Elizabeth Severt
Environmental Program Manager

What is CFPUA?

- Water and Wastewater Utility.
- Employs 280 people.
- Provides service to 67,000+ customer accounts. (Nearly 200,000 people.)
- Acquire, finance, construct, manage, maintain & operate systems
- Authority = Self-supporting agency.
  ALL funds from users, impact fees.

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Stewardship. Sustainability. Service.

CFPUA Facilities, Staff

CFPUA owns, operates and maintains systems that include:

- 2 Water Treatment Plants
- 2 Wastewater Treatment Plants
- MILES of water, sewer lines
- More than 7,700 fire hydrants
- Nearly 150 pump stations
- 11 water tanks – 10 elevated, 1 ground
- 4 buildings that house:
  - Environmental and Laboratory Services
  - Collection System Maintenance
  - Distribution and Construction Services
  - Administrative Services

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Why Do We Do It? Our Mission.

Provide high-quality service in an environmentally responsible manner while maintaining the lowest practicable cost.

Our Environmental Policy

Communicate policy and provide educational outreach to all.

Follow all legal requirements.

Prevention of Pollution by minimize waste and impacts on the natural resources.

Understand the needs of our stakeholders.

Achieve improvements.

NSF-ISR Registered to ISO 14001

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How to Get Started:

- Determine if assessing energy use is important
- Contact Waste Reduction Partners
- Determine facilities to assess
- Gather the data (pre-assessment survey)
  - Utility History – look at your bills
    - Electric
    - Gas
    - Oil
    - Propane
    - Water / Sewer
  - Building plans and as builts
  - Process Information – what is the facility used for
- Schedule energy audit

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Assessment Day

- **Who should attend**
  - **WRP**
  - **Subject Matter Experts**
  - **Environmental/Energy Team**

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Assessment Day

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What's Next?

- Energy Team
  - Who are the right people?
  - Management approval/buy in
- Review Audit Report
- Determine Priorities
  - Develop Energy Policy
- Set goals and track process

WASTE REDUCTION PARTNERS

ENERGY ASSESSMENT

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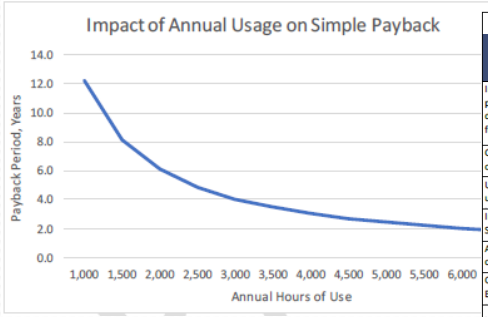
ESTIMATED ANNUAL EMISSION REDUCTION SAVINGS	
Carbon Equivalent, (CO_2e) - Greenhouse Gases, Pounds/Year	150,679
Nitrogen Oxides, (NO_X) - Precursor to Ozone, Pounds/year	112
Sulfur Oxides, (SO_X) - Contributes to Acid Rain, Pounds/Yr	273



Summary of Recommendation Measures

Energy Efficiency Recommendations	Cost Savings / yr.	Investment Cost	Payback Period (yr)	mmBtu Saved
Implement a program to minimize energy use for pumping. This may require an initial investigation to define current energy use per gallon pumped over the full range of pumping scenarios.	$2,730	TBD	TBD	102.4
Convert outside lights at Pump Staion 89 to LED (Based on 4 fixtures)	$191	$560	2.9	7.2
Upgrade pump station exhaust fans to minimize energy, using variable speed drives and appropriate	$727	$700	1.0	27.3
Implement an LED Lighting Upgrade at the Utility Services Facility (including Vactor Bay Garage).	$699	$4,060	5.8	35.0
At USF Warehouse Mezzanine, eliminate the release of conditioned air into unconditioned space.	$40	None	Instant	2.1
Consider upgrading warehouse heaters at USF, Vactor Bay and the Nanoplant to minimize natural gas use.	$439	TBD	TBD	50.0
Implement an LED Lighting Upgrade at the EMSD Facility	$1,338	$7,070	5.3	72.0
Modify ESMD laboratory hood practice to run only when required by standards. Assumed 50 percent run time of lab hoods and some automation improvements.	$1,563	$3,000	1.9	$84
Implement an LED Lighting Upgrade at the Nanofiltration Plant	$2,401	$4,958	2.1	128.4
Reduce hours plant run on-peak by 2 hours/day	$5,358	None	Instant	$0
Reduce peak KW demand at water plant by 50 KW/mon.	$5,580	None	Instant	$0
TOTAL	$21,066			508

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QUESTIONS?

CONTACT INFORMATION

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