

# WASTEWATER MASTER PLAN

Wastewater Management System and Capacity Fee Summary and Recommendations

WASTEWATER MANAGEMENT SYSTEM UPDATE





## WMS Update Purpose

- Ensure adequate capacity to accommodate planned growth
   Provide framework for proactive, cost-effective management of wastewater assets
  - Infrastructure needs identified and prioritized in advance
    - Funding in place
    - Timely implementation of upgrades, replacements, and new installations
    - Continue to avoid SSOs, spills



## Updated Land Use Duty Factors

- Growth projections reflect adopted land use planning – 2005 GP, Amendments
- Generation rates
  Based on last 3 years water billing records
  - Assume increased conservation (265 gpd/EDU vs. 230 gpd/EDU)



# **Overview of Sewer System**





## **Treatment Options**

 Purchase Capacity at Point Loma WWTP or build Wastewater Treatment Plant
 No decision at this time/City will continue to monitor
 Regional factors may influence

decision (potable re-use)





## WMS Capital Improvement Program

- Driven by infrastructure evaluation
- Identifies capital projects
  - Repair/replacement of existing infrastructure
    Infrastructure improvements (new facilities, major upgrades)
- Presents capital projects schedule
  - Estimates budget needs
  - Reflects Asset Management approach:
    - Strategic Spending (the right project at the right time)



#### WMS Capital Improvement Program

#### Capital Improvement Projects

- Pipelines
- Manholes
- Meter Vaults

Improvements based on existing systems' ability to convey ultimate flows

Approximately \$15.8 Million in collection system improvements have been identified

# WMS Capital Projects Overview



# WMS Capital Projects West



# WMS Capital Projects Central



# WMS Capital Projects East



# Fee Calculation Methods

#### OPTION 1: Buy-in to existing facilities:

New customers pay an amount equal to the investment made by existing customers

- Basis for current capacity fee
- Results in a fee of \$4,092/EDU

Existing collection system + Value of available Metro treatment rights

Total build-out capacity

(29.89 mgd)

Available Metro treatment rights

(5.134 mgd)

## Fee Calculation Methods

- OPTION 2: Incremental capacity expansion costs: New customers pay marginal cost of new facilities needed to serve them
  - No charge for existing system
  - Produces lowest fee of \$3,450/EDU

Collection system expansion +Expansion of treatmentRemaining EDUs to build-out<br/>(14.16 mgd)Remaining EDUs to build-out<br/>less available treatment<br/>capacity at Metro

(9.026 mgd)

# **Capacity Fee Survey**



### Recommendations

- Adopt new capacity fee of \$3,450 based on the incremental method
  - The incremental method produces a lower fee and is based on the best available estimates of the cost of future facilities

If future costs are higher than estimated, the capacity fee may need to be increased

Capacity fee should be adjusted annually based on the ENR Construction Cost Index

Same process as DIFs

### **Recommended** Action

Adopt resolution accepting the 2014 Wastewater
 Master Plan Update

 Place Ordinance on first reading to modify the Sewer Capacity Charge and the Wastewater Unit Generation Rates



## Questions

