New Southeast Plant Biosolids Digester Facilities

Planning Underway

Last fall, the San Francisco Public Utilities Commission (SFPUC) began the planning and preliminary design efforts for the new Biosolids Digesters Project. The proposed project will develop new digestion and solids handling facilities to replace the existing aging ones at the Southeast Treatment Plant.

When completed, the new digester facilities will be a world-class structure replacing the existing digesters built more than a half century ago. It will include state-of-the-art treatment processes to reduce odors and other impacts on the neighborhood. Biosolids will be treated to a higher level so they can be reused for beneficial purposes. The biogas produced will help power the new digesters.

Anticipated Project Timeline for the Southeast Plant

- PLANNING & ENVIRONMENTAL REVIEW: Through Summer 2017
- DESIGN: Fall 2015 to Summer 2018
- CONSTRUCTION: Winter 2018 to 2022
Green Infrastructure Pilot Projects Move Ahead

Over the past year, the SFPUC has commenced planning and design for eight green infrastructure demonstration projects to improve stormwater management within each of San Francisco’s eight urban watersheds.

“With input from neighbors at meetings and online, SFPUC will refine these concepts and proceed with designing green infrastructure technologies including permeable pavement, rain gardens and creek daylighting to store or divert stormwater for beneficial use and reduce the amount of urban runoff that enters the combined sewer system,” said Project Manager Raphael Garcia. Projects also have the added advantage of enhancing local neighborhoods by replacing portions of pavement with green and planted areas, calming traffic, restoring natural habitat and improving community aesthetics.

Upon project completion of each project, the SFPUC will monitor and track performance to help build a more resilient sewer system. These projects will provide data for future planning through the Urban Watershed Assessment, and will also enable the SFPUC to establish performance and design standards.

The Urban Watershed Assessment: A New Way of Doing Business

The SSIP Urban Watershed Assessment (UWA) team has been busy this year assessing sewer system challenges across the city’s five Bayside watersheds, and analyzing upstream and downstream opportunities to address those challenges.

As part of this assessment, more than 4,300 community members completed surveys offering their opinions on stormwater management technologies, including green infrastructure. In November, more than 90 participants from southeast Bayside watersheds attended a hands-on workshop that took the form of a participatory planning game. Participants learned about the City’s urban watersheds’ natural characteristics and sewer related challenges while exploring tradeoffs between project solutions, performance and costs.

In 2014, the team will launch assessments of the three westside watersheds.

“The SSIP urban watershed assessment project engages the public in a new way: helping the SFPUC identify stormwater management projects that align with community values.”

— RACHEL KRAAI, DEPUTY PROJECT MANAGER
Central Bayside System Improvements Project to Address Failing Channel Force Main

After completing its Needs Assessment Report in 2013, the Central Bayside System Improvement Project (CBSIP) is moving toward Alternatives Analysis that will include results from both the Channel and other Bayside watersheds assessments.

Throughout the past year, the Central Bayside Project has moved forward in identifying ways to provide long-term reliability and resiliency for our City’s sewer system.

— MANFRED WONG, SENIOR PROJECT MANAGER

This is the largest collection system improvement project in the SSIP. It will provide redundancy to the Channel Force Main which conveys 60% of Bayside flows to the Southeast Plant and has failed three times.

As part of this project, the Wiggle Neighborhood Green Corridor, a green infrastructure and traffic calming project in the Channel Watershed, is nearing the end of the planning phase and will move into design in 2014.

Treatment Plants Reliability Improvements

This past year, the SSIP team completed roof repairs and rehabilitation of four Southeast Plant digesters to ensure the plant continues operating at maximum capacity until the new digester facilities are built later this decade. Additional digester improvements will be made in early 2014.

The Southeast Plant also replaced the antiquated oxygen plant with a new technologically advanced oxygen generation facility. “The older models from 1981 were becoming extremely difficult to maintain and have failed two times in the past year,” said Jignesh Desai, Senior Project Manager.

The new oxygen plant will provide much greater energy efficiency and increased reliability while enabling the Southeast Plant to meet heightened permit compliance.

At Oceanside Treatment Plant, new dewatering equipment was added. The new equipment will help reduce hauling costs and aerosols in the workplace. This upgrade is part of ongoing improvements at both Oceanside and North Point treatment facilities.
Learning More About Me - Your Sewer System

To raise awareness about the “City under the City” that is out of sight and thus often out of mind, the SFPUC launched a public awareness campaign last fall.

The “Learn About Me” advertising campaign helped build public appreciation of the scale of the sewer system and the improvements that are needed to keep it resilient. Ads were placed online, in newspapers, on Muni buses and shared across SFPUC social media accounts. The ads featured humorous sayings highlighting the vital need for the sewer system, and reminded readers of the dirty job it performs each and every day of the year. Ads ran in English, Spanish and Chinese.

SSIP Community Benefits Catalyst Projects

The SFPUC is the first public utility in the nation to adopt an Environmental Justice Policy (2009) and a Community Benefits Policy (2011) which guide efforts to be a “good neighbor” to all whose lives or neighborhoods are directly affected by the operation of its Water, Wastewater, and Power Enterprises.

SSIP includes four “Catalyst Projects” as demonstration models for expanding economic inclusion and creating job opportunities:

- **Youth Workforce Development**: Year-round intern programs educate young people about how the sewer system serves San Francisco and the work of the SFPUC.

- **Adult Workforce**: Connects local residents, particularly those who are low-income or low-skilled, to job training and apprenticeships.

- **Small Business**: Offers assistance to local businesses to gain contracting experience to strengthen and grow their companies.

- **Education**: Partnership with nonprofits and city agencies, to educate school-aged children about water and energy conservation, pollution prevention, environmental stewardship and sustainability.

SSIP is a 20-year citywide investment to upgrade our aging sewer system and provide a more reliable, sustainable, and seismically safe sewer system now and for future generations.

The Commission authorized the $2.7 billion Phase I Sewer System Improvement Projects in August, 2012.

For more information, visit:

[sfwater.org/SSIP](http://sfwater.org/SSIP)

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