City of Hayward
Wastewater Collection and Treatment Service

Local Agency Formation Commission
July 10, 2014
City of Hayward

Home to:

- 150,000 residents
- Large industrial and commercial sector - dependent on reliable wastewater collection and treatment service
- State university and community college
- Regional hospital

California State University East Bay

Hayward City Hall
Description of Services

• **Service Area**
  ▫ Nearly all of City of Hayward and a small number of properties in Unincorporated Alameda County
  ▫ Current City population - 150,000

• **Services Provided by City**
  ▫ Wastewater collection
  ▫ Wastewater treatment

• **Member of East Bay Dischargers Authority**
  ▫ Disposal of treated wastewater
Wastewater Collection System

- 350 miles of sewer mains
- 9 lift stations
- Staffed by 10 FTEs
Water Pollution Control Facility

- Permitted capacity - 18.5 mgd
- Current average dry weather flow - 11.4 mgd
WPCF Infrastructure

- Primary through advanced secondary treatment
  - Primary clarifiers
  - Trickling filters
  - Solids contact basins
  - Secondary clarifiers
- Staffed by 28 FTEs (including administrative and engineering personnel)
Phase I WPCF Improvement Project

- Completed in 2008 - $58M project
  - Second trickling filter
  - Two new final clarifiers
  - Solids contact tank
  - Solids thickening facilities
  - 12kv electrical system
  - Two megawatt standby generator

- Increased performance, system reliability and redundancy
WPCF Removal Efficiency

- Common measures of wastewater treatment removal efficiency
  - Carbonaceous Biochemical Oxygen Demand (cBOD)
  - Total Suspended Solids

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<td>cBOD</td>
<td>EFF  2%</td>
<td>INF 98%</td>
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<td>TSS</td>
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Looking ahead

- **Collection System Master Plan - 2014**
  - 98% complete
  - No significant issues identified
  - Some pipeline improvements needed

- **WPCF Master Plan - 2013**
  - New primary clarifier and trickling filter
  - New anaerobic digester (long-term)
  - Disinfection (long-term)
Long-Term Outlook

• Long range planning supports City’s recently adopted General Plan strategies through 2040

• Sufficient capacity available to accommodate future economic and residential development
Sustainable Energy Sources

- Photovoltaic solar array - 1 megawatt
  - One of the largest in the county

- New co-generation system: 1.1 megawatt

- Second 1 megawatt solar project in next 3 years
Energy Production

- Co-generation system will make WPCF energy self-sufficient
- 1.6 million kW hours currently exported to PG&E grid
- RES-BCT Tariff - allows installation to exceed 1 MW and use surplus energy to offset demand at other City facilities
Recycled Water

- 2 to 4 mgd secondary treated wastewater supplied to Russell City Energy Center - reduces dependency on potable water

- Feasibility of recycled water distribution for irrigation and industrial use - up to 500,000 gpd - environmental review under way
Rates and Revenues

- Current single-family residential monthly billing: $27.27
- 3% increase approved for FY 2015
- Future rate adjustments anticipated to be low-to mid-single digits
- Total revenue about $18,500,000 per year
Future Challenges

• Implementing needed system improvements while maintaining reasonable rates
• Increasingly stringent regulatory compliance
• Developing and retaining a qualified workforce