



Interim Food Waste Receiving Facility, P2-124 Pricing and Policy Discussion

Administration Committee Meeting
May 13, 2020



Objectives



- Help cities divert food waste from landfills
- Utilize existing OCSD infrastructure
- Recover energy and organics from food waste
- Provide a cost-effective option for ratepayers

History



**STATE
MANDATES
2011-2020**



**OCSD BIOSOLIDS
MASTER PLAN 2015
RECOMMENDATION**



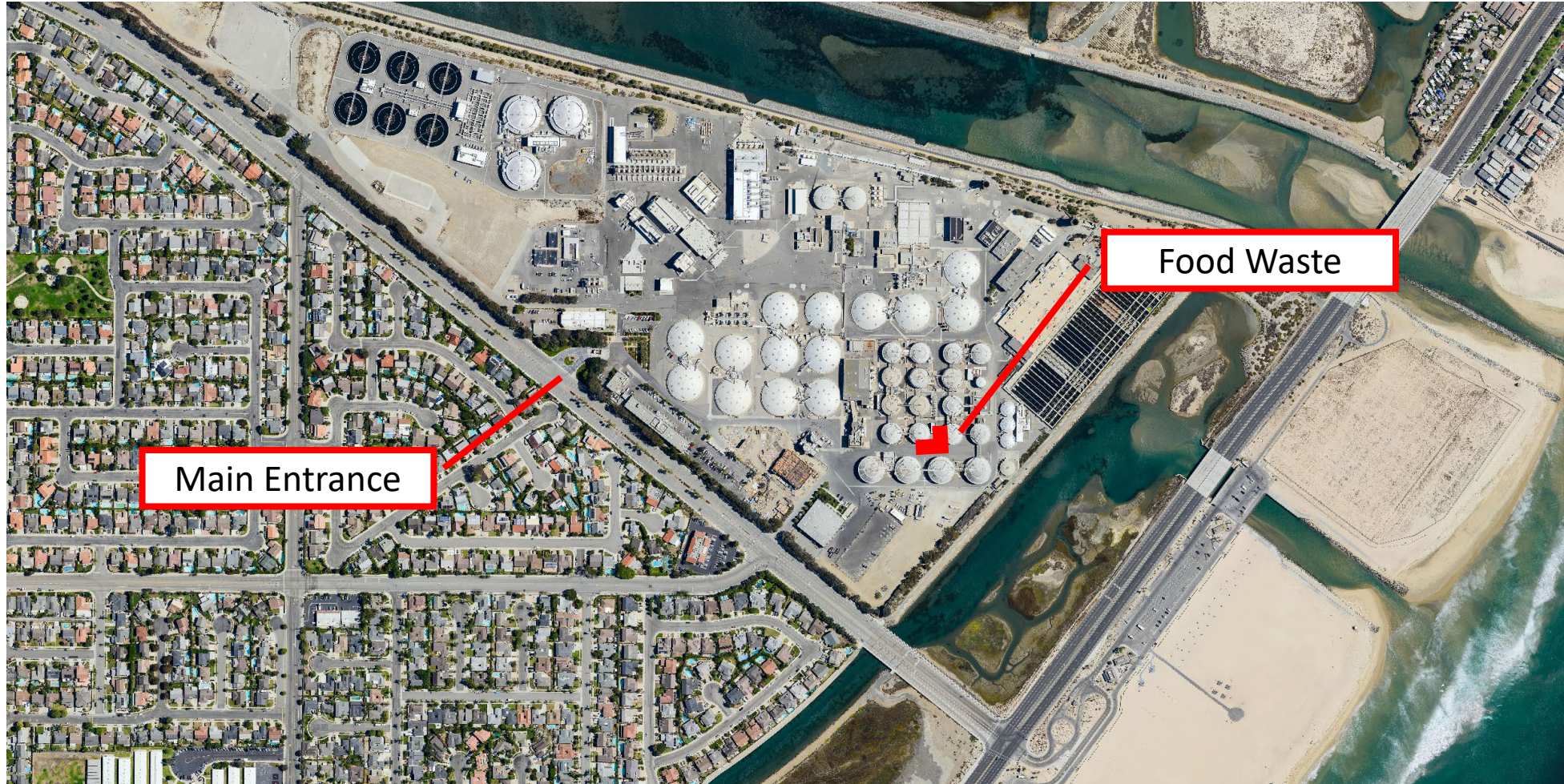
**P2-124
PROJECT
DESIGN
2018-2020**



**OCSD 2019
STRATEGIC PLAN**



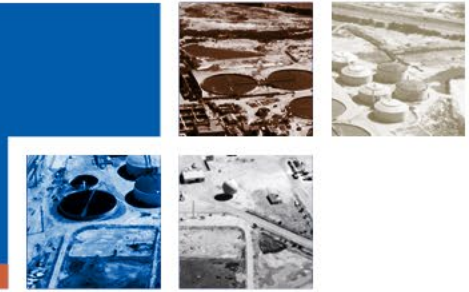
Location – Plant No. 2



Main Entrance

Food Waste

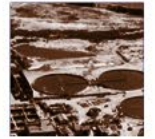
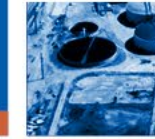
Facility Highlights



- 10-15 Year Life
- 150 Wet Tons/Day
- 5-6 Trucks/Day
- 15% Gas Production Increase



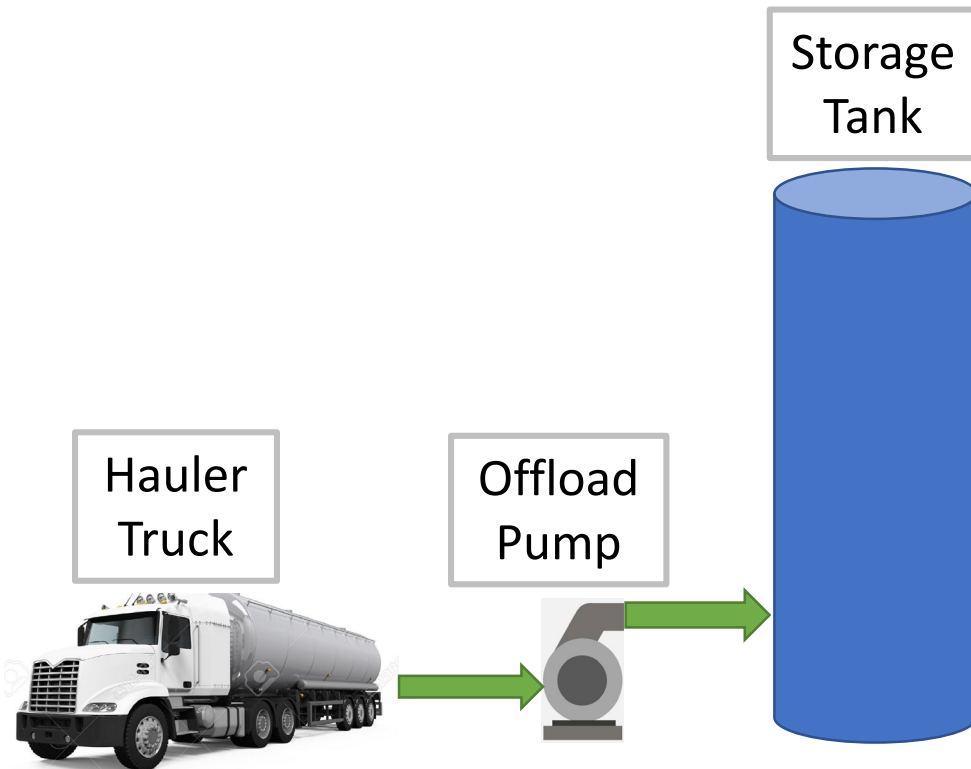
Facility Process



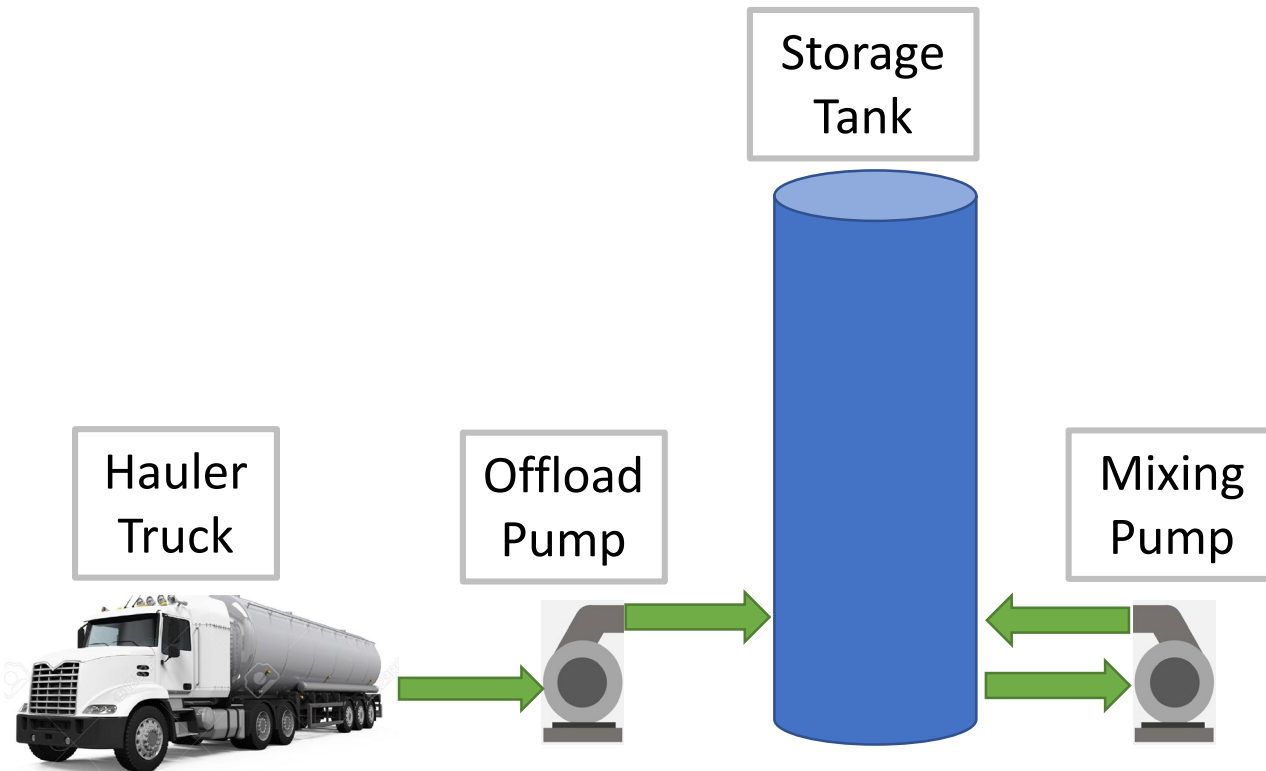
Hauler
Truck



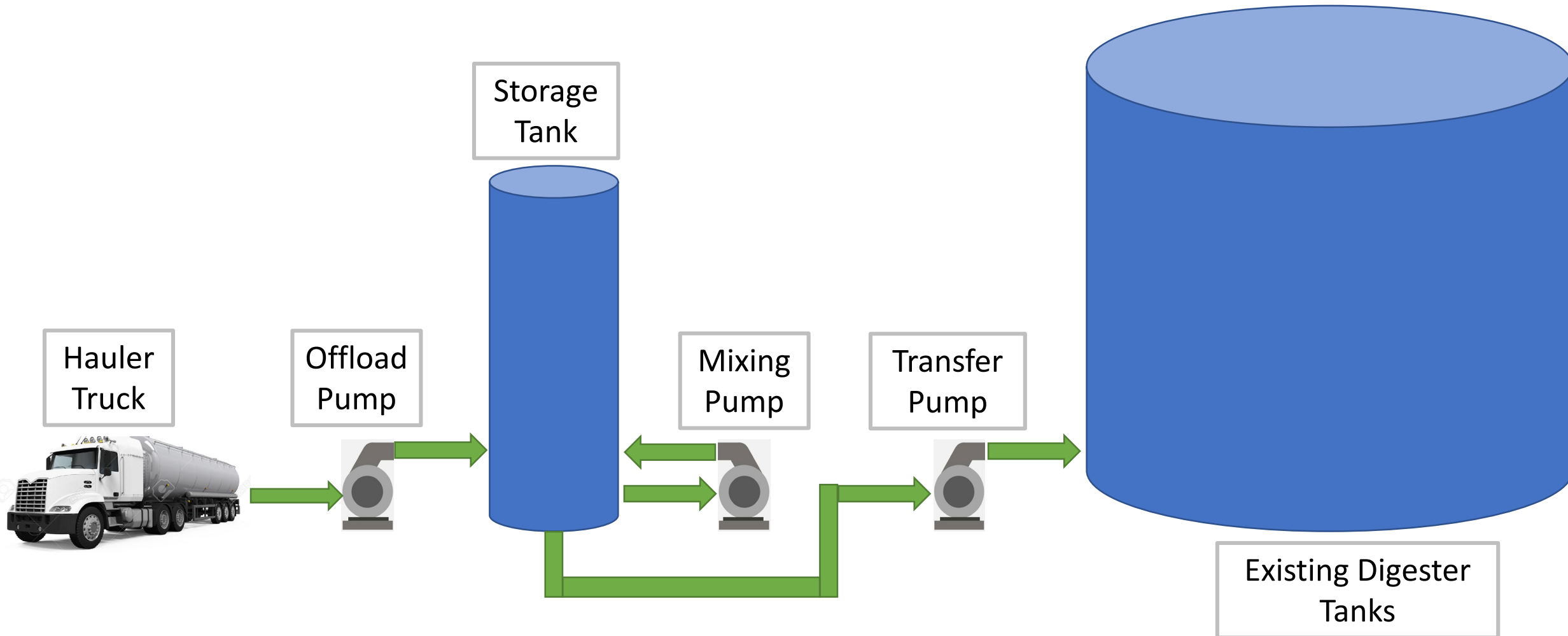
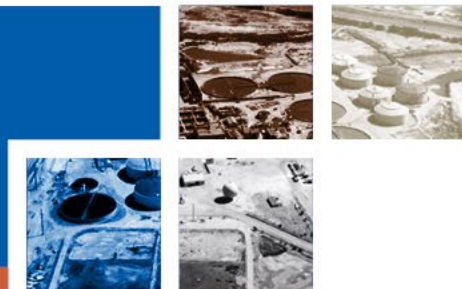
Facility Process



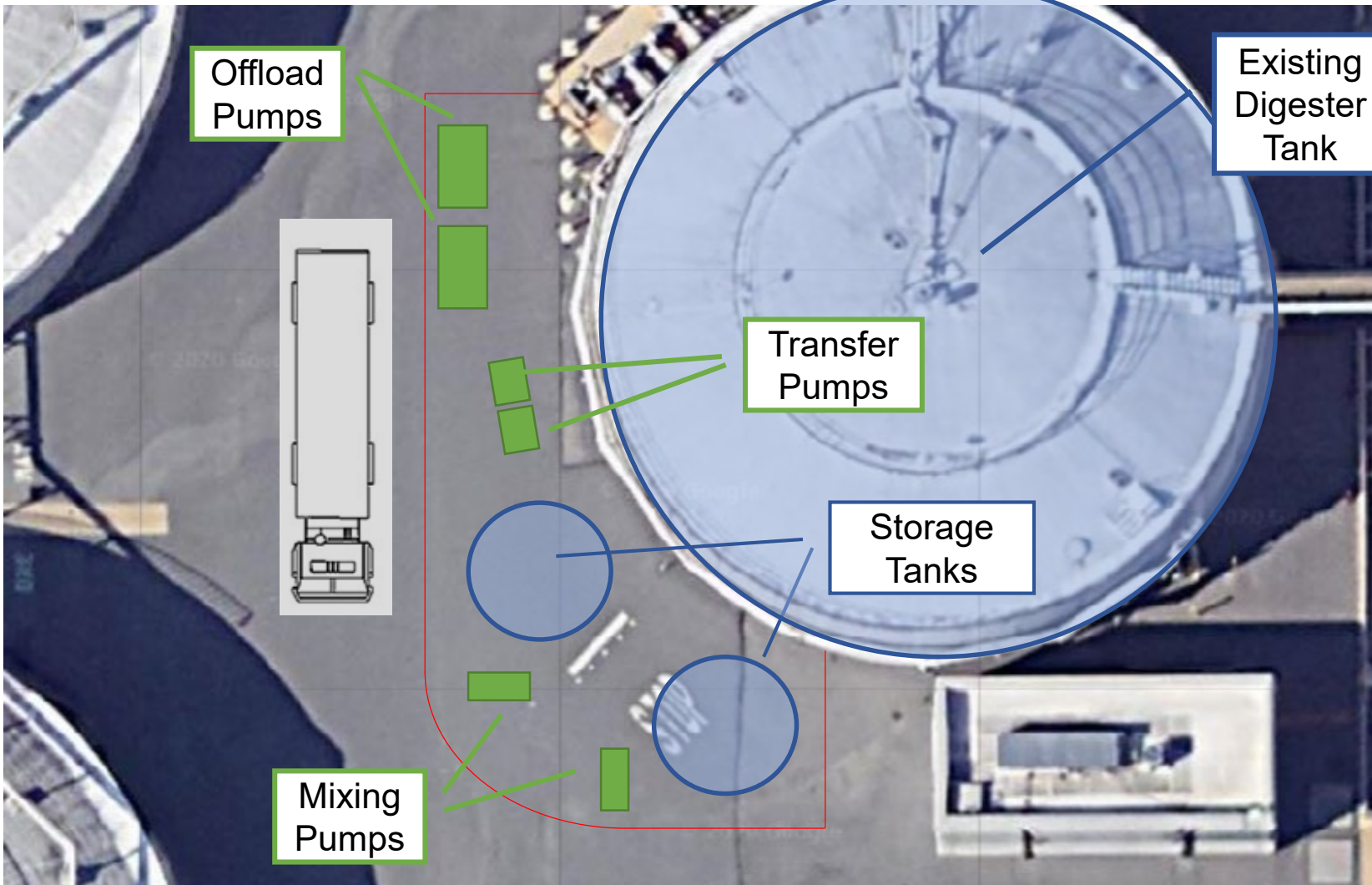
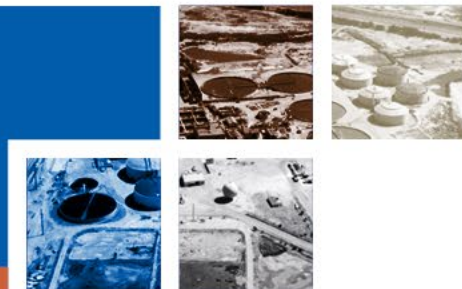
Facility Process



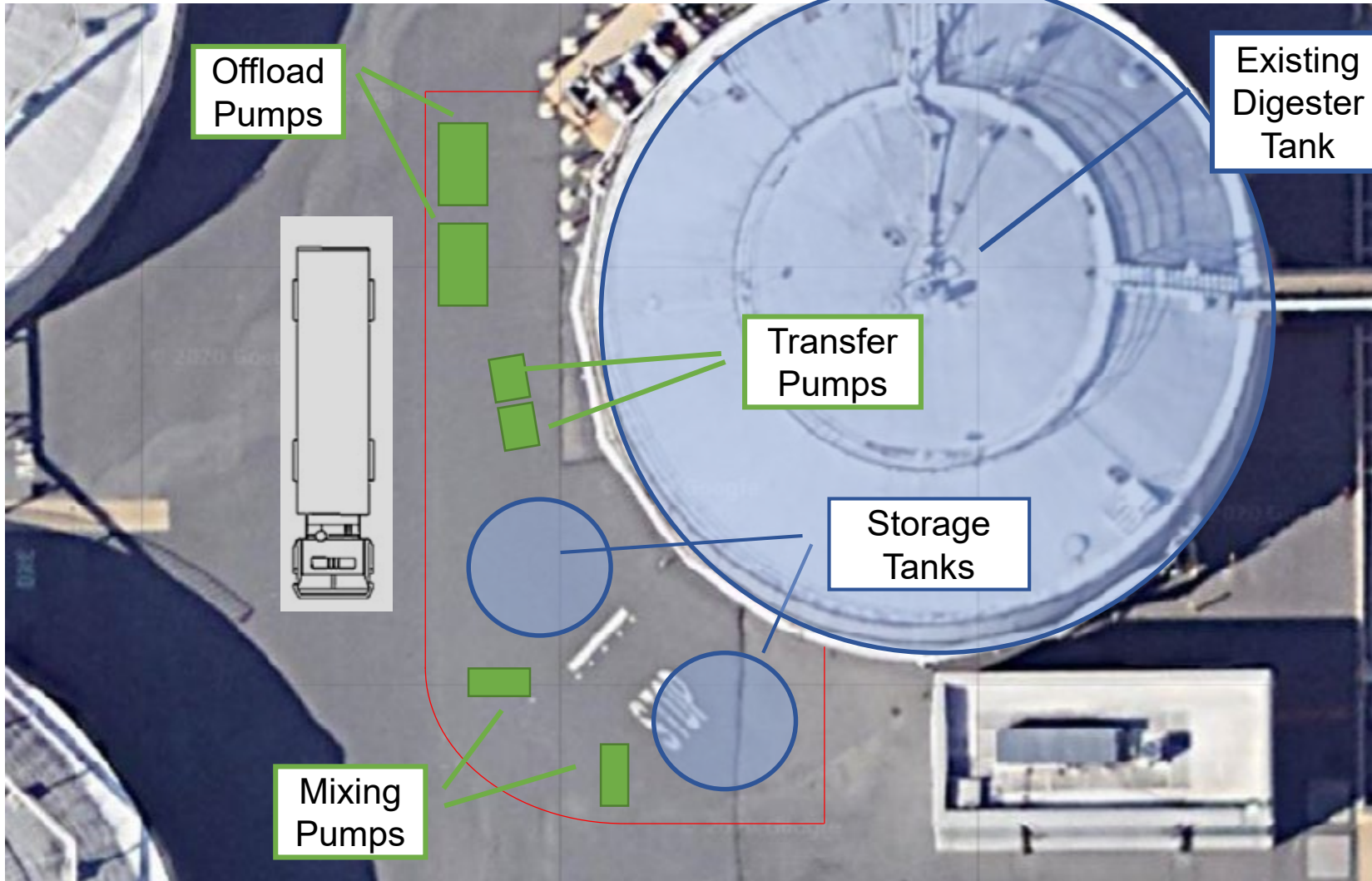
Facility Process



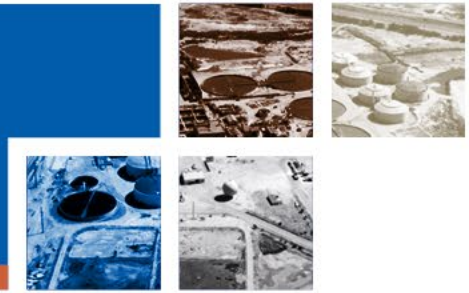
Facility Layout



Facility Layout



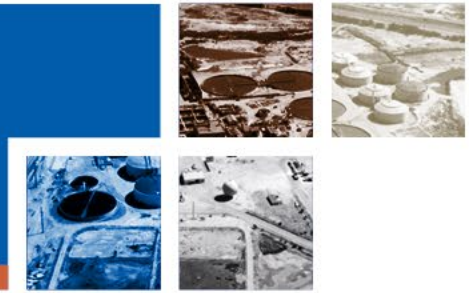
Project Budget & Schedule



Budget	
Construction	\$3.3M
Non-construction	\$2.2M
Contingency	\$0.8M
Total Project	\$6.3M

Schedule	
Advertise Bids	July 2020
Construction Award	Nov 2020
Facility On-line	Apr 2022

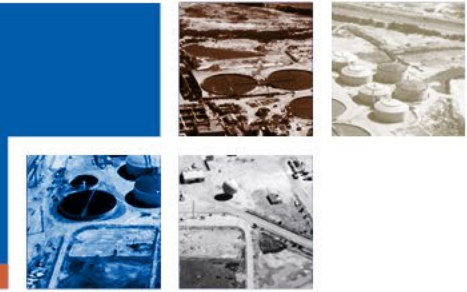
2019 Strategic Plan



Tipping Fee Policy Question:

How should OCSD structure the tipping fee for digestion of food waste?

Tipping Fee Basis



- Tipping fee cannot exceed OCSD costs
- Tipping fee transparency and notification to member agencies
- Different fee for food waste from outside OCSD's service area

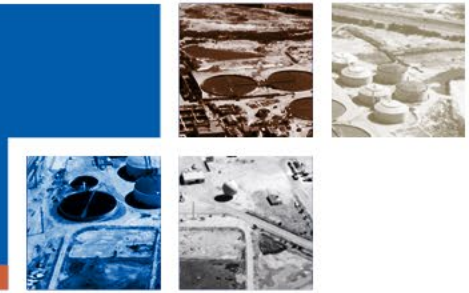
Cost Recovery - Overview



Cost Recovery

- Capital
- O&M
 - New Facility
 - Impact to Existing Facilities
- Benefits to OCSD
 - More Gas = Less SCE

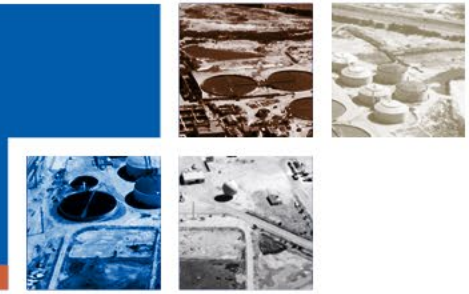
Cost Recovery – Capital, O&M



Costs (\$/ton)

	5-Year Capital Recovery	10-Year Capital Recovery
Capital Costs	\$23	\$12
O&M Costs	\$18	\$18
Subtotal	\$41	\$30

Cost Recovery – Benefits of Extra Gas



Quality Food Waste = Less SCE Electricity Purchased

	5-Year Capital Recovery	10-Year Capital Recovery
Savings Range	(\$2-9)	(\$2-9)
Electricity Savings	(\$4)	(\$4)

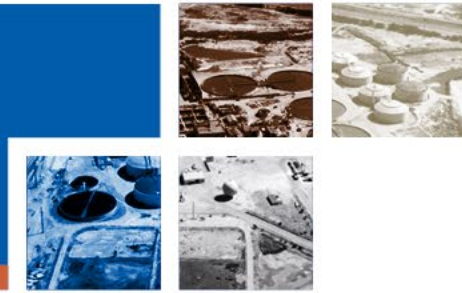
Tipping Fee - Total



Costs (\$/ton)

	5-Year Capital Recovery*	10-Year Capital Recovery
Capital Costs	\$23	\$12
O&M Costs	\$18	\$18
Electricity Savings	(\$4)	(\$4)
Tipping Fee	\$37	\$26

Comparable Agencies



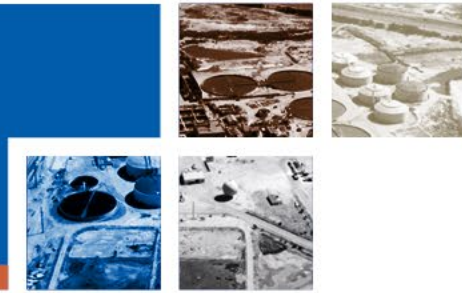
Agency	Tipping Fee and Tonnes	Vendors and Feedstock	Onsite Food Process	Contract Term	Cost of Project	Cost Recovery
OCSD - Planned	\$41/ton (1-5 Years) \$18/ton (6-10 Years): 150 tpd	TBD	NO	TBD	\$6.3M	YES (Construction and O&M)
LACSD Current	\$25/ton: 250-300 tpd – Direct discharged into headworks (no-co-digestion)	8 Vendors Preprocessed Food Waste and FOG	NO	Year to Year	N/A	N/A
LACSD Planned Project (2021)	\$25-\$40/ton: 100-150 tpd Co-Digestion	3 Vendors Preprocessed Food Waste	NO	TBD	\$877,500 Repurposing Existing Food Waste Receiving Station.	YES (Construction and O&M) –Time Length TBD

Other Similar Agencies



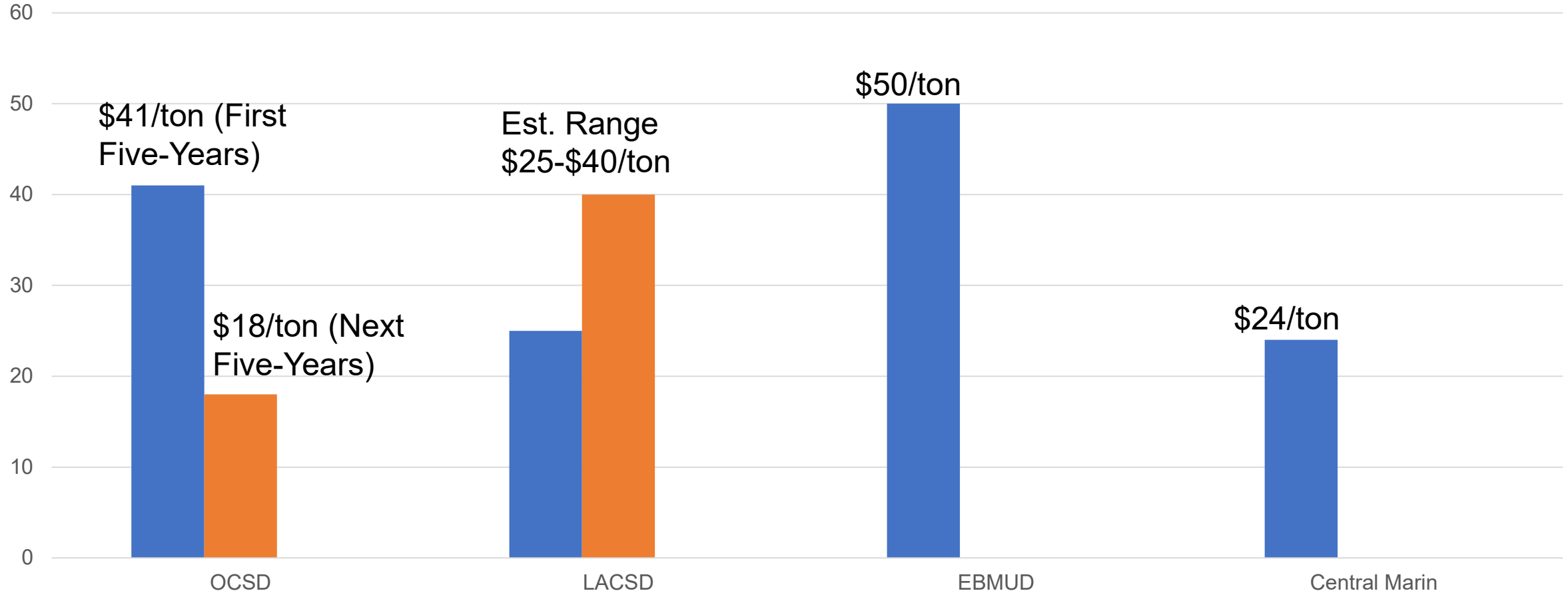
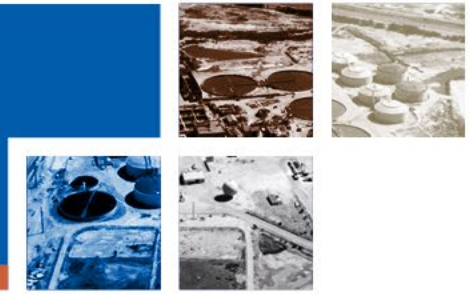
Agency	Tipping Fee and Tonnages	Vendors and Feedstock	Onsite Food Process	Contract Term	Cost of Project	Cost Recovery
East Bay Municipal Utility District	\$50/ton: 15-70 tpd	Central Contra Costa County Solid Waste Authority - Food Waste	YES (Additional Processing)	10 Years (2014-2024) with two one-year extensions	\$5M	YES only O&M
Central Marin Sanitation Agency	\$23.90/ton: 15-70 tpd	Marin Sanitary Service - Food Waste	YES (Additional Processing)	10 Years (2016-2026) with three one-year extensions	\$7.8M	YES (Const. and O&M) 10 year pay back

Other Similar Agencies

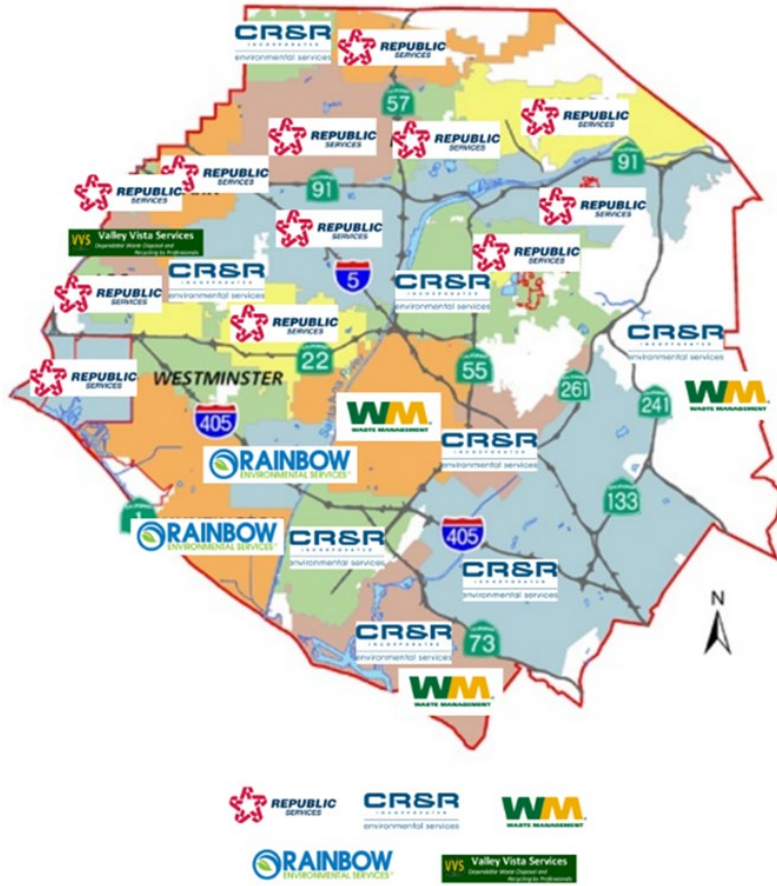


Agency	Tipping Fee and Tonnages	Vendors and Feedstock	Onsite Food Process	Contract Term	Cost of Project	Cost Recovery
Encina Wastewater Authority	\$0.035/gallon + \$45,000/year (CPI) 50K-80K gallons/week	<i>Stone Brewery Waste and Other Vendors FOG</i>	NO	8 Years (2015-2023)	\$2.3M	YES (Construction and O&M) 4 year back
City of Petaluma (Under Construction)	\$0.04/gallon	<i>Clover Stornetta Dairy and Petaluma Poultry Processors</i>	NO	TBD	\$6M	YES (Construction and O&M) 4 year back – Includes \$3M Grant and Energy Credits

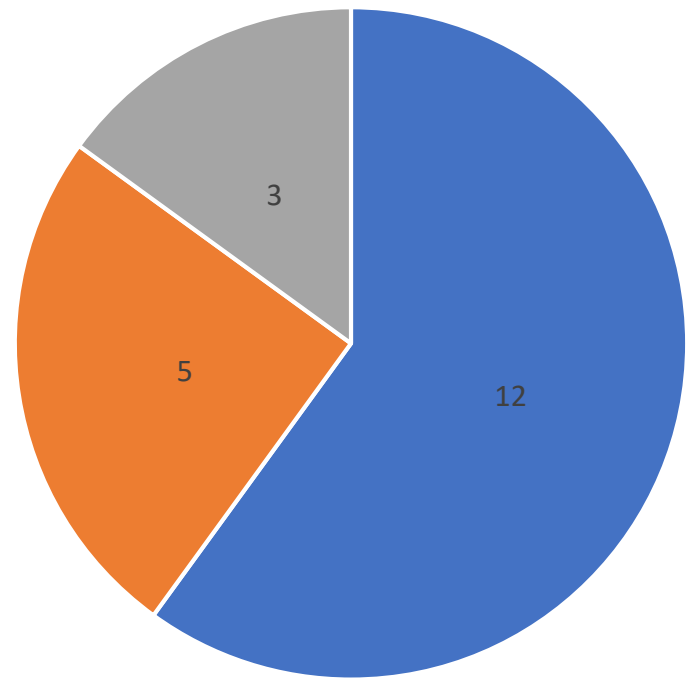
Summary Tipping Fee for Preprocess Food Waste for Co-Digestion



Service Area and Solid Waste Providers



City Member Agencies



■ Republic/Rainbow ■ CR&R ■ Waste Management ■

Organic Processing Fees:

- Rate increases have been applied
- Organic Processing Fee: \$100.10/ton (Republic)

Tipping Fee Deal Points



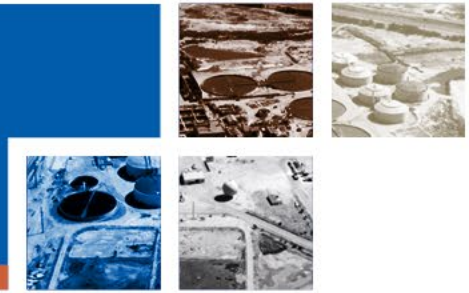
- Term duration of agreement
- Quality (specs) of the food waste slurry
- Price Change - Regulatory Milestones

Next Steps



- Set OCSD food waste tipping fee
- Secure agreement(s) with potential vendor(s)
- Construct food waste receiving station
- Start receiving food waste

Outcome of Tipping Fee Analysis



How should OCSD structure the tipping fee for digestion of food waste?

- 5-Year Capital Recovery - \$37/ton (Interest 3%)
- Once capital costs have been recovered, reduce tipping fee to O&M only cost (\$18/ton est.)
- OCSD will approach solids waste providers based on an open and a fair competitive process to secure food waste slurry

Questions



Thank You

