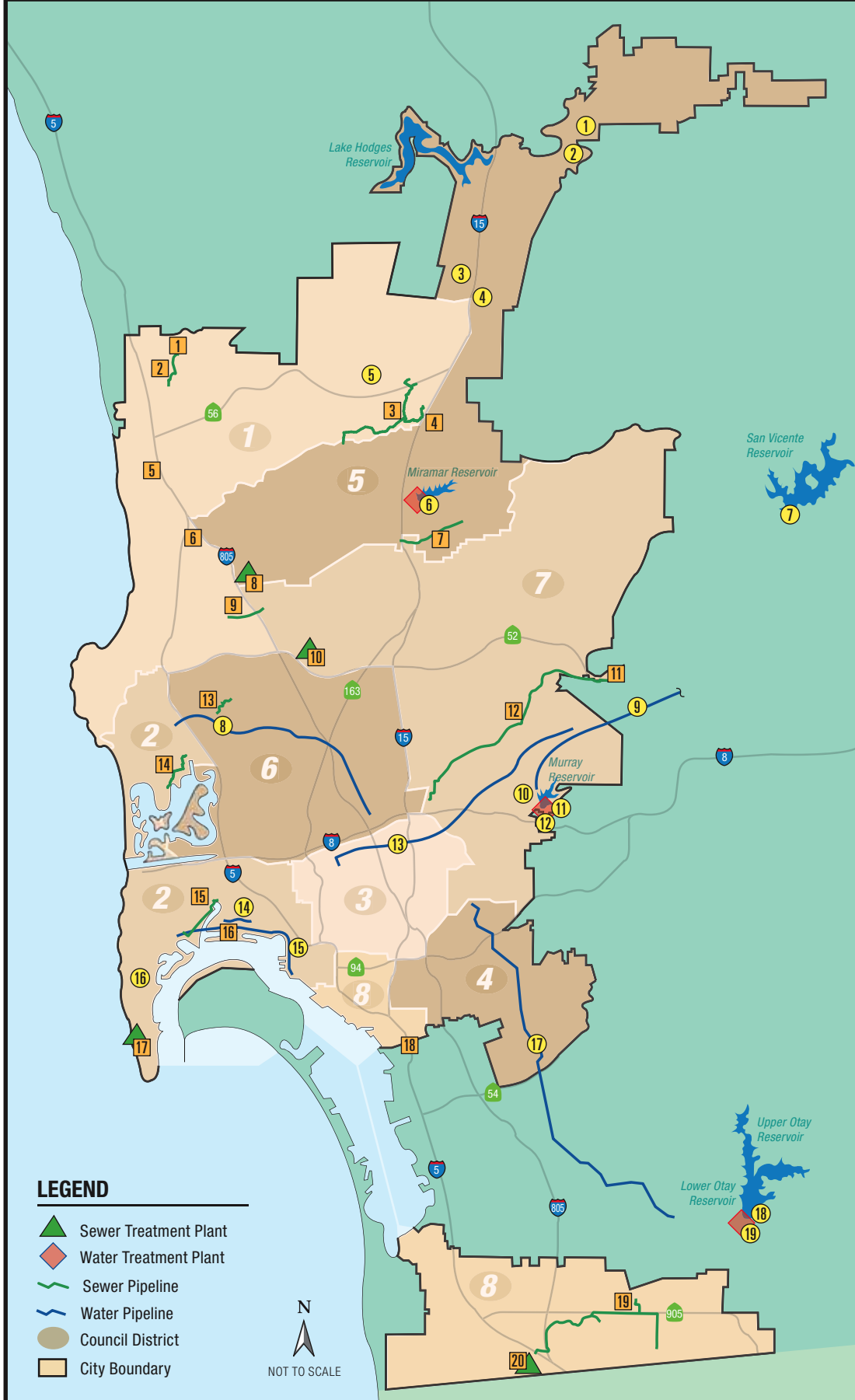




THE CITY OF SAN DIEGO

# Water & Wastewater Systems KEY PROJECTS 2008 - 2011



### CITY-WIDE PROJECTS

- Cast iron water main replacements
- Water Department security upgrades
- Seismic retrofits of large pipelines
- Combined Water & Sewer Projects

### Water Project Locations

1. San Pasqual Groundwater Desalination
2. San Pasqual Brackish Groundwater Desalination Demo
3. Rancho Bernardo Reservoir Rehabilitation
4. Pomerado Park Reservoir Upgrade
5. Rancho Peñasquitos Pump Station
6. Miramar Water Treatment Plant
7. San Vicente Reservoir Water Quality Improvements
8. Kearny Mesa Pipeline Upgrade
9. El Monte Pipeline No. 2
10. San Carlos Reservoir Interior Enhancement
11. Alvarado Water Treatment Plant
12. Alvarado WTP SDFCF-12
13. El Capitan Pipeline No. 2
14. Lindbergh Field 16 inch Cast Iron Main Replacement
15. Harbor Dr. Pipeline (Cast Iron)
16. Catalina Standpipe Renovation
17. Otay 2nd Pipeline Improvement
18. Lower Otay Reservoir Emergency Outlet Improvement
19. Otay Water Treatment Plant
20. El Capitan Reservoir Road Improvement (Not Shown)

### MWWD Project Locations

1. Pump Station 79
  2. Pump Station 79 Force Main
  3. Penasquitos Views Trunk Sewer
  4. Penasquitos Pump Station
  5. Pump Station 65
  6. Pump Station 64
  7. USIU Trunk Sewer
  8. North City Water Reclamation Plant
  9. Miramar Road Trunk Sewer
  10. Metro Biosolids Center
  11. East Mission Gorge Pump Station
  12. East Mission Gorge Force Main
  13. Balboa Trunk Sewer
  14. Crown Point Trunk Sewer
  15. East Point Loma Trunk Sewer
  16. Pump Station 2
  17. Point Loma Wastewater Treatment Plant
  18. Pump Station 1
  19. Otay Mesa Trunk Sewer
  20. South Bay Water Reclamation Plant
- [List not in order of priority]



THE CITY OF SAN DIEGO

*Our Water & Wastewater Systems —*

# Building a Framework for Life

The City of San Diego is committed to an ongoing investment in our water and wastewater systems. We're maintaining safe and reliable water and sewer service for more than 1.3 million customers by continuing to upgrade and improve this critical infrastructure.

Our responsibility is to treat and deliver an average of 210 million gallons of water and to treat and dispose of nearly 180 million gallons of wastewater every day.

Alvarado Water Treatment Plant



Upkeep of these systems is a critical part of maintaining our quality of life. Just like the costs of other everyday necessities, the costs for water and wastewater system improvements are rising. Because these costs continue to escalate, postponing improvements will only result in higher expenditures in the future.

The City is planning a series of important upgrades and improvements for both systems that will allow us to meet our obligations under state and federal law. The projects being

planned will increase the reliability of both systems and allow us to replace aging pipelines and upgrade the treatment processes.

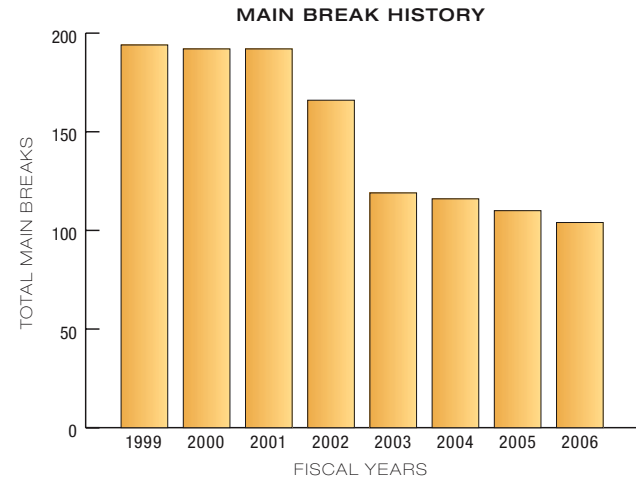
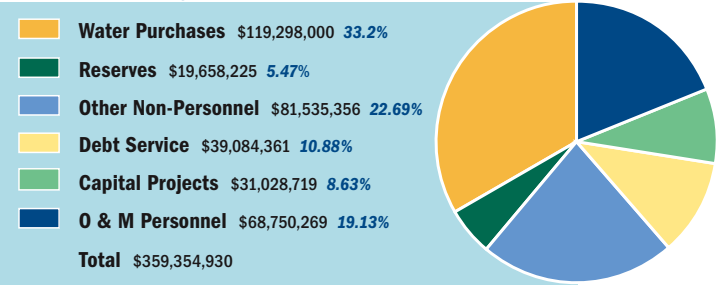
The planned improvements will help us protect the environment, maintain our quality of life and promote the economic vitality of our city.



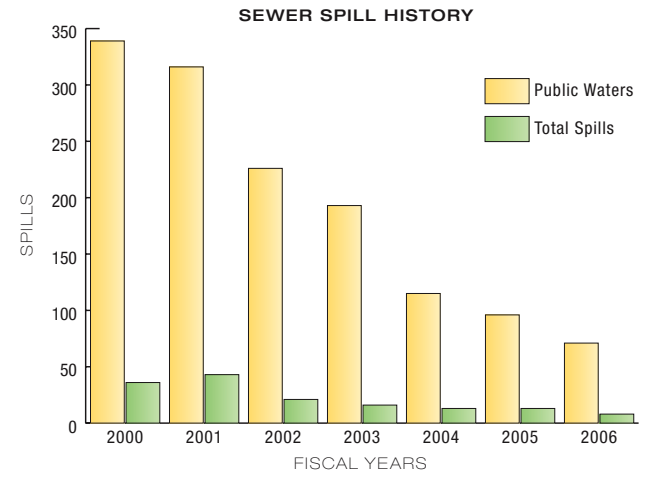
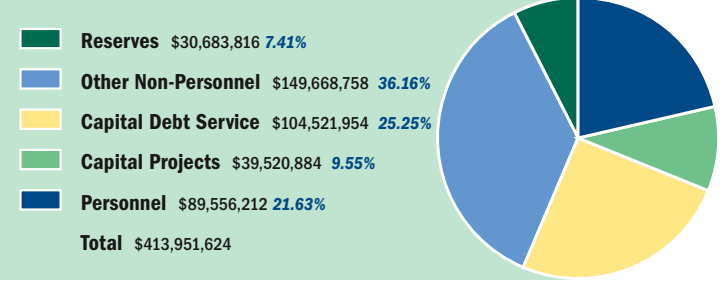
Point Loma Wastewater Treatment Plant

# Building a Framework for Life

## Water Budget Fiscal Year 2007



## Wastewater Budget Fiscal Year 2007



## Accountability

- International Organization for Standardization (ISO 14001)
- Independent, third-party audits
- Corrected transfer of funds procedures
- \$200 million in operational savings
- System reinvestment
- Business Process Re-engineering
- Staff reductions

## Why does San Diego need Water & Sewer Rate Increases?

- Rate increases are necessary in order to continue to meet ongoing capital and operational needs of the systems
- San Diego must comply with Federal Safe Drinking Water Act, Clean Water Act, and California Department of Health Services Compliance Order
- Aging infrastructure must be replaced to reduce pipeline breaks, emergency repairs and sewer spills
- City agreed to a judicial decree in the settlement of a lawsuit over sewer spills

## System Improvements

- Completed the Earl Thomas Reservoir, the largest pre-stressed concrete reservoir in the world
- Replaced 90 miles of aging water pipes
- Enhanced security program to protect the water supply of the nation's eighth largest city
- Rehabilitated three water pump stations



Televising sewer lines



Cleaning sewer lines



Before



After

Cast iron water main replacement

- Increased water capacity
- Cleaned all 3,000 miles of sewer lines
- Televised more than 1,200 miles of oldest sewer lines to assess condition
- Increased replacement and rehabilitation of aging sewer lines from 14 to 45 miles a year
- Upgraded municipal wastewater pump stations

## Future Needs

- Meet Federal and State mandates
- Replace deteriorating cast iron mains
- Upgrade and expand treatment plants
- Replace or rehabilitate aging pipelines
- Improve or replace storage tanks
- Upgrade or replace pump stations
- Replace or rehabilitate reservoirs
- Improve telecommunications and system monitoring
- Enhance security systems
- Upgrade odor control systems
- Replace trunk sewers
- Upgrade power systems
- Continue ongoing system maintenance and improvements

## Challenges

- Deadlines for Federal and State mandates
- Ongoing mandated improvements
- Previous financing delays
- Escalating construction costs
- Rising cost of materials and services