

# Overview of Environmental Services

**March 16, 2011**

**William G. Moore, General Manager**



## MISSION

***MCES exists to provide wastewater services that protect the public health and environment while supporting regional growth***

A photograph of a single water droplet hitting a surface, creating concentric ripples that spread outwards. The background is a deep blue gradient.

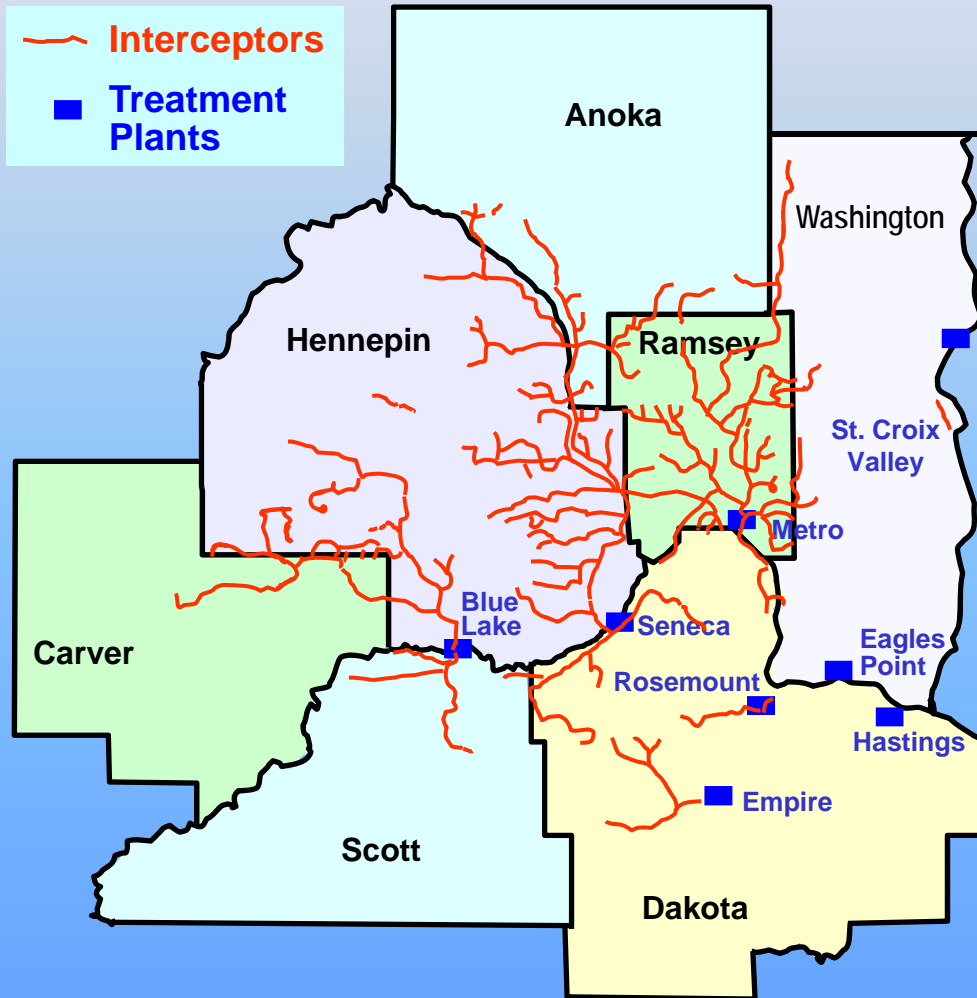
A Clean Water Agency

# Environmental Services Division

## Major Responsibilities

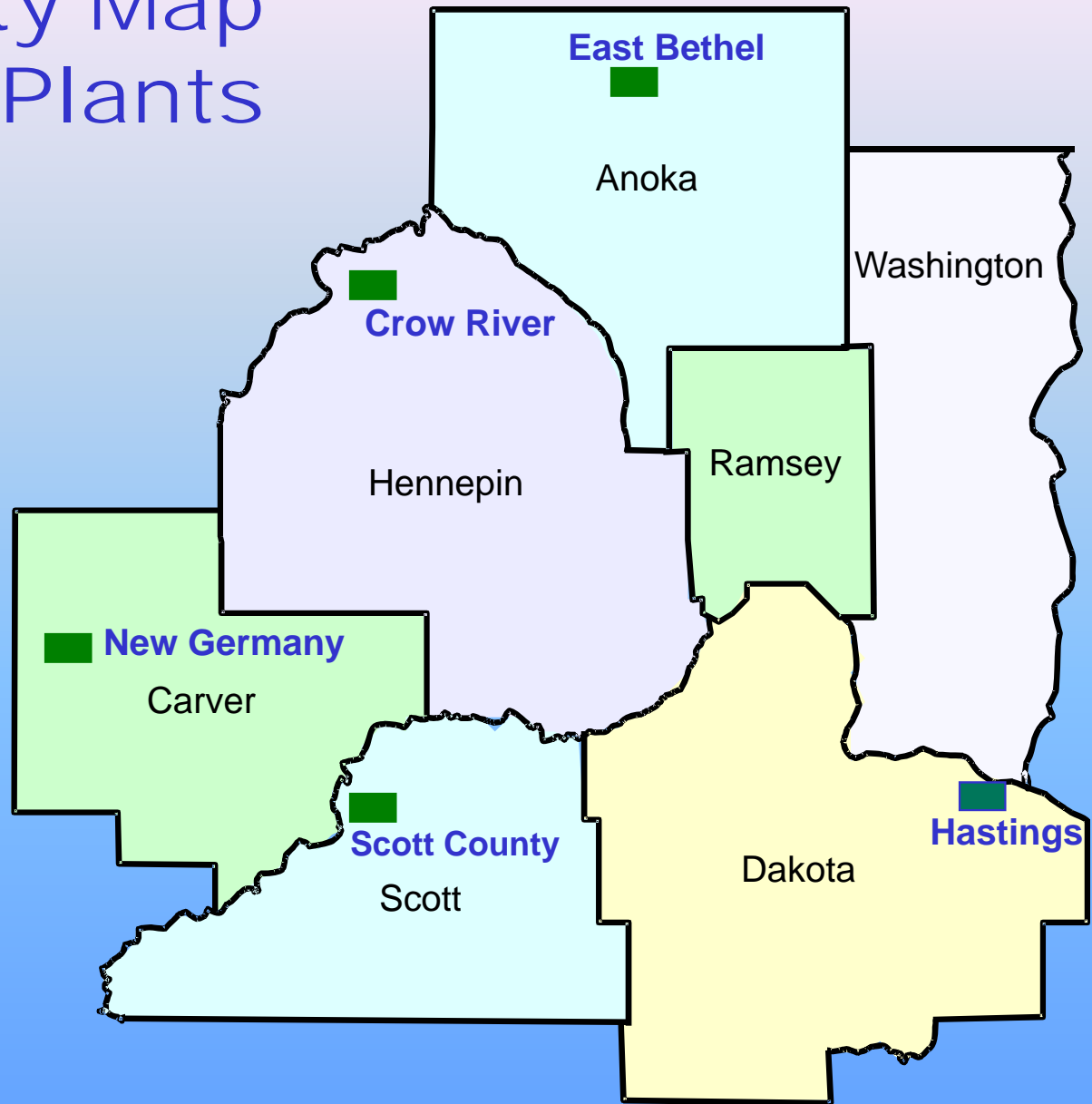
- Regional Wastewater System
- Wastewater System Plan
- Water Supply Plan
- Planning Reviews

# Wastewater system



- Seven Treatment Plants
- 600 miles of Regional Interceptors
- Estimated \$3 Billion Replacement Value
- 105 Communities Served
- Approximately 250 million gallons per day of Wastewater Flow

# Seven-County Map with Future Plants





# Metropolitan Wastewater Treatment Plant (Metro Plant)

Minnesota's largest treatment plant: treats about 70% of wastewater generated in the Twin Cities metropolitan area. Solids are incinerated and energy recovered.

**Located in: St. Paul, MN**

**Type: Advanced secondary with chlorination/dechlorination**

**Capacity: 251 million gallons/day**

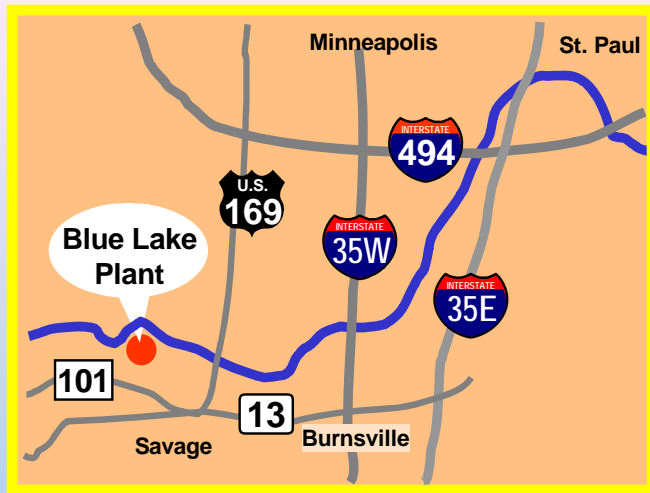
**Discharges to: Mississippi River**

**Communities served: 66**

**Population served: 1.9 million**

**Interceptors to plant: 377 miles**





# Blue Lake Wastewater Treatment Plant

**Plant produces heat-dried pellets for use as an agricultural fertilizer.**

**Located in: Shakopee, MN**

**Type: Advanced secondary with chlorination/dechlorination**

**Capacity: 32 million gallons/day**

**Discharges to: Minnesota River**

**Communities served: 29**

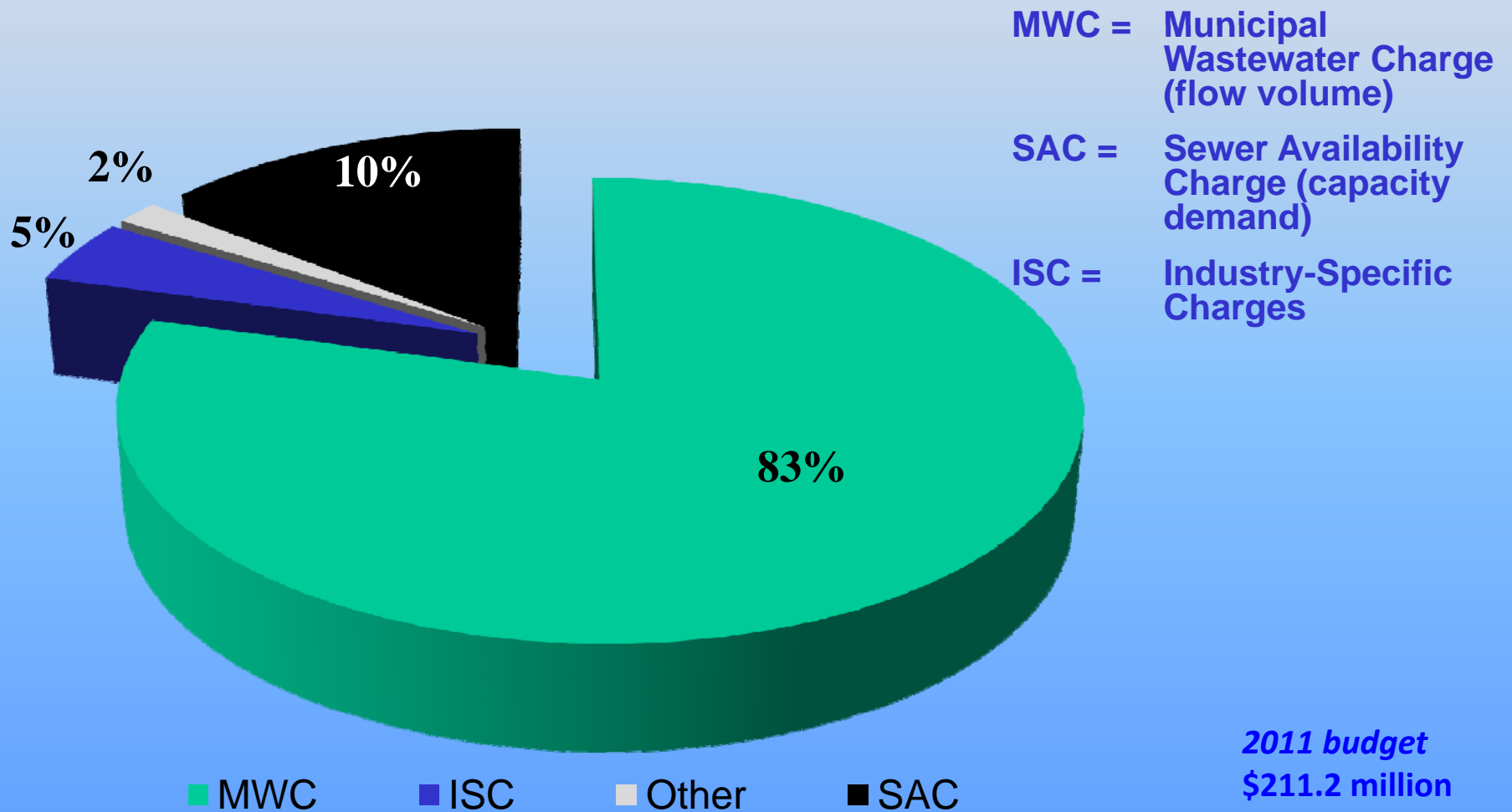
**Population served: 300,000**

**Interceptors to plant: 122 miles**



# MCES Budget: Revenue

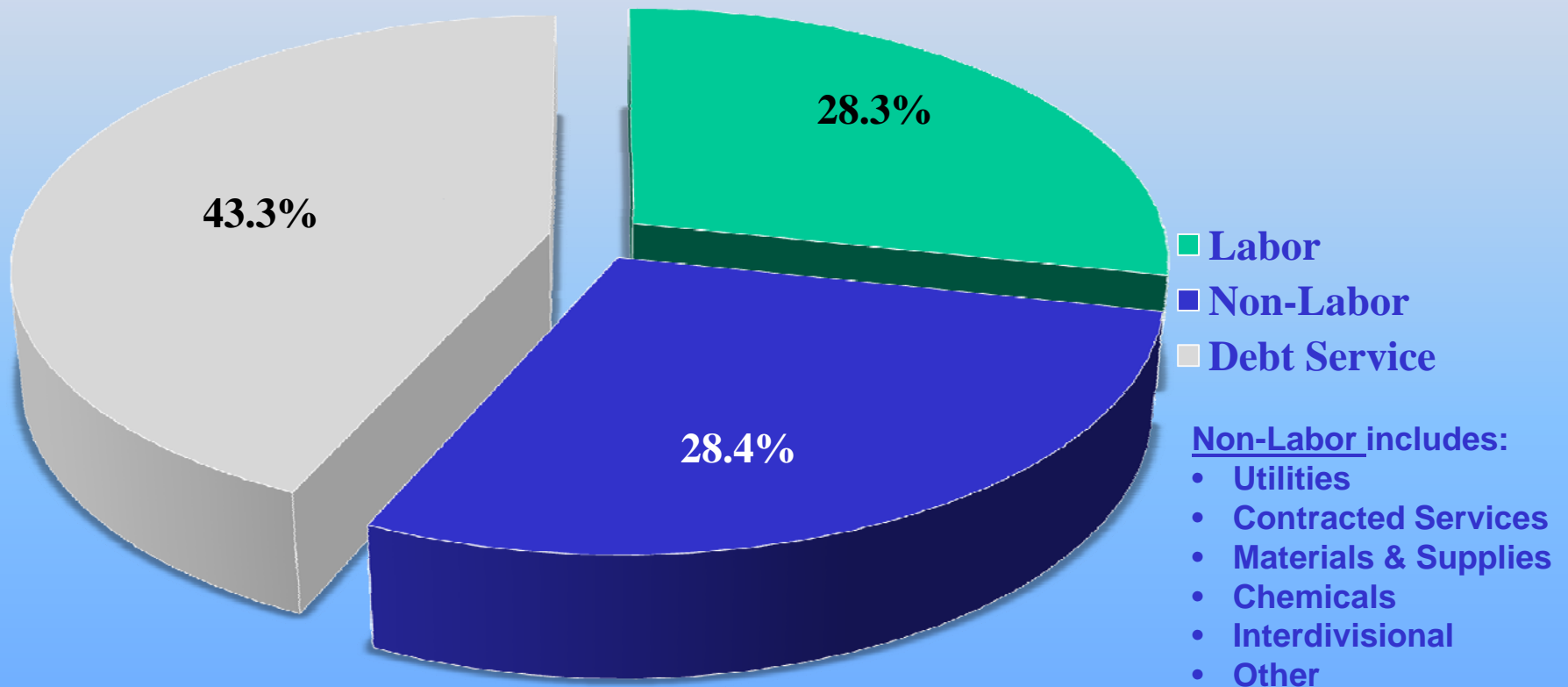
- Wastewater costs are 100% user-fee funded; no taxes





# MCES Budget: Expenses

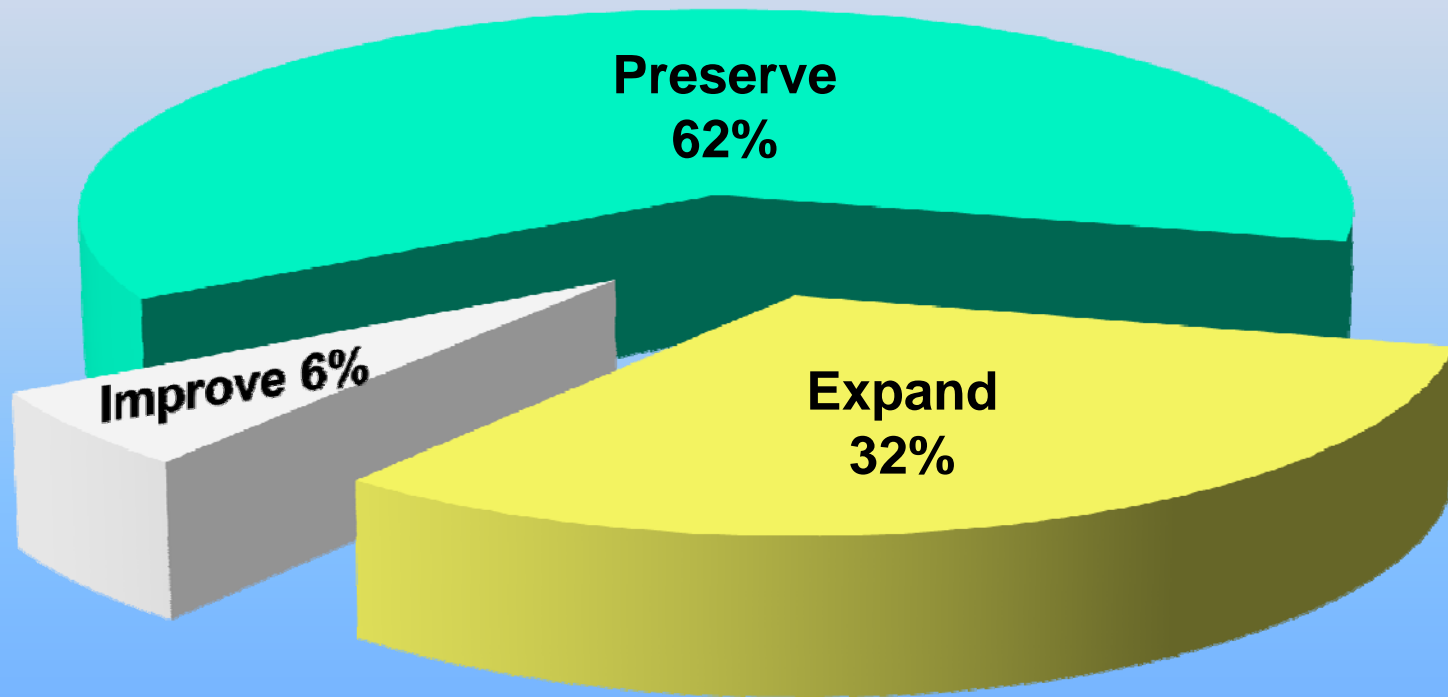
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*2011 budget*  
\$211.2 million

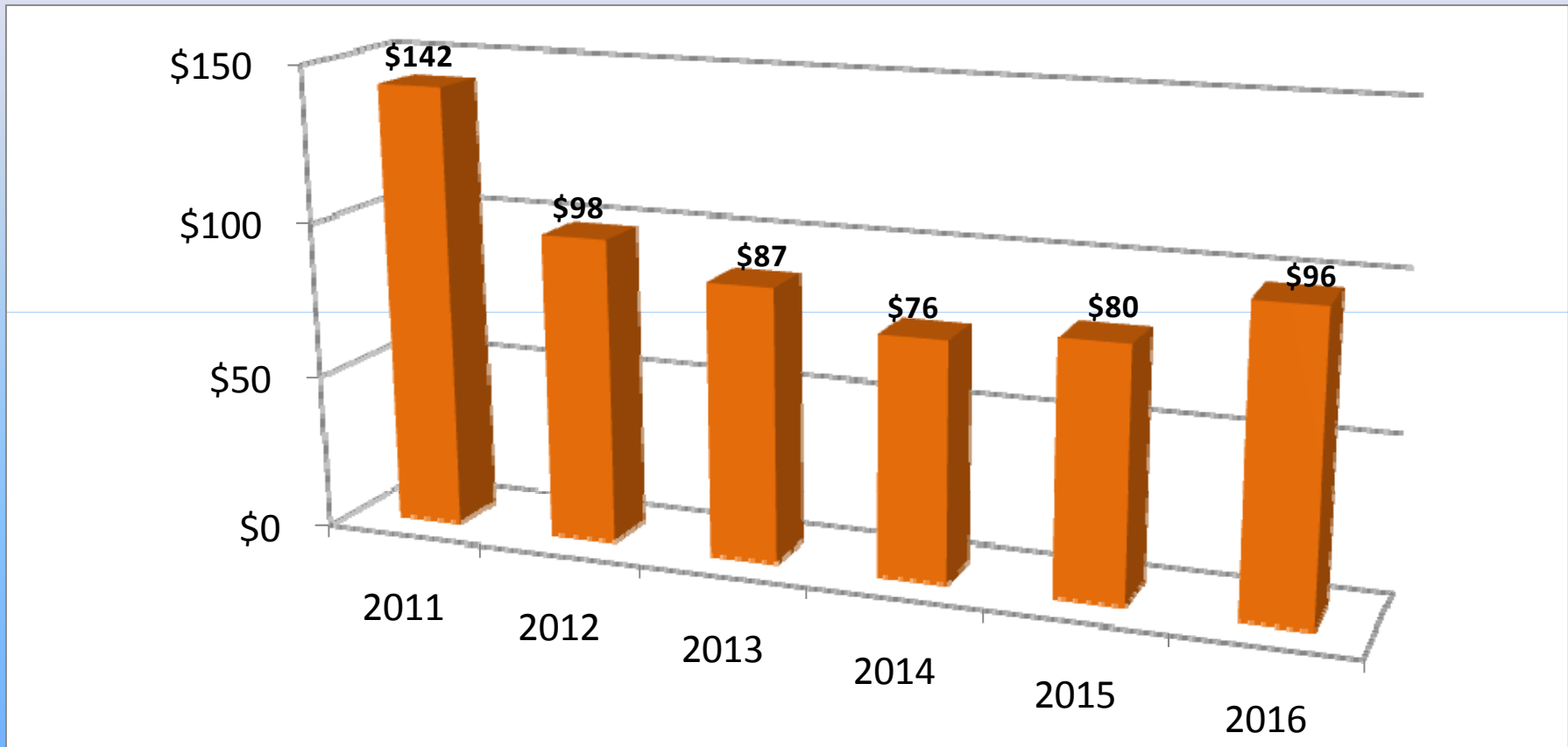
# Capital Improvement Program

## *Cost Breakdown by Project Objective*

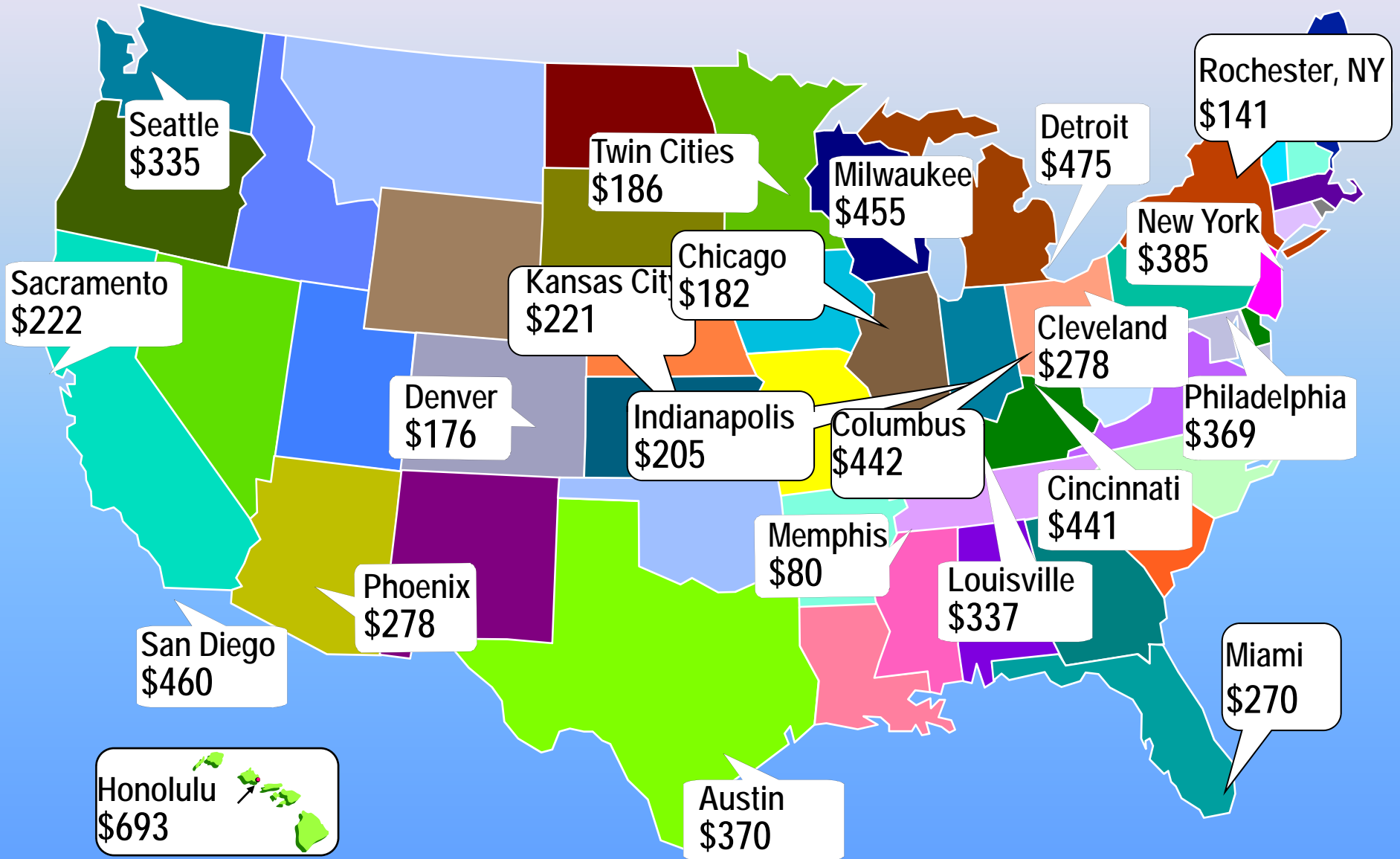


**Total Program**  
2011 - 2016  
**\$579 Million**

# 2011-2016 MCES Capital Improvement Program

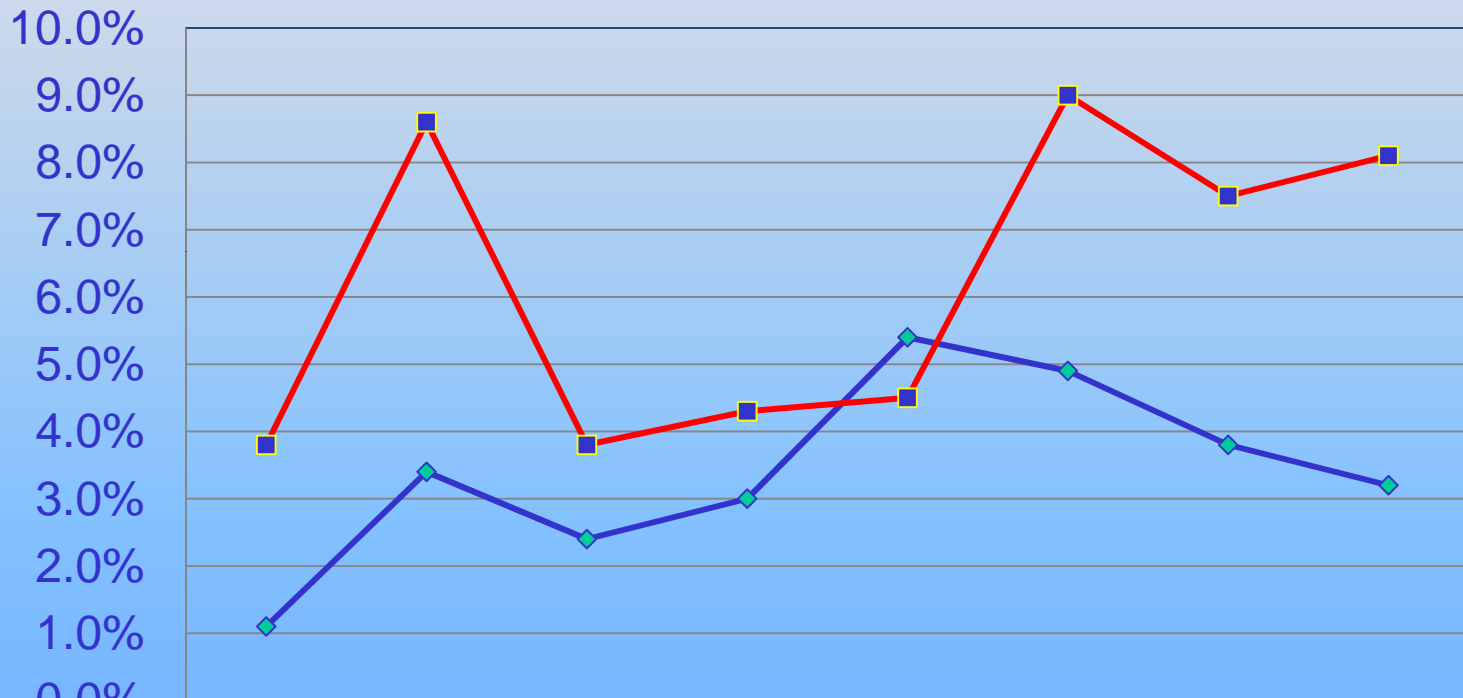


# Comparative Information Annual Household Rates



# MCES Increases Below National Average

Average Household % Increase

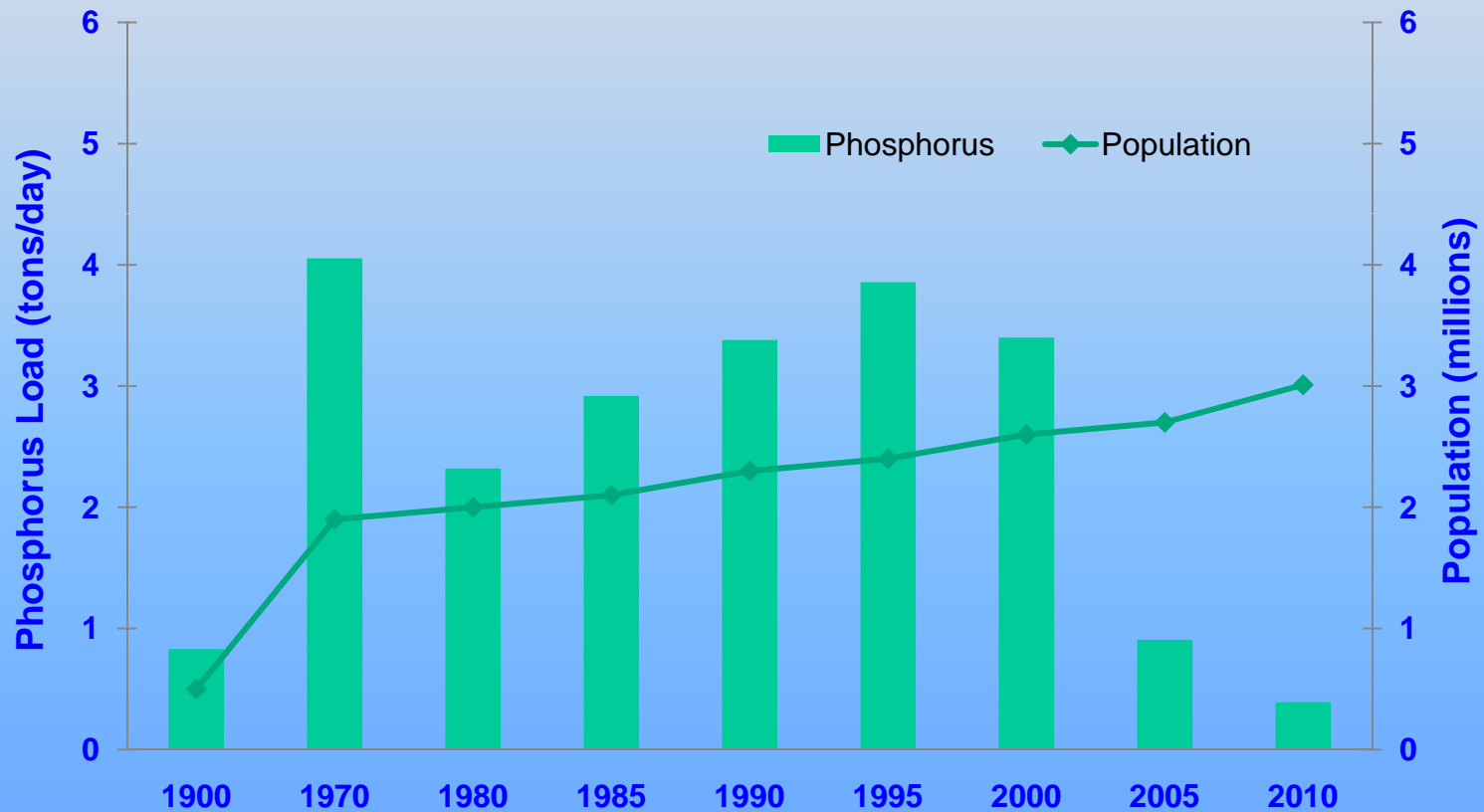


|                 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------|------|------|------|------|------|------|------|------|
| ◆ MCES          | 1.1% | 3.4% | 2.4% | 3.0% | 5.4% | 4.9% | 3.8% | 3.2% |
| ■ NACWA Average | 3.8% | 8.6% | 3.8% | 4.3% | 4.5% | 9.0% | 7.5% | 8.1% |

# Significant Issues / Initiatives

- Future Regulations
  - Phosphorus / Nitrogen limits
  - Perfluorooctane Sulfonate (PFOS)
  - Emerging contaminants
- Sewer Availability Charge (SAC)
- Infiltration / Inflow mitigation
- Energy Initiative
  - Metro Plant energy recovery
  - Blue Lake biogas generation
  - 25% reduction goal

# Wastewater Phosphorus Loads and Population Twin Cities Metropolitan Area in Select Years



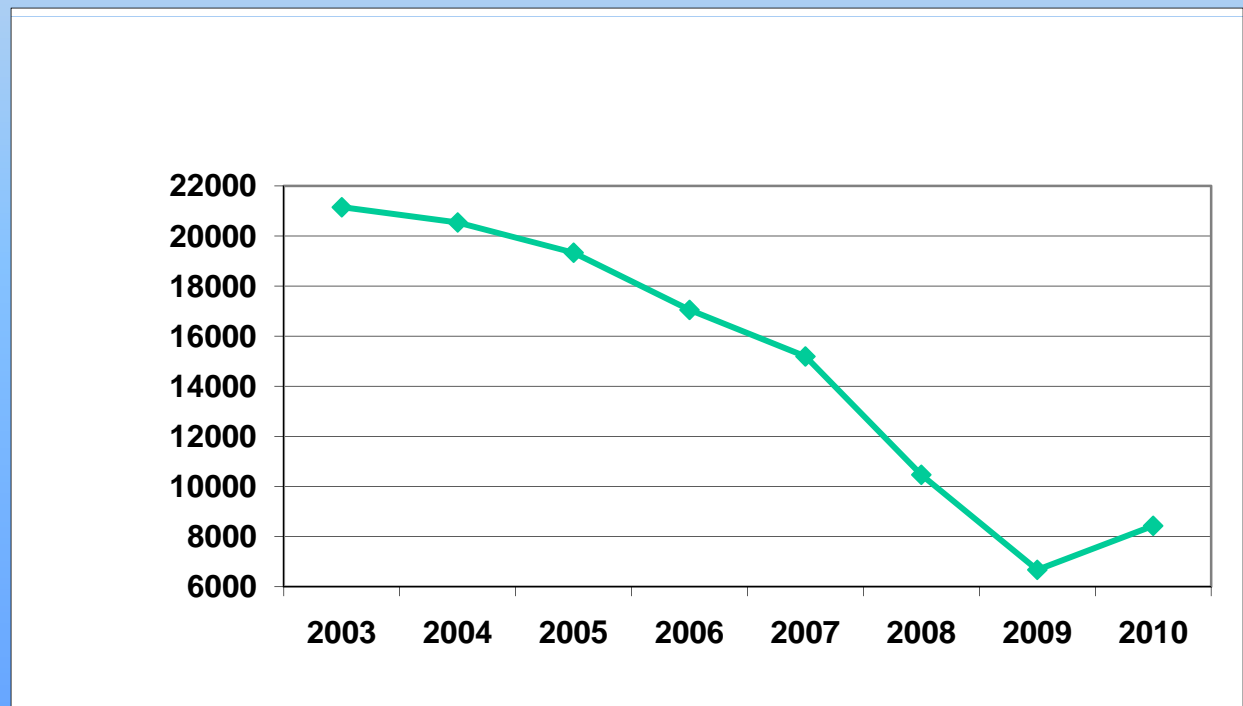
**Note: During 2000-2009, the combined phosphorus load of the three major rivers as they enter the Metro Area averaged 6.9 tons per day.**

# SAC Units

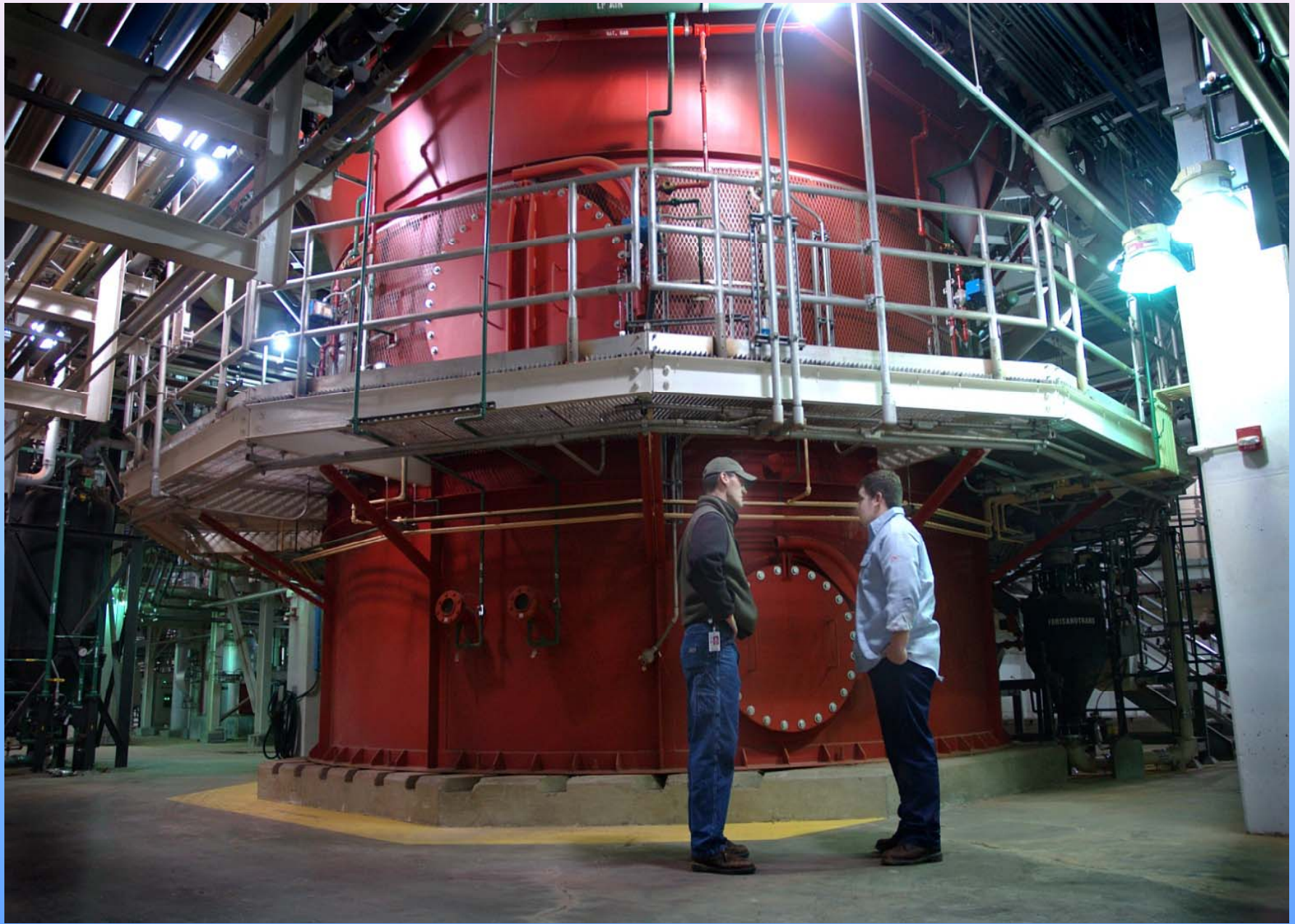
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In this decade, SAC units declined from 20,000/yr average to 6,675 in 2009, causing pressure on the SAC reserve fund balance

- 2003: 21,150
- 2004: 20,542
- 2005: 19,334
- 2006: 17,052
- 2007: 15,194
- 2008: 10,470
- 2009: 6,675
- 2010: 8,431







Questions

