Financial Needs for Water and Wastewater Infrastructure (2015)
Water and Wastewater Needs

• 20 years
• Five categories of infrastructure
  • Combined sewer overflow
  • Wastewater conveyance and treatment
  • Septic system remediation
  • Stormwater conveyance and management
  • Drinking water production, treatment, and distribution
• Reported in $Millions (M) and $Billions (B)
• Statewide and by county
• Numbers adjusted to 2014 dollars and rounded to $10,000
History

• 2002-2003: First compilation of water infrastructure needs
  • Leadership – Representative Klinker and Senator Gard
  • $12.4 to $13.9B needs

• 2003-2006 Update
  • Incorporated updated number for drinking water and implementation of the arsenic rule
  • Other numbers adjusted for inflation
  • $16.4 - $18.1B
  • Explored current and additional options for funding
  • Study advisory committee proposed funding fixes
Current Effort

• Phase I
  • Use existing estimates for drinking water
  • Adjust existing wastewater estimates for non response
  • Use a combination of existing and updated needs for CSOs
  • Collect new data for septic maintenance needs
  • Calculate stormwater needs
  • Collect utility rates for drinking water, wastewater, and stormwater to support decisionmaking for the CDBG program.
Current Effort

• Phase 1 (continued)
  • Partnered with the Indiana Office of Community and Rural Affairs
  • Research assistance from the Indiana Association of Regional Councils
  • Additional assistance from the Indiana Finance Authority SRF programs, ACEC Indiana Funding Sources Committee, the Indiana Rural Wastewater Task Force, and USDA Rural Development

• Phase 2
  • Assist in updating the RCAP unsewered community survey; update septic system remediation needs
  • Collect additional needs for drinking water and wastewater
  • Explore additional methodologies for estimating stormwater needs; collect additional needs.
20-Year Water and Wastewater Needs: $15.6 to $17.5B
Annual Water and Wastewater Needs: $780 to $876M

- Combined Sewer Overflow Needs
- Wastewater Conveyance and Treatment Needs
- Septic System Needs
- Total Wastewater Needs (CSO, Wastewater, and Septic)
- Stormwater Conveyance and Management Needs
- Drinking Water Production, Treatment, and Distribution Needs
- Total Water and Wastewater Capital Needs

Annual Low | Annual High | Annual Mean
20-Year CSO Needs: $2.9 to $4.1B

- Two sources of needs:
  - 2012 CWNS
  - 2015 analysis of outstanding projects from community long-term control plans
- 71 communities in 48 counties have outstanding CSO needs
- Median county has no needs
- Fountain and Jennings counties have fewest ($1M each)
- Marion County has the greatest need ($863M to $1B)
20-Year Wastewater Needs: $4.8B

- Two sources of needs:
  - 2012 CWNS
  - Needs for nonrespondents extrapolated from per capita respondent needs

- 446 wastewater systems
- Median county has $17M
- Ohio County has fewest ($3M)
- Marion County has the greatest need ($1.7B)
20-Year Needs for Septic Remediation: $512M to $1B

- Sources of needs: Survey of local health departments
- Only 30% of counties provided enough info to estimate
- For low estimate needs range from Putnam County ($10,000) to Allen County ($148M)
- On high estimate needs range from Floyd County ($30,000) to Delaware County ($274M)
20-Year Stormwater Needs: $750M to $971M

• 2 Sources of needs:
  • 2012 CWNS (mostly C4 communities)
  • Calculated needs based on impervious surface, infrastructure cost per acre

• Median county has $2.9-$3.7M
• Brown County has fewest needs ($160,000-$210,000)
• Marion County has the most needs ($264 to $344M)
20-Year Drinking Water Needs: $6.6B

- Sources of needs: 2011 DWNS
- $1.9 billion for large systems (>100,000 population)
- $3.6 billion for medium systems (3,301 to 100,000 population)
- $1.2 billion for small systems (<3,300 population)
- Union County has fewest needs ($4M)
- Lake County has the largest needs ($678M)
Water and Wastewater Investments 2005-2014

- **Wastewater**: $2,801 million
- **Stormwater**: $634 million
- **Drinking Water**: $1,107 million
- **Total**: $4,541 million

Source: Dodge Data & Analytics, Construction Starts Information
Water and Wastewater Investments 2005-2014

• State and federal agencies support infrastructure investments (2014 dollars)
  • IFA SRF
    • Wastewater $2.1B grant and loan support
    • Drinking Water $418M grant and loan support
  • OCRA (2006-2014)
    • Drinking Water, Wastewater, Stormwater Grants = $119M
  • USDA Rural Development
    • CSO and Wastewater Loans $195M and Grants $100M
    • Drinking Water Loans $116M and Grants $22M
20-Year Funding Gap: $6.5 to 8.5B

20-YEAR NEED

10-YEAR INVESTMENT X 2

20-YEAR FUNDING GAP
Conclusions

• We need significant additional funding to meet Indiana’s infrastructure needs over the next 20 years.

• Updating needs numbers regularly as new estimates by type become available will keep this important issue top of mind.

• Most improvements are paid ultimately by utility ratepayers; we must encourage utilities to set rates that will allow them to address depreciation and other needs over time.

• Asset management is important for making the most of existing resources; utilities must know what they own to be able to manage it and make good choices about repair and replacement.
Conclusions

- We use limited grant $ and rate subsidies to support communities. IFA SRF, OCRA, and USDA Rural Development do everything they can to find additional resources and wring the most utility out of the resources that are available.

- There are many communities, particularly small ones, that cannot afford improvements even with current subsidies.

- In addition to more funding support, we need to institutionalize low cost infrastructure solutions.
Next Steps

• Release the Phase I report
• Update septic remediation numbers with results from the Unsewered Communities Survey
• Explore methodologies for estimating stormwater needs; collect additional needs from communities

• Drinking Water
  • 2015 DWNS
  • WhyFi Water Effort

• Wastewater
  • 2016 CWNS