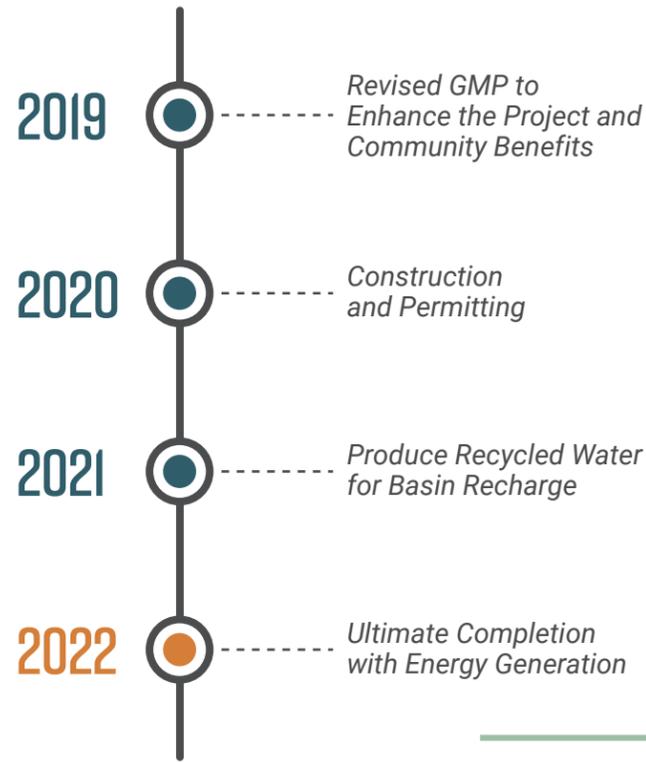


# CONSTRUCTION SCHEDULE

Codigestion was added to the project in 2019, over a year after entering into the contract with Balfour Beatty for construction. Fortunately, the use of progressive design-build allowed for the addition of a highly complex element in this phase rather than a later phase, while maintaining the target of creating recycled water by the end of 2021 and electricity in early 2022.



**CONSTRUCTION WILL BE COMPLETED AND SITE FULLY OPERATIONAL BY JULY 2022.**



*Build Partners*

**Balfour Beatty**

**ARCADIS**

**RUHNAU CLARKE ARCHITECTS**

**HIE HELIX ELECTRIC CONSULTING ENGINEERS**

**INFRAMARK WATER & INFRASTRUCTURE SERVICES**

**Trussell TECHNOLOGIES INC.**

**wsp**

**Anaergia**

**FIBRACAST**

*Funding Sources*

**PROP 1 WATER BOND 2014**

**Clean Water State Revolving Fund**

**CALIFORNIA WATER BOARDS**

**EPA United States Environmental Protection Agency**

**CALIFORNIA CLIMATE INVESTMENTS**

**Valley SAN BERNARDINO MUNICIPAL WATER DISTRICT**

**CALIFORNIA natural resources AGENCY**

Funding for this Sterling Natural Resource Center project has been provided in full or in part by the Proposition 1 - the Water Quality, Supply, and Infrastructure Improvement Act of 2014 and the Clean Water State Revolving Fund through an agreement with the State Water Resources Control Board. California's Clean Water State Revolving Fund is capitalized through a variety of funding sources, including grants from the United States Environmental Protection Agency and state bond proceeds.

The Urban Greening Program is part of California Climate Investments, a statewide program that puts billions of cap-and-trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment—particularly in disadvantaged communities. The cap-and-trade program also creates a financial incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. California Climate Investment projects include affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, recycling and much more. At least 35 percent of these investments are made in disadvantaged and low-income communities. For more information, visit [caclimateinvestments.ca.gov](http://caclimateinvestments.ca.gov).



# PROJECT Enhancement BRINGS MORE BENEFITS TO THE COMMUNITY



Added opportunities of advanced technology have allowed the project to incorporate on-site energy generation. This additional element not only benefits the project, but a **broader range of people**.

## Another Beneficial Resource

The Sterling Natural Resource Center (SNRC) has set out to "Make Every Source a Resource". Using state-of-the-art technology, the SNRC will convert up to 8 million gallons per day of wastewater into clean treated water to replenish the Bunker Hill Basin and supply the region with hundreds of millions of gallons of water for dry years.

Added advanced technological opportunities will allow this project to turn 130,000 gallons per day of imported organic waste streams into 3 megawatts

**STERLING**  
NATURAL RESOURCE CENTER

MAKING EVERY SOURCE A RESOURCE

of renewable energy to power the facility with the potential to produce fertilizer to improve soil quality.

**This renewable energy will benefit the regional energy grid while offsetting the entire energy needs of the facility.**

## New Opportunities to Offset Operational Costs



**TIPPING FEES**

- Creates a resource by reusing "food waste" in a new way.
- \$2.7 million per year in projected revenue to be collected.



**POTENTIAL ADDITIONAL REVENUE**

- Remaining material after co-digestion can be transformed into fertilizer. Staff is evaluating the additional benefits of this opportunity.



**SURPLUS ENERGY REVENUE**

- Produces electricity to sell to the energy grid.
- Guaranteed rates through the BioMAT program.
- \$800,000 per year in electricity revenue from Southern California Edison (SCE).

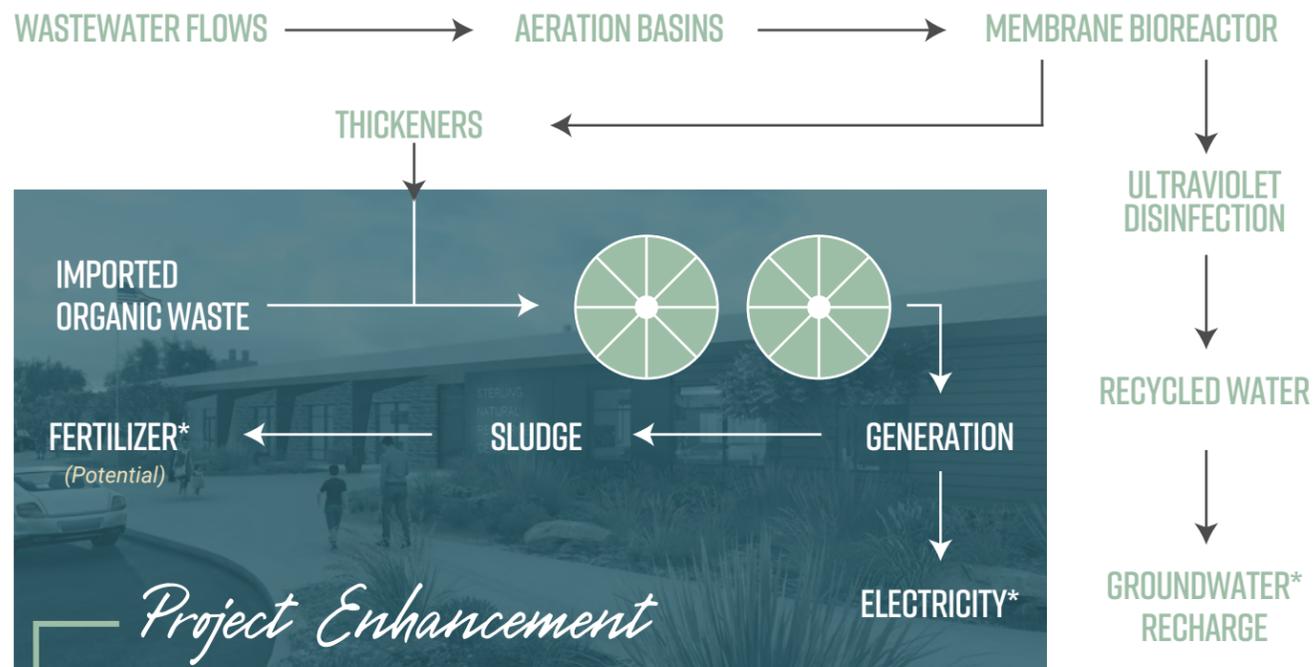


**AVOIDED ELECTRICITY COSTS**

- Generates enough energy to offset the electricity needs of the entire SNRC.
- Avoids cost of future increases.
- \$2.7 million per year in avoided electricity costs.

## ENERGY GENERATION PROCESS

This enhancement represents a significant improvement to the project by allowing the SNRC to produce enough renewable electricity to meet the facility's energy needs, with additional electricity transferred onto the energy grid.



*Project Enhancement*

\*Non-Rate Based Revenue

There may be additional opportunities to use the material that remains after energy generation to produce fertilizer. This would be another opportunity to enhance the quality of life for the community.



*Did You Know?*

**3 MEGAWATTS IS ENOUGH ENERGY TO POWER APPROXIMATELY 1,950 HOMES**

Entities who are allotted sales tax revenues, such as the City of Highland and County of San Bernardino will still receive their portion through the program funding rather than from the District's vendors.

## Changes to the Project's Design

Incorporation of the digesters is a valuable investment for the community. In order to produce 3 megawatts of electricity, the facility will take on more of an industrial look on the east portion of the property. Architectural elements will be incorporated to enhance the look as much as possible. The west side will still result in a picturesque location for the community.

## IMPACTS TO THE PROJECT BUDGET

The current project status presents a unique opportunity to maximize the incentives available for sites that generate electricity. The State of California offers a program where eligible equipment needed for the generation of energy can receive a sales tax exclusion. Since wastewater treatment is what produces the material used by the generators, most of the equipment to be purchased for the project will be eligible for the sales tax exclusion.

**If the District were to opt for the completion of this element in a later phase, it would miss out on the savings of equipment purchased during the initial phase of construction.**

$$\begin{array}{r} \text{CURRENT GUARANTEED} \\ \text{MAXIMUM PRICE (GMP)} \\ \text{\$150 MILLION} \end{array} + \begin{array}{r} \text{PROJECT} \\ \text{ENHANCEMENT:} \\ \text{COGENERATION} \\ \text{\$32,917,000} \end{array} = \begin{array}{r} \text{ENHANCED PROJECT BUDGET} \\ \text{\$182,917,000 MILLION} \\ \text{The SNRC is projected to pay} \\ \text{for the added cost in 25 years} \end{array}$$

DIGESTER COST BREAKDOWN



DIGESTER PROPOSED FUNDING

Increased State Revolving Fund Loan by  
**\$25,000,000**

Southern California Edison Self Generation Incentive Program (SGIP)  
**\$3,000,000**

Sales Tax Exclusion  
**\$3,500,000**

Cash Finance  
**\$1,417,000**

## CONSTRUCTION FUNDING OPPORTUNITIES



*SCE Incentive*

- Program rewards new construction that offsets energy demands.
- District participated with hydroelectric generation at Plant 134.
- Approximately \$3 million in construction incentives.



*Sales Tax Exclusion*

- If constructed at one time, most of the SNRC will be eligible for an exclusion from sales tax, when applicable.
- \$3.5 million in sales tax exclusions.



*Additional Savings*

- Anaergia has the ability to purchase equipment with minimal overhead mark up.
- \$2 million in savings.