Southeast Plant Biosolids Digester Facilities Project

BVHP EJ Response Task Force

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Agenda

- Sewer System Improvement Program (SSIP)
- Biosolids Digester Facilities Project (BDFP)
- Environmental Justice Analysis
- Q&A
SFPUC
SEWER SYSTEM
IMPROVEMENT PROGRAM
Our mission is to provide our customers with high quality, efficient and reliable water, power, and sewer services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care.
Our Combined Sewer System

1,011 Total Miles of Sewers
959 Major, Local, & Brick Sewers
52 Transport/Storage, Tunnels, Force Mains, Outfalls
25,000 Catch Basins
27 Pump Stations
Some of Our Priority Challenges

- Seismic Safety
- Aging Infrastructure & Odors
- Localized Flooding
- Climate Change
Sewer System Improvement Program (SSIP)

Grey.
System and Seismic Reliability & Redundancy

Green.
Innovative Stormwater Management Solutions

Clean.
Protecting Public Health & The Environment
SFPUC Endorsed SSIP Levels of Service Goals

Provide a Compliant, Reliable, Resilient, & Flexible System that can **Respond to Catastrophic Events**

Integrate Green & Grey Infrastructure to **Manage Stormwater** and **Minimize Flooding**

Provide **Benefits** to Impacted **Communities**

Modify the System to **Adapt to Climate Change**

Achieve **Economic & Environmental Sustainability**

Maintain **Ratepayer Affordability**
SSIP Phase 1 Projects

- Treatment Plants
- Central Bayside System Improvement Project
- Green Infrastructure & Stormwater Management Projects
- Large Sewers, Tunnels, and Odor Control
- Pump Stations and Force Main Improvements
- Flood Resilience Projects
- Combined Sewer Discharge Structures & Transport/Storage Boxes
- Interdepartmental Projects
SSIP Phase 1 Projects
Southeast Area Upgrades

- Biosolids Digester Facilities Project (BDFP)
- Headworks Facility Project
- Primary and Secondary Clarifier Upgrades
- 521/522 and Disinfection Upgrades
- Existing Digester Gas Handling Improvements
- Power Feed and Primary Switchgear Upgrades
- SEP Facility-wide
- Facility-wide Distributed Control System (DCS) Upgrades
- Seismic Reliability and Condition Assessment Improvements
SOUTHEAST PLANT BIOSOLIDS DIGESTER FACILITIES PROJECT (BDFP)
Biosolids Digester Facilities Project (BDFP)

Project Location & Purpose

Project design informed by community input and comments
Biosolids Digester Facilities Project

Key Features

- Reduce Number of Digesters from 9 to 5
- Generate 5 MW electricity to power new facility
- Improve Biosolids treatment quality from Class B to Class A for more beneficial uses
- Limit project odors to within the SEP fence line
Biosolids Digester Facilities Project (BDFP)
Start of Construction 2019
Biosolids Digester Facilities Project (BDFP)
Aerial View from East
Responsive to Community Interests

• Project Design
  • Example: Install source-emissions air quality monitoring; Electric Vehicle charging station

• Construction
  • Example: Traffic Control Plan should route traffic away from childcare provider during drop-off, pickup, and recess

• Programmatic Initiatives
  • Environmental Justice Analysis recommendations to be implemented outside of the Project
ENVIRONMENTAL JUSTICE ANALYSIS
Advancing our mission through

Environmental Justice

Doing our part to support healthy communities
EJ Analysis – Purpose & Goals

• Purpose
  • To ensure that we do our part to support positive EJ outcomes through our infrastructure investments & our ongoing Community Benefits programs, as mandated by our agency’s Environmental Justice Policy.

• Goals
  • To better understand the EJ Issues impacting the Bayview-Hunters Point community – utilizing the community’s input
  • To understand the potential for the BDFP and SFPUC’s Community Benefits Program to adversely or beneficially affect known EJ indicators
  • To tangibly incorporate principles of environmental justice into our decision making process
Indicators Screened for Potential Nexus to BDFP

- 62 EJ Indicators evaluated
- 33 Disproportionate burden
- 17 Potential nexus with BDFP
EJ Indicators Improved with Project

+ Nuisance Odors
+ Bike Network

+ Presence of Cleanup +/or Brownfield Sites
+ Walkability

+ Public Transit Ridership & Score
+ Unemployment Rate
EJ Indicators w/potential to contribute to an existing disproportionate impact

- Hazardous Waste Generators & Handling Facilities
- Open Space & Trees
- PM 2.5 Concentrations
  - Cancer Risk from TACs
  - Population of Children
  - Asthma Hospitalization Rate
  - Linguistic Isolation
BDFP Recommendations & Updates

• PM2.5 Concentrations
  • Install source-emissions air quality monitoring
  • Install community-accessible EV charging stations
  • Traffic Control Plan should route traffic away from childcare provider during drop-off, pickup, and recess
  • Enact a PM2.5 offset program

• Open Space and Trees:
  • Replace all removed trees 1:1

• Opportunities for additional improvements:
  • Bicycle Network: Include dedicated bike lanes instead of sharrows
  • Walkability: Design Jerrold Ave and Evans/Phelps crossing consistent with Better Streets Plan
  • Linguistic Isolation: Provide signage in Spanish and Chinese
Indicators Screened for Nexus to Community Benefits

- 62 EJ Indicators evaluated
- 33 Disproportionate burden
- 25 Potential nexus with BDFP
Community Benefits
Recommendations & Updates

- **PM 2.5 Concentrations**
  - Explore installing an ambient air quality monitoring system at 1550 Evans
  - Bring back the Bayview Garden Supply pop-ups
  - CB grant programs support planting & maintenance of trees and gardens
  - Create publicly accessible electric vehicle charging stations

- **Unemployment, Poverty/EITC, and Affordability Gap:**
  - Commit and identify paid internships to 150-200 young people annually in BVHP

- **Walkability:**
  - Consider incorporating pedestrian/cycle friendly connections to 3rd St. corridor and greenway

- **Childcare Burden:**
  - Double square footage and number of children served

- **Healthy Food Access:**
  - Future greenhouses should be used, at least in part, for growing food

- **Monitoring Progress:**
  - After 5 years has passed since publication of this report, SFPUC should use this monitoring and reporting protocol to review outcomes and progress related to the indicators identified
THANK YOU.