

## WaterSMART:

# Water Recycling and Desalination Planning

NOFO: R23AS00076

## City of Burbank

# POTABLE REUSE PLANNING, ENVIRONMENTAL COMPLIANCE, AND PRE-FINAL DESIGN STUDY

#### Prepared For:

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February 28, 2023

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#### 1. TECHNICAL PROPOSAL AND EVALUATION CRITERIA

A. Executive Summary

**Date:** February 28, 2023

**Applicant Name:** City of Burbank Water and Power (BWP) Department

City, County, State: Burbank, Los Angeles County, CA

**Application Type:** Funding Group I

**Project Summary.** The City of Burbank Water and Power (BWP) Department requests \$400,000 to conduct a feasibility study for a new potable reuse facility that will purify a portion of the City's recycled water for potable uses. The study's scope of work will include feasibility assessment, facility planning, environmental compliance, pre-final design, and community engagement and outreach. The proposed potable reuse facility will:

- Maximize the beneficial use of 4.2 MGD of recycled water that is produced by the City, but is not used and is currently being discharged to the ocean;
- Decrease the City's 100% dependence on imported water;
- Increase reliability and sustainability of imported supplies (i.e., State Water Project (SWP) and Colorado River) that are increasingly vulnerable due to climate change; and
- Improve BWP's operational flexibility.

**Project Timeline. 24 MONTHS.** BWP is ready to begin the project immediately following execution of the grant agreement, which is estimated to be October 2023. The Project can be completed within 24 months, by October 2025, including all grant closeout activities.

**Federal Facility.** The proposed project area is not located within a Federal facility. However, the City of Burbank's potable water supply is entirely comprised of imported water from the Colorado River and the SWP delivered via the Metropolitan Water District of Southern California (MWD). The Bureau of Reclamation (Reclamation) manages and operates the Colorado River system, including project planning, public and water-user relations, and supervision of project operation and maintenance (e.g., dams and powerplants.) Additionally, Reclamation, in conjunction with the California Department of Water Resources (DWR), operates the SWP under a Coordinated Operation Agreement which outlines water quality, water flow, and other operational issues, as well as cost sharing to meet joint responsibilities under the Endangered Species Act, including monitoring and habitat restoration. The ultimate potable reuse facility would reduce required draws on these Reclamation water sources.

#### **B. Project Location**

The proposed *Potable Reuse Planning, Environmental Compliance, and Pre-Final Design Study* will be conducted for the City of Burbank (population 105,401¹), which is located in Los Angeles County. The City covers approximately 17 square miles (10,880 acres) of the eastern end of the

<sup>&</sup>lt;sup>1</sup> Known as the "Media Capital of the World," the City's weekday population nearly doubles as employees commute to the City's more than 1,000 media and entertainment companies.

San Fernando Valley. The City of Glendale lies to the south and east, and downtown Los Angeles lies approximately 12 miles to the south (see Fig. 1).

Burbank Water and Power is located at 164 W Magnolia Boulevard, Burbank, CA 91502: latitude/longitude - 34.178150, -118.315468. Burbank's climate is considered Mediterranean, which is warm and dry during summer and cool and wet during winter, with an annual average

precipitation of 17.5 inches. The City is currently in a moderate drought due to recent rains, but conditions have vacillated between severe and extreme over the past decade.

BWP's Water System. Burbank is 100% dependent on imported water for potable supplies. BWP's potable water supply is purchased from MWD which imports the water from Northern California via the State Water Project (SWP) and also the Colorado River via the Colorado River Aqueduct (CRA). Burbank's potable water system includes approximately

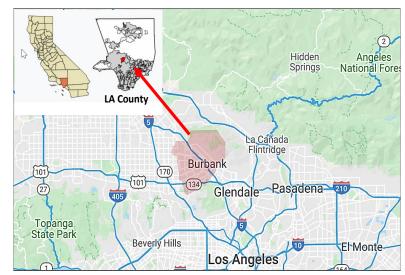


Fig. 1: The Planning Area (City of Burbank, CA)

286 miles of pipelines ranging in size from 30 inches to 1-1/2 inches in diameter, 35 booster pumps, 21 tanks and reservoirs, eight wells, five MWD connections, and over 26,000 service connections. Burbank is entitled to spread or percolate imported water into the aquifer thus creating the groundwater credits described above; they are also entitled to accumulate or store these groundwater credits if they are unused in the year they are earned or created. BWP's recycled water system is comprised of approximately 34 miles of pipelines, seven pump stations, six pressure zones, and six storage tanks. Recycled water is produced at the Burbank Water Reclamation Plant where 8.5 MGD of sewage is treated daily, and is delivered via an independent distribution system. All groundwater extracted in Burbank (via groundwater credits) is treated to remove Volatile Organic Compounds at the Burbank Operable Unit prior to entering the distribution system.

Burbank is located in the San Fernando Basin (also known as the Upper Los Angeles River Area (ULARA)) and the Los Angeles River Watershed (see Fig. 2). The City of Los Angeles owns all native groundwater rights per a 1979 Judgement; however, the Judgment also included provisions for an Import Return Credit (IRC), storage of imported water in the aquifer, stored water credits, and Physical Solution Water for Burbank and other parties. Burbank is entitled to an IRC of 20% of all water delivered in Burbank, including recycled water, since all of the water delivered in Burbank originates from outside ULARA (i.e., imported from MWD) and percolates

into the aquifer, becoming part of the groundwater supply. The IRC is calculated on an annual basis by the ULARA Watermaster.

# C. Project Description Applicant Category. Funding Group I

#### Applicant Eligibility.

BWP is a <u>local authority</u> responsible for providing water and electric services for Burbank residents, businesses, and institutions. BWP is a not-for-profit utility owned and operated by the City of Burbank.

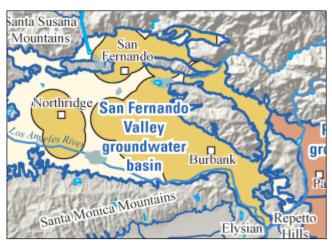


Fig. 2: The City is located in the San Fernando Basin and the Los Angeles River Watershed

## Goals and Objectives.

**GOAL 1:** Decrease Burbank's reliance on imported water for potable uses.

**GOAL 2:** Increase Burbank's local potable water supplies.

<u>Objective</u>: Maximize use of 4.2 MGD of available recycled water (that is not being used and is discharged to the ocean) by constructing and deploying a potable reuse facility in the City of Burbank.

## Description of Project Approach.

BWP requests funding to conduct the *Potable Reuse Planning, Environmental Compliance, and Pre-Final Design Study* (proposed study), and produce a Title XVI-eligible feasibility report for a new potable reuse facility in the City of Burbank. BWP will hire a qualified and experienced Consultant to lead the 24-month study, facilitate stakeholder engagement and outreach, and produce the final feasibility report. BWP staff will oversee the Consultant's activities, provide technical information and guidance to the Consultant, assist with community engagement and outreach, and facilitate the approval of the culminating study document with City and Reclamation officials.

The proposed study will fulfill the recommendations of an earlier preliminary study conducted in 2018 (funded by the California State Water Resources Control Board) which was the City's first review of options to produce purified recycled water to offset imported water.<sup>2</sup> That 2018 preliminary study determined that an IPR project would be technically feasible; however, due to the cost of advanced water purification equipment and associated infrastructure improvements (estimated at \$35 million), the project was deemed not financially viable without external funding support. The 2018 preliminary study recommended: 1) additional "technical studies to further refine the project...prepare the engineering report...initiate environmental documentation...and refine project cost estimates" (p. ES-32), and 2) community engagement to ensure public support for potable reuse throughout the City (p. 119-120). The proposed

<sup>&</sup>lt;sup>2</sup> City of Burbank Water and Power Potable Reuse Facilities Plan Final Report, November 2018.

study represents the final planning phase for the potable reuse facility; completed planning and environmental compliance will position BWP to apply for future Title XVI funding via Reclamation. Together, the 2018 preliminary study and the proposed study will fulfill Reclamation's feasibility study requirements as outlined in *Title XVI Water Reclamation and Reuse Program and Desalination Construction Program Feasibility Study Review Process (WTR-11-01) (Reclamation Feasibility Study D&S)*. The tasks for the proposed study are outlined below.

#### Task 1: PROCUREMENT AND KICK-OFF MEETING

BWP will conduct a competitive procurement to identify and secure the services of a qualified and experienced Consultant who will be responsible for conducting the proposed study with guidance provided by BWP. The Request for Proposals will include a requirement for demonstrated experience developing studies of similar size and scope, with a preference for knowledge of the challenges in the San Fernando Basin and Burbank's unique vulnerability. It is estimated the procurement will take up to three months, based on BWP's similar recent experience. BWP will hold a kick-off meeting with the selected Consultant to review the scope of work, schedule, budget, performance monitoring plan (discussed under the Project Management task), and the Consultant's interim and final deliverables. Reclamation will be invited to attend this kick-off meeting.

## Task 2: REVIEW EXISTING DOCUMENTS AND IDENTIFY GAPS

The Consultant will gather, review, and analyze all previous reports relevant to the proposed project, including but not limited to:

- City of Burbank Water and Power Potable Reuse Facilities Plan Final Report, November 2018 (i.e., 2018 preliminary study);
- City of Burbank Water and Power Urban Water Management Plan, 2020;
- City of Burbank Recycled Water Master Plan, 2010;
- Greater Los Angeles County (GLAC) Integrated Regional Water Management Plan (IRWMP);
- Los Angeles Department of Water and Power (LADWP)-BWP Water Exchange Agreement; and
- ULARA Judgement for the San Fernando Basin and Annual Report.

#### Task 3: CONCEPTUAL DESIGN FOR THE BURBANK GROUNDWATER REPLENISHMENT SYSTEM

The City requires 10% conceptual design for the potable reuse facility, conveyance pump station, pipeline, and injection wells, collectively referred to as the Burbank Groundwater Replenishment System (BGWRS). The drawings will show the overall design intent, major design features, and preliminary selection of materials and equipment as needed for pricing and coordination.

#### Task 4: LEVEL OF ADVANCED TREATMENT

The Consultant will review the proposed level of advanced treatment with BWP based on current direct potable reuse (DPR) regulations and imported water curtailments. The treatment train would meet anticipated water quality criteria and treatment performance requirements by providing a multi-barrier treatment process to address both aesthetics and pathogens (i.e., viruses, Giardia, Cryptosporidium, and bacteria log removal targets). Upon selection of a level of advanced treatment, the Consultant will receive vendor equipment proposals and develop 10 percent conceptual design drawings.

#### Task 5: SITE SELECTION FOR THE POTABLE REUSE FACILITY

The Consultant will recommend the final site selection for the potable reuse facility assuming it is 2.1 MGD source/feed water capacity or greater and accommodates processes required for direct potable reuse. Upon selection of a recommended site, the Consultant will develop 10% conceptual design drawings.

#### Task 6: INJECTION WELL SITING ASSESSMENT & GROUNDWATER MODELING

The Consultant will assess appropriate site selection for the injection well(s). The site assessment should consider vegetation, soils, geology, topography (slopes), flood hazards, proximity to any contamination plumes, environmental impacts, ownership, and acquisition costs. In addition, an environmental constraints analysis will be performed to identify any fatal flaws or potential major mitigation requirements that might be associated with any of the proposed sites. The Consultant will confirm that two (2) existing monitoring wells can be used to confirm the downgradient and upgradient travel times. One well is required to be located approximately 30 days of travel time downgradient from the injection wells. A second well is required to be located upgradient and proximal to the nearest potable production well. Once a preliminary set of candidate injection well locations has been established, the Consultant will conduct groundwater modeling of injected purified water travel times to existing production wells to validate that minimum retention time of 12 months has been met. The San Fernando Groundwater Basin (SFB) is a superfund site and close coordination with the U.S. EPA, ULARA Watermaster, and Los Angeles Department of Water and Power (LADWP) is required. The Consultant will meet with the U.S. EPA, ULARA Watermaster, and LADWP as needed to ensure approval (assume monthly coordination meetings). Upon completion of the injection well assessment and groundwater modeling, the Consultant will develop 10 percent conceptual design drawings.

#### Task 7: SITE SELECTION FOR THE CONVEYANCE PUMP STATION

The Consultant will recommend the conveyance pump station site assuming it is 1.8 MGD product water capacity. Upon selection of a recommended pump station site, the Consultant will develop 10 percent conceptual design drawings.

#### **Task 8: PIPELINE ALIGNMENT ASSESSMENT**

Based on the final potable reuse facility, conveyance pump station and injection well siting, the Consultant will provide up to three preliminary pipeline alignments for BWP's review. Upon

completion of the pipeline alignment assessment, the Consultant will develop 10 percent conceptual design drawings.

#### Task 9: REGULATORY & PERMITTING SUPPORT

## **Engineering Report**

The Consultant will prepare a draft and final Engineering Report to the State Water Resources Control Board (SWRCB)-Division of Drinking Water (DDW) and the Regional Water Quality Control Board (RWQCB) that indicates how a potable reuse project will comply with all regulations and includes a contingency plan to ensure that no untreated or inadequately treated water will be used.

#### Report of Waste Discharge (ROWD)

The Consultant will prepare and submit a Report of Waste Discharge (ROWD) for the proposed recycled water recharge to the Regional Water Quality Control Board (RWQCB) to initiate the RWQCB permitting process. The ROWD must identify proposed treatment, discharge facilities and operations, and characterize potential impacts on water quality. The ROWD will be submitted in advance of and/or with the draft Engineering Report.

#### California Water Code (CWC) Section 1211

The Consultant will support BWP to provide data for a Water Code 1211 water right petition. Per the April 2018 Wastewater Change Petitions (WW0019 & WW0091), prior to making any change in the point of discharge, place of use, or purpose of treated wastewater, approval must be obtained from the SWRCB-DDW.

#### Environmental Compliance Documentation

The Consultant will undertake a joint Federal and State environmental review of the proposed facility to avoid redundancy and promote efficiency. The Consultant will prepare draft and final California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents. BWP anticipates developing the Initial Study followed by the Environmental Impact Report.

#### Task 10: CONSTRUCTION COST ESTIMATE

The Consultant will prepare a Class 3 AACEI Opinion of Probable Construction Cost (OPCC) for all project elements utilizing unit price costing for detailed elements of the design and stochastic estimating methods for those aspects of the design with less definition.

## Task 11: DELIVERY METHOD ASSESSMENT & IMPLEMENTATION APPROACH

The Consultant will provide the pros and cons of traditional and collaborative delivery approaches in order to successfully design, procure equipment, and construct the project within five (5) years or less.

## Task 12: STAKEHOLDER ENGAGEMENT AND OUTREACH

The 2018 preliminary study strongly recommends a community engagement element. The stakeholder engagement and outreach element will be implemented by the Consultant, BWP's project team, and BWP's Marketing Department. The Consultant will facilitate proposed engagement and outreach activities, and develop content for written and digital materials. BWP's Marketing Department will handle the logistics for these efforts. All public meetings will be run by the Consultant and BWP's project team. The task will be initiated with the Consultant's development of a stakeholder engagement "roadmap" which defines which stakeholders to involve, when, and how; at minimum, the following stakeholders will be engaged: regional partners (such as MWD, neighboring cities, and the ULARA Watermaster), and the community including residential, commercial, and institutional customers.

#### 12.1 Conducting Engagement and Outreach

The following engagement and outreach activities will be implemented.

- **Develop a Purpose and Need Statement Targeted to Customers/Laymen**: Develop a purpose and need statement for the potable reuse facility that is written in non-technical terms for a layman's audience. This purpose and needs statement will be the basis for key messages, informational materials, presentations, and all other project communications.
- Conduct Three Public Meetings: A series of three public meetings will be conducted to share information about the purpose and need for the project in even more detail, discuss and address concerns that are raised, and answer questions.
- **Disseminate Informational Materials:** Develop bilingual fact sheets, infographics, and a frequently asked questions document that can be posted on BWP's website and social media channels, in BWP's *Currents* newsletter, and printed for distribution at appropriate locations, including the BWP offices and at community presentations or events.

#### 12.2 Promoting the Engagement and Outreach

BWP's Marketing Department will use established channels and marketing templates for communicating with stakeholders about the project and the opportunities to participate in engagement events described above. These established channels include BWP's website, social media, *Currents* newsletters, and billing notes/inserts.

#### Task 13: DEVELOP THE DRAFT AND FINAL TITLE XVI FEASBILITY REPORT/APPROVALS

The Consultant will prepare a feasibility report per the requirements of *Reclamation Feasibility Study D&S (WTR-11-001)* including the following:

- Introductory Information;
- Statement of Problems and Needs;
- Water Reclamation, Recycling or Desalination Opportunities;
- Description of Alternatives;
- Economic Analysis;
- Selection of the Project;
- Environmental Consideration and Potential Effects;
- Legal and Institutional Requirements;

- Financial Capability of the Sponsor; and
- Statement of Research Needs (if required).

The technical work completed above in Tasks 2-12 will be summarized and included as additional sections or appendices to the Feasibility Report.

#### 13.1 Develop the DRAFT City of Burbank Potable Reuse Facility Feasibility Report

The Consultant will develop the draft report and present it for review. The draft report will include the input of all relevant stakeholders as well as details of all engagement and outreach efforts and audiences. The Consultant will disseminate the draft report for review and comments to: 1) the BWP project team (Project Manager and Project Engineer); BWP leadership team (including BWP's General Manager, Assistant General Manager for Water, and the BWP Board); the Burbank City Manager and City Council; and Reclamation officials. The Consultant will gather and organize all input, suggested edits, and feedback.

#### 13.2 Develop the FINAL City of Burbank Potable Reuse Facility Feasibility Report

The Consultant will document and incorporate reviewers' feedback and edits, and develop the final document. The Consultant will disseminate the final report for review and comments to:

1) the BWP project team (Project Manager and Project Engineer); BWP leadership team (including BWP's General Manager, the Assistant General Manager for Water, and the BWP Board); the Burbank City Manager and City Council; and Reclamation officials. The Consultant will incorporate the final feedback, and produce a document in a format that is appropriate for final review and approval.

13.3 Facilitate Approvals of the *City of Burbank Potable Reuse Facility Feasibility Report*The Feasibility Report must be approved at three levels: 1) BWP, 2) City of Burbank, and 3) Reclamation. With guidance from the BWP project team, the Consultant will be responsible for moving the document through these approval phases, and making edits and refinements, as necessary.

#### **Task 14: PROJECT AND GRANT MANAGEMENT**

Grant management includes finalizing the grant agreement with Reclamation, complying with all ongoing grant requirements, and meeting with Reclamation, as requested. Project management includes coordinating and conducting monthly performance monitoring meetings; closely monitoring the project schedule and budget; preparing and submitting quarterly project reports, financial reports, and invoices; overseeing the work of the project's expert Consultant; and closing out the grant, as required. Bassil Nahhas, Acting Manager of Water Engineering/ Planning, will serve as the Project Manager, and will be assisted by a Grant Coordinator (who will be named after award).

D. Responses to Evaluation Criteria Responses

Evaluation Criterion 1: Project Planning and Analysis (30 points)

#### Subcriterion 1.A. Water Recycling Needs and Opportunities (15 points)

#### 1. Problems and Needs.

100% Reliance on Imported Water. The City of Los Angeles owns all native groundwater rights per a 1979 Judgement<sup>3</sup>, and thus Burbank is 100% dependent on imported water for its water supplies. BWP's water is purchased from the Metropolitan Water District of Southern California (MWD), which imports the water from Northern California via the State Water Project (SWP) and the Colorado River via the Colorado River Aqueduct. In 2020, BWP supplied 6,165 AF of imported water from MWD. As described earlier, the Judgment included provisions for Burbank to receive Import Return Credits (IRC) for storage of imported water in the aquifer since all the water delivered in Burbank originates from outside the watershed (i.e., imported from MWD) and percolates into the aquifer, becoming part of the groundwater supply.

Vulnerability of Imported Water Sources. Both of the City's imported sources are extremely vulnerable and long-term reliability and availability of these sources is a serious concern. In 2021, Reclamation declared the first-ever shortage on the Colorado River basin.<sup>4</sup> Extreme and accelerating drought conditions are drastically depleting water levels in the Basin, which supplies water from Rocky Mountain snowfall runoff to 40 million people in the western U.S. and Mexico. In February 2023, the Lake Powell reservoir, which is fed by the River, reached is lowest level since its first filling in the 1960s.<sup>5</sup> Its companion reservoir, Lake Mead, is now near its own historic lows. The State Water Project (SWP) is the nation's largest state-built water and power development conveyance system, diverting water from the Feather River (which is fed by snowfall in the Sierra Nevada Mountains) to the State's Central Valley, South Bay, and Southern California. This important water source faces its own threats including the state's ongoing historic drought and aging infrastructure. For instance, SWP water is transported through 100-year-old, fragile levees that are vulnerable to collapse in the event of a major earthquake or flood. 6 In such an event, saltwater from the ocean could contaminate freshwater in the Sacramento-San Joaquin Delta, and a critical source of water could be unavailable for 2out-of-3 Californians. Ensuring the long-term resiliency of these water sources will require significantly reducing water use across sectors, modernizing infrastructure, and maximizing local resources, all of which will be addressed by the proposed study and the ultimate potable reuse facility.

Ongoing Drought and Impacts of Climate Change.

<sup>&</sup>lt;sup>3</sup> The City of Los Angeles v. City of San Fernando, Los Angeles Superior Court Case No. 650079, dated January 26, 1979.

<sup>&</sup>lt;sup>4</sup> American Water Works Association. August 26, 2021. https://www.awwa.org/AWWA-Articles/us-declares-first-ever-colorado-river-water-shortage

<sup>&</sup>lt;sup>5</sup> https://www.usatoday.com/story/news/2023/02/17/lake-powell-water-level-drought-water-crisis-west/11257099002/

<sup>&</sup>lt;sup>6</sup> https://www.watereducation.org/aquapedia/state-water-project

A 2022 study concluded that the drought affecting the western U.S. over the last 20 years ranks as the driest 22-year period in at least 1,200 years. Climate change is leading to rising temperatures and making the drought worse, leading researchers to call the current situation a megadrought that is a realization of worst case scenarios. After a record dry start to 2022, California water officials announced cuts of SWP allocations from 15% to 5%, and advised residents to prepare for a third year of drought. This declaration is especially significant for residents of Burbank, with 100% of water coming from imported supplies. Burbank, like all of Southern California, currently vacillates between stages of severe or extreme



drought. Burbank has activated its Level Three Water Shortage Contingency Plan.

- 2. Water Supply and Demand. BWP is the City department responsible for providing reliable, affordable, and sustainable water and electric services for Burbank's residents and businesses. BWP's potable water sales for 2020 averaged 5,123 million gallons (15,724 AF). Potable water deliveries were comprised of 50% single-family residential, 27% multi-family residential, 17% commercial, 1% institutional/governmental, and 0.1% fire protection. Between 2020 and 2045, total potable demands are projected to increase approximately 40%—from 15,724 AFY to 22,010 AFY (2020 Urban Water Management Plan). The average daily water demand over the past five years was approximately 19.7 million gallons, with a maximum daily demand of 29.7 million gallons.
- **3.** Investigating Potential Uses and Markets. The proposed study will investigate the use of reclaimed water to augment potable water supplies via two alternative processes:
  - 1. **Indirect potable use (IPR)** in which treated purified water augments groundwater by surface spreading or well injection; OR
  - 2. **Direct potable reuse (DPR)** in which treated purified water is connected pipe-to-pipe to BWP's existing potable water system.

Both alternatives will be studied to determine the most cost-effective and productive option; regardless of which is selected, both options would provide potable water to all of BWP's residential, commercial, and industrial customers.

**4. Water Source for the Proposed Project.** Since all water delivered to Burbank is of imported water origin, recycled water produced at the Burbank Water Reclamation Plant (BWRP) is also considered water of imported origin. Recycled water from the BWRP will be conveyed to the new potable reuse facility for purification and distribution for potable use. The BWRP, located at 740 N. Lake Street in Burbank, is a tertiary wastewater treatment plant that is owned and operated by the City of Burbank Public Works Department. The BWRP can produce up to

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<sup>&</sup>lt;sup>7</sup> Rapid Intensification of the Emerging Southwestern North American Megadrought in 2020–2021, *Nature Climate Change*, Vol. 12, March 2022.

approximately 10,000 AFY of tertiary effluent for reuse. The largest recycled water user is the Magnolia Power Project (MPP), located at the BWP Campus. BWP's existing recycled water system includes 1,800 feet of a 20-inch gravity fed recycled water pipe from the BWMP to the

MPP, 2.6 MG of recycled water storage and pump station at the MPP (owned and operated by MPP), four pumping stations, four pressure zones, four storage reservoirs or tanks totaling 2 MG, and approximately 34 miles of distribution pipelines ranging from 4-inch diameter to 20-inch diameter pipe. The storage tanks allow for steady, efficient system operations, regardless of daily fluctuations in recycled water supply and demand. The BWRP was built in 1966 to treat 6 MGD; it was upgraded in 1971, 2000, and 2002. The quality of the recycled water produced by BWRP is monitored in accordance with their permit. BWRP's effluent meets the most stringent criteria for recycled water defined in the California Code of Regulations (CCR), Title 22, Division 4, Chapter 3, as disinfected tertiary recycled water.

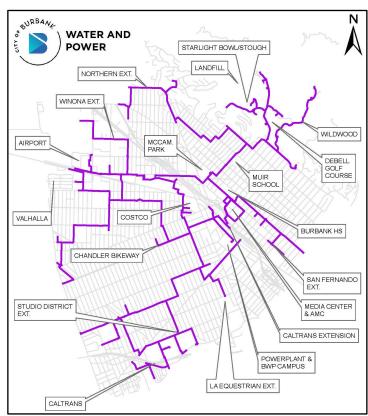


Fig. 3: Burbank's recycled water system

Overall, Burbank produces approximately 7.5 MGD of recycled water. Only 45% (i.e., 3.5 MGD) of the recycled water is being used--for non-potable uses--with the rest flowing to the Burbank Western Channel, and ultimately to the ocean. Many schools, parks, and commercial customers have been converted to recycled water in the last five years which consequentially eased peak hour and peak season demand. The potential to produce 4.2 MGD of reclaimed potable water (an estimated 4,707 AFY) would address increasing demand and the legitimate and growing concerns about the availability and reliability of imported water supplies.

#### Subcriterion 1.B. Evaluation of Project Alternatives (15 points)

#### 1. Potable Reuse Facility Objectives and Alternatives

Recycled water represents 19% of BWP's portfolio, but development of non-potable reuse projects within the City is approaching the saturation point. Only 45% of the recycled water is being used. One of the options for using the balance of the treated water that is being discharged to the storm drain channel is through groundwater augmentation or treated

drinking water augmentation, collectively known as "potable reuse". Potable reuse is recycled water that is purified to meet or exceed potable water quality standards by applying advanced water treatment technologies and then reused as potable water. A potable reuse project could become essential and economically viable if imported water supplies to the region were to be interrupted or curtailed, resulting in exponential increases in the price of imported water.

#### **Objectives of All Alternatives:**

- Decrease dependence on imported water (i.e., create a "drought resistant" supply);
- Increase water system reliability by reducing interruption of imported water supplies due to climate change or seismic events;
- Maximize the beneficial use of the remaining 4.2 MGD of recycled water that is currently being discharged to the ocean; and
- Improve operational flexibility.

#### Alternatives:

BWP has identified two options for using highly treated wastewater effluent to augment potable water supplies:

- Indirect Potable Reuse (IPR). IPR involves the blending the groundwater with treated and purified recycled water (via surface spreading or well injection). The groundwater acts as an "environmental buffer."
  - The State's Division of Drinking Water (DDW) has established regulations for groundwater augmentation.
  - Receptor type: "Groundwater augmentation"
- 2. Direct Potable Reuse (DPR). DPR involves delivering purified recycled water directly into the potable water system upstream of the water treatment plant. DPR removes the environmental barrier, and instead focuses on engineered measures to replace the environmental barrier such as more robust and redundant treatment barriers and enhanced monitoring for chemicals, pathogens, etc.
  - The DDW has only recently begun investigating DPR and no regulations are currently in place.
  - Receptor type: "Treated drinking water augmentation"

#### 2. Project Alternatives that will be Investigated

As described above, the proposed study will examine two options for using highly treated wastewater effluent to augment potable supplies: Indirect Potable Reuse and Direct Potable Reuse. Several advanced water treatment technologies will also be investigated including: ultrafiltration, reverse osmosis, advanced oxidation, ozone disinfection, and ultraviolet disinfection.

#### 3. Description of the Selected Project

Two strategies for potable water supply augmentation will be evaluated in this project. These include indirect potable reuse (IPR) via groundwater augmentation and direct potable reuse (DPR) via treated drinking water augmentation. The 2018 preliminary study examined receptor

options (described below) for each strategy, and these will be used as a starting point for evaluation of options in the proposed study.

**Receptor Options:** Nine potential receptors (i.e., end users) were identified during the 2018 preliminary study, and each was screened and scored. It was determined that three preferred receptor options will move forward for further consideration. The three proposed receptor options are:

#### Groundwater Augmentation (IPR):

Groundwater Injection Wells – this option would involve conveying purified water from the potable reuse facility to a series of injection wells for groundwater augmentation via injection. It is assumed that two wells would be needed to inject 1.8 MGD at 625 gpm per well. Areas suitable for groundwater injection have been identified, but site(s) still need to be studied and selected. The potable reuse facility would consist of Full Advanced Treatment (FAT). The treatment train would include micro or ultrafiltration (MF/UF), reverse osmosis (RO), and ultraviolet light with either a hydrogen peroxide (UV-peroxide) or a chlorine (UV-chlorine) to catalyze the advanced oxidation process (AOP).

#### Treated Drinking Water Augmentation (TDWA)(DPR):

- <u>VPP/BOU</u> this option would involve conveying purified water from the potable reuse facility to the Valley Pumping Plant/Burbank Operable Unit (VPP/BOU) for treated drinking water augmentation. This concept constitutes a pipe-to-pipe project.
- <u>Lake St. GAC</u> this option would involve conveying purified water from the potable reuse facility to the Lake Street GAC (Granular Activated Carbon) Plant (Lake Street GAC) for treated drinking water augmentation. This concept constitutes a pipe-to-pipe project.

For TDWA receptor options (i.e., VPP/BOU or Lake St. GAC), additional barriers may be required to address acutely toxic constituents and to provide additional robustness to protect public health. An independent, supplemental disinfection process and organics removal process is assumed. For this analysis, (ozone (O3)) followed by biological active filtration (BAF)) ahead of the FAT train is included. The TDWA setting at BWP includes two features that will aid in chemical peak dampening. First, Burbank Water Reclamation Plant (BWRP) secondary process offers relatively robust organics removal and substantial retention and mixing due to its NDN operation. And second, the proposed potable reuse facility would include ozone/BAF to further dampen any potential illicit chemical peaks introduced in the collection system.

#### **Potable Reuse Facility Site Options:**

The 2018 preliminary study examined five sites for the proposed potable reuse facility. Based on previous experience with facilities of this type and size, an area approximately one acre in size will be needed, and will be located inside the City of Burbank for jurisdictional purposes. Using these two preliminary criteria, five sites were identified by the consultant team and were validated with BWP staff. As a result of a screening and scoring process, and after discussions

with BWP staff, it was determined that <u>three sites</u> are preferred options that will move forward for further consideration, and this will be the starting point of site selection for the proposed study. The three candidate sites are: Magnolia Power Plant, VPP/BOU, BWRP. These three sites include a total of twelve potential sub-sites: two MPP sub-sites (Olive Cooling Towers and Olive Power Plant), four BWRP sub-sites, and six VPP/BOU sub-sites.

#### 4. Preliminary Schedule for the Proposed Study

| No.     | Task   |          | YEAR 1 |   |   |   |   |   |   |   |   |    |    | YEAR 2 |    |    |    |    |    |    |    |    |    |    |    |    |
|---------|--|----------|--------|---|---|---|---|---|---|---|---|----|----|--------|----|----|----|----|----|----|----|----|----|----|----|----|
| 140.    | IdSK   | Duration | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12     | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Task 1  | Procurement and Kick-off Mtg                       | 4 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 2  | Review Existing Documents/Identify Gaps            | 2 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 3  | Conceptual Design for BGWRS                        | 3 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 4  | Level of Advanced Treatment                        | 3 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 5  | Site Selection for Potable Reuse Facility          | 3 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 6  | Injection Well Siting/Asmt. & Groundwater Modeling | 3 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 7  | Site Selection for Conveyance Pump Station         | 2 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 8  | Pipeline Alignment Assessment                      | 3 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 9  | Regulatory and Permitting Support                  | 12 mos   |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 10 | Construction Cost Estimate                         | 2 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 11 | Delivery Method Asmt. & Implementation Approach    | 3 mos    |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 12 | Stakeholder Engagement & Outreach                  | 18 mos   |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 13 | Develop the Title XVI Feasibility Report/Approvals | 12 mos   |        | L |   |   |   |   | L |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |
| Task 14 | Project and Grant Management                       | 24 mos   |        |   |   |   |   |   |   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |    |

#### **Evaluation Criterion 2: Stretching Water Supplies (20 points)**

- 1. Potential to Impact Development of Non-Recycled Supplies. Burbank has no rights to the native groundwater, is 100% reliant on imported sources, and thus has no ability to expand non-recycled water sources. Maximizing recycled water is Burbank's primary strategy for long-term supply resilience. BWP's development of non-potable reuse projects is approaching the saturation point; the time to focus on BWP's unused recycled water is now. The 2018 preliminary study projected that a potable reuse project would provide approximately 4.2 MGD AFY of additional water supply for Burbank, essentially 'drought-proofing' 12.5% of the BWP's total portfolio. Construction and implementation of a potable reuse facility would allow BWP to reduce reliance on imported water that is sourced from the SWP and the Colorado River, sources that are in serious jeopardy. Reducing reliance on these vulnerable imported sources is extremely critical to the sustainability of regional water supplies, as well as the local and regional economy.
- <u>2. Alleviating Pressure on Existing Water Supplies</u>. If the proposed potable reuse facility were constructed and deployed, BWP could immediately reduce the amount of water it purchases from MWD water that is sourced from the SWP and the Colorado River. On average, BWP purchases 12,000 AFY of water from MWD; reduced reliance on this vulnerable source will

support the sustainability and resilience of these water sources for BWP and all users in the western U.S.

## 3. Making Water Available to Address Specific Concerns

**Water Supply Shortages and Reliability.** Burbank is 100% reliant on imported supplies that are sourced from the SWP and the Colorado River. Maximizing use of recycled water (a reliable local supply) will shield Burbank from some of the impact of supply shortages from the SWP and Colorado River due to drought and climate change.

**Water Quality Issues.** The potable reuse facility's objectives do not include water quality; however, an Indirect Potable Reuse facility would positively impact water quality. The purified water that would be spread or injected would exceed both state and national water quality standards. In essence, the water that would be added to the groundwater would be cleaner than the groundwater itself; thus the overall groundwater quality will be improved.

**Natural Disasters that May Impact Water Supply Infrastructure.** Maximizing use of recycled water (a reliable local supply) will shield Burbank from supply issues due to a national disaster. This mitigation is important, as even minor infrastructure issues affect supply reliability. In September 2022, an upper feeder that brings water from the Colorado River to the City had to be repaired, leading to reduced water deliveries, restrictions, and bans within the City.

Heightened Competition for Water Supplies. Burbank is just one of many agencies who rely on MWD for all or some of its water. MWD provides water for 19 million people across six Southern California counties. Beyond Southern California, the SWP and Colorado River provide water for many more millions of people and are key to the State's agricultural production. As climate change worsens and the drought lingers, competition for limited water will become more heightened. Having a reliable local supply will mitigate some of the impact on Burbank.

**Availability of Alternative Supplies.** A potable reuse facility will make a new, alternative supply available in Burbank. Currently, Burbank is only using 45% of its recycled water—for non-potable use—and the remainder is discharged to the storm drain channel. The proposed reuse facility will use recycled water that is otherwise being lost.

Increasing Cost of Water Supplies. As climate change and drought accelerate, the pressure on the SWP and the Colorado River will intensify. As supplies dwindle, costs will increase. While Burbank has no control over these costs, the amount of water imported is a variable that can be controlled via conservation and maximized use of recycled water. As noted, if BWP is able to use all of its recycled water, 12.5% of its portfolio would be impervious to increasing costs.

<u>4. Creating Flexibility to Address Drought</u>. The proposed potable reuse facility will "drought-proof" approximately 12.5% of BWP's portfolio (the potable reuse facility could produce 2,000 AFY of the City's 16,000 AFY total demand). With no rights to native groundwater, recycled water is Burbank's only local supply; it will be available regardless of local drought—regardless

of drought and climate change impacts on the SWP and the Colorado River. Maximizing Burbank's use of all of its recycled water is a critical endeavor and the purpose of the proposed study (and the culminating project).

#### **Evaluation Criterion 3: Environment and Water Quality (20 points)**

## 1. Improving Quality of Surface Water and Groundwater

**Surface Water:** Increasing local supply resiliency will protect the Colorado River and Bay Delta Estuary. Reduced water levels create issues with flow, nutrients, salinity, and many other quality factors, all of which affect their beneficial uses. BWP's reduced reliance on imported supplies from these source will keep more water in the River and in the Estuary, and reduce the noted issues.

**Groundwater**: The Indirect potable reuse (IPR) alternative would augment groundwater (either via spreading grounds or well injection). The purified water that would be spread or injected would exceed both state and national water quality standards. In essence, the water that would be added to the groundwater would be cleaner than the groundwater itself; thus the overall groundwater quality will be improved.

#### 2. Improving Effluent Quality

The advanced treatment technology that will be used will purify wastewater effluent such that it exceeds state and federal drinking water standards.

#### 3. Improving Flow Conditions

Not applicable to the study or the potable reuse facility

#### 4. Potential to Restore/Enhance Habitat for Listed and Non-Listed Species

The Bay Delta Estuary is a four-million-acre watershed that is the largest estuary on the west coast of North America and supports over 700 plant, fish and wildlife species, including the endangered Delta Smelt. Unique to the Bay Delta, the endangered Delta Smelt has been pushed closer to extinction by extenuating drought conditions and an overtaxed water distribution system. Delta Smelt are considered an "indicator" species, and their abundance reflects how well the Delta's aquatic environment is functioning – meaning that as Delta Smelt decline, the Delta is changing in a way that does not support other species that are also dependent on the system (including Longfin Smelt, Green Sturgeon, Chinook Salmon, and Steelhead). Delta Smelt are protected under both the Federal and State Endangered Species Acts.

American Rivers, a Washington, DC-based river conservation organization, named the Colorado River the #1 Most Endangered River in the country on its list of America's Most Endangered Rivers of 2022. Climate change and water management issues threaten not only the drinking water for 40 million people, but also the vital habitat for 30 native fish species and more than 400 bird species. Of the fish species that call the Colorado River home, four of them are

endangered. These species include: the razorback sucker, Colorado pikeminnow, bonytail and humpback chub.

With so many species on the precipice of extinction, every effort must be made to maintain and repair their vital habitats. By reducing the amount of water that Burbank draws from these sources, the project will make strides toward preserving the Bay Delta and Colorado River ecosystems.

#### **Evaluation Criterion 4: Department of the Interior Priorities (15 points)**

#### 1. Combatting the Climate Crisis

Local and regional drought impacts are being negatively impacted and accelerated by climate change. Southern California is in the midst of a megadrought that researchers are saying is the driest 22-year period in 1,200 years, putting unprecedented pressure on local water supplies. The long-term availability of imported water from the SWP and the Colorado River is in jeopardy. The documented water deliveries from the SWP for Water Year 2020 (October 1, 2019, to September 30, 2020) indicate that the volume of water delivered to SWP Contractors was the lowest since Water Year 2015. The 2019 SWP Delivery Capability Report (published in August 2020), estimated a SWP reliability of 58%. This was down from 62% in 2017. In March 2022, California Department of Water Resources (DWR) officials announced that they were cutting SWP allocations from 15 percent to 5 percent and warned residents to prepare for a third year of drought. Likewise, since 2000, Colorado River flows have seen a 20% decrease compared to the 20th Century average. The river's two main reservoirs – Lake Mead and Lake Powell – are at record low levels.

Addressing these impacts will take a concerted effort that involves all stakeholders, all cities, and all customers. BWP's proposed effort to use **every drop** of their reclaimed water is a contribution to this effort. Only 45% of Burbank's recycled water is being used (for non-potable uses); the remainder, 4.5 MGD is lost to the storm drain channel. That loss represents an opportunity to maximize the beneficial use of Burbank's recycled water. A new potable reuse facility will allow Burbank to use 100% of their recycled water, and thus drought-proof 12.5% of its water supply. Burbank's reduced reliance on imported sources will reduce pressure on the SWP and Colorado River, which are already greatly impacted by drought that has been worsened by climate change.

#### 2. Impact on Disadvantaged or Underserved Communities

Increasing water supply resiliency will directly benefits all BWP customers, including the City's minority and disadvantaged communities, as defined by E.O. 14008, E.O. 13985, and Section 1015 of the Cooperative Watershed Act.

- <u>Minority Representation</u>: Forty-five percent of City residents are minorities, including 24% Hispanic, 12% Asian, 3% Black, and 6% other.
- <u>Distressed Communities</u>: The City's distressed Census Tracts are located adjacent to the I-5 interstate corridor, which runs through the City, and adjacent to the Hollywood

Burbank Airport. Of the City's 23 Census Tracts, 39.1% (nine Census Tracts) are identified as <u>historically distressed communities</u> by U.S. Department of Housing and Urban Development, and one Census Tract is an <u>Area of Persistent Poverty</u> as defined by the U.S. Department of Transportation. Seven Census Tracts are also classified as among the worst in the State of California for quality-of-life indicators (52.9%), including linguistic isolation, unemployment, homelessness, housing burden, and education (CalEnviroScreen 4.0).

• <u>Unemployment</u>: Unemployment in Burbank has been higher than the national average since before the Covid-19 pandemic. In April 2020, Burbank's unemployment rate skyrocketed to 20.7% (compared to 14.8 % nationally), and did not drop below that until August, when it dropped to 19.0% (compared to 10.2 % nationally). Burbank's recovery from the covid pandemic has been slow, and lagging behind the nation, with the October 2022 unemployment rate at 5.3%, still far above the nationwide rate of 3.7%.

Burbank's disadvantaged communities are disproportionately affected by drought conditions, and they will bear the biggest burden if and when imported water supplies are restricted. Increased costs for food, water, and electricity can be insurmountable for households living with poverty-level median incomes. Increased costs of imported water and the resultant rate increases have severe budgetary impacts for these struggling communities. Increasing supply resiliency in Burbank will mitigate impacts on its disadvantaged communities by 'drought-proofing' a portion of our water supply.

#### 3. Tribal Benefits - Not applicable

## **Evaluation Criterion 5: Watershed Perspective (15 points)**

1. Implementation of a Regional or State Water Plan or an Integrated Resource Management Plan Not applicable – the study and potable reuse facility are standalone projects.

#### 2. Meeting Water Supply Needs of a Large Geographic Area

If Burbank reduces its reliance on imported water from MWD, it will free up MWD's limited supplies to their other 19 million customers in six counties in Southern California.

#### 3. Stakeholder Involvement

Several key stakeholders have expressed support for the project, and their letters of support are attached. At a minimum, the stakeholders will be invited to participate in the public meetings that will be conducted for the proposed study to ensure that their input and concerns are addressed. In addition, the stakeholders will be consulted on specific planning activities that have common elements; for instance, the ULARA Watermaster will be consulted on the study's proposed groundwater modeling activities.

#### **Local and Regional Partnerships**



The City of Glendale - Glendale is a neighboring city and water partner for Burbank. Glendale and Burbank have potable and recycled water system interconnections that have been used on several occasions to solve short-term operational problems or needs for extra water between the two cities. The collaboration has been one of water 'exchange' rather than buying and selling water to each other. Like Burbank, the majority of Glendale's water (70%) is imported from MWD. Drought-related reductions of water

deliveries and water rationing affect both cities and limit their ability to assist each other. Increasing Burbank's resiliency and local supplies will benefit the City of Glendale.



Metropolitan Water District of Southern California (MWD) – MWD provides 100% of Burbank's water. BWP has worked closely with MWD on the development of both MWD's and Burbank's Urban Water Management Plans. Additionally, BWP works with MWD to implement conservation measures within the framework of their Water Surplus and Drought Management (WSDM) Plan.<sup>8</sup> MWD has declared a water shortage emergency and recognizes the importance of every member agency

pursuing system improvements to save water for the long term. Decreasing Burbank's reliance on imported water from MWD will decrease pressure on MWD's own vulnerable supplies, and support resiliency for all who depend on MWD.



**Upper Los Angeles River Area (ULARA) Watermaster** – This entity is the Courtappointed Watermaster for the adjudicated region known as the Upper Los Angeles River Area which includes the San Fernando Basin. Burbank is located in this adjudicated basin for which the City of Los Angeles retains all groundwater rights, while Burbank retains the right to purchase or exchange groundwater credits. San Fernando Basin groundwater levels have undergone a general

decline in recent years and resiliency of the Basin is directly connected to water conservation efforts and protracting local water supplies. Groundwater augmentation by the proposed potable reuse facility (both increased water levels and improved water quality) would benefit the entire Basin and all users.



The Burbank Chamber of Commerce, who recognizes that reliable water resources are critical to sustain our economy and our community. In turn, this translates into profitability and

sustainability for the "Media Capital of the World."

**Congressman Adam B. Schiff** – Adam B. Schiff, U.S. Representative of California's 28<sup>th</sup> District, noted that the potable reuse facility was directly-aligned with State drought and water

<sup>8</sup> https://www.mwdh2o.com/media/17000/24 water supply drought management plan.pdf

conservation efforts, as well as being proactive in light of statewide emergency drought proclamation.

#### 4. Stakeholder Engagement and Outreach

Task 12 (above) details the study's proposed Stakeholder Engagement and Outreach element, which will include:

- Develop a Purpose and Need Statement Targeted to Customers/Laymen: Develop a purpose and need statement for the potable reuse facility that is written in non-technical terms for a layman's audience. This purpose and needs statement will be the basis for key messages, informational materials, presentations, and all other project communications.
- Conduct Three Public Meetings: A series of three public meetings will be conducted to share information about the purpose and need for the project in even more detail, discuss and address concerns that are raised, and answer questions.
- **Disseminate Informational Materials:** Develop bilingual fact sheets, infographics, and a frequently asked questions document that can be posted on BWP's website and social media channels, in BWP's *Currents* newsletter, and printed for distribution at appropriate locations, including the BWP offices and at community presentations or events.

**REQUIRED PERMITS OR APPROVALS.** No permits or approvals are required to perform the proposed study.

**OVERLAP/DUPLICATION OF EFFORT STATEMENT.** There is no overlap or duplication for the Project.

**UNIFORM AUDIT REPORTING STATEMENT.** The City of Burbank submitted a Single Audit Report for the most recent fiscal year, 2021. The report was filed under TIN #95-6000683, and it is available through the Federal Audit Clearinghouse website.

#### **CONFLICT OF INTEREST DISCLOSURE STATEMENT**

No actual or potential conflicts of interest exist at the time of the submission of this application.

END OF 20-PAGE LIMIT FOR TECHNICAL PROPOSAL AND EVALUATION CRITERIA

## **OFFICIAL RESOLUTION**

#### **RESOLUTION NO. 23-29,404**

A RESOLUTION OF THE COUNCIL OF THE CITY OF BURBANK AUTHORIZING THE SUBMISSION OF A GRANT APPLICATION TO THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION, FOR THE 2023 WATERSMART WATER RECYCLING AND DESALINATION PLANNING GRANT PROGRAM AND AUTHORIZING THE BURBANK WATER AND POWER GENERAL MANAGER, AS DESIGNEE OF THE CITY MANAGER, TO EXECUTE A GRANT AGREEMENT

## THE COUNCIL OF THE CITY OF BURBANK FINDS:

- 1. The United States Department of the Interior, Bureau of Reclamation (USBR), released a Funding Opportunity Announcement (NFO: R23AS00076) WaterSMART Grants: Water Recycling and Desalination Planning for 2023;
- 2. The City of Burbank is a California municipal corporation and, through its Department of Water and Power (BWP), has the authority to construct, operate, and maintain the water distribution system and is responsible for providing reliable, affordable, and sustainable water and electric services;
- 3. The grant application requires the adoption of an authorizing resolution designating a representative to sign and file a financial assistance application and all necessary documents related to a grant agreement with the United States Department of the Interior, Bureau of Reclamation; and
- 4. The City, if selected, will enter into a grant agreement with the United States Department of the Interior, Bureau of Reclamation to carry out a project to plan for the City's potable reuse planning, environmental compliance, and other pre-design activities.

#### THE COUNCIL OF THE CITY OF BURBANK RESOLVES:

- 1. The General Manager of BWP, as designee of the City Manager, is hereby authorized and directed to sign, submit and file, for and on behalf of the City, an application for a grant agreement with the United States Department of the Interior, Bureau of Reclamation to carry out a project to plan for the City's potable reuse planning, environmental compliance, and other pre-final design activities.
- 2. The General Manager of BWP, as designee of the City Manager, is designated to provide the assurances, certifications, and commitment required for the financial assistance application, including executing all documents in furtherance thereof, including but not limited to a grant or cooperative agreement with the United States Department of the Interior, Bureau of Reclamation and any amendments or changes thereto.

- 3. The City is capable of providing the matching funding and/or in-kind contributions specified in the grant application funding plan.
- 4. The City Council has reviewed and supports the application to be submitted to the United States Department of the Interior, Bureau of Reclamation.
- 5. The City will use reasonable efforts to work with the United States Department of the Interior, Bureau of Reclamation to meet established deadlines for entering into a grant or cooperative agreement, and
- 6. The General Manager of BWP, as designee of the City Manager, is designated to represent the City in carrying out the City's responsibilities under the grant agreement, including certifying disbursement requests on behalf of the City and compliance with applicable state and federal laws.

PASSED AND ADOPTED this 14th day of February, 2023.

Konstantine Anthony

Mayor

Approved as to Form: Office of the City Attorney

By:

Christopher Chwang Senior Assistant City Attorney

Attest:

Kimberley Clark, City Clerk

STATE OF CALIFORNIA CITY OF BURBANK

COUNTY OF LOS ANGELES

I, Kimberley Clark, City Clerk of the City of Burbank, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the Council of the City of Burbank at its regular meeting held on the 14th day of February, 2023, by the following vote:

AYES:

Mullins, Perez, Takahashi, Schultz, and Anthony.

SS.

NOES:

None.

ABSENT:

None.

Kimberlev Clark, City Clerk

## **LETTERS OF SUPPORT**

Metropolitan Water District of Southern California

ULARA Watermaster

City of Glendale

Burbank Chamber of Commerce

Congressman Adam Schiff



Office of the General Manager

February 21, 2023

Secretary Deb Haaland U.S. Department of the Interior, Bureau of Reclamation Denver Federal Center Bldg. 67, Room 152 Denver, CO 80225

Dear Madam Secretary:

Support for the Burbank Water and Power's Grant Application for the Bureau of Reclamation's WaterSMART: Water Recycling and Desalination Planning Grant

The purpose of this letter is to express The Metropolitan Water District of Southern California's (Metropolitan) support for Burbank Water and Power's (Burbank) WaterSMART: Water Recycling and Desalination Planning grant application. If awarded, Burbank would use grant funds to study the feasibility of a new facility to purify recycled water for potable use. The scope of work includes planning, environmental compliance, and pre-final design study phases.

In collaboration with local agencies, Metropolitan is a leader in implementing water efficiency programs and funding sustainable local water resources such as potable reuse, groundwater recovery, and desalination. Metropolitan's Integrated Water Resources Plan promotes a One Water approach to enhance regional reliability and resilience. California's current drought, the long-term shortage on the Colorado River, and regional aridification are examples of impacts of climate change that underscore the need for continued diversification of Southern California's water resource portfolio.

Burbank relies heavily on imported water from California's State Water Project (SWP). Innovative potable recycled water approaches could yield a sustainable local drinking water supply during low SWP allocations and help Burbank and Metropolitan manage shortages and emergency conditions.

Metropolitan supports USBR grant funding for Burbank's feasibility study to evaluate the expansion of potable recycled water to increase the resiliency of its water supplies against climate change.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

U.S. Department of the Interior, Bureau of Reclamation Page 2 February 21, 2023

Please contact Raymond Jay at (213) 217-5777 or via e-mail at <u>rjay@mwdh2o.com</u> if you have any questions.

Sincerely,

Brad Coffey

Brad Coffey

Manager, Water Resource Management

RJ: rh

cc: Dawn Roth Lindell BWP General Manager dlindell@burbankca.gov

Bassil Nahhas
BWP Acting Manager Water Engineering/Planning
bnahhas@burbankca.gov



UPPER LOS ANGELES RIVER AREA WATERMASTER Richard C. Slade - Watermaster

ularawatermaster.com

14051 Burbank Blvd, Suite 300 Sherman Oaks, CA 91401

818-506-0418 PHONE 818-506-1343 FAX

February 22, 2023

To: Secretary Deb Haaland

U.S. Department of the Interior, Bureau of Reclamation

Denver Federal Center Bldg. 67, Room 152 Denver, CO 80225

Re: Support for Burbank Water and Power's Potable Reuse Planning, Environmental

Compliance, And Pre-Final Design Study

The undersigned, as the Court-appointed Watermaster for the adjudicated region known as the Upper Los Angeles River Area (ULARA), wishes to express direct support for the City of Burbank Water and Power (BWP) application to conduct a feasibility study to use recycled water to produce potable supplies. Burbank overlies the San Fernando Basin (Basin), the largest of the four groundwater basins in the court-adjudicated ULARA region.

The viability and resiliency of this Basin are of significant concern to the Watermaster. Any and all water improvements performed by Burbank that enhance groundwater recharge and promote resiliency among all basin users are highly supported by the Watermaster. As part of the proposed potable reuse project, purified water (after passing through an advanced water treatment train) is proposed to be injected into the Basin aquifers via two new injection wells. Purifying recycled potable water using advanced water technologies would result in a water source with a higher quality than the existing groundwater in the area; the water purified by the facility would exceed State drinking water standards. By injecting that purified water into the Basin, the proposed project would enhance Basin groundwater levels, and would improve groundwater quality in the Basin. Comprehensive groundwater hydraulic modelling is also proposed to be conducted by Burbank as part of the scope of the subject planning and environmental compliance study. This Watermaster strongly recommends that the BWP application be approved to help fund their potable reuse planning, CEQA/NEPA compliance, and design efforts. Please note that this recommendation is on behalf of the Watermaster and does not reflect the position of any of the parties to the adjudication.

Respectfully Submitted

Richard C. Slade

**ULARA** Watermaster

cc: Members of the ULARA Administrative Committee



141 N. Glendale Ave., Level 4 Glendale, CA 91206-4975 Tel. (818) 548-2107 Fax (818) 552-2852 glendaleca.gov

February 15, 2023

Secretary Deb Haaland U.S. Department of the Interior, Bureau of Reclamation Denver Federal Center Bldg. 67, Room 152 Denver, CO 80225

Dear Madam Secretary:

The City of Glendale Water and Power is pleased to offer its support for Burbank Water and Power's (BWP) application for funding from the Bureau of Reclamation (BOR) to conduct a Potable Reuse Planning, Environmental Compliance, And Pre-Final Design Study.

Glendale and Burbank are neighboring cities and partners. Glendale and Burbank have two water system interconnections that allow the cities to solve short-term operational problems or needs for extra water. Our partnership has been one of 'exchange' instead of buying and selling water to each other. Like Burbank, Glendale is reliant on imported water. About 60% of Glendale's water is imported from the Metropolitan Water District (MWD), which is sourced from the State Water Project and the Colorado River via the Colorado River Aqueduct. If MWD had to ration water during a drought, both cities would be affected, and our ability to assist each other would be diminished or impossible. As such, the City of Glendale views the proposed project as a win-win situation that supports resiliency and the 'safety net' for both Burbank and Glendale.

Because both cities depend on the same external water sources, it is vital that we each use our water wisely. The City's culminating project will result in recycled water purified for potable reuse, which will help ensure that our respective communities remain resilient, as well as the region and State while reducing Southern California's reliance on imported water. As such, "one water" communities represent a promising model for managing water resources efficiently and sustainably. We offer our full support to BWP's proposed study, and hope you will find their application worthy of funding.

Respectfully Yours

Mark Young / General Manager



January 27, 2023

Secretary Deb Haaland U.S. Department of the Interior, Bureau of Reclamation Denver Federal Center Bldg. 67, Room 152 Denver, CO 80225

Subject: Support for Burbank Water and Power's Potable Reuse Planning, Environmental Compliance & Pre-Final Design Study

Dear Madam Secretary,

On behalf of the Burbank Chamber of Commerce, I am happy to provide this letter to demonstrate our enthusiasm and support for the City of Burbank Water and Power (BWP) Department's grant application to the U.S. Bureau of Reclamation. The Chamber is considered the City's leading business advocate helping to promote economic growth and prosperity; serving as a vital strategic partner in initiatives that enhance and preserve the quality of life within our community; and providing valued services to our diverse business members. The Burbank Chamber of Commerce fosters connections with the vast spectrum of businesses throughout the Burbank community.

Burbank is known as the "Media Capital of the World," and the entertainment industry is our primary economic driver. We are home to The Walt Disney Company, Warner Bros Studios, The Burbank Studios, Nickelodeon, Cartoon Network, ABC Studios, and more. These major studios are supported by thousands of small and medium-sized businesses. Burbank's business community also includes the Hollywood Burbank Airport (vital for the entertainment industry and the regional tourism industry with 90 non-stop flights per day and 5.2 million annual visitors), Providence Saint Joseph Medical Center, Woodbury University, Burbank Unified School District, and many small businesses and enterprises. While the City has approximately 107,700 residents, the population doubles to more than 200,000 during the workweek with a robust daily workforce.

A reliable water supply is essential to sustaining our economy and community. Enhancing the use of recharged water for potable use will reduce the strain on the City's water supply due to increased demand from population growth and climate change impacts. We understand the critical importance of integrating potable reuse into BWP's existing strategies and commend BWP for taking a proactive approach to increase our potable water supply by conducting an in-depth feasibility study. The Chamber strongly encourages you to consider Burbank's funding application.

Sincerely.

Chief Executive Officer

amie Keyser Thomas

# PERMANENT SELECT COMMITTEE ON INTELLIGENCE

CHAIRMAN

## APPROPRIATIONS COMMITTEE Ex-Officio Member

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February 22, 2023

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(BY APPOINTMENT ONLY)

The Honorable Deb Haaland, Secretary U.S. Department of the Interior Bureau of Reclamation Denver Federal Center Bldg. 67, Room 152 Denver, CO 80225

Re: Burbank Water and Power Potable Reuse Feasibility Study

Dear Secretary Haaland:

I am pleased to support Burbank Water and Power's (BWP) application to the U.S. Bureau of Reclamation's WaterSMART Water Recycling and Desalination Planning Grant Program for the City of Burbank's Potable Reuse Planning, Environmental Compliance, and Prefinal Design Study.

Burbank Water and Power has been dedicated to offering reliable services to the residents and businesses of the City of Burbank and has served the community for more than a century. This project will study the feasibility of a new facility to purify recycled water for potable use. This endeavor would 'drought-proof' 12.5 percent of the City of Burbank's water supply and address the city's policy goals of reliability, sustainability, and affordability. Presently, 45 percent of recycled water is being used for non-potable reuse, but with this project, there is the possibility for an additional 4.2 MGD in new potable supplies. By incorporating potable reuse into its current strategies for managing freshwater resources, the City of Burbank can enhance its resilience to drought and environmental impacts that threaten access to clean drinking water.

The severity of drought conditions coupled with mandatory water restrictions make projects that aim to maximize the use of recycled water necessary to support the long-term resiliency of our water supplies, and I commend Burbank's commitment to environmental responsibility and the people it serves.

Please give full and fair consideration to this important application.

Sincerely,

ADAM B. SCHIFF Member of Congress

#### PROJECT BUDGET AND NARRATIVE

#### A. Funding Plan

The City of Burbank Water and Power (BWP) Department requests \$400,000 in Reclamation funding for the proposed *Potable Reuse Planning, Environmental Compliance, and Pre-Final Design Study*, which will culminate in a complete, WTR-11-01 compliant Feasibility Report. BWP will provide \$400,000 as a non-federal funding match, for a total project cost of \$800,000. The source of the local match is cash from BWP's Capital Improvement Program Fund.

There are no time constraints on the availability of funds, nor any other contingencies associated with the funding commitment.

- Project funding will not include third-party in-kind costs or cash requested or received from other non-Federal entities.
- There are no pending funding requests (grants or loans) for this planning project.
- Project funding will not include third-party sources, and as such, there are no required Letters of Commitment.
- BWP is not seeking reimbursement for any expenditures incurred prior to the award.
- BWP will assume any necessary BWP staffing costs. These staffing costs are not included in the proposed project budget.

Table 1—Summary of Non-Federal and Federal Funding Sources

| SOURCE                                    | AMOUNT    |
|---|-----------|
| Non-Federal Entities                      |           |
| 1. BWP - Capital Improvement Program Fund | \$400,000 |
| Non-Federal Subtotal                      | \$400,000 |
| REQUESTED Reclamation Funding             | \$400,000 |

**Table 2—Total Project Cost Table** 

| SOURCE  | AMOUNT     |  |  |  |  |  |
|---|------------|--|--|--|--|--|
| Costs to be reimbursed with the requested Federal funding | \$400,000  |  |  |  |  |  |
| Costs to be paid by the applicant                         | \$400,000  |  |  |  |  |  |
| Value of third-party contributions                        | \$0        |  |  |  |  |  |
| TOTAL PROJECT COST  | \$ 800,000 |  |  |  |  |  |

## **B. Budget Proposal**

| Dudget Hear Description         | Comp | outation | Quantity | Total Cost |  |  |  |  |  |
|---------------------------------|------|----------|----------|------------|--|--|--|--|--|
| Budget Item Description         |      | Quantity | Туре     | Total Cost |  |  |  |  |  |
| Salaries and Wages              |      |          |          |            |  |  |  |  |  |
| NOT APPLICABLE                  |      |          |          | \$0        |  |  |  |  |  |
| Fringe Benefits                 |      |          |          |            |  |  |  |  |  |
| NOT APPLICABLE                  |      |          |          | \$0        |  |  |  |  |  |
| Travel                          |      |          |          |            |  |  |  |  |  |
| NOT APPLICABLE                  | 0    | 0        |          | \$0        |  |  |  |  |  |
| Supplies/Materials              |      |          |          |            |  |  |  |  |  |
| NOT APPLICABLE                  | 0    | 0        |          | \$0        |  |  |  |  |  |
| Contractual                     |      |          |          |            |  |  |  |  |  |
| Expert Planning Consultant      | 200  | 4,000    | Hrs      | \$800,000  |  |  |  |  |  |
| Third-Party Contributions       |      |          | -        |            |  |  |  |  |  |
| NOT APPLICABLE                  | 0    | 0        |          | \$0        |  |  |  |  |  |
| Other                           |      |          |          |            |  |  |  |  |  |
| NOT APPLICABLE                  | 0    | 0        |          | \$0        |  |  |  |  |  |
| TOTAL DIRECT COSTS              |      |          |          |            |  |  |  |  |  |
| Indirect Costs - NOT APPLICABLE |      |          |          |            |  |  |  |  |  |
| TOTAL ESTIMATED PROJECT COSTS   |      |          |          |            |  |  |  |  |  |

#### C. Budget Narrative

<u>Personnel (Salaries, Wages, and Fringe Benefits)</u>

All BWP staff time needed will be provided outside of the project budget, and will include:

1. Project Manager - Bassil Nahhas, PE, PMP (BWP Acting Manager of Water Engineering and Planning). As the Project Manager, Mr. Nahhas will be responsible for day-to-day operations of the proposed study, will supervise other participating BWP staff and the Consultant, and will manage the project budget and schedule. He will provide technical input and guidance to the Consultant throughout all stages of the study. He will conduct monthly performance monitoring meetings to ensure that the project stays on-budget and on-schedule, and will serve as the point-of-contact for Reclamation. Mr. Nahhas is a proven and effective leader in the planning, design, and construction of a broad spectrum of water infrastructure projects including renewal, rehabilitation, and maintenance of ageing water assets. He has more than 28 years of experience in the water industry. He has a Master of Science degree in Civil Engineering, registered civil engineering in California, and he holds Grade IV certifications in both water distribution and water treatment from the State Water Resources Control Board.

2. Project Engineer - Jared Lee, PE (BWP Civil Engineer).

Mr. Lee will provide engineering support to the Project Manager and Consultant throughout the two-year project. Mr. Lee has more than seven years' experience in water system planning, design, operations, and compliance. He also has over five years of experience in engineering consulting at AECOM, URS, and Malcolm Pirnie. He has a degree in Environmental Engineering from the University of California, Irvine. Mr. Lee is a registered Civil Engineer in the state of California.

- 3. Stakeholder Engagement Coordinator Tracie Neiswonger (BWP Marketing Associate).

  Ms. Neiswonger will manage all logistics for the project's stakeholder engagement and outreach to include coordinating public meetings and managing information dissemination via BWP's website, social media channels, *Currents* newsletters, etc.
- 4. Grant Coordinator to be named after award. The Grant Coordinator will provide administrative support to the project, assisting with grant and project management activities, including progress and financial reporting, managing reimbursement requests, grant compliance, coordinating audits, etc. The position requires a combination of education and/or experience including graduation from an accredited college with a degree in business administration, public administration, or related degree. Desirable qualifications include experience with budgeting, reporting, and grant agreement compliance.

Travel NOT APPLICABLE.

Equipment NOT APPLICABLE.

Supplies NOT APPLICABLE.

## Contractual

BWP's approach for the proposed study is to hire a Prime Consultant who will be responsible for conducting all study activities with guidance, input, and oversight provided by BWP. BWP will conduct a competitive procurement to identify and secure the services of a qualified and experienced Consultant. BWP conferred with area engineering firms to estimate costs for a study of the proposed size and scope, and this project budget reflects that estimate.

• \$200/hour x 4,000 hours over two years (96% FTE each year).

**Construction NOT APPLICABLE.** 

Indirect Charges NOT APPLICABLE.