



DWSD Wholesale Customer Rates Meeting Water Supply System

Meeting #1 – Capital Improvement Program Summary

October 20, 2011

The Water System's investment in capital improvements has varied over the years

- During the 1990s, DWSD invested approximately \$455 million (~\$45 million annually) in capital improvements to the water system
- During the 2000's, the corresponding figure is \$1.57 billion (~\$157 million annually)
- Estimated figures for FY's 2012-2016:
 - 2004 Master Plan = \$1.75 billion (\$350 million per year)
 - 2008 CIP = \$1.44 billion (\$287 million per year)
 - 2010 CIP = \$1.04 billion (\$208 million per year)
 - 2011 CIP = \$556 million (\$111 million per year)



The 2011 CIP reflects a fundamental shift in DWSD planning criteria

- Prior CIP's have largely been based on the 2004 Master Plan and "old" assumptions regarding System demand and capacity requirements
- Recently experienced levels of water demands have caused DWSD to reconsider these assumptions
- The 2011 CIP is designed to facilitate the new planning criteria as it emerges

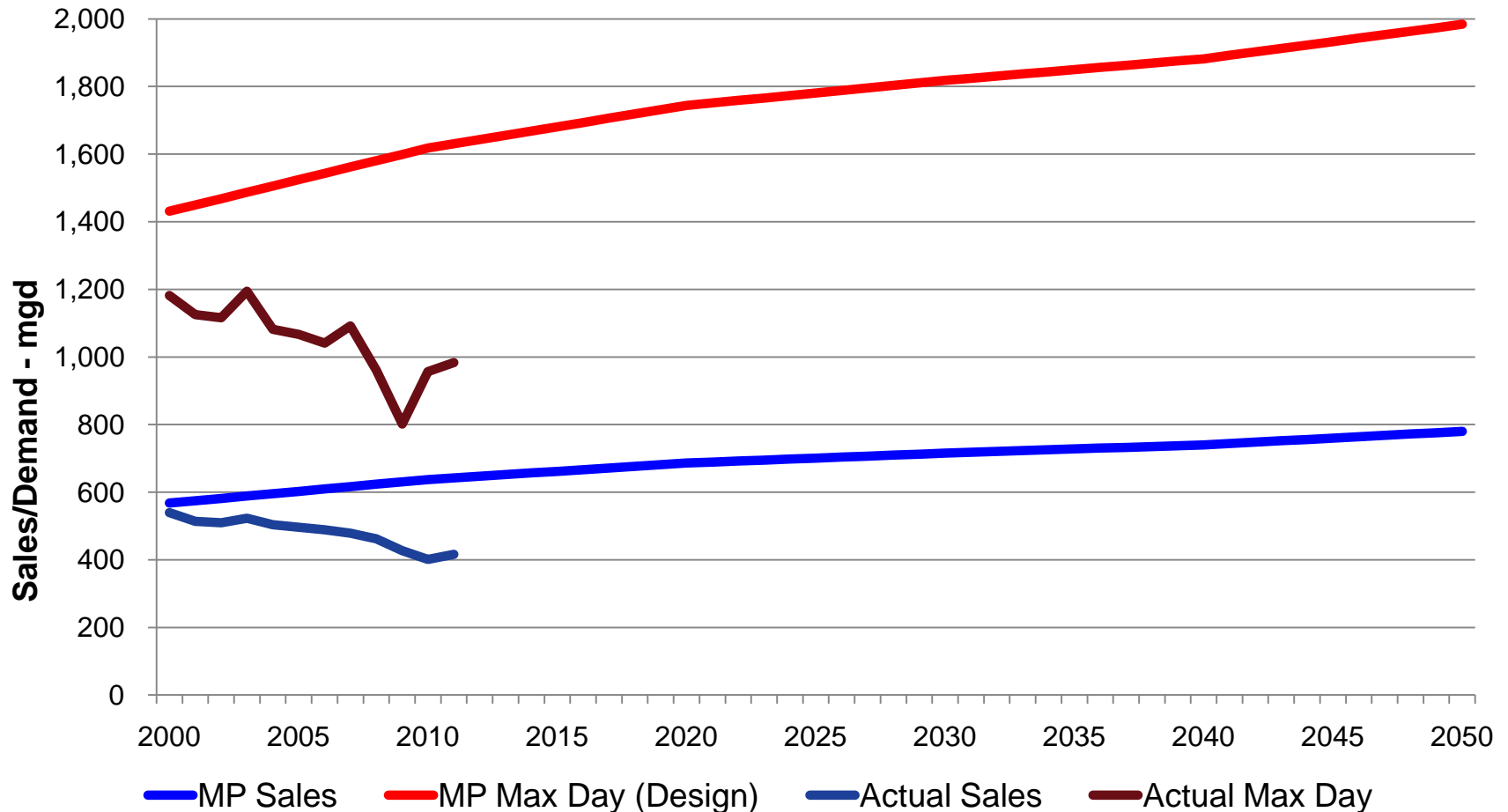


The 2004 Master Plan needs to be updated

- That document forecasted almost 40% growth from 2000 to 2050 (~0.65% per year)
 - Indicated WTP capacity expansion and significant delivery investments to meet expected rising demands
- Demands have dropped significantly (almost 30% from 2000 to 2010)
 - Several delivery improvements are not necessary and it MAY be possible to contract WTP capacity



The 2004 Water Master Plan was based on forecasted growth of 40% over a 50-year period, which has not occurred



The Water CIP is designed to continue reliable service while options regarding plant capacity are researched

- The 5 WTPs have a rated capacity of ~1.7 billion gallons per day (bgd)
- Based on current use, the System may be able to be reliably served with ~1.1 bgd
- Initial research reveals that the Northeast (NE) and Southwest (SW) WTPs could potentially be “taken out of service” in some fashion
- This would require significant reconfiguration of the existing delivery system, and may include transforming the NE and SW plants into storage and pumping facilities



The Water CIP is designed to continue reliable service while options regarding plant capacity are researched

- The funded portion of the proposed CIP contains \$30 million to address short term improvements at these plants while the long term decisions are researched
 - These specific improvements have yet to be identified
- The funded portion of the proposed CIP also contains projects to support this research
 - Comprehensive Master Plan Update
- All of the other prior identified improvements at NE and SW WTPs (totaling over \$325 million) have been deferred pending ultimate decision regarding their future use



The Master Plan scope contains these overarching task categories

1. Review Previous Master Plan Study
2. Develop Water Demand Projections by Individual Customer and Area
3. Develop Water Supply and Management Plan
4. Update Water Quality Management Plan
5. Customer Service and Regional Support
6. Financing, Staffing, and Implementation
7. Coordinate with DWSD Management Team and Wholesale Customers



The Master Plan scope has specific requirements that include:

- Update projected water demands for a 20-year period
- Utilize existing and enhanced programs to get customer input on water demands
- Expand DWSD's hydraulic modeling capability in order to analyze the system under a continuous simulation mode
- Evaluate current means of measuring production at each water treatment plant
- Evaluate needs for regional storage, including storage within wholesale customers' service area
- Prepare a proposed 20-year CIP
- Prepare a recommended financing plan for the CIP and related support activities



The CIP contains projected expenditures for a 5-year period, but rates provide funding for the first two years

- For the July 2011 CIP, the plan presents projected expenditures for FYs 2012 through 2016
- The financing plan for the FY 2013 rates will focus on requirements for FYs 2012 and 2013
- The “Funded” portion of the CIP consists of FYs 2012 and 2013 (the first two years of the CIP)
- The CIP also denotes remaining projected expenditures beyond the five years
 - This column often reflects projects that have been deferred pending additional review



The 5-year CIPs total approximately \$1.1 billion of projected expenditures, approximately half of which is in the “Funded” portion (*\$ millions*)

	Water Supply System	Sewage Disposal System	DWSD Total
FY 2011-12	90.97	125.56	216.53
FY 2012-13	142.79	145.14	287.94
Subtotal “Funded”	233.76	270.70	504.47
FY 2013-14	137.72	137.10	274.82
FY 2014-15	98.61	106.38	204.99
FY 2015-16	85.93	57.50	143.42
Total 5-year CIP	556.02	571.69	1,127.70
Remaining beyond 2016	167.14	36.68	203.82
Total CIP	723.16	608.37	1,331.53

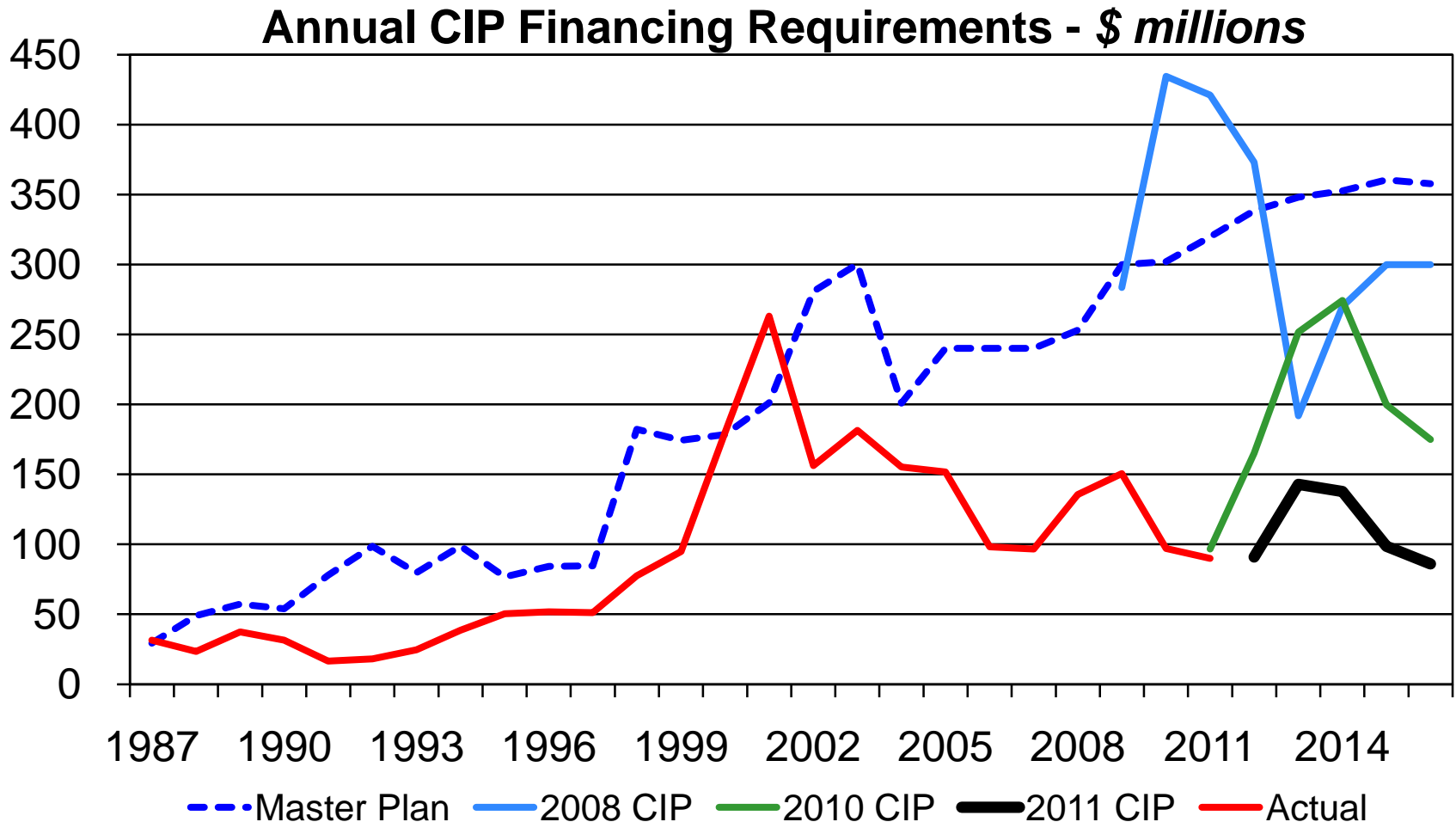


The CIP reports categorize projects based on their “Active” status

- **ACTIVE Projects:**
 - Work is underway – the CIP contains projected expenditures necessary to complete these ongoing projects
- **UNDER PROCUREMENT Projects:**
 - Project is about to begin. A DRMS number (accounting code) has been assigned, but notice to proceed has not yet been issued
- **NEW Projects:**
 - Project proposal has been approved but procurement process has not yet been initiated

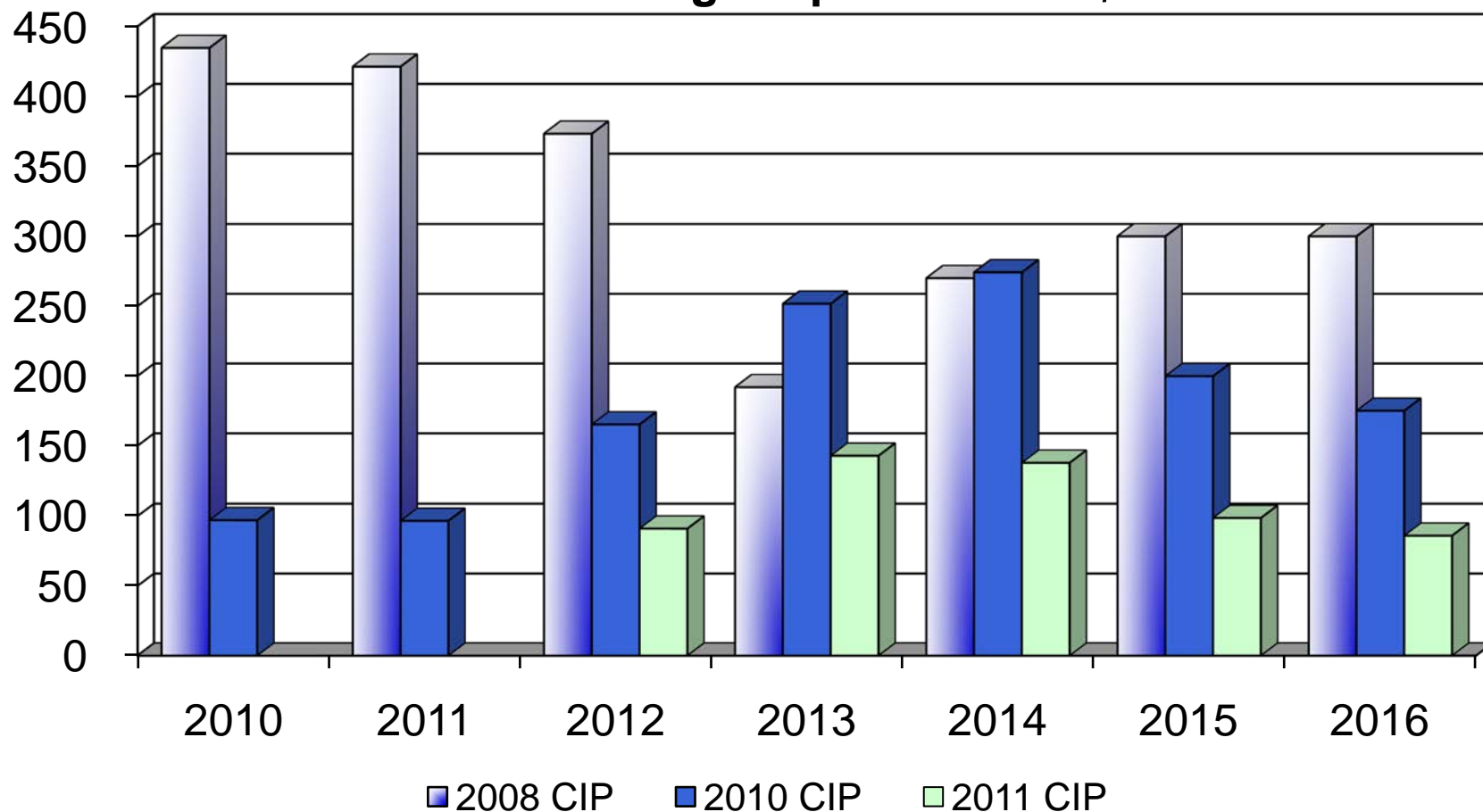


The 2004 Water Master Plan identified an aggressive CIP, which has been modified recently to reflect more reasonable expectations



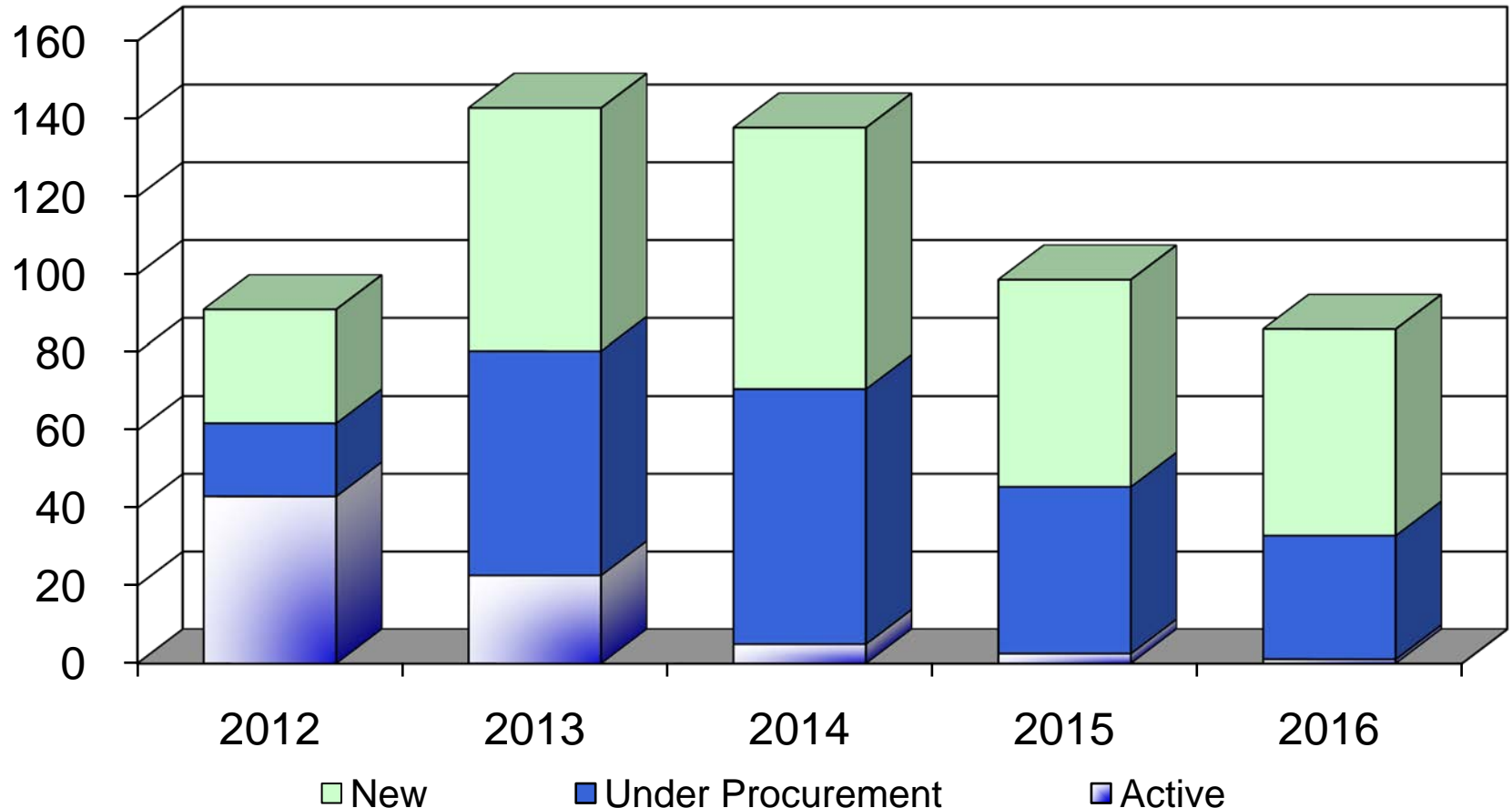
Starting with the July 2009 CIP, DWSD reduced and/or deferred several major Capital Improvement Program projects

Annual CIP Financing Requirements - \$ millions



Due to the recent, ongoing investigations regarding capacity utilization the Water CIP contains a large amount of “New” Projects

Annual CIP Financing Requirements - \$ millions



The Water CIP report contains criteria designed to identify project purpose and allocation status

- Criteria in Report
 - Primary Project Purpose
 - SDWA Water Quality Compliance
 - System Reliability
 - Efficiency Measures
 - Growth to New Service Areas
 - Allocation Status
 - D - Detroit Only
 - CTA - Common to all



The 2011 CIP reflects reduced investment while DWSD strategically “right sizes” capacity and service levels

- Master Plan study to identify capacity is key element of the CIP
 - This process will take a couple of years and result in a July 2013 Water CIP that begins to implement the updated Master Plan
 - Stakeholders should not expect the July 2012 Water CIP to reflect major changes from the July 2011 CIP
- Participation from customers is vital and DWSD intends to engage them



Specific projects that were deferred from the 2010 CIP pending further review

- All Major projects at Northeast Water Treatment Plant that had not been started
- All Major projects at Southwest Water Treatment Plant that had not been started
- WW-536: WWP Yard Piping Improvements
- SP-567: Springwells Header Pipe Replacement
- Ready Road Pump Station and Reservoir

