

August 18, 2008 Minutes

The Board of Directors of Tampa Bay Water met in their offices, 2575 Enterprise Road, Clearwater, Florida 33763.

BOARD MEMBERS PRESENT:

Present: Chairman – Commissioner Susan Latvala, Pinellas County
Council Member James Bennett, City of St. Petersburg
Commissioner Ronnie Duncan, Pinellas County
Commissioner Al Higginbotham, Hillsborough County
Commissioner Ann Hildebrand, Pasco County
Mayor Scott McPherson, City of New Port Richey
Councilman Charlie Miranda, City of Tampa
Commissioner Ted Schrader, Pasco County
Commissioner Mark Sharpe, Hillsborough County

Staff: Gerald J. Seeber, General Manager
Rick Lotspeich, General Counsel

A list of others present who signed the attendance roster was filed in the permanent files of Tampa Bay Water. Staff and Consultants presenting to the Board are listed below:

Staff/

Consultant: Paula Dye, Project Supervisor
Steve Simpson, Black & Veatch
Dr. Alison Adams, Senior Manager, Source Rotation & Environmental Protection
Jon Kennedy, Manager, Engineering and Projects
Mandi Rice, Senior Manager, Construction

Chairman Latvala called the meeting to order at 9:00 a.m.

PUBLIC COMMENT

Public comment was duly recorded and is filed in the permanent files of Tampa Bay Water.

Mr. Seeber announced to the Board that the new infrastructure and emergency management building at Cypress Cress was open and in use. He stated that the completion of the building allows the Operations and Facilities Division to be located in one place rather than in several. It has been built to withstand a Category 5 hurricane and will function as our operations center in the event of a hurricane or other emergency; three other agencies have contacted us about sharing the facility. As part of our emergency operation plan, we will continue to meet Member Government water demands in the event of a disaster. The facility is located outside of any surge zone and is large enough to secure our records safely, and from a data processing perspective, we have a server redundancy to operate our critical programs. The facility can also serve as backup space for Board meetings if need be or temporary offices. Mr. Seeber extended an invitation to each Board Member to visit the facility.

CONSENT AGENDA

A. ADMINISTRATION

1. Board Minutes for June 16, 2008 Board Meeting - *Approve*
2. Board Meeting Schedules for 2009 - *Approve*

B. FINANCE & ADMINISTRATIVE SERVICES

1. General Manager's Travel - *Approve*
2. Agency-wide Contract Programmer Services - *Approve*
3. Financial Advisory Services with Bank of America - *Approve*
4. Yearly Health and Dental Insurance Renewals not to exceed \$1,220,000 - *Approve*
5. Year-end Report of Rate Stabilization Account Deposits for Encumbered and Unencumbered Funds - *Approve*
6. Pay and Classification Plan Adjustment of 2.5% - *Approve*

C. SCIENCE & ENGINEERING

1. Emergency Surplus Water Agreement with Hillsborough County - *Approve*
2. Professional Consultant Services
 - a. Tampa Bypass Canal/Alafia River Water Supply Projects Hydrobiological Monitoring Program – Contract No. 2008-045 with Post, Buckley, Schuh & Jernigan, Inc., in the amount of \$3,964,347 - *Approve*
 - b. Tampa Bay Seawater Desalination Facility Hydrobiological Monitoring Program - Contract No. 2008-046 with Post, Buckley, Schuh & Jernigan, Inc., in the amount of \$1,223,714 - *Approve*
3. U.S. Geological Survey Joint Funding Agreements
 - a. Actual Evapotranspiration Monitoring Project - *Approve Renewal*
 - b. Evaluation of Vegetation Changes in Wetlands Due to Wellfield Pumpage Reduction - *Approve*
 - c. Evaluation of Factors Influencing Water Levels in Wetlands - *Approve*
 - d. Hydrologic Monitoring Services - *Approve*
4. Satellite and/or Digital Aerial Imagery for Tampa Bay Water Regionally-Operated Facilities and the Cone Ranch Property – First Amendment to Contract No. 2006-095 with Digital Aerial Solutions, LLC, in the amount of \$165,420 - *Approve*
5. Consolidated Water Use Permit – Application Development Process - Status Report
6. Hydrologic Conditions Report - *Status Report*
7. Regional Surface Water Treatment Plant – Amendment No. 12 with Veolia Water North America-South, LLC, and Veolia Water North America Operating Services, LLC - *Approve*
8. As-Needed Engineering Services Contracts
 - a. First Amendment to Contract No. 2006-038 with Golder Associates, Inc., in the amount of \$175,000 - *Approve*
 - b. First Amendment to Contract No. 2006-039 with Greeley and Hansen, LLC, in the amount of \$160,000 - *Approve*
9. Hydrogen Sulfide Treatment at South-Central Hillsborough Regional Wellfield – Treatment Process and Delivery Method - *Approve*
10. System Configuration II – Morris Bridge Booster Station – Environmental Resource Permit Application - *Approve Submittal to SWFWMD and ACOE*

11. Florida Yards and Neighborhoods Program – One-year Funding Agreements with Hillsborough, Pasco, and Pinellas Counties at a total cost of \$186,000 - *Approve*
12. Source Water Protection Mini-Grant Program - *Status Report*
13. Laboratory Sampling and Analytical Services Contracts
 - a. Alafia Watershed – Final Year Option to Renew Contract 2006-076 including First Amendment - *Approve*
 - b. C.W. Bill Young Regional Reservoir – Final Year Option to Renew Contract 2006-006 including First Amendment - *Approve*
14. Regional Water Shortage Mitigation Plan - *Approve Plan of Action*
15. Real Property – Northwest Hillsborough Pipeline Project – Mutual Use Agreement with Tampa Electric Company at no cost - *Approve*
16. System Configuration II – Consultant Services Contract with MWH Americas, Inc., for Pump Station Expansions – Amendment No. 5 in the amount of \$999,735 - *Approve*
17. Second Amendment to As-needed Professional Services Agreement for Surveying Services with Post, Buckley, Schuh & Jernigan, Inc. - *Approve*

D. OPERATIONS & FACILITIES

1. Tampa Bay Water Insurance Program – Delegation of authority for selection of Fiscal Year 2009 Insurance Program - *Approve*
2. Water Quality Update - *Status Report*
3. Water Treatment Chemicals
 - a. Diatomaceous Earth Supply Services – Award Contract No. 2008-049 to the lowest, responsive, responsible bidder, Univar USA, Inc., at the unit price of \$0.3294 per pound - *Approve*
 - b. Calcium Hydroxide Supply Services – Award Contract No. 2008-050 to the lowest, responsive, responsible bidder, Chemical Lime Company of Alabama, at the unit price of \$231.42 per ton - *Approve*
 - c. Defoamer Supply Services – Award Contract No. 2008-051 to the lowest, responsive, responsible bidder, Univar USA, Inc. at the unit price of \$1.385 per pound - *Approve*
 - d. Silica Dioxide Supply Services Contract No. 2008-052 - *Reject sole bid submittal from Standard Sand & Silica Co.*
4. Maintenance Service Contracts
 - a. Lawn Maintenance Services for all Tampa Bay Water Facilities, Contract No. 2007-002, Amendment 2 - *Approve*
 - b. Well Repair Services for all Tampa Bay Water Facilities, Contract No. 2007-003, Renewal - *Approve*
 - c. Maintenance Services for Diesel Generators, Contract No. 2007-001, Renewal - *Approve*
5. As-Needed Emergency Management Consulting Professional Services, Contract No. 2008-029, Amendment 1 - *Approve*
6. As-Needed Production Well Rehabilitation and Construction Services, Contract No. 2008-016 - Renewal - *Approve*
7. System Configuration II Construction Progress - *Status Report*
8. Cypress Creek Pump Station Facility – Header Improvements Phase I, Project No. 07021 – Project Closeout - *Approve*
9. As-Needed General Contractor, Contract No. 2005-079-01, Amendment No. 4 to Rowland Inc. - *Approve*

E. GENERAL COUNSEL

1. Legal Services Assignments, Contracts and Purchase Orders for FY 08/09 - *Approve*

Motion: Commissioner Hildebrand moved approval of the Consent Agenda. Councilman Miranda seconded the motion. The motion carried by a vote of 9-0.

REGULAR AGENDA

Fla. Long-Term Water Supply Planning - Concept Shortlist Information

Ms. Paula Dye stated that the Long-Term Water Supply Planning Program presentation will cover information on the concept shortlist, adding that it was an information item and Board action will not be requested today. She stated that Mr. Steve Simpson with Black and Veatch will be covering most of the presentation today, providing information on the concept shortlist which is a part of the overall Long-Term Water Supply Plan. That plan includes background data analysis, a section on source water protection, recommendations for future planning efforts that might be undertaken in that arena, information on demand management, and future activities and planning activities. Today's presentation will concentrate mostly on the concept shortlist in preparation for a Board recommendation in October on the Master Water Plan update. The Master Water Plan projects will then move forward and undergo planning and engineering analysis in 2009 - 2011 in order to provide complete information to the Board prior to their selecting a project to build.

Reviewing the overall planning process, Ms. Dye stated that it takes about five years for staff to complete the process with the Board. It started last year with the System Engineer compiling a comprehensive list of over 300 ideas. Those projects were evaluated and a concept shortlist was recommended to the Board. This year the System Engineer is reviewing the Concept Shortlist projects against the Master Water Plan goals of Environmental Stewardship, Cost and Reliability. In October, this information and evaluation will be presented to make a recommendation to the Board and staff will ask for approval of the plan. This will allow staff to move forward and prepare a recommendation in the 2012 timeframe on System Configuration III projects, a list of projects, or a major project, which will be built to meet future Water Supply needs.

Displaying a Future Need Projections graphic, Ms. Dye stated that this graphic showed current planning level estimates that Dr. Alison Adams and her team will continue to work on over the next couple of years. Current planning analysis shows a need of about 40 mgd by 2030. In order to meet demands for new water supply, the Board will need to approve a plan in the October timeframe of this year. More study will be undertaken over the next several years so that by 2012 staff will be in a position to make sound recommendations to the Board about what projects might be selected to meet the 2019 water supply needs. This amount of time is needed for staff to go through final design and construction phases on some of the more complex and difficult projects.

Ms. Dye reviewed the next steps with the Board noting that during the month of August staff has been working on the Long-Term Water Supply Plan and evaluating the concept shortlist. On August 1 a draft of that plan was provided to the Member Government Utility Directors to allow them time to provide input and comments. Ms. Dye stated that staff anticipates working with the Utility Directors over the next several weeks on the final recommendations for the plan which will be back to the Board for approval in October. Ms. Dye then turned the presentation over to Steve Simpson to present the Concept Shortlist.

Mr. Simpson advised the Board that he would be summarizing and hitting on the highlights of the concept shortlist. He referred to a map illustrating the location of the projects, noting that the projects were located throughout the tri-county area. All types of source waters were considered as potential concepts and all of the projects were challenging.

Mr. Simpson stated that these project concepts were discussed with the members at the last Member Update Meeting, and they pointed out that the calculated incremental unit cost for some of these alternative projects was much higher than in the past and a number of reasons exist for this.

- Costs have been updated to 2008 dollars.
- The construction market the last five to six years has seen a significant increase in the cost of concrete, steel and other raw materials that will be used to build these projects.
- Some of the projects are smaller yield, providing less capacity to spread out the capital costs that are required to implement them.
- Due to the project concepts being locations relative to the regional system, in some cases fairly long pipelines will be required to get that water to a point in the regional system where it can be transmitted for use.
- A common cost basis is being used for evaluation of all these concepts - 2008 dollars and updated construction costs to enable a fair basis for comparison.

Mr. Simpson stated that the first category of options is brackish groundwater and the first project is Small Footprint Reverse Osmosis in Pasco County. The term small footprint means it is a relatively small yield of 5 mgd of finished water which means that the raw water facilities are a slightly higher capacity depending on the recovery. A previous study identified a number of potential sites in Pasco County. The key issue with this project, as with any reverse osmosis treatment process, is the permitting requirements for the concentrate discharge. The incremental unit cost is calculated to be \$5.56 per thousand gallons.

The next project reviewed by Mr. Simpson was the Mid-Pinellas Brackish Groundwater Desalination Project. Tampa Bay Water has invested some effort in review of this project, but unfortunately potential landfill/private well mitigation issues, as well as difficulties in acquiring land for good well sites has held this project from being implemented. The incremental cost calculated for this project is \$7.52 per thousand gallons.

Mr. Simpson stated that the third idea is a Small Footprint Reverse Osmosis located in Pinellas County. The study identified a number of potential sites in Pinellas County and looked at both wellfield and bay options. Some of those locations have promise, noting that both Tarpon Springs and Oldsmar are moving projects forward in those locations. Because of the range of options here, a potential unit cost range of \$8.17 to \$8.41 per 1000 gallons is being reflected.

Mr. Simpson stated that the next category was Seawater Desal. The first idea is to expand the existing plant. This has been envisioned from the beginning, which is the reason that some of the infrastructure like the discharge pipeline has been sized for 35 mgd or a 10 mgd expansion. The permits for operating this plant are in hand hopefully reducing the permitting effort since we would be modifying existing permits as opposed to getting new ones for a new facility.

Mr. Simpson stated that the Gulf Coast Seawater Desal Plant would be a new seawater desal plant located at the Anclote Power Plant and was originally envisioned as a 25 mgd project. Various phasing configurations have also been considered, from 9 mgd to 25 mgd, but the incremental unit cost for 25 mgd would be \$7.26 per thousand gallons. A fair amount of effort has been invested in that project including a fairly long-term pilot study providing some good information about this project. An advantage for this project is that it would connect to the system in a location that is near some of the larger demands in the western end of the system.

Mr. Simpson stated that the next category of options is groundwater. The first idea is to expand the capacity of the existing consolidated wellfield permit facilities. The 2010 permit renewal activities are underway and this project will not affect that in any way. This project will use the additional decade of data available on the environmental conditions, performance and production of the facilities to consider an increase in capacity of 10 to 15 mgd for those eleven wellfields for the 2020 renewal. The incremental cost is estimated to be \$2.09 per thousand gallons.

East Pasco Regional Wellfield would be a new wellfield facility on the smaller end of the scale at 5 mgd. The groundwater from that facility would be routed to the Cypress Creek Water Treatment Plant and enable the use of existing treatment capacity. This project would take advantage of existing infrastructure and that is reflected to be in the \$2.36 incremental cost.

A number of the groundwater ideas, like East Pasco, were originally envisioned when those locations were outside the Northern Tampa Bay Water Use Caution Area. Today, with the recent changes in area designation by SWFWMD, all the projects are now in the Water Use Caution Area which will require a significant effort in terms of permitting those projects.

Northeast Hillsborough Regional Wellfield would be a new 10 mgd facility combined with a groundwater treatment plant. The finished water would be piped to the system at the Lithia point of connection which is a significant distance from the proposed facility and that is reflected in the \$2.68 per thousand gallon unit cost. This project is also in the Northern Tampa Bay Water Use Caution Area.

The Cone Ranch and Dispersed Wells project has been extensively studied by Tampa Bay Water. Modeling has been conducted, along with groundwater quantity and quality studies providing very good information about this project idea. This project is conceptualized as connecting to the system at Lithia and that contributes to the incremental cost calculation of \$4.10 per thousand gallons.

The Central Pasco Regional Wellfield would be a new 8 mgd capacity wellfield utilize existing treatment capacity at Cypress Creek and would face the same permitting challenges.

Cypress Bridge II was previously considered and studied by Tampa Bay Water. This project idea would consist of new wells adjacent to the existing facility for an estimated yield of 4-8 mgd and would utilize existing treatment capacity at Cypress Creek. Because of the extensive infrastructure available, the incremental cost is estimated to be \$1.74 per thousand gallons.

Thonotosassa Wells is a new concept suggested by the City of Tampa for wells at the City's site. A yield of 10 mgd has been conceptualized with new chloramination treatment with the finished water routed to the North Central Hillsborough Intertie. Information is available on groundwater quality

and quantity based on a previous test well study. The incremental cost is expected to be \$2.28 per thousand gallons.

The last groundwater project is the Brandon Wells Enhancement which involves the addition of new wells in the vicinity of the existing wells and new chloramination treatment, with delivery into the Brandon transmission system. Some of the 30 original potential well sites may be candidates for these additional well sites. But well site location could be a key issue for this project because of previous water quality issues with wells in the Brandon area. Depending on the exact location of the wells, we also may be permitting in two different water use caution areas.

Downstream Augmentation of the Alafia River is the concept of using City of Tampa reclaimed water, routing that water to the Alafia River and augmenting the flow of the river with a one-for-one upstream surface water withdrawal. The surface water withdrawal would be treated at the City of Tampa Water Treatment Plant or a new treatment plant and stored in a new reservoir. The options for treatment and storage are part of an ongoing study and land evaluation study. The cost of the project with a 15 mgd capacity and the inclusion of the reservoir is approximately \$7.93 per thousand gallons.

The Alafia Expansion Project is simply withdrawing more water from the Alafia River. The water would be treated either at a new surface water treatment facility or at the City of Tampa's water treatment plant and potentially stored in a new reservoir before routing into the system. The estimated yield would be 11 to 15 mgd. An enhanced surface water system study is ongoing that will help us narrow down that range of estimated yield. Because of the available options, whether a new reservoir is included or not, the cost ranges from \$3.58 to \$10.50 per thousand gallons.

The Downstream Augmentation of the Hillsborough River concept involves using the City of Tampa's reclaimed water to augment the Hillsborough River with increased upstream surface water withdrawal. That increase withdrawal would be treated at the City of Tampa's water treatment plant site. The estimated yield would be in the range of 5-11 mgd with an incremental unit cost estimate of \$5.77 per thousand gallons.

The final idea on the list is Aquifer Recharge and is probably the least defined idea because it is the newest concept, something that SWFWMD has just begun consideration of. Although this is conceptually a 20 mgd project, the difficulty is the fact that there are multiple considerations available such as using the City of Tampa's reclaimed water in a recharge well scenario, developing new groundwater wells and utilizing that groundwater. Also, taking the water north to Pasco using the reclaimed water in a rapid infiltration basin type recharge situation and expanding the capacity of existing groundwater facilities is a concept new and we are proceeding with further study.

It is anticipated that this project will require an extensive permitting effort and the facilities required to implement this project may be more than currently expected. Given those uncertainties, the unit cost developed is in the range of \$4.65 to \$7.63 per thousand gallons.

Mr. Simpson stated that with that baseline of information, over the next month these projects will be evaluated against the Board's Master Water Plan goals of environmental stewardship, cost and reliability. The list will be narrowed down from the Concept Shortlist of 17 project ideas. A recommendation of a shorter list to the Board to update the Master Water Plan will allow us to focus further resources on the best potential projects to meet the future projected demand.

Reviewing the overall planning process, Ms. Dye stated that the planning cycle, which takes about five years, was approximately half way completed. She thanked Mr. Simpson and his team for all the work they have done to keep the process on schedule, adding that Mr. Simpson is expected to be before the Board in October to make a recommendation on the Long-Term Water Supply Plan and Master Water Plan. Prior to that, work will continue with Member Government utility directors and staff to receive their input in order to finalize the plan.

Council Member Bennett stated that the Public Utilities Department suggested the possibility of taking the stored treated water not being used by the City of St. Petersburg for augmentation or possible replacement in the brackish groundwater wellfield, one of the most costly projects for yielding 5 million gallons. He questioned the possibility of investigating this suggestion. If it could work in conjunction with this project it would require fewer wells to be dug in mid-Pinellas. Since St. Petersburg has a source of water, it would enjoy having the opportunity of seeing if that water could be available.

Ms. Dye thanked Council Member Bennett voicing appreciation of the offer. She stated that it would be added to the list of things to be looked at and Mr. Simpson and his team would begin looking at it with staff.

Council Member Bennett stated that it was his belief that City staff had already begun a preliminary look into this, adding that at this point it is a source of water.

Commissioner Schrader referred to the extensive reclaimed water project efforts Pasco County has undertaken - building a couple of reservoirs and interconnecting many communities. He asked if this information could be factored into staff's evaluation as the Board moves forward because he felt the numbers would be significant. He also thought it would be helpful to the Board, before they make a decision on these projects, to find out which projects will have the highest probability for cost sharing with the Water Management District and other agencies. Commissioner Schrader stated that given the huge amount of information presented today and the next Board meeting, and the recognition that the residential real estate market is currently soft, he wondered if there was any urgency for the Board to make a decision in October. If the Board could get a further update as they tweak these numbers, maybe this decision can be delayed until December. He added that Member Government staffs need an opportunity to review this information as it continues to come forward. He asked fellow Board Members if they felt there was a real urgency to get this done in October or if could wait until December.

Chairman Latvala acknowledged Commissioner Schrader's question and asked if staff had adjusted its projections based on the real estate market.

Ms. Dye advised Commissioner Schrader that staff would be glad to work with Pasco County staff on the reclaimed issue just like the City of Tampa and thanked him for the offer. She stated that she would also make sure that Mr. Simpson and his team brings back the information he requested regarding cost sharing with the Water Management District because that does provide a valuable resource to the Board. With regard to the October timeframe, Ms. Dye stated that staff has been working hard to meet that timeline in order to receive Board approval of the Master Water Plan Update in 2008. A Board decision to take action in the October or December timeframe would meet the requirements of the Interlocal Agreement.

Commissioner Schrader stated that he noticed that one of the proposals contained an expansion of volumes from existing wellfields, as well as the addition of a new wellfield in east Pasco County near Cypress Creek. He asked if it was safe for him to assume that both of those projects would not be selected since he felt the expansion of existing pumping would have the same impact as new wells within that geographic region.

Ms. Dye replied that she felt this was an analysis that the System Engineer needed to complete and bring back to the Board since she thought the projects had been reviewed individually to date. One of the benefits to updating the Master Water Plan is that those types of questions can be answered in depth.

Commissioner Schrader stated that he would like Member Government staffs to have adequate opportunity to review this data and favored making a final decision in December.

Mr. Simpson noted that it was scheduled to come back to the Board in October for a decision because the actual requirement of the Interlocal Agreement is to have the Master Water Plan updated by the end of this year (December 2008).

Chairman Latvala stated that she was fairly certain there was going to be a lot of debate on these various options and moving it to December would provide an opportunity for the Board to have a lengthy discussion in October. If they are unable to finalize their selection in October, they would then have the option of doing so in December. She then called upon Mayor McPherson.

Mayor McPherson stated that he understood that today's presentation was merely an informational item and that no action was required by the Board and definitely agreed that it should be placed on the agenda for October in the event the Board is in a gridlock. He felt a lot more engineering information was needed and was specifically concerned about the Central Pasco County Wellfield project since the groundwater pumping in that area has been reduced from the mid-100's down to the 80's as a result of the efforts made by Tampa Bay Water since 1998.

Commissioner Hildebrand confirmed that pumpage was reduced to 84 mgd.

Mayor McPherson voiced concern stating that area of Pasco County was pumped very hard over the years and it had a detrimental effect on the county and desal has reduced that impact. Going back into Central Pasco County and building new wellfields was a concern for him. With regard to the option of desal at the Anclote Power Plant, Mayor McPherson noted that the Pasco County shoreline was quite different than Pinellas County in that there is a long shallow shelf that extends out into the Gulf in the vicinity of the Anclote Power Plant and a lot of shallow water species lived in the area of that power plant. He wondered how the brinish discharge, on such a shallow shelf from an environmental and an engineering standpoint, might affect the sea life. Mayor McPherson stated that would be a very big concern for him adding that he would want more feedback before he considered that as one of the options for the long-term plan.

Inquiring about the nature of the Master Water Plan, Council Member Bennett asked if the list is approved in December, is it possible to manipulate in the future with additions or subtractions. Chairman Latvala replied that it was possible to do that. She went on to explain that when projects are added to the list the process of spending money begins, since it takes money to study the

projects and determine if they are viable. She added that the Board doesn't want to spend money on all of the projects.

Ms. Dye explained that what the Board will be approving in October or December is a plan that the Board can update at any time. The Interlocal Agreement requires that it be updated every five years so staff undertakes a comprehensive long-term planning process every five years. One of the reasons a shortlist is recommended to the Board is to identify the projects which will then be studied in depth to answer the types of questions Mayor McPherson has asked. This will enable you to select projects in the 2012 time frame.

Mr. Seeber explained to the Board that this particular planning process was akin to the capital improvement programs that the Board members must undertake in their cities and counties. Staff looks for projects on a regular basis as part of the Master Water Plan process and the Board is required to formerly update the plan once every five years. Knowing that this will be a weighty policy decision for this Board, staff anticipated that you would need more time for discussion for this item hence the scheduling of bringing it to you in October so you would have that opportunity before the end of the year to talk with each other about these issues and arrive at some consensus of what you think is most appropriate. In that regard, if you have ideas or thoughts that you wanted to share with us at a staff level between now and that October meeting, we would appreciate hearing from you or your staff on those matters because it helps us formulate a policy recommendation for your consideration later this year.

Commissioner Hildebrand observed that by 2019, 40 mgd will be needed while the list of projects presented for consideration totals a little less than 100 mgd. Many of these projects have been discussed for several years; there aren't any surprises on this list. She recalled that when the Board selected the desal plant at Tama Bay, the two sites under consideration were Anclote and Tampa Bay. Overwhelmingly the Tampa Bay site was selected because, as indicated by Mayor McPherson, the Anclote site had shallow water and it would have been very expensive to implement a desal plant at that location. Commissioner Hildebrand felt the expansion of existing facilities would keep the capital cost down. She concurred with Commissioner Schrader that a December selection date would be better because it would allow the Board more time to review the projects. She added that the Board will probably hear the same hue and cry from the public that was heard on a lot of these projects before Tampa Bay Water was created in 1998.

Chairperson Latvala agreed that the list was very familiar to many of the Board Members. She thought the Board would have plenty of time for debate and to make a decision that is in the best interest of the member governments.

F1b. Long-Term Water Supply Planning - City of Tampa – Memorandum of Understanding

Ms. Dye stated that this presentation is on the Memorandum of Understanding (MOU) with the City of Tampa. The City of Tampa is compiling a Master Reclaimed Water Plan and Councilman Miranda and City staff approached us a few months ago requesting a cooperative planning effort with them to look at potential projects that might have a potable benefit to the region, to each of the members and to the City for use of the City's reclaimed water.

The Memorandum of Understanding before the Board memorializes those efforts that we can undertake together in planning and reviewing ideas. The MOU has several provisions. One is that

the City and Tampa Bay Water will work together to further the understanding of the potable supply benefits of potential projects by exploring the technical, financial, environmental and permitting feasibility of the identified projects. An estimate of the potential quantity of reclaimed water available for each project, consistent with the City's other priorities for the use of their reclaimed water, will be identified.

Should the City and Tampa Bay Water wish to move forward and implement a project, Joint Projects Agreements or a Reclaimed Water Agreement would require Board approval. There is also a provision in the MOU that should project(s) be identified that merit further study or implementation, the City and Tampa Bay Water would cooperate in pursuing outside funding to bring down the cost for both entities. The MOU does not affect the Interlocal Agreement or the Master Water Supply Contract in anyway. It does have an expiration provision of three (3) years from the date of execution unless extended in writing. The MOU can be terminated by either party with 60 days written notice. Ms. Dye stated that staff recommends approval of the MOU with the City of Tampa.

Motion: Commissioner Duncan moved approval. Commissioner Hildebrand seconded the motion. The motion carried by a vote of 9-0.

II. Regional Water Supply and Current Drought Status

Mr. Seeber called upon Dr. Alison Adams who stated that her presentation would provide an update on regional water supplies and demands as we enter into the wet season adding that no action by the Board will be required.

Dr. Adams displayed a slide showing the Hillsborough River, Tampa Bypass Canal and Alafia River watersheds along with rainfall gauges monitored by Tampa Bay Water that collect real time rainfall data to help assess the potential stream flows in each of the watersheds. She also noted the location of the river flow gauging stations monitored by the USGS which provide real time information on stream flow conditions and is used to assess our water supplies in order to meet demands.

Her next graphic provided a comparison of actual rainfall in the Hillsborough River Watershed and the Alafia River Watershed over the last four years versus the amount of rain expected in those watersheds. After further explaining the graphic, Dr. Adams stated that over the last four years these watersheds received far less rain than expected. She explained that monthly deviations are used to provide a cumulative picture of what is happening in each of the watersheds with respect to rainfall which is an indicator of current and expected stream flow status. The Alafia River Basin, at the end of this time period is a little over 13 inches compared to January when the cumulative deficit was closer to 16 inches. However, the Hillsborough River Watershed does not have the same degree of recovery for this water year.

Dr. Adams' next three slides compared daily rainfall for the current year, 2008 to date, against last year's daily rainfall comparing actual rainfall against long-term statistics. Stream flow conditions in the Alafia River Basin last year were very dry. After a couple of intense rainfalls in the spring this year some of the basin has recovered, although it is still not back to a wet condition.

For the Hillsborough River Basin, Dr. Adams had two graphics, one of the Zephyrhills gauge representing the upper portion of the watershed which showed last year's very dry conditions. After a

couple significant rainfall events in the spring of this year, river flows increased in the upper portion of the basin but flows have not returned to a wet season condition. Showing the Hillsborough River at the Morris Bridge gauge, the most downstream gauge in the watershed prior to the City of Tampa's reservoir, river flows also increased in the lower Hillsborough River basin but has not returned to good wet season condition.

Dr. Adams explained that taking the actual river flows and converting that into water supply availability presents a picture of water supply conditions; where they have been and where they are likely to be as we move through the wet season and into the fall and winter seasons. Using a graphic showing the cumulative amount of surplus water expected to be captured from the river systems, Dr. Adams stated that there was more water moving into the wet season portion of the year compared to the dry conditions last year when we were only able to capture about 25 percent of the amount of water we expected to capture. This year, to date, we have had more surface water, primarily coming from the Alafia River Basin. There was a significant increase in flows early in the spring, but late spring didn't show much increase. Water supplies increased from the Alafia River due in large part to the Executive Order from the Water Management District allowing withdrawals from the Alafia River Basin to double.

The next graphic showed the use of the Regional Reservoir. Dr. Adams stated that withdrawals from the reservoir started in December 2007 and use of the reservoir was fairly continuous until the middle of July. Drawing down the reservoir allowed for implementation of scheduled monitoring and maintenance activities. When we completed using the reservoir this year, it was down to an elevation of about 95 feet, just a little under 4 billion gallons of storage. Filling the reservoir began in the middle of July and about 2.5 billion gallons have been stored bringing it to the currently 105 foot elevation. Under an agreement with the Florida Department of Environmental Protection, the reservoir will not be filled any higher. This will be discussed further in the next presentation. Current storage in the reservoir is at 6.5 billion gallons and it is expected that this will be the available as we enter the spring dry season. Dr. Adams stated that this information will be used to determine allocation strategies for the next fiscal year which will be presented to the Board in October.

Regarding the water shortage status, hydrologic conditions, Dr. Adams stated that annual rainfall is above normal even though we are still climbing out of a four year deficit. If rainfall continues for the remainder of this wet season as it has started, we will be able to climb out of the long-term deficit much faster. That long-term deficit is leading to the stream flow deficit in the Hillsborough River Basin. Stream flows are still running below normal and the deficit is still greater than the trigger contained in the Water Shortage Plan. With the reservoir at 6.5 billion gallons of storage and the current water supply situation, staff would recommend that the Member Governments continue with the demand management actions of one day per week irrigation restrictions, public conservation messaging and enforcement of restrictions.

Explaining a graphic of regional demands, Dr. Adams explained that it shows a comparison between monthly total regional demand and total monthly rainfall; it illustrates the month-to-month variability of regional demands and the relationship between total rainfall in the urban service area. The regional demand is running about 10 mgd less than the previous year. The two reasons for this reduction in demand are increased rainfall in the urban service area and the reduction in active water accounts across the region.

Dr. Adams turned her attention to a review of climatic conditions, El Niño/La Niña conditions. She noted that in February she spoke about the importance of the sea surface temperatures of the Pacific Ocean, whether they are cooler or warmer than normal and how that affects the potential rainfall and temperature patterns in this part of Florida. Today climate scientists indicate that we are moving out of the La Niña pattern which we were in for about the last year and a half that contributed to the less than normal wet season for the past two years. This same condition contributed to the significant drought of 1999 - 2002. We are moving into a neutral condition which is expected to continue throughout the fall and into the winter and would mean a return to normal rainfall and an increase of potential stream flows, as well as a return to normal temperatures. After a couple of very warm Novembers with a significant increase in demands, we look forward to a regular temperature regime and a regular rainfall regime this fall. There is an increased potential for hurricane activity and NOAA has revised their predictions early in August giving us about an 85-90 percent chance of having a hurricane impact Florida. She displayed a graphic showing that when in a neutral phase there is an increased potential for hurricanes to hit along the coast of Florida.

In conclusion, Dr. Adams stated that with a decrease in demand, an increase in surface water flows and the desal plant online, groundwater pumpage from the eleven wellfields of the Consolidate Water Use Permit has been reduced. Pumpage has declined as we moved from the spring into the summer and further reductions are anticipated as we continue thorough the wet season. Currently we are on track to meet the 12-month running average wellfield production of 90 mgd from those eleven wellfields by the end of this water year. With a regulatory requirement date of December 31, 2008, we are on schedule to meet that requirement ahead of schedule.

Mayor McPherson referred to the "Comparison of Regional Water Demand and Urban Service Area Rainfall" graph showing the correlation between increased rainfall and decreased demand, and the "Current Drought Status" slide containing staff's recommendation to continue one day per week restriction and public conservation messaging. His concern was about public conservation messaging and whether enough of the public was being made aware of when not to water their lawn and if they had sensors on their systems. One solution he suggested for encouraging people not to water their lawn during rain would be to sanction them in the form of an ordinance or state statute. Mayor McPherson felt that the better approach would be though public conservation messaging and asked what was being done in that regard.

Dr. Adams explained that the public messaging is really a joint effort between Tampa Bay Water and the Member Governments who implement a lot of their own public messaging campaigns, in coordination with the Water Management District. She stated that public messaging information was available on everyone's websites. Tampa Bay Water provides conservation messaging and information on our website with links of Member Government websites. She felt it was important to provide balanced messaging so the public is not inundated with too much messaging and just blocks it out. Additionally, it was important to have targeted messaging to get people to understand that as long as they are getting rainfall events every couple of days, their lawn and landscape do not need supplemental irrigation.

Mayor McPherson agreed that there was a lot of information on the web, but did not think that many people go to the web. He was in favor of more conventional means such as television and newspapers and questioned if this could be budgeted in the future. He voiced interest in hearing about the public relations plan adding that it would be nice to see the correlation between increased rainfall and decreased demand widen even further and wondered how to make that happen.

Councilman Bennett asked if any of that decrease in demand was due to the economy and people not wanting to spend money.

Dr. Adams replied that she believed that a portion of it was. Although all of the account data is not up to date in terms of actual water use, comparing the water utilities with electric utilities, many of the electric utilities are indicating that they have far less new service and an increase in reduced service across the area.

As a follow up to Mayor McPherson's comment, Commissioner Schrader stated that one of the things Pasco County does through its utility department to notice homeowners is put messages on the utility bill. Many homeowners are winter residents who have automatic watering systems in place or a lawn service and we need to communicate with them. We found this to be a more effective way to communicate directly with the rate payer.

12. C.W. Bill Young Regional Reservoir – Investigation of Flat-Plate Soil-Cement and Development of Management/Maintenance Practices

Mr. Seeber stated that Mr. Kennedy would address the Board on the investigation of the flat-plate soil-cement issues at the Regional Reservoir and present what we have been doing and what we foresee in the near term.

Mr. Kennedy stated that he would be updating the Board on the three important missions at the reservoir: 1) maintain public safety; 2) complete the technical work and evaluations to find a root cause of the cracking problem in the soil-cement; and 3) develop and recommend a program to cure the problem. He stated that staff is not ready to recommend a cure and would be discussing why. He would review activities to date, ongoing activities, operation of the reservoir and where we go from here.

Mr. Kennedy stated that first and foremost, as reported in October 2007 and repeated since that time, the reservoir facility is safe and will be operated safely by Tampa Bay Water. That determination was made by HDR, the engineer of record, and by the FDEP.

For orientation purposes, Mr. Kennedy displayed a slide depicting a cross-section of the reservoir and highlighted the various components:

- The embankment - The greatest mass of the reservoir is the earthen embankment which provides an anchor for the system. In the deepest part of the reservoir the embankment is a little over 60 feet high.
- The geomembrane cutoff wall and soil-bentonite cutoff wall - these are impermeable and prevent water from seeping from the inside of the reservoir through the earthen embankment.
- Soil wedge underneath the reservoir soil cement flat-plate - The soil wedge adds a mass of weight to the embankment on top of the cut off walls, and on top of that is the soil cement itself. The soil-cement flat-plate is where the cracks have occurred.

- Bench - the bench elevation location was noted and would be talked about further.

Next Mr. Kennedy displayed a drawing depicting an aerial view of the reservoir and noted the two areas that have experienced larger than expected cracking. He stated that some cracking of the soil cement is expected, similar to small cracking in a garage floor and small cracking would not be repaired. However, both the northeast corner and the southwest corner of the reservoir has experienced larger than expected cracking in the soil cement. These cracks were first observed during the second drawdown cycle in December 2006 and the filling of cracks commenced at that time.

Mr. Kennedy used an aerial photo of the northeast corner of the reservoir during the time when the reservoir was drawn down in June of this year to show the Board what the cracks look like. Noting that the reservoir level in the photo is down to an elevation 95 or 96 feet, he showed the location of the stair steps and the cracks in the northeast corner. The cracks run in band in this area and the slope elevations in this band are approximately 115 feet to 125 feet.

Mr. Kennedy stated that the engineer of record, HDR, has been assembling a crack inventory and mapping these, while Tampa Bay Water monitors the cracks and uses contractors to fill them as required. Some reopening of cracks has occurred and when cracks reopen they are refilled.

Mr. Kennedy again noted that the cracks in the soil cement that required filling were first observed during the second drawdown cycle in December 2006. At the October 2007 meeting, the Board approved an extension to HDR's contract giving them two important missions: 1) to evaluate the flat-plate soil-cement maintenance procedures to optimize the annual cost of maintaining the soil-cement while keeping the reservoir operational; and 2) develop a monitoring plan to identify and address the root cause of the larger than expected cracking in the flat-plate soil cement.

The instruments being used in the monitoring plan are:

- Extensometers - to monitor movement of the soil cement down the slope.
- Piezometers - to measure pore pressure from water beneath the soil cement.
- Inclometers - to measure the change in slope (rotation) of the soil just beneath the soil-cement (rotating).

The deployment of these monitoring devices has just been completed since the contractor had to wait until this June's low water level to install some of the instruments. Most of the instruments have been installed at crack locations, pointing out eight devices that were installed in crack locations and two that were not, for the purpose of collecting data to determine the difference between the areas that experience cracking and areas that do not.

In addition to the monitoring instruments, two additional investigations have been conducted to further the research effort into the root cause. A trench drain test was performed this spring in two areas; one in a badly cracked area and one in an area that was not. The purpose of the trench drain test was to determine the behavior of the soil wedge and the flat plate on top of it during a simulated drawdown cycle. While the reservoir was drawn down, the engineer artificially introduced water up slope, installed piezometers down slope and collected water at the bottom of the test area to

measure the effect of pore pressure on the soil wedge under the soil-cement flat plate. Unfortunately, this test was inconclusive.

This summer a pit test was conducted into the soil wedge that sits underneath the flat plate at two locations to visually observe and test the soil condition in the area of the cracking. The pit tests were developed by system engineer, Black & Veatch. Mr. Kennedy noted the involvement of Dr. David Carrier of FDEP during testing activities.

Excavation at each test pit location allowed the engineers to observe the condition of the soil and the wedge beneath the cracked areas and remove samples for testing. The engineers are now taking 50 more soil borings throughout the rest of the reservoir to see if there is a correlation between the soils, and the conditions of the soils in the cracked areas and the conditions of the soil wedge in the areas that are not cracked.

Mr. Kennedy stated that there was some good news in all of this: the reservoir is safe; the facility can be used in an interim mode with a fill elevation of 105 feet for more than 6.5 billion gallons of storage that can be relied upon in water source availability projections; and the interim mode operations can continue if necessary for several fill and drain cycles.

Using a chart showing the water level elevation at the reservoir over time, Mr. Kennedy referred to the 105 foot elevation operating condition agreed to with the FDEP. He stated that operation at the 105 foot elevation makes sense for the following reasons:

- If we experience hurricane force winds during the wet season at the 105 foot elevation, costly wave related damage to the band of cracks can be minimized or possibly prevented entirely. He reiterated that the band of cracks are located between the 115 foot and 125 foot elevation
- The 105 foot elevation will enable the reservoir to be drawn down next spring to the bench elevation, between 85 and 90 feet if necessary, to perform dry tests of the bench. The engineers have indicated a desire to do this. Although the bench has been inspected by divers, there is no substitute for a dry condition inspection.
- The 105 foot elevation provides more than 6 billion gallons of storage and allows for more fill and draw down cycles.

Although data collection began last fall, more time is needed to recommend a solution in order to properly determine the cause of the cracking to make sure the solution is correct, cost effective, and provides the best opportunity to continue to use the reservoir in the interim mode.

Mr. Kennedy explained that the interim mode could last for a period of several years due to ongoing monitoring and analysis; the need to collect additional data next spring with the bench test; design preparation; permit modification applications; followed by contractor procurement. Since we are in step one of a four step process that will probably take several years, it was crucial to get FDEP's support to operate this facility at 105 feet.

Mr. Kennedy acknowledged that the interim mode with an elevation of 105 feet with 6.5 billion gallons of storage is not the same as the 15 billion gallons. Dr. Adams' supply analysis depends on full reservoir capacity to be available for the long-term as does the capital investment in this facility, and the Configuration I and Configuration II programs. Staff needs to complete the evaluations,

identify the root cause and recommend a cure. Tampa Bay Water is working closely with FDEP and the Water Management District to keep their support during this time period, support for both the interim operations and for implementing a cure when it is determined.

In conclusion, time is needed to make sure the solution is correct, cost effective and gives the agency the best opportunity to run in interim mode as much as possible. Along with continued evaluation of the data, maintenance of the cracks, and identification of the cause, staff will continue to report to the Board bi-monthly.

Councilman Miranda voiced his appreciation of the effort Mr. Kennedy and staff have made to find out what is going on, but added that he had financial concerns. Since we have spent a considerable amount of money on these things, do we have any deadlines we need to meet in order to protect ourselves legally? We might find the cause of the cracks after some deadline and may not be able to recover the cost. Councilman Miranda asked the status of the implementation plan that would make sure that our costs are recovered if we find that there has been an omission of some sort on behalf of whoever created the reservoir.

Chairman Latvala referred the question to the General Counsel.

Mr. Lotspeich advised the Board that legal has been involved in this for months and was taking all appropriate actions to protect Tampa bay Water's rights and remedies going forward. He did not feel it would be appropriate to say more at this point in time.

Mayor McPherson echoed Councilman Miranda's concern, adding that during staff briefing that was the issue that he raised as well. Although he was not making any allegations of professional negligence, he felt the Board had to look at this since he knew there was a shortened statute of limitations. Since there is a shorter statute of limitations for professional negligence, he asked if that statute tolled or extended until the cause was known.

Mr. Lotspeich stated that staff was operating fully aware of all the various statutes and limitations that might come into play and guaranteed the Board that staff would meet those statutes. He added that staff was not going to waive any rights by missing statutes of limitation.

Commissioner Sharpe stated that he knew that small cracking was normal and to be expected but noted that the cracks were exceeding what was expected. He asked if there were other reservoirs with a similar type of cracking.

Mr. Kennedy responded that this reservoir does not have an operating precedent in the State of Florida. Currently the Peace River/Manasota Water Supply Authority to the south has a reservoir under construction but it is not in service. The Tampa Bay Water facility is unique and that is one of the reasons it is taking so long to get to the bottom of this.

Commissioner Sharpe stated that questions have been raised concerning the safety of the facility. Although he was completely satisfied from staff's presentations that there was absolutely no danger whatsoever to the public as far as the structural integrity, he asked for staff's confirmation of that.

Mr. Kennedy replied that was correct.

Commissioner Sharpe noted that Mr. Seeber came before the Hillsborough County Board of County Commissioners and in a very open fashion provided as much information as was available. He appreciated that and the fact that staff was working towards resolving this problem and the cooperative spirit of everyone. Even those who helped build the reservoir are working with staff to resolve the problems. He thanked staff for what they have done and stated that he was sure it would be resolved quickly.

Chairman Latvala reiterated that staff has been very up front and open about this from day one and the Board has been kept apprised. Chairman Latvala stated that she along with Mr. Seeber and Mr. Lotspeich met with Dave Moore, Chairman Combee and Mr. Bilenky of the Water Management District to make sure they had all the current information. This is an ongoing process. Chairman Latvala stated that she knows it was frustrating for everyone; we want an answer now so it can be resolved, but it has to be done correctly. She added that Mr. Lotspeich is doing what he needs to do and the Board can be assured that he is on top of that as well. If Board Members have questions or concerns between meetings, she suggested they call Mr. Seeber. He will send out information to you as it is available or staff will meet with you individually, if that is necessary. It is important that we are presenting the proper information to the public as well because there has been some misinformation and the agency wants to make sure that people have the facts. But most importantly, the reservoir is safe and we are working diligently with HDR and Black & Veatch to find the root cause and we will resolve the issue when we know that.

Chairman Latvala called upon Commissioner Higginbotham.

With regard to the meeting of the minds with FDEP about the 105 foot level, Commissioner Higginbotham asked if at any point there was an indication that FDEP was going to order us to do it had Tampa Bay Water not agreed to do it on a voluntary basis.

Mr. Kennedy responded it didn't go that far because both Tampa Bay Water and the FDEP agreed that the reservoir is totally safe when totally full. Since Tampa Bay Water is not in a position to be certain that we could fill it completely above the band of cracks, the discussion went to what is a safe elevation we all could recommend below the band of cracks.

Commissioner Higginbotham sought confirmation that Tampa Bay Water was not under the gun to draw the reservoir down, but rather it was just an engineering and science move to drop the reservoir down. Mr. Kennedy confirmed that an elevation of 105 feet makes a lot of sense and positions the agency to be able to get the reservoir down to the bench elevation next spring. Through the use of a graphic, Mr. Kennedy noted the location of the 105 foot elevation. He stated that rather than fill the reservoir as we have done during normal spring rainy season, it is felt that staff will have a much better chance of getting down to the bench level to do an inspection from the 105 foot elevation. The engineers have not been able to inspect the entire bench since the first filling operation of 2005.

Commissioner Higginbotham stressed that safety was the issue he was having a hard time convincing the residents who live in the immediate area about. To Mr. Seeber and staff he stated that it was certainly a pleasure to work with them and their openness. He stated that last fall he had difficulty getting access to the reservoir to take a look when he started asking these hard questions. He again thanked Mr. Seeber for being open and willing to work not only with him but the members of the Board of County Commission and the public on this. As far as the legal action he questioned

if, as a member of the Board, he might suggest an executive session of the Board so they can be briefed on any legal steps that cannot be shared openly or in public. He added that he was concerned and edgy about that issue.

Chairman Latvala urged the Board to trust the General Counsel adding that she was talking with Mr. Seeber and assured the Board that they would do what needs to be done.

Mr. Lotspeich advised the Board that this is a delicate time and asked for their trust adding that if a special executive session was needed, he would ask for it. If that is not required it will mean we are at a point where we are actually ready to move forward with more serious steps.

Commissioner Higginbotham stated that although he appreciated the General Counsel's request for trust, he has been trusted by the public users, people who live in the immediate area, to make sure that we are addressing this. He would continue to respectfully request reports to make sure that we hear something by October on the direction this is moving.

Commissioner Sharpe asked for confirmation that the relationship thus far with HDR has been very positive and they have been working with Tampa Bay Water to try and remedy the problem. Chairman Latvala replied absolutely, adding that was expected to continue.

Mr. Seeber stated that all along staff has taken the approach of working collaboratively both with the design engineer and the system engineer on the technical side of this and we have incorporated FDEP into that process. Tampa Bay Water makes sure they get copies of the data, that they have an opportunity to review and see things out there and we participate in meetings as well when needed to insure that they understand what we are doing and why we are doing it. So they never had to get to the point where they had to issue an order and exercise their enforcement muscle because they know they have a collaborative partner in Tampa Bay Water in resolving this.

Commissioner Higginbotham thanked Mr. Seeber but again stressed that he would continue to be on this.

Council Member Bennett asked Mr. Kennedy the depth of the dirt below the soil cement, on top of the geomembrane. Mr. Kennedy replied that it was about ten feet deep at that location and up to 20-25 feet deep in others.

Council Member Bennett noted that was a lot of heavy dirt on top of the geomembrane which really is the barrier that we are concerned about. Mr. Kennedy replied that was correct.

Council Member Bennett asked if the soil cement was to secure the dirt and add the extra weight so that it doesn't move around during wave actions or gravitational pull. Mr. Kennedy stated that although the soil cement weighs a lot, it doesn't weigh as much as the dirt because the dirt is 15-20 times thicker. The primary function of the soil cement is to protect wave erosion from getting into the wedge of dirt.

With the abnormal cracking, Council Member Bennett asked if there was evidence of that dirt being moved or any change of science in the sense that the water is moving or dirt is moving. Mr. Kennedy responded that Tampa Bay Water is working very hard to absolutely confirm that for a fact in the cracked areas. Tampa Bay Water has undertaken ground penetrating radar tests, performed

the drain test, performed the pit tests and continue to work on finding a method that can give and DEP a satisfaction that that is absolutely the case.

Council Member Bennett asked if it would be safe to say that even with the cracks, the reservoir is normal, doing its job. Mr. Kennedy replied yes.

Council Member Bennett asked Mr. Kennedy to describe the material used to fill the cracks. Mr. Kennedy explained that it is called "neat" grout and is sprayed in the cracks.

Referring to the fact that there was one area where they had to go back and re-grout, Council Member Bennett asked if there was a problem with that grout. He asked if the grout being used was being studied to see if it could be augmented with something else to make it more stable.

Mr. Kennedy responded that concrete and grout have almost no tensile (pulling) strength so clearly the crack reopened on its own absent the kind of grout being used.

Mr. Kennedy confirmed Council Member Bennett's statement that even if the cracks reopen, the integrity of the reservoir has never been questioned.

Hearing no further questions, Chairman Latvala closed the discussion.

J1. Configuration II Expansion Projects

- a. Tampa Bypass Canal Pump Station – Award Construction Contract No. 2008-047 to lowest responsive, responsible bidder, Encore Construction Co., in the amount of \$16,960,000**
- b. Regional Facilities Site including Repump Station and High Service Pump Station – Award Construction Contract No. 2008-048 to lowest responsive, responsible bidder, Encore Construction Co., in the amount of \$15,100,000**

Mr. Seeber advised the Board that the next items were bid award actions on the Configuration II schedule of projects. Mandi Rice, Senior Manager of Construction will offer a brief presentation on two contract awards for Board action.

Ms. Mandi Rice stated that she would provide a brief description of the two construction contracts before the Board today. Implementation of System Configuration II was approved by the Board in October of 2006. The program includes ten projects with the construction phase currently estimated to be approximately \$250 million, including engineering and construction management services. Bids were opened in July for the Tampa Bypass Canal Pump Station, Repump Station and the High Service Pump Station expansion projects. The Repump Station and High Service Pump Station expansion projects were included under one construction contract because they are both located at the Regional Facilities Site. The resulting contract is called the Regional Facility Site Expansions. Encore Construction was the successful bidder on both of these contracts.

Ms. Rice displayed a table comparing previous project estimates with the results of bidding. Due to the number of bids received and the tight grouping of the bids, it is felt that the resulting contract amounts represent true market conditions. With approval of these contracts, five of the ten System Configuration II projects will be in construction and the remaining five are currently in the design phase.

Ms. Rice explained that the Tampa Bypass Canal Pump Station Expansion project will increase the capacity of this facility from 138 mgd to 259 mgd of raw water than can be withdrawn from the lower and middle pools. The construction effort includes doubling the number of pumps and intake screens and will also be adding auxiliary power for withdrawal capacity of 66 mgd.

Ms. Rice stated that the High Service Pump Station Expansion will increase the capacity of this facility from 120 mgd to 135 mgd of finished water that can be sent into the regional system. One new pump is being added along with chemical feed and mixing modifications and additional auxiliary power capacity for 66 mgd.

Ms. Rice stated that the Repump Station sends excess withdrawals from the Tampa Bypass Canal to the reservoir. The capacity of this facility is being increased from 130 mgd to 180 mgd by adding two pumps and implementing yard piping and metering modifications.

Ms. Rice stated that staff's recommendation is to award these two construction contracts to the lowest, responsive, responsible bidder and in both cases that is Encore Construction.


Motion: Commissioner Schrader moved approval of Construction Contract No. 2008-47 and Contact No. 2008-048 to Encore Construction Co. Commissioner Duncan seconded the motion. The motion carried by a vote of 9-0.

L. Receive & File

Motion: Commissioner Sharpe moved approval of Receive & File. Commissioner Schrader seconded the motion. The motion carried by a vote of 9-0.

Adjournment:

The meeting adjourned at 10:25 a.m.

Attest: 

Gerald J. Seeber, Secretary

Date: 10-20-08