

3/20/08

Sustainable Infrastructure Overview

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Statewide Committee
State Water Plan
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Why are we here?

- Provide Overview of the Initiative
- Need to start taking a more comprehensive look at our water infrastructure
- Solicit Input and Support
- Different Way of Thinking
 - Not something new, something part of our everyday jobs

Goal: Keep Pennsylvanians Working Repairing Pennsylvania's Infrastructure

Action Item #4
Launch Rebuild Pennsylvania to repair the state's aging infrastructure with over \$700 million to accelerate progress in next three years. *With these funds, over the next three years at least 1,000 bridges will be repaired, all state-owned high hazard dams will be addressed and matching funds will be provided to help local government repair their dams. Capital funds will provide targeted infrastructure improvement necessary for business expansion, completion of a record number of flood mitigation projects, improvement on state's rail/freight lines and expansion of the capacity of regional airports.*

Details
PennDOT will commence the accelerated bridge repair program immediately, the balance of the infrastructure improvements require the passage of the Governor's budget proposal

From Governor's Office Presentation

Over \$250 Million in Infrastructure Improvements in Twelve Months

	2008-09	2009-10	2010-11
New Capital Funds			
Bridge Repairs	\$200.00	\$200.00	\$200.00
State-owned Dam Repairs	\$12.00	\$25.00	\$0
New Flood Projects	\$15.00	\$20.00	\$58.00
New Aviation Projects	\$5.00	\$5.00	\$5.00
New Rail Freight Projects	\$15.00	\$10.00	\$17.00
Total-Capital Funds	\$247.00	\$260.00	\$273.00

	2008-09	2009-10	2010-11
New Operating Funds			
PENNSYLV. Local Dam Repairs	\$2.20	\$4.40	\$0
DWP-Flood Control Projects	\$3.00	\$3.00	\$3.00
Flooded Areas Mapping	\$2.40		
New Flood Control Postings	\$1.50	\$1.50	\$1.50
Infrastructure for Business Development	\$16.00	\$6.00	\$5.00
Total-General Fund	\$19.10	\$8.90	\$4.50

From Governor's Office Presentation

Executive Order

- Sustainable Water Infrastructure Task Force
 - 24 Members
- Identify the following:
 - The "gap" between financial need and available resources
 - Cost savings due to non-structural alternatives
 - Actual costs for providing services
 - Recommendations for promoting components of Sustainable Infrastructure (more later)
- Revise existing policies and procedures, guidelines and regulations to insure consistency with the principles of Sustainable Infrastructure

Sustainable Infrastructure (SI)

What does it mean?

Sustainable Infrastructure

Just the latest buzz-word - that will soon go away?

NO

SI is an umbrella concept that is the motivator for existing State infrastructure-related programs, *plus*

Additional programs, or a refinement of existing programs, that might be added to reinforce the concept.

What started SI?

Recognition, on a national scale, that :

- Much of our water and sewer infrastructure is in bad condition and getting worse.
- The government has shallow pockets
- The utilities can work more effectively and efficiently to improve delivery and control costs

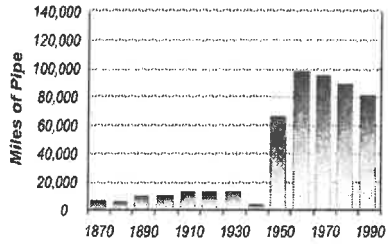
2002 EPA Gap Report

The Purpose – To reach a common, quantitative understanding of the magnitude of increase in investment needed.

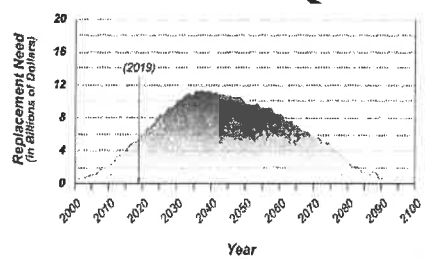


<http://www.epa.gov/owm/gapreport.pdf>

Our piping system was largely constructed over the past 60 years



National Funding Gap – Coming Peak

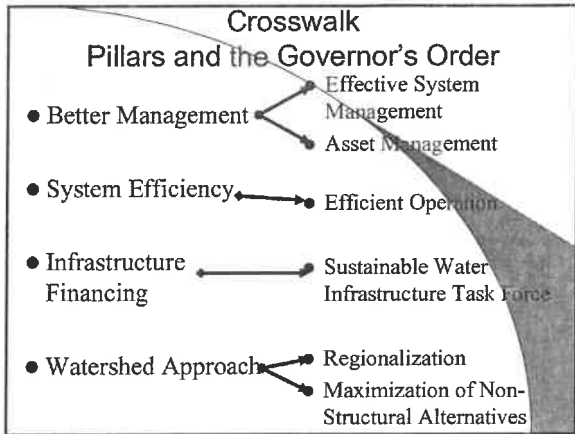


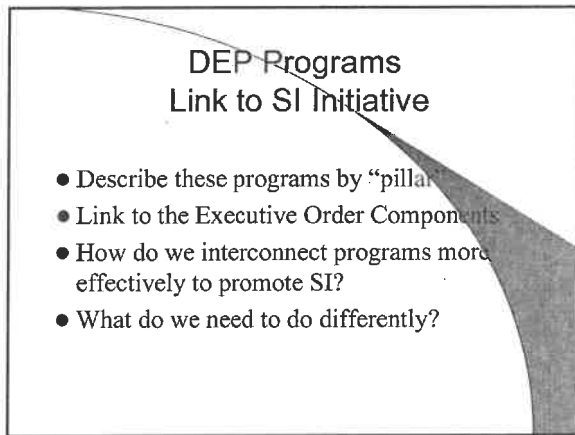
So what IS sustainable infrastructure?

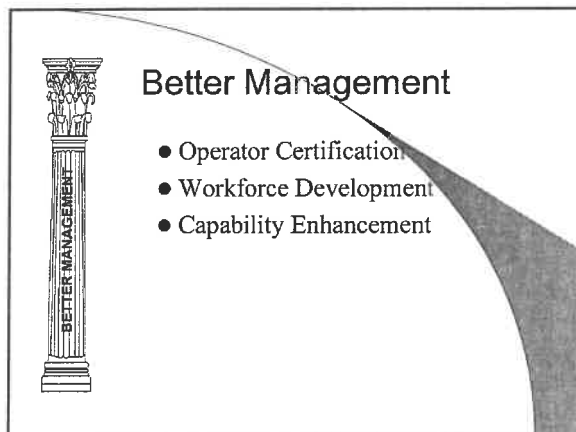
It is usually defined as the four SI “pillars”




- **Better Management** (Asset Management, Effective Management)
- **Full Cost Pricing** (Infrastructure Financing)
 - ✓ Adequate rates; subsidy where necessary
- **Water Use Efficiency** (System Efficiency)
 - ✓ Optimized operation
 - ✓ Water and Energy Conservation
- **Watershed Approach:** Innovative solutions
 - State Water Plan
 - Regionalization
 - Non-structural Alternatives











System Efficiency

- Workforce Development
- Capability Enhancement
- Water Conservation Technical Assistance Center
- Energy Conservation and Efficiency Initiatives



Infrastructure Financing

- Focus of the Governor's Task Force



Watershed Approach

- State Water Plan
- Integrated Water Resource Management
- Green Infrastructure
- Sewage and Water Facilities Planning and Permitting
- Regionalization



What is the PA Gap Study?

- Goal – Identify:
 - Utility Cash Flow Needs, 20 year
 - ↳ – Capital
 - ↳ – O&M
 - Cash Availability
 - Existing user charges
 - “Affordable” future user charges
 - Available subsidies



What is the PA Gap Study? (continued)

- Quantify the “Gap” (#1 above minus #2 above)
- Promote Needed Change
 - State assistance program methods & targeting
 - Subsidy distribution criteria
 - Encourage better management methods, like AM
 - Increased user charges where necessary



What is the PA Gap Study? (continued)

- Study Method
 - Joint State/EPA Study Design
 - State collects data, 10% of systems (ongoing)
 - 196 Wastewater Systems
 - 158 Drinking Water Systems
 - Selection by Water Basin, based on flow & population served
 - EPA HQ/Contractor data analysis
 - Joint EPA HQ/State report preparation

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Next Steps

- Strategic Planning Effort
- Support Sustainable Water Task Force
 - Report Due October 2008
- Contact Information
 - Division Phone Number: 717-705-4090
717-787-0122
