

TOWN OF PALM BEACH

Office of The Town Clerk

REPORT OF THE WATER COMMITTEE HELD ON TUESDAY, JULY 28, 2009

I. CALL TO ORDER AND ROLL CALL

The Water Committee Meeting was called to order at 2:02 p.m. on Tuesday, July 28, 2009 in the Emergency Operations Center, 355 S. County Road, Palm Beach. On roll call, Chair Rosow and Committee Member Diamond were found to be present.

II. PLEDGE OF ALLEGIANCE

Chair Rosow led the Pledge of Allegiance.

III. APPROVAL OF AGENDA

Committee Member Diamond asked to add citizen remarks to the agenda. Chair Rosow indicated that the citizens may ask questions as the discussions are ongoing.

The Agenda was approved as printed.

IV. UPDATE ON FEASIBILITY STUDY OF RO PLANTS ON QUADRILLE PROPERTY AND PHIPPS PARK PROPERTY (James M. Bowser, Town Engineer)

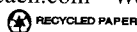
Mr. John Potts, from Kimley Horn & Associates, provided a brief progress report on reverse osmosis potable water treatment plants on Town owned Quadrille and Phipps Ocean Park sites. Mr. Potts indicated they have only been contracted with for two weeks and they have been collecting data and determining how much water is available. Their preliminary conclusions indicate there are plants of 5 mgd at Quadrille, and 8 mgd at Phipps Ocean Park are feasible..

Kimley Horn & Associates will prepare a technical memorandum that will review the raw water supply, prepare a conceptual water plant site plan, including water storage needs, and by-product (brine) disposal. The memorandums will estimate the maximum amount of water that could be treated at each site and will prepare a budget level opinion of probable costs to construct the facilities. Chair Rosow asked if sea water could be used at the Phipps location. Mr. Potts responded that you could use the sea water, but it is better to draw water from the aquifer if

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possible, because it requires less treatment. Sea water is a better option for irrigation but also requires a separate piping system.

Chair Rosow indicated that eventually the SFWMD will restrict the use of water from the Floridan aquifer. That is why he suggested a separate system for irrigation. Citizens are concerned with taste, odor and smell. He feels that they should speak to the City of West Palm Beach for options about a potable water plant. They should have the same issues as West Palm Beach. The issue at the Quadrille location will be the setbacks. Mr. Potts indicated that it is 16 feet from the property line. The lot size is a triangle and difficult to comply with the requirements.

Lee Goldstein, 3120 S. Ocean Blvd, asked about the desalinization option and if that would be considered. Jim Bowser asked if the membrane space is more if you use the sea water. Mr. Potts stated that the energy consumption is considerable. You would need a larger FPL grid to power the filtration process. Chair Rosow asked if they used a mixed source of sea water and some Floridan water, could SFWMD grant an exception for a permit. Mr. Potts stated that there are prohibitive costs and most likely would not grant an exception.

V. PLAN FOR SMART IRRIGATION PILOT PROGRAM AND ANALYSIS OF PILOT
(Sarah E. Hannah, Assistant Town Manager)

Assistant Town Manager Sarah Hannah presented the item and recommended to the Water Committee to consider two alternatives with regards to the study and promotion of a smart irrigation program for property owners in Palm Beach. The Town met with the Civic Association and Citizens' Association to discuss how to proceed with the pilot program. Because the cost of a consultant-aided study, and because of the amount of information that was already available on smart technologies, staff did not feel a consultant was necessary.

Ned Barnes, Civic Association, introduced Bob Johnson, from Superior Sprinkler Systems who has over 200 clients for irrigation on the Island. He also introduced Communications Director Mike Brown from the Civic Association. Mr. Barnes recommended not conducting the study since so much information is already available. Mr. Johnson informed the Committee that that the lawns in Southeast Florida need 61 inches of rainfall per year. The same amount of rainfall that Florida typically receives.

Committee Member Diamond asked Mr. Brown the effect of water restrictions on the usage. The last few years in California with their drought, and having restrictions, the results of the studies were skewed. Currently, the usage is about 25% savings and most of that is without smart technology.

Chair Rosow stated that he is ready to start and wants to install a system. Mr. Brown responded that they will have water workshops with irrigation and smart technology companies present, as well as invite the top 100 water users in the Town. Mr. Barnes indicated that the Civic

Association is ready to move forward. **Assistant Town Manager Hannah was instructed to have an agenda item at the next Town Council meeting to implement a smart technology program.**

Chair Rosow requested the Civic Association to go ahead with their pilot program. Mr. Bob Johnson, also from Florida Irrigation Society and Superior Sprinklers, spoke about the history of restrictions and feels that a lot of the program is education. Very little irrigation is actually needed. He noted that the water waste on the island is phenomenal. If you can convince the residents that they will get some money back, they will install them. Smart controllers cost from \$200-\$700 to install. They use weather and water data to adjust the amount of watering times and frequency.

VI. REPORT ON WHETHER IT IS TRUE THAT IF THERE WERE MORE THAN TWO USERS ON ONE WELL IT REQUIRES A PERMIT (James M. Bowser, Town Engineer)

Jim Bowser, Town Engineer researched if more than one property owner is on a well. SFWMD requires a permit for ALL users with exceptions for duplexes. There cannot be multiple users on wells. Chair Rosow asked if two owners have two wells, but one RO system. John Potts indicated that SFWMD does not regulate it after the water is drawn.

Jim Bowser discussed the costs of private RO well systems and they vary from \$100-125,000.

VII. REUSE PRESENTATION BY AECOM (Scott A. Eckler, Vice President)

Scott Eckler, Vice President from AECOM, presented a power point presentation to the Water Committee regarding water use options. A copy was submitted into the record.

The Town's water reuse options for restricted irrigation (restricted by SFWMD Rules and Regulations)

- Construct New Reverse Osmosis (RO) Treatment Plant at Quadrille site to produce own water from Floridan Wells
- Continue to utilize the City of West Palm Beach Water Supply

The Town's water reuse options for unrestricted irrigation (NOT restricted by SFWMD Rules and Regulations)

- Install Membrane Bioreactor WWTP @ ECRWRF and pump treated wastewater to the Town
- City of West Palm Beach to install new MBR at 23rd and Tamarind
- Recover previously injected and future wastewater from ECRWRF, treat w/new filtration plant and pump treated effluent to the Town.
- Install small MBR plants on Town property on island for larger users.

- Participate in building Seawater RO plant @ new FPL Plant site
- Build new SWRO Plant(s) on Town property on Island
- Capture wasted stormwater at C-51/C-17 at tidal control structures.

Chair Rosow thought all seven opportunities for unrestricted irrigation are worth exploring. Jerry Hartman, of GAI Consultants, spoke of the north end storage capabilities that are presently used for water systems and could be switched out for usage as an RO facility. Chair Rosow asked if Mr. Eckler was working for the City of West Palm Beach and he is not. He is working with Port St. Lucie for a recapturing of stormwater.

Chair Rosow directed staff for the next meeting to prioritize and include costs and where the committee should be focusing its efforts. New ideas have been presented today and should be considered. Jim Bowser cautioned that anything the town does has to coordinate with the City Franchise agreement.

VIII. REUSE OPTIONS FOR TOWN CONSIDERATION (James M. Bowser, Town Engineer and Eduardo Balbis, Assistant City Administrator, City of West Palm Beach)

Eduardo Balbis, Assistant City Administrator, City of West Palm Beach spoke regarding the reuse options for the Town to consider. Chair Rosow asked Mr. Balbis how seriously the City is in engaging in RO plants. Mr. Balbis is looking at a 10mgd facility at the ECR plant. It recharges the water and is used for reuse water. The City is looking at the MDR plant at a larger lift station. There are some challenges however, and are in the cost estimate, evaluation stage. Another option is to treat wastewater, to pare down the treatment so that it is just reclaimed water and pump the water to the Town for irrigation. The Town's wastewater affluent produced is not enough to provide to FPL. Chair Rosow asked what the City's feeling was about the condition of the existing water lines in the Town of Palm Beach. Mr. Balbis indicated that he is not familiar with the Town system. Mr. Bowser indicated there are very few water main breaks in the Town and that is a test of its condition. The hydraulic issues of the past have been addressed. Mr. Balbis updated the Committee on the Water Utility in West Palm Beach. There were 43 items that they were ordered by the health department to improve and the City has met each one. Turbidity is 0.3. He provided a tour to Mr. Bowser and Ms. Hannah yesterday. The water pressure is over 70 psi and water quality is the best it has ever been. The regulatory agencies have commended them for their compliance. Part of the consent order was to treat 100%. He highlighted some other projects that the City is working on. The existing ASR well has not been used and was installed in the late 1990's. They may be able to inject partially treated water into the well and withdraw the water during times of drought, and may be permitted for alternative water supply.

They have been conducting tests from the C-51 canal and are being reviewed by the SFWMD. One of the challenges that it poses, the SFWMD has its own usage plans for the C-51 canal. Chair Rosow appreciated and thanked Mr. Balbis for his report. Chair Rosow asked if the City

1 tests for taste or odor. Mr. Balbis stated that they do, in fact, test the water. Their lab employees
 2 conduct daily taste and water tests. **Chair Rosow asked for copies of the results.** Mr. Balbis
 3 indicated ferri, lime, a filter aid, chlorine, ammonia, fluoride and a corrosion inhibitor are all
 4 added to the water. The lead and copper update showed that the corrosion inhibitor showed a
 5 large decrease in the lead and copper. Committee Member Diamond asked about the next agenda
 6 item and if the 5 year plan is part of their scope. Mr. Balbis indicated that MWH and JJ&G are
 7 consultants that are working on reports for the Town and will be completed by March 2010.
 8 Chair Rosow asked to explain further the ASR option that could be strictly devoted to the Town
 9 of Palm Beach. The 6 mgd would be strictly for the use of the city Mr. Balbis stated.

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 11 Jerry Hartman stated that was involved with the interlocal agreement and asked if it had been
 12 amended to allow for the Town to implement an Alternate Water Supply. Mr. Balbis stated that it
 13 had not been amended. Committee Member Diamond indicated that the town should control its
 14 own destiny and not rely on all the problems the City says. Chair Rosow said it may be clear
 15 what the Town should do, but there is a large price tag attached to it.

16
 17 Becky Hachenburg, P.E. from MWH provided a power point presentation to the Committee as
 18 an update to the City's study and project. A copy was provided for the record.

19
 20 Next Becky Hachenberg discussed the MBR technology with a brief power point presentation.
 21 Whether or not the existing collection can incorporate 4-6 mgd. Things to be considered are
 22 preliminary site plan requirements budgetary economic analysis, establish quality of potable
 23 water, conservation that was traditionally used for irrigation, uses, estimates in the reduction in
 24 maximum day treatment capacity afforded by the use of reclaimed irrigation. Council Member
 25 Diamond asked if MWH could work with the Town since this is what the Town is trying to
 26 accomplish.

27
 28 Jim Bowser indicated that he would hope that they could work with the County and the ECR
 29 plant. Mr. Bowser indicated that he cannot speak to Mr. Brian Shields, Director, at PBCWUD
 30 outside of the Sunshine, and would need to speak at the ECR meetings.

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 33 **Chair Rosow indicated he wanted this item as part of the staff directive.**
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 37 IX. APPROVAL FOR RECOMMENDATION TO COUNCIL TO FUND AN
 38 INDEPENDENT PEER REVIEW OF THE CITY'S PLAN FOR \$70 MILLION
 39 UPGRADE TO THEIR FACILITIES (James M. Bowser, Town Engineer)

40 Jim Bowser was seeking a consultant to work with the City of West Palm Beach to provide a
 41 concise report on the City's activities. It would be a limited look at the projects. Council Member
 Diamond was in favor of it and thought they could avoid duplication of costs. **The Water
 Committee agreed that they will recommend it to the Town Council .**

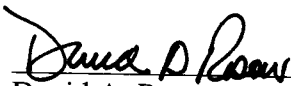
1 X. ANY OTHER MATTERS

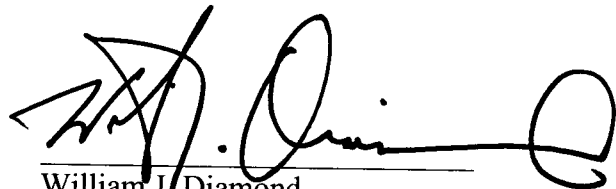
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3 There were none.
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5 XI. ADJOURNMENT

6 There being no further business, the Water Committee Meeting of Thursday, July 28, 2009 was
7 adjourned at 3:30 p.m.
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9 APPROVED:

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12 _____
13 David A. Rosow
14 Chair



William J. Diamond
Committee Member