes:
 - A statewide regulatory framework is needed to promote consistency among the districts and provide regulatory certainty to reclaimed water providers;
 - The entity creating the reduction or mitigation should get the credit for the offset; and
 - The offset credit to the utility should be irrevocable as long as the offset still exists.
- Let's get moving:
 - Rule development workshops beginning in Spring 2009 with the goal of having statewide offset rules in place by December 2009.

Goal-Based Water Conservation Plans

- Basic Concept: Wastewater treatment utilities and reclaimed water providers should be encouraged to adopt progressive policies and utilize flexible innovative tools to promote the efficient and effective reuse of reclaimed water.
- Action: Update the Conserve Florida program and underlying statute to facilitate the efficient and effective use of reclaimed water; remove unintentional statutory hurdles to promote the use of goal-based water conservation plans.

Goal-Based Water Conservation Plans

- How it would work (part 1):
 - In 2004, the Florida Legislature enacted § 373.227, F.S., which empowers public water supply utilities to “propose a goal-based water conservation plan that is tailored to its individual circumstances.”
 - Update the program to recognize actions designed to increase the efficient and effective use of reclaimed water, including reclaimed water irrigation restrictions, volumetric metering, efficient augmentation, and other proposed beneficial actions.

Goal-Based Water Conservation Plans

- How it would work (part 2):
 - The statute requires that the “utility must provide reasonable assurance that the [goal-based] plan will achieve effective water conservation at least as well as the water conservation requirements adopted by the water management district.” § 373.227(4), F.S.
 - This well-intended statutory requirement impedes the use of goal-based plans, because one cannot make a meaningful comparison between the two programs.
 - Revise statutory language to ensure robust plans but avoid requiring goal-based / standard plan comparisons.

Discussion

- Questions
- Next Steps...

Florida Water Environment Association