TOWN OF PALM BEACH

Town Clerk's Office

REPORT OF THE WATER COMMITTEE MEETING
HELD ON OCTOBER 21, 2008, @ 1:30 P.M.

I. CALL TO ORDER AND ROLL CALL

The Water Committee Meeting was called to order at 1:30 p.m. in the Town Council Chambers. On roll call, Chair David A. Rosow and Committee Member Denis P. Coleman were found to be present. Also present for all or a portion of the meeting were: Mayor Jack McDonald, Town Council President Pro Tem Gail Coniglio, Town Manager Peter B. Elwell, Assistant Town Manager Sarah E. Hannah, Director of Planning, Zoning and Building John Page, Director of Public Works H. Paul Brazil, Assistant Director Eric Brown, Town Engineer James Bowser, and Town Clerks Susan Eichhorn and Joanna Cunningham. The following were present from the City of West Palm Beach: Eduardo Balbis, Assistant City Administrator, and Peter Robbins, Public Information Officer. Chip Merriam, Deputy Executive Director from the South Florida Water Management District and Bevin Beaudet, Department Director of Palm Beach County Water Utilities were also present.

II. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Chair Rosow.

III. APPROVAL OF AGENDA

The Agenda was approved as printed.

IV. CITY OF WEST PALM BEACH.

A. DISCUSSION OF WATER OPTIONS FOR THE TOWN OF PALM BEACH.

Mr. Eduardo Balbis presented a Power Point to the Committee that outlined the previous concerns of the Town Council. The presentation agenda included a Regulatory Update, Water System Update and Future Options for the Town of Palm Beach to consider.

The regulatory update included discussion regarding the Notice of Violation sent out with the recent water bills discussing the total Trihalomethanes(TTHM) MCL Violations. The City of West Palm Beach is required by EPA standards to notify residents. This was due to a high chlorination period in the disinfection period. Mr. Balbis reiterated the water is safe to drink. The City does not have disinfection byproducts in access of 80ppb currently, and have not had them since the free chlorination event of 2007.

Next, Mr. Balbis discussed the Consent Order. On September 2, 2008, the City of West Palm Beach entered into a Consent Order with the Palm Beach County Health Department which itemized a number of things and Mr. Balbis highlighted the two most important items on a slide. Item "n" was required by the Health Department. The City must establish a drinking water system that produces 100 percent of the daily average water supply using membrane technologies including Reverse Osmosis, nanofiltration, ultrafiltration or find a ground water supply not under the direct influence of surface water.

The City now has eighteen months (Item "m") to choose one of these options. Mr. Balbis indicated that there are over 40 action items that the City needs to meet. Mr. Balbis indicated he is happy to state that they have met 8 of the 40 items already and are on track and meeting all of the deadlines.
Continuing with the Power Point, the next slide listed the Water Quality Improvements the City has made:

- Filter Upgrades
- Pump Station and Plant Improvements
- Operational Changes
- Chemical/Process Changes
- Turbidity November 2007: 0.23 NTU Average
  September 2008: 0.06 NTU Average

The Regulatory maximum : 0.30NTU

Mr. Balbis mentioned that U.S. Water is currently acting as the plant manager for operations and filling ten vacant positions within the water plant. Over eight million dollars have been spent on improvement to the water plant. Improvements with the filtration system have helped obtain a very low turbidity reading.

Mr. Balbis discussed the changes that have occurred recently at the water plant. Pump Station improvements have increased to approximately 50PSI. Committee Chair Rosow asked where the readings were taken and during what time period. Mr. Balbis responded that they were from September 16 through October 16, 2008,

and that the reading is taken right outside of the pump station, but also at other locations throughout the town. Chairman Rosow asked what causes the spikes in pressure. Mr. Balbis responded that irrigation demands can cause this. The PSI will decrease at times of peak watering and usage. They continue to look into many other efficiency improvements.

The next slide demonstrated the Efficiency Improvements that have been made at the water plant to decrease electrical demand. FPL printed a one year summary of usage and the City has decreased their electrical amount by 12% in the past year by making several changes about lengths of pumps running, the time of day they are used etc.

Mr. Coleman asked what percentage of the City's budget is electricity.

Mr. Balbis stated that 1.5 million dollars out of a 64 million dollar budget is used for electricity. He stated that the usage for Palm Beach is 30% of the total water usage. The Town of Palm Beach is the largest customer of West Palm Beach water.

Another improvement the City of West Palm Beach has made is with regard to the Chemical/Process change. This was demonstrated on a slide:

Reduction/Optimization in Ferric Sulfate Coagulant
Use: $106,000 Estimated Annual Savings

Reduction/Optimization in Powdered Activated Carbon Use:
$35,000 Estimated Annual Savings

Flushing Optimization: $365,000 Estimated Annual Savings.

The Water Advisory Task Force comprised of members from the Town of Palm Beach, South Palm Beach and West Palm Beach continues to meet with City of West Palm Beach officials and discuss water options, usage and restrictions.

Next, Mr. Balbis discussed the four future options for the City of West Palm Beach and the Town of Palm Beach:

1. What supply source?
2. Where to locate?
3. Rebuild or renovate?
4. What treatment technology?

Mr. Balbis then discussed the options and was seeking Committee Directives from the Town. Does the Town want to:

1.Remain as equal customer with the City.

2. Build upon and refurbish existing site in West Palm Beach with a desalinization plant.
3.The Town could construct its own Water Plant and tap into the brackish Floridan aquifer and be operated by the City of West Palm Beach.
4. The Town could build and operate its own utility.

Each Option was presented on slides.

Option 1 - Town remains as Equal Customer
- Town subject to same water restrictions imposed on water supply for the entire service area.
- Town subject to same rates and debt service as other customers

Option 2 - City dedicates Seawater Plant for Town
- Town remains as customer of the City of West Palm Beach
- Unrestricted use for Town of Palm Beach
- Additional capital and operational costs to Town of Palm Beach
- Desalination plant located on City property

Option 3 - City dedicates Floridan Plant for Town of Palm Beach
- Town remains as customer of the City of West Palm Beach
- Possibly less restricted use for Town of Palm Beach
- Reverse Osmosis plant located on City property

Option 4 - Town constricts their own Plant
- Town takes over retail service
- Possibly less restricted use for Town of Palm Beach
- Sale of infrastructure (pump stations and piping) to Town
- Storage and land requirements

Mr. Ewell asked if the Town could become a Bulk Water customer as an option. Mr. Balbis indicated that was not currently on the table but could be looked at as an Option 5.

Mr. Balbis needs some direction form the Town:
- Direction to move forward with preliminary design and cost estimates for options
- Direction to move forward with preliminary permit discussions with regulatory agencies
- Appointment of Town staff member to participate in permit and preliminary design discussions. (Mr. Balbis suggested Mr. Jim Bowser, Town Engineer).

Chairman Rosow indicated that he would bring this item up at the next Town Council meeting on November 12, 2008 for a full Council recommendation.

This concluded the Power Point Presentation.

B. DISCUSSION OF RECENT ANNOUNCEMENT CONCERNING VIOLATIONS.

Mr. Balbis reiterated that the water within the City of West Palm Beach IS safe to drink. The notices of violation that were in the recent water bills that indicated a higher content of THM's in the water was due to the higher chlorination process from earlier in the summer.

Committeeman Coleman asked which was better, bottled water or the City's drinking water. Mr. Balbis indicated that bottled water does not have to comply with the hundreds of water testing criteria that municipal water supplies must adhere to. The City of West Palm Beach has over 230 water samples taken per week. Mr. Coleman asked if Mr. Balbis knew how the City water compared to New York City Water. Mr. Balbis indicated that he did not have that information. Mr. Coleman then asked Mr. Balbis to come back to the Committee with a comparison of New York City water quality records with the water quality records of the City and the quality of water between New York City and West Palm Beach. Mr. Coleman indicated he could use those results as a benchmark for a quality product.

Mr. Coleman said there is an increasing demand for a depleting product. The City of West Palm Beach has numerous buildings going up and is likely to continue in the future. He cited a tension in the relationship between the City and the Town because the amount of water used for irrigation is larger in Palm Beach than in West Palm Beach.

Mr. Balbis agreed with Mr. Coleman that his assessment was probably correct. By looking at future demands, the Town of Palm Beach will most likely remain constant as the island is built out, and could possibly decrease as the per capita per day consumption goes down with water restrictions and other directed water management practices.

Mr. Coleman stated that he predicted that in the future if the choice is between water for lawns and water for people, that the people would win, as they should. As the Town looks forward to create a source for water, how do we go about doing that? How does the Town carve out a water supply?

Mr. Balbis responded that when they plot out a water supply plan, they do not break down the irrigation demand vs. potable demand. They must comply with their 20 year water use permit. Average daily flow from the water plants is 30 million gallons per day and they are permitted up to 53 million gallons per day. Increased use in demand would be due to development of the City of West Palm Beach downtown area and other areas.

Mr. Rosow asked that if the daily usage is 30mgd now, what was the demand prior to water restrictions, and Mr. Balbis responded that it was a ten percent reduction in demand. They have seen an increase in peak demand since everyone is watering at the same time. Mr. Rosow has noticed that on watering days, his water pressure is less than on those days when there are restrictions.

Discussion ensured regarding how the City of West Palm Beach charges for water usages and if they use a tier system. To encourage water conservation, users that use over a certain amount are charged more once they reach that threshold. Their rate structure is based on usage. Mr. Coleman added that persons in Palm Beach pay more because they use more water for their estates, and reiterated that they are 30% of total water consumption.

Mr. Coleman also asked Mr. Balbis to return a list of the largest water consumers in Palm Beach to the Council. Mr. Coleman was considering that the Town could create its own water plant for irrigation purposes if it would be geographically feasible. Mr. Balbis indicated normal water usage is 250 gallons of water per person per day and Palm Beach Residents are using an average of 800 gallons of water per person per day. Most likely, the water is being used for irrigation. Mr. Chip Merriam from the South Florida Water Management District indicated that if four or more persons are using a well, it then becomes a public water supply and would be required to be permitted. **Mr. Coleman asked Mr. Balbis to return with total gallons of water used vs. total amount of dollars paid by the Town of Palm Beach residents.**

Mr. Coleman asked about the ongoing maintenance issues and reserves that Mayor Frankel mentioned six months ago. The City is currently $3 million dollars in the red, but is decreasing the debt by $700,000 per month, in part due to a rate increase. Capital costs for a desalination plant are $8-10 dollars per gallon of capacity with a total cost of approximately $100 -$120 million total to build while a reverse osmosis is $6-7 dollars per gallon. Operational costs for each vary but particularly for a desalination plant because pushing the water through the small membranes takes more energy and thus, more electricity to operate.

Mr. Rosow returned to original questions and asked discussion regarding timelines. He stated that the residents want quality and quantity at a fair price. When would the City know what the costs are? Mr. Balbis indicated again - that it depends on the direction of the Town and if they have permission to move forward with the permitting process. He again asked for a designated staff person. In addition, the SFWMD restrictions and permitting will become a factor.

V. SOUTH FLORIDA WATER MANAGEMENT DISTRICT.

A. WATER AVAILABILITY OVER THE NEXT DECADE.

Mr. Chip Merriam, Deputy Executive Director, indicated that water is free- it is the transmission of it that is the cost. SFWMD does not own the water, it regulates the water. Two day a week irrigation will most likely become a permanent conservation effort. The goal is to get away from the 50% use of potable water that currently goes for lawns and irrigation. Florida essentially is a swamp and our area has over 1800 linear miles of canals. The Herbert Hoover Dike structure is also an area of concern but the U.S. Army Corps of Engineers has developed a thirty year plan to preserve and repair/strengthen the dike.

B. ADEQUACY OF WATER FROM AQUIFERS.

There are issues with using the surficial aquifer. There are already several other existing users that have been permitted and their permit needs to be enforced and regulated by the SFWMD. Landfill locations near wellfields can also contaminate the water supply when the wellfields are drawn down. The Floridan aquifer gets recharged from below or laterally, which is a much more brackish system. The surficial aquifer is replenished through rainwater. Mr. Merriam indicated that water in Florida is always moving. The CERP (Comprehensive Everglades Restoration Plan) will also attempt to save and preserve water, but currently those waters go to tide. Mr. Merriam indicated that water usage in Palm Beach is excessive and the numbers are very high (800 gallons per day). He cited that he has an 8 acre ranch with horses and he only uses 150 gallons per day.

C. SFWMD VIEW OF SEA WATER DESALINIZATION.

Mr. Merriam feels that desalination plants are a great idea. The most useful suggestion would be to work with other entities to co-locate, such as with a power plant. They both use the same discharge permits. He cited Tampa Bay and the Florida Keys as examples. He also suggested using a diversified portfolio for water sources: a combination of wells, aquifers, reverse osmosis and other water uses. Ph changes in older water pipes can increase your costs through the chemical treatment process. He suggested perhaps joining with Palm Beach County Water Utilities or other local governments as it may be cheaper since they serve more people. He indicated that a water plant built solely on the island may not work well due to the salt and salinity of the location of the wells.

D. SFWMD POTENTIAL FINANCIAL SUPPORT AND REGULATORY ASSISTANCE.

The legislature cut funding for the AWS (Alternative Water Supply) grant program through SFWMD last year from $43 million to less than $12 million. Application has been made for AWS grant for the new PAR 3 Golf Course renovations. Mr. Merriam indicated that the permits must already be approved in order to be considered for grant monies.

New rule-making will come into place due to the drought and everglades restoration. Twice a week irrigation will most likely go into effect in South Florida. Reduction of water use is a focus of the SFWMD.

Mr. Coleman asked in generality how much a well costs. Mr. Beaudet indicated it is roughly a million dollars per well.

Council Rosow requested a list from the SFWMD of the reclaimed water users and lists of locations where there are current permits. Mr. Merriam indicated he would look into that and see if he could comprise a list.

VI. COUNTY OF PALM BEACH.

A. DISCUSSION WITH MR. BEVIN BEAUDET, DIRECTOR, PALM BEACH COUNTY WATER UTILITIES

Mr. Beaudet commended the Town for attempting to resolve the water issues within the Town and noted that the City of West of Pam Beach has recognized its responsibilities, is doing the right types of studies, and has brought in capable people to address previous problems.. He expressed that the County is not in a position to assist the Town at this time. He indicated that the cost of pipes to connect to the County water system would be approximately $15 million dollars. Mr. Beaudet added that desal plants are very expensive to build, have a very high carbon footprint, and have high energy usage.

Mr. Coleman asked about using certain plant life that reduces water usage. Mr. Beaudet indicated that the City of Las Vegas will pay residents to remove their lawns and replace it with desert-like flora. Chairperson Rosow asked if reclaimed water is available at all on the island and was told it is not available.

VII. ANY OTHER MATTERS

Mr. Balbis mentioned that the Water Advisory Task Force would include members of the community and could become an official City Board and he looks forward to working with the Town regarding future water use.

Resident Bill Diamond, 220 Wells Road, asked Mr. Balbis if the drinking water is safe to drink for the elderly and immune impaired residents. Mr. Balbis assured Mr. Diamond that the drinking water is safe.

Resident Gerry Frank, 2784 South Ocean Blvd., asked about the storage plan in the caverns in the western area of Palm Beach County, and asked about the Ordinance in Town regarding sprinkler systems that were required to have a rain sensor and used during water restrictions.

Mr. Elwell answered the question regarding the Ordinance and confirmed that it is in effect and residents have been ticketed. The primary violation was that an electrical shortage sometimes can upset the timing schedule and the sprinklers were turning on when they were supposed to be restricted. New systems must also have a rain sensor to not turn on while it is raining.

Mr. Merriam indicated that the 1000 mine/rock pits are in use and assisted the City of West Palm Beach during the recent drought when they needed more water supply. The project is not complete, as it needs a $100 million dollar pump.

Mr. Coleman asked Mr. Balbis if there was a conservation program for information and evaluations for residents and their water usage. Mr. Balbis said currently there is not an in-home inspection program. He would however, provide some literature to Mr. Coleman.

VIII. ADJOURNMENT

There being no further business, the Water Committee Meeting of October 21, 2008, was adjourned at 3:39 p.m.

David A. Rosow
Water Committee Chair

Denis P. Coleman
Water Committee Member