THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: March 29, 2018

TO: Independent Rates Oversight Committee

FROM: Vic Bianes, Director, Public Utilities Department
via Paz Gomez, Deputy Chief Operating Officer, Infrastructure/Public Works

SUBJECT: Department Response to the Fiscal Year 2017 IROC Annual Report

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On December 21, 2017, the Independent Rates Oversight Committee (IROC) and its subcommittees issued their Fiscal Year 2017 Annual Report with nine recommendations.

The Public Utilities Department (Department) has reviewed and provided responses to IROC's recommendations (Attachment 1). The 2017 Pure Water Annual Progress Report is provided in Attachment 2. The Department agrees with all of the recommendations. We will update IROC periodically to keep you informed of our progress towards implementation.

I would like to express my gratitude on behalf of the Department for your insightful and wide ranging recommendations. Staff will continue to evaluate and consider all of IROC's recommendations. If you have any questions or require additional information, please contact IROC Coordinator, Wilson Kennedy at (858) 614-4070 or via email at wkennedy@sandiego.gov.

Vic Bianes, P.E.
Director, Public Utilities Department

WK/em

Attachments: 1. Department Response to the Fiscal Year 2017 IROC Annual Report
2. 2017 Pure Water Program Annual Progress Report

cc: Honorable Mayor Kevin L. Faulconer
Honorable Council President Myrtle Cole and Members of the City Council
Aimee Faucett, Chief of Staff, Office of the Mayor
Kris Michell, Chief Operating Officer
Stacey LoMedico, Assistant Chief Operating Officer
Andrea Tevlin, Independent Budget Analyst
Almis Udrys, Deputy Chief of Staff, Office of the Mayor
Thomas Zeleny, Chief Deputy City Attorney, Office of the City Attorney
Cathleen Pieroni, Government Relations Water Policy Manager, Office of the Mayor

Public Utilities Department
Response to the Fiscal Year 2017 IROC Annual Report
Issued: December 21, 2017

IROC 2017 Recommendations

1. The Department should release updated Pure Water program costs and timing of expenditures and evaluate the impact of the accelerated Pure Water program on not only the approved 2016 to 2020 water rate increases, but also on future water rates. IROC also recommends that the Department evaluate the additional costs resulting from the Pure Water program be evaluated to determine long term impacts on the City's wastewater rates and charges and charges to non-City entities that contract with the City for wastewater (i.e. JPA members) services.

   Department Response: The Department agrees with this recommendation. The Department will provide IROC with updated Pure Water Program information in alignment with Council Committee updates. The Department continually looks at long-range financial projections for operation and maintenance, capital improvement program size, financing opportunity, and sufficiency of rates (among many others). These projections are discussed internally with the City's Chief Financial Officer and staff (i.e. Financial Management, Debt Management, City Comptroller's Office, etc.) and will be shared with IROC when made public. These projections include the Water Fund's review of funds, which is anticipated to be completed prior to the end of FY 2018 and will include the Pure Water Program costs through FY 2017 and updated capital spending projection for future fiscal years. The Department is also working on updated wastewater projections that will be shared with IROC when made public that will incorporate this same information.

2. Last year, IROC noted that the Pure Water program represented one of the largest investments ever made by the Department. As such, IROC believed that the program needed greater visibility at IROC and recommended that the reporting of the Pure Water budget, schedule, progress and other key elements of the program be separated out from reporting of other departmental programs so that IROC and others can better track the program. The Department agreed with this recommendation stating they would provide an annual report in December of each year. While IROC awaits its first annual report, IROC recommends that to meaningfully track progress and make recommendations in a timelier fashion, the Department report quarterly to IROC on Pure Water progress. IROC also recommends that Pure Water expenditures be shown separately in the Department's budget, or at a minimum provide IROC with detailed expenditures contained in the Department's annual proposed budget.

   Department Response: The Department agrees with this recommendation. The Department will provide the Pure Water annual report to IROC within 30 days after the conclusion of each calendar year. The report will describe Pure Water progress and accomplishments for the preceding year. This will be followed up with a presentation of the preceding year's milestones and achievements. The Department will report quarterly on Pure Water progress and also continue to provide budget information as part of the City-wide budget updates.

3. The Department is currently undertaking an Alternative Water Rate Structure Study that could result in modifications to the existing way water is billed to consumers. This study, when completed, will become one of the building blocks to the next COSS rate setting process. Originally IROC was told that a working group would be formed to help guide the study and that IROC would have a representative on this group. Instead, the rate structure consultant gave presentations to solicit feedback from various community groups and IROC. IROC asked that the consultant and staff provide regular status reports on study progress so that IROC could better monitor study progress and provide ongoing guidance. IROC recommends that this request be followed and that IROC be given study progress reports at each meeting as well as the opportunity to provide input as the study progresses.

   Department Response: The Department agrees with this recommendation.

   The Alternative Water Rate Structure process being undertaken by the Department is an inclusive and public process that will engage stakeholders, ratepayers, elected officials, and others that have a vested interest in this process to potentially determine a different way of ensuring a financially stable utility and enhancing customer transparency. IROC will be a stakeholder in this process and additional updates and opportunity to weigh in on this process will be provided at their committee(s) or full meetings.

4. Continue with the Pipeline and Facility Condition Assessments to help guide the Integrated Asset Management System and the CIP prioritization.

   Department Response: The Department agrees with this recommendation.

   The Department is continuing with the implementation of its robust condition assessment program for water and wastewater infrastructure, which includes pipelines. The results of these assessments, along with forecasted demands and operational data, are used to determine future capital improvements and needs. The Department has a 10–year CIP model in place to identify and prioritize capital assets and financial tools to successfully carry out the Department's mission to provide a reliable service at the lowest cost possible, and in an environmentally responsible manner. Furthermore, the Department assisted with the implementation of the user friendly Infrastructure Asset Management (I AM) San Diego System which went live during the 3rd quarter of FY 2018.

5. Increase the funding for the replacement of the aging portions of the water distribution system, especially replacement of Asbestos Cement pipelines. This should be guided by the Condition Assessment Studies to ensure that the most vulnerable parts of the system are being replaced first.

   Department Response: The Department agrees with this recommendation. The Department has identified high priority Asbestos Cement pipelines which are currently programmed for replacement within the next seven (7) years. Furthermore, the Department will request additional funding as warranted, based on the condition assessment results on risk and priority, contractor's capacity and then the financial capacity of existing rates, funds and financial metrics.

6. The Department should continue to enhance public understanding of the costs and benefits of the water and wastewater system, through consistent information and messaging, under a clear, compelling, value statement (e.g. "Value of Water").

   Department Response: The Department agrees with this recommendation. The Department launched its new outreach campaign, *Water: Getting More Local* in December 2017. The new campaign is designed to increase public awareness of water and wastewater activities and better align the perception of value to the services the City provides. This outreach effort will provide the general public, customers, stakeholders and elected officials with relevant messaging for all service lines of the Public Utilities Department.

7. The Department should notify and provide members of IROC copies or links to information and action items scheduled before the City Council. This will enable IROC members to be fully up to date and versed in the status of programs and issues within its area of responsibility.

   Department Response: The Department agrees with this recommendation. Public Utilities Department staff will ensure that each IROC member will be enrolled with the San Diego City Clerk to receive timely email updates on all docketed information that will be coming before City Council.

8. The Department should provide regular (minimum bi-monthly) updates to the full IROC as it does at the sub-committee level on Water Sales and Purchases. Updates to the full IROC can be information items only, discussed upon request.

   Department Response: The Department agrees with this recommendation.

   The Department will continue to provide IROC with financial information as soon as possible. In addition, the Department will continue to present key drivers of revenues and costs at IROC meetings.

9. The Department should continue to provide quarterly, and annual summaries of miles of pipe and other infrastructure replaced and associated capital costs, as well as a summary of overall project costs that are associated with the CIP and Pure Water.

   Department Response: The Department agrees with this recommendation.

   The Department, in conjunction with Public Works Engineering, will continue to provide IROC with quarterly and annual summaries of miles of pipe and other infrastructure replaced as well as a summary of overall project costs associated with CIP reports for the Water and Wastewater Funds. These reports will show actual miles replaced for both the Water and Wastewater Funds in addition to all previously provided metrics.

   Pure Water cost updates will coincide with design milestones and will be updated again at 100% design.

Attachment 2

Pure Water Program
Annual Progress Report

2017

City of San Diego

Public Utilities Department

Table of Contents

1. Introduction

The Pure Water San Diego Program (Pure Water) made substantial progress over the last year, with efforts focused on the implementation of Phase 1 – North City projects.

This Pure Water Program Annual Progress Report (Progress Report) highlights achievements over the last year, provides a status update on Phase 1 – North City scope and schedule status and discusses critical initiatives that are in progress. No changes have been made to the Central Area and South Bay projects (Phases 2 and 3) since the distribution of the Pure Water Preliminary Capital Improvement Plan (CIP), in July 2015.

2. Pure Water Accomplishments

It has been a year of forward progress, decision-making and major accomplishments!

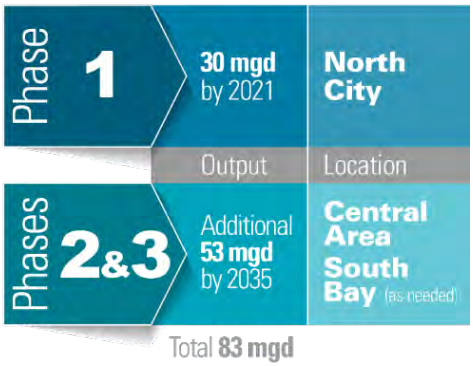
The table below provides an overview of this year's accomplishments; more details are provided on the following pages.

Table 1: At A Glance Accomplishments

Area of Achievement		What Was Accomplished
✓	**Phase 1 – North City Program Implementation**	Completed the following design milestones for Phase 1 – North City Projects: • 100% Design for the North City Pure Water Pipeline and Dechlorination Facility; design review is ongoing • 90% Design for the North City Pure Water Pump Station • 60% Design for the Morena Pump Station and Pipelines Project, North City Water Reclamation Plant Expansion and North City Pure Water Facility • 30% Design for the Metropolitan Biosolids Center Improvements Project • 10% Preliminary Design for North City Renewable Energy Project initiated
✓	**Regulatory Progress**	Submitted first draft of the Title 22 Engineering Report to the California Division of Drinking Water in May 2017 and received comments back during the first week of October 2017
✓	**Environmental Review**	Released draft of the Phase 1 - North City Projects Environmental Impact Report and Environmental Impact Statement for public review on September 7, 2017 and November 24, 2017, respectively
✓	**Engineering and Process Optimization Accomplishments**	Conducted research and improvements at the North City Demonstration Pure Water Facility (Demonstration Facility) to increase efficiency and answer design questions related to life-cycle cost savings and operational stable of future full-scale facilities
✓	**Pure Water Public Outreach**	Partnered with Stone Brewing on an event that was covered by more than 80 news outlets, held the second Pure Water Open House that was attended by more than 500 people and welcomed our 14,000th Demonstration Facility tour participant
✓	**Program Recognition**	The City of San Diego and Stone Brewing received the 2017 Public-Private Partnership Award from the Water Reliability Coalition

3. Phase 1 – North City Implementation Update

Pure Water is the City of San Diego's (City) program that will provide 1/3 of San Diego's water supply locally by 2035. The Pure Water Program will include a system of treatment facilities, pump stations and pipelines that will be constructed in three phases.



The Pure Water Team developed the Phase 1 – North City plan to achieve 30 million gallons per day (mgd) of purified water production. Figure 1 provides an overview of the Phase 1 facilities. As of the end of 2017, all Phase 1 projects are on schedule to be completed by the end of 2021.

The Pure Water Team is being led by the Public Utilities Department; the Public Works Department and consultant staff have been integrated into the Pure Water Team to manage the design and construction of all Pure Water projects. This partnership leverages design, construction and project management expertise that will benefit Phase 1 – North City delivery. The Pure Water Team is overseeing the preliminary design and detailed design for all key Phase 1 – North City projects, which are highlighted below and detailed on the following pages:

- NC01 – Morena Pump Station and Pipelines: 60% Design Completed
- NC02 – North City Water Reclamation Plant Expansion: 60% Design Completed
- NC03 – North City Pure Water Facility: 60% Design Completed
- NC04 – North City Pure Water Pump Station and Pipeline:
    - North City Pure Water Pipeline and Dechlorination Facility: 100% Design Review Ongoing
    - North City Pure Water Pump Station: 90% Design Completed
- NC05 – North City Renewable Energy Project: 10% Preliminary Design Ongoing
- NC06 – Metropolitan Biosolids Center Improvements: 30% Design Completed
- NC07 – Miramar Drinking Water Treatment Plant Improvements: Preliminary Planning Ongoing

Figure 1: North City Project Map

Phase 1 – North City Projects

The Pure Water Team has advanced design of Phase 1 – North City projects. The scope of Phase 1 – North City projects has been refined through the completion of preliminary design and detailed design submittals. Project details are provided in the following pages:

NC01 Morena Pump Station and Pipelines Project

The Morena Pump Station and Pipelines Project (Morena Project) is designed to increase wastewater flows to the North City Water Reclamation Plant, which would require 52 mgd of wastewater to meet both Pure Water and recycled water needs.

The Morena Project would transport an annual average of 32 mgd of wastewater from four existing sanitary sewers near the intersection of Friars Road and Morena Boulevard and would use a pump station to send the wastewater north to the North City Water Reclamation Plant. This would enable the North City Water Reclamation Plant to operate consistently at 52 mgd and the new North City Pure Water Facility to produce 30 mgd of purified water to add to the drinking water supply system.

A wastewater pump station would be built at the intersection of Sherman and Custer Streets, near Morena Boulevard (see Figure 2). Two 10.7-mile wastewater pipelines would also be constructed: one pipeline would transport wastewater from the pump station to the North City Water Reclamation Plant and one would transport salts and contaminants (brine) from the North City Water Reclamation Plant to the Point Loma Wastewater Treatment Plant. The wastewater pipelines would start at Sherman Street, follow West Morena Boulevard to Clairemont Drive, continue to Genesee Avenue and go through University City to the North City Water Reclamation Plant on Eastgate Mall.

This project would also include construction of two approximately 3.5-mile water pipelines (a 16-inch water distribution pipeline and a 36-inch transmission main), which would run parallel to the wastewater pipelines along West Morena Boulevard and Morena Boulevard.

Status: Recently completed 60% Design

Figure 2: Draft Design Rendering for Morena Pump Station

NC02 North City Water Reclamation Plant Expansion Project

The North City Water Reclamation Plant treats wastewater from several San Diego communities and distributes recycled water for irrigation and industrial purposes in the northern San Diego region. As part of the Pure Water Program, the North City Water Reclamation Plant would be expanded from producing 30 mgd to 52 mgd so the facility can continue to serve recycled water customers as well as provide recycled water to the future North City Pure Water Facility.

Major design elements for the North City Water Reclamation Plant expansion are illustrated in Figure 3 and include new secondary clarifiers, addition of chemically-enhanced primary treatment, expansion of the aeration basins, a new tertiary filter and a new equalization basin. This project also includes design of a 42.5 mgd pump station and a wastewater pipeline that would convey recycled water produced at the North City Water Reclamation Plant to the future North City Pure Water Facility. The rendering below shows the upgrades that would be made at the North City Water Reclamation Plant.

Status: Recently completed 60% Design

Figure 3: Draft Design Rendering for North City Water Reclamation Plant Expansion

NC03 North City Pure Water Facility Project

The North City Pure Water Facility would treat recycled water produced at the North City Water Reclamation Plant to purified water standards. The new facility would be constructed north of Eastgate Mall across the street from the existing North City Water Reclamation Plant. The North City Pure Water Facility would feature a state-of-the-art five-step treatment process that includes:

1. Ozonation
2. Biological Activated Carbon filters
3. Membrane filtration
4. Reverse osmosis
5. Ultraviolet light with advanced oxidation

Other North City Pure Water Facility design elements include chemical feed systems, site work, yard piping and electrical installations. The facility would also include an operations building, illustrated in Figure 4, which would house North City Pure Water Facility operations, maintenance and laboratory staff as well as a visitor center.

Once operational in 2021, the new plant would have a production capacity of up to 34 mgd. The purified water from the North City Pure Water Facility would be conveyed to Miramar Reservoir. The North City Pure Water Facility will include a public art component, which is currently in the planning stages.

Status: Recently completed 60% Design

Figure 4: North City Pure Water Facility Draft Design Rendering

NC04 North City Pure Water Pump Station and Pipeline Project

The North City Pure Water Pump Station and Pipeline Project is needed to convey purified water produced by the new North City Pure Water Facility to Miramar Reservoir.

The purified water would be pumped from the North City Pure Water Facility by a new 30 mgd pump station, which would be located on the southeast portion of the North City Pure Water Facility on Eastgate Mall. Next, the purified water would be conveyed via a pipeline that would start at Eastgate Mall, follow Miramar Road, tunnel under the Interstate 15 (I-15) Highway, and continue through the Scripps Ranch community up to Miramar Reservoir. There, the purified water would be dispersed throughout the reservoir via an underwater pipeline that would be constructed on site and installed along the base of the reservoir.

The North City Pure Water Pump Station and Pipeline Project includes the following:

- 30 mgd purified water pump station
- Over 7.5 miles of 48-inch diameter pipeline
- 0.9 miles of 12-inch to 54-inch diameter underwater pipeline at Miramar Reservoir
- Dechlorination facility (illustrated in Figure 5)

The purified water would blend with the City's imported and local water supplies and be treated again at the adjacent Miramar Drinking Water Treatment Plant and distributed to customers.

Status: 100% Design submitted for North City Pure Water Pipeline and Dechlorination Facility (design review is ongoing); 90% Design completed for the North City Pure Water Pump Station

Figure 5: Draft Design Rendering of the North City Pure Water Dechlorination Facility

NC05 North City Renewable Energy Project

The North City Renewable Energy Project would capture Miramar Landfill gas to generate energy and help meet Climate Action Plan targets to reduce greenhouse gas emissions. The project would produce the majority of power needed for the Phase 1 - North City facilities, including the expanded North City Water Reclamation Plant, North City Pure Water Facility, North City Pure Water Pump Station, and Metropolitan Biosolids Center. The City would install a new 15.4 MW generation facility at North City Water Reclamation Plant, 1.6 MW generation facility at Metropolitan Biosolids Center, landfill gas compressor station and pipeline.

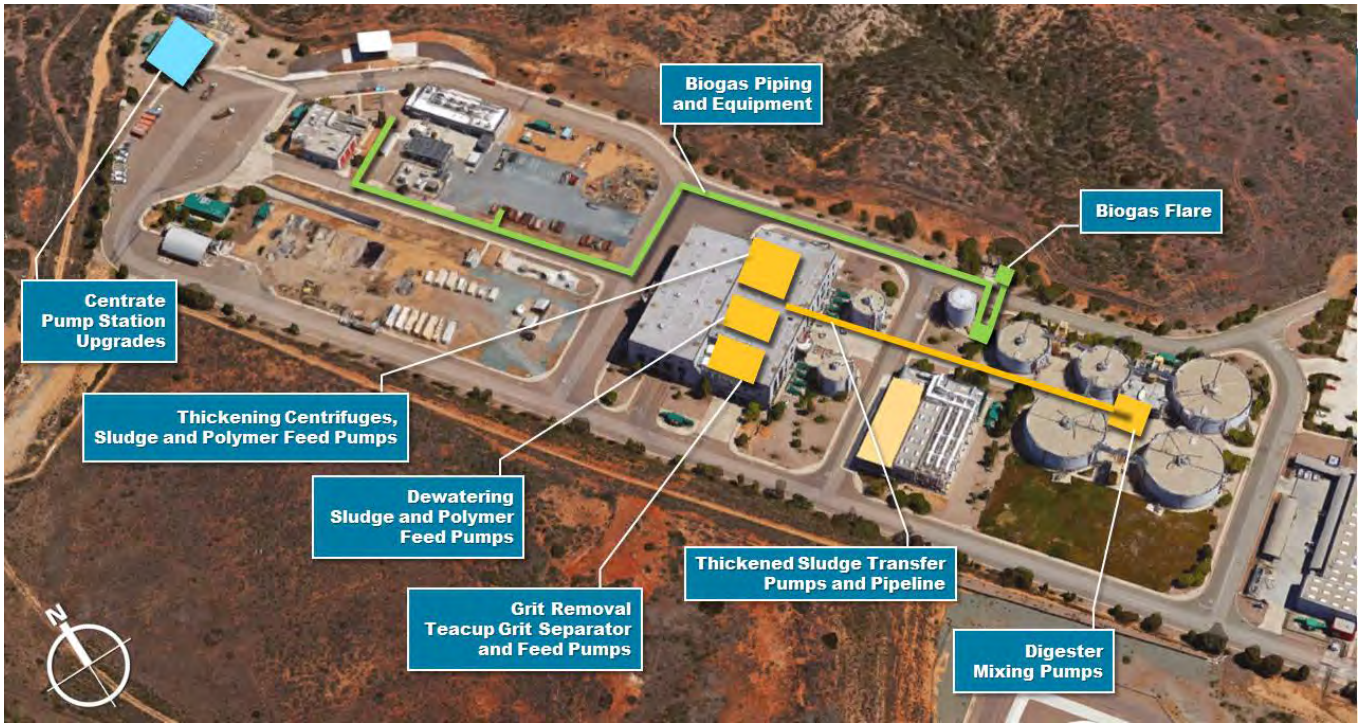
Status: Currently in Preliminary Design (10%); working with Debt Management, Office of the City Attorney and consultants to finalize Request for Statement of Qualifications (RFSQ) for issuance in the first quarter of 2018

NC06 Metropolitan Biosolids Center Improvements Project

The Metropolitan Biosolids Center is the City's regional biosolids facility that receives and processes solids from both the North City Water Reclamation Plant and the Point Loma Wastewater Treatment Plant. Upgrades and improvements to the existing process systems are necessary. The major project scope elements at the Metropolitan Biosolids Center are illustrated on Figure 6 and entail improvements to the following process areas: grit removal, biosolids thickening, anaerobic digestion and centrate pump station.

Status: Recently completed 30% Design

Figure 6: Metropolitan Biosolids Center Improvements Draft Site Plan



NC07 Miramar Drinking Water Treatment Plant Improvements Project

A potential project to improve the Miramar Drinking Water Treatment Plant in support of Pure Water is being considered. More details on progress are provided on pages 9-10.

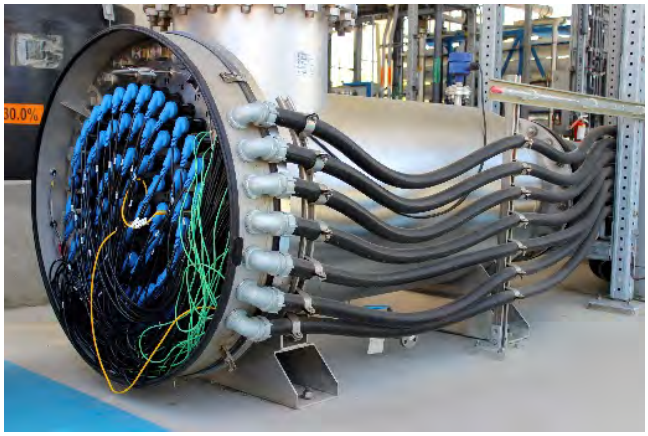
Status: Preliminary planning ongoing; Pump Station Condition Assessment completed December 2017

Engineering and Process Optimization Supporting Studies

The Pure Water Team has been conducting important studies to confirm program and project scope, including a full evaluation to assess the potential impacts of integrating purified water into the existing water and wastewater system.

Advanced Water Treatment Equipment Pre-selection

The Pure Water Team has undertaken a full-scale testing program to preselect membrane filtration and ultraviolet equipment and to prequalify reverse osmosis equipment. The Pure Water Team used a comprehensive testing protocol with pre-established performance standards that has allowed the City to identify which vendors will be considered further for selection of North City Pure Water Facility equipment. This approach was used to ensure the treatment equipment's performance and reliability, and to control potential change orders during construction.



Ultraviolet Disinfection Located at the North City Demonstration Pure Water Facility

Final selection of equipment was completed in 2017 and vendors are working with the North City Pure Water Facility final designer to incorporate layout and equipment needs. In addition, in 2017, the City started the process to prequalify antiscalant suppliers to ensure reliable performance of reverse osmosis membranes at the North City Pure Water Facility. Testing is scheduled to be completed in 2018 with qualifying antiscalant suppliers to be issued a Request for Proposal following testing.

Miramar Drinking Water Treatment Plant and Distribution System Impacts

Bench- and Pilot-Scale Testing

In 2016, bench-scale testing was conducted to assess the impact Pure Water will have, if any, on the drinking water system. The study evaluated the impact of blending Pure Water with other raw water supplies on the reservoirs, treatment plants, and drinking water distribution system to ensure public health protection following a change in the source water. The Pure Water Team performed in-depth data collection; assessed operation, mixing and water quality in the reservoirs; and analyzed implications for treatment plant operation via bench-scale tests. The team investigated implications of the finished water for the distribution system based on water chemistry modeling and recommended improvements and provided associated costs to mitigate any potential impacts. In 2017, to supplement the bench-scale work, additional pilot-scale testing is being conducted to validate the findings from the bench-scale work. The pilot-scale testing is scheduled to be completed in 2018.

Pump Station Condition Assessment

A condition assessment on the Miramar Reservoir Pump Station was performed in 2017. With the Pure Water program in place, the Miramar Pump Station will need to be adapted to additional flows and new operations. The condition assessment evaluates the existing condition of the Miramar Pump Station to ensure that any required upgrades to the existing pumps along with various mechanical and electrical upgrades to the valves, piping, and instrumentation and control system are completed prior to receiving purified water.

The condition assessment was completed in December 2017. The preliminary condition assessment findings are as follows: pumps and pump check valves require rehabilitation, appurtenances to the pumps and small piping require replacement, electrical power equipment is in good condition, and the station instrumentation system programmable logic controllers (PLCs) meet the current standards. Noise assessment study results indicate that the pump station, while operating at full capacity, meets noise level standards and therefore does not require any enclosure.

North City Pure Water Facility Research

The City continues to operate and maintain the Demonstration Facility, a 1 mgd plant that comprises the advanced treatment processes that will be used in the full-scale North City Pure Water Facility. The Pure Water Team conducted additional research and improvements to the Demonstration Facility to increase efficiency and answer specific design questions related to life-cycle cost savings and assuring stable operation of future full-scale facilities.

Grant-funded Research Projects

In 2017, the City was awarded two U. S. Bureau of Reclamation grant-funded research projects, which the Pure Water Team is managing. The two grant-funded research projects are titled “Site Specific Analytical Testing of Reverse Osmosis Brine Impacts to the Treatment Process” (Brine Impacts Study) and “Demonstrating Innovative Control of Biological Fouling of Microfiltration/Ultrafiltration and Reverse Osmosis Membranes and Enhanced Chemical and Energy Efficiency in Water Reuse” (No Chloramine Study).

Lab Technician Performing Water Quality Testing

Brine Impacts Study

A by-product of the North City Pure Water Facility’s reverse osmosis treatment process is brine. The brine produced at the North City Pure Water Facility will be conveyed to the Point Loma Wastewater Treatment Plant via the brine pipeline, which is being designed and constructed as part of the Morena Project. The objective of the Brine Impacts Study was to assess the effect of future brine inputs on Chemically Enhanced Primary Treatment (CEPT) and methane gas production through the anaerobic digestion process at the Point Loma Wastewater Treatment Plant. The study was completed in September 2017; the preliminary findings show that the current CEPT baseline can be restored by increasing coagulant doses. In addition, no apparent effects on gas production were observed.

No Chloramine Study

The objective of the No Chloramine Study is to demonstrate efficiency of the Ozone and Biological Activated Carbon (BAC) pretreatment to eliminate the need for chloramines, which would result in chemicals and energy savings and extending the lifecycle of membranes. This study is currently in progress and will conclude in 2018.

North City Demonstration Pure Water Facility

Tertiary Filter Loading Rate Evaluation

The Pure Water Team recently completed a tertiary filter loading rate evaluation at the North City Water Reclamation Plant to determine if an equal degree of treatment could be achieved for higher filtration rates. The evaluation was modeled off the Filter Loading Evaluation for Water Reuse (FLEWR) study. It has been successfully demonstrated that North City Water Reclamation Plant can operate at filtration rates of 7.5 gal/ft^2-min.

Pathogen Study

To demonstrate pathogen removal at the North City Water Reclamation Plant, the Pure Water Team completed a comprehensive pathogen study, which is one of the largest microbiological datasets ever collected at a wastewater treatment facility. The year-long microbiological monitoring effort included 11 microbiological assays, sample collection from the raw influent, secondary and tertiary effluent, 21 virus sampling events, and 24 protozoa sampling events. The results of the study are being used to support Title 22 Engineering Report approval efforts related to the consequent pathogen removal credits for the North City Water Reclamation Plant. The pathogen removal credits will further promote redundancy in the overall system's pathogen removal capability and operational flexibility in Phase 1 - North City.

4. Regulatory and Environmental Progress

Regulatory Progress

The City is committed to continued close collaboration with the State Water Resources Control Board's (SWRCB) Division of Drinking Water (DDW) and Regional Water Quality Control Board (RWQCB) staff in the development of a project that protects public health as well as meets basin objectives for discharge to Miramar Reservoir. The staff from the City and the DDW met monthly between 2016 and May 2017, when the draft Title 22 Engineering Report was submitted for DDW's review.

Title 22 Engineering Report

The Title 22 Engineering Report describes all aspects of the Phase 1 – North City projects and the framework for compliance with the California Code of Regulations Title 22 Water Recycling Criteria (CCR, 2014) and future surface water augmentation regulations.

The purpose of the Title 22 Engineering Report is to request approval from DDW for the North City Pure Water Project and form the basis for the National Pollutant Discharge Elimination System (NPDES) permit to be issued by the RWQCB. Preparation of this very comprehensive report was initiated in early 2016; the first draft was submitted to the DDW in May 2017.

The North City Pure Water Project Title 22 Engineering Report covers a variety of topics, including:

- Regulatory Requirements
- Wastewater Source Control
- Detailed Project Facilities Description
- Reclaimed and Purified Water Quality
- Drinking Water Supply System
- Treatment Safety Features
- Response & Notification Plan and Contingency Plan
- Monitoring and Reporting Program
- Operations Optimization Plan
- Operations and Maintenance (O&M) Readiness Plan
- Technical, Managerial and Financial Capacity

DDW completed their review of the first draft of the Title 22 Engineering Report and submitted comments to the City the first week of October 2017. The City is in the process of responding and preparing a second draft for DDW's review. The City's goal is to receive an approval letter from DDW with conditions for the project by fall 2018.

Miramar Reservoir

Independent Advisory Panel

The City reconvened the Independent Advisory Panel (IAP) on October 9-10, 2017 to provide their opinion on a couple of key issues important to approval of the project. The DDW and SWRCB were in attendance on the first day of the IAP to engage with panel members. Key issues discussed were related to:

- Dilution modeling at Miramar Reservoir
- Pathogen removal credit at the North City Water Reclamation Plant

In the November 29, 2017 National Water Research Institute Memorandum, the IAP supported the City's approach to enable the use of sophisticated reservoir modeling to determine withdrawal locations at the Miramar Reservoir outlet tower as a demonstration of meeting DDW's dilution criteria under the Surface Water Augmentation regulations.

The IAP recommended a modified approach for addressing pathogen removal credit from the North City Water Reclamation Plant that is statistically defensible and supports the approach proposed by the City, based upon the data collected in the Pathogen Study. In addition, the IAP recommended that appropriate North City Water Reclamation Plant operating and performance criteria be determined that would allow DDW to grant the desired pathogen removal credit. Details of the pathogen study are found on page 11.

California Potable Reuse Regulations Update

The California Water Code requires the DDW, a division of the SWRCB, to adopt regulations for surface water augmentation, which is a form of indirect potable reuse. The Code also requires DDW to investigate and report to the Legislature on the feasibility of developing uniform regulations for direct potable reuse.

Surface Water Augmentation Regulations

The DDW released a draft of the surface water augmentation regulations for public comment on July 21, 2017. The comment period closed on September 12, 2017 and DDW is currently developing responses to public comments. A little more than 20 comment letters were received. The City submitted a letter to DDW in support of the draft surface water augmentation regulations, which are consistent with development of the Phase 1 - North City projects. The City is looking forward to DDW finalizing the surface water augmentation regulations.

Direct Potable Reuse Feasibility

DDW was required to convene two independent groups to assess direct potable reuse feasibility:

1) Expert Panel of scientists and engineers

2) Advisory Group of stakeholders to assist with the feasibility assessment

The City participated in the Advisory Group, helping to ensure that the Pure Water Program was aware of and had representation in formulation of the feasibility assessment. The DDW released its draft report on the feasibility of developing direct potable reuse regulations to the California Legislature on September 2, 2016. The draft report concludes that it is feasible to begin the process of developing direct potable reuse regulations and that the regulations can be adopted, provided that certain research and key knowledge gaps are addressed. The City supports the draft report's overall conclusion that it is feasible to develop uniform criteria for direct potable reuse in California.

Since that time, Assembly Bill 574 was passed in the California Legislature that provides specific definitions for various types of direct potable reuse and for the SWRCB to adopt uniform recycling criteria for direct potable reuse through raw water augmentation (excluding an environmental buffer) by December 31, 2023. The SWRCB must convene an expert panel to review proposed criteria to ensure that they are protective of public health.

Regional Water Quality Control Board

During the past year, the City initiated discussions with the RWQCB staff, which is part of the SWRCB. Those initial meetings and communications have focused on the City's proposed approach for ensuring that:

- The Miramar Reservoir purified water discharge complies with applicable Basin Plan objectives
- A pure water conveyance system discharge under emergency conditions to a stormwater drain, prior to the reservoir, meets ambient water quality objectives

Now that the draft Title 22 Engineering Report has been submitted to the DDW and comments have been received by the City, the City will begin preparing the appropriate NPDES permits.

The City began meeting with the California Department of Fish and Wildlife in late spring of 2017 to balance beneficial use designations for Miramar Reservoir while ensuring that the water quality meets all applicable receiving water and drinking water requirements established by the SWRCB and DDW. The City has studied the ecosystem in Miramar Reservoir based on vetted, well-accepted modeling and on thoroughly researched assessments of nutrient inputs. The results were included in the Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) document and indicate that:

- There will be no loss or impairment of beneficial uses in Miramar Reservoir
- A functioning aquatic community will continue to exist
- Impacts to warm water habitats are less than significant

Point Loma Area

Environmental Review

Significant progress has been made on the project-level environmental document for Phase 1 - North City.

A Draft North City Project joint EIR/EIS (SCH No. 2016081016) has been prepared in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The project-level analysis includes all projects necessary to produce 30 mgd of purified water for the first phase of the Pure Water Program.

Phase 1 – North City Projects EIR and EIS

Accomplishments

- Notice of Preparation of an EIR for the Phase 1 - North City projects released on August 4, 2016
- Notice of Intent to Prepare an EIS for the Phase 1 - North City projects published by the U.S. Bureau of Reclamation on August 5, 2016
- Draft of the Phase 1 - North City Projects EIR released for CEQA public review on September 7, 2017
    - Numerous comments were received from individuals, organizations and agencies
    - Comment topics include CEQA process, clarifications, project alternatives, traffic and community impacts, project details, future project coordination, health and safety, noise, biological resources, air quality and project timing
- Draft EIR Public Workshop conducted on October 11, 2017
- Notice of Availability for the EIS (NEPA) public review period released by the U.S. Environmental Protection Agency (EPA) on November 24, 2017

Anticipated Timeline for Completion

- Response to EIR (CEQA) Comments in January 2018
- EIS (NEPA) public comments are due by January 8, 2018
- City to finalize EIR/EIS in February 2018
- Notice of Decision by City Council in April 2018
- Record of Decision by the U.S. Bureau of Reclamation is anticipated in June 2018

Phase 1 – North City Projects Environmental Regulatory Permitting Accomplishments

Permit applications for impacts to jurisdictional waterways and wetlands were submitted to the California Department of Fish and Wildlife, RWQCB, and the U.S. Army Corps of Engineers in 2017.

5. Phase 1 – North City Schedule and Budget Update

Schedule

The table below shows milestone dates for the Phase 1 - North City projects. NC07 – Miramar Drinking Water Treatment Plant Improvements Project is not included since it is still in preliminary planning stages.

Table 2: Current Phase 1 – North City Schedule

Project Name	Design Finish	Construction Contract Advertisement*	Construction Start*	Project Complete*
NC01 Morena Pump Station and Pipelines	Jul-2018	Aug-2018	Apr-2019	Nov-2021
NC02 North City Water Reclamation Plant Expansion	Apr-2018	May-2018	Feb-2019	Dec-2021
NC03 North City Pure Water Facility	Apr-2018	Jun-2018	Feb-2019	Nov-2021
NC04 North City Pure Water Pump Station and Pipeline	Feb-2018	Feb-2018	Nov-2018	Mar-2021
NC05 North City Renewable Energy Project**	Feb-2020	N/A	Mar-2020	Dec-2021
NC06 Metropolitan Biosolids Center Improvements	May-2018	Jun-2018	Feb-2019	Oct-2021

*Projects are broken into multiple construction contracts; dates are representative of the primary construction contract.

**North City Renewable Energy Project is anticipated to be procured via a design-build-finance-operate-maintain (DBFOM) contract method. RFSQ is expected to be released in early 2018 with a follow-on Request for Proposals in the summer of 2018.

Budget

The draft Phase 1 – North City budget was updated in mid-2017 to reflect the projects' 30% Design estimates. The estimates will continue to be updated as the projects progress through design and construction.

Table 3: Draft Phase 1 – North City Budget

Project Name	Project Cost Estimate
Total	**$1,226,014,000**
NC01 Morena Pump Station and Pipeline	$297,256,000
NC02 North City Water Reclamation Plant Expansion	$195,719,000
NC03 North City Pure Water Facility	$502,486,000
NC04 North City Pure Water Pump Station and Pipeline	$113,724,000
NC05 North City Renewable Energy Project*	$76,380,000
NC06 Metropolitan Biosolids Center Improvements	$40,449,000

* North City Renewable Energy Project cost estimate based on project validation

City of San Diego

Value Engineering

Value Engineering Studies were performed on key projects at the completion of 30% Design to support cost and schedule saving measures. As a result, multiple recommendations were incorporated into the detailed designs moving forward, such as:

- Morena Project: Utilizing open cut technique in lieu of micro tunneling
- North City Pure Water Facility: Modify the O&M building to reduce the footprint and increase the height of Reverse Osmosis Skids to reduce building size
- North City Pure Water Pump Station and Pipeline Project: Reduce the pipe size at strategic locations, such as locations that require tunneling

Grants/Loans

The City has successfully submitted multiple applications for grants and initiated several applications for additional grants and loans. The EPA has invited the City of San Diego to apply for a $492 million Water Infrastructure Finance and Innovation Act (WIFIA) loan. The City submitted a letter of interest to the EPA for the Pure Water Program in April 2017 and was selected from a group of projects to move forward in the process. Additionally, the EPA has notified the City that there may be additional funds up to $20-30 million available. The City is concurrently applying for Clean Water State Revolving Fund (CWSRF) loans from the SWRCB, which would provide a low cost source of financing. If awarded these loans, the City will use the funds to construct Phase 1 – North City.

Thus far, the City has procured or plans to procure the grants/loans that are detailed in Table 4 on the following page.

Table 4: Grant/Loans Procured or Being Procured by City

Title	Agency	Project Title	Amount Awarded	Award Date
Grants Awarded				
Watersmart: Title XVI Water Reclamation and Reuse Program FY16	Bureau of Reclamation	Pure Water North City Planning and Design	$4,940,000	9/13/2016
Watersmart: Title XVI Water Reclamation and Reuse Program FY17	Bureau of Reclamation	Pure Water North City Planning and Design	$4,200,000	8/7/2017
Title XVI Feasibility Studies	Bureau of Reclamation	Biological Fouling Grant	$300,000	8/21/2017
Title XVI Feasibility Studies	Bureau of Reclamation	Analytical Testing of Reverse Osmosis Brine Impacts	$48,526	8/21/2017
Grant Application Submitted - Under Review by Agency				
Proposition 1 Water Storage Investment Program	California Water Commission	Pure Water San Diego	$219,310,000 (Amount Requested)	TBD
Border Environment Cooperation Commission (BECC) / North American Development Bank	BECC / North American Development Bank	Pure Water North City	$8,000,000 (Amount Requested)	TBD
Grant and Loan Applications In Process				
Proposition 1 Regional Water Reliability - Integrated Regional Water Management Program Grant	Department of Water Resources	Pure Water San Diego	TBD	TBD
Clean Water State Revolving Fund Loans	SWRCB	Pure Water San Diego	$1,150,000,000* (Amount to be Requested)	TBD
Watersmart: Title XVI Water Reclamation and Reuse Program FY18 Grant	Bureau of Reclamation	Pure Water North City Planning and Design	$44,567,750** (Amount Requested)	TBD
WIFIA Loan Program***	EPA	Pure Water North City	$492,000,000*** (Amount Requested)	TBD

*The City will apply for State Revolving Fund loans for the full amount of Phase 1 eligible projects.

** It is anticipated funding in the amount of $5 million may be awarded, based on prior awards.

*** The City submitted a Letter of Interest for WIFIA funding and was invited to apply for $492 million in WIFIA loans.

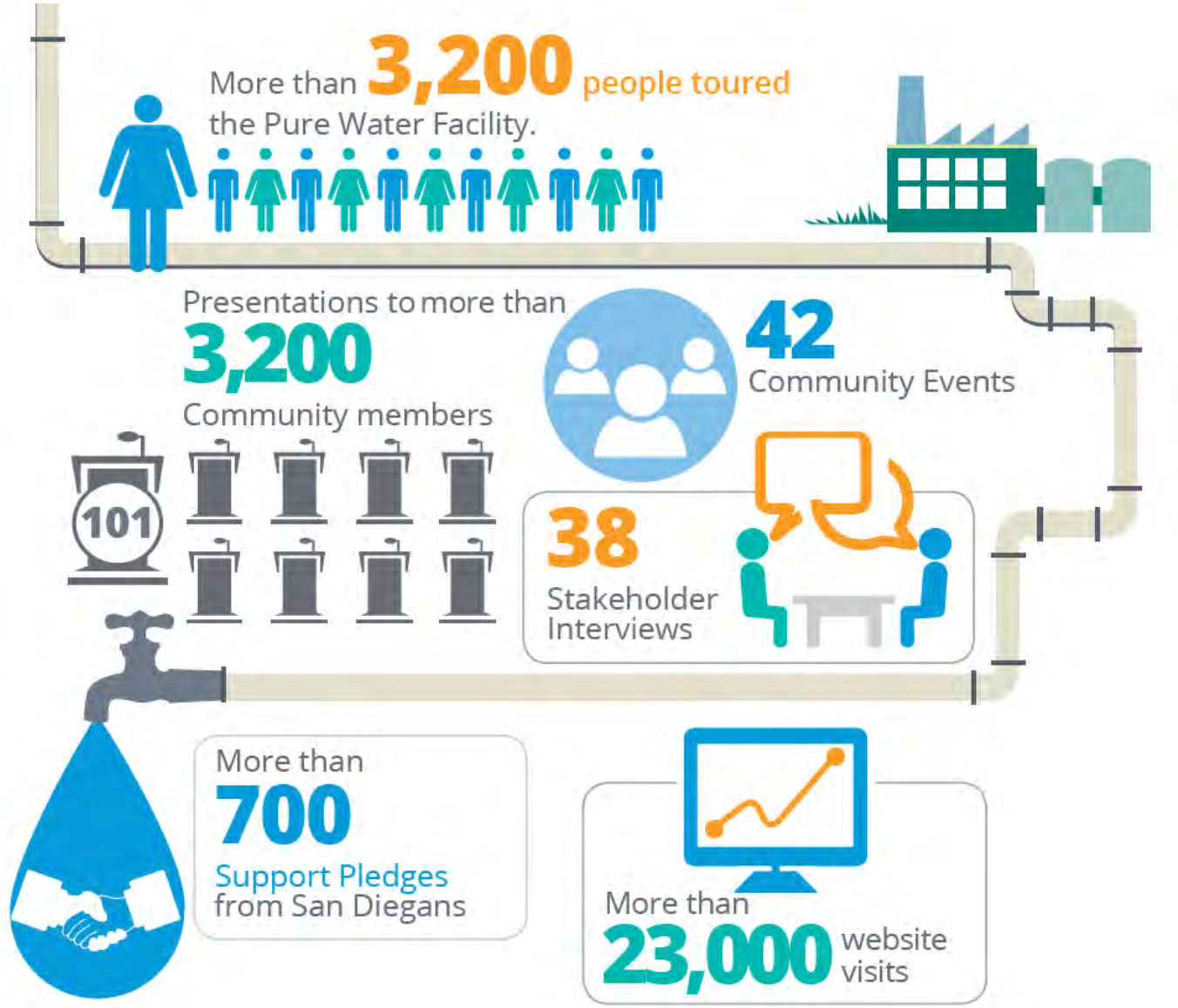
6. Other Critical Initiatives in Progress

Program and Project-Specific Outreach

The Pure Water Team has continued to implement a comprehensive program outreach plan. This year, the North City Demonstration Pure Water Facility welcomed its 14,000th tour participant and the City of San Diego partnered with Stone Brewing to brew beer using purified water from the Demonstration Facility for an event that was covered by more than 80 local, national and international news outlets.

In addition, program outreach made many accomplishments in 2017, as shown in Figure 7 below.

Figure 7: Public Outreach Accomplishments



Pure Water Day Open House

More than 500 people attended the second annual Pure Water Day Open House event to learn more about the Program, Phase 1 projects and tour the Demonstration Facility.

With construction on the Phase 1 Pure Water projects beginning in 2018, project-specific outreach on several projects has continued. As part of this effort, the Pure Water Team held an Open House event in October 2017 for the public at the North City Water Reclamation Plant, which includes the Demonstration Facility. The goal of this event was to increase awareness of the Pure Water Program and upcoming projects. The Open House included tours of the Demonstration Facility, tastings of the purified water, a video testimonial booth, an interactive Kid Zone, tours of the North City Waterwise Garden, a succulent planting station and free snow cones, kettle corn and hot dogs. The Demonstration Facility hosted a record 21 tours over 5 hours.

Pure Stone Partnership

In March 2017, the Pure Water Program partnered with Stone Brewing to brew Stone Full Circle Pale Ale, using purified water from the Demonstration Facility.

The March 16, 2017 event marked the first time a commercial brewery had brewed beer with 100% advanced-treated recycled water. Mayor Kevin Faulconer and Pat Tiernan, Chief Operating Officer (COO) of Stone Brewing, kicked off the Pure Stone event by pouring the first pints of sustainably-brewed beer.

More than 200 City leaders and elected officials gathered at Stone Brewing World Bistro & Gardens in Liberty Station to hoist a glass and taste the beer for themselves. The partnership's shared commitment to sustainability and ingenuity helped the City cement its reputation as a leader in potable reuse nationwide. To recognize the importance and significance of the partnership, Mayor Kevin Faulconer presented a proclamation that declared March 16 "Pure Stone Day." The innovative partnership was covered by more than 80 local, national and international media outlets.

Phase 1 Project Outreach

In preparation for start of construction on Phase 1 projects, project-specific outreach increased in 2017, with 20 presentations provided to more than 600 community members in City Council Districts 1, 5, 6 and 7 – the communities within the Phase 1 project area.

These presentations included information on the proposed pipeline alignments and facility locations, work hours during construction, renderings of facilities and traffic control plans. Presentations were made to community planning groups, town councils, civic associations, home owner associations, recreation councils, and stakeholder groups. Additionally, the Pure Water Team provided presentations to the San Diego Council of Bass Clubs and increased outreach efforts to the fishing community in San Diego.

Demonstration Pure Water Facility Tour Participants Drinking Pure Water

Public Art Outreach

An event was held on June 10, 2017, to obtain public input on the public art piece that will be designed for the full-scale North City Pure Water Facility. Approximately 30 attendees met the artist, toured the Demonstration Facility and shared their memories and thoughts on the importance of water to their lives via an interactive activity.

Pure Water Working Group

The Pure Water Working Group reconvened on June 29, 2017 to review and provide input on the 30% design renderings of the full-scale North City Pure Water Facility. The Pure Water Working Group was established in 2014 and consists of representatives from San Diego community planning groups, businesses, City Council District offices, environmental organizations and community leaders.

Contractor Forum

The Pure Water Team participated in the Contractor Forum, held on August 28, 2017. The purpose of the Contractor Forum was to provide the construction industry with the timing and scope of Pure Water construction contracts, as well as to provide a general update on construction for the rest of Public Utilities Department's water and wastewater Capital Improvement Program (CIP). The event outlined how projects will be implemented and how contractors can partner together to bid on these upcoming projects. City staff were available to answer questions related to both programs.

Youth Outreach

The next generation of San Diegans will be the main beneficiaries of the Pure Water Program, which is why the City continues to place emphasis on engaging youth. Throughout the past year, 2,908 San Diego youth were engaged through tours, events and presentations. In November 2017, the City partnered with Carollo Engineers and the Fleet Science Center Better Education for Women in Sciences and Engineering (BE WiSE) Program to hold a workshop for aspiring female scientists and engineers. More than 30 middle and high school students attended the workshop and toured the Demonstration Facility. Female engineers from the City and Carollo Engineers discussed their careers in water and answered questions from workshop attendees. More than 300 students participating in the FIRST LEGO League robotics competition toured the Demonstration Facility as part of their research to develop a project that helps solve a water supply challenge.

Awards and Recognition

The City of San Diego and Stone Brewing received the 2017 Public-Private Partnership Award from the Water Reliability Coalition. The partnership was recognized for increasing awareness of the safety and reliability of potable reuse by brewing* Stone Full Circle Pale Ale *beer with purified water produced from the City's demonstration Pure Water Facility.

The Pure Water Program received the Outstanding Public Involvement/Education Program from the California Association of Environmental Professionals and the Public Outreach Award from the American Planning Association San Diego Section. The City received two San Diego/Imperial Counties Mark of Excellence Silver Awards from the Public Relations Society of America for the first annual Pure Water Day Open House and Pure Stone event, in addition to the 2017 Public Relations (PR) Team of the Year Special Award and the Best of Show Award for the Pure Stone event.

2017 Public-Private Partnership Award from the Water Reliability Coalition (left and middle), Public Outreach Award from the American Planning Association San Diego Section (right)

San Diego/Imperial Counties Mark of Excellence Silver Awards from the Public Relations Society of America (left), Outstanding Public Involvement/Education Program Award from the California Association of Environmental Professionals (right)

Construction Management Planning

The Pure Water Team has initiated construction management (CM) procurement, is establishing the CM organizational Structure and protocols and is implementing PMWeb.

As-needed CM Procurement

The Pure Water Team initiated the procurement process for CM services to assist with the oversight of Phase 1 - North City construction projects. Two CM consultants have been selected, one for treatment facilities and one for conveyance facilities. The CM contracts are currently in negotiation and the selected CM consultants are scheduled to be onboard during the first and second quarters of 2018.

Establish CM Organizational Structure and Protocols

The Pure Water Team is developing the organizational structure for managing the construction of Phase 1 - North City projects. The organizational structure defines the functional roles and responsibilities to be performed by the City, Program Management Team, CM Consultants and other consultant staff and outlines the roles and responsibilities for each of the positions in the CM organizational structure.

The Pure Water Team coordinated with the Public Works Department Construction Management and Field Services Division and CM leadership to outline the requirements for various CM procedures, business processes and systems to be used for construction of Phase 1 - North City projects. The Pure Water Team is using these requirements to develop CM Plan Guidelines for the Pure Water Program that will detail the specific procedures and protocols that will be followed during construction and specific Construction Management Information System (CMIS) requirements processes to be followed.

PMWeb Implementation for Program Controls and Reporting

Last year, the City selected PMWeb as the CMIS controls and reporting platform that will be used during construction. The PMWeb tool is currently configured to be utilized for Pure Water Program, but with the flexibility to be used on other City infrastructure projects and programs. The Pure Water Team is defining the specific CM business processes that will be managed and various reports that will be generated using PMWeb and is working with the PMWeb integration consultant to establish the required workflows, document management and reporting functions to support the construction of Phase 1 – North City projects. All construction contractors, the CM consultants as well as the Pure Water Team will use the CMIS for all data management, CM procedures and information management during the construction phase. The PMWeb team integrated the PMWeb tool directly with the City's accounting system, which allows for accurate and timely project financial reporting.

Phase 1 - North City Commissioning Plan

The Phase 1 – North City facilities are interconnected and part of a linear system that functions sequentially to produce pure water. Commissioning, startup and testing of these facilities therefore require careful planning to assure the system functions as a whole to meet objectives, regulatory requirements and the overall Program schedule.

Construction of all Phase 1 – North City projects will consist of approximately 12 separate prime construction contracts. The final commissioning, startup and testing activities to be completed as part of all these contracts will need to be coordinated carefully to address schedule and operational inter-dependencies. Therefore, the Pure Water Team's commissioning planning efforts are being implemented to take into consideration project-specific commissioning; start-up and testing requirements; commissioning inter-dependencies between construction packages; North City facilities system-wide commissioning and testing requirements; and sequencing, timing and risks associated with releasing some prime construction contractors prior to the system-wide commissioning and costs associated with keeping construction contractors on stand-by for system-wide commissioning.

Following the initial November 2016 Commissioning Planning Workshop (Workshop 1), the Pure Water Team conducted project-specific commissioning planning meetings with each project design team, comprising City and final design consultant staff throughout 2017. The purpose of the project-specific meetings was to initiate discussion with the design consultants and understand their approach to address commissioning, startup and testing requirements within the contract documents for their project. These meetings identified questions and areas for additional investigation and cross-project coordination between the design teams. The meetings resulted in identification of the design consultants' planned sequences, acceptance and performance test requirements and language for inclusion in the project technical specifications describing these requirements.

A second Commissioning Planning Workshop was conducted in November 2017 that included the participants from Workshop 1 and final design consultant team members from each project. This workshop focused on the interfaces between North City Projects and identified additional questions for the City to consider and specific cross-project coordination items for the design consultants to address in the projects' contract documents. In addition, this workshop identified areas where the Distributed Control System (DCS) elements require cross-project coordination in order to achieve the performance and acceptance testing requirements of the facilities.

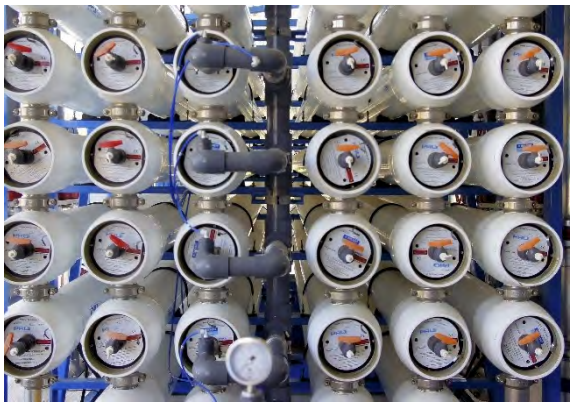
Microfiltration Canisters at the North City Demonstration Pure Water Facility

Operator Readiness

The Pure Water Team is working to ensure that the correct O&M staff are in place and have the qualifications and training required to operate the new Pure Water facilities in a safe and reliable manner.

Operator Training on Demonstration Facility

The 1 mgd Demonstration Facility has been operated and maintained by the City with support of consultant staff since 2011. In 2017, the Demonstration Facility's O&M was transitioned to City staff through comprehensive operator training and development of an O&M plan. The Pure Water Team will leverage the Demonstration Facility O&M plan to train staff on the future operation of the full-scale North City Pure Water Facility.



RO Pressure Vessels Located at the North City Demonstration Pure Water Facility

O&M Readiness Plan

In 2017, the Pure Water Team completed development of the comprehensive O&M Readiness Master Plan for Phase 1 – North City. The City is currently using the O&M Readiness Plan as a guide to budget, hire and onboard staff, as identified in the hiring plan. The content of the Pure Water North City O&M Readiness Master Plan was used to develop the O&M-related sections of the Title 22 Engineering Report and will support creation of the North City Pure Water Operations Optimization Plan, which will be developed prior to the commissioning of all Phase 1 – North City facilities.

In addition, City staff have been involved in planning of a new Advanced Water Treatment Certification Program through participation in the SWRCB Advisory Group on Feasibility of Developing Criteria for Direct Potable Reuse and a collaborative effort led by the California Urban Water Agencies. Through this involvement, the City is participating in development of certification requirements that will be applicable to the North City Pure Water Facility operations staff.

7. Summary of 2017 Accomplishments

When the Pure Water Team entered 2017, we wanted to capitalize on the planning and outreach work that set the foundation for Phase 1 – North City and begin design and regulatory approval efforts in earnest. During 2017, we met this goal with all major projects advancing well into design development and some nearing completion.

The Pure Water Team has continued our engineering and optimization studies, prequalifying specialized treatment equipment and conducting studies to better understand the:

1) Impact of Pure Water on Miramar Drinking Water Treatment Plant performance and the drinking water distribution system
2) Approaches to further optimize the North City Pure Water Facility treatment processes
3) Removal of pathogens and indicator organisms at the North City Water Reclamation Plant
4) Impact of purified water treatment residuals on the performance of the Point Loma Wastewater Treatment Plant

In addition, the Pure Water Team has made significant progress on the regulatory front, releasing the North City Projects EIR/EIS, completing the first draft of the Title 22 Engineering Report, and beginning the NPDES permit process. At the same time, we have made significant progress with the submittal of funding requests, including grant and low-interest loan applications at both the State and Federal level. Finally, we have maintained our award-winning Public Outreach Program, rallying support for Pure Water across a wide range of stakeholders.

As we move into 2018, the Pure Water Team will complete project designs, welcome CM consultants onboard to guide the next phase of project implementation, and begin procurement for construction contracts. We will continue to focus on O&M readiness to build capacity for project start-up in 2021 and beyond. 2018 will be a critical year for regulatory approvals from the SWRCB. It is an exciting time for the Pure Water Team and the City of San Diego – stay tuned!

The Pure Water Team continues to move ahead with Phase 1 – North City implementation and looks forward to another successful year of progress towards meeting the Phase 1 goal - producing 30 mgd of purified water in 2021.