



CITY OF GLENDALE, CALIFORNIA REPORT TO THE CITY COUNCIL

AGENDA ITEM

Report: Professional Services Agreement with Arcadis U.S., Inc. for Engineering Services in Developing a Water Master Plan.

1. Motion authorizing the City Manager, or his designee, to enter into and execute a Professional Services Agreement (PSA) with Arcadis U.S., Inc, for engineering services in developing a comprehensive Water Master Plan., in the not-to-exceed amount of \$1,196,892.

COUNCIL ACTION

Item Type: Action Item

Approved for December 3, 2024 **calendar**

EXECUTIVE SUMMARY

In August 2024, Glendale Water & Power (GWP) through a Request for Proposal (RFP) process, invited qualified consulting firms to develop a comprehensive Water Master Plan (WMP). Proposals were received from two highly qualified engineering firms. The proposals were evaluated based on responsiveness, firm experience and technical abilities, project team experience, design approach, cost and results from a presentation and oral interview. Based on the evaluation, Arcadis U.S., Inc. (Arcadis) was selected with the highest scoring and lowest cost for the project.

The proposed PSA with Arcadis is for a total not-to-exceed cost of \$1,196,892.

RECOMMENDATION

Authorize the City Manager, or his designee, to enter into a PSA with Arcadis U.S., Inc. for engineering services in developing a comprehensive Water Master Plan, in the not-to-exceed amount of \$1,196,892.

ANALYSIS

Water Supply

Two-thirds of Glendale's water supply is imported from external watersheds in other parts of the state and/or the country. This consists of supplies from the Colorado River through the Metropolitan Water District of Southern California's (MWD) Colorado River Aqueduct. This also includes supplies from the Northern Sierras in Northern California through the California Aqueduct or State Water Project (SWP). The SWP system is owned and operated by the California Department of Water Resources (DWR).

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Glendale can receive water supplies from these entities through its relationship with MWD. Glendale is an original founding member and one of the 26 member agencies of MWD.

Colorado River Supplies:

The Colorado River Basin encompasses seven states and northern Mexico and supports over 20 federally recognized tribes. The river provides municipal and industrial water for over 40 million people across major Southwestern Metropolitan areas including Los Angeles, San Diego, Las Vegas, Phoenix, and Denver.

The Colorado River Basin is facing an unprecedented water crisis due to prolonged drought, climate change and overallocation of its resources, which has necessitated action to address the impending water scarcity. Some actions that have been taken to address this issue includes:

Reduced Basin Allocations: In May of 2023, the three states of California, Nevada, and Arizona reached an agreement to cut their water Basin Allocations from the Colorado River by at least three million acre-feet through 2026. These primary objective for these reductions were to manage water levels in Lake Mead. Lake mead is one of the critical lakes within the Colorado River Basin. The Bureau of Reclamation (BOR) governs the Colorado River resources and is responsible for establishing new operating guidelines to manage the forecasted shortages by December 2025. The new guidelines are scheduled to go into effect after 2026.

State Water Project Supplies:

The State Water Project (SWP) provides a critical water supply lifeline to the Southern California region and spans over 705 miles throughout the state, originating from the Northern Sierras. This water system of existing storage and conveyance delivers clean water to approximately 27 million Californians including the City of Glendale.

The impacts of climate change continue to impact the reliability of the SWP. Projections by DWR anticipate a continual decline in SWP supplies over time. Due to climate change, more rainfall in short periods of time, less snowpack, and earlier runoff are expected in the Northern Sierra, reflecting a systemic shift from historical hydrologic patterns.

In August 2024, DWR released the biennial SWP Delivery Capability Report. This report represents a step forward in quantifying the risks to the SWP delivery capability by incorporating a range of climate change impacts. According to the report, SWP delivery capability and reliability could be reduced by as much as 23% in the next 20 years under the assumption change in temperature, and hydrologic conditions. These climate-change induced findings underscore the need for Glendale to address the impacts of climate change and upgrading infrastructure to manage associated risks. According to the Delivery Capability Report, current infrastructure will show a decrease in the State's capability to deliver water in the coming years as rising temperatures bring more intense droughts, decreased snowpack, more extreme storms, and more precipitation falling as

rain rather than snow. Changes in the timing of runoff and impacts from sea level rise are also expected to create challenges.

Increasing Glendale's local water supply specifically through the expansion of recycled water will aid in reducing the reliance on imported supplies from the Colorado River and the Northern Sierras. This would diversify water supplies and ensure reliability, especially in a rapidly changing climate. In addition to this, it would support the City's water supply in the event of an earthquake or other potential emergency disruptions to imported supplies.

Water Infrastructure

Water Pipeline System:

The City's potable water distribution system consists of approximately 408 miles of pipelines ranging from four inches to 48 inches in diameter. About 40% of the system pipelines were installed prior to 1950, which translates to over 74 years old and 65% are cast-iron pipe which has an average useful life of 65 years. Cast-iron can become very brittle over time, increasing the likelihood of cracking due to temperature changes and seismic activities, which results in main breaks and leaks. GWP Water actively replaces old cast-iron pipe with new ductile-iron pipe through its capital pipeline management program.

Water Pump Stations:

The City's potable water distribution system contains 26 pump stations that move water between pressure zones. Most of the pump stations are more than 40 years old and are still operating with the original pumping and electrical equipment that are past their useful life. Through an ongoing pump station improvement program, GWP replaces the obsolete pumps and motors to significantly improve both the reliability of the pump station and the energy efficiency of the pumping unit. Dated electrical equipment is upgraded to current industry standard for the safety of City staff and greater efficiency.

Water Storage Facilities:

Water distribution systems rely on stored water to help equalize fluctuations between supply and demand. Currently, the City's potable water system has 28 reservoirs and tanks which provide approximately 184 million gallons (MG) of storage capacity. Since the City's groundwater wells and imported water supplies originate at the lower elevations of its distribution system, reservoirs are configured to be replenished from lower pressure zones. This is achieved by using booster pump stations to convey water to the higher pressure zones. The City's water tank and reservoir life spans range between 30 and 90 years. For the water quality and safety of the storage facilities, GWP routinely inspects the water reservoirs and tanks, perform tank rehabilitation, update safety features on water tanks, and repair any leaks in reservoirs to minimize water loss.

To improve and maintain the City's water infrastructure and facilities and to enhance the reliability of future water supply, GWP Water Division will be retaining professional services of a well-qualified consulting firm to perform detailed system-wide condition assessment as part of the WMP.

The WMP will provide GWP with comprehensive analyses of both the potable and recycled water systems. This includes the development and implementation of a new hydraulic model for the City's recycled water distribution system, performing recycled water demand analysis, identify existing system's deficiency, and exploring and strategy planning of new water reuse opportunities to maximize the City's recycled water supply and use. The WMP consists of multiple analyses, including water demand analysis, water supply analysis, water quality analysis, and existing and future water system hydraulic analysis. The analyses results from the two master plans will be used to develop the Capital Improvement Program (CIP) and the Pipeline Replacement Program (PRP), provide recommendations of improvements and expansions to the existing water systems, and establish project priorities for funding the CIP and PRP. GWP will utilize the two master plans as a guiding tool for long-term water supply investments to ensure water supply reliability for the City.

After the completion of the WMP, the project consultant will continue providing engineering support to GWP throughout the Water Cost-of-Service Analysis and new water rate structure development process and make appropriate adjustments to the CIP and PRP schedule based on the funding from the new water rate structure.

One of the critical components of the WMP development is public outreach and engagement to help the Glendale community understand and recognize the goals and importance of the proposed water system capital improvements and water reuse effort and projects.

On July 29, 2024, GWP Water staff issued an RFP for the comprehensive infrastructure condition assessment, development of the WMP, and providing technical support during the Water Cost-of-Service Analysis Study. The RFP was posted on the public bidding platform - BidNet Direct. GWP Water staff conducted a pre-proposal meeting on August 12, 2024, and nine consulting firms participated.

On September 6, 2024, the due date for proposal submissions, proposals were submitted by two engineering firms as outlined below:

Firm	Location	Amount
Arcadis U.S., Inc.	Los Angeles, CA	\$1,196,892
CDM Smith, Inc.	Irvine, CA	\$1,978,216

The proposals were evaluated and ranked by a three-member review panel composed of staff from the GWP Administration and Water Engineering Sections. Evaluation criteria included completeness of proposal; firm experience and professional qualifications; project team experience; technical approach and methodology; cost, and results from a presentation/interview. It was determined that the two proposals ranked

sufficiently close to warrant being invited to make an oral presentation and respond to questions from a seven-member interview panel composed of staff from the GWP Administration, Engineering, and Operations Sections. After conducting the interviews on October 3, 2024, the panel completed the consultant ranking process and concluded that Arcadis U.S., Inc. had the best approach to the assessment and provided the best overall value to the City. A summary of the complete evaluation is shown below:

Criteria	Max Pts	Arcadis	CDM Smith
Completeness of Proposal	5.0	4.8	5.0
Professional Qualifications and Experience of Firm	25.0	23.3	23.3
Project Team Experience	25.0	20.8	22.9
Technical Approach and Methodology	25.0	22.5	21.7
Cost	20.0	19.3	12.7
Total Score	100.0	90.8	85.6

As such, GWP respectfully recommends that the City Council authorize the City Manager, or his designee, to enter into a PSA with Arcadis U.S., Inc. for engineering services in developing a comprehensive Water Master Plan., in the not-to-exceed amount of \$1,196,892.

STAKEHOLDERS/OUTREACH

Not applicable.

FISCAL IMPACT

The 2024 Water Master Plan development will cost \$1,196,892, which was approved as a part of the FY 2024-25 budget. No new appropriation is being requested at this time. The City Council approved funding is outlined below:

Existing Appropriation		
Amount	Account String	Funding Source
\$1,316,582	43110-5920-GWP-4700	Water Works Revenue Fund

ENVIRONMENTAL REVIEW (CEQA/NEPA)

This item is not a project for the purposes of the California Environmental Quality Act (CEQA) and thus is not subject to CEQA review.

CAMPAIGN DISCLOSURE

In accordance with the City Campaign Finance Ordinance No. 5744, the following are the names and business addresses of the members of the board of directors, the chairperson, CEO, COO, CFO, Subcontractors and any person or entity with more than ten percent interest in the company proposed for contract in this agenda item report.

Arcadis U.S., Inc., is 100% owned by Arcadis North America, Inc., a Colorado Corporation, located at 630 Plaza Drive, Highlands Ranch, Colorado. Arcadis North America, Inc.'s sole shareholder is Arcadis USA, B.V. whose principal office is located at Gustav Mahlerplein 97-103, 1082 MS, Amsterdam, The Netherlands. Arcadis USA, B.V. is a wholly owned subsidiary of Arcadis N.V. a publicly traded Netherlands company with its shares traded on the EuroNext exchange. Arcadis N.V.'s only shareholder holding more than ten percent (10%) interest is the Lovinklaan Foundation, a private Dutch foundation that manages the shares held by the employees of Arcadis.

Officers of: **Arcadis U.S., Inc.**

Full Name	Title	Business Address	City	State	Zip
None					

Ownership Interest in more than ten percent (10%) in **Arcadis U.S., Inc.**

Full Name	Title	Business Address	City	Postal Code	Country
Lovinklaan Foundation		Beaulieustraat 22	Arnhem	6814 DV	Netherlands

ALTERNATIVES TO STAFF RECOMMENDATION

Alternative 1: Choose not to award the PSA as recommended herein. This will result in delay of completing system-wide infrastructure condition assessment and the master planning of capital improvements and system expansions to ensure the reliability of future water supply.

Alternative 2: Consider any other alternative not proposed by staff.

ADMINISTRATIVE ACTION

Submitted by:

Manuel Robledo, Interim General Manager - Glendale Water & Power

Prepared by:

Chisom Obegolu, Assistant General Manager - Water

Approved by:

Roubik R. Golanian, P.E., City Manager

EXHIBITS/ATTACHMENTS

Not applicable.