

RECLAMATION

Managing Water in the West

Water Infrastructure Improvements for the Nation Act of 2016 (Pub. L. 114-322), Title I Water Resources Development Section 4009(c):

Feasibility Study Review Findings

August 2019

Prepared for

United States Congress

Prepared by

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

Mission Statements

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Eligible Projects

This periodic report is provided in accordance with the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 (Pub. L. 114-322), Title I Water Resources Development Section 4009(c). The purpose of this report is to provide a summary of each of the review findings for Title XVI feasibility studies reviewed, completed, and not previously transmitted to Congress that meet the established requirements as defined in the Bureau of Reclamation (Reclamation) Manual Directives and Standards WTR-11-01 and under section 1604 of Pub. L. 102-575, as amended. The following list of completed feasibility studies is provided:

- Big Bear Area Regional Wastewater Agency (California), Replenish Big Bear
- Carpinteria Valley Water District (California), Carpinteria Advanced Purification Project
- City of Garden City (Kansas), Reuse Feasibility Study
- Coachella Valley Water District (California), WRP-10 Non-Potable Water System Expansion Project
- El Paso Water Utilities Public Service Board (Texas), Aquifer Storage and Recovery Using Reclaimed Water Project
- Kitsap County Public Works (Washington), Kingston Recycled Water Project
- Las Virgenes-Triunfo Joint Powers (California), Pure Water Project

This list of projects eligible to compete for funding will be added to the list transmitted previously and will be amended as subsequent reports are provided to Congress as additional feasibility studies are completed and reviewed.

Summary of Results

This report includes a brief one-page summary of the results of each feasibility study review under WTR 11-01, including the following determinations:

- The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended.
- The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of Title XVI projects.
- The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Project specific reports are provided to summarize the results of each feasibility study review, provide a brief project description, and identify conditions.

Big Bear Area Regional Wastewater Agency

Project Sponsor: Big Bear Area Regional Wastewater Agency

Location: Big Bear, California

Project: Replenish Big Bear

Total Estimated Project Cost: \$43,715,000

Review Completed: March 8, 2019

Project Description: The Big Bear Area Regional Wastewater Agency considered the feasibility of upgrading its existing wastewater facility to treat wastewater to the level required for replenishing surface water sources and groundwater recharge. The preliminary design capacity of the treatment upgrades is 2.2 million gallons per day, which will produce an estimated 1,950 acre-feet of recycled water annually. The project will provide a reliable and local water supply in an area where groundwater is currently the only source of potable water.

Feasibility Study Review Finding: The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended. The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water recycling projects. The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Funding Conditions:

- Reclamation will include Big Bear Area Regional Wastewater Agency's project on a publicly available list of projects that have a completed feasibility study that has been determined to meet program requirements. The list will be available on the Reclamation website.
- The project sponsor is eligible to apply for funding through an annual competitive funding opportunity announcement, but the total Federal funding received towards the planning, design, and construction of this project may not exceed 25 percent of the total cost of the project or \$20 million, whichever is less.
- Planning, design, and construction activities completed prior to the transmission of this list of eligible projects or outside of the scope of the project described in the completed feasibility study are not eligible for funding.
- Prior to receiving Federal funding, the project must comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- Prior to receiving Federal funding, the project sponsor must demonstrate that it is financially capable of funding the non-Federal portion of project construction costs and all necessary project operation, maintenance, and replacement costs, pursuant to Reclamation Manual Directives and Standards WTR-11-02.

Carpinteria Valley Water District

Project Sponsor: Carpinteria Valley Water District

Location: Carpinteria, California

Project: Carpinteria Advanced Purification Project

Total Estimated Project Cost: \$23,200,000

Review Completed: April 4, 2019

Project Description: Carpinteria Valley Water District considered the feasibility of constructing an advanced water purification facility to treat effluent from the Carpinteria Sanitary District. The proposed project is expected to produce an annual 1,100 acre-feet of recycled water for injection into the local groundwater basin, which would ultimately be used for the District's potable supply. The project will include the advanced water purification facility with microfiltration, reverse osmosis, and an advanced oxidation process, a purified water pump station, 9,000 feet of pipeline, 2 injection wells, 4 monitoring wells, the existing production wells, and modifications to the Sanitary District's ocean outfall. The project will help address water resource vulnerabilities caused by critical drought conditions and projected changes to the area's existing water supplies.

Feasibility Study Review Finding: The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended. The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water recycling projects. The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Funding Conditions:

- Reclamation will include Carpinteria Valley Water District's project on a publicly available list of projects that have a completed feasibility study that has been determined to meet program requirements. The list will be available on the Reclamation website.
- The project sponsor is eligible to apply for funding through an annual competitive funding opportunity announcement, but the total Federal funding received towards the planning, design, and construction of this project may not exceed 25 percent of the total cost of the project or \$20 million, whichever is less.
- Planning, design, and construction activities completed prior to the transmission of this list of eligible projects or outside of the scope of the project described in the completed feasibility study are not eligible for funding.
- Prior to receiving Federal funding, the project must comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- Prior to receiving Federal funding, the project sponsor must demonstrate that it is financially capable of funding the non-Federal portion of project construction costs and all necessary project operation, maintenance, and replacement costs, pursuant to Reclamation Manual Directives and Standards WTR-11-02.

City of Garden City

Project Sponsor: City of Garden City

Location: Garden City, Kansas

Project: Garden City, Kansas Reuse Feasibility Study

Total Estimated Project Cost: \$8,093,100

Review Completed: February 1, 2019

Project Description: The City of Garden City evaluated options to reuse wastewater effluent. The recommended project will provide recycled water for industrial use, where the City will construct infrastructure and equipment to support the development of a centralized, expandable wastewater reuse facility. Water produced by this project will contribute to a more reliable water supply and eliminate the need to develop new water supplies that further deplete the Ogallala Aquifer.

Feasibility Study Review Finding: The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended. The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water recycling projects. The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Funding Conditions:

- Reclamation will include the City of Garden City's project on a publicly available list of projects that have a completed feasibility study that has been determined to meet program requirements. The list will be available on the Reclamation website.
- The project sponsor is eligible to apply for funding through an annual competitive funding opportunity announcement, but the total Federal funding received towards the planning, design, and construction of this project may not exceed 25 percent of the total cost of the project or \$20 million, whichever is less.
- Planning, design, and construction activities completed prior to the transmission of this list of eligible projects or outside of the scope of the project described in the completed feasibility study are not eligible for funding.
- Prior to receiving Federal funding, the project must comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- Prior to receiving Federal funding, the project sponsor must demonstrate that it is financially capable of funding the non-Federal portion of project construction costs and all necessary project operation, maintenance, and replacement costs, pursuant to Reclamation Manual Directives and Standards WTR-11-02.

Coachella Valley Water District

Project Sponsor: Coachella Valley Water District

Location: Coachella, California

Project: Water Reclamation Plant Number 10 Non-Potable Water System Expansion Project

Total Estimated Project Cost: \$100,600,000

Review Completed: April 4, 2019

Project Description: The Coachella Valley Water District evaluated the feasibility of expanding one of its wastewater reclamation plants to provide additional non-potable recycled water to new customers. By maximizing delivery of recycled wastewater, the District will ensure the use of all recycled water produced at its water reclamation plant, thereby eliminating the need for effluent land disposal. The project will enhance the sustainability of groundwater supplies by maximizing the use of reliable local recycled water.

Feasibility Study Review Finding: The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended. The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water recycling projects. The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Funding Conditions:

- Reclamation will include Coachella Valley Water District's project on a publicly available list of projects that have a completed feasibility study that has been determined to meet program requirements. The list will be available on the Reclamation website.
- The project sponsor is eligible to apply for funding through an annual competitive funding opportunity announcement, but the total Federal funding received towards the planning, design, and construction of this project may not exceed 25 percent of the total cost of the project or \$20 million, whichever is less.
- Planning, design, and construction activities completed prior to the transmission of this list of eligible projects or outside of the scope of the project described in the completed feasibility study are not eligible for funding.
- Prior to receiving Federal funding, the project must comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- Prior to receiving Federal funding, the project sponsor must demonstrate that it is financially capable of funding the non-Federal portion of project construction costs and all necessary project operation, maintenance, and replacement costs, pursuant to Reclamation Manual Directives and Standards WTR-11-02.

El Paso Water Utilities Public Service Board

Project Sponsor: El Paso Water Utilities Public Service Board

Location: El Paso, Texas

Project: Aquifer Storage and Recovery Using Reclaimed Water Project

Total Estimated Project Cost: \$27,700,000

Review Completed: March 24, 2019

Project Description: El Paso Water Utilities Public Service Board considered opportunities to provide a long-term reliable water source to its users. The proposed aquifer storage and recovery (ASR) project will treat impaired surface water for groundwater infiltration at the Hueco Bolson Aquifer. The ASR improvements consist of added pipelines, valves, meters, monitoring systems and controls for conveyance, new infiltration basin facilities, a new treatment system, and upgrades to existing infrastructure. The project will expand aquifer recharge in an area with declining groundwater levels and growing water demand.

Feasibility Study Review Finding: The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended. The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water recycling projects. The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Funding Conditions:

- Reclamation will include El Paso Water Utilities Public Service Board's project on a publicly available list of projects that have a completed feasibility study that has been determined to meet program requirements. The list will be available on the Reclamation website.
- The project sponsor is eligible to apply for funding through an annual competitive funding opportunity announcement, but the total Federal funding received towards the planning, design, and construction of this project may not exceed 25 percent of the total cost of the project or \$20 million, whichever is less.
- Planning, design, and construction activities completed prior to the transmission of this list of eligible projects or outside of the scope of the project described in the completed feasibility study are not eligible for funding.
- Prior to receiving Federal funding, the project must comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- Prior to receiving Federal funding, the project sponsor must demonstrate that it is financially capable of funding the non-Federal portion of project construction costs and all necessary project operation, maintenance, and replacement costs, pursuant to Reclamation Manual Directives and Standards WTR-11-02.

Kitsap County Public Works

Project Sponsor: Kitsap County Public Works

Location: Port Orchard, Washington

Project: Kingston Recycled Water Project

Total Estimated Project Cost: \$13,648,000

Review Completed: April 11, 2019

Project Description: Kitsap County Public Works considered the feasibility of upgrading its wastewater treatment plant to produce recycled water for golf course irrigation and groundwater recharge.

Components of the proposed project include treatment upgrades at the wastewater treatment plant, pumping conveyance and equalization infrastructure to deliver recycled water, and an infiltration gallery to allow for winter groundwater recharge. By treating wastewater for beneficial use, the County will be able to better manage its water resources and reduce wastewater discharges to Puget Sound.

Feasibility Study Review Finding: The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended. The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water recycling projects. The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Funding Conditions:

- Reclamation will include Kitsap County Public Works' project on a publicly available list of projects that have a completed feasibility study that has been determined to meet program requirements. The list will be available on the Reclamation website.
- The project sponsor is eligible to apply for funding through an annual competitive funding opportunity announcement, but the total Federal funding received towards the planning, design, and construction of this project may not exceed 25 percent of the total cost of the project or \$20 million, whichever is less.
- Planning, design, and construction activities completed prior to the transmission of this list of eligible projects or outside of the scope of the project described in the completed feasibility study are not eligible for funding.
- Prior to receiving Federal funding, the project must comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- Prior to receiving Federal funding, the project sponsor must demonstrate that it is financially capable of funding the non-Federal portion of project construction costs and all necessary project operation, maintenance, and replacement costs, pursuant to Reclamation Manual Directives and Standards WTR-11-02.

Las Virgenes-Triunfo Joint Powers Authority

Project Sponsor: Las Virgenes-Triunfo Joint Powers Authority

Location: Calabasas, California

Project: Pure Water Project

Total Estimated Project Cost: \$122,600,000

Review Completed: November 20, 2018

Project Description: Las Virgenes Municipal Water District and Triunfo Sanitation District considered approaches to maximize use of recycled water during times of low irrigation demand. The proposed indirect potable reuse project includes the delivery of recycled water from the existing recycled water system to a proposed advanced water treatment facility, where water would be treated to the level required to supplement potable water supplies in Las Virgenes Reservoir. The project will help address water supply reliability, seasonal imbalance in recycled water supply and demand, and constraints related to surface water discharges.

Feasibility Study Review Finding: The feasibility study report meets the requirements of a feasibility study as defined under section 1604 of Pub. L. 102-575, as amended. The feasibility study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water recycling projects. The project is technically and financially feasible and provides a Federal benefit in accordance with the reclamation laws.

Funding Conditions:

- Reclamation will include the Las Virgenes-Triunfo Joint Powers Authority's project on a publicly available list of projects that have a completed feasibility study that has been determined to meet program requirements. The list will be available on the Reclamation website.
- The project sponsor is eligible to apply for funding through an annual competitive funding opportunity announcement, but the total Federal funding received towards the planning, design, and construction of this project may not exceed 25 percent of the total cost of the project or \$20 million, whichever is less.
- Planning, design, and construction activities completed prior to the transmission of this list of eligible projects or outside of the scope of the project described in the completed feasibility study are not eligible for funding.
- Prior to receiving Federal funding, the project must comply with all applicable environmental laws, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- Prior to receiving Federal funding, the project sponsor must demonstrate that it is financially capable of funding the non-Federal portion of project construction costs and all necessary project operation, maintenance, and replacement costs, pursuant to Reclamation Manual Directives and Standards WTR-11-02.