Status Report of Water & Wastewater Infrastructure in the United States

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American Society of Civil Engineers Infrastructure Report Cards

- Last round was done in 2009
  - Drinking Water Grade: D-
  - Wastewater Grade: D-
- Effort has begun to update report cards in 2013
  - Arizona is doing its own
    - 2004 Report card did not include water & wastewater
  - U.S. economy has forced deferral of maintenance & repairs
- Failure to Act Economic Analyses
    - What's the cost of not investing?
      - Businesses
      - Individuals

“So, what is the grade based upon?”

- Report Card Advisory Council
  - Analyze current data and conditions within the 15 categories
  - Consult with additional technical and industry experts
  - Assess and assign grades
- Evaluation Criteria
  - Capacity
  - Condition
  - Current & future funding
  - Public safety
  - Resilience
- Sources
  - Publicly available data
  - Subjective assessment of engineers

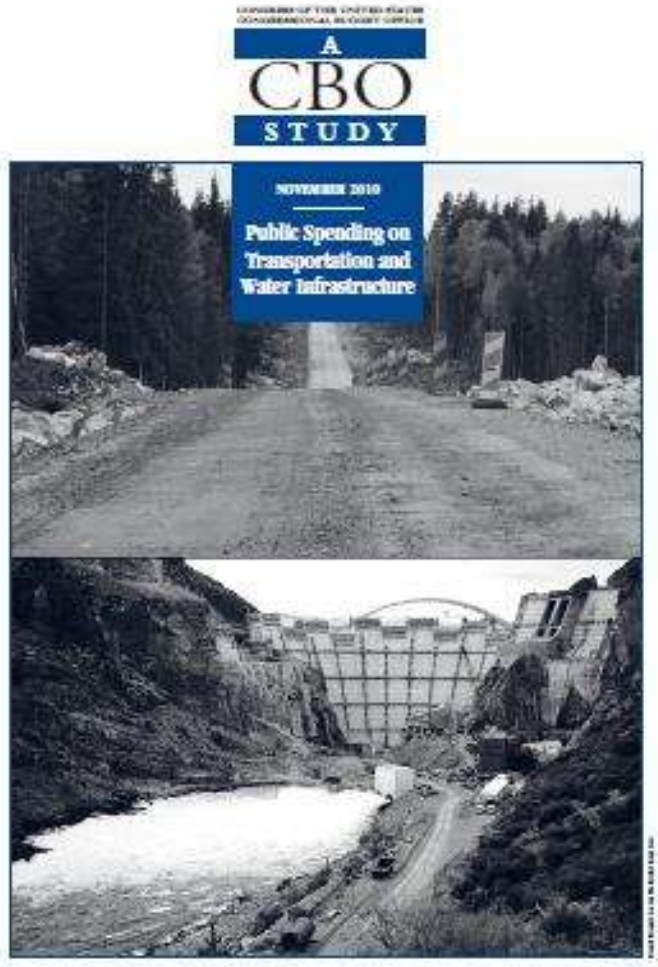
Drinking Water

U.S. Drinking Water System Conditions

- ~$11B annual shortfall for repair & replacement
  - Just to meet existing and planned regulations
  - Does not account for increases in demand
- 2002 EPA Gap Analysis:
  - Funding gap for 2000-2019 of between $45B and $263B for O&M
  - Capital needs pegged at $161B for 20 year period

2003 Congressional Budget Office Study

- "Current funding from all levels of government and current revenues generated from ratepayers will not be sufficient to meet the nation's future demand for water infrastructure."
- Estimated that between $10B and $20B is needed between 2002 and 2022



Support not Keeping up with Projections

- Congress enacted the drinking water state revolving loan fund (SRF) program in 1996
- Between FY 1997 and FY 2008, Congress appropriated approximately $9.5 billion for the SRF
  - 11-year total is only slightly more than the annual capital investment gap for each of those years as calculated by the EPA in 2002.

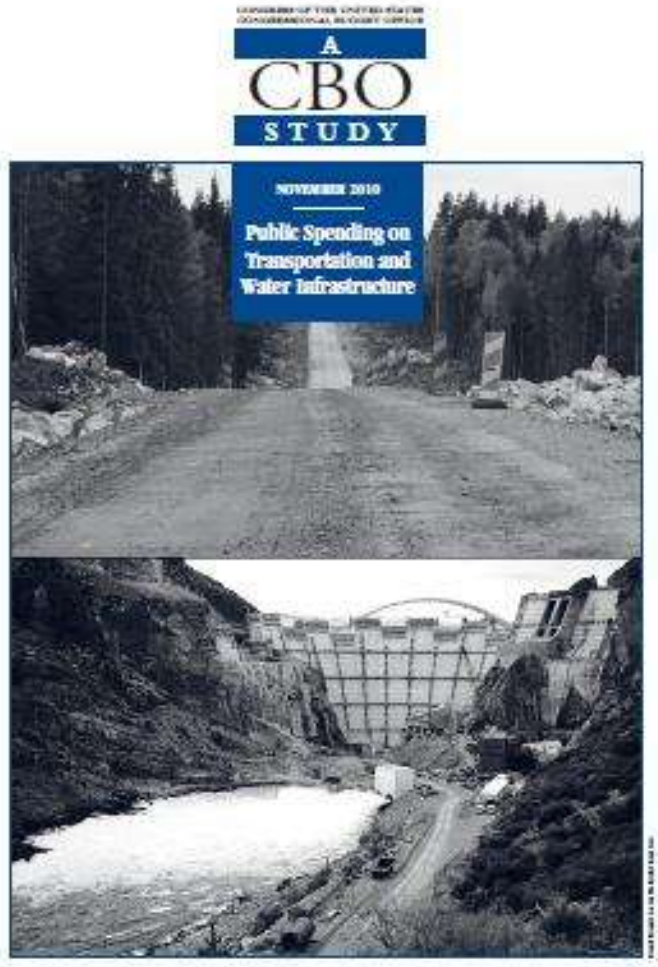
Wastewater

U.S. Wastewater System Conditions

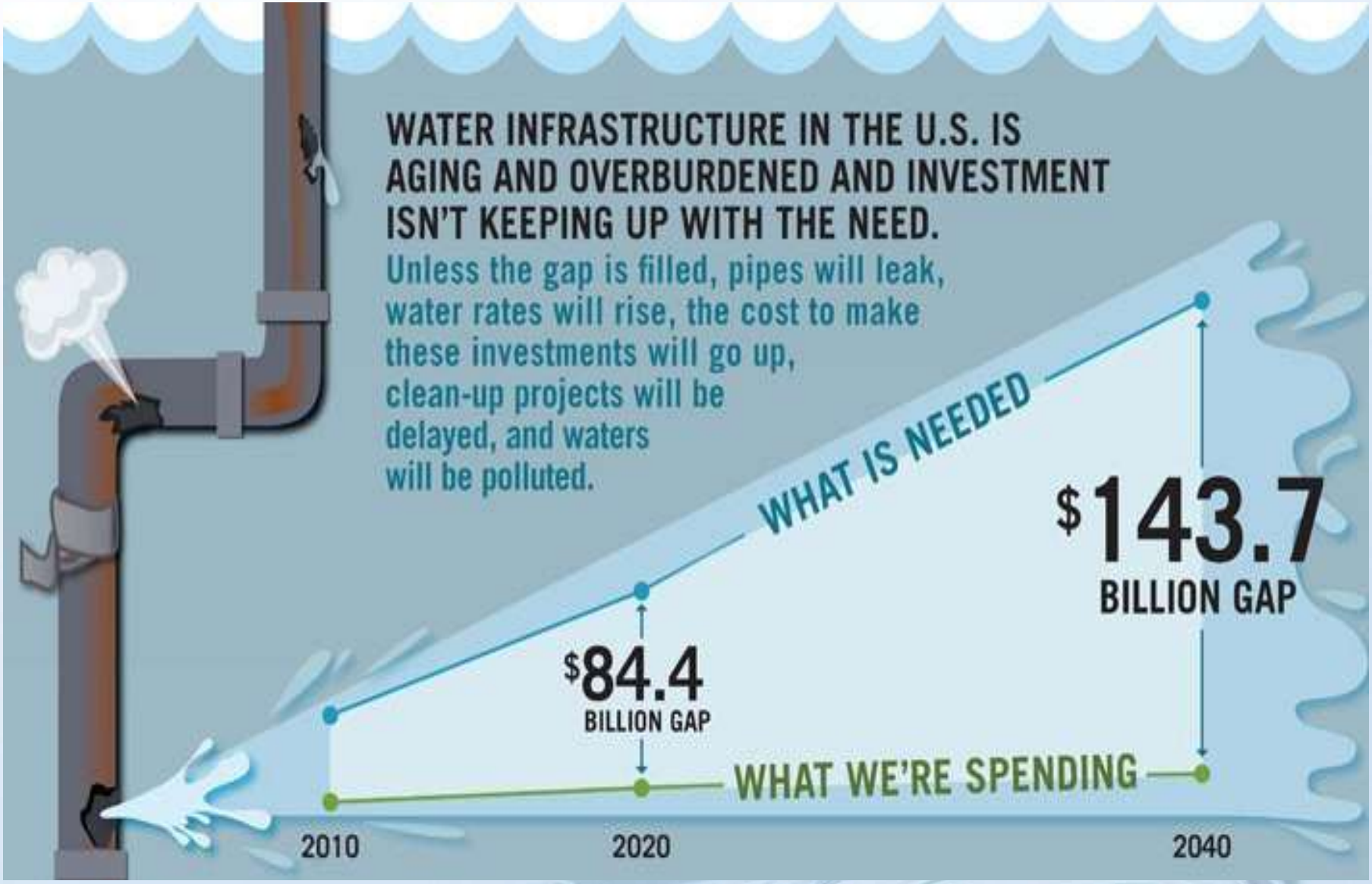
- ~$20B annual shortfall for repair & replacement
  - Just to meet existing and planned regulations
  - Does not account for increases in demand
- 2002 EPA Gap Analysis:
  - Capital needs pegged at $390B for 20 year period

2003 Congressional Budget Office Study

- Estimated that between $23B and $37B is needed ANNUALLY between 2002 and 2022



Summary


WATER INFRASTRUCTURE IN THE U.S. IS AGING AND OVERBURDENED AND INVESTMENT ISN'T KEEPING UP WITH THE NEED.
Unless the gap is filled, pipes will leak, water rates will rise, the cost to make these investments will go up, clean-up projects will be delayed, and waters will be polluted.
WHAT IS NEEDED
$143.7
BILLION GAP
$84.4
BILLION GAP
WHAT WE'RE SPENDING
2010
2020
2040

Cost of Failure to Act?

FAILURE TO ACT

THE ECONOMIC IMPACT OF CURRENT INVESTMENT TRENDS IN WATER AND WASTEWATER TREATMENT INFRASTRUCTURE ★★★★

BY INVESTING AN ADDITIONAL $84B WE CAN PREVENT:

$147B
Increased Costs to
BUSINESSES

$59B
Increased Costs to
HOUSEHOLDS

By 2020, family budgets will be squeezed by **$900** as water rates rise and personal income falls.

AND PROTECT:

- + Almost 700,000 jobs
- + $541B in personal income
- + $416B in GDP
- + $6B in U.S. exports

Proposed Solutions

Solutions that Will Work Now…

- **Increase** funding for water infrastructure system improvements and associated operations through a comprehensive program.
- **Create** a Water Infrastructure Trust Fund
- **Retain** traditional financing mechanisms
- **Expand** innovative financing mechanisms, including broad-based environmental restoration fees

More Resources

- Report Cards: http://www.infrastructurereportcard.org/
- Failure to Act: http://www.asce.org/economicstudy/
  - Water & Wastewater
  - Electricity
  - Surface Transportation
  - Airports, Inland Waterways, and Marine Ports

Thank you for your interest & attention!

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