



**PALM BEACH COUNTY
WATER RESOURCES
TASK FORCE JOINT MEETING
WITH BROWARD COUNTY
Boca Raton Fire Rescue /Police Training Facility**



**January 18, 2013
1:30 P.M. to 3:30 P.M.**

I. CALL TO ORDER AND OPENING REMARKS

The meeting was called to order at 1:36 p.m. by Vice-Chair Donald Rosen. The Vice-Chair of the Palm Beach County Water Resources Task Force, Mayor of Haverhill, Jay Foy, introduced the Mayor of Boca Raton, Ms. Susan Whelchel. Mayor Whelchel noted the importance of the meeting and extended an invitation to all to enjoy the City of Boca Raton.

Broward County WRTF Vice-Chair Rosen then asked for the roll call from each Water Resources Task Force. Roll calls were taken and a quorum was met by each.

Vice-Chair of the Palm Beach Water Resources Task Force, Mayor Jay Foy provided opening remarks noting that the Palm Beach Task Force has always tried to focus on the fact that our water resources are regional. Broward County Commissioner Rosen, Vice-Chair of the Broward County Water Resources Task Force, also provided opening remarks, recalling the evolution of the C-51 Reservoir project, the project evaluations, and the general body of work undertaken during the past several years. He also noted that it was time to move the project forward as a sustainable and viable water supply solution. He thanked all of the task force members for their participation and continued engagement in efforts to move this project forward.

Palm Beach County WRTF Members Present:

Jay Foy, Adrian Salee, Michael Dahlgren, Mike Mullaugh, Ted Winsberg, Dave Stewart, Tanya Quickel, David Brown, Jim Alderman, Matt Wilhite, Mary Lou Berger, Rod Braun (Alt. for SFWMD), Dick Tomasello (Alt. for John Flanigan),

PBC WRTF Alternates Present:

Jeff Hmara

PBC WRTF Members not Present:

John Flanigan

PBC WRTF Alternates not Present:

John Whitworth, Shelley Vana, Scott Maxwell, J.P. Sasser, Dawn Pardo, John Callaghan, Henry Shaw

Broward County WRTF Members and Alternates Present:

Donald Rosen, Vice-chair, City of Sunrise
Lisa Aronson, Commissioner, City of Coconut Creek
Peter Bober, Mayor, City of Hollywood
Richard Blattner, Commissioner, City of Hollywood

Doug Bell, Chair, CBWCD Board of Commissioners
Thomas Good, Commissioner, South Broward Drainage District Terrie Bates for Glen Waldman, SFWMD Governing Board
Ted Mena, Vice President, Coral Springs Improvement District

Guests Present:

PBC WRTF Working Group: Ken Todd (Chair), Mike Baker, Peter Kwiatkowski, Darrel Graziani, Chris Helfrich, Ray Liggins, Kofi Boateng

Broward WRTF Tech Team: Steve Bassett, Hank Breitenkam, Randy Brown, Jennifer Jurado, Alan Garcia, Steve Joseph, Julie Leonard, Dean Powell, Eric Shea, John Crouse

Other Guests: Melissa Meeker, Bob Brown, Bevin Beaudet, Albert Basulto, David Boyer, Albert Carbon, Ben Chen, Ernie Cox, Carol Connolly, Lisa Wilson-Davis, Fran Henderson, Glen Humphrey, Ed Kent, Steve Lamb, Joan Lawrence, Alex Larson, Kevin Leo, Maria Loucraft, Don Mathis, Drew Martin, Martha Musgrove, Sean O'Keefe, Michael Owens, Dean Powell, Brian Shields, Charlotte St, John, Mark Tomczyk, Alan Wertepny, Brent Whitfield, Mike Zygnerski, Erik Shea, Dave Markward, Lyle Munce, Pat Gleason, Ken Ammon, Ken Thurston, Angelica Gregory, Albrey Arrington, John Crowe, Carolyn Ansay, Lauren Burack, Nick Blactne, Harry Raucher, Ron Crone, Ted Petrides, Tim Hall, Patrick Martin, Bob Paschle, Shawn Waldeck, Scott Harrison, Mark Perry, Michael Cox, Kirk Martin, Danna Ackerman-White, Neil Johnson, Terry Clark, Mike Copeland, Kristin Melton, Richard Kaplan, John Crouse, Barbara Powell.

II. Background and Evolution of the Proposed C-51 Reservoir - Dr. Jennifer Jurado, Broward County

Broward WRTF Vice-Chair Rosen introduced Dr. Jennifer Jurado, Director, Broward County's Natural Resources Planning and Management Division to present the background and evolution of the C-51 Reservoir Project Proposal. Dr. Jurado began with an overview of her presentation, to include background and planning efforts related to the project, recent regional coordination efforts, and review of the regional benefits of the project. She then described the original concept as it was considered in CERP- to capture seasonal discharges that would reduce impact of freshwater discharges to the Lake Worth Lagoon. When considered as a water supply source, at that time, there were no defined users of this water. Over the past 6 years, the working group consisting of 7 utilities, which was expanded to include a broader planning effort, includes the participation and technical support of the South Florida Water Management (SFWMD), 298 and Special Districts and private partners. She reminded everyone that the investigation of C-51 Reservoir as a sustainable water source option was in part driven by the adoption of the Lower East Coast Regional Water Availability Rule in 2007 and the need to find alternative water supplies to support the then high growth rates and water demand projects for both counties. The project is now appreciated to have the potential to achieve more diverse benefits as a regional water resource project that would also help to preserve existing water supplies while supporting environmental objectives. This is of increasing importance in light of sea level rise and predicted impacts of climate change.

Dr. Jurado explained that as first evaluated, the C-51 Reservoir projected consisted of 1,200 acres that would be able to provide up to 120 MGD of captured runoff. The partner utilities combined their resources to contract services to further explore the feasibility of the project under the coordination of the City of Fort Lauderdale. At that time, the SFWMD played a critical role in providing a facilitator to aid the regional coordination process and to assist in coordination efforts with the District. Technical services provided under this agreement provided a thorough analysis of projected water supply demands and potential offsets that could be made to meet water supply needs throughout the year. Also addressed at this time were the conveyance options and how best to take advantage of canal systems. Cost/benefit and environmental comparisons were made based on other available alternative water supply options. Later, additional questions were raised by the partners and the SFWMD related to regulatory and permitting considerations, best conveyance strategies, potential environmental issues, the potential governance options and the need for a more thorough and full cost accounting of the project. These issues were brought back to the two water resources task forces and at a joint meeting in 2009, the Palm Beach and Broward Water Resources Task Forces provided support to undertake a Phase IIA evaluation under the management of the City of Fort Lauderdale. The major components to evaluate included an update of the current population demands given the economic downturn, certification of the water available, governance, conveyance options, hydrologic and geotechnical evaluations, and cost-effectiveness of the project compared to other options. Dr. Jurado stated that the initial results of these analysis showed that the C-51 Reservoir was a viable water source for future demands and that it was cost competitive while meeting the enhanced environmental aspects. Results of these analyses indicated the project cost at \$490 million dollars under one option (did not involve the EAA) which ranged from \$0.68 to \$1.01 per 1,000 gallons. This was comparable to other water supply options.

This work effort then led to an expanded coordination under a MOU with SFWMD, Lake Worth Drainage District (LWDD), and Palm Beach County with the City of Fort Lauderdale. Joinders (non-binding) to this MOU included; Boynton Beach, Broward County, Dania Beach, Margate, Plantation and Pompano Beach. Work products proposed for a Phase IIB analysis were undertaken through this expanded work group, including work group coordination (LWDD), modeling/water availability (170 MGD) and report preparation (SFWMD), conveyance options, water quality analysis (Broward County) and updated costs estimates (Palm Beach Aggregates). Dr. Jurado then outlined the resulting analysis of the Phase IIB work that included the Preliminary Design and Cost Estimate Report (June, 2012), the project size (75,000 ac. ft.), estimate costs (\$756 million), the proposed secondary canal routing, water quality considerations. She also acknowledged the remaining need to adequately investigate the governance and financing structures options that might be employed to support construction and management of the project.

Dr. Jurado summarized stakeholder feedback from this Phase IIB effort, which focused on the updated cost estimates, comparable costs, and the uncertainty of additional participation of the utilities. With those outstanding concerns, the recommended next steps included: reassessment of costs; consideration of a phased approach for the water storage (to bring down those incremental costs); and development of a preferred governance structure and financing option.

Dr. Jurado summarized her presentation by detailing the additional benefits of having more storage, including: potential value to the Everglades Settlement Agreement; improved flood control in western Palm Beach County; mitigation for water shortages; aquifer recharge to abate saltwater intrusion and preserve water supplies. She also added to this listing by saying that these benefits will increase over time as water managers consider climate change, increase in sea level rise, and more variable weather. The C-51 Reservoir also directly supports integrated water resources management which is included as a primary water resource management strategy recommended in the 4-County Regional Climate Action Plan. The C-51 Reservoir is a prime example of a water storage project that enhances the environmental protection while providing for seasonal variations in water demands.

Broward WRTF Vice-Chair Rosen thanked Dr. Jurado and asked for questions from the task force members. A question was asked dealing with the fluctuation of ground water elevations through seasonal demands. Dr. Jurado stated that this type of project would offer mitigation against those impacts.

III. C-51 Reservoir, Potential Opportunities – Melissa Meeker, Executive Director, SFWMD

Broward WRTF Vice-Chair Rosen then introduced the South Florida Water Management District's Executive Director, Melissa Meeker. Ms. Meeker's presentation began with a description of the adjacent L-8 Reservoir. She emphasized that the L-8 Reservoir plays an important role within the functions of the SFWMD. These functions include moving water (with new pumps) for storage to meet MFL concerns of the Loxahatchee River and moving water south to the STAs to improve water quality as part of the Everglades Settlement Agreement. She also noted that the C-51 Reservoir project, being adjacent to these key areas means that this proposed project will also play a very important role to the SFWMD. Ms. Meeker noted that the current Lower East Coast Water Supply Plan Update is underway and that within this area the traditional water supplies may be limited by the Regional Water Availability Rule. These constraints mean that alternative supplies will be very expensive and so we need to look toward innovative and cost-effective projects such as the proposed C-51 Reservoir project. After many years of looking at this project, including modeling and conveyance options to move water north to south, the SFWMD feels that for specific utilities who need additional sources, this could meet their current demands. In addition, if the SFWMD can transfer some of the utility demands that are now indirectly impacting groundwater levels connected to the Everglades, it would be a big benefit to the Central Everglades restoration effort. Ms. Meeker then described the uniqueness of the L-8 Reservoir and the potential to increase water storage by using both reservoirs given that they would both be constructed in the same geologic formation and use the current infrastructure. It is believed there is enough water available for multiple uses and to provide strategic water supply deliveries to maintain canal and groundwater through water releases when needed (dry times). This can help address the saltwater intrusion issue that several utilities face.

Ms. Meeker then addressed the multiple challenges facing the C-51 Reservoir project. Beyond the current timing and economic constraints, the governance issue is a big concern. One action over the last 8 months was to ask the project developer to look at phasing of the project. The revised Phase I is designed at 14,000 ac. ft. and would deliver 35 mgd. The construction timeline would be about 2.5 yrs. The additional phases could be brought on later as demands rise and the project is shown to be successful. The specific issues that SFWMD finds to be within their responsibility include: operations and maintenance of the Reservoir, recovery of O & M costs, management of water supply and regulatory issues. SFWMD considers the remaining issues, including construction costs/timing, and contracts for alternatives and financing, to be the responsibility of partners and the project developer.

Ms. Meeker then summarized that this project offers a regionally significant opportunity with multiple public purposes. The benefits include beneficial use of water otherwise lost to tide, a decrease in harmful fresh water discharges to Lake Worth Lagoon, long-term & cost-effective alternative water supply, and potential flood relief in western Palm Beach County. Additionally, there could be saltwater intrusion benefits. Capitalizing on the unique location and geology, the current work on the L-8 Reservoir, together with the extensive canal infrastructure & conveyance capabilities offer even more benefits. She concluded by stating she hopes the project will move forward quickly with Phase 1 and she looks forward to working together with all the entities.

Questions from Mayor Foy centered on how the L-8 basin water and the water quality implications were being addressed under the Settlement Agreement, since that water was not considered in the analysis. What is the role of the L-8 Reservoir for the North County CERP Project? Terrie Bates, SFWMD, described the original role of the L-8 Reservoir project as one in support of Loxahatchee River restoration. As part of the Restoration Strategies Plan, additional STAs and treatment options/infrastructure will be needed to meet water quality treatment requirements for additional water.

Broward County Commissioner Richard Blattner asked if the capacity of the L-8 Reservoir is expandable. Ms. Meeker replied that at 950 acres and 46,000 ac. ft. it is maximized. Mr. Mena asked if canals can deliver water to the Everglades. It was explained that water is leaving the area in general for flood control.

Palm Beach County Commissioner Mary Lou Berger complimented Ms. Meeker and then asked about the project costs and if the SFWMD Governing Board (GB) had discussed the option of applying a tax to the impacted utilities. Ms. Meeker explained that the GB does not have a way to tax a sub-segment of the entire SFWMD. In addition, the challenges they are facing constrain where they can spend their dollars. While taxing is not an option that they are considering, they feel there are opportunities to leverage the current SFWMD infrastructure to save significant dollars (\$50 million). Broward WRTF Vice-Chair Rosen asked about the status of the L-8 Reservoir pumps and the proposed numeric nutrient criteria requirements that this project may be able to mitigate. The response was that a contract has been let for construction of the L-8 pumps and the basis of using upstream storage to hold and treat water that is captured during storm events will improve water quality.

A final question from Vice-Chair Rosen was to verify if the GB felt that they should be playing a role in crafting the future governance structure. Ms. Meeker responded that the GB members definitely wanted to have a seat at the table and to be actively engaged throughout the process.

IV. C-51 Project Status Update – Ernie Cox, Palm Beach Aggregates LLC

Mr. Ernie Cox, Palm Beach Aggregates (PBA) Project Manager, provided an update on the proposed C-51 reservoir project. He noted that the project report was available for background details and acknowledged the great modeling work that SFWMD's Jayantha Obeysekera had achieved for this project. He then outlined the three original potential phases of the project, as discussed in the June 2012 Preliminary Design and Cost Estimate Report, as 10,000 ac. ft, then an additional 20,000 ac. ft, and final phase as another 45,000 ac. ft. (total 75,000 ac. ft). The phases would span 2.5 to 7 years to construct. He then discussed the June 2012 Preliminary Design and Cost Estimate Draft Report and noted the extensive design components for moving water into and out of the reservoir, none of which have yet been permitted and all of which would require significant work. The proximity of the proposed culverts and pump station near and under SR80, etc. led to discussions with LWDD and SFWMD staff to investigate an easier routing of the water, that would not require as much extensive work and would save money as compared to the initially proposed project at \$755.6 million for the full project. This alternate, known as Alternative 2A, would use the existing canals and control structures and pump stations, a much simpler design currently proposed for the L-8 Reservoir, to save on the design and construction costs of \$35 million. The next evaluation that Mr. Cox discussed was to look at the current restoration strategies plan for a divide structure in the L-8 canal. Utilizing that structure as part of Phase I instead of having two divide structures in the same canal would save even more money. The comparison of the unit costs of water savings was shown as \$4.08 capital cost per gallon in the original design to \$3.92 capital cost per gallon in the Alternative 2A design. Mr. Cox did emphasize that these are preliminary concepts, including the possibility of connecting the two reservoirs and that the costs are also very preliminary.

Additional project concepts were then presented within the incremental phases and provided benefits. For the 'Stand-alone' Phase I, using the Alternative 2A concept would be \$186.5 million but if connected to the L-8 reservoir with only the culvert (no pump station is necessary in the Phase 1), then the costs would be \$150.5 million. The unit cost does increase, however, to \$4.30 capital cost per gallon. In this preliminary concept being discussed, PBA would undertake the financing, permitting and only upon completion, would they be paid.

An overview of potential governance using a Hybrid P3 (public/private partnership) structure was shown as a diagram with PBA, Utilities, SFWMD, 298 Districts and a Not-For-Profit Special Purpose Entity. Mr. Cox stated that this is an option, but whatever model is used, the ultimate outcome should be that reservoir would be owned by a public group. So a creation of a new, non-profit entity could be composed of a Board of Directors with the participating entities. That newly created entity would acquire the reservoir and through agreements with the utilities and 298s, own the C-51 reservoir. The SFWMD would operate it based on an agreed upon fee. The benefits of this structure would give the entities the ability to move forward with a long-term permit and operations for the Phase 1 by agreements. This would provide more flexibility for future phases. Mr. Cox then showed pictures of the L-8 Reservoir that is now being pumped down, currently to an elevation of minus 4 or 5 ft. NGVD which is significantly lower than the current 12 ft. NGVD water elevation of the L-8 canal. SFWMD is continuing to remove water as part of the L-8 Reservoir construction.

Questions to Mr. Cox from Commissioner Good pertained to how to convey the water and who would be responsible. The operational permits would need to be discussed and worked out between the SFWMD and the entities. Mayor Foy asked about flood control which is a concern. Mr. Cox replied that there is an ability to maximize the water storage needs and operations within wet season with two reservoirs and that further discussion is needed. Other questions on the LWDD participation were mentioned and how they would be considered in the ultimate plan. If LWDD canals were to be used, then they would need to be directly involved.

Terrie Bates responded to a question on how the proposed C-51 Reservoir project may affect other restoration projects in the Loxahatchee River. She summarized the commitment of the SFWMD to come up with an alternative plan for Loxahatchee restoration associated with repurposing of the L-8 Reservoir as part of the Restoration Strategies and that this is independent of how the C-51 Reservoir project advances. In response to additional questions regarding cost, Mr. Cox responded that the costs for future Phases 2 and 3 of the proposed C-51 Reservoir project are undetermined given the unknown timeframes for construction.

**V. C-51 Project Benefits, Governance, and Cost Considerations –
Albert Carbon, Public Works Director, City of Ft. Lauderdale**

Mr. Carbon presented a summary of the topics for discussion that included the governance options, ownership and operations and what to pay. The two basic structures, public or private were further detailed including public bonding (30-yr), fees through the SFWMD, taxing authorities and/or millage rates through entities.

For private options, bonds for only the components in each phase could be established. The bonds would be in the open market. Mr. Carbon then compared the public to private concepts in ownership and the permitting by the SFWMD. The responsibilities for the operations/maintenance were shown with the SFWMD controlling the operation. Payments and costs were detailed as options. The first being a standard RFP or bid for a fixed cost over 50 yrs. The next option was a profession evaluation that would look at all the variables that would go directly into the negotiations including water quality and quantity, regulatory and costs.

VI. Wrap-Up – Ken Todd, Water Resource Manager, Palm Beach County

Ken Todd, Water Resource Manager for Palm Beach County, gave a quick wrap-up of what the two Task Forces had heard that day. Mr. Todd asked the members from both Task Forces to discuss certain issues to provide feed-back to the C-51 Reservoir Stakeholder group. Those issues are outlined as follows:

1. Is the Stakeholder group on the right direction?
2. Which Governance items should be evaluated for future consideration and which ones should be eliminated?
3. Should the public agencies conduct an economic evaluation of the PBA proposal?
4. What should be the future participation levels of the stakeholder entities; SFWMD, LWDD, PBA, Utilities, and Other?

VII. Task Force Discussion

Commissioner Rosen then asked if any Task Force members had recommendations to proceed forward. Mr. Mena, CSID, encouraged the Task Forces to support moving forward with Phase I of the project, and expressed that it was time to move from deliberation to action. Commissioner Good, SBDD, expressed a similar option, and that it was time to gain commitments from partners in the form of a resolution. Vice-Chair Rosen expressed that this appeared a reasonable approach and that while there are some unanswered questions, these can only be answered by moving forward. He expressed that it was time to identify partners and to request that these partners come to the table ready to participate in the establishment of the project foundation. Rosen suggested that a resolution from the Task Forces would be an appropriate starting place, and then from the individual stakeholder groups. Jim Alderman, a member of the Palm Beach Task Force expressed concurrence, that was exactly what was needed, and that an organization needs to be put in place that could receive the finished reservoir, and that governance needs to be overseen by those that are truly involved. Each entity should have 1 vote with this limited group charged with creating the governance strategy. The consensus recommendations were that moving forward in a phased approach would be prudent, however, there was additional discussion on obtaining cost estimations and how the public/private governance structure should be established.

Commissioner Rosen asked Mr. Carbon if there were any additional recommendations to consider. Mr. Carbon responded that staff is prepared to move forward with a Scope of Work (SOW) to conduct a more thorough evaluation of the project costs. He is working on that SOW and is waiting for additional information from the SFWMD and the report from PBA before finalizing.

Hollywood Commissioner Blattner stated his support for restricting initial development to the Phase I option given the various unknowns. This would help to reduce risk while allow testing of options. Mayor Bober stated agreement with this position and a phased evaluation of cost which should facilitate planning. Vice Chair Rosen concurred, noting that communities need additional water storage and water supply during dry season, and that cost is key. There needs to be greater definition as to who pays and how to move forward. He also voiced support for SFWMD to serve as owner and operator of the Reservoir as it ultimately the SFWMD that is responsible for regional water resources. He further stated that construction of the Reservoir is complex and will require the oversight of the all stakeholders to establish that the project costs are legitimate, but a resolution is needed first.

Commissioner Rosen made a motion to have a model resolution drafted for adoption by the Task Forces, with the resolution to include a commitment from project partners and the mechanism for organizing regionally to develop proposed governance and finance structure to support Phase I implementation. A second was provided by Hollywood Commissioner Blattner. Terrie Bates noted that she and Rod Braun, as staff of SFWMD, were abstaining from the vote. The motion was approved unanimously by the Broward Water Resources Task Force.

Next, the Palm Beach Water Resources considered the same motion, which was made by Commissioner Adrian Salee. A second was provided by Mike Mullaugh, Councilman for the City of Boca Raton. The motion was approved unanimously by the Palm Beach Water Resources Task Force.

Conversation ensued with Commissioner Aronson inquiring about the nature of the proposed public entity and the possibility of creating a dependent district that could undertake the bonding. She acknowledged the need for legal advice and services regarding the governance and finance considerations.

Commissioner Berger suggested that the Task Forces use this interim period to consider how to proceed using the questions posed in the closing slides as guidance.

Staff confirmed that sufficient guidance had been provided for developing the requested resolution, consistent with the motions approved by each of the Task Forces, and that staff would coordinate to finalize a draft resolution that could be brought back for formal approval by each of the Task Forces.

VIII. Public Comment

Commissioner Rosen opened the floor for public comment.

Ms. Martha Musgrove, Florida Wildlife Federation, suggested that the Task Forces explore that model of the Tampa Bay Water Authority, and the wisdom of developing a governance structure that includes a strong technical partner in the SFWMD as opposed to a structure that might invite legislative intrusion.

IX. Adjournment: There being no further business, the meeting was adjourned at 3:40 p.m.