# 2011/13 Biennial Budget

# Water System Operations Budget

Engineering & Operations Committee
Item 6c
February 7, 2011

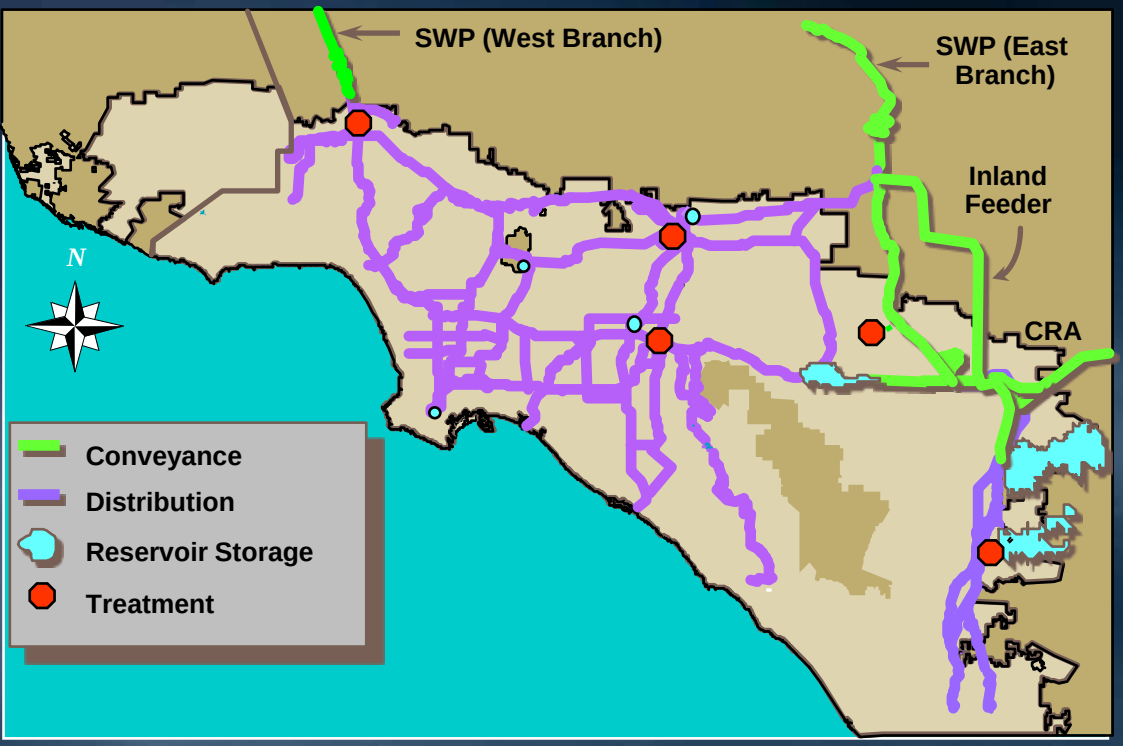
# Water System Operations Core Priorities

- **Reliable system operations**
  - Scheduled water deliveries
  - Optimized water treatment
  - Emergency response
- **Full regulatory compliance**
  - High quality water
  - Safety
  - Environmental protection

# Water System Operations Core Priorities (continued)

- **Effective maintenance**
  - Stand-by generator improvements
  - Maintenance standards
  - Condition-based maintenance
- **Sustainability**
  - Power management
  - Source water protection
  - Support water resource programs
  - Workforce development

# Water Delivery and Treatment System



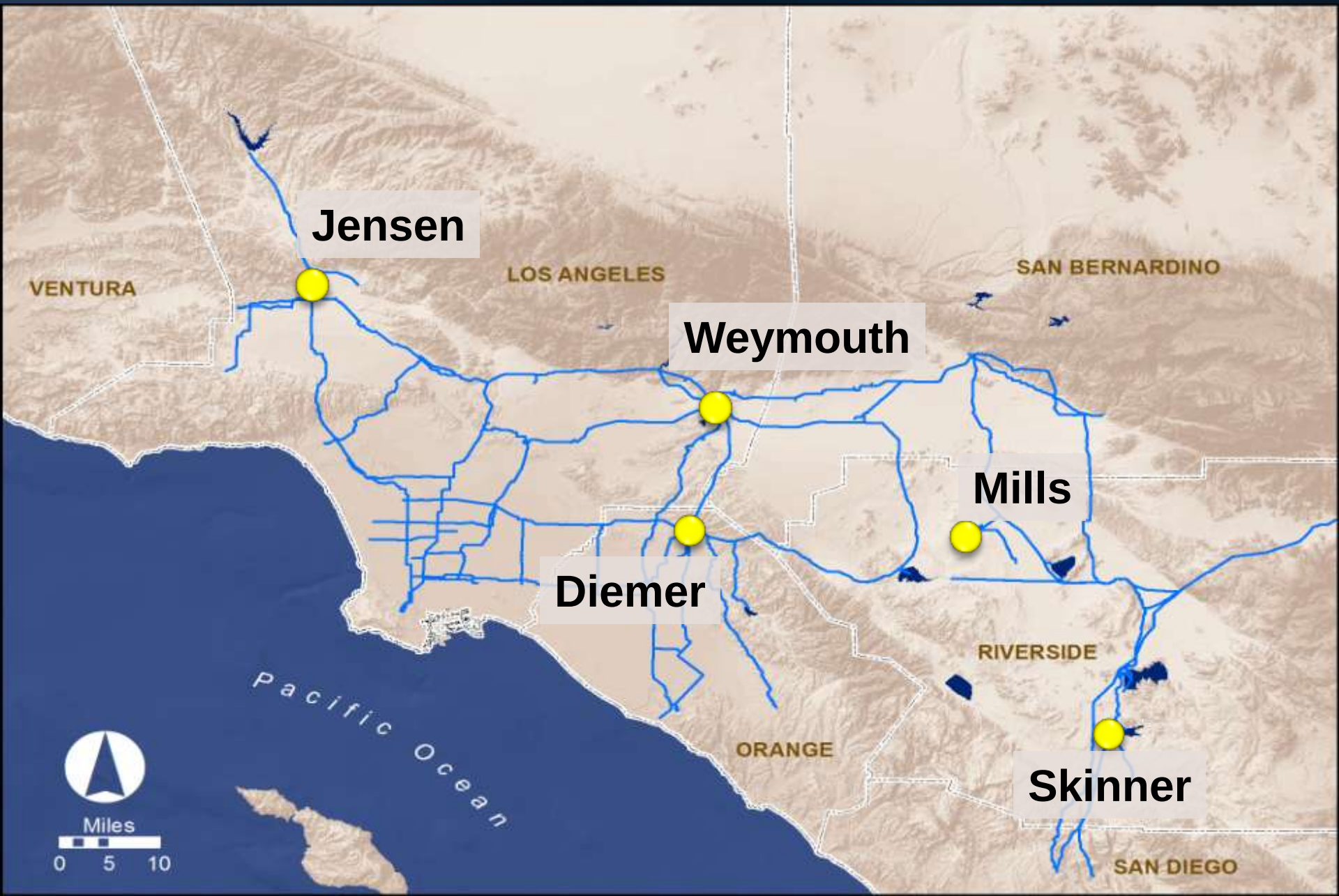

- **Colorado River Aqueduct (242 miles)**
  - ✓ Five pumping plants
  - ✓ 64 miles of canal
  - ✓ 92 miles of tunnel
  - ✓ 83 miles of conduit & siphon
  - ✓ 330 miles of high voltage transmission lines

- **Five Treatment Plants**
  - ✓ 2,640 MGD total design capacity
  - ✓ Ozone & conventional treatment processes

- **Distribution and storage**
  - ✓ Nine surface reservoirs
  - ✓ 800 miles of pipeline
  - ✓ 16 small hydroelectric plants
  - ✓ Over 5,000 structures & 350 service connections

# Water System Operations Group Organization

# Water Treatment Section



# Jensen Water Treatment Plant Unit

- 750 million gal/day
- 2nd largest in U.S.
- 11,600 pieces of equipment
- Staffing complement
  - Plant manager
  - Craft supervisors
    - Operators (all shifts)
    - Mechanics
    - Electricians
    - Electronic technicians
    - Support staff
- Electrical & electronic support to the distribution system

# Conveyance and Distribution Section

# Western Distribution System Unit

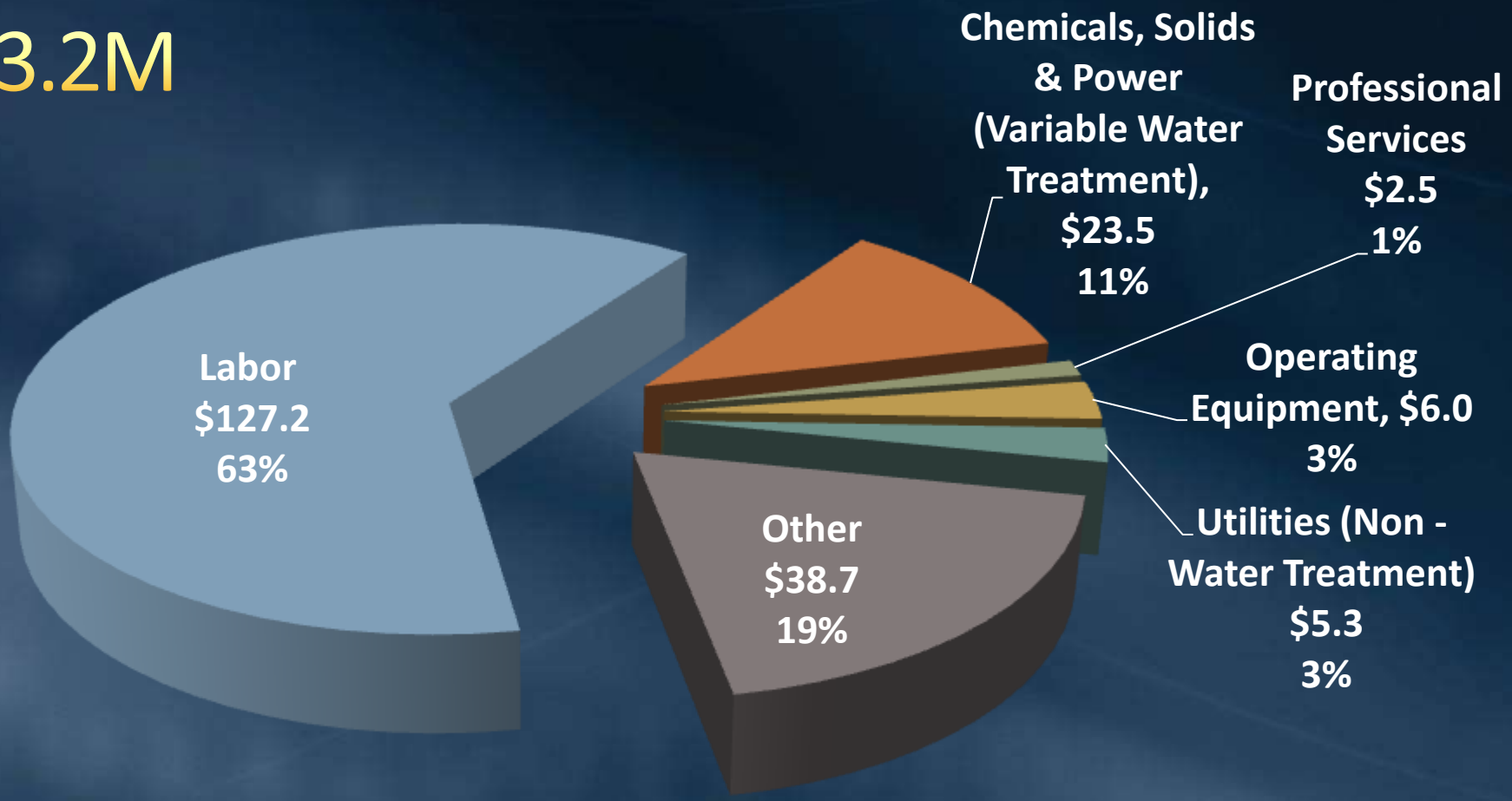
- 425 miles of pipeline
- 27,200 pieces of equipment
- Staffing complement
  - Area manager
  - Craft supervisors
    - Pipeline mechanics
    - Patrollers
    - Coaters
    - Support staff

# Water System Operations Biennial Budget Overview

| Expense Type ($ M) | 2010/11 Budget | 2011/12 Budget | Variance 2010/11 to 2011/12 | 2012/13 Proposed | Variance 2011/12 To 2012/13 |
|---|---|---|---|---|---|
| Labor | 119.0 | 124.4 | 5.4 | 127.2 | 2.8 |
| Chemicals, Power, Solids (Variable WT) | 26.5 | 22.2 | (4.3) | 23.5 | 1.3 |
| Utilities (Non-WT) | 5.1 | 5.2 | 0.1 | 5.3 | 0.1 |
| Professional Services | 2.4 | 2.5 | 0.0 | 2.5 | 0.0 |
| Other | 37.2 | 37.3 | 0.1 | 38.7 | 1.4 |
| Operating Equip | 1.6 | 6.0 | 4.4 | 6.0 | 0.0 |
| Total | 191.9 | 197.6 | 5.7 | 203.2 | 5.6 |
| | | | | | |
| Budgeted Positions | 928 | 929 | 1 | 929 | 0 |
| Treated Water Sales (MAF) | 1.14 | 1.02 | (0.12) | 1.05 | 0.03 |

Totals may not foot due to rounding

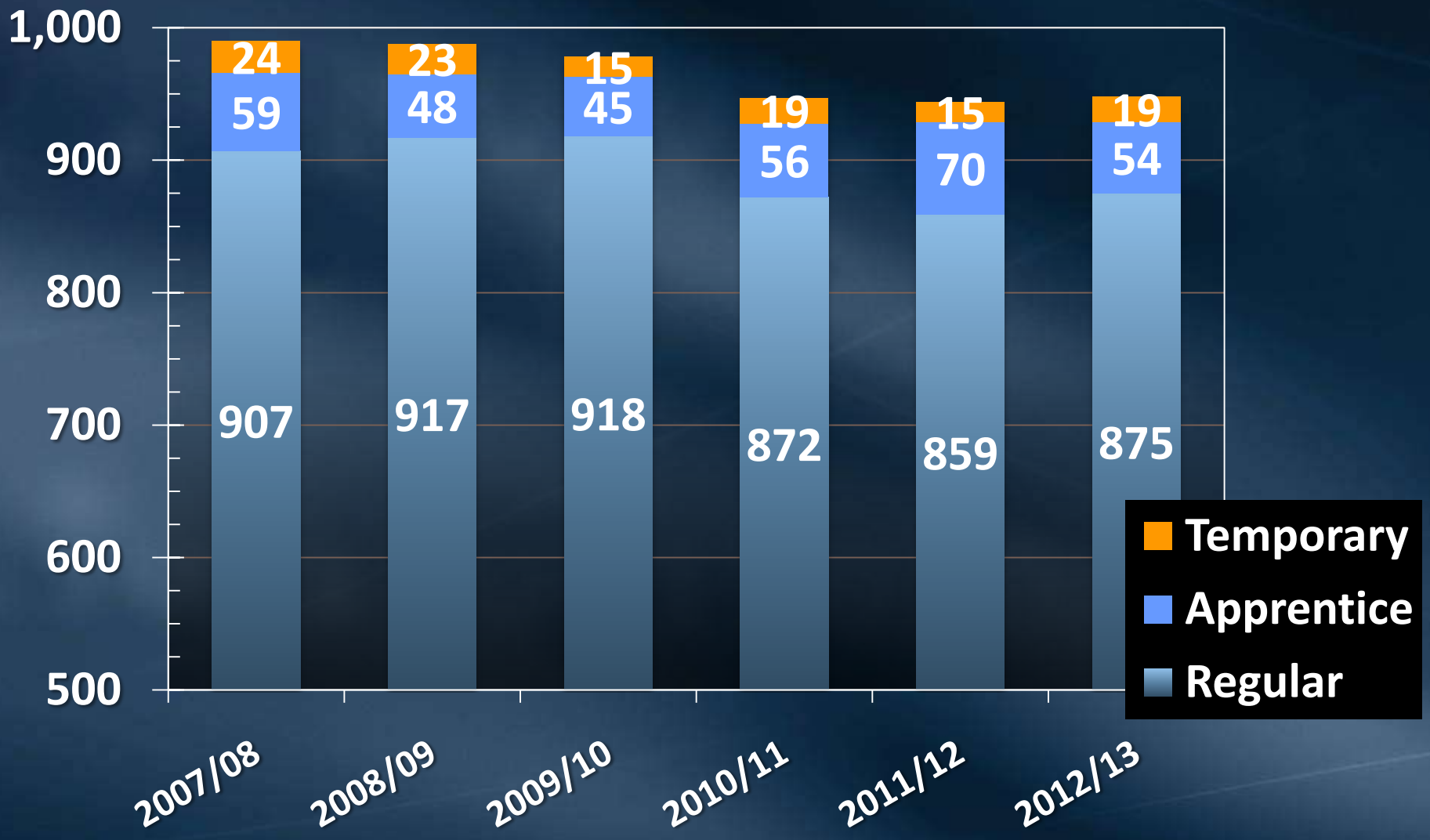
# WSO FY 2012/13 Proposed O&M Budget $203.2M



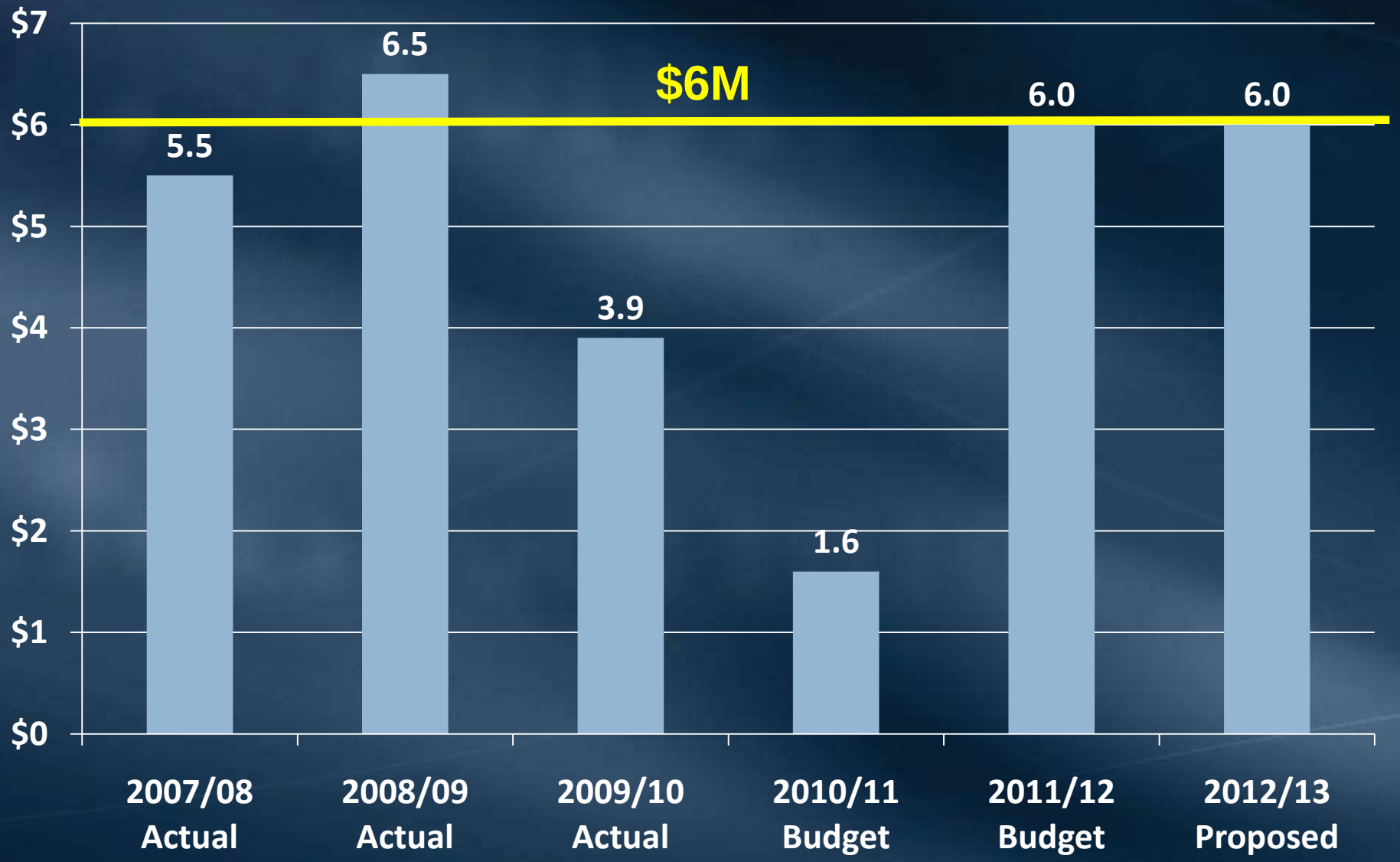

***Other includes non-professional services, materials & supplies, security, fuel, communications, repairs & maintenance***

# Budgeted Staffing Trend

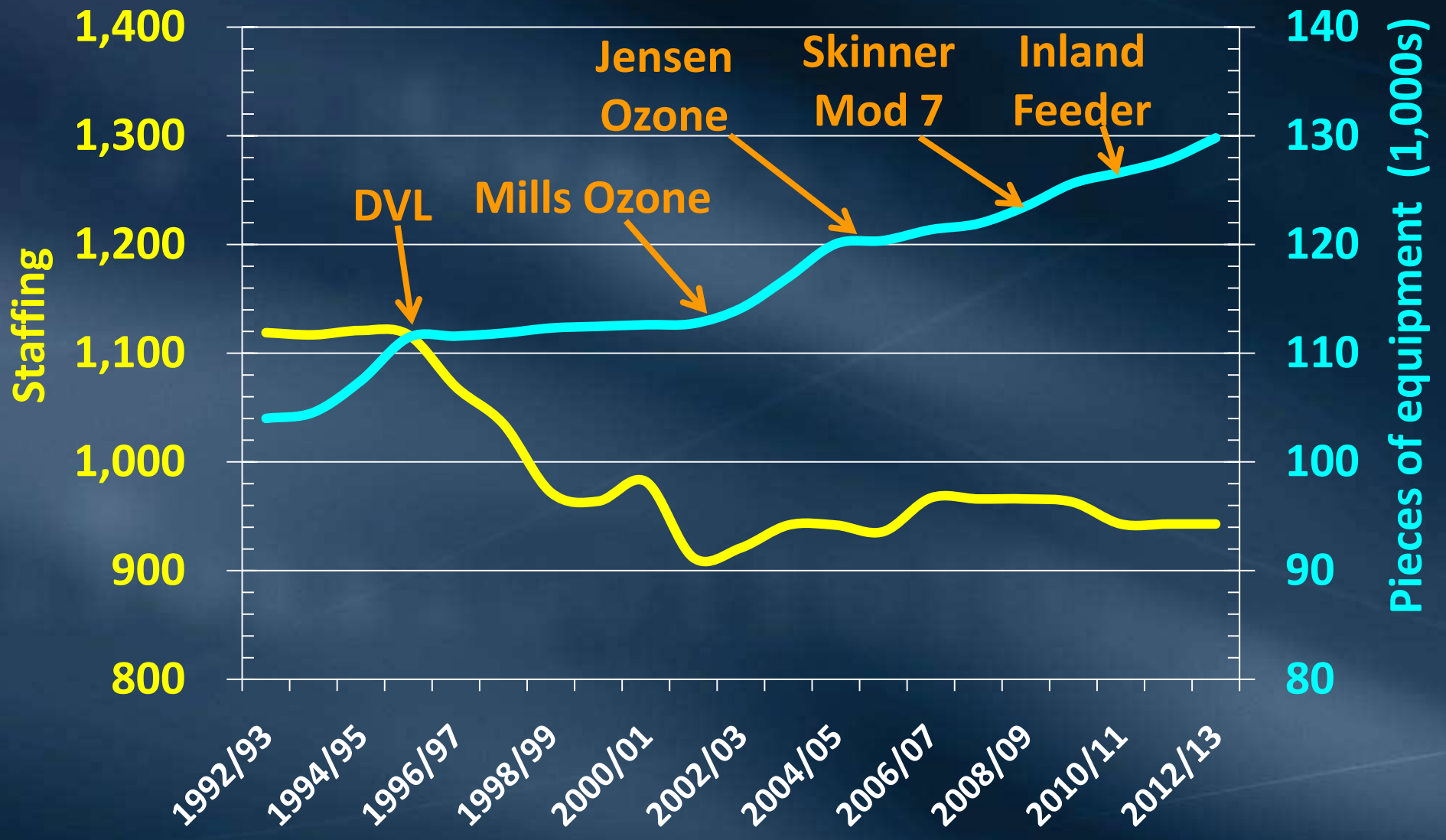
## 2011/13 Biennial Proposed Budget



# Water System Operations Group 2011/13 Biennial Operating Equip. ($M)



# Workforce Efficiency



# Water System Operations Group
## 2011/13 Proposed Biennial Summary

- Maintain staffing levels despite infrastructure increasing
- FY 11/12 Budget Actions
  - Reduced variable treatment
  - Reduced number of fleet assets but reinvesting to maintain effective fleet
  - Inflationary pressure on labor additives
- FY 12/13 Budget Actions
  - Optimize treatment costs
  - Maintenance initiatives increase materials & supplies
  - Inflationary pressure on labor additives, chemicals, supplies


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928