



Services of the San Francisco Public Utilities Commission

# Budget & Finance Sub-Committee

## July 20, 2016

**San Francisco Westside Recycled Water Project  
and Phase 2 Groundwater Supply Project**

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*Revised in Committee - 7/20/16  
SR*



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Water Power  
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## Presentation Overview

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- Westside Recycled Water Project
  - Overview
  - Construction
  - Budget & Reserve Funds
- San Francisco Groundwater Supply Project Phase II
  - Overview
  - Construction

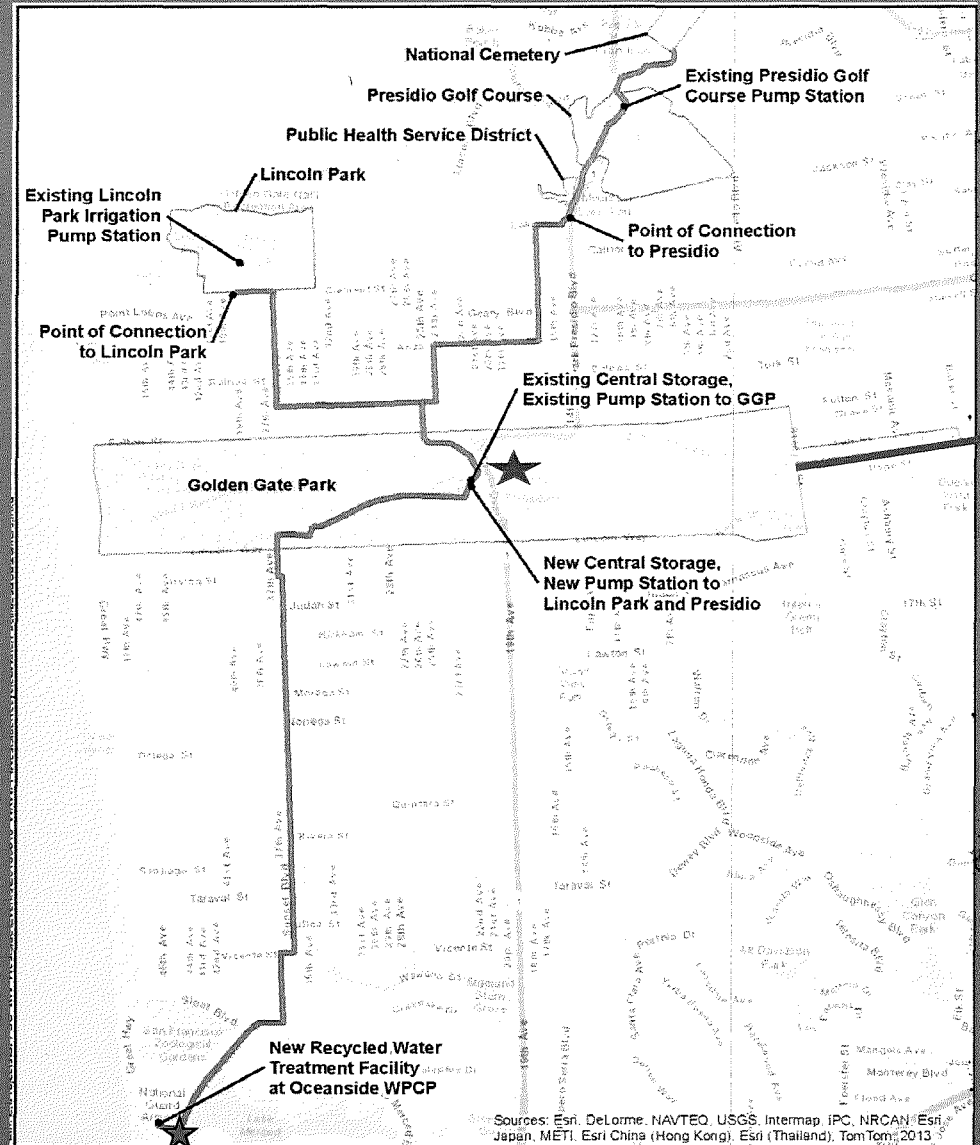
**HETCH HETCHY**  
**+ LOCAL WATER**

**Better together.**



# Westside Recycled Water Project - Overview

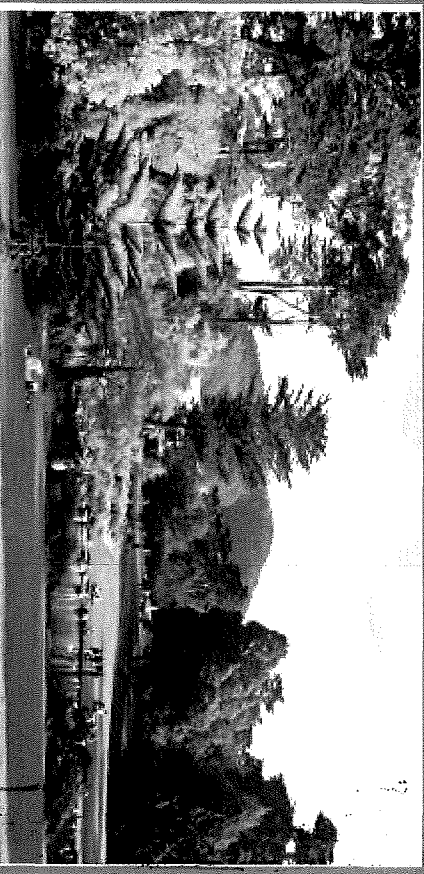
- Produce average 1.6 mgd; 4 mgd peak production
- New treatment facility within Oceanside Plant
  - Major components sized for build-out peak production of 5 mgd
- 7.7 miles of new pipeline
- New reservoir and pump station in GGP



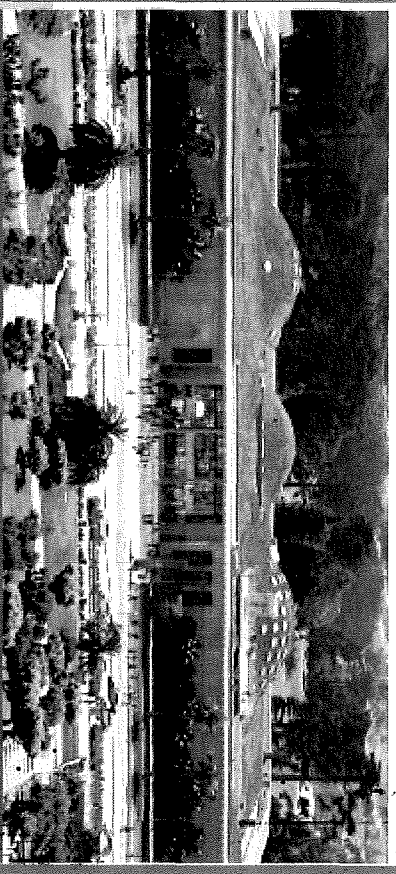


## Proposed Customers & Uses of Recycled Water

- Proposed uses/customers at project start-up:
  - Irrigation of Golden Gate Park and Panhandle
  - Filling ornamental lakes in Golden Gate Park
  - Irrigation of Lincoln Park Golf Course
  - Irrigation of Presidio Golf Course and other landscaped areas
- Potential Future Customers/Uses
  - SF Zoo
  - Toilet flushing – CAS, deYoung



Golden Gate Park



California Academy of Science



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## Water Quality Objectives & Golden Gate Park

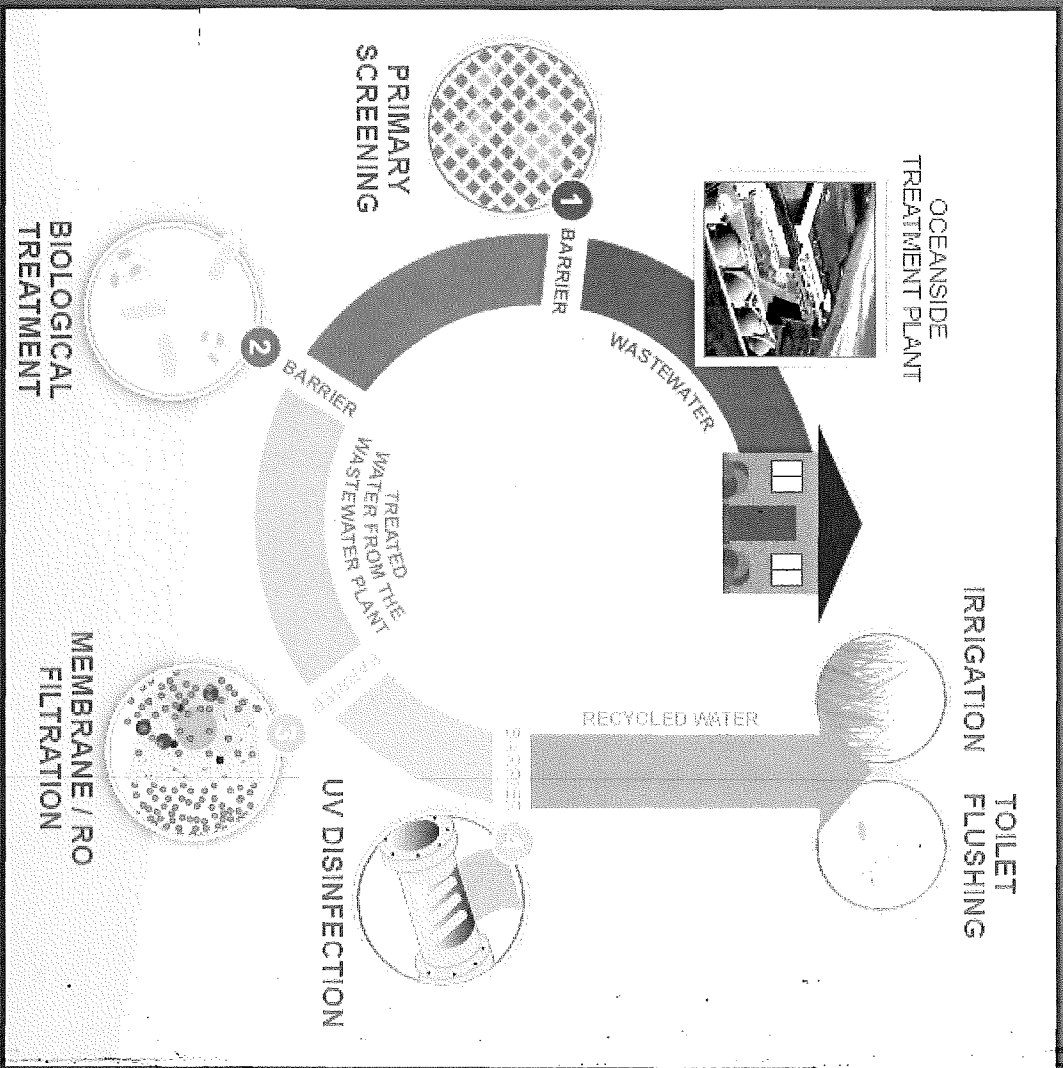
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- Golden Gate Park is the largest customer of recycled water (1.3 mgd)
  - Water quality objectives set to meet the needs for park irrigation and lake-fill
- Targets established for salts, nutrients, and ammonia
- Reverse osmosis identified as the best available technology to meet all water quality goals



# Recycled Water Treatment

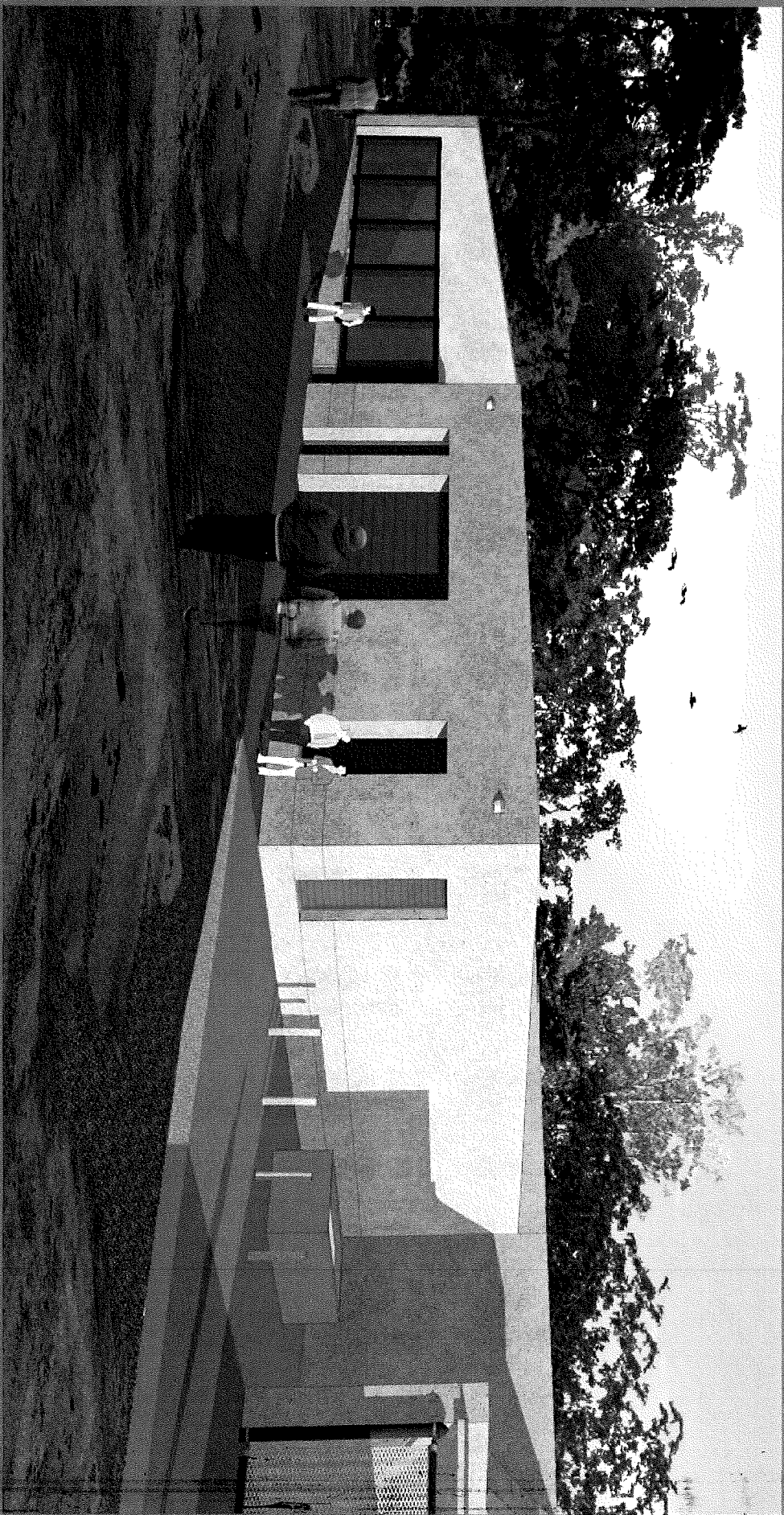
- Oceanside Plant secondary effluent will be treated with:
  - Micro/ultrafiltration (membrane filtration)
  - Reverse osmosis (RO)
  - Disinfection with ultraviolet (UV) light
- Recycled water will be very high quality





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# Recycled Water Pump Station in Golden Gate Park





# Westside Recycled Water Project Budget & Reserve Funds

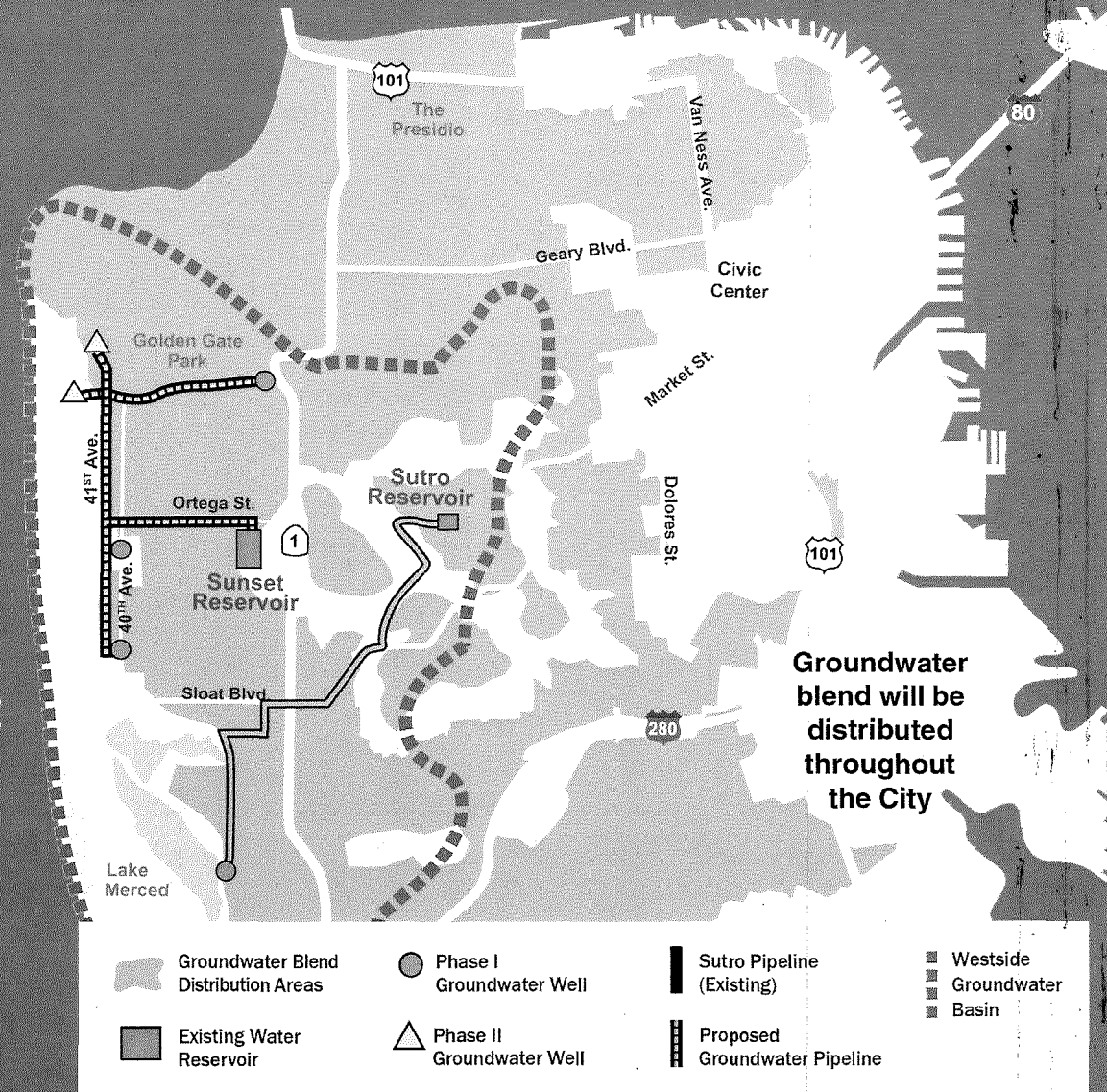
Sources of Funds	Appropriation	Budget and Finance Committee Reserve
<u>Water Enterprise Revenue Bonds</u>		
Ordinance 53-08	\$3,457,718	
Ordinance 311-08	\$14,217,812	
Ordinance 92-10	\$110,146,222	\$91,608,000
Ordinance 230-11	\$29,219,000	\$29,219,000
Subtotal, Water Enterprise Revenue Bonds	\$157,040,752	\$120,827,000
<u>Budget Appropriations</u>		
FY 2016-17 Budget	\$21,306,000	
FY 2017-18 Budget	\$6,500,000	
FY 2018-19 Budget	\$1,373,248	
Subtotal, Budget Appropriations	\$29,179,248	
<b>Total</b>	<b>\$186,220,000</b>	<b>\$120,827,000</b>





# SF Groundwater Supply Project Overview

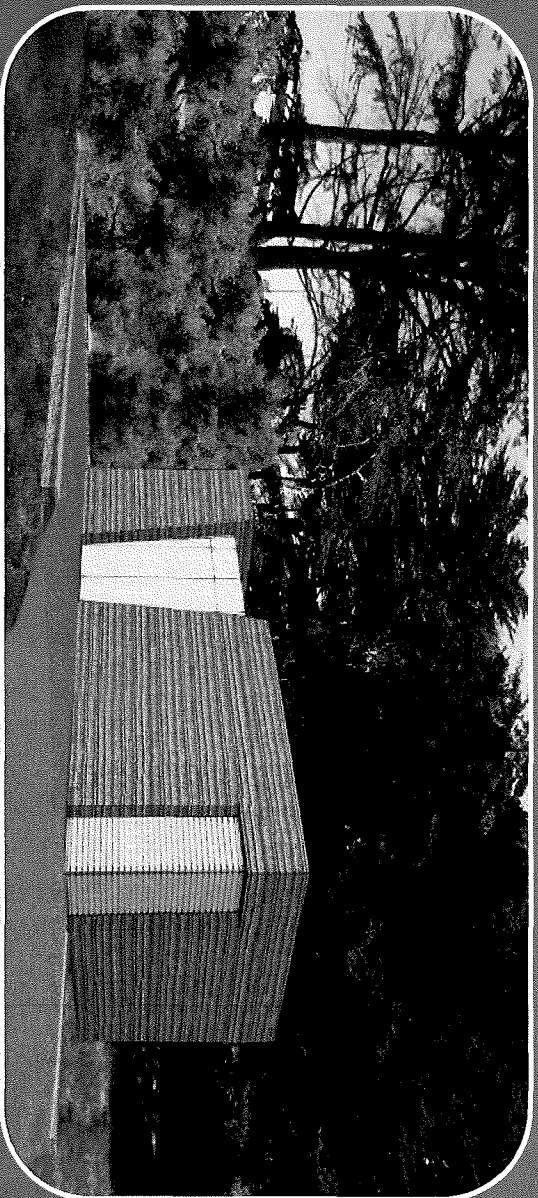
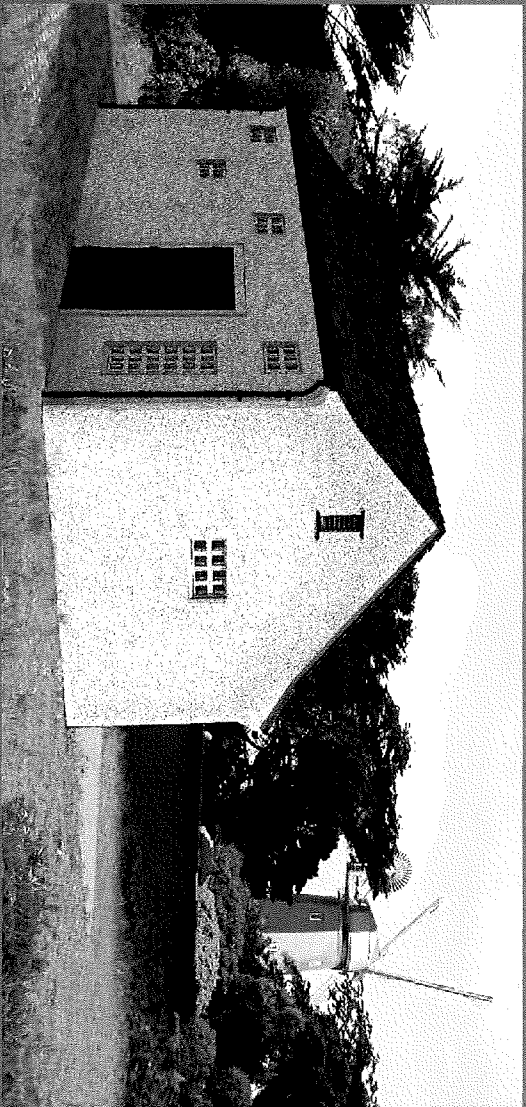
- Project will supply up to 4 **mgd** of groundwater from the Westside Basin aquifer in San Francisco
- Pumping will start at 1 mgd and **slowly ramp up** by approximately 1 mgd/yr
- Groundwater will be **blended** with SFPUC regional water supplies at 2 reservoirs
- Blended water will be **distributed** throughout the City





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# Groundwater Project Facilities



## Groundwater is a High Quality Source

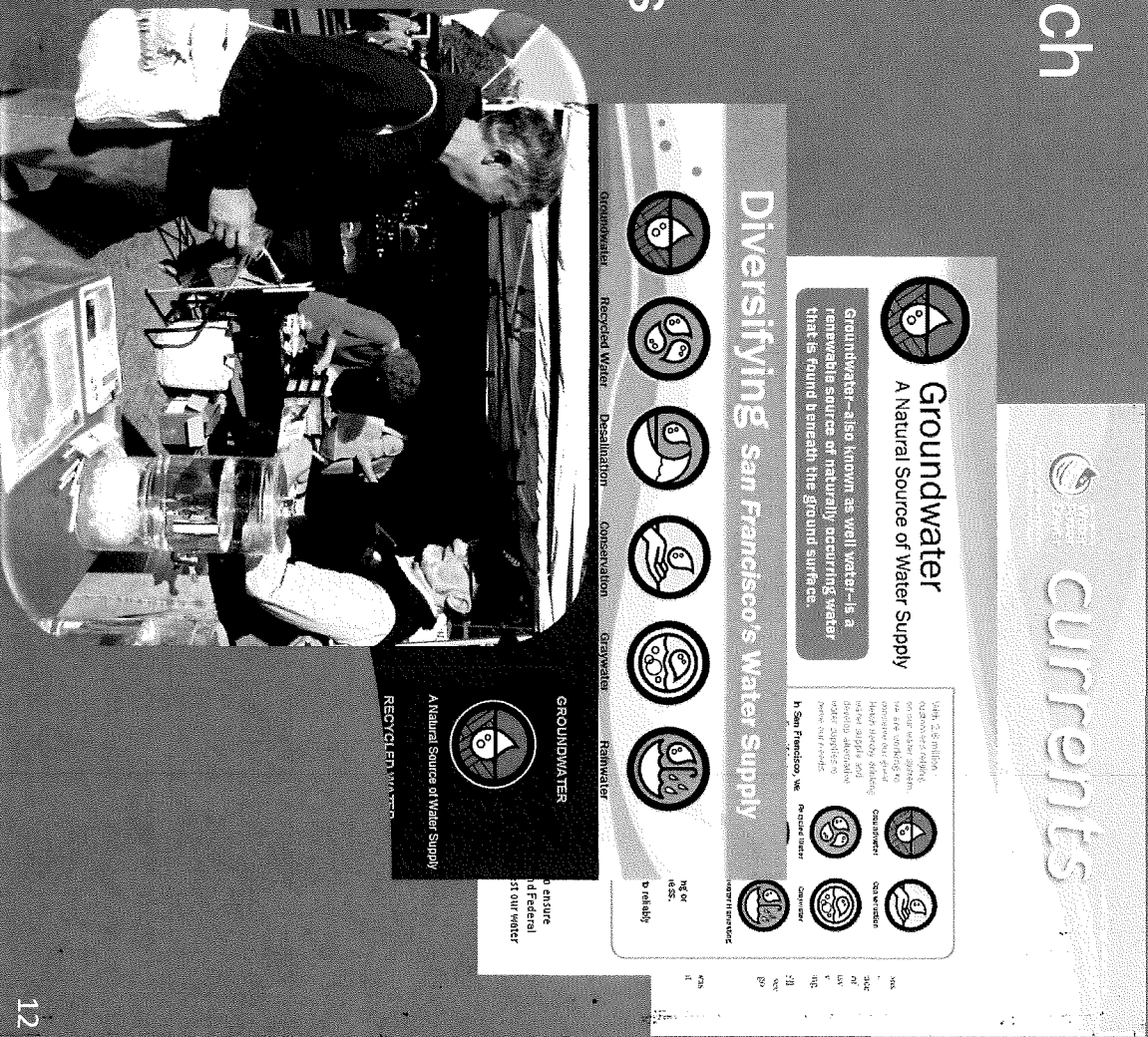
- Extensive monitoring of groundwater since 2000: **high quality** source of water
- A small quantity of groundwater will be **blended** in our reservoirs
- Water distributed to our customers will continue to **surpass all drinking water standards**



# Groundwater Public Outreach Efforts

Ongoing public outreach since 2007

- “Currents” Newsletter (utility bill inserts)
- Planning Dept. mailings (EIR)
- Fact Sheets
- Community Outreach
- Sampling Groundwater Blend



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## Summary

### Actions Requested:

- Adoption of CEQA Findings for the Westside Recycled Water Project
- Approval of Construction in Golden Gate Park
  - Recycled Water Reservoir & Pump Station
  - Phase II Groundwater Well Station Buildings
- Release of Project Reserve Funds



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# Questions?

