



WATER'S WORTH IT™

Water Environment
Federation
the water quality people



MoneyMatters™

Smarter Investment to Advance Clean Water

NACWA Summer Conference Philadelphia, Pennsylvania July 16, 2012



PRIORITIES
PERFORMANCE
SERVICE



The St. Louis Consent Decree

- Wet weather lawsuit filed June 2007
- Consent decree entered April 2012
- Estimated cost = \$4.7 B (2010 dollars)
 - \$1.9 B CSO long term control plan
 - \$1.3 B SSO elimination
 - \$1.3 B Asset renewal
 - \$230 M Cityshed improvements
- Compliance Schedule = 23 years



SSO Elimination

- Early action elimination of 50 constructed SSO locations by 12/31/12
- SSO Master plan that provides a detailed removal schedule of remaining by 12/31/13
- 85% removal of constructed SSO locations by 12/31/23, approximately 178 SSOs
- Remaining 15% by 12/31/33 if technically justified, less than 32 SSOs

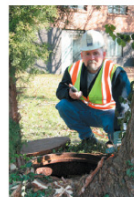


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SSO Elimination Tools

- Increased maintenance
- Asset condition monitoring
- Flow metering
- Activation monitoring
- Sewer replacement for increased capacity
- Private I/I control
- Pipe rehabilitation
- Storage tanks



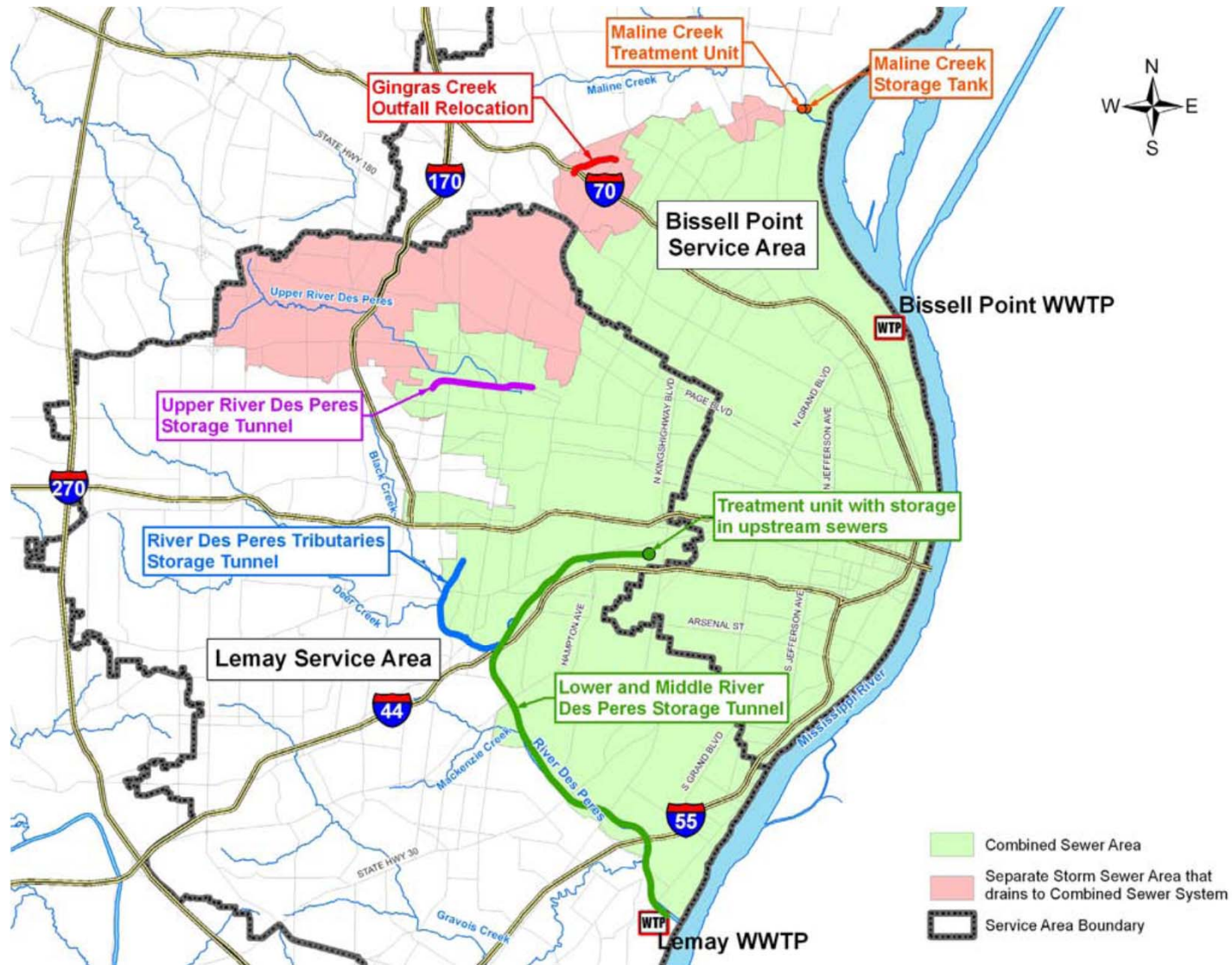
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CSO Control

- 177 CSO locations
- \$100 M green infrastructure program
 - \$3 M pilot program underway
 - Pilot performance report due in 2015
- 3 tunnels
 - 9 mile, 28 foot diameter
 - 2.25 mile, 20 foot diameter
 - 1.7 mile, 24 foot diameter
- 2 high rate treatment plants

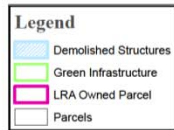




CSO VOLUME REDUCTION - GREEN INFRASTRUCTURE (Pilot Program)

(Project #11048)

Concept Schematic



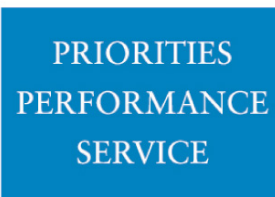
SCALE: 1" = 50'

0 25 50 100 150 200 Feet



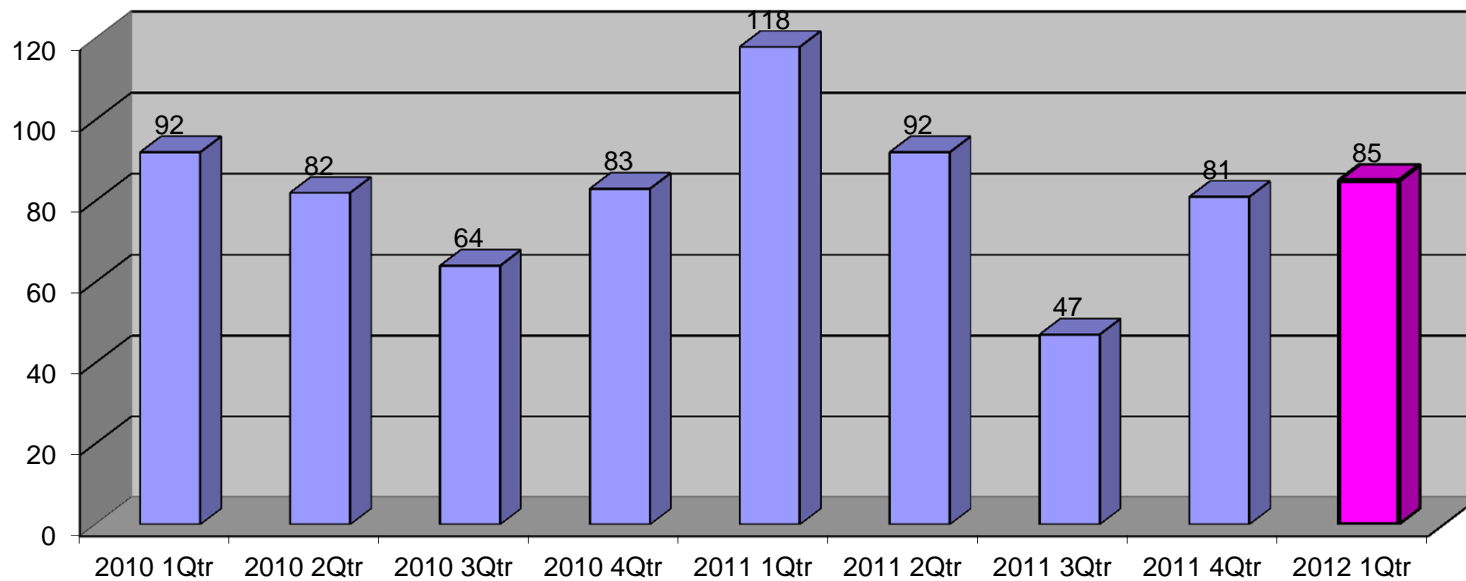
CMOM Metrics

- Inspection
 - CCTV 280 mi/yr until system completely inspected, plus
 - CCTV 120 extra mi/yr until 12/31/13
 - 15,000 structures/yr
 - Forcemains 1-5 yr cycle based upon risk
- Cleaning
 - Non PVC $\leq 21"$, every 5 years
 - PVC & CIPP $\leq 21"$, every 10 years
- Rehabilitation/replacement
 - 1500 structures/yr
 - 90 mi/yr for first 10 years, 65 mi/yr thereafter



Clean the sewers first!

Maintenance Related Basement Backups
2003 – 2008 average = 220 per quarter



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Asset Management Features

- MSD presents service level metrics to EPA
- Service level metrics used to fine tune program the CMOM metrics
 - Failing to meet metrics – increase efforts
 - Exceeding metrics – right size efforts
- Pump station inspection
- FOG program
- Integration of ESRI GIS and Maximo asset management system



Getting Started

- Not really, we've spent \$2.5B since 1992 addressing 350 overflows
- 2013-16 rates approved June 5th
 - 85% favorable vote
 - 52% increase, with \$945 M debt authorization
 - 126% increase with cash funded program
 - Current rates = \$28.73 for average homeowner
- ~ \$1B of capital improvements over 4 years
- Rates expected to rise ~2.5x by 2020



Money will Matter

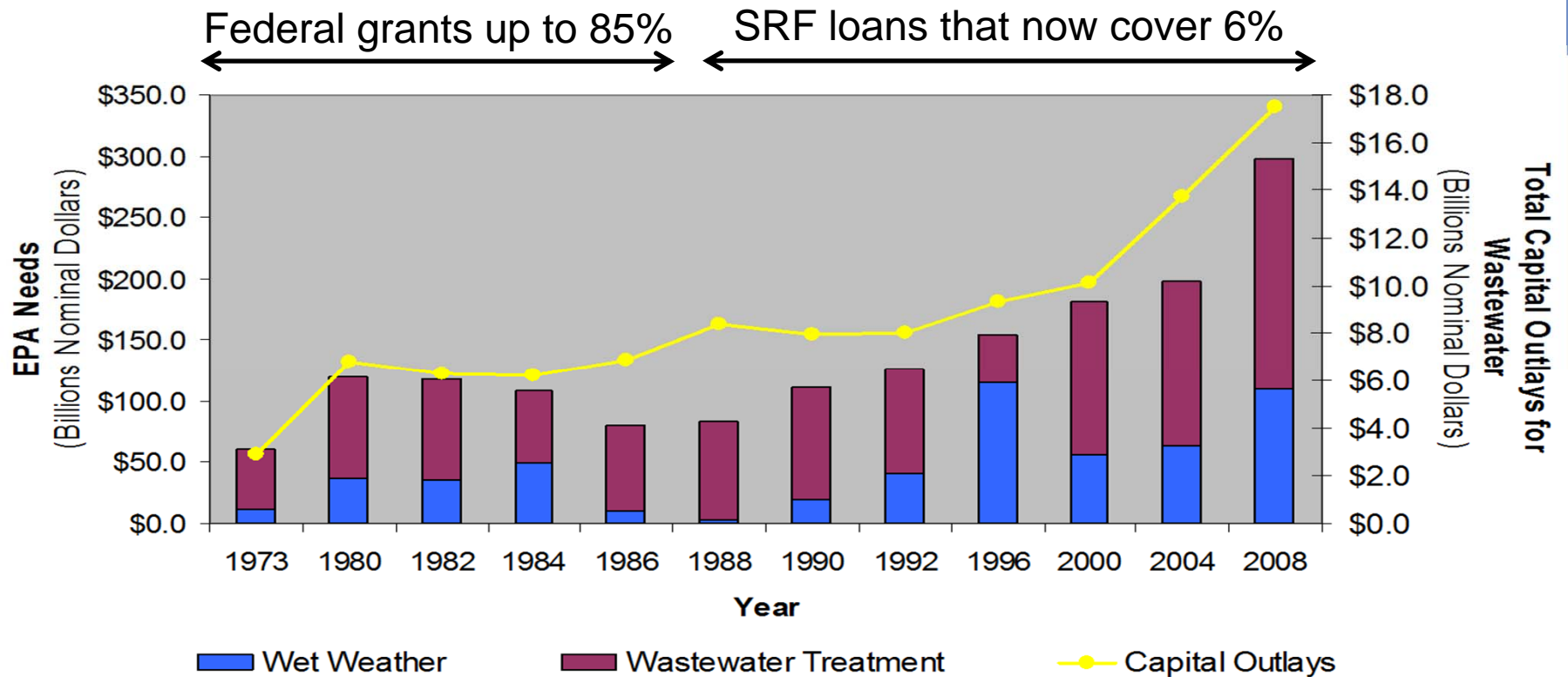
- We can manage what we've agreed to, but
- As rates rise to ~\$1000 per year what about:
 - POTW Nutrient removal - \$500M
 - Recreational WQ standards - \$2B
 - Incinerator MACT standards - \$250M
 - Stormwater pollution - ?
 - Climate change- ?
 - Immerging contaminants - ?



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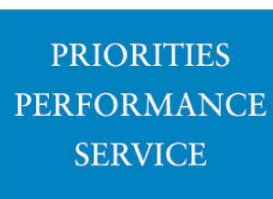
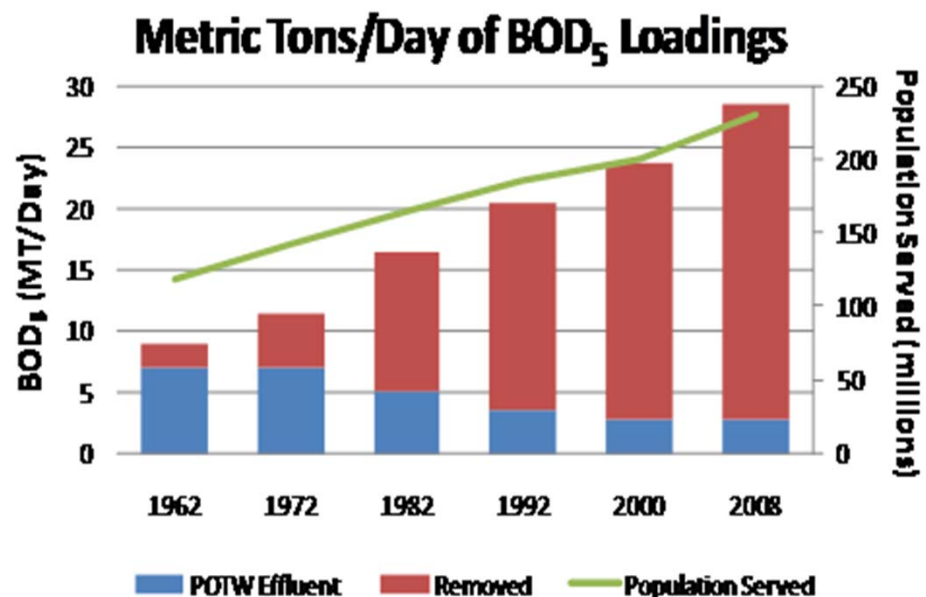


An Historical Perspective: "Needs"



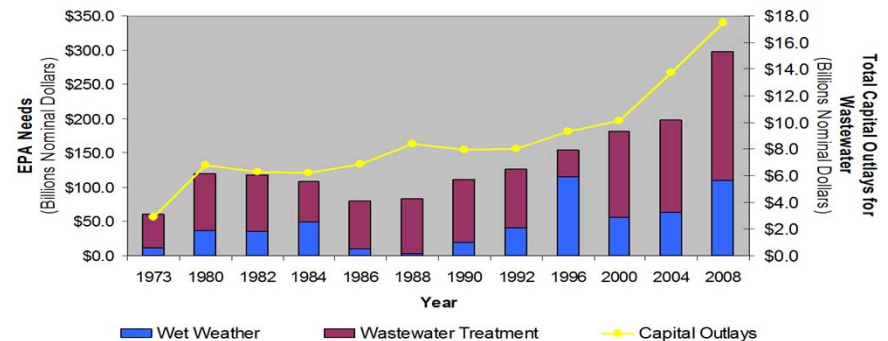
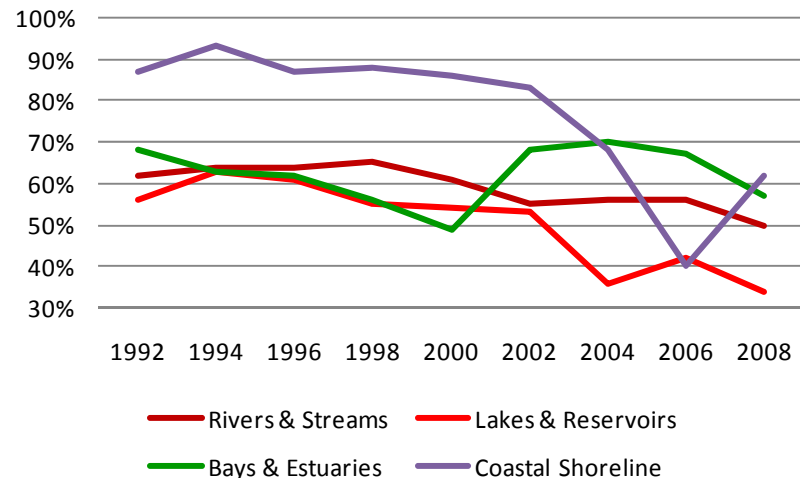
An Historical Perspective: Benefits

- \$600 billion (\$2010) to build, repair, and replace wastewater infrastructure
- Prevented nearly 30,000 tons of organic pollutants a day from reaching America's waters
- Progress each decade, despite growth in population served, until the last decade
- Well documented benefits: ecological, fisheries, recreation, land values, industrial productivity, GDP



Chronic Under-Investment

- Water quality goes down in rivers, lakes, estuaries, and coastal waters
- Investment needs to meet Clean Water Act objectives go up, despite increases in investment in all periods
- Because clean water benefits flow downstream, communities that pay 100% of the costs of clean water will tend to choose less water quality than society as a whole would choose



NACWA's *Money Matters* Campaign -Smarter Investment to Advance Clean Water-

- Pursue a watershed-based approach to solve water quality challenges
 - The Clean Water Act of 1972 must be updated to include controls on all sources of water pollution.
- Recommit to new technology and pioneering innovation
 - Municipalities and states must be encouraged, not deterred, in implementing innovative strategies, techniques, and technologies.
- Entrust local experts and leaders to use limited dollars to maximize community benefit
 - Regulatory structures must allow local clean water experts the flexibility to adapt to shifting public health and safety problems and priorities.
- Develop a rational, integrated approach to assessing community affordability
 - Using stakeholder input, EPA should conduct a complete and thorough update of its affordability criteria under the Clean Water Act.





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- We are now faced with educating the public on the value of water and the need to pay more.
- Our customers will not “buy-in” if we do not get the most benefit from the dollars entrusted to us.
- The issue of prioritizing scarce resources to achieve the highest water quality benefits is critical.



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How Can We Pay For This?

1. We need more money on the table and all options need to be part of the funding mix:
 - Continued and Consistent Rate Increases
 - Water Trust Fund
 - Private Investment- PPPs and PABs where appropriate
 - State Revolving Fund
 - Infrastructure Bank
 - Individual Earmarks
2. Given the ongoing economic situation, federal funding or new tax revenue to support clean water are unlikely in the short-term...THEREFORE:

It is clear that a *NEW APPROACH TO SMARTER CLEAN WATER ACT INVESTMENT* is needed to address this challenge!



NACWA's Related Advocacy Efforts

- Use 40th Anniversary of CWA as a moment to rethink key priorities, not just celebrate past success
 - Utility of the future
 - Ensure collaborative efforts within water sector and other key partners
 - Develop comprehensive wet weather legislation
 - Seek additional federal funding
 - Expand advocacy strength through NACWA Engage and social media



We have a
Challenge ...



... this is not who
we are.

