

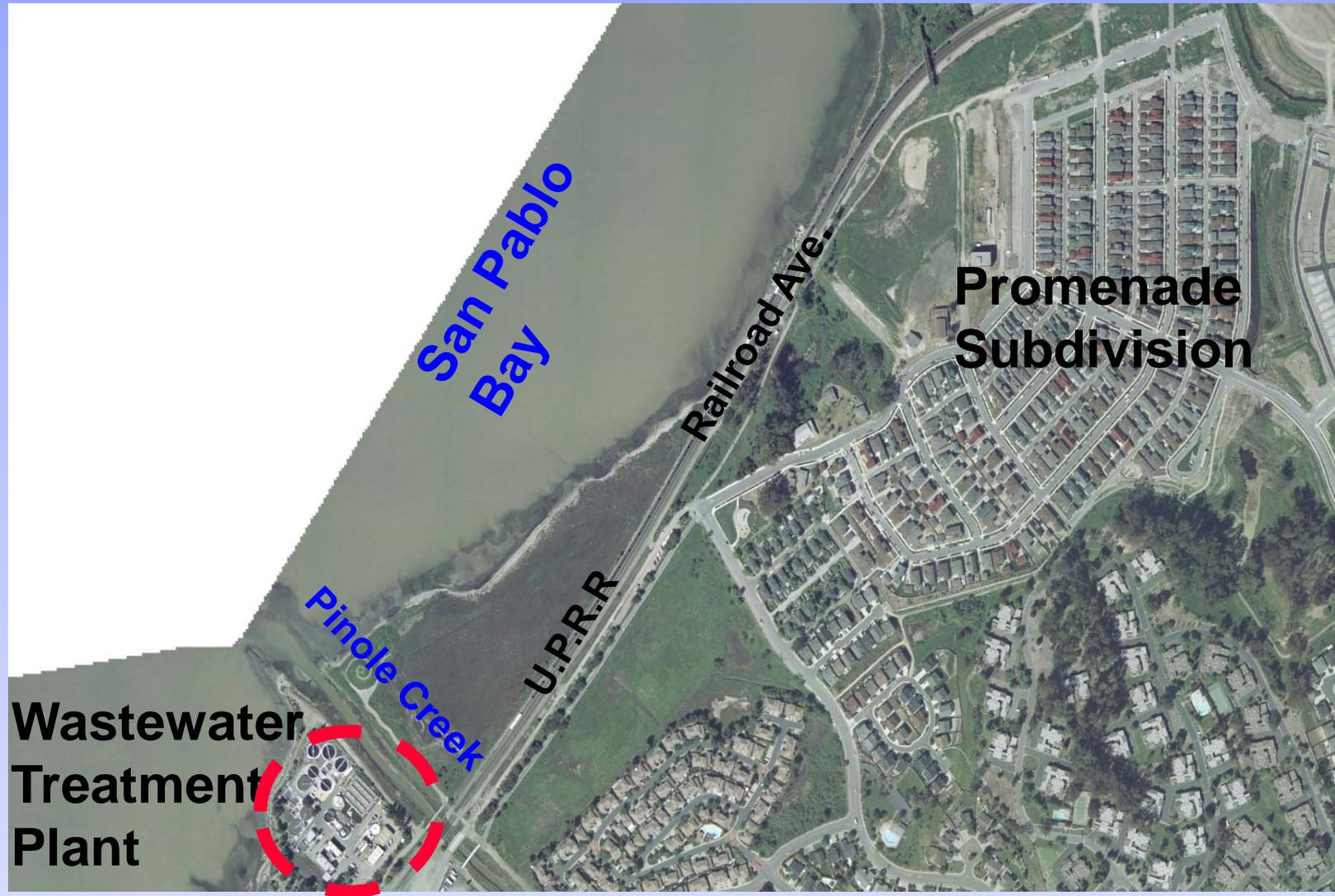
Presentation of Pinole/Hercules Wastewater Treatment Plant

- 1) Existing Facilities
 - 2) Historical Background
 - 3) Rate Structures and Bond Status
 - 4) Current Issues Facing Plant and City
 - 5) Alternatives Considered
 - 6) Staff Recommendations
 - 7) Project Tentative Schedule
- Questions

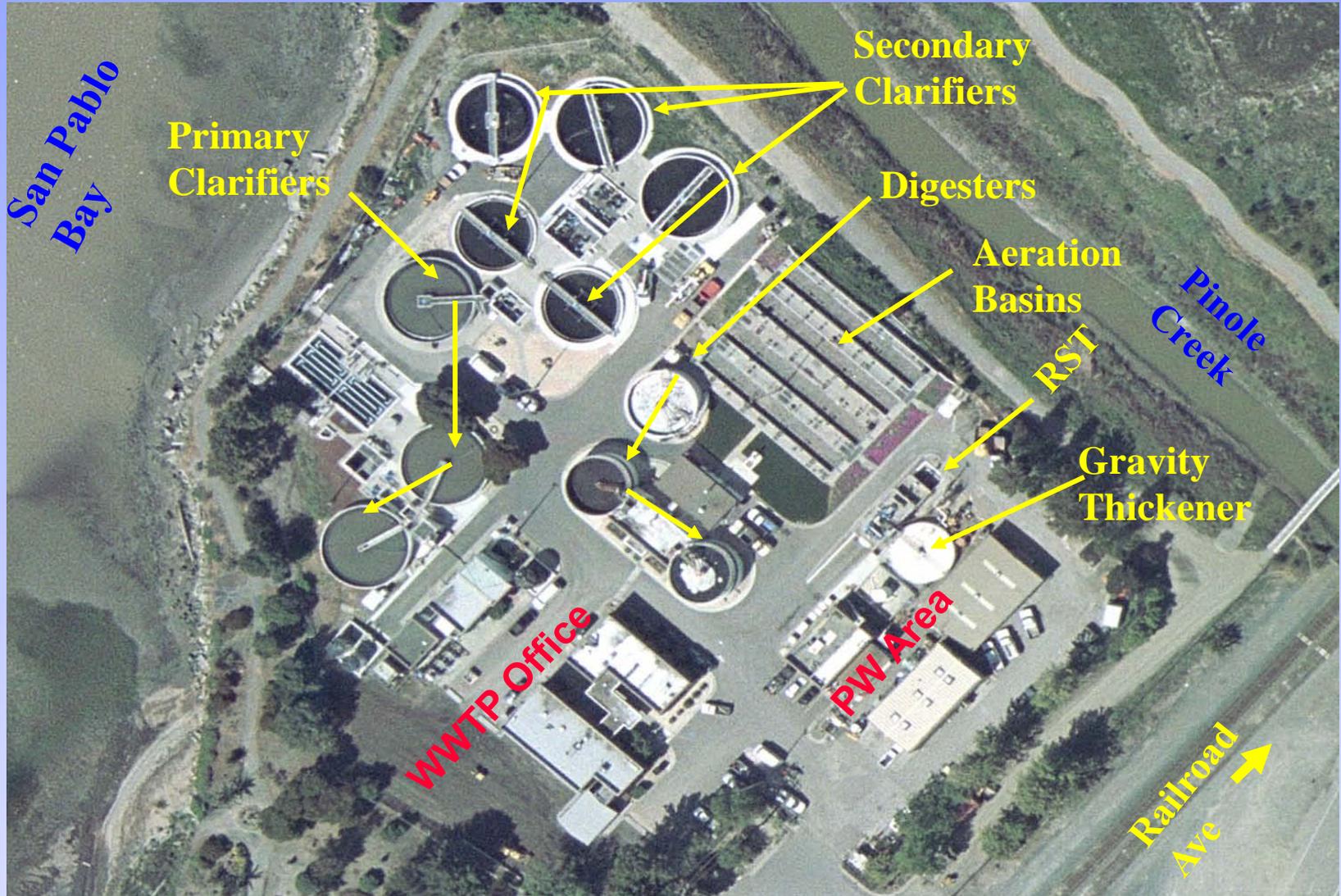
Existing Facilities



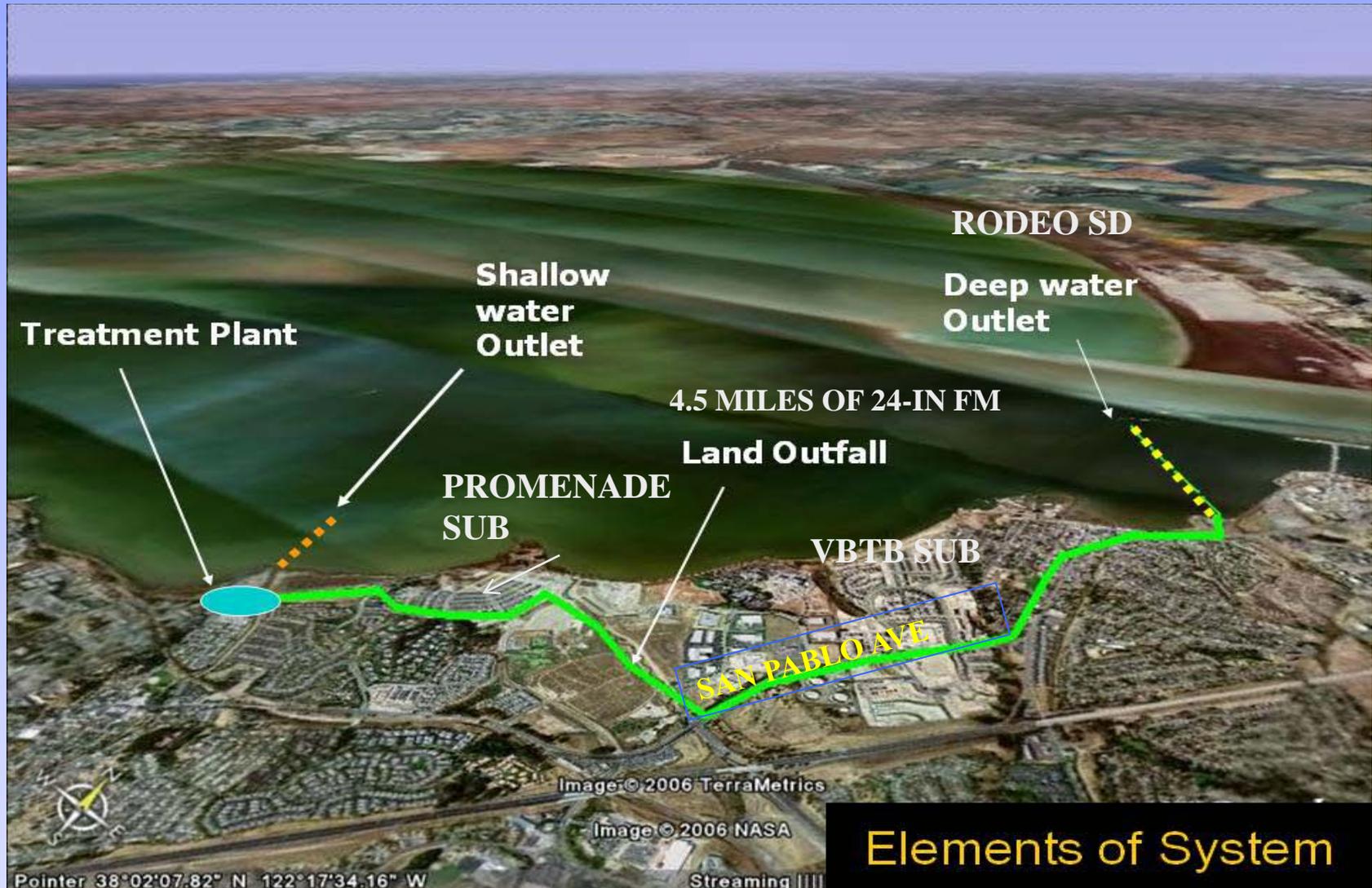
Pinole/Hercules Wastewater Treatment Plant Vicinity Map



Wastewater Treatment Plant Facility



Existing Outfall Alignment



Historical Background



Timeline

Construction History

Original Construction – 1956

Original Plant Capacity – 1.0 MGD

City Served – Pinole Only

1973 – Serves Cities of Pinole & Hercules

Two Major Expansions

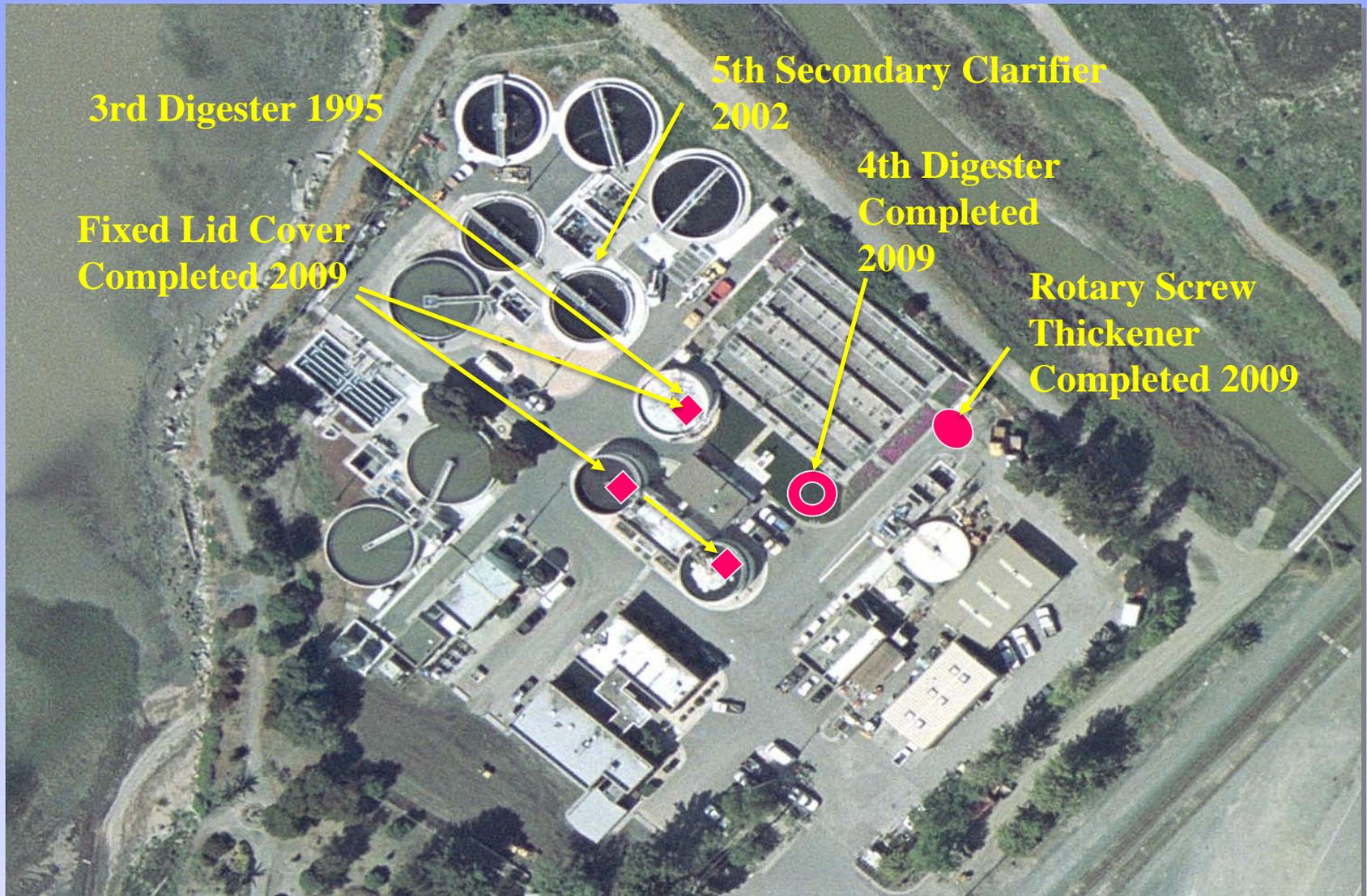
1972 – Capacity upgraded 2.0 MGD

1985 – Capacity upgraded 4.06 MGD

Various Plant Issues Prompted Additional Actions

After 1985 Expansion

Overview of Plant Improvements From 1995-2009



Improvement History

Project	Year Completed
Expansion to 2.0 MGD	1972
Expansion to 4.06 MGD	1985
3 rd Digester	1995
5 th Secondary Clarifier	2002
4 th Digester and Fixed Lid	2009
Rotary Screw Thickener	2009

**Total costs were evenly shared between Pinole & Hercules*

- **Project Funding (Hercules):**

Project was supported by funds generated through private development sewer connection fees/DIF .

Customers Rate Structures-2011

<u>Customers Type</u>	<u>Customers Count/Fee</u>
1) Single Family Residential (SFR):	8087 (SFU) / \$44.00
2) Multifamily Residential (MFR):	424 (MFU) / \$30.60
3) Commercial/Retail:	979 (ESFU) / *
4) Institutional :	<u>90 (ESFU) / *</u>
	Total = 9580 ESFU **

* Based on water usage

** Revenue collected through Tax Roll

Revenue & Expenditures -2011

Projected Revenue

Total Revenue for all ESFU	\$4,914,529
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Projected Expenditures

a) O & M (Pinole/Hercules Plant)	\$2,075,000
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b) Hercules Collection Systems	\$ 628,771
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(Include salaries/Benefit)

c) Debt Service (30 year bond)	<u>\$ 726,580</u>
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Total Expenditure = \$3,430,351

Net Operating Income = \$1,484,178

Bond Issued

Wastewater Revenue Bonds Series 2010 (\$11,765,000)

<u>Sewer Projects Supported</u>	<u>Project Costs</u>
1) Sycamore Ave Util Reloc	\$960,000 **
2) Sewer Tie-in San Pablo/Sycamore	\$223,000*
3) Demolished Hercules Corpyard	\$500,000 **
4) Relocate Bayfront Lift Station	\$1,500,000 **
5) CEQA/Prelim Engr (WCWD)	\$7,707,000 **
6) Hercules I&I Project	<u>\$150,000</u> **

*Completed

** On-going

Total = \$11,040,000

Current Issues Facing Plant and City



Current Issues

1. Regional Board mandates
 - a) Increase plant wet weather capacity
 - b) Eliminate blending
 - c) No discharges to shallow water outfall
2. Regional Board has de-rated capacity from 4.06 to 3.52 mgd
3. Plant is operating near its de-rated capacity and additional capacity needed to accommodate the City of Hercules' growth projections
4. Governance

Current Plant Capacity

Average Daily Dry Influent Flows for 2011 In Million Gallons Per Day (MGD)

Influent Permitted Capacity – 4.06

Actual Plant Capacity – 3.52 *

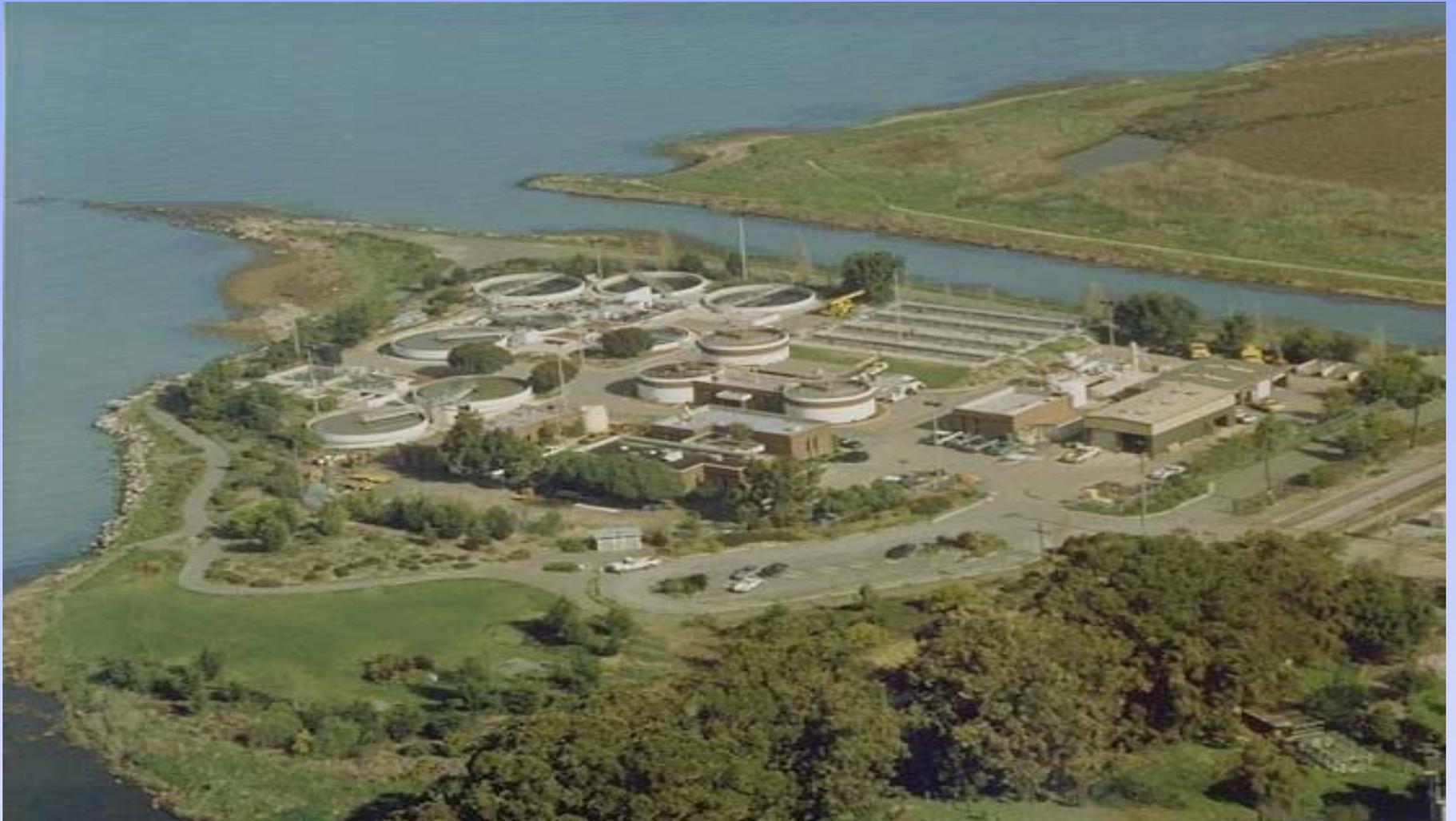
Pinole Influent – 1.53

Hercules Influent – 1.78

Average Combined Influent – 3.31

* Per June 9, 2009 SFRWQCB directives.

Alternatives Considered



Alternatives Considered

1. Divert all flow (Pinole & Herc) to WCSD (Carollo May 2008 study)
2. Divert Hercules flow to WCSD (Carollo May 2008 study)
3. Upgrade Pinole/Hercules Plant to service both Cities and restore capacity to 4.06 mgd dry weather flow and 14.60 mgd wet weather flow
 - a) Land outfall option (Dodson/Psomas study June 2009)
 - b) Equalization basin option (Dodson/Psomas study June 2009)

Rate Structure Development

Options Based on 9580 Equivalent Single Fam.	Herc Share of Capital Cost Bond @ 4.5% for 30yr	Annual Costs Debt Svc on Capital	Annual Costs 2015 O&M + (Coll Sys Mnt. Util, Salaries)	Total Annual Obligation
<u>Option 1</u> – Divert All Flow (Pinole and Hercules) to WCSD	\$70M	\$4.29M \$0.727M	\$2.7 M	\$7.72M
<u>Option 2</u> – Divert Hercules Flow to WCSD	\$59M	\$3.62M \$0.727M	\$2.7 M	\$7.05M
<u>Option 3a</u> – Upgrade Pinole/Hercules Plant with Land Outfall Option	\$24M	\$1.47M \$0.727M	\$2.7 M	\$4.90M
<u>Option 3b</u> – Upgrade Pinole/Hercules Plant with Equalization Basin Option	\$26M	\$1.60M \$0.727M	\$2.7 M	\$5.03M

Cost Impacts of Alternatives

Options Based on 9580 Equivalent Single Fam.	Planning Level Capital Costs in 2015 Dollars	Hercules' Share of Capital Cost	Annual Oblig 2015 (O&M +)	Req Mo User Rates 2015 Hercules *
<u>Option 1</u> – Divert All Flow (Pinole and Hercules) to WCSD	\$130 to 140 M	\$65 to \$70 M (\$70M)	\$7.72M	\$67.13
<u>Option 2</u> – Divert Hercules Flow to WCSD	\$70 to 80 M	\$70 to 80 M (\$59M)	\$7.05M	\$61.3
<u>Option 3a</u> – Upgrade Pinole/Hercules Plant with Land Outfall Option	\$47 M	\$23 – \$24 M (\$24M)	\$4.90M	\$42.60
<u>Option 3b</u> – Upgrade Pinole/Hercules Plant with Equalization Basin Option	\$51 M	\$25 – 26 M (\$26M)	\$5.03M	\$43.73

Cost Opinions

1. All costs are planning level estimates with limited engineering information
2. Pinole and WCSD alternatives are not based on the same assumptions
 1. Pinole alternatives only restore dry capacity to 4.06 mgd it does not address wet weather flow beyond 20 mgd
 2. WCSD alternatives accommodate additional City growth

Cost Opinions Con't

1. Costs to Upgrade Pinole/Hercules Plant may actually be higher than shown because
 - a) Alternatives do not include costs to relocate existing corporation yard in Pinole
 - b) Alternatives will require additional projects for I&I Removal
 - c) Costs do not include plant operational impact during construction

2. Costs to go to WCSD may be lower than shown
 - a) Potential site redevelopment opportunities if option 1 is selected (benefit to Pinole)
 - b) Hercules may consider negotiating to sell or leasing their share of the plant's capacity back to Pinole (Option 2)

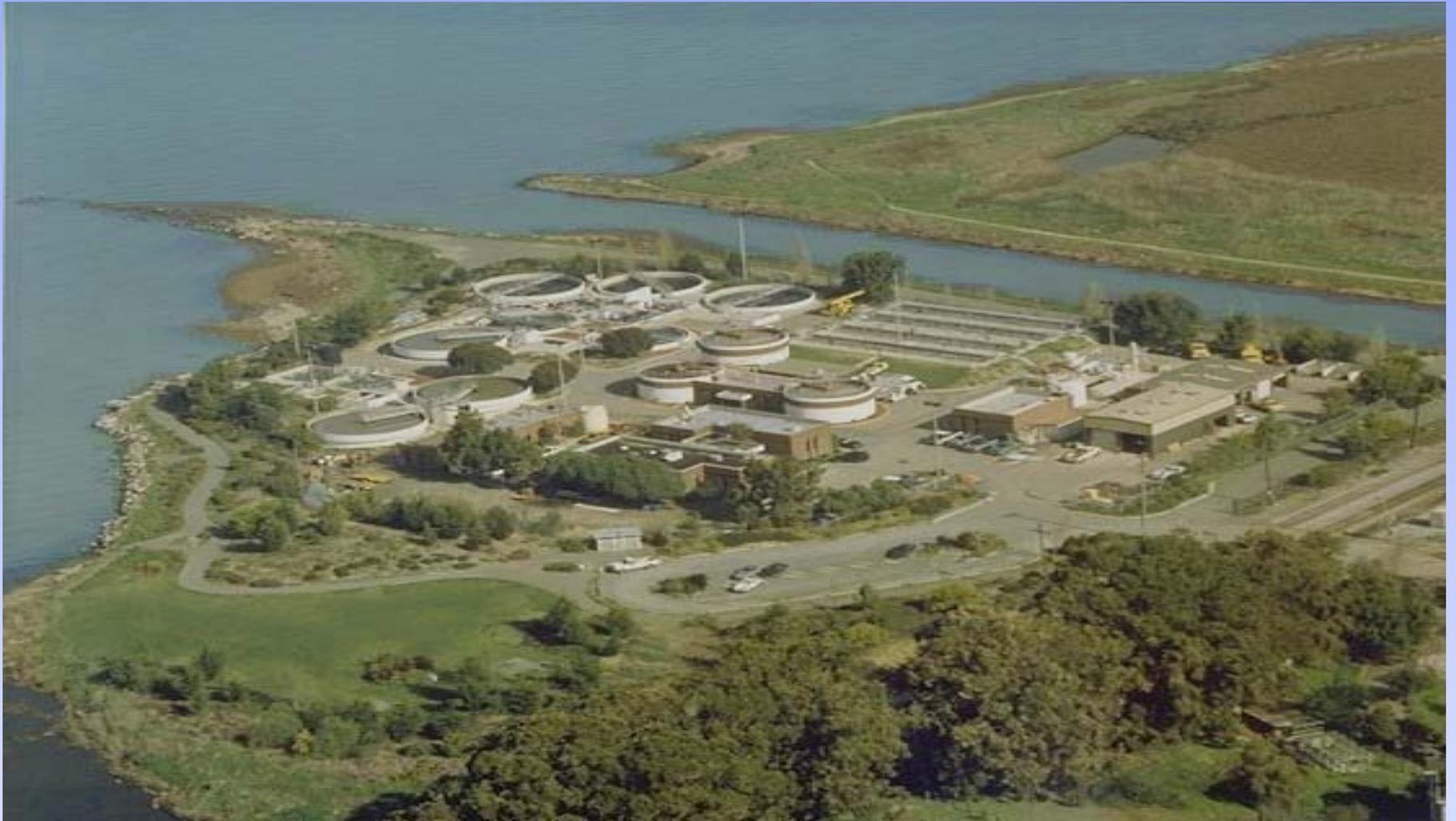
Cost Opinions Con't

1. Although capital costs to go to WCSD are higher, there is a significant savings in ongoing O&M costs
2. Estimated rates in 2015 range from \$42 to \$67 per month.
3. User rate charge for 2015 (\$52/mo) and will peak @ \$54.00/mo in 2016.

The City Decided to Begin Preliminary Design and Env. Review of WCSD Alternative (No. 2) Because ...

1. Larger customer base means long term benefit to Hercules rate payers
 - a) Lower operating costs
 - b) Lower impact to rate payers for future capital projects triggered by regulatory changes
2. Ample space at WCSD plant for additional growth at Hercules . Pinole/Hercules plant has limited room for growth
3. City of Hercules can get out of wastewater business
4. Responsibility for treatment, disposal, and meeting NPDES permit is with specialized sewer District

Staff Recommendations



Recommendations

1. Complete Preliminary Design Engineering for Alternative 2
 - a) Will generate a more detailed project cost with a greater degree of certainty compared to previous estimates
 - b) Detailed costs generated from the study would serve as the baseline for all future engineering probable costs
 - c) Re-evaluate rate impacts with updated costs
2. Continue with EIR process and stay on schedule per Regional Board requirements
3. Continue communication with Pinole on items related to other alternative or exit agreement

Regional Water Quality Control Board

Deadlines and Status of Option 2

Item	Deadline	Recommended Schedule for Option 2 (if Selected)
Sewer Master Plan	June 2008	★ Done
Further Analyze Option for Hercules Only	March 2010	★ Done
Certified EIR	August 2010	November 2011
Secure Funding (Preliminary Engineering)	August 2011	★ Done
Begin Design of Upgrades	August 2012	August 2011
Begin Construction of Upgrades	June 2014	June 2013
Complete Construction	Nov 2015	November 2015

