City of Hayward Wastewater Collection and Treatment Service

Local Agency Formation Commission
July 10, 2014

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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

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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

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Wastewater Collection System

- 350 miles of sewer mains
- 9 lift stations
- Staffed by 10 FTEs

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Water Pollution Control Facility

- Permitted capacity – 18.5 mgd
- Current average dry weather flow – 11.4 mgd

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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)

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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

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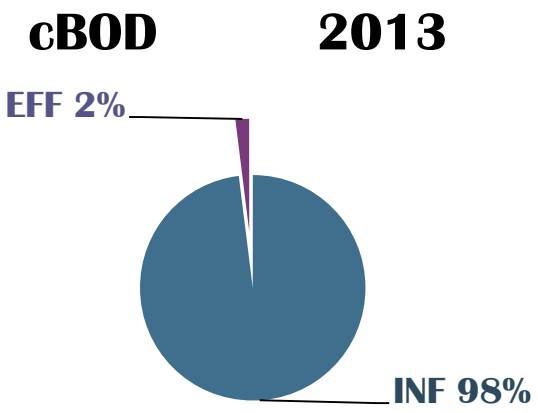
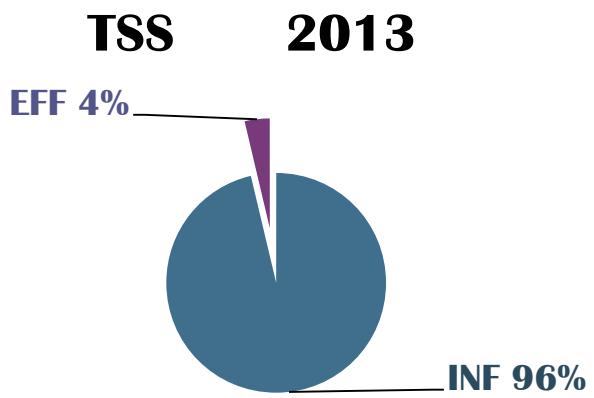
WPCF PLANT UPGRADE PROJECT COMPLETION MAY 2008

WPCF Removal Efficiency

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





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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

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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

Russell City Energy Center

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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

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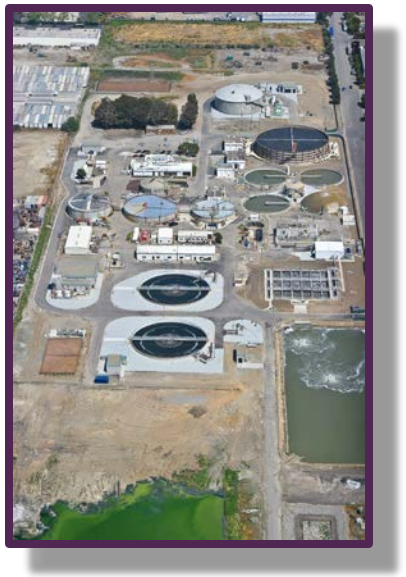
Future Challenges

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

WPCF 1961



WPCF Today