



One Water One Watershed Project Information

Project Number 1307

Lead Agency Information

Agency or Organization ®: City of San Bernardino Municipal Water Department

Project Director ®: JohnClaus

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City ®: San Bernardino

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Project Partners

<u>Agency</u>	<u>Contact Name</u>	<u>Phone</u>
▪		



Project Type Construction

Q. Is this project included in an existing regional, sub-regional plan ®? Yes

If yes, name plan (200 characters): San Bernardino Clean Water Factory – Phase VI

Project Location

Describe Location/Area (500 characters)®:

399 Chandler Place, San Bernardino, CA 92408, RWQCB Management Zone Bunker Hill – A

Q. Please provide an electronic GIS shapefile delineating the project:
 or if no GIS shapefile is available provide a set of point coordinates (lat/long)
 Latitude: 34° 11 43.4644" N
 Longitude: 117° 19 57.4202" W

SBMWD CWF Site Map (flat).pdf

E. Project Funding and Economic Feasibility

Q. Approximately what portion of the project funding is expected from ®:

Description	Amount	Percent
Requested Funding	\$32,796,500.00	50%
Non-State Share (Funding Match)	\$32,796,500.00	50%
Local Contribution		
Federal Contribution		
In-Kind Contribution		
SRF Loan		
Total Project	\$65,593,000.00	100%

Q. Has funding been secured for project ®? No

Q. Has O&M funding been secured ®? No



F. Project Information and Technical Feasibility

Q. Project Name (200 characters): San Bernardino Clean Water Factory – Phase VI

Q. Project Description (1,000 characters):

The proposed Clean Water Factory (CWF) will treat effluent from the San Bernardino Water Reclamation Plant (SBWRP) to a quality approved for recharge—as set by the California Department of Public Health (CDPH) and the Santa Ana Regional Water Quality Control Board (RWQCB)—and convey the recycled water to the Waterman Basins, the East Twin Creek Spreading Grounds, and the Devil Canyon and Sweetwater Basins for surface spreading. The locations of these facilities are shown in Figure 1. Recycled water spread at these facilities will artificially recharge the Bunker Hill Groundwater Basin (Bunker Hill Basin) and, more specifically, the Bunker Hill A Management Zone, as described in the Water Quality Control Plan for the Santa Ana River Watershed (Basin Plan). The CWF will also treat a side stream of SBWRP effluent to a quality approved for direct use and convey the tertiary treated recycled water to customers that can benefit from a non-potable water supply.

Phase VI of the CWF project involves the design and construction of a 4,700 AFY advanced purification treatment system, distribution system, and groundwater recharge facilities for indirect reuse. A significant portion of the Phase VI work will be contracted with the services procured through formal advertising and/or competitive negotiations.

Q. Goals and Objectives of the Project (1,000 characters):

The primary objectives of the San Bernardino Clean Water Factory Project include:

- (1) Improve water supply reliability by ultimately recycling as much as 31,500 afy.*
- (2) Preserve/enhance the quality of the groundwater basin to the benefit of present and future generations by applying advanced treatment methods to the recycled water that will be used for recharge.*

Secondary benefits to be derived by the project include:

- (1) Provide the surrounding community (the City of San Bernardino is classified as a disadvantaged community) with the benefits of:*
 - a. Water supply reliability*
 - b. Water supply self-reliance; and*
 - c. Economic stability and growth.*
- (2) Improve groundwater management: the San Bernardino Municipal Water Department treats VOCs in the Bunker Hill Groundwater Basin by pump and treatment process. The recharge basin proposed to be used for this project is located up-gradient of the pump and treat system, thereby allowing for flushing of the VOCs down into the treatment system. A projected 50-year cleanup can be accelerated and render the basin more amenable to conjunctive use.*
- (3) Conservation of the basin’s groundwater by supplying recycled water for landscape irrigation.*
- (4) Reducing/offsetting the current and future costs of associated with the treatment of wastewater.*
- (5) Providing jobs within a severely economically depressed area.*

Q. Purpose and Need of the Project (1,000 characters):

Currently, about 5,000 acre-ft/yr (AFY) of the groundwater pumped by the SBMWD must be made up by recharging State Water Project (SWP) water, and this recharge will increase in the future as the groundwater pumping by the SBMWD and other water purveyors increases. The supplemental water recharge required for the SBMWD to meet future water demands could reach 15,000 to 20,000 acre-ft/yr by 2025. Given the conditions in the Sacramento and San Joaquin River Delta, the reliability of SWP supplies in the future may be reduced substantially, and the SBMWD needs to consider new sources of supplemental water to meet groundwater recharge requirements and to reduce the demand on groundwater pumping. The SBMWD’s recycled water can be used to reduce its dependency on SWP water.

To provide a reliable supply of supplemental water for recharge, the SBMWD has developed the concept for the CWF project. As envisioned, the project will result in the design and construction of the Clean Water Factory infrastructure (an advanced purification system and the storage and distribution system) that supplies recycled water for groundwater recharge.

Q. Are there any significant institutional/technical barriers to project ? Yes

We anticipate initial public opinion to be skeptical toward recycled water. Technology and science can prove indirect potable reuse projects that incorporate advanced water purification produce high-quality water that exceeds state and federal drinking water standards, but public opinion can still delay the project.

With the project of the anticipated magnitude, we expect issues including, but not limited to, political jurisdictions, water rights, the environment, public health, and determining

G. Resources Stewardship and Sustainability

Landuse

Q. Does the project employ resource efficient landuse (LID, LEED, or Ahwahnee Principles)? Yes

Q. Percentage of the project footprint that implements resource efficient landuse : TBD

Describe the resource efficient landuse practices implemented (1000 characters):

It is anticipated that resource efficient land use practices will be incorporated into the development of the project (Phases II through VII); specific practices

TBD.

Q. What are the impacts to natural hydrology and alluvial fans ? No Impacts

Describe impacts (1000 characters): *Negative impacts are not anticipated; however, TBD from Phase I modeling.*



Climate Change Adaptation

Describe how the project adapts to the potential effects of climate change (1000 characters)[®]:

The project is highly adaptable to climate change, as it will result in an essentially closed-loop wastewater recycling to groundwater recharge system, thereby reducing or eliminating the need for supplemental groundwater recharge water that is currently imported from Northern California.

G. Resources Stewardship and Sustainability Cont.

Greenhouse Gas Emissions

Q. Reduction of greenhouse gas emissions achieved by project TBD (metric tons CO2 /year)[®]

Q. If this is a water supply project that depends on metered energy resources, estimate TBD (KWh/Acre foot)[®]

Describe the measures to reduce greenhouse gas emissions of your project (1,000 characters)[®]:

Adopting and integrating USEPA Sustainable Infrastructure Initiative components into the planning and design of the Clean Water Factory.

H. Strategic Considerations

Q. Where do the benefits of the projects accrue [®]?
*multiple municipalities/communities
 Bunker Hill Groundwater Basin*

Describe project synergies and linkages that result in added value, and coordinated implementation and/or operation (1,000 characters)[®]:

While the groundwater recharge operations will primarily benefit the agencies drawing water from the Bunker Hill Groundwater Basin and serving the communities of San Bernardino and East Highland, the State Project Water currently used as a source of supplemental recharge water can be freed up for use by other agencies served by the San Bernardino Valley Municipal Water District. Additionally, preliminary project planning has identified other regional partners that may benefit from the recycled water generated by the Clean Water Factory that is in excess of SBMWD's needs.

I. Disadvantaged/Native American Tribal Communities

Q. Does project provide direct benefits to disadvantaged communities [®]? Yes

Q. Does project provide direct benefits to Native American tribal communities [®]? Yes

Q. Percentage of the project benefiting disadvantaged communities [®]: 75%

Q. Percentage of the project benefiting Native American tribal communities [®]: 5%

Describe the benefits to disadvantaged and/or Native American tribal communities (1,000 characters)[®]:

According to the latest census data, a significant portion of the City of San Bernardino may be classified as a disadvantaged community. Securing a steady, reliable, and economical supply of water is essential to the community's growth and success. To ensure this reliable source of water is developed in a cost-effective, environmentally safe manner protective of human health, the SBMWD is undertaking the development of the plans necessary to properly implement the Clean Water Factory Project. Additionally, the San Manuel Band of Serrano Mission Indians resides within the area served by the Bunker Hill Groundwater Basin.

J. Environmental Justice

Q. How does the proposed project address any Environmental Justice concerns [®]?

Environmental Justice issues will be addressed through the development and implementation of an extensive public education/outreach program as well as establishing a panel of experts to review the project's development, planning, design, construction, and operation.



K. Water Resource Management Strategies

Indicate the strategies that the project addresses ®:

Check all that apply, and indicate performance metrics for those checked

<u>Purpose</u>	<u>Description</u>	<u>Metric</u>	<u>Unit</u>
	Recycled water	4,700	Annual water supply (AFY)
	Wastewater treatment	4	Water treated (mgd)

L. Economic Incentives

Q. Number of jobs created by project ®:

construction 30 (# of individuals)

operational 2 (# of individuals)

M. Project Readiness/Status

Q. What is the status of the project ®?

Planning studies completed

Q. CEQA Status ® *In Progress*

Q. NEPA Status *In Progress*

Q. Estimated completion date of project ®: 07/01/2026

Q. Estimated operational life of project ®: 07/01/2046

Q. Has your agency constructed similar projects in the past ®? No

