



NACWA



Every Which Way – A Tale of Consent Decree Compliance Through Satellite Collaboration

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Brown AND
Caldwell

HRSD
Cleaning wastewater every day for a better Bay.

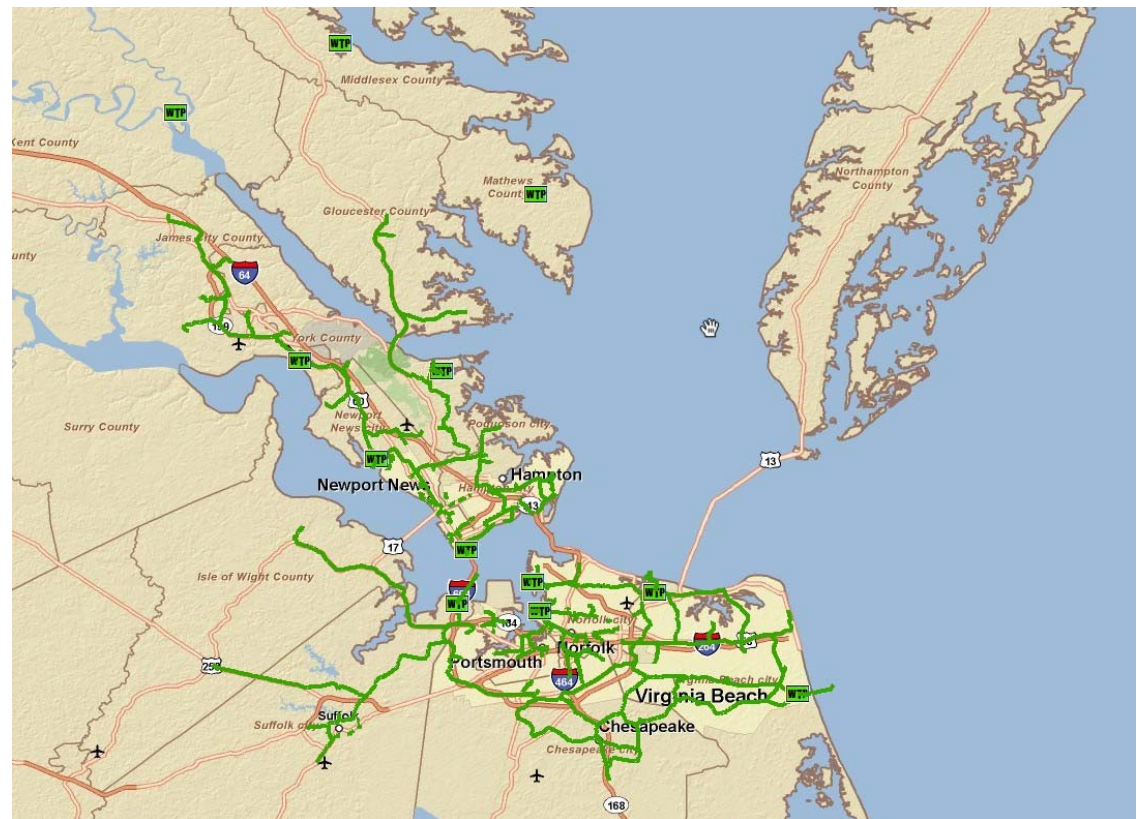
Hampton Roads Sanitation District (HRSD)

- A political subdivision of the Commonwealth of Virginia
- Formed in 1940 through public referendum to address pollution of Chesapeake Bay waters and closure of oyster beds
- Broad powers under the enabling legislation
- Commission appointed by Governor's office to represent the interests of the region
- Owns and operates large conveyance and treatment works
- Serves businesses and localities

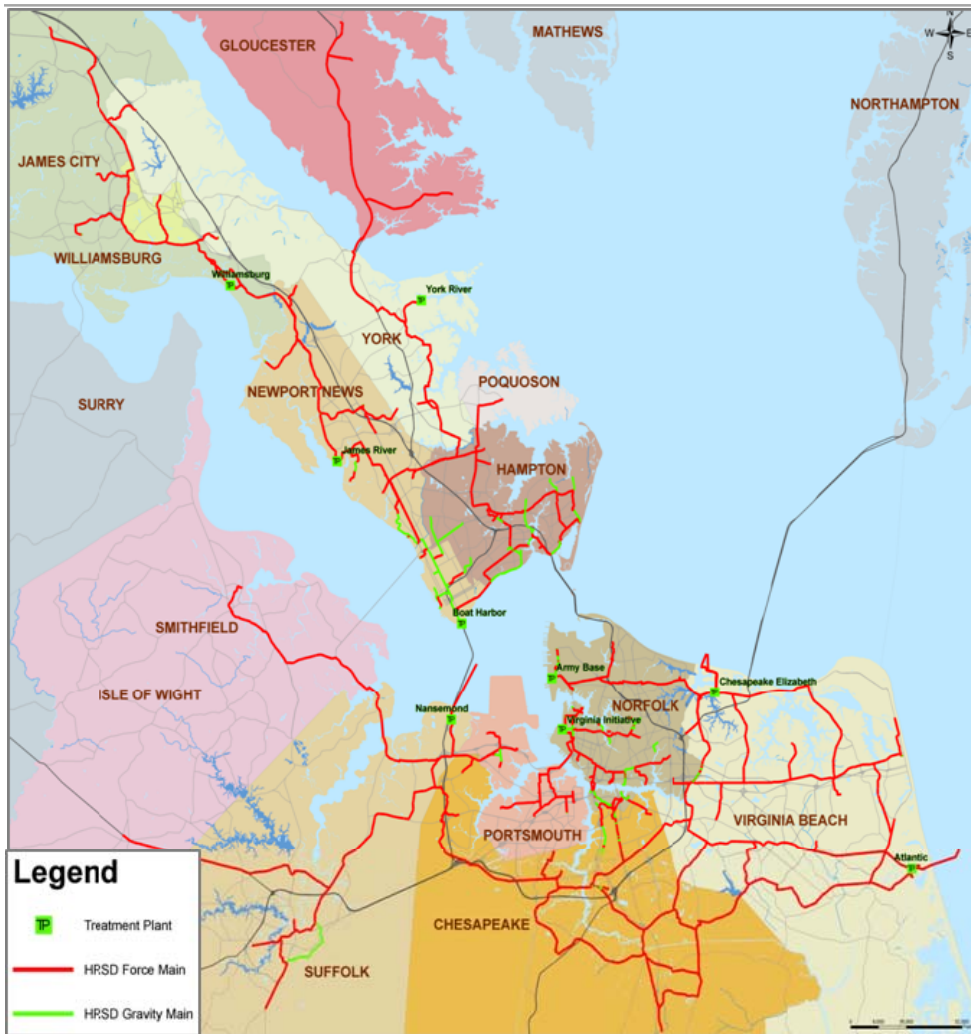


Hampton Roads Sanitation District

- Serves Southeast Virginia
- 1.6 million people
- 430 miles of force mains
- 81 PS
- 50 miles gravity pipe
- 9 major treatment plants



Regional System



- 450,000 connections
- 5,800 miles gravity sewer
- ~ 4000 miles private sewers
- 1,580 public sewer pump stations
- ~ 1500 private sewer pump stations
- 1,120 miles of force main
- 3,100 sq. mile service area
- 1.6 million population
- 9 Wastewater Treatment Plants
- 250 MGD Permitted Capacity

Slide 4

a1

Mark said this includes Locality data as well...

acullipher, 9/19/2012

Historical Difference of Opinion

Locality: Your pipes are too small causing my overflows



HRSD: You have too much I/I resulting in excessive flow and SSOs

Enforcement Happens.... Despite Great Performance

- EPA declared their intention to institute an enforcement action in 2005
- Region comes together and develops a State Consent Order covering HRSD and 13 Localities in 2006 & 2007
- EPA and HRSD negotiate a Federal Consent Decree similar to the State Order in 2008 & 2009
- Federal Decree entered with court in 2010



Major Consent Decree Compliance Requirements Build Toward Regional Wet Weather Plan (RWWMP)

- Flow, Pressure and Rainfall Monitoring
- Regional Hydraulic Model and Assessment
- Condition Assessment Plan
- Interim System Improvements
- MOM
- Regional Wet Weather Management Plan
- Post RWWMP Implementation Monitoring and Performance Assessment

The “Deal”

- Localities perform Rehab in basins above 775 gpd/eru to remove as much I/I as is cost effective
- HRSD accepts the remaining flow and builds infrastructure to convey and treat flows up to a selected level of service



Caution: Enforcement May Have Desirable Side Effects

- 2+ Years working on Regional Technical Standards forged a bond amongst the group
- Having a common foe (i.e., EPA) helped to create a sense of team
- The hard work of compliance brought folks together UNTIL the hard question of who pays and firm commitments arose.



Roots of Regionalization

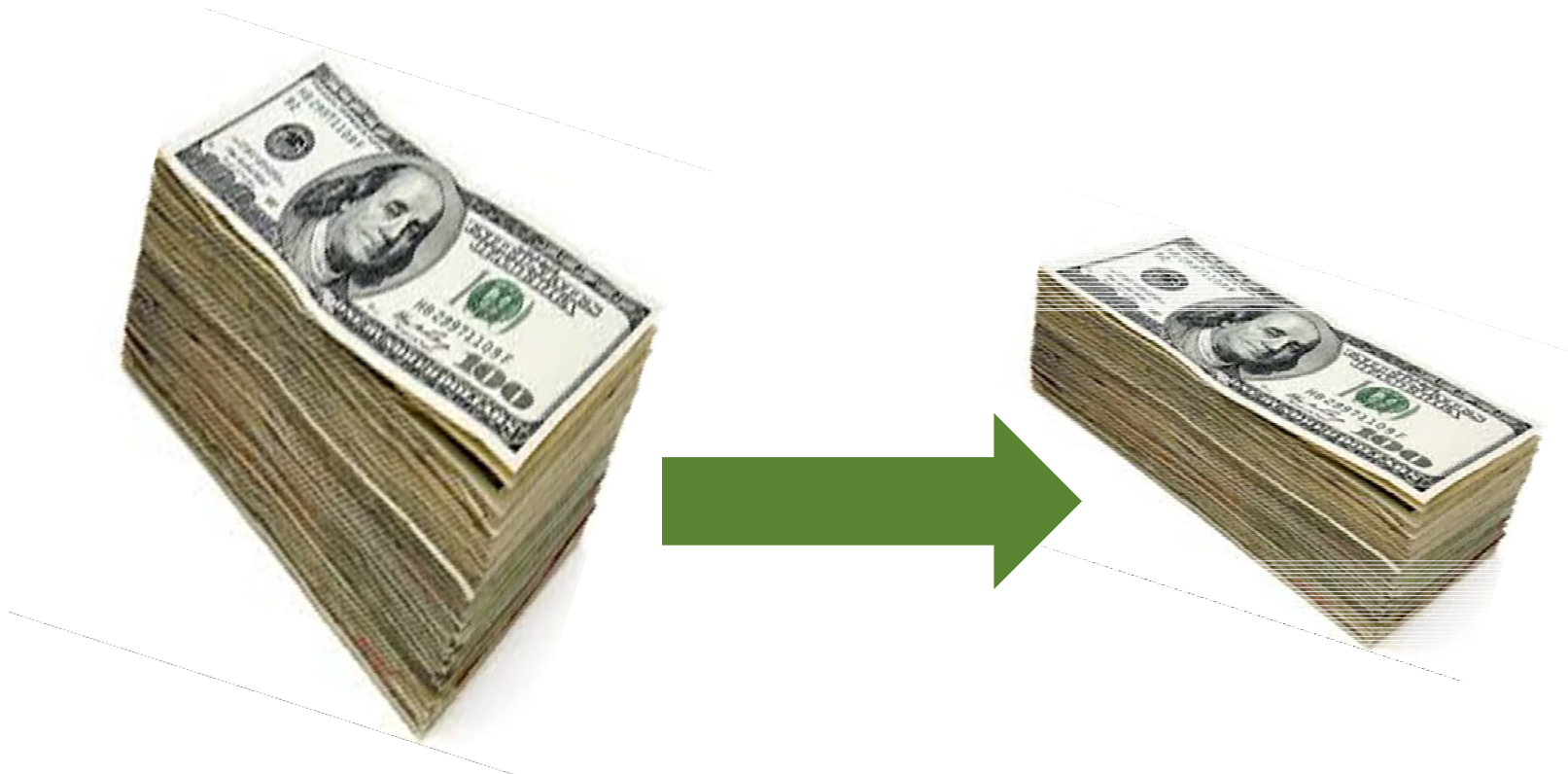
- No flow agreements
- How are peak flow commitments enforced?
- Concerns over who pays for wet weather capacity improvements
- Lack of agreement on technical details
- Affordability concerns for some localities
- Equity concerns
- Belief in economies of scale
- Transfer of liability
- Regulators prefer to regulate one party vs. 15

Regionalization Evaluation

- **Study**
 - Logistical
 - Debt
 - Operations
 - Personnel
 - Rates
 - Economies of scale
 - Governance
 - Extension of service
 - Support of economic development
- **Comparative Analysis**
 - Contrast Wet Weather Plans
 - Contrast Rehab Plans
 - Scheduling and logistical benefits for coordinating construction

Regionalization Study Revealed Benefits

- Regionalization Saves More than \$1B in Capital Costs
- Substantial O&M Savings over Time



BUT

- Concerns about CONTROL
- Two competing schools of thought on governance
 - Big guys want proportional representation
 - Little guys want one locality, one vote
 - HRSD likes existing structure
- Customer service concerns
- Resistance from management



When It Became Apparent that Straight Regionalization was DOA- Go to Plan Z!

- Localities retain ownership of their assets
- HRSD takes responsibility for capacity for all public assets
- HRSD pays for and executes rehab and capacity enhancements in both their and Locality systems
- Change the SOC and CD to allow the different approach
- Develop an Memorandum of Agreement to memorialize the deal



Memorandum of Agreement

HRSD

- Develop a affordable and cost effective RWWMP in consultation with Localities
- Design, construct and fund all RWWMP improvements
- Turn over improved facilities to Localities
- Assume capacity responsibility forever after completion of the RWWMP

Localities

- Maintain and operate their collection systems
- Provide HRSD access to information and facilities necessary to plan and execute the RWWMP
- Fix significant defects not addressed in the RWWMP
- Cooperate with HRSD

Status

- Localities starting to approve MOA
- Notify EPA/DEQ at end of February 2014
- Negotiate changes to Federal CD and State SOC
- Develop the RWWMP by October 2016

Questions ?



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