Regional Infrastructure: Wastewater and Stormwater



June 11, 2014



Overview

Wastewater & Stormwater Infrastructure

- Protects Public Health
- Protects & Restores Water Quality
 - Rivers, Streams, Lakes & the Bay
- Supports our Communities,
 Businesses & Economy



Regional Infrastructure



-BELO SELOC

Wastewater and Stormwater

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Who regulates

- U.S. Environmental Protection Agency (EPA)
- Maryland Department of the Environment (MDE)
- Virginia Department of Environmental Quality (VA-DEQ)
- Who's responsible
 - Stormwater Local Governments
 - Wastewater Local Governments & Authorities





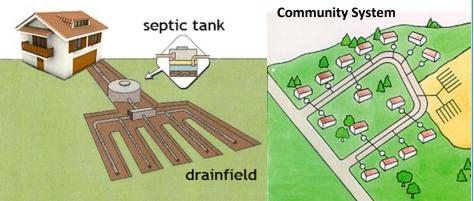


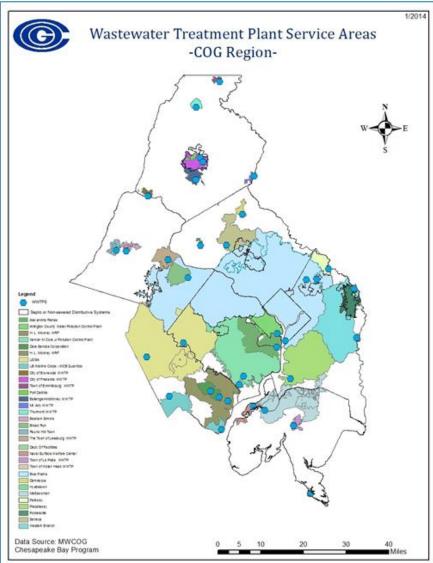


Wastewater

Region's Population

- 90% Served by Wastewater Treatment Plants
- 10% Served by On-site Septic & Community Systems









Wastewater



- 24 Plants 19 Major
- 16 Collection Systems
- 722 MGD Capacity
 - Blue Plains 370 MGD
 - 544 MGD Average Treatment (2013)
- Two Combined Sewer Systems
 - District & Alexandria





Wastewater

Metropolitan Region at a Glance

- \$950 million O&M Costs (2013)
- \$1.3 billion Capital Costs (2013)
- 16,000 miles of Large, Medium & Small Pipes
- + 1 million accounts



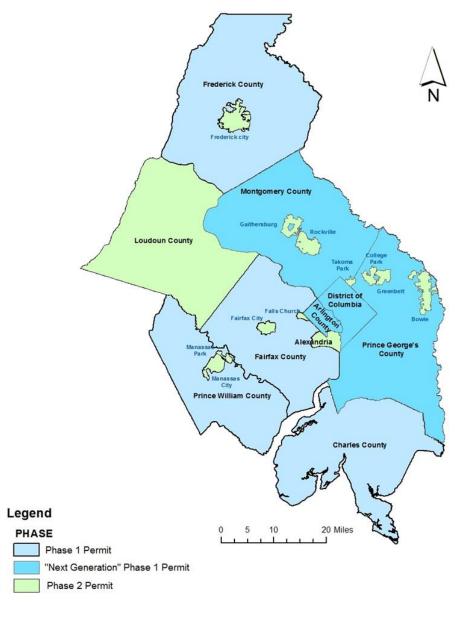
Regional Infrastructure



Stormwater

Stormwater Management

- Handles rainwater runoff from roads & other surfaces
- Removes excess nutrients, oil & chemicals, sediment
- Phase 1 Permits
 - Larger populations/more requirements
- Phase 2 Permits
 - Smaller populations/fewer requirements







Stormwater



Metropolitan Region at a Glance

- \$8 to \$12 Billion over next 10-20 years (current estimate)
- Total Annual Budgets Exceed \$450 Million
- Capital and O&M –
 Expanding rapidly





Challenges & Opportunities

- Asset Management
 - Wastewater Aging Pipelines
 - Stormwater Existing & New
 - Dispersed/Smaller Systems; Some on Private Land
- Green Infrastructure
- Wastewater Flows Flat (Water Conservation)
 - Increasing Costs New Rate Structures/Revenue
- Stormwater Permits New Fees/Taxes





Challenges & Opportunities





- Permit Requirements
- Bay TMDL & Local TMDLs
- Local Stream Restoration Goals
- Endocrine Disrupting Compounds
- Workforce & Job Opportunities
- Interdependencies
 - Energy & Water
 - Development & Land Use
- Climate Change
- Communication, Outreach & Messaging



Regional Infrastructure



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COG Support Activities

- Regional Water Quality Assessments
- Technical/Regulatory Support
- Permitting & Regulatory Tracking
- Security & Mutual Aid
- Climate/Extreme Weather Impacts
- Blue Plains IMA Coordination & Support
- Watershed Restoration Anacostia
- Policy & Advocacy



