

**MINUTES OF AN INFORMATIONAL MEETING OF DIRECTORS
OF THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
APRIL 18, 2013**

An information meeting of the directors of The Water Works Board of the City of Birmingham was held on Thursday, April 18, 2013 at 12:00 p.m., at 3600 First Avenue North, Birmingham, Alabama.

The following Directors were present: A. Jackie Robinson, III, Sherry W. Lewis, Ann D. Florie, David S. Herring and George Munchus, Ph.D.

Inasmuch as all of the Directors were present, Chairman Robinson declared a quorum in attendance.

The meeting was also attended by: Mac Underwood, General Manager; Michael Johnson, T. M. "Sonny" Jones, and Darryl Jones, Assistant General Managers; Grace E. Amison, Executive Assistant to the Board of Directors; Roger Hicks, Binnie Myles, and Patty Barron; Charlie D. Waldrep, K. Mark Parnell, Mary Thompson, and Kelvin Howard, Waldrep Stewart & Kendrick, LLC; Christopher Bazuaye and Keana Winston, Elements Communication Solutions; Matthew Arrington, Terminus Securities; Jason Carter, Malcolm Pirnie/Arcadis; Mark Dolan, Volkert & Associates; Christopher Woods, C.W. Woods Contracting Services, Inc.; Dan Meadows, S. S. Nesbitt & Company, Inc.; Matt Adams, Raymond James & Associates/Morgan Keegan & Company, Inc.; David Merrida, Birmingham Construction Industry Authority and Jonice Vanterpool, Sterne Agee.

Chairman Robinson called the meeting to order at 12:09 p.m. and Assistant General Manager Michael Johnson opened with an invocation.

Under old business, the General Manager recognized Mr. Matthew Arrington of Terminus Securities, LLC to update the directors on the bond issue, as set forth in agenda item 1.1. Mr. Arrington reported the bond team went to the bond market on April 16 and 17, 2013 and had very good results on the Water Revenue Refunding Bonds, Series 2013-A for the Series 2006-A bonds. He stated said team reported to senior executive management on Friday that it did not think it would be able to do the refunding piece because of a lack of savings, pointing out they wanted to try and get at least a 3% savings. He noted that about \$23 million of the existing water revenue bonds were refinanced with a savings of approximately 3.7 percent. Mr. Arrington called to the directors' attention that a summary handout from Raymond James & Associates, Inc. of the Series 2013-A Refunding and the Series 2013-B New Money bonds had been provided to them and a copy is on file with the Board's Meeting booklet. He indicated that Mr. Matt Adams would discuss pricing of said bonds. Following, Mr. Arrington said the referenced 3.7 percent savings on the 2013-A Refunding bonds equate to about \$1.5 million in savings to the Board. He also said almost \$70 million of the 2006-A debt is still outstanding and that the bond team would monitor the market weekly and inform the Board when additional savings could be realized. He pointed out that the interest rate on the 2006-A debt is down from 4.92 percent to about 3.9, noting this was a good deal for the Board on the refunding portion. Mr. Arrington said the Series 2013-B New Money bonds sold very well, pointing out the demand was five (5) to six (6) times higher than the number of bonds presented for sale. Following, he explained that MM&D refers to an AAA scale and indicates where rates should fall wherein the reference to spreads of MM&D refers to the difference between AAA scales and where the Board may fall. He said the Board's last pair of transactions was about 85 to 120 basis points off and in 2010 the City of Birmingham was about 88 basis points off. Mr. Arrington noted however, that he could not compare the City of Birmingham's latest transaction because it was a different structure and the Board received a much better rate.

Following, Mr. Arrington congratulated the Board's underwriting team of Raymond James/Morgan Keegan, Sterne Agee, Securities Capital, and Benchmark Securities. He stated said team did a good job of marketing the referenced bonds and being very aggressive with their scales. He also congratulated the Board on its credit rating and pointed out if the issue had been done about four (4) months ago at the old rate the Board would have paid nearly \$2 million more than what it paid a few days ago. Subsequently, Mr. Arrington recognized Mr. Adams to provide pricing highlights and indicated they would have a full pricing book with details on orders sold in the market and a recap of the bond issue within the next 30 days. He invited the directors to call or email him if they have any questions, and indicated he would be available to answers questions after today's meeting. Mr. Arrington said they expect to close on the Series 2013-A Refunding bonds next week.

Following, Mr. Matt Adams reviewed pricing highlights of the above mentioned bonds. He pointed out the Series 2013 Refunding bonds priced at 3.90% and resulted in about \$1,418,000.00 savings to the Board with a present value savings of about \$731,000.00. He explained that the manner in which the savings are structured would allow \$500,000.00 of said savings to hit the interest payment in fiscal year 2013 and the balance would be about \$30,000.00 to \$35,000.00 annually over the remaining life of the debt. In commenting on the order period, Mr. Adams said the refunding was always unstable due to its structure. He said the underwriting team put together a 4% coupon structure, noting that institutions currently prefer a 5% coupon structure. Next, Mr. Adams said the 2013-B New Money bonds were oversubscribed five (5) to six (6) times and the Board received about \$376 million from the combined Series 2013-A Refunding bonds and the Series 2013-B New Money bonds from syndicate members, pointing out that the majority of the additional orders came from the Series 2013-B New Money bonds because of the structure. Following, Mr. Adams called to the directors' attention a graph of some of the Board's and the City of Birmingham's previous credit spreads and a copy is on file with today's Board Meeting book. He stated it is obvious that the Board's credit is headed in the right direction. Mr. Adams pointed out the +69 credit spread is the Board best spread ever. Subsequently, Chairman Robinson expressed appreciation to the bond team for their hard work on the referenced bond issuances, especially the core team for getting the presentation ready for the rating agencies. He said the rating agencies presentation was the best he has been a part of and commented he does not believe there was a question asked during the presentation that the Board had not already anticipated or answered.

Next, the Board was asked to authorize the General Manager and/or the Assistant General Manager to enter into an agreement with Winters and Company, as set forth in agenda item 2, to act on behalf of the Water Works Board as "Bidding Agent" for the purpose of properly investing the Series 2013-B Construction Fund and the deposit from the proceeds of the Series 2013-B Bonds into the Board's Debt Service Reserve Fund in Investment Agreements. The General Manager said senior executive management does a Guaranteed Investment Contract (GIC) whenever a bond issue is finalized to try and get the maximum interest rates, noting that a "Bidding Agent" is appointed to go out and get the best rate for the Board. On a motion duly made and seconded, the following resolution was adopted:

"WHEREAS, The Water Works Board of Birmingham (the "Water Works Board") has or is in the process of issuing its Water Revenue Bonds, Series 2013-B (the "Bonds") and, in connection therewith, has established a Series 2013 Bond Fund and will be making a deposit to the Board's Debt Service Reserve Fund relating to such Bonds; and

WHEREAS, there are certain monies related to such Funds (hereinafter collectively referred to as the "Invested Funds") that will be in need of being invested; and

WHEREAS, the Winters & Co. Advisors, LLC. ("Winters") is a company that specializes in the arrangement of Investment Agreements for the investment of such bond proceeds and fund balances that occur

in conjunction with the issuance and ongoing administration of municipal bond issuance and has presented a proposal to the Water Works Board to use new Investment Agreements to significantly enhance the financial position of the Board; and

WHEREAS, the Water Works Board has deemed that the use of Investment Agreements for the investment of such Funds is permitted under its Indenture and has deemed that the use of Investment Agreements are advantageous and in the best interest of the Water Works Board;

NOW, THEREFORE, BE IT RESOLVED on a motion duly made by Mr. David S. Herring and seconded by Dr. George Munchus, as follows:

1. The Water Works Board’s General Manager is hereby authorized to enter into an agreement with Winters, to act on behalf of the Water Works Board as “Bidding Agent” for the purpose of properly investing the Series 2013-B Construction Fund and the deposit from the proceeds of the Series 2013-B Bonds into the Board’s Debt Service Reserve Fund in Investment Agreements, as well as other uninvested funds of the board as may be directed by the General Manager.

2. Winters shall work at the direction of the General Manager to structure new Investment Agreements as deemed advantageous to the Water Works Board, to prepare bid specifications detailing the new Investment Agreements to be bid and to be distributed to qualified investment providers for the purpose of receiving bids. Said bids shall comply with the terms and conditions of said bid specifications and of the Indenture.

Resolution No. 6438 is hereby adopted by unanimous vote.”

Following, the General Manager asked the Board to approve a payment of invoice for professional services, as set forth in agenda item 3. The General Manager indicated that staff has reviewed the referenced invoice and recommends approval. On a motion duly made and seconded, the following resolution was adopted:

“BE IT RESOLVED By The Water Works Board of the City of Birmingham (“the Board”), on a motion duly made by Ms. Sherry W. Lewis and seconded by Mr. David S. Herring, that the Board hereby approves payment of invoice from Elements Communication Solutions for professional services rendered in March 2013 in the amount of \$50,941.33. Resolution No. 6439 is hereby adopted by unanimous vote.”

Next, the General Manager asked the Board to hear Division Reports, as set forth in agenda items 4.1 through 4.3, and Assistant General Manager Michael Johnson was recognized to present the Finance and Administration Division’s Operating & Statistical Report (O&S) for March 2013, as set forth in agenda item 4.1, in a PowerPoint presentation. A copy of said presentation is on file in today’s Board Meeting book. Assistant General Manager Michael Johnson reviewed and discussed in details graphical illustrations as outlined in said presentation. He reported there was no significant change in the number of customers through March and reminded the directors that raw water sales have been lagging. He reported U.S. Steel went down unexpectedly for 11 days last month and commented senior executive management is optimistic usage would start to increase since they have come back online; Following, Assistant General Manager Michael Johnson reported the operating net revenue available for debt service and PAYGO for March 2013 was \$495,837.00

under budget however, since operating expenses are \$632,775.00 under budget the net operating revenue is \$136,888.00 over budget. Director Munchus asked what attributed to the decrease in operating expenses and Assistant General Manager Michael Johnson said various line items throughout the budget attributed to the decrease. Director Munchus then asked if under budgeted expenses are attributed to decisions made by senior executive management or if the Water Works is getting better prices on some products and services. The General Manager stated a lot of the under budget is a result of water delivery in the system, pointing out expenses are not as much if less water is pumped and expenses would also be less if less water is treated. Assistant General Manager Darryl Jones pointed out when it rains a lot, such as it did last month, less water is sold wherein this shows up in revenue and expenses. Assistant General Manager Michael Johnson said some of the expenses are difficult to analyze but it is easier to understand why they may be higher or lower as the year progresses. Next, Assistant General Manager Michael Johnson reported the total operating net revenue available for debt service year-to-date is \$826,339.00 under budget, operating expenses year-to-date are \$1,008,001.00 over budget and net operating revenue is \$181,662.00 over budget. Assistant General Manager Michael Johnson reviewed the large O&M variances year-to-date and reported employee health care cost is \$68,450.00 over budget, pointing out said cost was \$122,000.00 over budget in February; reported contractor and paving costs are \$160,417.00 over budget but less than in February; power costs are \$3,500.00 under budget; chemical costs are \$38,037.00 under budget; and labor cost is \$58,918.00 over budget wherein said cost was \$200,000.00 over budget in February because employees were given the cost-of-living raise as a one-time payment in January. Next, Assistant General Manager Michael Johnson reported that as of March 31, 2013 the target balance is \$45,812,905.00 and the reserve fund balance is \$59,026,832.00, pointing out there is a timing difference and approximately \$10,000,000.00 would be reflected in his April 2013 O&S report. He cited the \$20,000,000.00 to \$23,000,000.00 overage in reserves as the reason less money is being borrowed wherein senior executive management plans to use PAYGO for the CIP. Following, Assistant General Manager Michael Johnson reviewed the minority vendors and reported consultants and others who provide goods and services were paid \$382,353.94 through March 2013 and \$1,550,933.88 year-to-date; reported \$64,233.37 was awarded in bids in March and \$249,774.46 year-to-date; and reviewed a comparison of full time actual and vacant employees through March 2013 and 2012. Subsequently, Assistant General Manager Michael Johnson reviewed a graphical illustration of the March 2013 EasyPay Stats relative to the number of users for the IVR vs. Website, the e-Check vs. Credit/Debit cards and the e-Bill sign-ups. He indicated the goal for e-Bill sign-ups was revised after reviewing the number of customers that pay at the Customer Payment Center. Assistant General Manager Michael Johnson said the nearly 20,000 customers who pay at said center would probably never use e-Billing therefore, the previous three-year goal of signing up 30,000 customers for said billing was adjusted to 25,500.

Next, Assistant General Manager Sonny Jones was recognized to present the Engineering and Maintenance Division's Report, as set forth in agenda item 4.2, for April 2013 in a PowerPoint presentation. A copy of said presentation is on file in today's Board Meeting book. Assistant General Manager Sonny Jones reviewed and discussed in details graphical illustrations as outlined in said presentation. Following, he reported the Capital Improvement Plan's (CIP) year-end projection is expected to be on track. He then reviewed the capital project highlights and reported security improvements at the Western Filter Plant should be closed out by the end of May 2013; and reported the filter rehab is moving along nicely, noting the Backwash Supply (BWS) Pump Station is under construction and filters 5-8 have been removed and are in the process of being rehabbed. Following, Assistant General Manager Sonny Jones provided updates on the System Development Department's main replacements projects, wherein a total of 92,500 feet of mains are scheduled to be replaced in 2013; and on the Distribution Department's highlights related to leak orders completed and outstanding; hydrants repaired or replaced; and the average out-of-service time for fire hydrants. In response to Director Lewis' inquiry of the number of fire hydrants repaired or replaced and the difference in the cost to replace versus the cost to repair fire hydrants, Assistant General Manager Sonny Jones responded that cost depends on the level of replacement. He pointed the cost is generally about \$5,000.00 to

install a new hydrant and about \$1,000.00 for materials to replace just the hydrant above ground. Director Lewis asked what the average repair of a fire hydrant would cost and Assistant General Manager Sonny Jones said if a stem is replaced and the hydrant is lubricated the cost is about \$100.00 to \$400.00, depending on the amount of time the crew has to sit and repair the hydrant. In response to Director Lewis' inquiry if more hydrants are replaced or repaired, Assistant General Manager Sonny Jones responded that more hydrants are repaired than replaced wherein hydrants are expected to last about 100 years. He said staff needs to replace 150 of the 15,000 fire hydrants annually and must maintain this type of schedule in order to get on the 100-year timetable, pointing out the 150 oldest or hardest to service fire hydrants beyond repair that cost about \$3,000.00 are replaced.

Following, Director Lewis inquired about the testing status of the Storch fire hydrants and Assistant General Manager Sonny Jones responded that he wanted to wait until Director Lewis was more mobile after having injured her foot and the weather turned better to go out. He said the Storch Hydrant Connection is a quick connector coupling and has a lot of benefits but it is significantly more expensive than the normal fire hydrant, pointing out that a standard fire hydrant costs about \$900.00 but the Storch hydrant costs approximately \$3,200.00. Assistant General Manager Sonny Jones said one (1) of the Board's biggest problems with a regular fire hydrant is the theft of water and it is also a port into the Board's Distribution System if someone wants to introduce toxics. Assistant General Manager Sonny Jones said the issue of how to lock fire hydrants has been sidestepped for years and every time a solution is discovered an off duty fireman finds a way to defeat the purpose. He said currently the Storch fire hydrant cannot be unlocked but it is expensive. Subsequently, Assistant General Manager Sonny Jones said after staff is comfortable with the Storch fire hydrant firemen would have to be brought in and shown the benefits wherein Director Lewis said the Board would do nothing without informing them. Following, the General Manager said firemen currently use a universal wrench to unlock fire hydrants and the big issue is that each fire department would have to purchase the special wrench used to unlock the Storch hydrant. Assistant General Manager Sonny Jones stated he has asked a company to look at installing GPS tracking chips in all of the special fire hydrant lugs so they can be located when they disappear however, he noted this would also be expensive. Director Lewis commented that this is a lot of money and Director Herring said the Board is looking at new things to see if they are cost effective in the long run wherein Director Lewis agreed.

Next, Assistant General Manager Sonny Jones said one (1) of the Board's more reputable construction companies that is building a high school was discovered by staff last week using a special hydrant fitting with a hose and getting free water from the fire hydrant. He said he is preparing a letter to send to the company's CEO. The General Manager said the Water Works has a proper way for companies to legally get water out of fire hydrants using meters. He used an example that if a company is working on Highland Lakes and wants to keep the dust down it could get a meter with a backflow preventer to install on the fire hydrant and fill up the truck with water. He said, however, many times some companies do not follow this process and it is a problem. Subsequently, Director Lewis stated said problem would be addressed.

Following, Assistant General Manager Sonny Jones reviewed progress photographs of the Western Filter Plant's Rehabilitation Project that included filter Number Seven (7), the gallery pipe hanger, Back Wash Supply-Pump Station (BWS-PS) valve installation, control panels that are being reworked, and BWS backfill of one (1) of the pump stations. He asked the directors if they had any questions, as there were no questions.

Subsequently, Assistant General Manager Darryl Jones was recognized to present the Operations and Technical Services Division's Report for March 2013, as set forth in agenda item 4.3, in a PowerPoint presentation. A copy of the presentation is the Board Meeting Book. He indicated Water Resources Manager Roger Hicks would make a presentation to the Board relative to the Water Resources' functions. Following, Assistant General Manager Darryl Jones reported on the comparisons of monthly finished water and noted

pumpage for March was better than in previous years, with a yield of about 93 millions of gallons per day (MGD). He pointed out the increase in raw water was pumped to the treatment plants and not to all of the Board's industrial customers. Next, he reported the average daily demand for March was 131 MGD.

Following, Assistant General Manager Darryl Jones reported the average cumulative rainfall was above normal and led to reduced sales, pointing out additional rain forecasted for tonight and tomorrow would further impact sales; reported on the lake levels' capacities wherein Inland Lake is about one (1) foot from full capacity and Lake Purdy has been full since December 2012; reported raw water sales are picking up slightly, and USX Corporation's decreased sales since March 2011 are expected to improve. Following, he reported the U. S. Drought Monitor dated April 9, 2013 shows no drought issues for the Board's coverage areas. Assistant General Manager Darryl Jones reported savings of \$878.00 in power costs in March but pointed out said costs would be over budget in April as a result of running the Sipsey Pumping Station and Cane Creek/Carl Sims Booster Station because it cost more to run said stations; and reported chemical costs were \$19,750.00 under budget, pointing out the 2013 chemical budget was decreased by \$900,000.00 and said costs would be monitored closely throughout the year.

Next, Assistant General Manager Darryl Jones reminded the Board that one (1) department from his division each month would make a presentation regarding their respective department's status. He then recognized Water Resources Manager Roger Hicks to talk about Lake Purdy and the Cahaba Pumping Station, two (2) of the Board's oldest active facilities. Prior to Mr. Hicks' presentation, Assistant General Manager Darryl Jones pointed out the location of the majority of the Board's facilities, noting that Mr. Hicks' presentations would include Inland which is in Blount County, the Sipsey which is in Cullman County, Cane Creek in Jefferson County and the Mulberry.

Following, Director Munchus asked why the 2013 chemical budget was cut by \$900,000.00 and Assistant General Manager Darryl Jones stated efficient operation by staff resulted in the decrease and the Board had also asked staff to reduce its chemical budget. At 12:45 p.m., Director Florie departed the meeting.

Following, Mr. Roger Hicks updated the Board relative to the Water Resources Department in a PowerPoint presentation. Mr. Hicks reviewed the mission of the Water Resources Department which is to ensure there is an adequate supply of water for all of the Board's customers and to make sure the water is delivered at the highest quality possible, He reviewed said department's functions include monitoring water quality and sampling, implementing best management practices for watershed protection, pre-treating source water at Lake Purdy and frequently inspecting all of the Board's facilities. Mr. Hicks indicated other related functions include performing preventative maintenance at manned and unmanned stations, operating facilities in a manner that result in lower power costs and a reduction in chemical consumption, and providing accurate data to internal departments and other regulatory agencies. Mr. Hicks noted that the Water Resources Department operates 24 hours seven (7) days per week and responds to emergencies as needed. Mr. Hicks discussed the personnel at Lake Purdy which has three (3) employees and the Cahaba Pumping Station has eight (8) employees. In response to Director Herring's inquiry as to why there are three (3) employees at Lake Purdy, Mr. Hicks said during the Efficiency and Effectiveness Master Plan that was implemented over ten (10) years ago, he pointed out staff considered ways to reduce the staff levels which resulted in the reduction of staff at said lake. Following, Assistant General Manager Darryl Jones responded to a series of questions from Director Herring relative to the number of staff at Lake Purdy prior to the reduction and their job descriptions. Assistant General Manager Darryl Jones responded there were six (6) to eight (8) employees at said lake. and he indicated that said employees' job descriptions consisted of maintaining the property surrounding the dam, setting up pens to trap feral hogs, trying to prevent persons with four-wheelers from coming onto the property, and keeping the landscape from becoming overgrown. Mr. Hicks added that these employees dedicate several days a month to collect water samples and therefore, some of their primary duties are not addressed daily. The

General Manager said the employees occasionally monitor about 6,000 acres of land surrounding Lake Purdy and maintain some of the many gates that are kept locked to keep trespassers out. Director Herring asked if the Board is leasing any property to the archery clubs and Assistant General Manager Darryl Jones said the hunting leases would be a benefit to the Board because other people who observe unusual activities or problems would report these to the employees. Mr. Hicks said the reservoir and the dam at Lake Purdy were constructed in 1911, which holds approximately 5.6 billion gallons of water, is surrounded with over 5,000 acres of land, and is situated on the Little Cahaba River. At 12:50 p.m., Director Florie returned to the meeting. Mr. Hicks showed photographs of Lake Purdy Dam at full pool, the aeration which is part of the pretreatment process, and the valve house and its two (2) influent and three effluent (3) valves that allow water to flow in and out, respectively. He noted said valves are controlled remotely from the SCADA system and when they are opened it takes approximately 3.5 hours for the water to arrive at the Cahaba Pumping Station. Following, Mr. Hicks pointed out the Highway-280 Diversion Dam supplement, noting when water leaves Lake Purdy it travels down the Little Cahaba River to the diversion dam and is used to supplement the flow to the Cahaba River during periods when said river is flowing below capacity.

Next, Mr. Hicks discussed the 14 SolarBees that are spread out over Lake Purdy to re-circulate motionless water from the bottom of the lake to the top of the lake, thereby increasing the oxygen level. He said benefits from the SolarBees include a reduction in hydrogen sulfide and pointed out when water from said lake arrives at the Shades Mountain Filter Plant, the Board spends less money on chemicals to treat it because of the pretreatment process. Following, Mr. Hicks said the SolarBees were funded by the Alabama Department of Environmental Management/Environmental Protection Agency (ADEM/EPA) as a part of the Board's Green Initiative Projects because they impose no adverse impacts to the water source. Assistant General Manager Darryl Jones commented that the SolarBees installed in Lake Purdy cost over \$800,000.00 and were acquired through ADEM's Drinking Water State Revolving Loan Fund (DWSRF) wherein the Water Works received principle forgiveness for the entire amount. Assistant General Manager Darryl Jones called to the directors' attention that staff would be requesting additional SolarBees at the April 25, 2013 Regular Board of Directors' Meeting, and noted that while these SolarBees would not be 100% principle forgiveness, he commented value would be added because they would improve the water at Lake Purdy and the water quality coming to the Shades Mountain Filter Plant.

Following, Mr. Hicks said the Cahaba Pumping Station was built in 1890 and could only deliver about 24 MGD per day. He stated that the seven (7) pumps currently at said station have increased the capacity delivery up to 80 MGD to the Shades Mountain Filter Plant and said station has a chemical feed system. Mr. Hicks said the Lake Purdy wells are ground water wells and the five (5) sites presently under development would be able to deliver 6 MGD after completion during drought conditions. Mr. Hicks mentioned that long-range plans for the Water Resources Department include continuing to be innovative in looking for ways to supply source water to the Shades Mountain Filter Plant, installing back-up power generators at the intake stations and redundant pipelines to key industries within the BWWB raw water service area that would help improve the Board's liability in the system. Following, Director Florie asked about the amount that had been spent, or would be spent on the Lake Purdy wells and Assistant General Manager Sonny Jones estimated about \$5 million would be spent wherein Director Herring pointed out that originally staff indicated the cost would be approximately \$1 million per well. Subsequently, the Board thanked Mr. Hicks for a good report. Director Munchus asked if the \$5 million would be spread out over a couple of years or if it would be paid in one (1) year and Assistant General Manager Sonny Jones stated said amount would be spread out over three (3) or four (4) years. He called to the directors' attention that staff would be asking the Board to grant an easement to Alabama Power Company at the April 25, 2013 Regular Board of Directors Meeting so that said company could install power lines to the Lake Purdy well sites. Assistant General Manager Sonny Jones said the wells were drilled about two (2) years ago and some potential sites that might be productive to drill have been identified by the U.S. Geological Survey (USGS). Following, Director Herring asked if staff still expects to

drill a total of ten (10) wells and Assistant General Manager Sonny Jones said yes, pointing out that staff would try and extend the drilling over a few years in the capital budget to reduce expenses.

In response to Director Munchus' request for a clarification of tapping into ground water, Assistant General Manager Sonny Jones explained that ground water is well water and pointed out a lot of smaller systems use this process as a method of supplying water to their customers. He noted this route is not very efficient for larger systems and they would have to change to surface water supplies. Following, the General Manager commented that Leeds, Trussville, and Irondale presently pump water out of the ground, add a few chemicals and send it to homes. Director Munchus asked if this is safe wherein the General Manager said a lot of systems are doing this. He said the Board has five (5) wells that it can pump water from during the summer and put it into Lake Purdy during drought situations. Following, Director Herring asked what the shortage number of gallons was per day during the last drought and what percentage staff believes it would take to handle a similar drought. Assistant General Manager Darryl Jones said the 2007 drought was somewhat different from other droughts, pointing out the primary issue that impacted the Board in 2007 was the fact that Inland Lake did not fill up. He said if the extra 6 MGD from the Lake Purdy ground wells are put in Lake Purdy daily for 30 days, it would possibly make up for about a week's worth of water that staff takes out. Assistant General Manager Darryl Jones said well water would be put into Lake Purdy if it starts to drop below the safe yield line during the drought. He said well water has a good benefit because it is clean and half of the water systems in America are ground water systems. Subsequently, Assistant General Manager Sonny Jones commented that ground water is being over supplied around the country and ground water levels are dropping to historically lows. He said wells are failing throughout and they are not a source to look to for the future because you have to dig deeper to find clean well water.

Following, the General Manager indicated items 7 through 9 on the tentative agenda for the scheduled April 25, 2013 Regular Board of Directors' Meeting were discussed at the April 9, 2013 Engineering and Maintenance Committee Meeting and item 9 on said agenda was also discussed earlier in today's meeting. He said that in addition to putting 8 new SolarBees in Lake Purdy, 26 smaller SolarBees would be installed in some of the drinking water storage tanks. Director Munchus asked for an explanation of a sole source provider and Assistant General Manager Darryl Jones explained that certain types of technology are only provided by certain companies, pointing out the SolarBee equipment is solar powered wherein everyone else's methods are not. Director Munchus then asked why the cost of the SolarBees is exempt from the Alabama State Competitive bid Law and Board Attorney Mary Thompson said a sole source can either be something that is only provided by a single establishment or in this case it is unique to what the Board is requiring.

Next, the General Manager called the directors' attention a handout that included some before and after photographs of a right-of-way on the Inland Lake Raw Water Pipeline that was cleared by staff. A copy of said handout is in today's Board Meeting book. He pointed out the stream and the right-of-way area in one (1) of the photos in its pre-state prior to being cleared. He said staff clears right-of-ways throughout the system in different areas in order to locate leaks. The General Manager pointed out the Board has in-house crews that constantly perform this type of work and a special piece of equipment to grind some of the smaller trees was purchased. Subsequently, he stated said work that was done on the referenced pipeline was on Sunset Drive in the Pinson area.

Following, the General Manager said the U.S. Army Corps of Engineers and the Alabama Department of Environmental Management (ADEM) have indicated staff may have violated some of their policies by clearing more than one (1) acre of land. He stated that in addition to meeting with said entities, senior executive management had responded in writing and explained in detail the conditions regarding the maintenance work, including the fact that staff used best management practices for making sure there would be no runoff at said site. Subsequently, he said senior executive management is working through the issue with

said entities. Following, Director Lewis asked if this is a training issue for employees, noting that they should know the rules if they are constantly clearing right-of-ways. The General Manager said this is the first time he has seen an area cleared to the level that was done along the Inland Lake Raw Water Pipeline wherein Director Lewis asked why the referenced right-of-way was cleared to this level if it is not normally done. The General Manager said a portion included in the resolution would address additional training for the field crews. He said employees do not typically clear this much area and it is not a problem if the area cleared is less than one (1) acre. Following, Director Lewis pointed out that the area should have been measured prior to clearing. Subsequently, Assistant General Manager Sonny Jones stated the clearing was a training issue and senior executive management is working on a strategy for employees that maintain the right-of-ways for raw water and finished water pipelines to report to the Engineering and Maintenance Division.

Following, Assistant General Manager Michael Johnson announced that Mrs. Cynthia Williams' father passed away early Tuesday morning.

Following, Director Florie announced that the City of Birmingham recently released the comprehensive plan that it has been working on for two (2) years, noting it is extensive and she indicated a BWWB representative should review it to see if it contains any implications for the Water Works, pointing out said plan includes a lot that pertains to water. The General Manager said senior executive management printed a copy of the large document and is in the process of reviewing it wherein Director Florie pointed out the executive summary is shorter. Subsequently, Board Attorney Charlie Waldrep indicated the he would be glad to review said summary. Director Florie indicated the city is still accepting comments on said summary and she asked staff to respond if there is anything that impacts the Water Works. In response to Director Munchus' inquiry as to what is the role of the Birmingham Planning Commission, Director Florie stated said commission ultimately approves the city's comprehensive plan. Chairman Robinson said Mayor William Bell's Chief of Staff, Chuck Faush, indicated to him that the City of Birmingham is planning to add some water features in the parks downtown and he would send the Board a copy for review to see how and where the Water Works can help with the educational aspects. Following, Director Munchus asked if anyone from the Water Works Board attended the hearings for the comprehensive plan and provided any input and Director Florie and the General Manager responded no. Director Herring said he believes the comprehensive plan tries to map out the future development of the city and said plan is important.

Next, Attorney Waldrep introduced Attorney Kelvin Howard, a new member of Waldrep Stewart & Kendrick, LLC. Attorney Kelvin commented that Monday was his first day at said firm and he is looking forward to meeting everyone. He said it would be a pleasure working with and for the Board and to have an opportunity to continue to develop a working relationship. Director Herring asked what specialty Attorney Howard would work in and Attorney Waldrep stated Attorney Howard would work in the area of employment law, noting Attorney Howard has been a litigator and would continue to work to some degree in this capacity and indicated he would eventually work in employment law. Subsequently, Attorney Waldrep said Attorney Howard formerly worked with Thomas, Means and Gillis and Waldrep Stewart & Kendrick are fortunate to have him on their team. Chairman Robinson welcomed Attorney Howard on behalf of the Board.

Subsequently, Chairman Robinson expressed appreciation to all for attending today's Board meeting, Water Resources Manager Roger Hicks for a good presentation, and the bond team. As there was no further business before the Board, Chairman Robinson entertained a motion to adjourn the meeting. A motion was made and seconded, and the meeting adjourned at 1:44 p.m.

_____/s/
A. Jackie Robinson, III
Chairman/President

Attest:

_____/s/
David S. Herring
Secretary-Treasurer