

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

AGENDA REGULAR MEETING BOARD OF WATER COMMISSIONERS Tuesday, August 2, 2016 – 9:30 a.m. MARGARET H. CHANDLER WATER RECLAMATION PLANT 399 CHANDLER PLACE San Bernardino, California

BOARD OF WATER COMMISSIONERS

TONI CALLICOTT
President

Commissioners
LOUIS A. FERNANDEZ
WAYNE HENDRIX, P.E.
JUDITH VALLES
DAVID E. MLYNARSKI



STACEY R. ALDSTADT
General Manager
ROBIN L. OHAMA
Deputy General Manager
MIGUEL GUERRERO, P.E.
Director of Water Utility
JOHN A. CLAUS
Director of Water Reclamation
TERRI WILLOUGHBY
Director of Finance
JENNIFER L. SHEPARDSON
Director of Environmental &
Regulatory Compliance

“Trusted, Quality Service since 1905”

Welcome to a meeting of the Board of Water Commissioners of the City of San Bernardino.

- The City of San Bernardino Municipal Water Department recognizes its obligation to provide equal access to those individuals with disabilities. Please contact the General Manager’s Office (909-384-5191) two working days prior to the meeting for any requests for reasonable accommodation, to include interpreters.
- All documents for public review are on file with the Water Department located on the 5th floor of City Hall, 300 North “D” Street, San Bernardino or may be accessed online at http://www.ci.san-bernardino.ca.us/water/newsalerts/agendas_n_minutes.asp
- Please turn off or mute your cell phone while the meeting is in session.
- Any member of the public desiring to speak to the Board of Water Commissioners concerning any matter not on the agenda, but which is within the subject matter jurisdiction of the Board of Water Commissioners, may address the body at the end of the meeting during the period reserved for public comments. Said total period for public comments shall not exceed forty-five (45) minutes, unless such time limit is extended by the Board of Water Commissioners. A three-minute limitation shall apply to each member of the public, unless such time limit is extended by the Board of Water Commissioners. No member of the public shall be permitted to “share” his/her three minutes with any other member of the public.
- The Board of Water Commissioners may refer any item raised by the public to staff for appropriate action or have the item placed on the next agenda of the Board of Water Commissioners. However, no other action shall be taken nor discussion held by the Board of Water Commissioners on any item which does not appear on the agenda unless the action is otherwise authorized in accordance with the provisions of subdivision (b) of Section 54954.2 of the Government Code.
- Public comments will not be received on any item on the agenda when a public hearing has been conducted and closed.

CALL TO ORDER: _____ a.m./p.m.

Attendee Name	Present	Absent	Late	Arrived
President Toni Callicott				
Commissioner Louis Fernández				
Commissioner Wayne Hendrix				
Commissioner Judith Valles				
Commissioner David E. Mlynarski				
General Manager Stacey Aldstadt				
Deputy General Manager Robin Ohama				
Director of WRP John Claus				
Director of WU Miguel Guerrero				
Director of Finance Terri Willoughby				
Director of ERC Jennifer Shepardson				

OTHERS:

1. CLOSED SESSION: _____ a.m./p.m.

Pursuant to Government Code Section(s):

- A. Conference with legal counsel – existing litigation – pursuant to paragraph (1) of subdivision (d) of Government Code Section 54956.9: *In Re City of San Bernardino, California*, United States Bankruptcy Court, Central District of California (Riverside), Case No. 6: 12-bk-28006-MJ. *City of San Bernardino v. San Bernardino Valley Municipal Water District, et al.*, San Bernardino County Superior Court Case No. CIVDS1605532. *City of San Bernardino v. East Valley Water District*, San Bernardino Superior Court Case No. CIVDS 1608620.
- B. Conference with legal counsel – anticipated litigation – significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Government Code Section 54956.9.
- C. Conference with legal counsel – anticipated litigation – initiation of litigation – pursuant to paragraph (4) of subdivision (d) of Government Code Section 54956.9.
- D. Public Employment pursuant to Government Code Section 54957.
- E. Consultation with legal counsel and security consultant on matters posing a threat to the security of essential public services, including water, drinking water, and wastewater treatment pursuant to Government Code Section 54957.
- F. Conference with labor negotiator – pursuant to Government Code Section 54957.6.

**END OF CLOSED SESSION
RECONVENE MEETING**

CALL TO ORDER: _____ a.m./p.m.

Attendee Name	Present	Absent	Late	Arrived
President Toni Callicott				
Commissioner Louis Fernández				
Commissioner Wayne Hendrix				
Commissioner Judith Valles				
Commissioner David E. Mlynarski				
General Manager Stacey Aldstadt				
Deputy General Manager Robin Ohama				
Director of WRP John Claus				
Director of WU Miguel Guerrero				
Director of Finance Terri Willoughby				
Director of ERC Jennifer Shepardson				

OTHERS:

2. ANNOUNCEMENTS BY MEMBERS OF THE BOARD OF WATER COMMISSIONERS:

3. CONSENT CALENDAR

MOTION: That the motions indicated by consent calendar items 3A through 3E4 be adopted, except for _____.

MOTION: _____ SECONDED: _____

A. WAIVE FULL READING OF RESOLUTIONS

MOTION: That full reading of the resolutions on the regular or supplemental agendas of the Board of Water Commissioners be waived.

B. PAYROLL

MOTION: Approve the payroll for the pay period June 27, 2016 through July 10, 2016, July 11, 2016 through July 24, 2016, and July 25, 2016 through August 7, 2016.

C. CONTRACTS AND BILLS

MOTION: Approve the payment of contracts and bills to be presented at this meeting.

D. MINUTES

MOTION: Approve the minutes of the meetings of July 19, 2016 of the Board of Water Commissioners.

E. PERSONNEL ACTIONS

1. PROMOTION: Carla Luna, Customer Service Representative III, Range 141, to the position of Customer Service Supervisor, Range 258, effective August 1, 2016. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget.
2. PROMOTION: Jennifer Aguirre, Water Reclamation Operator, Range 143, to the position of Water Reclamation Senior Operator, Range 157, effective August 8, 2016. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget.
3. PROMOTION: April Emslie, Senior Office Assistant, Range 136, to the position of Technical Assistant, Range 140, effective August 8, 2016. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget.

4. REVISED JOB DESCRIPTION FOR WATER RECLAMATION MAINTENANCE PLANNER: The Board of Water Commissioners originally approved the job description for Water Reclamation Maintenance Planner on September 20, 1994 and it was last updated on April 4, 1995. The position has been vacant since March 21, 2014 due to retirement. The job description has been reviewed and updated to include support for the Electrical, Instrumentation, and SCADA section, reflect the current duties expected to be performed in the position, and to update terminology, and format. The testing standards are being updated to Civil Service Application Review and Civil Service Supplemental Application Review. The salary range remains the same at Range 154.

Staff is requesting Board approval of the revised job description and to authorize staff to submit the testing standards to the Civil Service Board for approval.

MOTION: Approve the Personnel Actions as submitted.

END OF CONSENT CALENDAR

4. ADDITIONS TO THE AGENDA: (if any) in accordance with Section 54954.2 (b) (2) of the Government Code (Brown Act), a two-thirds vote (or a unanimous vote if less than two-thirds are present) is required to add an item for action provided that there is a need to take immediate action and that the need for action came to the attention of the agency after the agenda was posted.

MOTION: Approve an additional item(s) to be added to the agenda in accordance with Government Code Section 54954.2(b) (2).

MOTION:_____ SECONDED:_____

5. AWARD OF CONTRACT – BELLEVIEW STREET AND VINE STREET ALLEY MAINS REPLACEMENT PROJECT – SPECIFICATION NO. 1578: Ten (10) bids were received and opened on June 30, 2016, for Specification No. 1578, “Furnish all labor, equipment, and materials for the Belleview Street and Vine Street Alley Mains Replacement Project, located in San Bernardino, CA.”

The Belleview Street and Vine Street Alley Mains Replacement Project consists of the installation of approximately two thousand three hundred forty (2,340) lineal feet of 8” ductile iron pipe and one thousand fifty (1,050) linear feet of 12” ductile iron pipe, as well as the relocation of one hundred sixty-one (161) domestic services.

MOTION: Accept the bid of T.B.U., Inc., as the lowest responsive, responsible bidder and award a contract in the amount of ONE MILLION ONE HUNDRED THREE THOUSAND TWO HUNDRED THIRTY-ONE AND 00/100 DOLLARS (\$1,103,231.00) for the BELLEVIEW STREET AND VINE STREET ALLEY MAINS REPLACEMENT PROJECT; retain the remaining bid securities in accordance with Specification No. 1578; and authorize the President and Secretary to execute the contract.

MOTION:_____ SECONDED:_____

6. AWARD OF CONTRACT – KENWOOD WELL FIELD 20” TRANSMISSION MAIN EXTENSION PROJECT SPECIFICATION NO. 1632: Seven (7) bids were received and opened on July 1, 2016, for Specification No. 1632, “Furnish all labor, equipment, and materials for the Kenwood Well Field 20” Transmission Main Extension Project, located in San Bernardino, CA.”

In 2013, the California Department of Transportation (Caltrans) and San Bernardino Associated Governments (SANBAG) began work on the Interstate 15/ Interstate 215 (I-15/I-215) Interchange Reconstruction Project. The project reconfigured the I-15/I-215 Interchange near Devore. As a result of this project, approximately 9,000 linear feet of 20” ductile iron pipe had to be relocated. The Kenwood Well Field 20” Transmission Main Extension Project consists of the connecting the newly constructed 20” transmission main to the existing 16” steel main.

MOTION: Accept the bid of El-Co Contractors, Inc., as the lowest responsive, responsible bidder and award a contract in the amount of ONE HUNDRED SEVENTY NINE THOUSAND AND 00/100 DOLLARS (\$179,000.00) for the KENWOOD WELL FIELD 20” TRANSMISSION MAIN EXTENSION PROJECT, retain the bid securities in accordance with Specification No. 1632; and authorize the President and Secretary to execute the contract.

MOTION: _____ SECONDED: _____

7. APPROVAL OF EPA 108S WELL REHABILITATION BY WEBER WATER RESOURCES: Extraction well EPA 108S is operated as part of the Muscoy Operable Unit (OU) Remedial Action under the terms negotiated with the United States Environmental Protection Agency (USEPA). The purpose of EPA 108X is to inhibit further migration of PCE and TCE in the aquifer. Proper and consistent operation of EPA 108S is critical in maintaining plume capture and therefore downtime should be minimized.

In May 2016, EPA 108S failed and the equipment was subsequently removed in June 2016. A specification for a new fixed speed well pump was developed by Department staff and Stantec Principal Hydrogeologist, Mark Eisen. The rehabilitation specification called for new pump, motor, column pipe, and miscellaneous ancillary material/equipment. Staff recently requested proposals from pre-qualified contractors to rehabilitate EPA 108S. Weber Water Resources was responsive and provided the lowest quotation in the amount of \$72,528.01.

Staff is recommending that this expenditure be approved from existing funds in the Fiscal Year 2016/17 Capital Budget under Annual R/R – EPA Extraction Well (Muscoy) with available funding of approximately \$165,000.00. Rehabilitation of EPA 108S is one hundred percent (100%) reimbursable through the AIG commutation account.

MOTION: Approve the rehabilitation of EPA 108S by Weber Water Resources in the amount of \$72,528.01.

MOTION: _____ SECONDED: _____

8. APPROVAL OF EPA 001 WELL REHABILITATION BY WEBER WATER RESOURCES: Extraction well EPA 001 is operated as part of the Newmark Operable Unit (OU) Remedial Action under the terms negotiated with the United States Environmental Protection Agency (USEPA). The purpose of EPA 001 is to inhibit further migration of PCE and TCE in the aquifer. Proper and consistent operation of EPA 001 is critical in maintaining plume capture and therefore downtime should be minimized.

In January 2016, EPA 001 failed and was temporarily repaired with the understanding that the temporary fix would not last more than six months. In June 2016, EPA 001 completely failed, and rather than pull the equipment for assessment and rehabilitation, a complete new design was pursued. A specification for a new fixed speed well pump was developed by Department staff and Stantec Principal Hydrogeologist, Mark Eisen. The rehabilitation specification called for new pump, motor, column pipe, and miscellaneous ancillary material/equipment. Staff recently requested proposals from pre-qualified contractors to rehabilitate EPA 001. Weber Water Resources was responsive and provided the lowest quotation in the amount of \$127,509.67.

Staff is recommending that this expenditure be approved from existing funds in the Fiscal Year 2016/17 Capital Budget under *Annual R/R – EPA Extraction Well (Newmark)* with available funding of approximately \$240,000.00. Rehabilitation of EPA 001 is one hundred percent (100%) reimbursable through the AIG commutation account.

MOTION: Approve the rehabilitation of EPA 001 by Weber Water Resources in the amount of \$127,509.67.

MOTION: _____ SECONDED: _____

9. PUBLIC HEARING AND APPROVAL BY THE BOARD OF WATER COMMISSIONERS FOR THE 2016 PUBLIC HEALTH GOALS IN COMPLIANCE WITH SECTION 116470 OF THE HEALTH AND SAFETY CODE: On July 5, 2016, the Board of Water Commissioners scheduled a Public Hearing date for August 2, 2016 at 9:30 a.m. in the Water Department Board Room located at 399 Chandler Place, San Bernardino, California. The Public Hearing involves the 2016 Water Quality Public Health Goals (PHG) concerning our city water system, in accordance with the California Health and Safety Code, Section 116470 (2)(b).

The purpose of the public hearing is to accept and respond to public comments from water consumers about the PHG report.

President to open the meeting.

MOTION: Open the Public Hearing and, subsequent to receiving and responding to any comments on the Public Health Goals concerning our city water system, that the hearing be closed and the staff report approved with no action at this time.

MOTION: _____ SECONDED: _____

10. RESOLUTION OF THE BOARD OF WATER COMMISSIONERS DECLARING THE CITY'S INTENTION TO REIMBURSE CERTAIN EXPENDITURES FROM THE PROCEEDS OF TAX-EXEMPT BOND FINANCING, AS REQUIRED BY UNITED STATES DEPARTMENT OF TREASURY REGULATIONS SECTIONS 1150.-2 (WATER FUND): The San Bernardino Municipal Water Department (Department) expects to issue tax-exempt revenue bonds or other obligations (Bonds) to finance costs associated with the following Water Fund projects: Reservoir seismic upgrades, the Intermediate Zone 24" transmission main, relocation of the customer service staff, and administration building consolidation and improvements. The proposed resolution would allow the Department to be reimbursed for these expenditures from the bond proceeds.

MOTION: Adopt a resolution declaring the City's intention to reimburse certain expenditures from the proceeds of tax-exempt bond financing, as required by United States Department of Treasury Regulations Sections 1150.-2 (Water Fund).

MOTION:_____ SECONDED:_____

11. RESOLUTION OF THE CITY OF SAN BERNARDINO DECLARING THE CITY'S INTENTION TO REIMBURSE CERTAIN EXPENDITURES FROM THE PROCEEDS OF TAX-EXEMPT BOND FINANCING, AS REQUIRED BY UNITED STATES DEPARTMENT OF TREASURY REGULATIONS SECTIONS 1150.-2 (SEWER FUND): The San Bernardino Municipal Water Department (Department) expects to issue tax-exempt revenue bonds or other obligations (Bonds) to finance costs associated with the following Sewer Fund projects: Primary influent flow equalization improvements, phase 1 of the Clean Water Factory recycled water project, acquisition and installation of a partially oxidized gas turbine, relocation of the customer service facility and administration building improvements. The proposed resolution would allow the Department to be reimbursed for these expenditures from the bond proceeds.

The Mayor and Common Council is the governing body responsible for approving the issuing of debt associated with the sewer treatment and collection systems.

MOTION: Approve the submission of the resolution to the Mayor and Common Council for adoption.

MOTION:_____ SECONDED:_____

12. REPORT ON WATER DEPARTMENT INVESTMENTS – QUARTER ENDING JUNE 30, 2016: Staff recommends that the Board of Water Commissioners receive and file the Investment Report for the quarter ending June 30, 2016. **(INFORMATION ITEM ONLY)**
13. REPORTS:
- A. Report of the President:

B. Report of the Commissioners:

C. Report of the Directors:

D. Report of the General Manager:

14. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA:

15. ADJOURNMENT: The meeting adjourned at _____ a.m./p.m.

NOTE: The next regular meeting of the Board of Water Commissioners is scheduled for *9:30 a.m., August 16, 2016* in the Margaret H. Chandler Water Reclamation Plant Conference Room, 399 Chandler Place, San Bernardino, California, 92408.

ROLL CALL: Roll call was taken with the following present: Vice-President Valles; Commissioners Fernández, and Hendrix; staff Aldstadt, Ohama, Claus, Shepardson, Guerrero, and Willoughby; Steven Graham, City Attorney's Office; Amy Smith, Executive Secretary.

Absent: President Callicott
Commissioner Mlynarski

ADJOURN CLOSED SESSION: At 10:04 a.m., the Closed Session of the Board of Water Commissioners adjourned to the Regular Meeting of the Board of Water Commissioners in the Water Department Board Room.

ROLL CALL: Roll call was taken with the following present: Vice-President Valles; Commissioners Fernández, and Hendrix; staff Aldstadt, Ohama, Claus, Shepardson, Guerrero, and Willoughby; Steven Graham, City Attorney's Office; Amy Smith, Executive Secretary.

Absent: President Callicott
Commissioner Mlynarski

2. ANNOUNCEMENTS BY MEMBERS OF THE BOARD OF WATER

COMMISSIONERS: None

3. CONSENT CALENDAR: Upon motion by Commissioner Hendrix, duly seconded by Commissioner Fernández, it was voted to approve the following Consent Calendar, Agenda Items 3A through 3D:

A. WAIVE FULL READING OF RESOLUTIONS: Waive full reading of the resolutions on the regular or supplemental agendas of the Board of Water Commissioners.

B. PAYROLL

	<u>Water Fund</u>	<u>Sewer Fund</u>	<u>Total</u>
Claims: 271869-272137			
Accounts Payable	\$1,696,901.45	\$439,728.74	\$2,136,630.19
Gross Payroll 06/13/16-06/27/16	<u>253,124.18</u>	<u>178,845.02</u>	<u>431,969.20</u>
TOTALS	<u>\$1,950,025.63</u>	<u>\$618,573.76</u>	<u>\$2,568,599.39</u>

Payroll for the pay period June 13, 2016 through June 26, 2016.

C. CONTRACTS AND BILLS: Contracts and bills presented at this meeting.

D. MINUTES: July 5, 2016.

END OF CONSENT CALENDAR

4. ADDITIONS TO THE AGENDA: None.

5. REQUEST TO TRANSFER FUNDS FROM ANNUAL WELL REPAIR AND REHABILITATION PROJECT (CO 10788) TO KENWOOD WELL FIELD TRANSMISSION MAIN PROJECT (CO 10677): The Kenwood Well Field Transmission Main Project was budgeted at \$175,000.00 in the Fiscal Year 2016/17 Capital Improvement Budget. Competitive bids for the project were received on July 1, 2016 with the apparent low bid submitted in the amount of \$185,512.00. In order to fund project construction, staff requested approval to transfer \$30,000.00 from the Annual Well Repair and Rehabilitation Project (CO 10788) to the Kenwood Field Transmission Main Project (CO 10677). There were available funds for the proposed transfer.

Upon motion by Commissioner Fernández, duly seconded by Commissioner Hendrix, it was unanimously voted to approve the capital budget transfer in the amount of \$30,000.00 from the 2016/17 Capital Improvement Project titled *Annual Well Repair and Rehabilitation Project* (CO 10788) to the capital project titled *Kenwood Well Field Transmission Main Project* (CO 10677).

6. REQUEST TO TRANSFER FUNDS FROM ANNUAL WELL REPAIR AND REHABILITATION PROJECT (CO 10788) TO BELLEVIEW AND VINE STREETS ALLEY MAIN REPLACEMENT PROJECT (CO 10636): The Belleview and Vine Streets Main Replacement Project was budgeted at \$1,000,000.00 in the Fiscal Year 2016/17 Capital Improvement Budget. Competitive bids for the project were received on June 30, 2016 with the apparent low bid submitted in the amount of \$1,103,231.00. In order to fund project construction, staff requested approval to transfer \$200,000.00 from the Annual Well Repair and Rehabilitation Project (CO 10788) to the Belleview and Vine Streets Alley Main Replacement Project (CO 10636). There were available funds for the proposed transfer.

Upon motion by Commissioner Hendrix, duly seconded by Commissioner Fernández, it was unanimously voted to approve the capital budget transfer in the amount of \$200,000.00 from the 2016/17 Capital Improvement Project titled *Annual Well Repair and Rehabilitation Project* (CO 10788) to the capital project titled *Belleview and Vine Streets Alley Main Replacement Project* (CO 10636).

7. RULE AND REGULATION NO. 21, WATER SUPPLY SHORTAGE CONDITIONS – STAGE IIA AMENDMENT: In May 2015, the State Water Resources Control Board (SWRCB) adopted an emergency drought regulation that required twenty-five percent (25%) reduction in potable water use across the state. SWRCB's emergency regulation outlined percentage reduction tiers (conservation standards) in gross water production for each urban water supplier to achieve the 25% reduction. The Department's standard was currently set at fifteen percent (15%). The latest amendment of the emergency regulation allowed water suppliers to self-certify their own conservation standard based on supply and demand from previous years, and it also extended the emergency regulation through February 2017.

In May 2015, the Board of Water Commissioners (Board) adopted a resolution to amend Department Rule and Regulation No. 21 to include Stage IIA extreme mandatory restrictions, and at the same time, the Board implemented Stage IIA restrictions, which requires a twenty-eight percent (28%) reduction in potable water use by all Department customers.

The Department remained under Stage IIA, as the extreme drought condition continued and the SWRCB drought emergency regulation remained in effect. As stated in Rule and Regulation No. 21, the Department shall maintain the amended Stage IIA water supply

shortage condition until such time the General Manager determined that drought conditions improved to a point where Stage II or Stage I can be re-implemented.

Upon motion by Commissioner Fernández, duly seconded by Commissioner Hendrix, it was unanimously voted to approve amendment of City of San Bernardino Municipal Water Department Rule and Regulation No. 21, Water Supply Shortage Conditions – Stage IIA to become effective August 1, 2016.

8. APPROVAL OF EPA 006 WELL REHABILITATION BY WEBER WATER

RESOURCES: Extraction well EPA 006 was operated as part of the Newmark Operable Unit (OU) Remedial Action under the terms negotiated with the United States Environmental Protection Agency (USEPA). The purpose of EPA 006 was to inhibit further migration of PCE and TCE in the aquifer. Proper and consistent operation of EPA 006 was critical in maintaining plume capture and therefore downtime should be minimized.

In April 2016, EPA 006 well equipment failed and was removed for diagnosis. The Department contracted Best Pump and Drilling, Inc. (Best) to pull EPA 006 well equipment, assess the equipment and well, and provide recommendations for rehabilitation of the well. The mechanical failure was due to a failed thrust bearing and worn pump impellers. Staff requested rehabilitation proposals from prequalified contractors to rehabilitate EPA 006. Weber Water Resources was responsive and provided the lowest quotation in the amount of \$42,986.62.

Staff recommended that this expenditure be approved from existing funds in the Fiscal Year 2016/17 Capital Budget under *Annual R/R – EPA Extraction Well (Newmark)* with available funding of approximately \$285,000.00. Rehabilitation of EPA 006 was one hundred percent (100%) reimbursable through the AIG commutation account.

Upon motion by Commissioner Hendrix, duly seconded by Commissioner Fernández, it was unanimously voted to approve the rehabilitation of EPA 006 by Weber Water Resources in the amount of \$42,986.62.

9. APPROVAL OF EPA 111 WELL REHABILITATION BY BEST PUMP AND

DRILLING, INC.: Extraction well EPA 111 was operated as part of the Muscoy Operable Unit (OU) Remedial Action under the terms negotiated with the United States Environmental Protection Agency (USEPA). The purpose of EPA 111 was to inhibit further migration of PCE and TCE in the shallow aquifer. Proper and consistent operation of EPA 111 was critical in maintaining plume capture and therefore downtime should be minimized.

In March 2016, while in the process of evaluating rehabilitation measures to increase efficiency, the pump in EPA 111 failed. Inspection of the pump and well revealed that most of the screen louvers were partially to near totally blocked as a result of chemical and biological conditions that caused buildup of scaling and bio fouling along the well screening. In April 2016, the Department contracted Best Pump and Drilling, Inc. (Best) to pull EPA 111 well equipment, assess the equipment and bio fouling issue, and provide recommendations for rehabilitation of the well. As part of this effort, Best subcontracted with Water Systems Engineering, Inc. (WSE) for assessment and recommendations on the scaling and bio fouling issue. Combined chemical and mechanical cleaning of EPA 111 was recommended. Staff requested rehabilitation proposals from prequalified contractors to execute WSE's recommendations for EPA 111. Best was responsive and provided the lowest quotation in the amount of \$119,170.00.

Staff recommended that this expenditure be approved from existing funds in the Fiscal Year 2016/17 Capital Budget under *Annual R/R – EPA Extraction Well (Muscoy)* with available funding of approximately \$285,000.00. Rehabilitation of EPA 111 was one hundred percent (100%) reimbursable through the AIG commutation account.

Upon motion by Commissioner Hendrix, duly seconded by Commissioner Fernández, it was unanimously voted to approve the rehabilitation of EPA 111 by Best Pump and Drilling, Inc. in the amount of \$119,170.00.

10. PROPERTY INSURANCE RENEWAL FOR FISCAL YEAR 2016-17: On July 31, 2016, the City of San Bernardino Municipal Water Department will need to renew its property insurance coverage for fiscal year 2016/17, covering approximately \$330,262,542.00 in Water and Sewer Fund real and personal property. The renewal carried an annual premium of \$536,279.00, which was a decrease of approximately 7.6% from last year's premium.

Due to years of excellent customer service and experience working with the company, the Water Department continued to work with Marsh Risk & Insurance Services (Marsh) to find the most appropriate insurance coverage for Department assets. Funds were budgeted to cover the cost of the proposed property coverage renewal.

Upon motion by Commissioner Hendrix, duly seconded by Commissioner Fernández, it was unanimously voted to approve the annual property insurance renewal premium of \$536,279.00. The General Manager was authorized to bind the renewal policies effective August 1, 2016.

11. CLAIMS SETTLEMENTS – QUARTERLY REPORT: In accordance with Policy 20.090 – Claims Handling, the Environmental and Regulatory Compliance Division prepared the quarterly claims settlements report detailing all claims processed for the period of APRIL through JUNE 2016. **(INFORMATION ITEM ONLY)**
12. JUNE 2016 DROUGHT MONITORING REPORT: This report continued to monitor and track the effects of the ongoing drought by monitoring groundwater levels in select wells located in the Department's service area. This monthly report provided valuable data needed to contemplate important policy decisions related to Water Supply Shortage Stages outlined in Rule and Regulation No. 21. **(INFORMATION ONLY)**
13. REPORTS:
- A. Report of the President: None
 - B. Report of the Commissioners: None
 - C. Report of the Directors: None
 - D. Report of the General Manager: None
14. PUBLIC COMMENTS: This is the time specified for public comments concerning specific items not on the agenda or matters of general interest. John Hillman, President of the North End Neighborhood Association and Preparedness Instructor for the American Red Cross, stated he wanted to inquire about the Department's earthquake preparedness. Director Guerrero will be meeting with Mr. Hillman on Wednesday, July 20, 2016, to discuss this issue.

15. ADJOURN MEETING: The meeting adjourned at 10:05 a.m. to the next Regular Meeting to be held on Tuesday, August 2, 2016, at 9:30 a.m. in Margaret H. Chandler Water Reclamation Plant Conference Room, 399 Chandler Place, San Bernardino, California, 92408.

BY: _____
TONI CALLICOTT
President

BY: _____
ROBIN L. OHAMA
Deputy City Clerk & Ex-Officio Secretary

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**

JUL 18 2016

TO: Stacey R. Aldstadt, General Manager
FROM: Robin L. Ohama, Deputy General Manager
SUBJECT: **PROMOTION OF CARLA LUNA TO CUSTOMER SERVICE SUPERVISOR**
DATE: July 18, 2016
CC: K. Hernandez, Human Resources

BACKGROUND:

A vacancy exists within Section 2060, Customer Service, for a Customer Service Supervisor due to the retirement of Joanne Chavez effective December 18, 2015. This position provides direct customer contact and is responsible for daily supervision of critical functions, including Customer Service and Cashiering and therefore must be filled as expeditiously as possible. This position is budgeted.

An eligibility list was called for and interviews for this position were conducted on July 7, 2016. From those interviews, Carla Luna was selected as the best candidate for the position.

RECOMMENDATION

Staff recommends that the Board of Water Commissioners make the following motion:

- Approve the promotion of Carla Luna from Customer Service Representative III, Section 2060, Range 141, to Customer Service Supervisor, Section 2060, Range 258, effective August 1, 2016.

Respectfully submitted,



Robin L. Ohama
Deputy General Manager

sdm

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**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**

TO: Stacey R. Aldstadt, General Manager

FROM: John A. Claus, Director of Water Reclamation

SUBJECT: **PROMOTIONAL APPOINTMENT – WATER RECLAMATION SENIOR OPERATOR – JENNIFER AGUIRRE**

DATE: July 20, 2016

CC: Human Resources, File, Laserfiche

BACKGROUND:

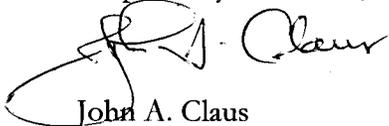
Staff requested Civil Service open appropriate recruitment procedures for the three (3) vacancies that exist in the Operations Sections (4020 and 5025) for the position of Water Reclamation (WR) Senior Operator. These positions are in the budget and based on the needs and staffing for these sections, the positions are still justifiable under the budget. Interviews for these positions were conducted on May 3, 2016, with Vince Bibbee, WR RIX Supervisor, Travis Mendenhall, WR Mechanical/Maintenance Supervisor, and Elizabeth Razo, Senior Administrative Coordinator. Staff recommends the promotion of Jennifer Aguirre to the vacant position of WR Senior Operator.

RECOMMENDATION:

Staff recommends the Board of Water Commissioners make the following motion:

Approve the promotion of Jennifer Aguirre from Water Reclamation Operator, Range 143, to the position of Water Reclamation Senior Operator, Range 157, effective August 8, 2016.

Respectfully submitted,

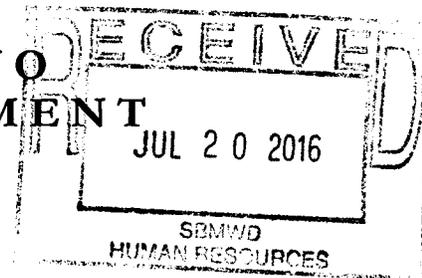


John A. Claus
Director of Water Reclamation

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CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT

BOARD OF WATER COMMISSIONERS
STAFF REPORT



TO: Stacey R. Aldstadt, General Manager
FROM: John A. Claus, Director of Water Reclamation
SUBJECT: PROMOTIONAL APPOINTMENT – TECHNICAL ASSISTANT – APRIL EMSLIE
DATE: July 18, 2016
CC: Human Resources, File, Laserfiche

BACKGROUND:

Due to the retirement of Eleanor Caruso, a vacancy exists in the Maintenance Section (4040) for the position of Technical Assistant. This position is in the budget and based on the needs and staffing for this section, the position is still justifiable under the budget. Interviews for this position were conducted on June 29 and 30, 2016, with Greg Evans, WR Maintenance Superintendent, Travis Mendenhall, WR Mechanical/Maintenance Supervisor, and Elizabeth Razo, Senior Administrative Coordinator. Staff recommends the promotion of April Emslie to the vacant position of Technical Assistant.

RECOMMENDATION:

Staff recommends the Board of Water Commissioners make the following motion:

Approve the promotion of April Emslie from Senior Office Assistant, Range 136, to the position of Technical Assistant, Range 140, effective August 8, 2016.

Respectfully submitted,

A handwritten signature in black ink that reads "John A. Claus".

John A. Claus
Director of Water Reclamation

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**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

BOARD OF WATER COMMISSIONERS
STAFF REPORT

JUL 18 2016

TO: Stacey R. Aldstadt, General Manager

FROM: Robin L. Ohama, Deputy General Manager

**SUBJECT: REVISED JOB DESCRIPTION FOR WATER RECLAMATION
MAINTENANCE PLANNER**

DATE: July 18, 2016

CC: John Claus, Human Resources, Payroll

BACKGROUND:

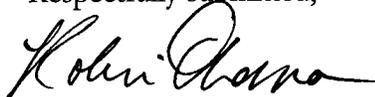
The Board of Water Commissioners originally approved the job description for Water Reclamation Maintenance Planner on September 20, 1994 and it was last updated on April 4, 1995. The position has been vacant since March 21, 2014 due to retirement. Since that time the Director of Water Reclamation has reviewed and updated the job description to include support for the Electrical, Instrumentation, and SCADA (EI&S) section, reflect the current duties expected to be performed in the position, and to update terminology, and format. The education and experience requirements have also been updated in order to attract candidates with the necessary skills. In addition, the testing standards are being updated to Civil Service Application Review and Civil Service Supplemental Application Review. The salary range remains the same at Range 154.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

- Approve the revised job description for Water Reclamation Maintenance Planner (21814), General unit, FLSA Non-Exempt, Range 154, and authorize staff to submit the testing standards to the Civil Service Board for approval.

Respectfully submitted,



Robin L. Ohama
Deputy General Manager

Attachments: Water Reclamation Maintenance Planner job description, redline and final draft versions.

**SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
CLASSIFICATION SPECIFICATION**

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TITLE: WATER RECLAMATION MAINTENANCE PLANNER

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DATE: JOB CODE: 21814

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FLSA STATUS: NON-EXEMPT UNIT REPRESENTATION: GEN

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Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

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SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

WATER RECLAMATION MAINTENANCE PLANNER

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JOB DESCRIPTION DUTIES SUMMARY

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Under general direction, provide professional level support to the change management process including evaluating and analyzing maintenance procedures and maintenance interfaces with all sections of the Water Reclamation (WR) division; develop and recommend revisions to the procedures and interfaces to optimize efficiency; provide management of the workload control segment of the Computerized Maintenance Management System (CMMS) to perform time and motion studies and analyses; establishing methods and procedures and applying time standards to maintenance functions; to plan and schedule, coordinate, and monitor work in accordance with established priorities, staffing, parts, and material availability; and to maintain records and prepare reports; assist in the management and coordination and controls Maintenance Section involvement in of the system of spare parts and materials inventory managed by the Purchasing Agent Supervisor; administers the Work Order System by coordinating work requests between various groups; produces the weekly work schedules; assist the Operations and Maintenance management teams with controls job interruptions due to emergency requests; maintains, update, and controls a complete library of all manufacturers and vendor installation, operations and maintenance manuals (IOMs); and maintains and controls a complete library of Pplant record drawings, specifications, and shop drawings.

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DISTINGUISHING CHARACTERISTICS

This is a single position class responsible for performing complex administrative work in planning, developing, coordinating, implementing, and delivering maintenance scheduling/management programs and services. The incumbent consults with administrators and technical personnel regarding the need for

training programs and develops and evaluates training methodology and curriculum content. The Water Reclamation Maintenance Planner is responsible for fully understanding the programs, procedures, and policies of the Department and managing complex assignments receiving only occasional instruction or assistance as new or unusual situations arise. Supervision is received from the Director of Water Reclamation or designee.

REPRESENTATIVE DUTIES EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staffs;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Implement standard workflows for Corrective Maintenance (CM) work order requests, Preventative Maintenance (PM), inspections, small projects, etc.;
- Develop, generate, and manage work requests in the Department's CMMS; ensure proper creation, planning, update, and closure of work orders;
- Serve as CMMS database developer for assigned function or program area; gather and administer information for asset creation; create new asset records; create new numbers, codes, and descriptions; delete unused numbers and records; create loop numbers and loop tag numbers assets; create and delete preventive maintenance schedules;
- Maintain CMMS database for assigned function or program area; maintain system codes, asset information, master loop and loop tag numbers, preventive maintenance schedules, P&ID drawings, service requests, and work order histories;
- Receive and reviews and receives work order requests, confer with requestors, visit job sites to clarify work requests, and estimate craft labor requirements;
- visits job site to clarify work requests; confers with work requester, estimates the craft labor requirements for each work request;
- Requests reservations of all stores, material, and parts, from Stock Room ensuring all resources are available before work is scheduled;
- orders all non-stock materials and parts; ensures all resources are available before work is scheduled;
- Direct and/or work with assigned administrative staff creating PM work orders, PM procedures, scheduling, and tracking back logs, etc.;
- develops standards for repetitive jobs; develops and tracks work request back log; determines labor capacity for schedule;
- Prepares weekly work schedules of scheduled and unscheduled maintenance for various WR sections;
- Develop Key Performance Indicators (KPIs) with section managers; measure and publish metrics of WR Operations and Maintenance; interpret and analyze data and present recommendation to the management teams for optimizing repetitive processes;
- Assist in developing and managing the WR asset management program; manage assets work planning and spare part inventory in the CMMS;
- Perform spare parts inventory management and auditing on a regular basis; publish regular spare part cycle count results in the CMMS;
- Order spare parts, supplies, and materials using the Department's enterprise system following established purchasing policies and procedures;
- Perform regular data analysis on parts/assets and recommend software enhancements and process changes;
- Participate in CMMS software implementation and improvement process;

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- Assist in creating and coordinating scope of work and changes with Project Managers and management teams;
- Develop and provide training on systems and procedures; prepare CMMS training manuals; provide training and assistance to other staff;
- Work with management teams to obtain quotes and project proposals;
- Interpret documents and manuals including drawings, plans, specifications, service bulletins, diagrams, Standard Operating Procedures (SOPs), etc.;
- Participate in meetings with the maintenance and operations staff and other groups including purchasing, engineering, contractors, and vendors;
- Maintain and update an electronic file of operations and maintenance manuals, plant record drawings, specifications, and shop drawings;
- Assist in budget preparation and administration;
- Assist in making cost estimates;
- Work indoors and outdoors and in and around extreme environments; heat, cold, noise, odor, fumes, dust, etc.;
- Operate office equipment and Department vehicles; and
- tracks work orders to completion; keeps a completed Work Order File by equipment number; establishes and optimizes the Preventative Maintenance Program; conducts Methods-Time Measurement and Process-Time Studies of employees and equipment using various techniques with emphasis on application of Methods-Time Measurement procedures; develops time standards and spread sheets for job/task applications; analyzes specific job tasks and applies standards to jobs; forecasts manpower requirements and determines availability of manpower, materials and equipment to accomplish work; plans and schedules jobs; trains and directs the work of assistants and clerical staff; plans, schedules and coordinates work with Operations and Maintenance supervisory personnel, related to a variety of Reclamation Plant equipment; coordinates and participates with the Maintenance Supervisors in inspection, diagnoses, replacement, and repair of work and malfunctioning equipment; inspects cuttings and threadings of pipe; installation of plumbing, fabrications of foundations for engines, pumps, motors and blowers and for electrical installations; maintains a variety of maintenance records; coordinates the requisition of supplies and parts; operates Department vehicles; and
- pPerforms other related work as required.

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MINIMUM QUALIFICATIONS

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Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

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Knowledge of:

- Asset management/CMMS at an advanced level;
- Safety Standards and practices applicable to wastewater treatment;
- Tools, materials, methods, and practices of the facilities maintenance, mechanical, electrical, electronic, and instrumentation trades;
- Advanced principles of project management;
- Basic principles and practices of computer science and information systems;
- Operations, services, and activities of assigned maintenance program areas;
- Principles, methods, and materials used in installing, maintaining, and repairing systems and equipment in construction and wastewater related trades, including preventative and corrective maintenance techniques;
- Operational characteristics of equipment, tools, and apparatuses used in construction and wastewater related trades;

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- Methods, materials, tools, and equipment used in the installation, maintenance, and repair of heavy plant equipment, pumps, motors, controllers, variable speed and chain drivers, and lift stations;
- General methods of related electrical, carpentry, plumbing and pipefitting repairs and building maintenance and repair;
- Operational principles of wastewater treatment facilities;
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases including operation characteristics of database systems;
- Personal computer hardware and software components;
- Basic methods and techniques of troubleshooting information systems hardware and software problems;
- Intermediate to advanced level computer operation skills, including work processing, database programs, spreadsheets, electronic mail, Department utilized software application programs, CMMS, and SCADA operation, etc.;
- Complex record keeping, documentation, and practices;
- English usage, spelling, grammar, and punctuation;
- Budget preparation and fiscal management required to develop and administer a budget;
- Problem analysis and problem solving skills;
- Report writing techniques to produce analytical reports or written materials having high organizational impact in appropriate format;
- Modern and complex principles and practices of preventive maintenance;
- Confined space entry including the use and operation of Self Contained Breathing Apparatus (SCBA);
- Occupational safety hazards and safe work practices;
- Principles of supervision, training, and performance evaluation;
- Ability to interpret technical information and translate across diversified groups within the organization and others in the water industry;
- Basic math and principles of work measurement, statistics, and record keeping;
- Production and inventory control systems; and
- Metrics and KPIs.

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Ability to:

- Plan, organize, schedule, and monitor work for efficiency, quality, and timeliness;
- Recognize, analyze, and define a variety of routine to complex mechanical, electrical, and instrumentation problems;
- Read, understand, interpret, and apply moderately complex materials including technical manuals, drawings, specifications, layouts, diagrams, blueprints, plans, and schematics;
- Maintain detailed, complex, and accurate records;
- Recognize, report, and correct unsafe working conditions;
- Understand and carry out routine to complex instructions furnished in oral, written, or diagrammatic form;
- Make arithmetical calculations involving fractions, decimals, and percentages with speed and accuracy;
- Communicate clearly and concisely, both orally and in writing;
- Work under moderate or high stress conditions;
- Make work assignments, set priorities for, train, and review the work of subordinate and assigned staff.

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- Respond to call-out or emergencies as required; handle emergency situations as directed;
- Remain current on related CMMS and asset management developments;
- Organize, prioritize, and perform multiple tasks concurrently;
- Exercise sound judgment; independently make decisions and take appropriate action;
- Establish and maintain effective working relationships with those contacted in the course of work; and
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier.

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Graduation from high school or G.E.D. equivalent, and three (3) years journey level experience in the maintenance of industrial engines or Water Reclamation Plant equipment. Must be able to work both inside and outside; may be exposed to fumes, dust, odors and weather. Must possess and maintain a valid Class "C" California Driver's License appropriate for equipment to be operated, and provide proof of and maintain a driving record acceptable to the Department.

GENERAL MINIMUM QUALIFICATIONS

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Education: Associate's degree from an accredited college or university with major course work in a technical field, engineering, business or public administration, or related field.

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OR

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Graduation from high school, or equivalent, and course work in a technical field, engineering, business or public administration, or related field equivalent to an Associate's degree.

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Experience: Six (6) years of increasingly responsible experience in industrial maintenance planning or scheduling, including a minimum of four (4) years of journey level experience managing maintenance planning, maintenance, and repairs via a CMMS.

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NECESSARY SPECIAL REQUIREMENTS

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Possession of a valid Class "C" California driver's license. For out of state applicants, a valid driver's license is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

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PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

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Work involves exposure to potential physical harm, infectious disease, and hazardous chemicals including smoke, fumes, gas, treated water, high frequency noise, dirt, dust, grease, oil, solvents, and toxic agents. Incumbents need to be able to tolerate unpleasant odors, wet conditions, and uncomfortable climate conditions. There is frequent need to stand, sit, stoop, walk, and perform other

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similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbent requires sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Water Reclamation Maintenance Planner

To: Water Reclamation Mechanical/Maintenance Lead Worker
Senior Electrical and Instrumentation Technician

Job Description

BOWC Approved: 9/20/1994
Rev Appr: 4/4/1995

Testing Standards: CS App Review/CS Supp App Review

CSB Approved:

Knowledge of:

Production and Inventory Control System;
Craft skills;
Communication methods;
Aptitude in clerical, office, and computer skills;
Principles of work measurement;
Basic mathematics;
Advanced record keeping methods;
Plant maintenance terminology methods, materials and equipment, as related to a Water Reclamation facility;
Plant maintenance work scheduling methods.

Ability to:

Estimate time and material requirements for plant maintenance work;
Work from blue prints, drawings, sketches and specifications;
Coordinate work assignments, set priorities;
Read, understand and apply moderately difficult materials;
Maintain detailed and accurate records;
Make arithmetic calculations with speed and accuracy;
Work in the field in varying weather conditions;
Prepare oral and written reports;

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~~Maintain effective relationships with those contacted in
the course of work.~~

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ORGANIZATIONAL RELATIONSHIPS

~~The Class of Water Reclamation Maintenance Planner is a staff level in the Water Reclamation Maintenance series. Supervision is received from the Water Reclamation Plant Maintenance Superintendent. Lead supervision may be exercised over clerical staff and assistants. May serve as acting Water Reclamation Maintenance Superintendent.~~

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SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER RECLAMATION MAINTENANCE PLANNER

DATE: JOB CODE: 21814

FLSA STATUS: NON-EXEMPT UNIT REPRESENTATION: GEN

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general direction, provide professional level support to the change management process including evaluating and analyzing maintenance procedures and maintenance interfaces with all sections of the Water Reclamation (WR) division; develop and recommend revisions to the procedures and interfaces to optimize efficiency; provide management of the workload control segment of the Computerized Maintenance Management System (CMMS); plan, schedule, coordinate, and monitor work in accordance with established priorities, staffing, parts, and material availability; maintain records and prepare reports; assist in the management and coordination of the system of spare parts and materials inventory managed by the Purchasing Supervisor; administer the Work Order System by coordinating work requests between various groups; produce work schedules; assist the Operations and Maintenance management teams with job interruptions due to emergency requests; maintain, update, and control a complete library of manufacturers and vendor installation, operations and maintenance manuals (IOMs); plant record drawings, specifications, and shop drawings.

DISTINGUISHING CHARACTERISTICS

This is a single position class responsible for performing complex administrative work in planning, developing, coordinating, implementing, and delivering maintenance scheduling/management programs and services. The incumbent consults with administrators and technical personnel regarding the need for training programs and develops and evaluates training methodology and curriculum content. The Water Reclamation Maintenance Planner is responsible for fully understanding the programs, procedures, and policies of the Department and managing complex assignments receiving only occasional instruction or assistance as new or unusual situations arise. Supervision is received from the Director of Water Reclamation or designee.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Implement standard workflows for Corrective Maintenance (CM) work order requests, Preventative Maintenance (PM), inspections, small projects, etc.;
- Develop, generate, and manage work requests in the Department's CMMS; ensure proper creation, planning, update, and closure of work orders;
- Serve as developer for, and maintain CMMS database for, assigned function or program area; maintain system codes, asset information, master loop and loop tag numbers, preventive maintenance schedules, P&ID drawings, service requests, and work order histories; create new asset records, new numbers, codes and descriptions; delete unused numbers and records; create and delete preventive maintenance schedules;
- Receive and review work order requests, confer with requestors, visit job sites to clarify work requests, and estimate craft labor requirements;
- Request reservations of all stores, material, and parts, ensuring all resources are available before work is scheduled;
- Direct and/or work with assigned administrative staff creating PM work orders, PM procedures, scheduling, and tracking back logs, etc.;
- Prepare work schedules of scheduled and unscheduled maintenance for various WR sections;
- Develop Key Performance Indicators (KPIs) with section managers; measure and publish metrics of WR Operations and Maintenance; interpret and analyze data and present recommendations to the management teams for optimizing repetitive processes;
- Assist in developing and managing the WR asset management program; manage assets work planning and spare part inventory in the CMMS;
- Perform spare parts inventory management and auditing on a regular basis; publish regular spare part cycle count results in the CMMS;
- Order spare parts, supplies, and materials using the Department's enterprise system following established purchasing policies and procedures;
- Perform regular data analysis on parts/assets and recommend software enhancements and process changes;
- Participate in CMMS software implementation and improvement process;
- Assist in creating and coordinating scope of work and changes with Project Managers and management teams;

- Develop and provide training on systems and procedures; prepare CMMS training manuals; provide training and assistance to other staff;
- Work with management teams to obtain quotes and project proposals;
- Interpret documents and manuals including drawings, plans, specifications, service bulletins, diagrams, Standard Operating Procedures (SOPs), etc.;
- Participate in meetings with the operations and maintenance staff and other groups including purchasing, engineering, contractors, and vendors;
- Maintain and update an electronic file of operations and maintenance manuals, plant record drawings, specifications, and shop drawings;
- Assist in budget preparation and administration;
- Assist in making cost estimates;
- Work indoors and outdoors and in and around extreme environments; heat, cold, noise, odor, fumes, dust, etc.;
- Operate office equipment and Department vehicles; and
- Perform other related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Asset management/CMMS at an advanced level;
- Safety standards and practices applicable to wastewater treatment;
- Tools, materials, methods, and practices of the facilities maintenance, mechanical, electrical, electronic, and instrumentation trades;
- Advanced principles of project management;
- Basic principles and practices of computer science and information systems;
- Operations, services, and activities of assigned maintenance program areas;
- Principles, methods, and materials used in installing, maintaining, and repairing systems and equipment in construction and wastewater related trades, including preventive and corrective maintenance techniques;
- Operational characteristics of equipment, tools, and apparatuses used in construction and wastewater related trades;

- Methods, materials, tools, and equipment used in the installation, maintenance, and repair of heavy plant equipment, pumps, motors, controllers, variable speed and chain drivers, and lift stations;
- General methods of related electrical, carpentry, plumbing and pipefitting repairs and building maintenance and repair;
- Operational principles of wastewater treatment facilities;
- Office procedures, methods, and equipment including computers and applicable software applications such as work processing, spreadsheets, and databases including operation characteristics of database systems;
- Personal computer hardware and software components;
- Basic methods and techniques of troubleshooting information systems hardware and software problems;
- Intermediate to advanced level computer operation skills, including word processing, database programs, spreadsheets, electronic mail, Department utilized software application programs, CMMS, SCADA operation, etc.;
- Complex record keeping, documentation, and practices;
- English usage, spelling, grammar, and punctuation;
- Budget preparation and fiscal management required to develop and administer a budget;
- Problem analysis and problem solving skills;
- Report writing techniques to produce analytical reports or written materials having high organizational impact in appropriate format;
- Modern and complex principles and practices of preventive maintenance;
- Confined space entry including the use and operation of Self Contained Breathing Apparatus (SCBA);
- Occupational safety hazards and safe work practices;
- Principles of supervision, training, and performance evaluation;
- Ability to interpret technical information and translate across diversified groups within the organization and others in the water industry;
- Basic math and principles of work measurement, statistics, and record keeping;
- Production and inventory control systems; and
- Metrics and KPIs.

Ability to:

- Plan, organize, schedule, and monitor work for efficiency, quality, and timeliness;
- Recognize, analyze, and define a variety of routine to complex mechanical, electrical, and instrumentation problems;
- Read, understand, interpret, and apply moderately complex materials including technical manuals, drawings, specifications, layouts, diagrams, blueprints, plans, and schematics;
- Maintain detailed, complex, and accurate records;
- Recognize, report, and correct unsafe working conditions;
- Understand and carry out routine to complex instructions furnished in oral, written, or diagrammatic form;
- Make arithmetical calculations involving fractions, decimals, and percentages with speed and accuracy;
- Communicate clearly and concisely, both orally and in writing;
- Work under moderate or high stress conditions;
- Make work assignments, set priorities for, train, and review the work of subordinate and assigned staff;
- Respond to call-out or emergencies as required; handle emergency situations as directed;
- Remain current on related CMMS and asset management developments;
- Organize, prioritize, and perform multiple tasks concurrently;
- Exercise sound judgment; independently make decisions and take appropriate action;
- Establish and maintain effective working relationships with those contacted in the course of work; and
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier.

MINIMUM QUALIFICATIONS

Education: Associate's degree from an accredited college or university with major course work in a technical field, engineering, business or public administration, or related field.

OR

Graduation from high school, or equivalent, and course work in a technical field, engineering, or business or public administration, or related field equivalent to an Associate's degree.

Experience: Six (6) years of increasingly responsible experience in industrial maintenance planning or scheduling, including a minimum of four (4) years of journey level experience managing maintenance planning, maintenance, and repairs via a CMMS.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California driver's license. For out of state applicants, a valid driver's license is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, infectious disease, and hazardous chemicals including smoke, fumes, gas, treated water, high frequency noise, dirt, dust, grease, oil, solvents, and toxic agents. Incumbents need to be able to tolerate unpleasant odors, wet conditions, and uncomfortable climate conditions. There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbent requires sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Water Reclamation Maintenance Planner

To: Water Reclamation Mechanical/Maintenance Lead Worker
Senior Electrical and Instrumentation Technician

Job Description

BOWC Approved:
Rev Appr:

9/20/1994
4/4/1995

Testing Standards: CS App Review/CS Supp App Review
CSB Approved:

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

BOARD OF WATER COMMISSIONERS
STAFF REPORT

JUL 25 2016

TO: Stacey R. Aldstadt, General Manager

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: AWARD OF CONTRACT – BELLEVIEW STREET AND VINE STREET ALLEY MAINS REPLACEMENT PROJECT SPECIFICATION NO. 1578

DATE: July 21, 2016

CC: M. Guerrero, M. Nevarez, M. Honis

BACKGROUND:

Specifications were advertised on May 24, 2016, for Specification No. 1578, FURNISH ALL LABOR, EQUIPMENT, AND MATERIALS FOR THE BELLEVIEW STREET AND VINE STREET ALLEY MAINS REPLACEMENT PROJECT, CALIFORNIA.

The Department's Water Facilities Master Plan includes the upgrading of various alleyway pipelines. These upgrades are required to upgrade aging infrastructure and to adequately support demand within the area. In addition, relocating the pipelines and services from the alleyways to the streets will allow for easier, safer access for Department staff. The Belleview Street and Vine Street Alley Mains Replacement Project consists of the installation of approximately two thousand three hundred forty (2,340) lineal feet of 8" ductile iron pipe and one thousand fifty linear feet of 12" ductile iron pipe, as well as the relocation of one hundred sixty-one (161) domestic services.

Specifications were provided to contractors through newspapers and the Department's automated online bidding system, PlanetBids. The Engineering estimate for this project was \$900,000.00. The ten bids received and opened on June 30, 2016, are as follows:

BIDDERS NAME	LOCATION	LUMP SUM	SUBS LISTED
T.B.U., INC.	BEAUMONT	\$1,103,231.00	YES
CP CONSTRUCTION CO., INC.	ONTARIO	\$1,185,000.00	NO
KIRTLEY CONSTRUCTION, INC.	SAN BERNARDINO	\$1,186,000.00	YES
DOWNING CONSTRUCTION INC.	REDLANDS	\$1,255,874.00	YES

HEMET MFG., CO., INC. DBA GENESIS CONSTRUCTION	HEMET	\$1,272,948.00	YES
EL-CO CONTRACTORS, INC.	SAN BERNARDINO	\$1,289,000.00	YES
R-JS GENERAL CONSTRUCTION	RIVERSIDE	\$1,348,850.00	YES
WEKA, INC.	HIGHLAND	\$1,409,212.00	YES
DDH APPLE VALLEY CONSTRUCTION, INC.	APPLE VALLEY	\$1,548,450.14	YES
CHRISTENSEN BROTHERS GENERAL	APPLE VALLEY	\$2,413,574.00	YES

All bidders submitted the appropriate bid bond with their proposal.

FUNDING SOURCE:

The funding source for this project is the FY 2016/2017 Water Fund Capital Improvement Project titled *Belleview and Vine Streets Alley Main Replacement Project* (C.O. 10636) which currently has a total of \$1,200,000.00 in unencumbered funds.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

- Accept the bid of T.B.U., Inc., as the lowest responsive, responsible bidder and award a contract in the amount of ONE MILLION ONE HUNDRED THREE THOUSAND TWO HUNDRED THIRTY ONE AND 00/100 DOLLARS (\$1,103,231.00) for the BELLEVIEW STREET AND VINE STREET ALLEY MAINS REPLACEMENT PROJECT, retain the bid securities in accordance with Specification No. 1578; and authorize the President and Secretary to execute the contract.

Respectfully submitted,



Robin L. Ohama
Deputy General Manager

Attachments

sdm

**City of San Bernardino Municipal Water Department
Bid Results Data Sheet**

Chronology				
Specification number:	1578			
Specification Title:	BELLEVIEW STREET AND VINE STREET ALLEY MAINS REPLACEMENT PROJECT			
Previous BOWC actions/approvals:	Approved in CIP Budget			
Date Advertised:	May 24, 2016			
Where Advertised (Papers, Plan rooms)	Press Enterprise, San Bernardino Sun, BidsOnline Bid Management (PlanetBids)			
Number of specifications sent out:	557			
Date of job walk:	June 7, 2016			
Number of contractors present:	17			
Total number of bids received:	10			
Date bids opened: (Electronic Bid)	JUNE 30, 2016			
Engineering Estimate:	\$900,000.00			
Number of responsive bids:	10			
Bidders Name	Lump Sum Bid	Subs Listed	Bond/Check	LOCATION OF BIDDER
T. B. U., INC.	\$1,103,231.00	YES	BOND	BEAUMONT
C.P. CONSTRUCTION CO., INC.	\$1,185,000.00	NO	BOND	ONTARIO
KIRTLEY CONSTRUCTION, INC.	\$1,186,000.00	YES	BOND	SAN BERNARDINO
DOWNING CONSTRUCTION INC.	\$1,255,874.00	YES	BOND	REDLANDS
HEMET MFG., CO., INC. DBA GENESIS CONSTRUCTION	\$1,272,948.00	YES	BOND	HEMET
EL-CO CONTRACTORS, INC.	\$1,289,000.00	YES	BOND	SAN BERNARDINO
R-JS GENERAL CONSTRUCTION	\$1,348,850.00	YES	BOND	RIVERSIDE
WEKA, INC.	\$1,409,212.00	YES	BOND	HIGHLAND
DDH APPLE VALLEY CONSTRUCTION, INC.	\$1,548,450.14	YES	BOND	APPLE VALLEY
CHRISTENSEN BROTHERS GENERAL ENGINEERING, INC.	\$2,413,574.00	YES	BOND	APPLE VALLEY

SIGNED: Sydney Morrison, Sr. Administrative Coordinator

DATE: July 6, 2016

JUL 21 2016

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**

TO: Stacey R. Aldstadt, General Manager

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: **AWARD OF CONTRACT – KENWOOD WELL FIELD 20”
TRANSMISSION MAIN EXTENSION PROJECT
SPECIFICATION NO. 1632**

DATE: July 22, 2016

CC: M. Guerrero, M. Nevarez, M. Honis

BACKGROUND:

Specifications were advertised on May 25, 2016, for Specification No. 1632, FURNISH ALL LABOR, EQUIPMENT, AND MATERIALS FOR KENWOOD WELL FIELD 20” TRANSMISSION MAIN EXTENSION PROJECT, CALIFORNIA.

In 2013, the California Department of Transportation (Caltrans) and San Bernardino Associated Governments (SANBAG) began work on the Interstate 15/ Interstate 215 (I-15/I-215) Interchange Reconstruction Project. The project reconfigured the I-15/I-215 Interchange near Devore. As part of this project, approximately 9,000 linear feet of existing transmission main located in the Cajon Wash were relocated to a reconstructed Cajon Boulevard and also upsized to 20” ductile iron pipe (DIP). The Department entered into a Utility Agreement with Caltrans and SANBAG which included this pipeline replacement, but did not include the final tie-in to the Department’s existing 16” steel main. The Kenwood Well Field 20” Transmission Main Extension Project consists of approximately 600 linear feet of 20” DIP that will connect the newly constructed 20” transmission main to the existing 16” steel main.

Specifications were provided to contractors through newspapers and the Department’s automated online bidding system, PlanetBids. The Engineering estimate for this project was \$140,000.00. The seven bids received and opened on July 1, 2016 are as follows:

BIDDERS NAME	LOCATION	LUMP SUM	SUBS LISTED
EL-CO CONTRACTORS, INC.	SAN BERNARDINO	\$179,000.00	YES
KIRTLEY CONSTRUCTION, INC.	SAN BERNARDINO	\$195,300.00	YES
DDH APPLE VALLEY CONSTRUCTION, INC.	APPLE VALLEY	\$196,547.48	YES
WEKA, INC.	HIGHLAND	\$203,644.00	NO
HEMET MFG., CO., INC. DBA GENESIS CONSTRUCTION	HEMET	\$226,788.00	NO
C. P. CONSTRUCTION CO., INC.	ONTARIO	\$230,500.00	NO
GWINCO INCORPORATED	ONTARIO	\$977,000.00	YES

All bidders submitted the appropriate bid bond with their proposal.

FUNDING SOURCE:

The funding source for this project is the FY 2016/2017 Water Fund Capital Improvement Project titled *Kenwood Well Field Transmission Main Project* (C.O. 10677) which currently has a total of \$205,000.00 in unencumbered funds.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

- Accept the bid of El-Co Contractors, Inc., as the lowest responsive, responsible bidder and award a contract in the amount of ONE HUNDRED SEVENTY NINE THOUSAND AND 00/100 DOLLARS (\$179,000.00) for the KENWOOD WELL FIELD 20" TRANSMISSION MAIN EXTENSION PROJECT, retain the bid securities in accordance with Specification No. 1632; and authorize the President and Secretary to execute the contract.

Respectfully submitted,



Robin L. Ohama
Deputy General Manager

Attachments

sdm

**City of San Bernardino Municipal Water Department
Bid Results Data Sheet**

Chronology				
Specification number:	1632			
Specification Title:	KENWOOD WELL FIELD 20" TRANSMISSION MAIN EXTENSION PROJECT			
Previous BOWC actions/approvals:	Approved in CIP Budget			
Date Advertised:	May 25, 2016			
Where Advertised (Papers, Plan rooms)	Press Enterprise, San Bernardino Sun, BidsOnline Bid Management (PlanetBids)			
Number of specifications sent out:	555			
Date of job walk:	June 14, 2016			
Number of contractors present:	13			
Total number of bids received:	7			
Date bids opened: (Electronic Bid)	July 1, 2016			
Engineering Estimate:	\$140,000.00			
Number of responsive bids:	7			
Bidders Name	Lump Sum Bid	Subs Listed	Bond/Check	LOCATION OF BIDDER
EL-CO CONTRACTORS, INC.	\$179,000.00	Yes	BOND	SAN BERNARDINO
KIRTLEY CONSTRUCTION, INC.	\$195,300.00	YES	BOND	SAN BERNARDINO
DDH APPLE VALLEY CONSTRUCTION, INC.	\$196,547.48	YES	BOND	APPLE VALLEY
WEKA, INC.	\$203,644.00	NO	BOND	HIGHLAND
HEMET MFG., CO., INC. DBA GENESIS CONSTRUCTION	\$226,788.00	NO	BOND	HEMET
C.P. CONSTRUCTION CO., INC.	\$230,500.00	NO	BOND	ONTARIO
GWINCO INCORPORATED	\$977,000.00	YES	BOND	ONTARIO

SIGNED: Sydney Morrison, Sr. Administrative Coordinator

DATE: July 6, 2016

RECEIVED
JUL 25 2016

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**

TO: Stacey R. Aldstadt, General Manager

FROM: Miguel J. Guerrero, P.E., Director of Water Utility

SUBJECT: APPROVAL OF EPA 108S WELL REHABILITATION BY WEBER WATER RESOURCES

DATE: July 21, 2016

COPIES: Robin Ohama (w/o attach), Terri Willoughby (w/o attach), Mike Garland (w/attach), Susan Justice (w/o attach), Sally Duran (w/attach)

BACKGROUND:

Extraction well EPA 108S is operated as part of the Muscoy Operable Unit (OU) Remedial Action under the terms negotiated with the United States Environmental Protection Agency (USEPA). The purpose of EPA 108S is to inhibit further migration of PCE and TCE in the aquifer. As is the case for all Remedial Action wells, proper and consistent operation of EPA 108S is critical in maintaining plume capture and therefore downtime should be minimized.

In May 2016, EPA 108S failed and the equipment was subsequently removed in June 2016. EPA 108S was originally designed to include a variable drive motor to allow flexibility in production. This design has proven to be more cumbersome than effective since it requires more maintenance than a fixed drive and there is no need for variation in pump speed/flow. A specification for a new fixed speed well pump was developed by Department staff and Stantec Principal Hydrogeologist, Mark Eisen. The rehabilitation specification called for new pump, motor, column pipe, and miscellaneous ancillary material/equipment.

In December 2014, staff issued a Request for Qualifications (RFQ) under Specification No. 1640 – Well Rehabilitation Assessment and Repair. As a result, in February 2015, five (5) well rehabilitation contractors were prequalified based on work experience, minimum insurance requirements, proper contractor's license, bonding capacity, experience level, and adequate staffing. Staff recently requested proposals from these prequalified contractors to rehabilitate EPA 108S. Weber Water Resources (Weber) was responsive and provided the lowest quotation in the amount of \$72,528.01. A copy of Weber's proposal detailing scope and budget is attached for reference.

Stacey R. Aldstadt, General Manager

Page 2

July 21, 2016

**SUBJECT: APPROVAL OF EPA 108S WELL REHABILITATION BY WEBER
WATER RESOURCES**

FISCAL IMPACT:

Staff is recommending that this expenditure of \$72,528.01 be approved from existing funds in the Fiscal Year 2016/2017 Capital Budget under *Annual R/R – EPA Extraction Well (Muscoy)* with available funding of approximately \$165,000.00. Rehabilitation of EPA 108S is 100 percent reimbursable through the AIG commutation account.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

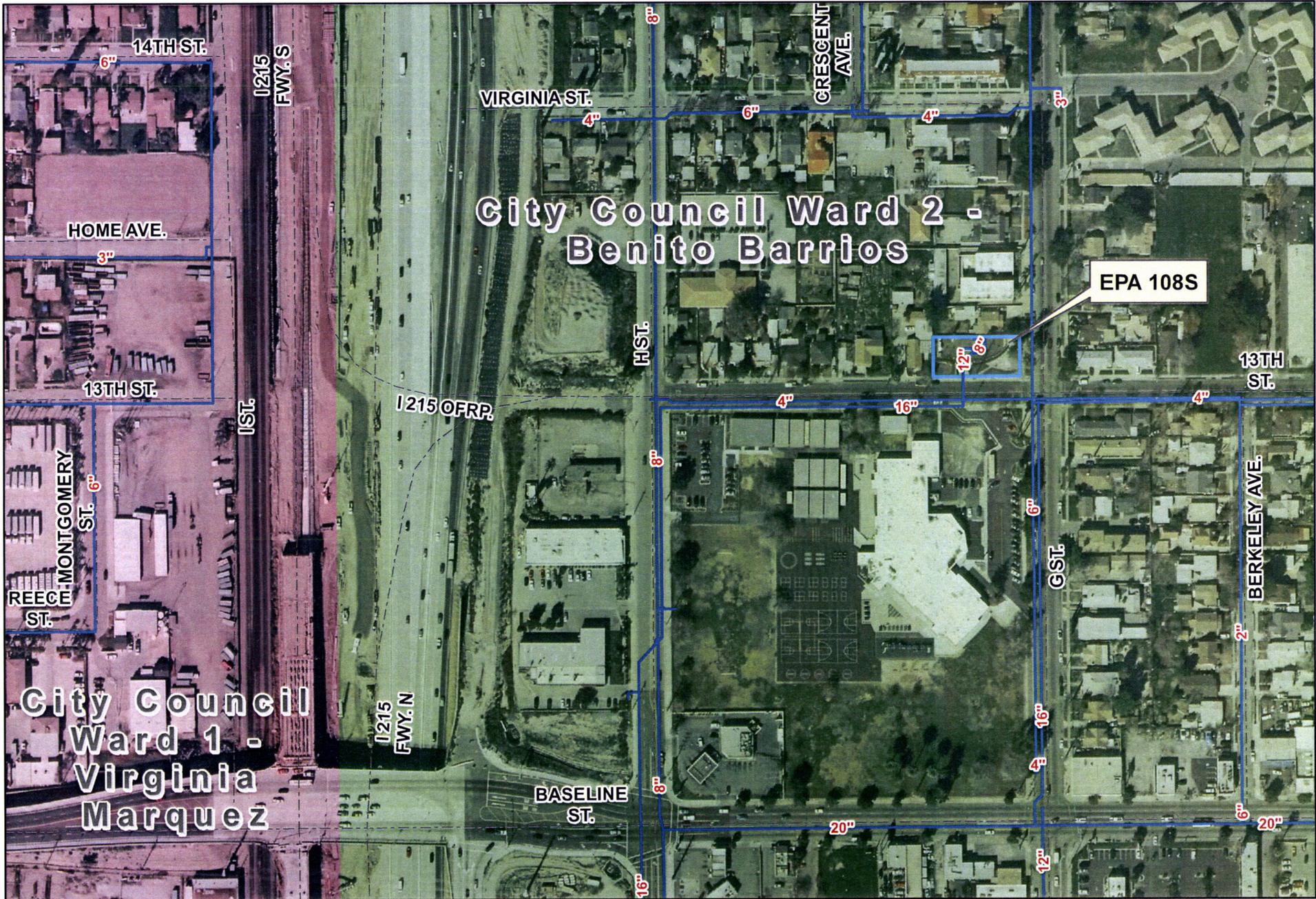
- **Approve the rehabilitation of EPA 108S by Weber Water Resources in the amount of \$72,528.01.**

Respectfully submitted,



Miguel J. Guerrero, P.E.
Director of Water Utility

MJG:swd
Attach.



SBMWD EPA WELL 108S





QUOTATION

Customer:	San Bernardino Municipal Water Department	From:	Tony McBee
Attention:	Mike Garland	Date:	7/19/2016
Phone:	(909) 384-5087	Phone:	909-519-2579
Fax:	(909) 384-5260	Project:	EPA Well 108S

Weber Water Resources is pleased to offer the following service for your review and consideration:

QTY.	DESCRIPTION	UNIT PRICE	TOTAL
30.00	Shop Labor: Pre-splice submersible power cable to motor lead and test; fabricate motor shroud; perform QC inspection of new materials and load for transport.	\$90.00	\$2,700.00
1.00	Pump Rig and Crew, Off Site Travel/Mobilization/Demobilization, Non-Prevailing Wage.	\$900.00	\$900.00
16.00	Pump Rig and Crew, On Site Prevailing Wage: Install well pump complete	\$425.00	\$6,800.00
1.00	Technician, Off Site Travel to, from site. Non-Prevailing Wage.	\$120.00	\$120.00
8.00	Technician, On Site, Prevailing Wage: Perform field start up of equipment.	\$160.00	\$1,280.00
		Subtotal for Labor	\$11,800.00
1.00	Submersible Bowl Assembly to provide 600GPM/539-Feet TDH. Note impeller material is aluminum bronze. Flowserve Model 10EMM-13 Stage	\$17,034.00	\$17,034.00
1.00	Submersible Motor, 125HP 460V 4-Pole (1800 Nominal RPM) 12-Inch Water Filled MFG: Submersible Motor Engineering	\$18,966.00	\$18,966.00
1.00	Motor Shroud Materials 14-Inch Schedule 10 PVC with stainless steel brackets and hardware.	\$975.00	\$975.00
22.00	Column Pipe, 8-Inch x 20-Foot NPT Threaded and Coupled, .277 wall	\$212.50	\$4,675.00
1.00	Column Pipe, 8-inch x 10-Foot NPT Threaded and Coupled, .277 wall	\$177.50	\$177.50
475.00	Submersible Cable, 4/0 3-Wire w/ ground, flat jacketed	\$20.14	\$9,566.50
1.00	Pipe Nipple, 8-Inch x 1-Foot NPT Threaded Both Ends, .277 wall	\$187.50	\$187.50
1.00	Check Valve, 8-Inch K & K Supply	\$812.50	\$812.50
1.00	Sounding Line, 1-Inch Flush Thread PVC x approx 460-feet	\$802.13	\$802.13
1.00	Airline, PVC Coated 304 Stainless Steel, 1/4 Inch x approx 460-feet w/ direct reading water level gage.	\$1,062.50	\$1,062.50
1.00	Miscellaneous Items and Supplies: Submersible Splice Materials (Compression connectors, epoxy heat shrink, tapes) Stainless Steel Banding and Buckles Misc Small Fittings, Fasteners and Hardware Gaskets (Base Flange and Pipe Flange - NAF/NSF)	\$718.75	\$718.75
1.00	Miscellaneous Freight and Shipping Charges	\$1,215.00	\$1,215.00
		Subtotal for Material	\$56,192.38



QUOTATION

QTY.	DESCRIPTION	UNIT PRICE	TOTAL
1.00	8.25% Tax on Materials (Optional Items Not Included)	\$4,535.63	\$4,535.63
Subtotal for Tax			\$4,535.63
TOTAL AMOUNT			\$72,528.01

OPTIONAL ITEMS

QTY.	DESCRIPTION	UNIT PRICE	TOTAL
1.00	Cable Tool Drill Rig, Travel/Mobilization/Demobilization, Off Site, Non-Prevailing Wage.	\$900.00	\$900.00
24.00	Cable Tool Drill Rig: On Site, Prevailing Wage: Brush and Bail. Includes tool make up, tear down, brush and bail well. 24 hours on site maximum.	\$400.00	\$9,600.00
1.00	Optional Labor: Haul-off and disposal of well spoils, including disposal fees. Estimated based on typical non-contaminated well spoils.	\$2,600.00	\$2,600.00
1.00	Optional Materials: Submersible Discharge Head, Steel Fabricated 8-inch	\$4,085.00	\$4,085.00

TERMS AND CONDITIONS

Terms net 10 days from date of Invoice
 Partial invoice to be generated at 30%, 60% and final completion.
 Quotation valid for 30 days
 1 year standard warranty from date of start up. Warranty does not cover acts of god, lubrication, aggregates (sand etc.), aeration, cavitations, customer supplied or used material
 Freight is FOB Jobsite
 All invoices are subject to a fuel surcharge
 Customer is responsible for all applicable sales tax
 Invoices will be based on quantities consumed
 Weber reserves the right to file 20 day preliminary lien notices on all projects
 Delinquent invoices will be charged an interest rate at the highest percentage rate available by law

Thank you for the opportunity to be of service. Please sign, date and return with P.O. number and we will proceed with project.

Best Regards,

Weber Water Resources
 909-519-2579

AUTHORIZED BY: _____ DATE: _____

TITLE: _____ PO NUMBER: _____

COMPANY: San Bernardino Municipal Water Department QUOTE NUMBER: _____

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**

JUL 25 2016

TO: Stacey R. Aldstadt, General Manager

FROM: Miguel J. Guerrero, P.E., Director of Water Utility

SUBJECT: **APPROVAL OF EPA 001 WELL REHABILITATION BY WEBER WATER RESOURCES**

DATE: July 21, 2016

COPIES: Robin Ohama (w/o attach), Terri Willoughby (w/o attach), Mike Garland (w/attach), Susan Justice (w/o attach), Sally Duran (w/attach)

BACKGROUND:

Extraction well EPA 001 is operated as part of the Newmark Operable Unit (OU) Remedial Action under the terms negotiated with the United States Environmental Protection Agency (USEPA). The purpose of EPA 001 is to inhibit further migration of PCE and TCE in the aquifer. As is the case for all Remedial Action wells, proper and consistent operation of EPA 001 is critical in maintaining plume capture and therefore downtime should be minimized.

In January 2016, EPA 001 failed and was temporarily repaired with the understanding that the temporary fix would not last more than six months. In June 2016, EPA 001 completely failed, and rather than to pull the equipment for assessment and rehabilitation, a complete new design was pursued. EPA 001 was originally designed to include a variable drive motor to allow flexibility in production. This design has proven to be more cumbersome than effective since it requires more maintenance than a fixed drive and there is no need for variation in pump speed/flow. A specification for a new fixed speed well pump was developed by Department staff and Stantec Principal Hydrogeologist, Mark Eisen. The rehabilitation specification called for new pump, motor, column pipe, and miscellaneous ancillary material/equipment.

In December 2014, staff issued a Request for Qualifications (RFQ) under Specification No. 1640 – Well Rehabilitation Assessment and Repair. As a result, in February 2015, five (5) well rehabilitation contractors were prequalified based on work experience, minimum insurance requirements, proper contractor's license, bonding capacity, experience level, and adequate staffing. Staff recently requested proposals from these prequalified contractors to rehabilitate EPA 001. Weber Water Resources (Weber) was responsive and provided the lowest quotation in the amount of \$127,509.67. A copy of Weber's proposal detailing scope and budget is attached for reference.

Stacey R. Aldstadt, General Manager

Page 2

July 21, 2016

SUBJECT: APPROVAL OF EPA 001 WELL REHABILITATION BY WEBER WATER RESOURCES

FISCAL IMPACT:

Staff is recommending that this expenditure of \$127,509.67 be approved from existing funds in the Fiscal Year 2016/2017 Capital Budget under *Annual R/R – EPA Extraction Well (Newmark)* with available funding of approximately \$240,000.00. Rehabilitation of EPA 001 is 100 percent reimbursable through the AIG commutation account.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

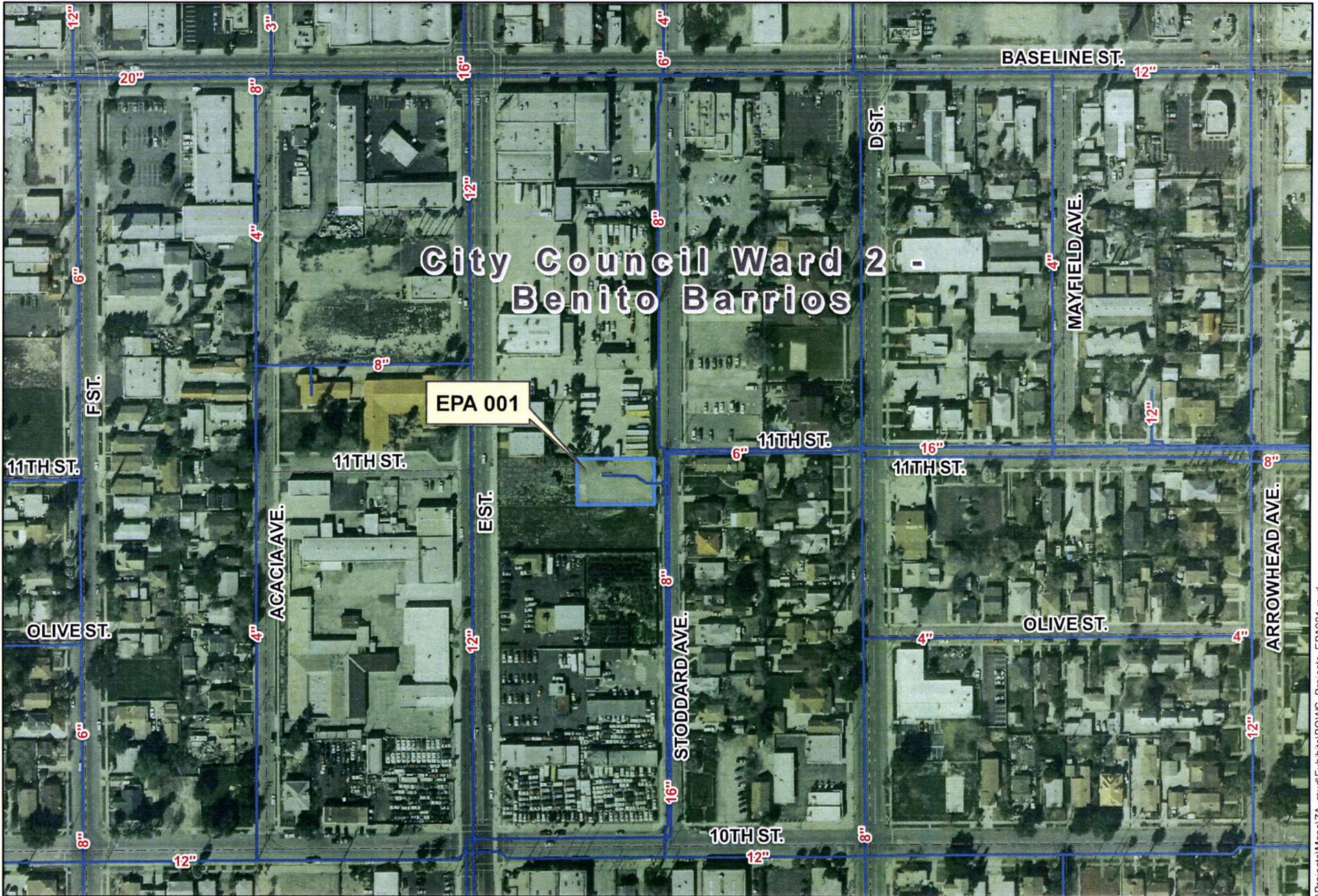
- **Approve the rehabilitation of EPA 001 by Weber Water Resources in the amount of \$127,509.67.**

Respectfully submitted,



Miguel J. Guerrero, P.E.
Director of Water Utility

MJG:swd
Attach.



SBMWD EPA WELL 001





QUOTATION

Customer:	San Bernardino Municipal Water Department	From:	Tony McBee
Attention:	Mike Garland	Date:	6/29/2016
Phone:	(909) 384-5087	Phone:	909-519-2579
Fax:	(909) 384-5260	Project:	EPA Well 001 - 1500 GPM

Weber Water Resources is pleased to offer the following service for your review and consideration:

QTY.	DESCRIPTION	UNIT PRICE	TOTAL
24.00	Shop Labor: Pre-splice submersible cable to motor lead and test. Perform QC inspection of new materials; load materials for transport.	\$90.00	\$2,160.00
2.00	Pump Rig and Crew: Off-site travel/mobilization/demobilization (pump removal and pump installation) Non-Prevailing Wage.	\$900.00	\$1,800.00
32.00	Pump Rig and Crew, On Site Prevailing Wage: Remove well pump complete. Install well pump complete.	\$425.00	\$13,600.00
1.00	Technician, Off Site Non-Prevailing Wage: Travel to, from site.	\$120.00	\$120.00
8.00	Technician, On Site, Prevailing Wage: Perform field start up of equipment.	\$160.00	\$1,280.00
		Subtotal for Labor	\$18,960.00
1.00	Submersible Bowl Assembly to provide 1500GPM/558-feet TDH with Aluminum Bronze Impellers, 12-inch motor bracket. Flowserve Model 13ETMH-7 Stage	\$20,893.00	\$20,893.00
1.00	Submersible Motor, 300HP 460V, 4-Pole (1800 nominal RPM) 12-Inch Water Filled Heat Exchanger MFG: Submersible Motor Engineering	\$35,071.00	\$35,071.00
400.00	Submersible Pump Cable, 500 MCM 3-Wire w/Ground, Flat Jacketed	\$58.08	\$23,232.00
18.00	Column Pipe, 10-inch x 20-foot NPT Threaded and Coupled Note: Pipe is standard column pipe wall thickness .279 wall	\$393.75	\$7,087.50
1.00	Column Nipple, 10-inch x 1-foot Threaded Both Ends, .279 wall (pump bowl/check valve connection)	\$150.00	\$150.00
1.00	Check Valve, 10-inch K & K Supply	\$1,106.25	\$1,106.25
1.00	Airline, PVC coated 304 stainless steel, 1/4-inch x 400-feet w/ direct reading gage	\$968.75	\$968.75
1.00	Sounding Pipe, 1-inch PVC x approximately 365-feet	\$645.19	\$645.19
1.00	Miscellaneous Items, Installation Materials: Submersible Splicing Materials (Compression connectors, epoxy heat shrink, tapes, compounds) Stainless Steel Banding and Buckles Misc Small Fittings, Fasteners and Hardware Gaskets (Base Flange, Pipe Flange - NAF/NSF)	\$2,968.75	\$2,968.75
1.00	Miscellaneous Freight and Shipping Charges on Materials	\$1,250.00	\$1,250.00
		Subtotal for Material	\$93,372.44
1.00	8.25% Tax on Materials (Optional Items Not Included)	\$7,703.23	\$7,703.23
		Subtotal for Tax	\$7,703.23



QUOTATION

	TOTAL AMOUNT	\$120,035.67
--	---------------------	---------------------

OPTIONAL ITEMS			
QTY.	DESCRIPTION	UNIT PRICE	TOTAL
1.00	Labor and Equipment EPA Well 1: Optional load, haul-off and disposal of pump materials removed from well.	\$1,584.00	\$1,584.00
1.00	Optional Submersible Surface Discharge Head, Steel Fabricated 10-inch	\$5,890.00	\$5,890.00

TERMS AND CONDITIONS

Terms net 10 days from date of Invoice
 Partial invoice to be generated at 30%, 60% and final completion.
 Quotation valid for 30 days
 1 year standard warranty from date of start up. Warranty does not cover acts of god, lubrication, aggregates (sand etc.),
 aeration, cavitations, customer supplied or used material
 Freight is FOB Jobsite
 All invoices are subject to a fuel surcharge
 Customer is responsible for all applicable sales tax
 Invoices will be based on quantities consumed
 Weber reserves the right to file 20 day preliminary lien notices on all projects
 Delinquent invoices will be charged an interest rate at the highest percentage rate available by law

Thank you for the opportunity to be of service. Please sign, date and return with P.O. number and we will proceed with project.

Best Regards,

Weber Water Resources
909-519-2579

AUTHORIZED BY: _____	DATE: _____	_____
TITLE: _____	PO NUMBER: _____	_____
COMPANY: <u>San Bernardino Municipal Water Department</u>	QUOTE NUMBER: _____	_____

Customer : FLOWERVE PUMP DIV...
 Item number : -
 Service : SBMWD Submersible
 Flowserve reference : 504585485
 Date : June 1, 2016

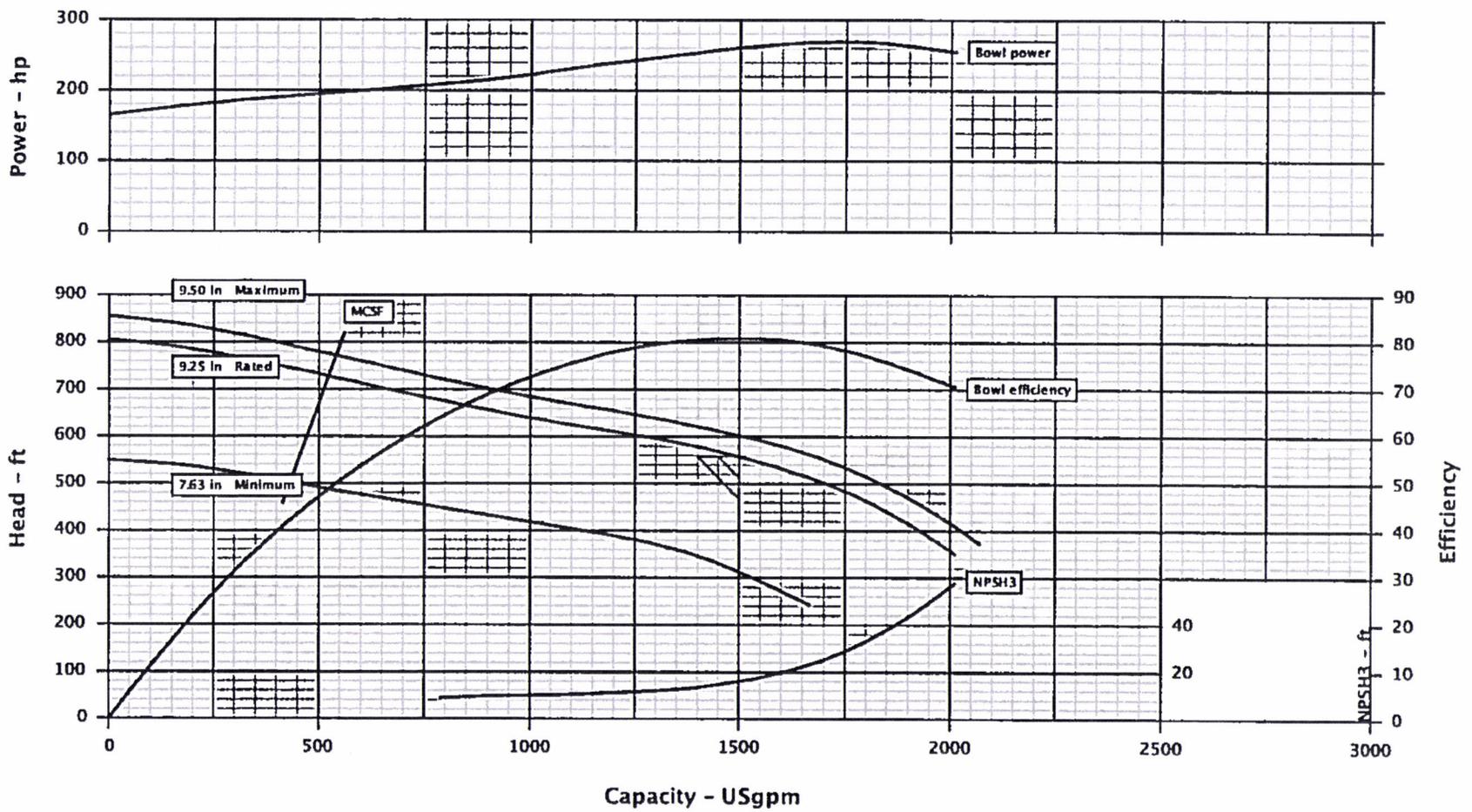


Pump size & type : 13ETMH
 Based on curve no. : 88376551
 Number of stages : 7
 Test tolerance : ANSI/HI 14.6 Grade 1B

Capacity : 1,500.0 USgpm Specific gravity : 1.000
 Head : 558.00 ft Pump speed : 1750 rpm

CURVES ARE APPROXIMATE. PUMP IS GUARANTEED FOR ONE SET OF CONDITIONS, CAPACITY, HEAD, AND EFFICIENCY

Bowl performance shown below is corrected for materials, viscosity and construction.



Bowl head of 558.78 ft corresponds with 558 ft head at low liquid level adjusted for elevation and friction losses.



MOTOR PERFORMANCE DATA

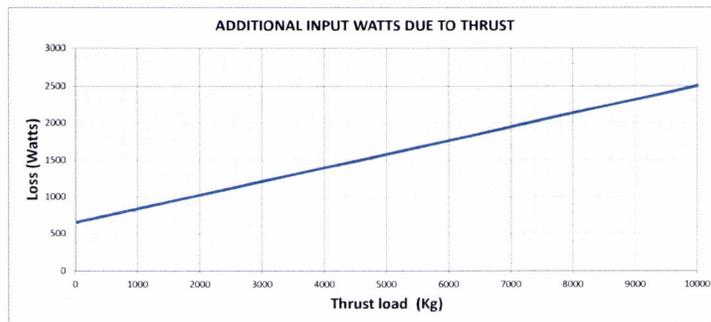
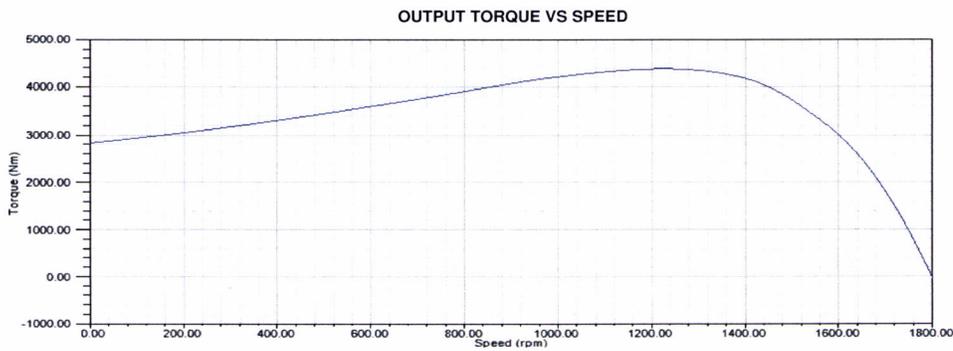
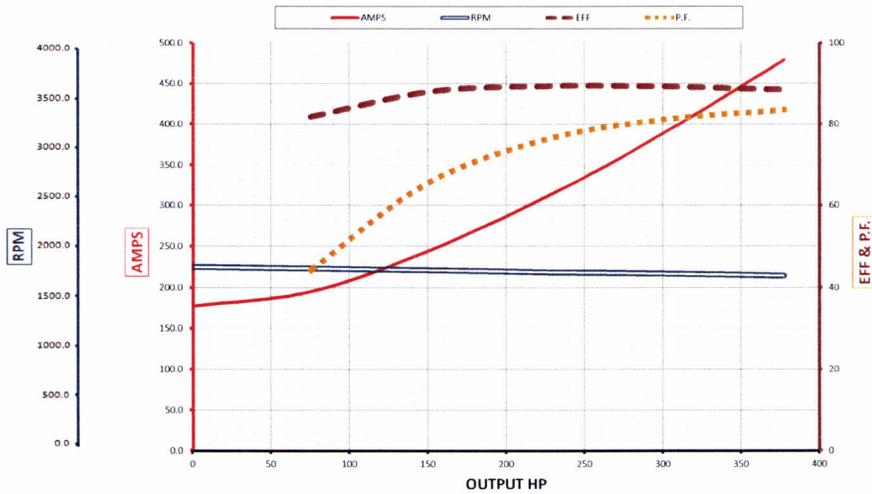
Model: **12" 4P Submersible Motor**

WATER	Type	300	HP
3	Phase	460	Volt
1.15	S.F.	30Deg.C	Max.Amb.Water

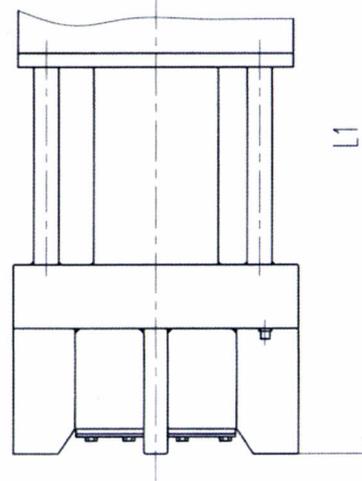
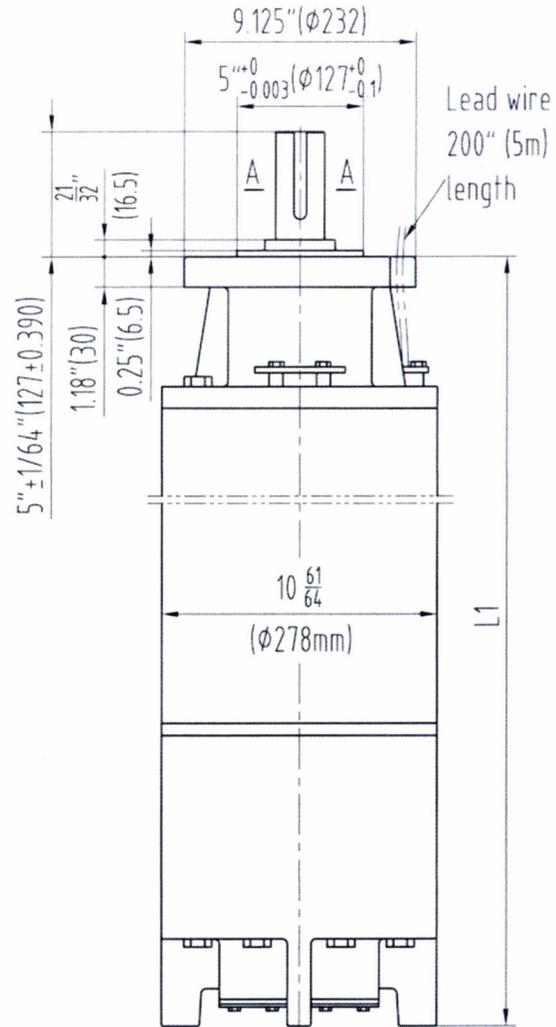
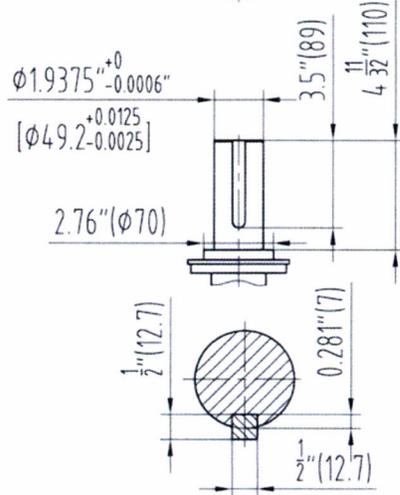
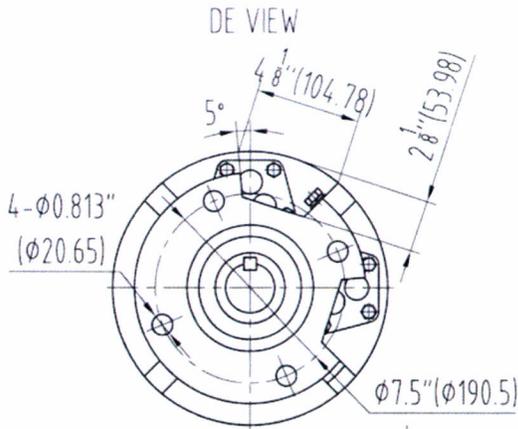
391	AMPS
1735	RPM
60	Hertz
4540	Kg Thrust Load

Date:	1/07/2014
300	HP
1735	RPM
1300	mm Stack

			Load	KW out	HP	KW in	EFF	P.F.	RPM	AMPS
Full Load Torque	1233	Nm	No Load	0	0	10	0	0.07	1800	177.1
Break Down Torque	4370	Nm	25%	56	75	69	81.8	0.44	1785	195.3
Locked Rotor Torque	2826	Nm	50%	113	151	128	88.0	0.66	1770	244.8
Locked Rotor Current	2343	Amps	75%	169	226	189	89.3	0.76	1750	311.2
Winding Resistance	0.03	Ohms	100%	225	302	252	89.2	0.81	1735	390.5
Weight (With Water)	950	Kg (Approximate)	125%	281	377	318	88.5	0.83	1715	478.7



12" MOTOR DIMENSIONS



HEAT EXCHANGER MOTOR (HE)

Output				Phase	Stack Length	L1			
50Hz		60Hz				STANDARD	HE		
HP	kW	HP	kW		mm	inch	mm	inch	mm
300	224	350	261	2P	1050	78.50	1994	112.3	2852
350	261	400	300		1200	84.41	2144	118.2	3002
400	300	480	360		1300	88.35	2244	122.1	3102
		100	75	4P	480	54.29	1379	88.07	2237
100	75	125	93		600	59.02	1499	92.80	2357
125	93	150	112		720	63.74	1619	97.52	2477
150	112	175	130		870	69.65	1769	103.43	2627
175	130	200	150		980	73.98	1879	107.76	2737
200	150	225	168		1100	78.70	1999	112.48	2857
225	168	250	186		1200	82.64	2099	116.42	2957
250	186	300	225		1300	86.57	2199	120.35	3057



**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**BOARD OF WATER COMMISSIONERS
STAFF REPORT**

JUL 18 2016

TO: Stacey R. Aldstadt, General Manager

FROM: Miguel J. Guerrero, P.E.

SUBJECT: PUBLIC HEARING AND APPROVAL BY THE BOARD OF WATER COMMISSIONERS FOR THE 2016 PUBLIC HEALTH GOALS IN COMPLIANCE WITH SECTION 116470 OF THE HEALTH AND SAFETY CODE

DATE: July 20, 2016

COPIES: Robin Ohama (w/o attach), Jennifer Shepardson (w/o attach), Mike Garland (w/o attach), Con Arrieta (w/o attach)

BACKGROUND:

On July 5, 2016, the Board of Water Commissioners scheduled a Public Hearing date for August 2, 2016 at 9:30 a.m. in the Water Department Board Room located at 399 Chandler Place, San Bernardino, California. The Public Hearing involves the 2016 Water Quality Public Health Goals (PHG) concerning our city water system, in accordance with the California Health and Safety Code, Section 116470 (2)(b).

The purpose of the public hearing is to accept and respond to public comments from water consumers about the PHG report (attached). The drinking water served to the City of San Bernardino residents by the Water Department meets all state and federal drinking water standards set to protect public health. Therefore, staff recommends that the Board approve the staff report with no additional action proposed at this time.

Copies of our report and laboratory test results have been available to the public at the Water Department's Customer Service Office, located at 300 North "D" Street, 5th Floor of City Hall, Monday through Thursday, 7:30 a.m. to 5:30 p.m. and Fridays, 7:30 a.m. to 4:30 p.m. since July 1, 2016. The report indicates what PHG's were exceeded, what health risks are associated with the exceedances, and what is the cost of the best treatment technology available.

Stacey R. Aldstadt, General Manager

Page 2

July 20, 2016

SUBJECT: PUBLIC HEARING AND APPROVAL BY THE BOARD OF WATER COMMISSIONERS FOR THE 2016 PUBLIC HEALTH GOALS IN COMPLIANCE WITH SECTION 116470 OF THE HEALTH AND SAFETY CODE

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners make the following motion:

Open the Public Hearing and, subsequent to receiving and responding to any comments on the Public Health Goals concerning our city water system, that the hearing be closed and the staff report approved with no action at this time.

Respectfully submitted,



Miguel J. Guerrero, P.E.
Director, Water Utility

MJG:swd
Attach.

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**REPORT ON
WATER QUALITY RELATIVE TO PUBLIC HEALTH GOALS**



**REPORT PREPARED BY
CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

JULY 1, 2016

Report Prepared Under Supervision:

**Miguel J. Guerrero, P.E.
Director, Water Utility**

EXECUTIVE SUMMARY:

The City of San Bernardino Municipal Water Department (SBMWD) meets or exceeds all United States Environmental Protection Agency (USEPA) and State Water Resources Control Board, Division of Drinking Water (SWRCB) standards. These two agencies govern the water quality of public drinking water systems.

For the purposes of this report, the amounts of contaminants in drinking water fall into two categories: one category involves "Maximum Contaminant Level" (MCL), which is the regulatory definition of what is considered "safe" and the criterion used to determine a water system's compliance; the other is a "Public Health Goal" (PHG). Unlike an MCL that demands corrective procedures, a PHG is a non-enforceable drinking water quality goal set by the California Office of Environmental Health Hazard Assessment (OEHHA), and is not required to be met by any public water system. A Maximum Contaminant Level Goal (MCLG) is the federal equivalent to a state PHG.

This report emphasizes the following three important realities of drinking water safety:

1. SBMWD water is in full compliance with existing drinking water quality standards.
2. There can be significant costs per resident and technology limitations associated with water treatment to reduce constituents to meet PHG or MCLG levels.
3. No public water supply can meet all PHG and MCLG levels. SBMWD routinely monitors its water supplies for over 250 constituents and contaminants, of which, 115 have enforceable standards. For calendar years 2013 through 2015 only 6 of the 250 contaminants were detected above PHG or MCLG levels in the City's water supply. All were at levels far below enforceable drinking water standards.

BACKGROUND:

Provisions of the California Health and Safety Code (Reference No. 1) specify that larger (>10,000 service connections) water utilities prepare a special report by July 1, 2016, if their water quality measurements have exceeded any PHGs. PHGs are non-enforceable goals established by the CAL-EPA's Office of Environmental Health Hazard Assessment (OEHHA). The law also requires that where OEHHA has not adopted a PHG for a constituent, water suppliers are to use the MCLGs adopted by USEPA. Only constituents which have a California Primary Drinking Water Standard and for which either a PHG or MCLG has been set are to be addressed. Reference No. 2 is a list of all regulated constituents with an MCL and PHG or MCLG.

There are a few constituents that are routinely detected in water systems at levels usually well below the drinking water standards for which no PHG or MCLG has been adopted by OEHHA or USEPA, including Total Trihalomethanes. These will be addressed in a future report after a PHG or MCLG has been adopted.

If a constituent was detected in SBMWD's water supply in 2013, 2014, or 2015 at a level exceeding an applicable PHG or MCLG, this report provides the information required by law as follows:

- List of constituent MCL, PHG or MCLG exceeded during the reporting period.
- The numerical public health risk associated with the MCL, PHG or MCLG.
- The category or type of risk to health that could be associated with each constituent.
- The best treatment technology available that could be used to reduce the constituent level.
- An estimate of the cost to install that treatment if it is appropriate and feasible.

WHAT ARE PHGs?

PHGs are set by the OEHHA, which is part of CAL-EPA, and are based solely on public health risk considerations. None of the practical risk management factors that are considered by the USEPA or the SWRCB in setting drinking water standards (MCL) are considered in setting PHGs. These factors include analytical detection capability, treatment technology available, benefits, and costs. The PHGs are not enforceable and are not required to be met by any public water system. MCLGs are the federal equivalent to PHGs.

WATER QUALITY DATA CONSIDERED:

All of the water quality data collected by the Department from 2013-2015 or the last sample taken during the previous three-year period (2013-2015), for purposes of determining compliance with drinking water standards, was considered. This data has also been summarized in the SBMWD's 2013, 2014, and 2015 Annual Consumer Confidence Reports (CCR).

GUIDELINES FOLLOWED:

The Association of California Water Agencies (ACWA) formed a workgroup which prepared guidelines for water utilities to use in preparing these required reports. The ACWA guidelines were used in the preparation of our report. No guidance was available from state regulatory agencies.

BEST AVAILABLE TREATMENT TECHNOLOGY AND COST ESTIMATES:

Both the USEPA and SWRCB adopt what are known as BATs, or Best Available Technologies, which are the best known methods of reducing contaminant levels below the MCL. Costs can be estimated for such technologies. However, since many PHGs

and all MCLGs are set much lower than the MCL, it is not always possible or feasible to determine what treatment is needed to further reduce a constituent to or near the PHG or MCLG, many of which are set at zero. Estimating the costs to reduce a constituent to zero is difficult, if not impossible, because it is not possible to verify by analytical means that the level has been lowered to zero. In some cases, installing treatment to try and further reduce very low levels of one constituent may have adverse effects on other aspects of water quality.

CONSTITUENTS DETECTED THAT EXCEED A PHG OR A MCLG:

The following is a discussion of the constituents that were detected in one or more of SBMWD's drinking water sources and distribution system at levels above the PHG, or, if no PHG exist, above the MCLG.

Arsenic

Arsenic is a naturally occurring metalloid element found in the earth's crust. It is widely distributed and commonly associated with ores of metals like copper, lead, and gold. Arsenic is present in all sources of water. It has generally been assumed that surface waters, including the sea are "self-purifying" with respect to arsenic, i.e., that the arsenic is removed from solution by deposition with sediments.

Arsenic has been detected at levels ranging from non - detect (ND) to 6.8 ug/L in four groundwater wells supplying SBMWD's water system. The MCL for arsenic is 10.0 ug/L, while the PHG is 0.004 ug/L or 0.004 parts per billion (ppb). The levels detected in SBMWD wells were never above the MCL, but are over the level identified by OEHHA as the PHG.

The numerical health risk for arsenic is 1×10^{-6} (1 per million). This is set at a level considered to pose no significant risk of cancer; this is usually a no more than one-in-a-million excess cancer risk level for a life time of exposure at the PHG. The category of health risk associated from ingestion of arsenic is identified by OEHHA as carcinogenicity, capable of producing cancer.

The best available technology identified to lower arsenic is reverse osmosis (RO). The most effective treatment system would be to use RO at the four wells that exceed the 0.004 ug/L PHG. The annualized capital and operation and maintenance costs are estimated at \$12,382,715. The estimated cost per water service customer per year is \$281.43. This is an estimate based on the expected annual production from the four wells. Because these wells are not centrally located and cannot produce into one treatment plant, the cost to construct and operate four individual RO plants could easily become far more expensive than the estimate above. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment.

Coliform Bacteria:

Coliform bacteria are an indicator organism that are ubiquitous in nature and are not generally considered harmful. They are used because of the ease in monitoring and analysis. If a positive sample is found, it indicates a potential problem that needs to be investigated and follow-up sampling taken. It is not at all unusual for a system to have an occasional positive sample. It is difficult, if not impossible, to assure that a system will never get a positive sample.

During 2013, 2014, and 2015 SBMWD collected between 275 and 281 distribution system samples each month for coliform analysis. Occasionally, a sample was found to be positive for coliform bacteria and all re-check samples were negative. A maximum of 0.7% of these samples were positive in any one month.

The MCL for coliform is 5% positive samples of all samples per month and the MCLG is zero. The reason for the coliform drinking water standard is to minimize the possibility of the water containing pathogens which are organisms that cause waterborne disease.

Because coliform is only a surrogate indicator of the potential presence of pathogens, it is not possible to state a specific numerical health risk. While USEPA normally sets an MCLG "at a level where no known or anticipated adverse effects on persons would occur", they indicate that they cannot do so with coliforms.

SBMWD has already taken all of the steps described by SWRCB as "best available technology" for coliform bacteria in California Code of Regulations (CCR), Title 22, Section 64447.

Steps include the addition of disinfectant chlorine at all sources to assure that the water served is microbiologically safe. The chlorine residual levels are carefully controlled to provide the best health protection without causing the water to have undesirable taste and odor or increasing the disinfection byproduct levels. This careful balance of treatment processes is essential to continue supplying our customers with safe drinking water.

Other equally important measures that SBMWD has implemented into its operation and maintenance routine include: an effective cross-connection control program, maintenance of a disinfectant residual throughout the distribution system, proper steps taken when pipeline repairs are made, an effective monitoring, and surveillance program and maintaining positive pressures in our distribution system.

Fluoride:

Fluoride is one of the most plentiful elements on earth, and it occurs naturally in water supplies throughout California and elsewhere. When fluoride is present in drinking water at optimal levels, it has been shown to promote oral health by preventing tooth decay. Water systems are considered naturally fluoridated when the natural level of fluoride is greater than 0.7 mg/L or 0.7 parts per million (ppm).

Fluoride has been detected at levels ranging from 0.3 to 1.7 mg/L in groundwater wells supplying the Department's water system. The MCL for fluoride is 2.0 mg/L, while the PHG is 1.0 mg/L. The levels detected in our system were never above the MCL, but are over the level identified by OEHHA as the PHG.

The numerical public health risk associated with the fluoride PHG is presently undetermined. The category of health risk associated from ingestion of fluoride is musculoskeletal toxicity (causes tooth mottling).

The best available technology identified to treat fluoride is reverse osmosis (RO). The most effective and economical treatment system would be to use RO treatment at the five wells exceeding the 1.0 mg/L PHG. The annualized capital and operation and maintenance costs are estimated at \$14,457,490. The estimated cost per water service customer per year is \$328.58. However, these exceedance values are based on source monitoring and are not representative of the water in the distribution system. SBMWD conducted distribution entry point sampling in 2000, and data based on actual water delivered to the customer in the distribution system lowers the level of fluoride to well below the 1.0 mg/L PHG set by OHHEA. Based on this information, the money that would be required for these additional treatment processes might provide greater public health protection benefits if spent on other water system operation, surveillance, and/or monitoring programs.

The Department collected source water samples for fluoride in July 2014 for regulatory compliance with Title 22. Levels have remained consistent and there have been no significant operational changes since the last PHG report, negating any need for additional distribution system monitoring.

Hexavalent Chromium:

Hexavalent chromium, also known as chromium 6, is a heavy metal that is commonly found at low levels in drinking water. It can occur naturally but can also enter drinking water sources by historic leaks from industrial plants' hazardous waste sites. Various other sources also contribute to the amount of hexavalent chromium in groundwater. Chromium 6 is known to be a potent carcinogen when inhaled. It was recently found to also cause cancer in laboratory mice and rats that were exposed through drinking water.

The PHG for hexavalent chromium is 0.02 ug/L or 0.02 ppb. The drinking water standard or MCL for hexavalent chromium is 10 ug/L. When all SBMWD wells were sampled during calendar years 2013 through 2015, hexavalent chromium was detected above the PHG at 25 of them. The levels of hexavalent chromium ranged from ND to 3.6 ug/L, all below the hexavalent chromium MCL.

The numerical health risk for this PHG is 1×10^{-6} . This is set at a level considered to pose no significant risk of cancer; this is usually a no more than one-in-a-million excess cancer

risk (1×10^{-6}) level for a life time of exposure at the PHG. The category of health risk associated with hexavalent chromium is carcinogenicity, capable of producing cancer.

The best available technology to lower the Hexavalent Chromium level to the PHG (0.02 ug/L) would be reverse osmosis (RO) at the 25 groundwater wells sampled during this reporting period. The annualized capital and operation and maintenance costs to install multiple RO treatment systems is estimated at \$30,717,956 to theoretically reduce the Hexavalent Chromium levels to less than 0.02 ug/L. The estimated cost per water service customer per year would be \$698.14.

Gross Alpha:

Gross Alpha is used as a screening tool by which to measure radioactive isotopes in drinking water. In practice, if the screening levels are exceeded, then additional analyses are performed to determine specific radioisotope levels in the drinking water sample such as Uranium.

Gross Alpha activity has been detected above the MCLG of zero (0) at levels ranging from 1.6 to 5.0 pCi/L in 23 of SBMWD's groundwater wells that were monitored in 2013, 2014, and 2015. The MCL for Gross Alpha is 15 pCi/L. The levels detected were below the MCL at all times.

The numerical health risk data for Gross Alpha is zero (0) at the MCLG. The category of health risk associated from ingestion of Gross Alpha is identified by OEHHA as carcinogenicity, capable of producing cancer.

The best available technology to lower the Gross Alpha particle activity level to the loosely defined theoretical MCLG of zero (0) would be reverse osmosis (RO) at the 23 groundwater wells sampled during this reporting period. The annualized capital and operation and maintenance costs to install multiple RO treatment systems is estimated at \$15,512,390 to reduce the Gross Alpha levels to a theoretical level of less than 0 pCi/L. The estimated cost per water service customer per year would be \$352.55.

It is important to note that all of SBMWD's 55 active wells have measured some level of Gross Alpha activity that are not required to be taken into consideration in this reporting period. As with the 23 wells taken into consideration, the majority of the remaining wells do not pump into a centrally located treatment plant, increasing the cost of treatment exponentially from the estimate above.

When considering treatment to lower Gross Alpha, it needs to be emphasized that Gross Alpha is a screening tool only. Further analysis would have to be conducted to identify which in the group of radionuclides make up the gross alpha particle level in order to design effective treatment systems.

Tetrachloroethylene (PCE)

PCE has been detected above the PHG at levels ranging from ND to 4.4 ug/L in four of the Department's groundwater wells supplying water to the distribution system. The MCL for PCE is 5.0 ug/L. The levels detected were below the MCL at all times. The PHG for PCE is 0.06 ug/L.

The numerical health risk for PCE is 1×10^{-6} at the PHG. This is set at a level considered to pose no significant risk of cancer; this is considered a no more than one-in-a-million excess cancer risk level for a life time of exposure. The health risk associated from ingestion of PCE is identified by OEHHA as carcinogenicity, capable of producing cancer.

The best available technology to lower the level of PCE below its respective MCL is either granular activated carbon (GAC) or packed tower aeration (PTA). Since the PCE levels in the Department's 10th and J Street, 27th and Acacia Street (this well is currently being blended), Olive and Garner, and Mill & "D" Street groundwater wells are already below the MCL, GAC with a long, empty-bed, contact time would likely be required to lower the PCE levels to less than the PHG set at 0.06 ug/L. The annualized capital and operation and maintenance costs to install GAC treatment systems is estimated at \$5,232,284 to reduce the PCE levels to less than 0.06 ug/L. The estimated cost per water service customer per year is \$118.92.

It should be noted and taken into consideration that these wells are not centrally located and cannot produce into one treatment plant; the cost to construct and operate four individual GAC plants could easily become far more expensive than the estimate above. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment.

RECOMMENDATIONS FOR FURTHER ACTION:

The drinking water quality of SBMWD meets all State of California, Regional Water Quality Control Board, Division of Drinking Water, and USEPA drinking water standards set to protect public health. To further reduce the levels of the constituents identified in this report that are already significantly below the health-based MCLs established to provide "safe drinking water", additional costly treatment processes would be required. The effectiveness of the treatment processes to provide any significant reductions in constituent levels at these already low values is uncertain. The health protection benefits of these hypothetical reductions are not at all clear and may not be quantifiable. Therefore, no action is proposed at this time.

REFERENCES:

- No. 1 Excerpt from California Health & Safety Code: Section 116470 (b).
- No. 2 Table of Regulated Constituents with MCLs, PHGs or MCLGs.
- No. 3 City of San Bernardino Municipal Water Department's 2013, 2014, and 2015 Consumer Confidence Reports.

ATTACHMENTS:

- No. 1 Exceedance Summary
- No. 2 Treatment Cost Summary

REFERENCE NO. 1

HEALTH AND SAFETY CODE

Section 116470. (b)

- (b) On or before July 1, 1998, and every three years thereafter, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, shall prepare a brief written report in plain language that does all of the following:
- (1) Identifies each contaminant detected in drinking water that exceeds the applicable public health goal.
 - (2) Discloses the numerical public health risk, determined by the office, associated with the maximum contaminant level for each contaminant identified in paragraph (1) and the numerical public health risk determined by the office associated with the public health goal for that contaminant.
 - (3) Identifies the category of risk to public health, including, but not limited to, carcinogenic, mutagenic, teratogenic, and acute toxicity, associated with exposure to the contaminant in drinking water, and includes a brief, plainly- worded description of these terms.
 - (4) Describes the best available technology, if any is then available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant. The public water system may, solely on its own discretion, briefly describe actions that have been taken on its own, or by other entities, to prevent the introduction of the contaminant into drinking water supplies.
 - (5) Estimates the aggregate cost and the cost per customer of utilizing the technology described in paragraph (4), if any, to reduce the concentration of that contaminant in drinking water to a level at or below the public health goal.
 - (6) Briefly describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision.
- (c) Public water systems required to prepare a report pursuant to subdivision (b) shall hold a public hearing for the purpose of accepting and responding to public comment on the report. Public water systems may hold the public hearing as part of any regularly scheduled meeting.

- (d) The department shall not require a public water system to take any action to reduce or eliminate any exceedance of a public health goal.
- (e) Enforcement of this section does not require the department to amend a public water system's operating permit.
- (f) Pending adoption of a public health goal by the Office of Environmental Health Hazard Assessment pursuant to subdivision (c) of Section 116365, and in lieu thereof, public water systems shall use the national maximum contaminant level goal adopted by the United States Environmental Protection Agency for the corresponding contaminant for purposes of complying with the notice and hearing requirements of this section.
- (g) This section is intended to provide an alternative form for the federally required consumer confidence report as authorized by 42 U.S.C. Section 300g-3(c).

REFERENCE NO. 2

2016 PHG Triennial Report: Calendar Years 2013-2014-2015				
MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants (Units are in milligrams per liter (mg/L), unless otherwise noted.) Last Update: December 31, 2015 (Reference last update 07/2015: http://www.waterboards.ca.gov/dwqs/contaminants/contaminants.cfm)				
This table includes:				
<ul style="list-style-type: none"> • DDW's maximum contaminant levels (MCLs) • DDW's detection limits for purposes of reporting (DLRs) • Public health goals (PHGs) from the Office of Environmental Health Hazard Assessment (OEHHA) • PHGs for NDMA and 1,2,3-Trichloropropane (both are unregulated) are at the bottom of this table • The federal MCLG for chemicals without a PHG, microbial contaminants, and the DLR for 1,2,3-TCP 				
Constituent	MCL	DLR	PHG or (MCLG)	Date of PHG
Chemicals with MCLs in 22 CCR §64431 -- Inorganic Chemicals				
Aluminum	1	0.05	0.6	2001
Antimony	0.006	0.006	0.02	1997
Antimony	--	--	0.0007	2009 draft
Arsenic	0.010	0.002	0.000004	2004
Asbestos (MFL = million fibers per liter; for fibers >10 microns long)	7 MFL	0.2 MFL	7 MFL	2003
Barium	1	0.1	2	2003
Beryllium	0.004	0.001	0.001	2003
Cadmium	0.005	0.001	0.00004	2006
Chromium, Total - OEHHA withdrew the 1999 0.0025 mg/L PHG in Nov 2001	0.05	0.01	(0.100)	
Chromium, Hexavalent (Chromium-6)	0.01	0.001	0.00002	2011
Cyanide	0.15	0.1	0.15	1997
Fluoride	2	0.1	1	1997
Mercury (inorganic)	0.002	0.001	0.0012	1999 (rev2005)*
Nickel	0.1	0.01	0.012	2001
Nitrate (as N)	10 as N	0.4	45 as NO3 (=10 as N)	1997
Nitrite (as N)	1 as N	0.4	1 as N	1997
Nitrate + Nitrite (as N)	10 as N	0.4	10 as N	1997
Perchlorate	0.006	0.004	0.001	2015
Selenium	0.05	0.005	0.03	2010
Thallium	0.002	0.001	0.0001	1999 (rev2004)
Copper and Lead, 22 CCR §64672.3				
Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called "Action Levels" under the lead and copper rule				
Copper	1.3	0.05	0.3	2008
Lead	0.015	0.005	0.0002	2009

REFERENCE NO. 2

Constituent	MCL	DLR	PHG or (MCLG)	Date of PHG
Radionuclides with MCLs in 22 CCR §64441 and §64443—Radioactivity				
[units are picocuries per liter (pCi/L), unless otherwise stated; n/a = not applicable]				
Gross alpha particle activity - OEHHA concluded in 2003 that a PHG was not practical	15	3	(zero)	n/a
Gross beta particle activity - OEHHA concluded in 2003 that a PHG was not practical	4 mrem/yr	4	(zero)	n/a
Radium-226	--	1	0.05	2006
Radium-228	--	1	0.019	2006
Radium-226 + Radium-228	5	--	(zero)	--
Strontium-90	8	2	0.35	2006
Tritium	20,000	1,000	400	2006
Uranium	20	1	0.43	2001
Chemicals with MCLs in 22 CCR §64444—Organic Chemicals				
(a) Volatile Organic Chemicals (VOCs)				
Benzene	0.001	0.0005	0.00015	2001
Carbon tetrachloride	0.0005	0.0005	0.0001	2000
1,2-Dichlorobenzene	0.6	0.0005	0.6	1997 (rev2009)
1,4-Dichlorobenzene (p-DCB)	0.005	0.0005	0.006	1997
1,1-Dichloroethane (1,1-DCA)	0.005	0.0005	0.003	2003
1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004	1999 (rev2005)
1,1-Dichloroethylene (1,1-DCE)	0.006	0.0005	0.01	1999
cis-1,2-Dichloroethylene	0.006	0.0005	0.1	2006
trans-1,2-Dichloroethylene	0.01	0.0005	0.06	2006
Dichloromethane (Methylene chloride)	0.005	0.0005	0.004	2000
1,2-Dichloropropane	0.005	0.0005	0.0005	1999
1,3-Dichloropropene	0.0005	0.0005	0.0002	1999 (rev2006)
Ethylbenzene	0.3	0.0005	0.3	1997
Methyl tertiary butyl ether (MTBE)	0.013	0.003	0.013	1999
Monochlorobenzene	0.07	0.0005	0.07	2014
Styrene	0.1	0.0005	0.0005	2010
1,1,2,2-Tetrachloroethane	0.001	0.0005	0.0001	2003
Tetrachloroethylene (PCE)	0.005	0.0005	0.00006	2001
Toluene	0.15	0.0005	0.15	1999
1,2,4-Trichlorobenzene	0.005	0.0005	0.005	1999
1,1,1-Trichloroethane (1,1,1-TCA)	0.2	0.0005	1	2006
1,1,2-Trichloroethane (1,1,2-TCA)	0.005	0.0005	0.0003	2006
Trichloroethylene (TCE)	0.005	0.0005	0.0017	2009
Trichlorofluoromethane (Freon 11)	0.15	0.005	1.3	2014
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.2	0.01	4	1997 (rev2011)
Vinyl chloride	0.0005	0.0005	0.00005	2000
Xylenes	1.75	0.0005	1.8	1997

REFERENCE NO. 2

Constituent	MCL	DLR	PHG or (MCLG)	Date of PHG
Chemicals with MCLs in 22 CCR §64533—Disinfection Byproducts				
Total Trihalomethanes	0.080	--		
Total Trihalomethanes	--	--	0.0008	2010 draft
Bromodichloromethane	--	0.0010	(zero)	--
Bromoform	--	0.0010	(zero)	--
Chloroform	--	0.0010	(0.07)	--
Dibromochloromethane	--	0.0010	(0.06)	--
Haloacetic Acids (five) (HAA5)	0.060	--	--	--
Monochloroacetic Acid	--	0.0020	(0.07)	--
Dichloroacetic Acid	--	0.0010	(zero)	--
Trichloroacetic Acid	--	0.0010	(0.02)	--
Monobromoacetic Acid	--	0.0010	--	--
Dibromoacetic Acid	--	0.0010	--	--
Bromate	0.010	0.0050 or 0.0010 ^a	0.0001	2009
Chlorite	1.0	0.020	0.05	2009
Microbiological Contaminants (TT = Treatment Technique)				
Coliform % positive samples	%	5	(zero)	
<i>Cryptosporidium</i> **		TT	(zero)	
<i>Giardia lamblia</i> **		TT	(zero)	
<i>Legionella</i> **		TT	(zero)	
Viruses**		TT	(zero)	
Chemicals with PHGs established in response to DDW requests. These are not currently regulated drinking water contaminants.				
N-Nitrosodimethylamine (NDMA)	--	--	0.000003	2006
1,2,3-Trichloropropane	--	0.000005	0.0000007	2009

Notes:

^a DDW will maintain a 0.0050 mg/L DLR for bromate to accommodate laboratories that are using EPA Method 300.1. However, laboratories using EPA Methods 317.0 Revision 2.0, 321.8, or 326.0 must meet a 0.0010 mg/L MRL for bromate and should report results with a DLR of 0.0010 mg/L per Federal requirements.

*OEHHA's review of this chemical during the year indicated (rev20XX) resulted in no change in the PHG

** Surface water treatment = TT

ATTACHMENT NO. 1

2016 PHG Exceedance Summary - PHG Constituent List

CONSTITUENT	WELL
ARSENIC	10th & J Street Well
	Lytle Creek #2
	Newmark #4
	Olive and Garner
FLUORIDE	10th & J Street Well
	Kenwood Well
	Kenwood #2 Well
	Lynwood Well
TETRACHLOROETHYLENE (PCE)	10th & J Street Well
	27th Street Well
	Mill & "D" Street Well
	Olive and Garner
ALPHA ACTIVITY, GROSS	16th Street Well
	27th Street Well
	31st Street Well
	Baseline & Calif. Well
	Cajon Canyon
	Devil Canyon Well #2
	EPA #001 Well
	EPA #002 Well
	EPA #003 Well
	EPA #004 Well
	EPA #005 Well
	EPA #006 Well
	EPA #108 Well
	EPA #108S Well
	EPA #109 Well
	EPA #110 Well
	EPA #111 Well
EPA #112 Well	
CHROMIUM, HEXA VALENT	10th & J Street Well
	16th Street Well
	19th Street #2 Well
	27th Street Well
	30th Street Well
	31st Street Well
	Baseline & Calif. Well
	Cajon #2 Well
	Devil Canyon #2 Well
	EPA #001 Well
	EPA #002 Well

ATTACHMENT NO. 1

2016 PHG Exceedance Summary - PHG Constituent List

<u>CONSTITUENT</u>	<u>WELL</u>
CHROMIUM, HEXAVALENT	EPA #003 Well
	EPA #004 Well
	EPA #005 Well
	EPA #006 Well
	EPA #007 Well
	EPA #108 Well
	EPA #108S Well
	EPA #109 Well
	EPA #110 Well
	EPA #111 Well
	EPA #112 Well
	Gilbert Street Well
	Olive and Garner
	Waterman Well

ATTACHMENT NO. 1

2016 PHG Exceedance Summary

10TH & "J" STREET WELL	Units	State MCL	DLR	MCLG	PHG	Results	Date
ARSENIC	ug/L	10	2		0.004	3.7	1/8/2013
						4.7	2/5/2013
						4.3	3/5/2013
						<2	4/2/2013
						3.8	6/4/2013
						3.6	7/2/2013
						4.4	8/6/2013
						<2	9/10/2013
						3.9	10/8/2013
						<2	11/12/2013
						<2	12/10/2013
						2	1/7/2014
						<2	2/4/2014
						<2	3/27/2014
						<2	4/1/2014
						4.5	5/8/2014
						4.2	6/3/2014
						4.2	7/8/2014
						4	7/29/2014
						3.5	8/5/2014
						3.2	9/9/2014
						4.3	10/7/2014
						<2	11/4/2014
						<2	12/2/2014
						<2	1/6/2015
						<2	2/17/2015
						<2	3/4/2015
						<2	3/10/2015
						<2	4/7/2015
						<2	5/12/2015
						3.3	6/9/2015
						<2	7/7/2015
						2.6	8/11/2015
						4.4	9/4/2015
						<2	10/6/2015
						<2	11/3/2015
						<2	12/1/2015
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	2.4	7/29/2014
FLUORIDE	mg/L	2	0.1	NA	1	1.7	7/29/2014
TETRACHLOROETHYLENE (PCE)	ug/L	5	0.5	NA	0.06	0.62	7/29/2014
						0.6	10/28/2014
						0.66	11/20/2014
						0.73	1/13/2015
						0.8	4/28/2015
						0.85	7/23/2015
						0.87	7/28/2015
						0.86	10/13/2015
						0.78	10/13/2015
						0.62	7/29/2014
						0.6	10/28/2014
						0.66	11/20/2014
						0.73	1/13/2015
						0.8	4/28/2015
						0.85	7/23/2015
						0.87	7/28/2015
						0.86	10/13/2015
						0.78	10/13/2015

ATTACHMENT NO. 1

2016 PHG Exceedance Summary

<u>16TH STREET WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	0.56	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	2.62	1/29/2013
<u>19TH STREET #2 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1	7/29/2014
<u>27TH STREET WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	3.6	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	3.4	1/29/2013
TETRACHLOROETHYLENE (PCE)	ug/L	5	0.5	NA	0.06	0.54	7/30/2014
<u>30TH STREET WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.7	9/5/2014
<u>31ST STREET WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.2	10/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	4	1/29/2013
<u>BASELINE WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.2	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	3.2	1/29/2013
<u>CAJON #2 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	0.5	7/29/2014
<u>CAJON CANYON WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
GROSS ALPHA	pCi/L	15	3	0	NA	2.6	1/28/2014
<u>DEVIL CANYON #2 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	5	1/29/2013
<u>EPA #001 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.8	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	2.2	1/28/2014
<u>EPA #002 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.5	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	3.4	1/29/2013
<u>EPA #003 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.2	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	4.1	1/29/2013

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2016 PHG Exceedance Summary

<u>EPA #004 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.1	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	2.83	1/29/2013
<u>EPA #005 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.6	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	2.61	5/30/2013
<u>EPA #006 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	2.5	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	3.5	1/29/2013
<u>EPA #007 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.1	7/29/2014
<u>EPA #108 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	2.8	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	2.6	1/28/2014
<u>EPA #108S WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.9	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	4.4	1/28/2014
<u>EPA #109 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	3.2	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	4.1	1/28/2014
<u>EPA #110 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.6	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	1.8	1/28/2014
<u>EPA #111 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.8	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	4.1	1/28/2014
<u>EPA #112 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.7	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	1.62	1/28/2014
<u>GILBERT WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	0.84	3/10/2014
						<1.0	7/29/2014

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2016 PHG Exceedance Summary

<u>KENWOOD WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
FLUORIDE	mg/L	2	0.1	NA	1	1.5	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	3.7	3/5/2013
<u>KENWOOD #2 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
FLUORIDE	mg/L	2	0.1	NA	1	1.5	7/29/2014
GROSS ALPHA	pCi/L	15	3	0	NA	2.59	1/29/2013
<u>LEROY WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
GROSS ALPHA	pCi/L	15	3	0	NA	2.75	1/29/2013
<u>LYNWOOD WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
FLUORIDE	mg/L	2	0.1	NA	1	1.5	7/29/2014
<u>LYTLE CREEK #2 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
ARSENIC	ug/L	10	2		0.004	5	1/22/2013
						4.9	4/9/2013
						4.6	7/23/2013
						4.1	10/15/2013
						4.9	1/14/2014
						4	4/8/2014
						4.5	7/29/2014
						3.5	10/21/2014
						4.6	4/28/2015
						4.6	7/28/2015
						4.8	10/13/2015
<u>MILL & D WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
TETRACHLOROETHYLENE (PCE) PUMPS DIRECTLY INTO THE DISTRIBUTION SYSTEM	ug/L	5	0.5	NA	0.06	0.65	7/22/2014
<u>NEWMARK #4 WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
ARSENIC	ug/L	10	2		0.004	<2	1/22/2013
						<2	4/9/2013
						2.1	7/23/2013
						2.1	10/15/2013
						<2	1/14/2014
						<2	4/8/2014
						<2	7/29/2014
						<2	10/21/2014
						<2	4/8/2015
						<2	7/28/2015
						<2	10/13/2015
<u>OLIVE & GARNER WELL</u>	Units	State MCL	DLR	MCLG	PHG	Results	Date
ARSENIC	ug/L	10	2		0.004	<2	1/8/2013
						<2	2/5/2013
						<2	3/5/2013
						<2	4/2/2013
						<2	5/7/2013
						2.1	6/4/2013
						5.1	7/2/2013
						6.8	8/6/2013
						5	9/10/2013
						6.7	10/8/2013
						6.4	11/12/2013
						<2	12/10/2013
						6.2	1/7/2014
						<2	2/4/2014

ATTACHMENT NO. 1

2016 PHG Exceedance Summary

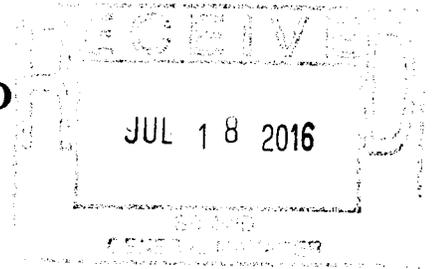
OLIVE & GARNER WELL	Units	State MCL	DLR	MCLG	PHG	Results	Date
ARSENIC	ug/L	10	2		0.004	<2	3/27/2014
						<2	4/1/2014
						<2	5/8/2014
						5.8	6/3/2014
						6.1	7/8/2014
						5.9	7/29/2014
						<2	8/5/2014
						<2	9/9/2014
						<2	10/7/2014
						<2	11/4/2014
						<2	12/2/2014
						<2	1/6/2015
						<2	2/17/2015
						<2	3/4/2015
						<2	3/10/2015
						<2	4/7/2015
						<2	5/12/2015
						<2	6/11/2015
						<2	7/7/2015
						<2	9/28/2015
						<2	10/6/2015
						<2	11/3/2015
						<2	12/1/2015
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.5	7/29/2014
FLUORIDE	mg/L	2	0.1	NA	1	1.7	7/29/2014
TETRACHLOROETHYLENE (PCE) PUMPS DIRECTLY INTO THE DISTRIBUTION SYSTEM	ug/L	5	0.5	NA	0.06	0.82	7/22/2014
VINCENT WELL	Units	State MCL	DLR	MCLG	PHG	Results	Date
GROSS ALPHA	pCi/L	15	3	0	NA	3.5	1/29/2013
WATERMAN WELL	Units	State MCL	DLR	MCLG	PHG	Results	Date
CHROMIUM, HEXAVALENT	ug/L	10	1	NA	0.02	1.2	9/5/2014
GROSS ALPHA	pCi/L	15	3	0	NA	2.63	1/15/2015

ATTACHMENT NO. 2

2016 PHG Treatment Cost Summary - Estimate by Constituent - Source: ACWA Guidance Document, 2012 cost estimates adjusted by CPI for 2015

CONSTITUENT	WELL	GPM	Gallons Per Year (GPM X 1,440 X 365)	MGD	Gallons/Day	SPM million traced (Assessment Daily Cost)	Total Annual Cost	Active Services	Constr. major service to treatment	Treatment Technology	Constituent Min - Max	Constituent MCL	Constituent PHG	Source of Information		
ARSENIC (ppb)	10th & J Street Well	1,913.00	1,005,472,800.00	2.8	1,005,472.80	3.92	3,941,453.38	44,000	89.58	Reverse Osmosis	<2 - 4.7	10	0.004	Reference: Arsenic Removal Study, City of Scottsdale, AZ - CH2M Hill, for a 1.0 mgd plant operated at 100% of design capacity, Oct. 1991		
	Lytle Creek #2	458.00	240,724,800.00	0.7	240,724.80	3.92	943,641.22	44,000	21.45	Reverse Osmosis	3.5 - 5.0	10	0.004			
	Newmark #4	1,344.00	1,042,750,400.00	2.9	1,042,750.40	3.92	4,087,738.37	44,000	92.90	Reverse Osmosis	<2 - 2.1	10	0.004			
	Olive and Garner	1,655.00	869,868,000.00	2.4	869,868.00	3.92	3,409,882.56	44,000	77.50	Reverse Osmosis	<2 - 6.8	10	0.004			
	Total						12,382,715.52		281.43							
FLUORIDE (mg/L)	10th & J Street Well	1,913.00	1,005,472,800.00	2.8	1,005,472.80	3.92	3,941,453.38	44,000	89.58	Reverse Osmosis	1.7	2	1	Reference: Arsenic Removal Study, City of Scottsdale, AZ - CH2M Hill, for a 1.0 mgd plant operated at 100% of design capacity, Oct. 1991		
	Kennwood Well	582.00	305,899,200.00	0.8	305,899.20	3.92	1,199,124.86	44,000	27.25	Reverse Osmosis	1.5	2	1			
	Kennwood #2 Well	1,433.00	753,184,800.00	2.1	753,184.80	3.92	2,952,484.42	44,000	67.10	Reverse Osmosis	1.5	2	1			
	Lynwood Well	1,434.00	753,110,400.00	2.1	753,110.40	3.92	2,952,544.77	44,000	67.15	Reverse Osmosis	1.5	2	1			
	Olive and Garner	1,655.00	869,868,000.00	2.4	869,868.00	3.92	3,409,882.56	44,000	77.50	Reverse Osmosis	1.7	2	1			
Total						14,457,489.98		328.58								
TETRACHLOROETHYLENE (PCE) (ug/L)	10th & J Street Well	1,913	1,005,472,800.00	2.8	1,005,472.80	2.08	2,091,383.42	44,000	47.53	GAC	0.60 - 0.87	5	0.06	Reference: Southern California Water Co. - actual data for "retent" GAC to remove VOCs (1,1-DCE), 1.5 mgd capacity facility, 1998		
	*27th Street Well	941	494,589,600.00	1.4	494,589.60	2.08	1,028,746.37	44,000	23.38	GAC	<0.5 - 4.4	5	0.06			
	Mill & D Street Well	277	145,591,200.00	0.4	145,591.20	2.08	302,829.70	44,000	6.88	GAC	0.65 - 0.88	5	0.06			
	Olive and Garner	1,655.00	869,868,000.00	2.4	869,868.00	2.08	1,809,325.44	44,000	41.12	GAC	0.82 - 1.9	5	0.06			
	Total						5,232,284.93		118.92							
Note: *27th and Acacia Well is currently being blended to lower NO3 and PCE Levels																
ALPHA ACTIVITY, GROSS (pCi/L)	16th Street Well	1,451	762,645,600.00	2.1	762,645.60	3.92	2,989,570.75	44,000	67.94	Reverse Osmosis	2.6	15	0	USEPA MCLG Note: Gross alpha particle activity - OEHHA concluded in 2003 that a PHG was not practical. MCLs for gross alpha and beta particles are screening standards for a group of radionuclides. Corresponding PHGs were not developed for gross alpha and beta particles. See the OEHHA memoranda discussing the cancer risks at these MCLs at http://oehha.studio-veeren.com/media/downloads/water/chemicals/plg/grossalphahp.pdf		
	27th Street Well	941	494,589,600.00	1.4	494,589.60	3.92	1,938,791.23	44,000	44.06	Reverse Osmosis	3.4	15	0			
	31st Street Well	1,014	532,958,400.00	1.4	532,958.40	3.92	2,089,196.93	44,000	47.48	Reverse Osmosis	4.0	15	0			
	Baseline & Calif. Well	457	240,199,200.00	0.7	240,199.20	3.92	941,457.86	44,000	21.40	Reverse Osmosis	3.2	15	0			
	Canon Canyon	1,086	570,801,600.00	1.6	570,801.60	3.92	2,237,342.27	44,000	50.85	Reverse Osmosis	2.6	15	0			
	Devil Canyon Well #2	1,003	527,176,800.00	1.4	527,176.80	3.92	2,066,593.07	44,000	47.97	Reverse Osmosis	2.7	15	0			
	EPA #001 Well	1,510	793,656,000.00	2.2	793,656.00	3.92	3,111,131.95	44,000	70.71	Reverse Osmosis	2.6	15	0			
	EPA #002 Well	1,342	705,355,200.00	1.9	705,355.20	3.92	2,764,992.38	44,000	62.84	Reverse Osmosis	3.4	15	0			
	EPA #003 Well	2,130	1,119,528,000.00	3.1	1,119,528.00	3.92	4,388,549.76	44,000	99.74	Reverse Osmosis	4.1	15	0			
	EPA #004 Well	1,591	751,109,600.00	2.0	751,109.60	3.92	2,865,949.63	44,000	65.14	Reverse Osmosis	2.8	15	0			
	EPA #005 Well	1,556	817,833,600.00	2.2	817,833.60	3.92	3,208,200.51	44,000	72.86	Reverse Osmosis	2.6	15	0			
	EPA #006 Well	400	210,240,000.00	0.6	210,240.00	3.92	824,140.80	44,000	18.73	Reverse Osmosis	3.4	15	0			
	EPA #007 Well	1,472	773,683,200.00	2.1	773,683.20	3.92	3,032,838.14	44,000	68.93	Reverse Osmosis	2.6	15	0			
	EPA #108S Well	219	113,106,400.00	0.3	113,106.40	3.92	451,217.09	44,000	10.35	Reverse Osmosis	4.4	15	0			
	EPA #109 Well	773	406,288,800.00	1.1	406,288.80	3.92	1,597,652.10	44,000	36.20	Reverse Osmosis	4.1	15	0			
	EPA #110 Well	306	265,933,600.00	0.7	265,933.60	3.92	1,052,338.11	44,000	23.69	Reverse Osmosis	1.8	15	0			
	EPA #110 Well	1,550	814,680,000.00	2.2	814,680.00	3.92	3,144,845.60	44,000	72.58	Reverse Osmosis	4.1	15	0			
	EPA #112 Well	643	337,960,800.00	0.9	337,960.80	3.92	1,324,806.34	44,000	30.11	Reverse Osmosis	3.7	15	0			
	Kennwood Well	582	305,899,200.00	0.8	305,899.20	3.92	1,199,124.86	44,000	27.25	Reverse Osmosis	3.7	15	0			
	Kennwood #2 Well	1,433	753,184,800.00	2.1	753,184.80	3.92	2,952,484.42	44,000	67.10	Reverse Osmosis	2.6	15	0			
	Lexo Well	1,700	893,520,000.00	2.4	893,520.00	3.92	3,502,598.40	44,000	79.60	Reverse Osmosis	2.8	15	0			
	Vincent Well	1,532	805,219,200.00	2.1	805,219.20	3.92	3,156,459.26	44,000	71.74	Reverse Osmosis	3.5	15	0			
	Waterman Well	2,282	1,199,419,200.00	3.3	1,199,419.20	3.92	4,701,723.26	44,000	106.86	Reverse Osmosis	2.6	15	0			
	Total						15,512,390.21		352.55							
	CHROMIUM, HEXAVALENT (ppb)	10th & J Street Well	1,913	1,005,472,800.00	2.8	1,005,472.80	6.78	6,817,105.58	44,000	154.93	X - Weak Base Anion Resin	2.4	10		0.02	Reference: February 28, 2013, Final Report Chromium Removal Research, City of Glendale, CA. 100-2000 ppm. Reduce Hexavalent Chromium to 1 ppb.
		16th Street Well	1,451	762,645,600.00	2.1	762,645.60	6.78	5,170,737.17	44,000	117.52	X - Weak Base Anion Resin	0.6	10		0.02	
		19th Street #2 Well	379	192,202,400.00	0.5	192,202.40	6.78	1,299,766.40	44,000	30.90	X - Weak Base Anion Resin	1.0	10		0.02	
		27th Street Well	941	494,589,600.00	1.4	494,589.60	6.78	3,333,317.49	44,000	76.21	X - Weak Base Anion Resin	1.6	10		0.02	
		30th Street Well	984	1,042,790,400.00	2.9	1,042,790.40	6.78	7,070,118.91	44,000	160.68	X - Weak Base Anion Resin	1.7	10		0.02	
		31st Street Well	1,014	532,958,400.00	1.4	532,958.40	6.78	3,613,437.95	44,000	82.12	X - Weak Base Anion Resin	1.4	10		0.02	
		Baseline & Calif. Well	457	240,199,200.00	0.7	240,199.20	6.78	1,628,550.38	44,000	37.01	X - Weak Base Anion Resin	1.2	10		0.02	
Canon #2 Well		1,086	570,801,600.00	1.6	570,801.60	6.78	3,924,404.54	44,000	81.93	X - Weak Base Anion Resin	0.5	10	0.02			
Devil Canyon #2 Well		1,003	527,176,800.00	1.4	527,176.80	6.78	3,574,258.70	44,000	81.93	X - Weak Base Anion Resin	1.0	10	0.02			
EPA #001 Well		1,510	793,656,000.00	2.2	793,656.00	6.78	5,380,987.68	44,000	122.30	X - Weak Base Anion Resin	1.0	10	0.02			
EPA #002 Well		1,342	705,355,200.00	1.9	705,355.20	6.78	4,782,308.26	44,000	108.69	X - Weak Base Anion Resin	1.0	10	0.02			
EPA #003 Well		2,130	1,119,528,000.00	3.1	1,119,528.00	6.78	7,590,399.84	44,000	172.51	X - Weak Base Anion Resin	1.2	10	0.02			
EPA #004 Well		1,591	751,109,600.00	2.0	751,109.60	6.78	4,956,343.09	44,000	112.66	X - Weak Base Anion Resin	1.1	10	0.02			
EPA #005 Well		1,556	817,833,600.00	2.2	817,833.60	6.78	5,544,911.81	44,000	126.02	X - Weak Base Anion Resin	1.6	10	0.02			
EPA #006 Well		400	210,240,000.00	0.6	210,240.00	6.78	1,425,272.20	44,000	32.40	X - Weak Base Anion Resin	1.7	10	0.02			
EPA #007 Well		988	519,292,800.00	1.4	519,292.80	6.78	3,520,805.18	44,000	80.02	X - Weak Base Anion Resin	1.1	10	0.02			
EPA #108 Well		1,472	773,683,200.00	2.1	773,683.20	6.78	5,245,577.10	44,000	119.22	X - Weak Base Anion Resin	2.8	10	0.02			
EPA #108S Well		219	113,106,400.00	0.3	113,106.40	6.78	780,291.39	44,000	17.74	X - Weak Base Anion Resin	0.9	10	0.02			
EPA #109 Well		773	406,288,800.00	1.1	406,288.80	6.78	2,754,638.26	44,000	62.61	X - Weak Base Anion Resin	3.2	10	0.02			
EPA #110 Well		306	265,933,600.00	0.7	265,933.60	6.78	1,803,165.41	44,000	40.98	X - Weak Base Anion Resin	1.6	10	0.02			
EPA #110 Well		1,550	814,680,000.00	2.2	814,680.00	6.78	5,325,530.40	44,000	125.53	X - Weak Base Anion Resin	1.8	10	0.02			
EPA #112 Well		643	337,960,800.00	0.9	337,960.80	6.78	2,291,374.22	44,000	52.08	X - Weak Base Anion Resin	1.7	10	0.02			
Gilbert Street Well		2,490	1,308,744,000.00	3.6	1,308,744.00	6.78	8,873,284.32	44,000	201.67	X - Weak Base Anion Resin	0.84 - <1.0	10	0.02			
Olive and Garner		1,655	869,868,000.00	2.4	869,868.00	6.78	5,897,705.04	44,000	134.04	X - Weak Base Anion Resin	1.5	10	0.02			
Waterman Well		2,282	1,199,419,200.00	3.3	1,199,419.20	6.78	8,132,062.18	44,000	184.82	X - Weak Base Anion Resin	1.2	10	0.02			
Total							30,717,956.16		698.14							

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT
BOARD OF WATER COMMISSIONERS
STAFF REPORT**



TO: Stacey R. Aldstadt, General Manager
FROM: Terri A. Willoughby, Director of Finance
SUBJECT: **RESOLUTION OF THE BOARD OF WATER COMMISSIONERS
DECLARING THE CITY'S INTENTION TO REIMBURSE CERTAIN
EXPENDITURES FROM THE PROCEEDS OF TAX-EXEMPT BOND
FINANCING, AS REQUIRED BY UNITED STATES DEPARTMENT OF
TREASURY REGULATIONS SECTIONS 1150.-2 (WATER FUND)**
DATE: July 14, 2016

BACKGROUND:

The San Bernardino Municipal Water Department (the "Department") expects to issue tax-exempt revenue bonds or other obligations (the "Bonds") to finance costs associated with the following Water Fund projects: reservoir seismic upgrades, the Intermediate Zone 24" transmission main, relocation of the customer service staff, and administration building consolidation and improvements. Certain expenditures related to these projects are expected to be paid by the Department prior to the date of issuance of the bonds. The proposed Resolution would allow the Department to be reimbursed for these expenditures from the bond proceeds.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners adopt the attached Resolution.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Terri A. Willoughby".

Terri A. Willoughby
Director of Finance

Attachments:

- Water Fund Reimbursement Resolution
- List of Capital Projects proposed to be funded by Revenue Bonds.

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RESOLUTION NO. _____

A RESOLUTION OF THE BOARD OF WATER COMMISSIONERS OF THE CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT DECLARING THE CITY'S INTENTION TO REIMBURSE CERTAIN EXPENDITURES FROM THE PROCEEDS OF ONE OR MORE TAX-EXEMPT BOND FINANCINGS, AS REQUIRED BY UNITED STATES DEPARTMENT OF TREASURY REGULATIONS SECTION 1.150-2; AND AUTHORIZING CERTAIN OTHER ACTIONS IN CONNECTION THEREWITH

WHEREAS, the City of San Bernardino (the "City") through its Municipal Water Department, expects to incur one or more series of obligations relating to tax-exempt bonds to be issued by a conduit issuer (collectively, the "Bonds") to finance costs associated with, among other projects, reservoir seismic upgrades, an intermediate zone 24" transmission main and administration building improvements (collectively, the "Project"); and

WHEREAS, certain expenditures with respect to the Project are expected to be paid by the City prior to the date of issuance of the Bonds (the "Reimbursable Expenditures"); and

WHEREAS, section 1.150-2 of the Treasury Regulations (the "Treasury Regulations") promulgated under the Internal Revenue Code of 1986, as amended, requires that for an allocation of proceeds of the Bonds to a capital expenditure paid prior to the issuance of the Bonds to be respected by the Internal Revenue Service, the City generally must no later than 60 days following such payment have declared its reasonable official intent to reimburse itself for such payment out of proceeds of the Bonds; and

WHEREAS, the City desires to facilitate the allocation of proceeds of the Bonds to the reimbursement for payment of the Reimbursable Expenditures for the Project.

NOW THEREFORE, BE IT RESOLVED by the City as follows:

SECTION 1. This Resolution is adopted for purposes of establishing compliance with the requirements of section 1.150-2 of the Treasury Regulations. This Resolution does not obligate the City to make any expenditure or proceed with the Project or obligate the City to cause the issuance of the Bonds.

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1 **A RESOLUTION OF THE BOARD OF WATER COMMISSIONERS OF THE CITY**
2 **OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT DECLARING THE**
3 **CITY'S INTENTION TO REIMBURSE CERTAIN EXPENDITURES FROM THE**
4 **PROCEEDS OF ONE OR MORE TAX-EXEMPT BOND FINANCINGS, AS**
5 **REQUIRED BY UNITED STATES DEPARTMENT OF TREASURY REGULATIONS**
6 **SECTION 1.150-2; AND AUTHORIZING CERTAIN OTHER ACTIONS IN**
7 **CONNECTION THEREWITH**

8 **SECTION 2.** The City hereby declares its reasonable official intention to cause the
9 issuance of Bonds or incur related obligations in an aggregate principal amount not to exceed
10 \$35,000,000 for the Project, and to apply a portion of the proceeds thereof to the
11 reimbursement for the prior payment of applicable Reimbursable Expenditures. The City
12 recognizes that under section 1.150-2 of the Treasury Regulations, the allocation of proceeds
13 of the Bonds to a Reimbursable Expenditure (other than to certain *de minimis* or preliminary
14 expenditures described in section 1.150-2(f) of the Treasury Regulations) will be recognized
15 only if (i) the Reimbursable Expenditure was paid not earlier than 60 days prior to the
16 adoption of this Resolution and (ii) the allocation of proceeds of the Bonds to such
17 reimbursement is made not later than the later of (a) 18 months after the date of payment of
18 the Reimbursable Expenditure or (b) 18 months after the date upon which the applicable
19 Projects are placed in service or abandoned, but in no event more than three years after the
20 date of payment of the Reimbursable Expenditure.

21 **SECTION 3.** This Resolution shall become effective immediately.
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1 **A RESOLUTION OF THE BOARD OF WATER COMMISSIONERS OF THE CITY**
2 **OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT DECLARING THE**
3 **CITY'S INTENTION TO REIMBURSE CERTAIN EXPENDITURES FROM THE**
4 **PROCEEDS OF ONE OR MORE TAX-EXEMPT BOND FINANCINGS, AS**
5 **REQUIRED BY UNITED STATES DEPARTMENT OF TREASURY REGULATIONS**
6 **SECTION 1.150-2; AND AUTHORIZING CERTAIN OTHER ACTIONS IN**
7 **CONNECTION THEREWITH**

8 I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Board of
9 Water Commissioners of the City of San Bernardino at a Regular Meeting thereof held on the
10 _____ day of _____, 2016 by the following vote to wit:

11 AYES:

12 NAYES:

13 ABSENT:

14 _____
15 Robin L. Ohama
16 Deputy City Clerk & Ex-Officio Secretary

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18 (SEAL)
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San Bernardino Municipal Water Department
Possible Debt-Funded Projects
As of 7/14/16

Project Name:	Ref #:	Water Fund:	Start Date	Duration	Sewer Fund:	Start Date	Duration
Reservoir Seismic Upgrades - Bid Package #1	1	\$ 2,000,000	Dec-16	12 months			
Reservoir Seismic Upgrades - Bid Package #2	2	7,500,000	Oct-18	12 months			
Reservoir Seismic Upgrades - Bid Package #3	2	7,500,000	Dec-19	12 months			
Intermediate Zone 24" Transmission Main	3	5,500,000	Apr-17	12 months			
SBMWD Administration Building		9,500,000	Sep-21	18 months	2,125,000	Sep-21	18 months
Primary Influent Flow Equalization					12,500,000	As soon as funding available.	22 months
Clean Water Factory - Phase I (construction)	4				13,500,000	Aug-17	18 months
Centralized Partial Oxidation Gas Turbine	5				5,000,000	Oct-17	15 months
Customer Service Relocation- 1350 "E" Street	6	2,000,000	Now	6 months	1,000,000	Now	6 months
		<u>\$ 34,000,000</u>			<u>\$ 34,125,000</u>		

Notes:

- 1: Concrete reservoirs
- 2: Steel reservoirs
- 3: Approximately 15 ft of 24 inch main
- 4: Contingent upon successful resolution to Change c
- 5: Contingent upon successful testing of Cogeneration Hydrogen Injection Demonstratio Project
- 6: Estimated cost and allocation between funds

CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT
BOARD OF WATER COMMISSIONERS
STAFF REPORT

JUL 18 2016

TO: Stacey R. Aldstadt, General Manager
FROM: Terri A. Willoughby, Director of Finance
SUBJECT: **RESOLUTION OF THE CITY OF SAN BERNARDINO DECLARING THE CITY'S INTENTION TO REIMBURSE CERTAIN EXPENDITURES FROM THE PROCEEDS OF TAX-EXEMPT BOND FINANCING, AS REQUIRED BY UNITED STATES DEPARTMENT OF TREASURY REGULATIONS SECTIONS 1150.-2 (SEWER FUND)**
DATE: July 14, 2016

BACKGROUND:

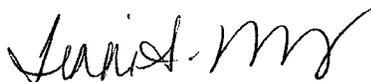
The San Bernardino Municipal Water Department (the "Department"), through the City of San Bernardino expects to issue tax-exempt revenue bonds or other obligations (the "Bonds") to finance costs associated with the following Sewer Fund projects: primary influent flow equalization improvements, phase 1 construction of the Clean Water Factory recycled water project, acquisition and installation of a partially oxidized gas turbine, relocation of the customer service facility and administration building improvements. Certain expenditures related to these projects are expected to be paid by the Department prior to the date of issuance of the bonds. The proposed Resolution would allow the Department to be reimbursed for these expenditures from the bond proceeds.

As the Mayor and Common Council is the governing body responsible for approving the issuing of debt associated with the sewer treatment and collection systems, this resolution will need to be presented to them for adoption.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners approve the submission of the attached Resolution to the Mayor and Common Council for adoption.

Respectfully submitted,



Terri A. Willoughby
Director of Finance

Attachments:

- Sewer Fund Reimbursement Resolution
- List of Capital Projects proposed to be funded by Revenue Bonds.

1 **RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE CITY OF**
2 **SAN BERNARDINO DECLARING ITS INTENTION TO REIMBURSE CERTAIN**
3 **EXPENDITURES FROM THE PROCEEDS OF ONE OR MORE TAX-EXEMPT**
4 **BOND FINANCINGS, AS REQUIRED BY UNITED STATES DEPARTMENT OF**
5 **TREASURY REGULATIONS SECTION 1.150-2; AND AUTHORIZING CERTAIN**
6 **OTHER ACTIONS IN CONNECTION THEREWITH**

7 **SECTION 2.** The City hereby declares its reasonable official intention to cause the
8 issuance of Bonds or incur related obligations in an aggregate principal amount not to exceed
9 \$35,000,000 for the Project, and to apply a portion of the proceeds thereof to the
10 reimbursement for the prior payment of applicable Reimbursable Expenditures. The City
11 recognizes that under section 1.150-2 of the Treasury Regulations, the allocation of proceeds
12 of the Bonds to a Reimbursable Expenditure (other than to certain *de minimis* or preliminary
13 expenditures described in section 1.150-2(f) of the Treasury Regulations) will be recognized
14 only if (i) the Reimbursable Expenditure was paid not earlier than 60 days prior to the
15 adoption of this Resolution and (ii) the allocation of proceeds of the Bonds to such
16 reimbursement is made not later than the later of (a) 18 months after the date of payment of
17 the Reimbursable Expenditure or (b) 18 months after the date upon which the applicable
18 Projects are placed in service or abandoned, but in no event more than three years after the
19 date of payment of the Reimbursable Expenditure.

20 **SECTION 3.** This Resolution shall become effective immediately.
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1 **RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE CITY OF**
 2 **SAN BERNARDINO DECLARING ITS INTENTION TO REIMBURSE CERTAIN**
 3 **EXPENDITURES FROM THE PROCEEDS OF ONE OR MORE TAX-EXEMPT**
 4 **BOND FINANCINGS, AS REQUIRED BY UNITED STATES DEPARTMENT OF**
TREASURY REGULATIONS SECTION 1.150-2; AND AUTHORIZING CERTAIN
OTHER ACTIONS IN CONNECTION THEREWITH

5 I HEREBY CERTIFY that the foregoing Resolution was duly adopted by the Mayor
 6 and Common Council of the City of San Bernardino at a _____

7 meeting thereof, held on the ____ day of _____, 2016, by the following vote,
 8 to wit:

9					
10	<u>Council Members:</u>	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
11	MARQUEZ	_____	_____	_____	_____
12	BARRIOS	_____	_____	_____	_____
13	VALDIVIA	_____	_____	_____	_____
14	SHORETT	_____	_____	_____	_____
15	NICKEL	_____	_____	_____	_____
16	RICHARD	_____	_____	_____	_____
17	MULVIHILL	_____	_____	_____	_____

18 _____
 19
 20 Georgeann Hanna, CMC, City Clerk

21
 22 The foregoing Resolution is hereby approved this ____ day of _____, 2016.

23
 24 _____
 25 R. Carey Davis, Mayor
 City of San Bernardino

26 Approved as to form:
 27 Gary D. Saenz, City Attorney

28 By: _____

San Bernardino Municipal Water Department
Possible Debt-Funded Projects
As of 7/14/16

Project Name:	Ref #:	Water Fund:	Start Date	Duration	Sewer Fund:	Start Date	Duration
Reservoir Seismic Upgrades - Bid Package #1	1	\$ 2,000,000	Dec-16	12 months			
Reservoir Seismic Upgrades - Bid Package #2	2	7,500,000	Oct-18	12 months			
Reservoir Seismic Upgrades - Bid Package #3	2	7,500,000	Dec-19	12 months			
Intermediate Zone 24" Transmission Main	3	5,500,000	Apr-17	12 months			
SBMWD Administration Building		9,500,000	Sep-21	18 months	2,125,000	Sep-21	18 months
Primary Influent Flow Equalization					12,500,000	As soon as funding available.	22 months
Clean Water Factory - Phase I (construction)	4				13,500,000	Aug-17	18 months
Centralized Partial Oxidation Gas Turbine	5				5,000,000	Oct-17	15 months
Customer Service Relocation- 1350 "E" Street	6	2,000,000	Now	6 months	1,000,000	Now	6 months
		<u>\$ 34,000,000</u>			<u>\$ 34,125,000</u>		

Notes:

- 1: Concrete reservoirs
- 2: Steel reservoirs
- 3: Approximately 15 ft of 24 inch main
- 4: Contingent upon successful resolution to Change c
- 5: Contingent upon successful testing of Cogeneration Hydrogen Injection Demonstratio Project
- 6: Estimated cost and allocation between funds

U:\CS Relocation\[Capital Projects_Debt Funding_071416.xlsx]Sheet1

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT
BOARD OF WATER COMMISSIONERS
STAFF REPORT**



TO: Stacey R. Aldstadt, General Manager
FROM: Terri A. Willoughby, Director of Finance
SUBJECT: REPORT ON WATER DEPARTMENT INVESTMENTS – QUARTER
ENDING JUNE 30, 2016
DATE: July 18, 2016

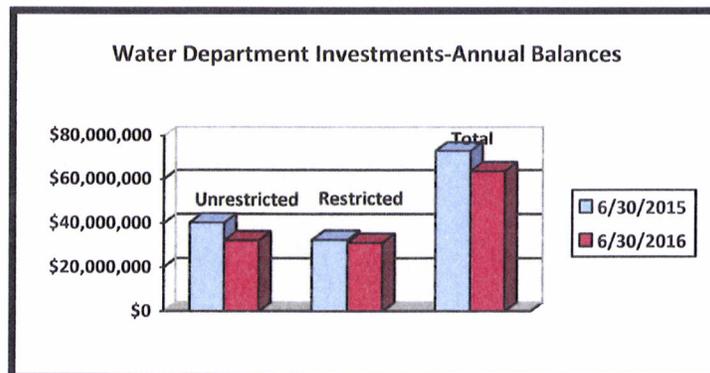
BACKGROUND:

On a quarterly basis, staff provides the Board of Water Commissioners (BOWC) a report regarding the cash and investments of the San Bernardino Municipal Water Department (Department). The Department's cash and investments are held in accounts in the Department's name separate from the City of San Bernardino's (City) cash and investments within the City Treasury.

The Department's checking account is maintained at Wells Fargo Bank, while its investments are held by the California Local Agency Investment Fund and Bank of New York. The assets held in trust by Bank of New York are actively managed by Chandler Asset Management. Consent Decree funds are also held by Bank of New York, but are managed by PFM Asset Management.

The total unrestricted cash and cash equivalents balance of \$11,271,781 indicated in the attached report will be used to meet the Department's current commitments and estimated expenditure requirements for the near future. The market value of unrestricted cash and investments is \$32,305,785 of which \$3,039,450 is held for customer deposits.

The total restricted cash and investment balance of \$31,280,002 consists primarily of consent decree funds, funds collected on behalf of the City for sewer collection, refuse and storm drains, funds collected on behalf of East Valley Water District for improvement to the East Sewer Trunk Line, and reserve funds from the 1998 Sewer Certificates of Participation. The chart below provides a comparison to balances at the same time period in the prior year.



QUARTERLY REPORT ON WATER DEPARTMENT INVESTMENTS

August 2, 2016

Page 2 of 2

Summary:

The Department's investments follow the investment policy recommended by the State of California in keeping with safety, liquidity and yield and comply with the investment policy filed by the City Treasurer with the Mayor and Common Council.

RECOMMENDATION:

Staff recommends that the Board of Water Commissioners receive and file the Investment Report for the quarter ended June 30, 2016.

Respectfully submitted,



Terri A. Willoughby
Director of Finance

Attachments: San Bernardino Municipal Water Department Investment Report
Operating Portfolio (Chandler Asset Management)
Consent Decree Portfolio (PFM)



San Bernardino Municipal Water Department
Investment Report

For the Period Ended June 30, 2016

San Bernardino Municipal Water District
Summary of Cash and Investments
For the Period Ended June 30, 2016

	<u>Book</u> Value	<u>Market</u> Value	<u>Percent of</u> Portfolio	<u>Current</u> Yield
<u>Operating Funds</u>				
Cash and Cash Equivalents:				
Checking Accounts	\$ 16,147,621	\$ 16,147,621	39.44%	0.00%
Cash on Hand	7,200	7,200	0.02%	0.00%
Local Agency Investment Fund	<u>3,751,646</u>	<u>3,751,646</u>	<u>9.16%</u>	<u>0.37%</u>
Total Cash and Cash Equivalents	<u>19,906,467</u>	<u>19,906,467</u>	<u>48.62%</u>	<u>0.07%</u>
Investments (Operating Portfolio):				
Money Market Accounts	133,089	133,089	0.33%	0.01%
Federal Agencies	10,227,418	10,372,774	25.34%	1.38%
Asset Back Securities	1,343,184	1,344,606	3.28%	1.03%
Commercial Paper	418,964	418,964	1.02%	0.75%
Medium-Term Corporate Notes	2,128,181	2,158,685	5.27%	1.53%
U.S. Treasuries	<u>6,466,910</u>	<u>6,605,495</u>	<u>16.13%</u>	<u>1.46%</u>
Total Investments	<u>20,717,745</u>	<u>21,033,612</u>	<u>51.38%</u>	<u>1.38%</u>
Total Operating Funds	<u>40,624,212</u>	<u>40,940,079</u>	<u>100.00%</u>	<u>0.74%</u>
<u>Consent Decree Portfolio</u>				
Certificates of Deposit	2,149,356	2,154,850	9.70%	1.45%
Asset-Backed Security/Collateralized	829,909	835,253	3.76%	1.38%
Money Market Accounts	44,540	44,540	0.20%	0.00%
Federal Agency Mortgage-Backed Securities	1,612,426	1,627,183	7.32%	3.01%
Federal Agency Collateralized Mortgage Oblig.	1,271,010	1,289,267	5.80%	2.06%
Federal Agency Notes/Bonds	1,963,937	1,997,912	8.99%	1.48%
Corporate Notes	5,552,581	5,553,349	24.99%	1.60%
Commercial Paper	793,854	796,512	3.58%	1.04%
U.S. Treasury Bill	-	-	0.00%	0.00%
U.S. Treasury Bonds	<u>7,785,240</u>	<u>7,924,187</u>	<u>35.66%</u>	<u>1.35%</u>
Total Consent Decree Portfolio	<u>22,002,854</u>	<u>22,223,053</u>	<u>100.00%</u>	<u>1.47%</u>
<u>1998 Refunding Sewer COP Trust</u>				
Money Market Accounts	47,777	47,777	11.31%	0.01%
Investment Agreement	<u>374,487</u>	<u>374,487</u>	<u>88.69%</u>	<u>5.58%</u>
Total 1998 Refunding Sewer COP Trust	<u>422,264</u>	<u>422,264</u>	<u>100.00%</u>	<u>4.95%</u>
Total Cash and Investments	<u>\$ 63,049,330</u>	<u>\$ 63,585,396</u>		

**San Bernardino Municipal Water District
Cash and Investments by Fund
For the Period Ended June 30, 2016**

	Market Value		
	Water Fund	Sewer Fund	Total
<u>Unrestricted</u>			
Cash and Cash Equivalents	\$ 5,944,288	\$ 5,327,493	\$ 11,271,781
Investments	2,491,788	18,541,824	21,033,612
Total Unrestricted Cash and Investments	<u>8,436,076</u>	<u>23,869,318</u>	<u>32,305,393</u>
<u>Restricted</u>			
Cash and Cash Equivalents:			
Refuse Fees	534,588	-	534,588
Storm Drain Fees	(177)	-	(177)
Inland Valley Development Agency Fees	14,630	-	14,630
Sewer Collection System Fees	-	264,138	264,138
SAWPA Fees	-	7,420	7,420
East Valley Trunk Line Fees	-	7,814,086	7,814,086
Total Restricted Cash and Cash Equivalents	<u>549,041</u>	<u>8,085,645</u>	<u>8,634,686</u>
Investments:			
Consent Decree	22,223,053	-	22,223,053
1998 Refunding Sewer COP Trust	-	422,264	422,264
Total Restricted Investments	<u>22,223,053</u>	<u>422,264</u>	<u>22,645,317</u>
Total Restricted Cash and Investments	<u>22,772,094</u>	<u>8,507,909</u>	<u>31,280,002</u>
Total Cash and Investments	<u>\$ 31,208,170</u>	<u>\$ 32,377,226</u>	<u>\$ 63,585,396</u>

Monthly Account Statement

San Bernardino Municipal Water Department

June 1, 2016 through June 30, 2016

Chandler Team

For questions about your account,
please call (800) 317-4747 or
Email operations@chandlerasset.com

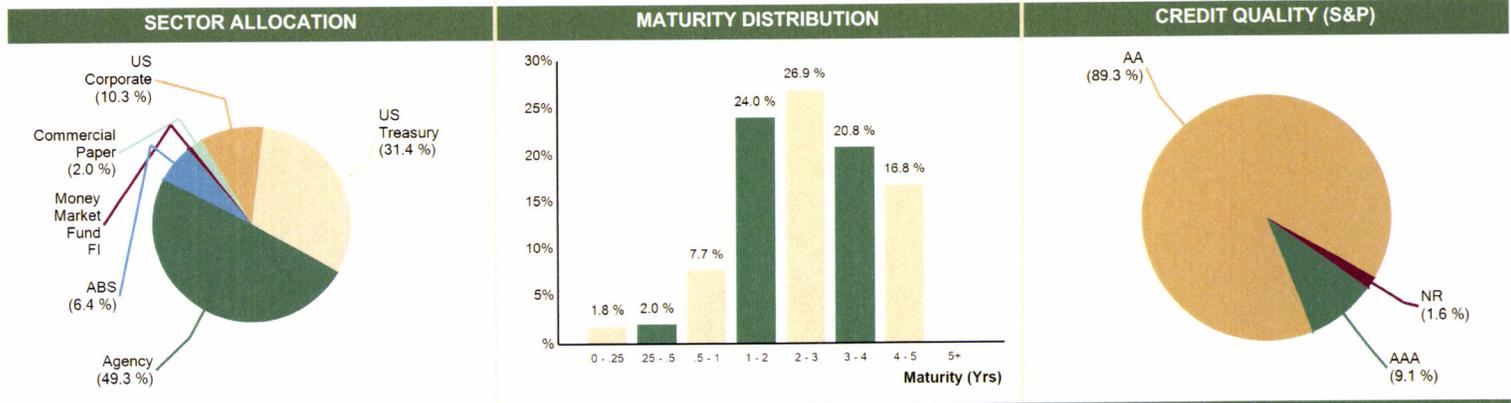
Custodian

Bank of New York Mellon
Lauren Dehner
(904)645-1918

Information contained herein is confidential. We urge you to compare this statement to the one you receive from your qualified custodian. Prices are provided by IDC, an independent pricing source.



PORTFOLIO CHARACTERISTICS		ACCOUNT SUMMARY		TOP ISSUERS		
Average Duration	2.47	Market Value	Beg. Values as of 5/31/16: 23,369,454	End Values as of 6/30/16: 21,033,612	Issuer	% Portfolio
Average Coupon	1.36 %	Accrued Interest	57,511	65,780	Government of United States	31.4 %
Average Purchase YTM	1.38 %	Total Market Value	23,426,965	21,099,392	Federal National Mortgage Assoc	18.3 %
Average Market YTM	0.82 %	Income Earned	26,240	23,802	Federal Home Loan Bank	15.2 %
Average S&P/Moody Rating	AA+/Aaa	Cont/WD		-2,501,925	Federal Home Loan Mortgage Corp	14.1 %
Average Final Maturity	2.64 yrs	Par	23,202,891	20,731,383	Honda ABS	2.7 %
Average Life	2.53 yrs	Book Value	23,190,666	20,717,745	Johnson & Johnson	2.2 %
		Cost Value	23,196,817	20,710,367	Toyota ABS	2.0 %
					Bank of Tokyo-Mit UFJ	2.0 %
						87.9 %



PERFORMANCE REVIEW									
Total Rate of Return As of 6/30/2016	Current Month	Latest 3 Months	Year To Date	1 Yr	Annualized				Since 2/28/2013
					3 Yrs	5 Yrs	10 Yrs	2/28/2013	
San Bernardino Municipal Water Department	0.80 %	0.71 %	2.19 %	2.35 %	1.66 %	N/A	N/A	1.30 %	4.39 %
BAML 1-5 Yr US Treasury/Agency Index	0.94 %	0.79 %	2.35 %	2.39 %	1.65 %	N/A	N/A	1.29 %	4.35 %
BAML 1-5 Yr US Issuers Corp/Govt Rated AAA-A Index	0.93 %	0.83 %	2.42 %	2.53 %	1.80 %	N/A	N/A	1.40 %	4.74 %



San Bernardino Municipal Water Department
June 30, 2016

COMPLIANCE WITH INVESTMENT POLICY

Assets managed by Chandler Asset Management are in full compliance with State law and with the Department's investment policy.

Category	Standard	Comment
Treasury Bills and Notes	No limitations	Complies
Federal Agencies	75% maximum - Callables	Complies
Local Agency Obligations	State of California only; 10% maximum	Complies
Banker's Acceptances	40% maximum; 30% per issuer; 180 day max maturity	Complies
Commercial Paper	A-1/P-1 rated; 25% maximum; 270 day max maturity	Complies
Negotiable CDs	30% maximum	Complies
Time Deposits	Collateralized; 25% maximum	Complies
Medium Term Notes	30% maximum; "AA"-rated issuer; 15% per issuer with Commercial Paper	Complies
Mortgage Mortgage and Asset-Backed Securities	AA-rated; 20% maximum	Complies
Money Market Funds	AAA/Aaa rated; fund assets > \$500MM; 20% maximum; 10% per fund	Complies
LAIF	\$50 million	Complies
Maximum maturity	5 years	Complies



BOOK VALUE RECONCILIATION	
Beginning Book Value	\$23,190,665.93
Acquisition	
+ Security Purchases	\$418,964.00
+ Money Market Fund Purchases	\$2,652,575.66
+ Money Market Contributions	\$0.00
+ Security Contributions	\$0.00
+ Security Transfers	\$0.00
Total Acquisitions	\$3,071,539.66
Dispositions	
- Security Sales	\$2,115,230.90
- Money Market Fund Sales	\$418,964.00
- MMF Withdrawals	\$2,501,925.00
- Security Withdrawals	\$0.00
- Security Transfers	\$0.00
- Other Dispositions	\$0.00
- Maturities	\$468,912.47
- Calls	\$0.00
- Principal Paydowns	\$53,195.25
Total Dispositions	\$5,558,227.62
Amortization/Accretion	
+/- Net Accretion	\$296.43
	\$296.43
Gain/Loss on Dispositions	
+/- Realized Gain/Loss	\$13,470.70
	\$13,470.70
Ending Book Value	\$20,717,745.10

CASH TRANSACTION SUMMARY	
BEGINNING BALANCE	\$401,401.93
Acquisition	
Contributions	\$0.00
Security Sale Proceeds	\$2,115,230.90
Accrued Interest Received	\$5,064.72
Interest Received	\$9,052.91
Dividend Received	\$31.88
Principal on Maturities	\$468,912.47
Interest on Maturities	\$1,087.53
Calls/Redemption (Principal)	\$0.00
Interest from Calls/Redemption	\$0.00
Principal Paydown	\$53,195.25
Total Acquisitions	\$2,652,575.66
Disposition	
Withdrawals	\$2,501,925.00
Security Purchase	\$418,964.00
Accrued Interest Paid	\$0.00
Total Dispositions	\$2,920,889.00
Ending Book Value	\$133,088.59



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
ABS									
477879AC4	John Deere Owner Trust 2013-B A3 0.87% Due 8/15/2017	9,740.97	08/27/2013 0.88 %	9,739.65 9,740.59	99.99 0.97 %	9,739.67 3.77	0.05 % (0.92)	Aaa / NR AAA	1.13 0.13
89231MAC9	Toyota Auto Receivables Owner 2014-A 0.67% Due 12/15/2017	89,466.20	03/11/2014 0.69 %	89,449.67 89,463.01	99.93 0.90 %	89,405.99 26.64	0.42 % (57.02)	Aaa / AAA NR	1.46 0.29
89231TAB6	Toyota Auto Receivables Owner 2015-C 0.92% Due 2/15/2018	112,833.81	08/18/2015 0.93 %	112,824.74 112,827.85	100.04 0.81 %	112,877.36 46.14	0.54 % 49.51	Aaa / AAA NR	1.63 0.34
43814GAC4	Honda Auto Receivables 2014-2 A3 0.77% Due 3/19/2018	114,548.49	05/13/2014 0.78 %	114,534.72 114,544.45	99.95 0.89 %	114,490.53 31.85	0.54 % (53.92)	Aaa / AAA NR	1.72 0.43
47787VAC5	John Deere Owner Trust 2014-A A3 0.92% Due 4/16/2018	151,704.53	04/02/2014 0.93 %	151,680.22 151,698.18	99.98 0.96 %	151,678.13 62.03	0.72 % (20.05)	Aaa / NR AAA	1.79 0.42
43814NAB1	Honda Auto Receivables 2016-1 A2 1.01% Due 6/18/2018	185,000.00	02/16/2016 1.02 %	184,981.52 184,984.30	100.06 0.92 %	185,119.14 67.47	0.88 % 134.84	NR / AAA AAA	1.97 0.71
89236WAC2	Toyota Auto Receivables Owner 2015-A 1.12% Due 2/15/2019	225,000.00	02/24/2015 1.13 %	224,965.98 224,981.27	100.18 0.92 %	225,404.78 112.00	1.07 % 423.51	Aaa / AAA NR	2.63 0.87
43813NAC0	Honda Auto Receivables 2015-2 A3 1.04% Due 2/21/2019	275,000.00	05/13/2015 1.05 %	274,957.79 274,970.33	100.08 0.96 %	275,229.63 79.44	1.30 % 259.30	NR / AAA AAA	2.65 0.98
47788MAC4	John Deere Owner Trust 2016-A A3 1.36% Due 4/15/2020	180,000.00	02/23/2016 1.37 %	179,971.67 179,973.95	100.37 1.17 %	180,660.60 108.80	0.86 % 686.65	Aaa / NR AAA	3.79 1.87
Total ABS		1,343,294.00	1.03 %	1,343,105.96 1,343,183.93	0.95 %	1,344,605.83 538.14	6.38 % 1,421.90	Aaa / AAA Aaa	2.35 0.83
AGENCY									
3137EACW7	FHLMC Note 2% Due 8/25/2016	250,000.00	01/19/2012 1.09 %	260,126.00 250,331.70	100.23 0.46 %	250,584.75 1,750.00	1.20 % 253.05	Aaa / AA+ AAA	0.15 0.15
3135G0GY3	FNMA Note 1.25% Due 1/30/2017	250,000.00	03/26/2012 1.25 %	249,976.75 249,997.20	100.45 0.47 %	251,130.25 1,310.76	1.20 % 1,133.05	Aaa / AA+ AAA	0.59 0.58
3137EADC0	FHLMC Note 1% Due 3/8/2017	500,000.00	03/19/2012 1.37 %	491,076.00 498,770.12	100.33 0.52 %	501,639.50 1,569.44	2.38 % 2,869.38	Aaa / AA+ AAA	0.69 0.68
313379FW4	FHLB Note 1% Due 6/9/2017	500,000.00	06/20/2012 1.02 %	499,395.00 499,885.60	100.39 0.58 %	501,952.50 305.56	2.38 % 2,066.90	Aaa / AA+ AAA	0.94 0.94
3137EADV8	FHLMC Note 0.75% Due 7/14/2017	400,000.00	06/29/2015 0.79 %	399,708.00 399,851.84	100.15 0.61 %	400,594.80 1,391.67	1.91 % 742.96	Aaa / AA+ AAA	1.04 1.03
3133EAY28	FFCB Note 0.83% Due 9/21/2017	375,000.00	09/18/2012 0.83 %	375,000.00 375,000.00	100.25 0.63 %	375,925.13 864.58	1.79 % 925.13	Aaa / AA+ AAA	1.23 1.21
3135G0ZL0	FNMA Note 1% Due 9/27/2017	385,000.00	Various 1.12 %	383,646.55 384,456.39	100.46 0.63 %	386,762.53 1,005.28	1.84 % 2,306.14	Aaa / AA+ AAA	1.24 1.23
3137EADP1	FHLMC Note 0.875% Due 3/7/2018	775,000.00	Various 1.20 %	763,499.00 770,915.19	100.18 0.76 %	776,428.33 2,147.40	3.69 % 5,513.14	Aaa / AA+ AAA	1.68 1.67
313378A43	FHLB Note 1.375% Due 3/9/2018	500,000.00	08/06/2013 1.48 %	497,605.00 499,119.21	101.17 0.68 %	505,831.00 2,138.89	2.41 % 6,711.79	Aaa / AA+ AAA	1.69 1.67



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
AGENCY									
3130A4GJ5	FHLB Note 1.125% Due 4/25/2018	500,000.00	03/03/2015 1.17 %	499,240.00 499,561.08	100.82 0.67 %	504,075.50 1,031.25	2.39 % 4,514.42	Aaa / AA+ AAA	1.82 1.80
3135G0WJ8	FNMA Note 0.875% Due 5/21/2018	600,000.00	Various 1.12 %	592,971.00 597,328.76	100.40 0.66 %	602,374.80 583.33	2.86 % 5,046.04	Aaa / AA+ AAA	1.89 1.87
313375K48	FHLB Note 2% Due 9/14/2018	750,000.00	02/07/2014 1.50 %	766,672.50 758,003.20	102.83 0.70 %	771,261.00 4,458.33	3.68 % 13,257.80	Aaa / AA+ AAA	2.21 2.15
3135G0YT4	FNMA Note 1.625% Due 11/27/2018	800,000.00	Various 1.59 %	801,286.00 800,618.56	102.13 0.73 %	817,029.60 1,227.78	3.88 % 16,411.04	Aaa / AA+ AAA	2.41 2.36
3137EADG1	FHLMC Note 1.75% Due 5/30/2019	1,000,000.00	Various 1.62 %	1,005,690.20 1,003,650.39	102.75 0.79 %	1,027,497.01 1,506.94	4.88 % 23,846.62	Aaa / AA+ AAA	2.92 2.84
3135G0ZG1	FNMA Note 1.75% Due 9/12/2019	500,000.00	Various 1.80 %	498,905.00 499,303.88	102.77 0.87 %	513,845.00 2,649.30	2.45 % 14,541.12	Aaa / AA+ AAA	3.20 3.10
3135G0A78	FNMA Note 1.625% Due 1/21/2020	500,000.00	02/10/2015 1.67 %	499,040.00 499,309.12	102.36 0.95 %	511,809.50 3,611.11	2.44 % 12,500.38	Aaa / AA+ AAA	3.56 3.43
313383HU8	FHLB Note 1.75% Due 6/12/2020	500,000.00	10/08/2015 1.46 %	506,510.00 505,496.15	102.66 1.06 %	513,303.50 461.81	2.43 % 7,807.35	Aaa / AA+ NR	3.95 3.81
3135G0F73	FNMA Note 1.5% Due 11/30/2020	500,000.00	12/04/2015 1.87 %	491,150.00 492,156.57	101.70 1.11 %	508,481.50 645.83	2.41 % 16,324.93	Aaa / AA+ AAA	4.42 4.26
3130A7CV5	FHLB Note 1.375% Due 2/18/2021	395,000.00	02/17/2016 1.46 %	393,404.20 393,521.24	101.18 1.11 %	399,657.84 2,006.55	1.90 % 6,136.60	Aaa / AA+ AAA	4.64 4.46
3135G0J20	FNMA Note 1.375% Due 2/26/2021	250,000.00	04/20/2016 1.36 %	250,147.50 250,141.59	101.04 1.15 %	252,590.00 1,193.58	1.20 % 2,448.41	Aaa / AA+ AAA	4.66 4.48
Total Agency		10,230,000.00	1.38 %	10,225,048.70 10,227,417.79	0.76 %	10,372,774.04 31,859.39	49.31 % 145,356.25	Aaa / AA+ Aaa	2.32 2.26
COMMERCIAL PAPER									
06538BKS1	Bank of Tokyo Mitsubishi NY Discount CP 0.74% Due 10/26/2016	420,000.00	06/27/2016 0.75 %	418,964.00 418,964.00	99.75 0.75 %	418,964.00 25.90	1.99 % 0.00	P-1 / A-1 F-1	0.32 0.32
Total Commercial Paper		420,000.00	0.75 %	418,964.00 418,964.00	0.75 %	418,964.00 25.90	1.99 % 0.00	P-1 / A-1 F-1	0.32 0.32
MONEY MARKET FUND FI									
316175603	Fidelity Institutional Government MMKT Fund #657	133,088.59	Various 0.02 %	133,088.59 133,088.59	1.00 0.02 %	133,088.59 0.00	0.63 % 0.00	Aaa / AAA NR	0.00 0.00
Total Money Market Fund FI		133,088.59	0.02 %	133,088.59 133,088.59	0.02 %	133,088.59 0.00	0.63 % 0.00	Aaa / AAA NR	0.00 0.00
US CORPORATE									
30231GAA0	Exxon Mobil Corp Note 0.921% Due 3/15/2017	360,000.00	03/17/2014 0.92 %	360,000.00 360,000.00	100.12 0.75 %	360,428.04 976.26	1.71 % 428.04	Aaa / AA+ NR	0.71 0.70



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
US CORPORATE									
037833AJ9	Apple Inc Note 1% Due 5/3/2018	310,000.00	Various 1.09 %	308,621.60 309,491.34	100.25 0.86 %	310,762.91 499.45	1.48 % 1,271.57	Aa1 / AA+ NR	1.84 1.82
478160BR4	Johnson & Johnson Note 1.125% Due 3/1/2019	470,000.00	02/25/2016 1.13 %	469,943.60 469,949.88	100.58 0.90 %	472,733.05 1,762.50	2.25 % 2,783.17	Aaa / AAA AAA	2.67 2.62
084670BL1	Berkshire Hathaway Note 2.1% Due 8/14/2019	350,000.00	07/15/2015 2.00 %	351,305.50 351,000.65	103.03 1.11 %	360,614.80 2,797.08	1.72 % 9,614.15	Aa2 / AA A+	3.12 3.00
594918BG8	Microsoft Callable Note Cont. 10/03/20 2% Due 11/3/2020	300,000.00	Various 2.03 %	299,644.50 299,690.54	102.55 1.38 %	307,656.31 966.67	1.46 % 7,965.77	Aaa / AAA AA+	4.35 4.07
166764BG4	Chevron Corp Callable Note Cont 4/15/2021 2.1% Due 5/16/2021	340,000.00	05/20/2016 2.23 %	338,007.60 338,048.17	101.91 1.68 %	346,489.92 892.50	1.65 % 8,441.75	Aa2 / AA- NR	4.88 4.54
Total US Corporate		2,130,000.00	1.53 %	2,127,522.80 2,128,180.58	1.10 %	2,158,685.03 7,894.46	10.27 % 30,504.45	Aa1 / AA+ AA+	2.89 2.76
US TREASURY									
912828TM2	US Treasury Note 0.625% Due 8/31/2017	125,000.00	Various 0.68 %	124,651.30 124,915.02	100.09 0.55 %	125,112.26 261.12	0.59 % 197.24	Aaa / AA+ AAA	1.17 1.16
912828G79	US Treasury Note 1% Due 12/15/2017	200,000.00	12/11/2014 1.04 %	199,742.86 199,875.18	100.62 0.57 %	201,234.40 87.43	0.95 % 1,359.22	Aaa / AA+ AAA	1.46 1.45
912828UZ1	US Treasury Note 0.625% Due 4/30/2018	200,000.00	05/28/2013 0.92 %	197,164.73 198,946.04	100.07 0.59 %	200,132.80 210.60	0.95 % 1,186.76	Aaa / AA+ AAA	1.83 1.82
912828VQ0	US Treasury Note 1.375% Due 7/31/2018	250,000.00	07/30/2013 1.37 %	250,108.26 250,045.06	101.57 0.62 %	253,925.75 1,435.44	1.21 % 3,880.69	Aaa / AA+ AAA	2.08 2.05
912828RE2	US Treasury Note 1.5% Due 8/31/2018	200,000.00	02/12/2014 1.40 %	200,867.86 200,413.54	101.89 0.62 %	203,773.40 1,002.72	0.97 % 3,359.86	Aaa / AA+ AAA	2.17 2.13
912828B33	US Treasury Note 1.5% Due 1/31/2019	275,000.00	02/27/2014 1.47 %	275,419.86 275,220.44	102.09 0.68 %	280,746.95 1,722.53	1.34 % 5,526.51	Aaa / AA+ AAA	2.59 2.52
912828C24	US Treasury Note 1.5% Due 2/28/2019	800,000.00	Various 1.60 %	796,162.82 797,901.31	102.14 0.69 %	817,124.80 4,010.87	3.89 % 19,223.49	Aaa / AA+ AAA	2.67 2.60
912828D23	US Treasury Note 1.625% Due 4/30/2019	500,000.00	Various 1.55 %	501,838.92 501,058.06	102.55 0.71 %	512,773.50 1,368.88	2.44 % 11,715.44	Aaa / AA+ AAA	2.83 2.77
912828D80	US Treasury Note 1.625% Due 8/31/2019	250,000.00	09/09/2014 1.76 %	248,409.04 248,987.25	102.71 0.76 %	256,787.00 1,357.85	1.22 % 7,799.75	Aaa / AA+ AAA	3.17 3.07
912828G61	US Treasury Note 1.5% Due 11/30/2019	575,000.00	Various 1.42 %	576,870.86 576,584.56	102.33 0.81 %	588,386.57 730.53	2.79 % 11,802.01	Aaa / AA+ AAA	3.42 3.33
912828J50	US Treasury Note 1.375% Due 2/29/2020	625,000.00	04/23/2015 1.38 %	624,806.78 624,854.10	101.89 0.85 %	636,791.88 2,872.37	3.03 % 11,937.78	Aaa / AA+ AAA	3.67 3.56
912828K58	US Treasury Note 1.375% Due 4/30/2020	300,000.00	05/06/2015 1.55 %	297,458.04 298,046.04	101.88 0.87 %	305,648.40 694.97	1.45 % 7,602.36	Aaa / AA+ AAA	3.84 3.72
912828XE5	US Treasury Note 1.5% Due 5/31/2020	500,000.00	Various 1.68 %	495,802.46 496,693.55	102.33 0.89 %	511,640.50 635.24	2.43 % 14,946.95	Aaa / AA+ AAA	3.92 3.80



San Bernardino Municipal Water Department
Account #10183

Holdings Report
As of 6/30/16

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
US TREASURY									
912828XM7	US Treasury Note 1.625% Due 7/31/2020	625,000.00	Various 1.52 %	628,161.27 627,627.11	102.83 0.92 %	642,700.00 4,241.07	3.07 % 15,072.89	Aaa / AA+ AAA	4.09 3.93
912828L99	US Treasury Note 1.375% Due 10/31/2020	350,000.00	Various 1.68 %	344,923.05 345,534.68	101.81 0.95 %	356,330.10 810.80	1.69 % 10,795.42	Aaa / AA+ AAA	4.34 4.19
912828N89	US Treasury Note 1.375% Due 1/31/2021	700,000.00	Various 1.37 %	700,248.43 700,208.27	101.77 0.98 %	712,386.50 4,019.24	3.40 % 12,178.23	Aaa / AA+ AAA	4.59 4.41
Total US Treasury		6,475,000.00	1.46 %	6,462,636.54 6,466,910.21	0.80 %	6,605,494.81 25,461.66	31.43 % 138,584.60	Aaa / AA+ Aaa	3.32 3.22
TOTAL PORTFOLIO		20,731,382.59	1.38 %	20,710,366.59 20,717,745.10	0.82 %	21,033,612.30 65,779.55	100.00 % 315,867.20	Aaa / AA+ Aaa	2.64 2.47
TOTAL MARKET VALUE PLUS ACCRUED						21,099,391.85			



Managed Account Summary Statement

For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Transaction Summary - Managed Account		Cash Transactions Summary - Managed Account	
Opening Market Value	\$21,967,204.02	Maturities/Calls	0.00
Maturities/Calls	(51,216.06)	Sale Proceeds	401,489.44
Principal Dispositions	(401,120.00)	Coupon/Interest/Dividend Income	16,201.20
Principal Acquisitions	509,140.63	Principal Payments	51,216.06
Unsettled Trades	0.00	Security Purchases	(511,401.16)
Change in Current Value	154,503.62	Net Cash Contribution	0.00
Closing Market Value	\$22,178,512.21	Reconciling Transactions	0.00

Earnings Reconciliation (Cash Basis) - Managed Account		Cash Balance	
Interest/Dividends/Coupons Received	16,570.64	Closing Cash Balance	\$44,540.51
Less Purchased Interest Related to Interest/Coupons	(2,260.53)		
Plus Net Realized Gains/Losses	2,651.21		
Total Cash Basis Earnings	\$16,961.32		

Earnings Reconciliation (Accrual Basis)		Total
Ending Amortized Value of Securities		21,878,105.23
Ending Accrued Interest		87,343.36
Plus Proceeds from Sales		401,489.44
Plus Proceeds of Maturities/Calls/Principal Payments		51,216.06
Plus Coupons/Dividends Received		16,201.20
Less Cost of New Purchases		(511,401.16)
Less Beginning Amortized Value of Securities		(21,825,144.18)
Less Beginning Accrued Interest		(69,535.96)
Total Accrual Basis Earnings		\$28,273.99



Portfolio Summary and Statistics

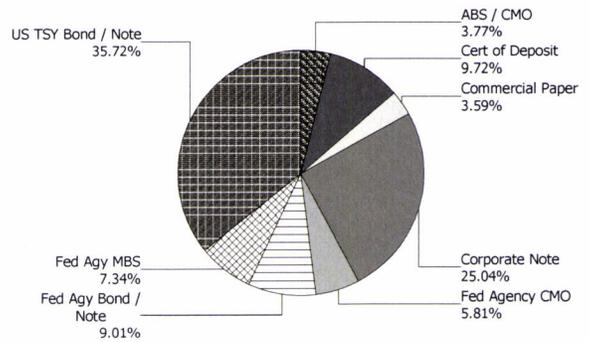
For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Account Summary

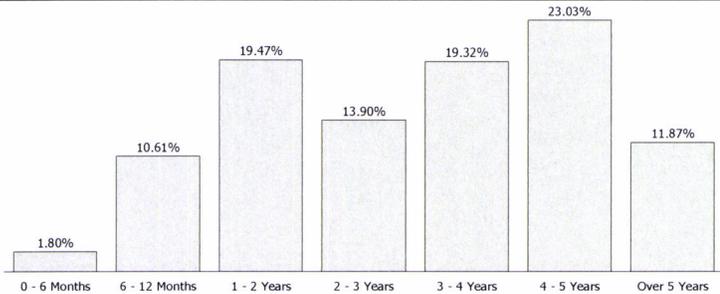
Description	Par Value	Market Value	Percent
U.S. Treasury Bond / Note	7,740,000.00	7,924,187.14	35.72
Federal Agency Mortgage-Backed Security	1,514,358.54	1,627,182.81	7.34
Federal Agency Collateralized Mortgage Obligation	1,233,732.25	1,289,266.60	5.81
Federal Agency Bond / Note	1,965,000.00	1,997,911.79	9.01
Corporate Note	5,430,000.00	5,553,349.01	25.04
Commercial Paper	800,000.00	796,512.00	3.59
Certificate of Deposit	2,150,000.00	2,154,850.20	9.72
Asset-Backed Security / Collateralized Mortgage Obligation	830,000.00	835,252.66	3.77
Managed Account Sub-Total	21,663,090.79	22,178,512.21	100.00%
Accrued Interest		87,343.36	
Total Portfolio	21,663,090.79	22,265,855.57	

Sector Allocation



Unsettled Trades 0.00 0.00

Maturity Distribution



Characteristics

Yield to Maturity at Cost	1.59%
Yield to Maturity at Market	1.05%
Duration to Worst	2.80
Weighted Average Days to Maturity	1526



Managed Account Issuer Summary

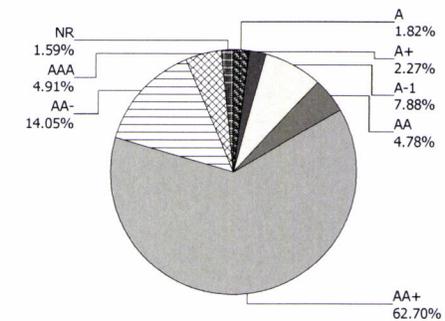
For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Issuer Summary

Issuer	Market Value of Holdings	Percent
APPLE INC	220,541.42	0.99
BANK OF AMERICA CREDIT CARD TRUST	402,406.00	1.81
BANK OF NEW YORK CO INC	403,980.00	1.82
BERKSHIRE HATHAWAY INC	429,353.38	1.94
BNP PARIBAS	398,132.00	1.80
CHEVRON CORP	497,020.23	2.24
CISCO SYSTEMS INC	416,501.60	1.88
EXXON MOBIL CORP	403,121.60	1.82
FANNIE MAE	3,525,879.18	15.90
FREDDIE MAC	1,010,810.07	4.56
GENERAL ELECTRIC CO	445,777.80	2.01
HYUNDAI AUTO RECEIVABLES	80,651.21	0.36
IBM CORP	592,702.37	2.67
JOHNSON & JOHNSON	125,674.50	0.57
JP MORGAN CHASE & CO	398,380.00	1.80
MICROSOFT CORP	479,410.67	2.16
NISSAN AUTO RECEIVABLES	352,195.45	1.59
PFIZER INC	310,674.56	1.40
RABOBANK NEDERLAND	499,940.00	2.25
ROYAL BANK OF CANADA	403,118.00	1.82
SKANDINAVISKA ENSKIDA BANKEN AB	450,477.00	2.03
TENNESSEE VALLEY AUTHORITY NOTES	377,671.95	1.70
TORONTO-DOMINION BANK	399,976.00	1.80
TOYOTA MOTOR CORP	405,425.00	1.83
UNITED STATES TREASURY	7,924,187.14	35.73
US BANCORP	903,733.20	4.07
WAL-MART STORES INC	320,771.88	1.45
Total	\$22,178,512.21	100.00%

Credit Quality (S&P Ratings)





Managed Account Detail of Securities Held

For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
U.S. Treasury Bond / Note											
US TREASURY NOTES DTD 08/31/2011 1.500% 08/31/2018	912828RE2	440,000.00	AA+	Aaa	09/02/14	09/04/14	441,151.56	1.43	2,205.98	440,633.38	448,301.48
US TREASURY NOTES DTD 10/31/2013 1.250% 10/31/2018	912828WD8	200,000.00	AA+	Aaa	10/30/14	11/03/14	199,320.31	1.34	421.20	199,598.72	202,773.40
US TREASURY NOTES DTD 11/30/2011 1.375% 11/30/2018	912828RT9	225,000.00	AA+	Aaa	04/22/16	04/27/16	227,566.41	0.93	262.04	227,392.94	228,893.63
US TREASURY NOTES DTD 12/02/2013 1.250% 11/30/2018	912828A34	325,000.00	AA+	Aaa	06/02/14	06/03/14	322,727.54	1.41	344.09	323,760.43	329,633.85
US TREASURY NOTES DTD 10/01/2012 1.000% 09/30/2019	912828TR1	250,000.00	AA+	Aaa	04/28/15	04/30/15	246,669.92	1.31	628.42	247,533.44	251,865.25
US TREASURY NOTES DTD 10/01/2012 1.000% 09/30/2019	912828TR1	350,000.00	AA+	Aaa	03/26/15	03/27/15	343,806.64	1.41	879.78	345,501.22	352,611.35
US TREASURY NOTES DTD 10/01/2012 1.000% 09/30/2019	912828TR1	600,000.00	AA+	Aaa	02/26/15	02/27/15	587,929.69	1.45	1,508.20	591,372.92	604,476.60
US TREASURY NOTES DTD 10/31/2014 1.500% 10/31/2019	912828F62	550,000.00	AA+	Aaa	05/28/15	05/29/15	552,234.38	1.40	1,389.95	551,697.71	562,804.55
US TREASURY NOTES DTD 10/31/2014 1.500% 10/31/2019	912828F62	650,000.00	AA+	Aaa	09/03/15	09/04/15	653,351.56	1.37	1,642.66	652,704.99	665,132.65
US TREASURY NOTES DTD 02/28/2013 1.250% 02/29/2020	912828UQ1	275,000.00	AA+	Aaa	11/05/15	11/09/15	271,379.88	1.57	1,148.95	271,905.75	279,103.55
US TREASURY NOTES DTD 02/28/2013 1.250% 02/29/2020	912828UQ1	350,000.00	AA+	Aaa	10/08/15	10/09/15	349,042.97	1.31	1,462.30	349,198.69	355,222.70
US TREASURY NOTES DTD 07/31/2013 2.000% 07/31/2020	912828VP2	300,000.00	AA+	Aaa	03/30/16	03/31/16	309,761.72	1.23	2,505.49	309,207.83	313,089.90
US TREASURY NOTES DTD 07/31/2013 2.000% 07/31/2020	912828VP2	325,000.00	AA+	Aaa	03/02/16	03/04/16	334,458.01	1.32	2,714.29	333,776.20	339,180.73
US TREASURY NOTES DTD 07/31/2013 2.000% 07/31/2020	912828VP2	400,000.00	AA+	Aaa	05/03/16	05/06/16	413,687.50	1.17	3,340.66	413,203.72	417,453.20



Managed Account Detail of Securities Held

For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
U.S. Treasury Bond / Note											
US TREASURY NOTES DTD 07/31/2013 2.000% 07/31/2020	912828VP2	500,000.00	AA+	Aaa	02/01/16	02/03/16	514,140.63	1.35	4,175.82	512,886.56	521,816.50
US TREASURY NOTES DTD 07/31/2013 2.000% 07/31/2020	912828VP2	600,000.00	AA+	Aaa	12/28/15	12/30/15	607,570.31	1.71	5,010.99	606,769.13	626,179.80
US TREASURY NOTES DTD 08/31/2015 1.375% 08/31/2020	912828L32	500,000.00	AA+	Aaa	06/28/16	06/29/16	509,140.63	0.93	2,297.89	509,129.00	509,160.00
US TREASURY NOTES DTD 08/31/2015 1.375% 08/31/2020	912828L32	900,000.00	AA+	Aaa	05/25/16	05/31/16	901,300.78	1.34	4,136.21	901,277.32	916,488.00
Security Type Sub-Total		7,740,000.00					7,785,240.44	1.35	36,074.92	7,787,549.95	7,924,187.14
Federal Agency Mortgage-Backed Security											
FNMA POOL #AB5396 DTD 05/01/2012 3.000% 06/01/2022	31417B7J0	119,377.96	AA+	Aaa	08/15/12	08/20/12	125,906.45	1.84	298.44	123,343.01	125,310.85
FNMA POOL #AS4197 DTD 12/01/2014 3.500% 01/01/2030	3138WDUX7	359,266.64	AA+	Aaa	07/10/15	07/16/15	380,373.56	2.62	1,047.86	378,295.17	384,567.53
FNMA POOL #AB5434 DTD 05/01/2012 3.000% 06/01/2032	31417CBC8	270,708.67	AA+	Aaa	07/17/12	07/20/12	283,271.23	2.48	676.77	281,040.94	285,379.94
FNMA POOL #MA1084 DTD 05/01/2012 3.500% 06/01/2032	31418AF29	276,359.41	AA+	Aaa	07/17/12	07/20/12	294,538.69	2.76	806.05	291,091.69	294,366.31
FHLMC POOL #A86315 DTD 05/01/2009 4.500% 05/01/2039	312933AQ7	43,611.74	AA+	Aaa	10/11/11	10/13/11	45,795.73	4.05	163.54	45,739.56	47,617.22
FNMA POOL #AC1637 DTD 08/01/2009 5.000% 09/01/2039	31417KZB6	209,303.75	AA+	Aaa	12/15/14	12/18/14	232,850.39	3.92	872.10	232,850.42	232,801.86
FNMA POOL #AB3033 DTD 04/01/2011 4.500% 05/01/2041	31416YLP1	235,730.37	AA+	Aaa	10/06/11	10/13/11	249,690.03	3.99	883.99	247,797.38	257,139.10
Security Type Sub-Total		1,514,358.54					1,612,426.08	3.01	4,748.75	1,600,158.17	1,627,182.81
Federal Agency Collateralized Mortgage Obligation											



Managed Account Detail of Securities Held

For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Federal Agency Collateralized Mortgage Obligation											
FNMA SERIES 2015-M1 ASQ2 DTD 01/15/2015 1.626% 02/01/2018	3136AMKW8	143,463.63	AA+	Aaa	01/15/15	01/30/15	144,897.20	1.26	194.39	144,110.33	144,617.71
FHLMC SERIES K717 A1 DTD 12/01/2014 2.342% 02/01/2021	3137BFDP3	135,080.62	AA+	Aaa	11/19/14	12/09/14	137,777.50	1.67	263.63	136,970.18	138,944.87
FHLMC SERIES K718 A1 DTD 05/01/2015 2.375% 09/01/2021	3137BHXX0	477,510.64	AA+	Aaa	05/13/15	05/27/15	487,046.53	1.68	945.07	485,030.53	498,034.00
FNMA SERIES 2015-MA AV1 DTD 03/01/2015 2.013% 07/01/2022	3136AMM30	177,400.21	AA+	Aaa	03/12/15	03/31/15	179,170.99	1.71	297.59	178,823.00	181,456.04
FREDDIE MAC SERIES 3842 DTD 04/01/2011 4.000% 04/01/2041	3137A9QP4	300,277.15	AA+	Aaa	05/05/15	05/08/15	322,117.62	3.35	1,000.92	321,603.30	326,213.98
Security Type Sub-Total		1,233,732.25					1,271,009.84	2.06	2,701.60	1,266,537.34	1,289,266.60
Federal Agency Bond / Note											
FANNIE MAE GLOBAL NOTES DTD 04/15/2013 0.875% 05/21/2018	3135G0WJ8	125,000.00	AA+	Aaa	05/24/13	05/31/13	123,106.25	1.19	121.53	124,267.53	125,494.75
TENNESSEE VALLEY AUTHORITY NOTES DTD 09/27/2013 1.750% 10/15/2018	880591EQ1	370,000.00	AA+	Aaa	09/24/13	09/27/13	368,238.80	1.85	1,366.94	369,181.01	377,671.95
FANNIE MAE GLOBAL NOTES DTD 10/01/2013 1.625% 11/27/2018	3135G0YT4	370,000.00	AA+	Aaa	10/22/14	10/23/14	373,515.00	1.39	567.85	372,089.88	377,876.19
FANNIE MAE GLOBAL NOTES DTD 10/01/2013 1.625% 11/27/2018	3135G0YT4	700,000.00	AA+	Aaa	06/16/14	06/19/14	700,021.00	1.62	1,074.31	700,012.92	714,900.90
FNMA BENCHMARK NOTE DTD 02/23/2016 1.000% 02/26/2019	3135G0J53	400,000.00	AA+	Aaa	02/19/16	02/23/16	399,056.00	1.08	1,388.89	399,166.00	401,968.00
Security Type Sub-Total		1,965,000.00					1,963,937.05	1.48	4,519.52	1,964,717.34	1,997,911.79
Corporate Note											
IBM CORP GLOBAL NOTES DTD 02/06/2012 1.250% 02/06/2017	459200HC8	145,000.00	AA-	Aa3	02/01/12	02/06/12	144,357.65	1.34	730.03	144,921.03	145,323.79



Managed Account Detail of Securities Held

For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Corporate Note											
WAL-MART STORES INC SR NOTES DTD 04/05/2007 5.375% 04/05/2017	931142CG6	310,000.00	AA	Aa2	04/05/12	04/11/12	363,967.90	1.72	3,980.49	318,536.91	320,771.88
BERKSHIRE HATHAWAY FIN GLOBAL NOTES DTD 05/15/2012 1.600% 05/15/2017	084664BS9	175,000.00	AA	Aa2	01/08/13	01/15/13	177,493.75	1.26	357.78	175,512.95	176,451.63
PFIZER INC CORPORATE NOTE DTD 05/15/2014 1.100% 05/15/2017	717081DJ9	310,000.00	AA	A1	05/12/14	05/15/14	309,727.20	1.13	435.72	309,919.76	310,674.56
US BANCORP (CALLABLE) DTD 05/08/2012 1.650% 05/15/2017	91159HHD5	500,000.00	A+	A1	07/25/12	07/30/12	510,680.00	1.19	1,054.17	501,831.99	502,394.00
JOHNSON & JOHNSON CORP NOTES DTD 11/21/2014 1.125% 11/21/2017	478160BL7	125,000.00	AAA	Aaa	11/18/14	11/21/14	124,901.25	1.15	156.25	124,953.87	125,674.50
TOYOTA MOTOR CREDIT CORP NOTE DTD 01/12/2015 1.450% 01/12/2018	89236TCA1	100,000.00	AA-	Aa3	01/07/15	01/12/15	99,863.00	1.50	680.69	99,929.34	100,729.10
IBM CORP NOTES DTD 02/06/2015 1.125% 02/06/2018	459200HZ7	200,000.00	AA-	Aa3	02/03/15	02/06/15	199,390.00	1.23	906.25	199,672.49	200,860.80
IBM CORP GLOBAL NOTES DTD 02/08/2013 1.250% 02/08/2018	459200HK0	245,000.00	AA-	Aa3	02/05/13	02/08/13	243,877.90	1.35	1,216.49	244,632.14	246,517.78
BERKSHIRE HATHAWAY GLOBAL NOTE DTD 02/11/2013 1.550% 02/09/2018	084670BH0	250,000.00	AA	Aa2	01/29/13	02/11/13	249,652.50	1.58	1,528.47	249,885.30	252,901.75
EXXON MOBIL CORP NOTES DTD 03/06/2015 1.305% 03/06/2018	30231GAL6	400,000.00	AA+	Aaa	03/04/15	03/06/15	400,000.00	1.31	1,667.50	400,000.00	403,121.60
MICROSOFT CORP GLOBAL NOTES DTD 05/02/2013 1.000% 05/01/2018	594918AS3	120,000.00	AAA	Aaa	04/25/13	05/02/13	119,924.40	1.01	200.00	119,971.82	120,478.32
APPLE INC GLOBAL NOTES DTD 05/03/2013 1.000% 05/03/2018	037833AJ9	220,000.00	AA+	Aa1	04/30/13	05/03/13	219,188.20	1.08	354.44	219,696.41	220,541.42
BANK OF NEW YORK MELLON CORP (CALLABLE) DTD 05/29/2015 1.600% 05/22/2018	06406HDB2	400,000.00	A	A1	05/22/15	05/29/15	399,964.00	1.60	693.33	399,976.66	403,980.00
CHEVRON CORP GLOBAL NOTES DTD 06/24/2013 1.718% 06/24/2018	166764AE0	315,000.00	AA-	Aa2	06/17/13	06/24/13	315,000.00	1.72	105.23	315,000.00	318,679.83



Managed Account Detail of Securities Held

For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Corporate Note											
GENERAL ELECTRIC CAP CORP NOTES DTD 01/08/2010 5.500% 01/08/2020	36962G4J0	390,000.00	AA+	A1	03/20/15	03/25/15	450,968.70	2.05	10,307.92	435,417.30	445,777.80
CISCO SYSTEMS INC CORP NOTES DTD 06/17/2015 2.450% 06/15/2020	17275RAX0	400,000.00	AA-	A1	06/10/15	06/17/15	399,460.00	2.48	435.56	399,566.68	416,501.60
MICROSOFT CORP NOTES DTD 11/03/2015 2.000% 11/03/2020	594918BG8	350,000.00	AAA	Aaa	10/29/15	11/03/15	349,720.00	2.02	1,127.78	349,755.46	358,932.35
TOYOTA MOTOR CREDIT CORP DTD 04/08/2016 1.900% 04/08/2021	89236TCZ6	300,000.00	AA-	Aa3	04/05/16	04/08/16	299,445.00	1.94	1,314.17	299,469.50	304,695.90
CHEVRON CORP NOTES DTD 05/16/2016 2.100% 05/16/2021	166764BG4	175,000.00	AA-	Aa2	05/09/16	05/16/16	175,000.00	2.10	459.38	175,000.00	178,340.40
Security Type Sub-Total		5,430,000.00					5,552,581.45	1.60	27,711.65	5,483,649.61	5,553,349.01
Commercial Paper											
JP MORGAN SECURITIES LLC COMM PAPER -- 0.000% 12/27/2016	46640PMT7	400,000.00	A-1	P-1	04/01/16	04/04/16	396,944.33	1.04	0.00	397,951.44	398,380.00
BNP PARIBAS NY BRANCH COMM PAPER -- 0.000% 01/03/2017	09659BN30	400,000.00	A-1	P-1	04/08/16	04/08/16	396,910.00	1.04	0.00	397,871.33	398,132.00
Security Type Sub-Total		800,000.00					793,854.33	1.04	0.00	795,822.77	796,512.00
Certificate of Deposit											
RABOBANK NEDERLAND NV CERT DEPOS DTD 04/27/2015 1.070% 04/21/2017	21684BXH2	500,000.00	A-1	P-1	04/22/15	04/27/15	500,000.00	1.07	1,040.28	500,000.00	499,940.00
US BANK NA CINCINNATI (CALLABLE) CD DTD 09/11/2014 1.375% 09/11/2017	90333VPP1	400,000.00	AA-	Aa1	09/09/14	09/11/14	399,356.00	1.41	1,680.56	399,743.22	401,339.20
SKANDINAVISKA ENSKILDA BANKEN NY CD DTD 11/17/2015 1.480% 11/16/2017	83050FBG5	450,000.00	A-1	P-1	11/16/15	11/17/15	450,000.00	1.48	4,199.50	450,000.00	450,477.00
ROYAL BANK OF CANADA NY CD DTD 03/11/2016 1.700% 03/09/2018	78009NZZ2	400,000.00	AA-	Aa3	03/11/16	03/15/16	400,000.00	1.69	2,077.78	400,000.00	403,118.00



Managed Account Detail of Securities Held

For the Month Ending **June 30, 2016**

SAN BERNARDINO MUNI. WATER DEPARTMENT - 76991000

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Certificate of Deposit											
TORONTO DOMINION BANK NY CD DTD 03/14/2016 1.720% 03/14/2018	89113E5E2	400,000.00	AA-	Aa1	03/14/16	03/16/16	400,000.00	1.72	2,083.11	400,000.00	399,976.00
Security Type Sub-Total		2,150,000.00					2,149,356.00	1.45	11,081.23	2,149,743.22	2,154,850.20
Asset-Backed Security / Collateralized Mortgage Obligation											
NISSAN ABS 2015-B A3 DTD 07/22/2015 1.340% 03/15/2020	65475WAD0	350,000.00	NR	Aaa	07/15/15	07/22/15	349,972.18	1.34	208.44	349,978.74	352,195.45
HYUNDAI ABS 2016-A A3 DTD 03/30/2016 1.560% 09/15/2020	44930UAD8	80,000.00	AAA	Aaa	03/22/16	03/30/16	79,984.48	1.57	55.47	79,985.45	80,651.21
BANK OF AMER CREDIT CARD TR 2015-A2 DTD 04/29/2015 1.360% 09/15/2020	05522RCU0	400,000.00	AAA	Aaa	04/22/15	04/29/15	399,952.02	1.36	241.78	399,962.64	402,406.00
Security Type Sub-Total		830,000.00					829,908.68	1.38	505.69	829,926.83	835,252.66
Managed Account Sub-Total		21,663,090.79					21,958,313.87	1.59	87,343.36	21,878,105.23	22,178,512.21
Securities Sub-Total		\$21,663,090.79					\$21,958,313.87	1.59%	\$87,343.36	\$21,878,105.23	\$22,178,512.21
Accrued Interest											\$87,343.36
Total Investments											\$22,265,855.57