

EPA Consent Decree Annual Information Meeting

Regional Wet Weather Management Plan

January 25, 2011

Annual Public Meeting

Requirements of the Consent Decree

- "...after providing reasonable notice on its webpage and in a newspaper of general circulation"
- "...shall hold an annual informational meeting open to the Localities and the public"
- "HRSD shall convey information on the status of the RWWMP, HRSD – Locality cooperation and steps citizens within the Localities can take to protect the receiving waters"



Objective of the Consent Decree

- "HRSD, working in coordination with the Localities, to fulfill the objectives of the Clean Water Act with a goal of eliminating Sanitary Sewer Overflows (SSOs)"
- The Regional Wet
 Weather Management
 Plan (RWWMP) will
 establish the Level of
 Service for elimination of
 SSOs





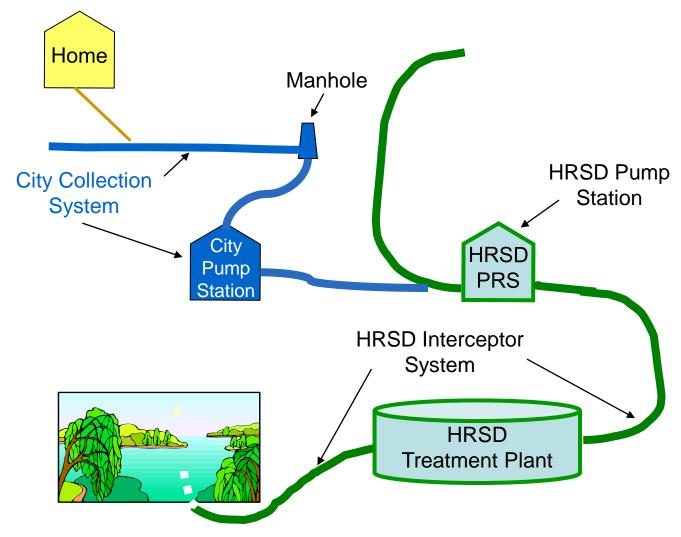
HRSD and the Regional Sewer System

- Regional Network
 - 1.6 million served
 - 5,800 miles of gravity sewer
 - 1,500 pump stations
 - 1,200 miles of force main
- HRSD System
 - ~ 430 miles of large diameter force main
 - ~ 50 miles of gravity sewer
 - 81 pump stations
 - 13 treatment plants

- Localities in State Order
 - Chesapeake
 - Hampton
 - Newport News
 - Poquoson
 - Portsmouth
 - Suffolk
 - Virginia Beach
 - Norfolk
 - Williamsburg
 - Gloucester
 - Isle of Wight
 - York
 - James City Service Authority
 - Smithfield



Regional Sanitary Sewer System





Quarterly Briefing

- Participants include EPA, DEQ and localities
- Twice per year in quarters when annual or semiannual reports are not due (July and January)
- Second briefing held on January 19, 2011



Overall Regulatory Status

- Region is in compliance with DEQ Special Order by Consent
- Federal Consent Decree was entered with the court on February 23, 2010
- All Consent Decree required submittals have been on time



Major Consent Decree Compliance Requirements

- Flow, Pressure and Rainfall Monitoring
- Regional Hydraulic Model and Assessment
- Condition Assessment Plan
- Interim System Improvements
- Management, Operations and Maintenance (MOM)
- RWWMP
- Post RWWMP Implementation Monitoring and Performance Assessment



State Consent Order Overview

Data Collection SSES Planning Condition Rehabilitation and Flow Assessment of **Planning** SSES Basin criteria Monitoring **Sewers and Pump** Prioritization **Stations** Rehabilitation SSO characterization resulting from SSES Use of existing Guidelines for work information condition assessment Evaluation of System mapping effectiveness of Assessment rehabilitation on I/I Flow monitoring standards reduction procedures Reporting · Rainfall monitoring requirements Sewer flow • Find and fix guidelines evaluation **Hydraulic** Flow evaluation **Regional Wet** reporting **Performance** Weather Assessment **Management Plan Development** Guidelines for development and Capacity assessment application of Level of service hydraulic model selection Procedures and Capacity standards for enhancement solutions calibration and verification Affordability



Regional Data Collection Efforts

- Extensive Flow, Pressure and Rainfall Network (greater than 360 measurement instruments) operational since March 12, 2010
- Data Quality Assurance Program is in place
- Interim Flow Monitoring Report was submitted on September 12, 2010 for first five months of data



Regional Hydraulic Model

- Initial Regional Hydraulic Model Report submitted to EPA/DEQ on November 30, 2010
- Calibration is using rain events from March, May and September
- Regional Hydraulic Model Report due July 31, 2011
- Intensive coordination with localities on model inputs



Condition Assessment Program

- Preliminary Condition Assessment Report approved by EPA
- Program is well underway four inspection and repair contracts awarded with total value of \$10.8 million
- Gravity main inspection is on schedule and nearing completion
- Force main inspection is underway, some challenges to date
- Prompt Repair contract is in place to address severe defects



Interim System Improvements

 Consent Decree includes requirement to complete 33 CIP projects totaling \$140 million by February 23, 2018. Current status:

- 4 com	plete	9	3 9	million
	4		_	

- 15 under design \$89 million
- 2 in study phase \$4.6 million
- 5 not started \$23 million



MOM Program

- Response to latest comments is due February 5, 2011
- Implementation of enhancements to existing programs has begun
- Performance Measures are starting to be tracked to evaluate the effectiveness of the programs



RWWMP

- Extensive coordination will be necessary with localities
- RWWMP will establish the projects, costs and schedule to address capacity challenges to a selected level of service
- Approved RWWMP will be incorporated into the Consent Decree by reference
- RWWMP Development schedule is very tight

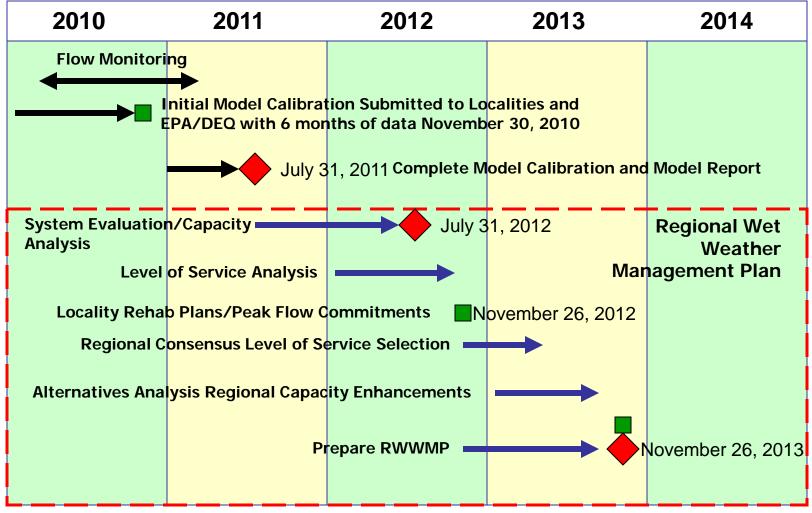


RWWMP Status

- Regional Hydraulic Model undergoing final calibration
- Pilot storage project under design
- Extensive locality coordination is ongoing on facility data, wet weather flow parameters, modeling approaches and rehabilitation planning



Consent Decree RWWMP Development Schedule







Short Term Wet Weather Operational Plan

- Purpose of the Plan is to identify how to get the most capacity out of the existing system
- Final EPA/DEQ comments are being addressed



SSO Response Plan

- Purpose of the plan is to document SSO response, reporting, recordkeeping and resolution practices
- Revised Plan approved by EPA/DEQ



Coordination with Localities

- Ongoing meetings of Capacity Team, Locality Team, Private Property I/I Abatement Committee, Model Users Group and Locality Modeling Committee
- Ad hoc committees with HRSD and locality representatives are reviewing key SOC deliverables
- HRSD providing GIS, flow, pressure and rainfall data to localities



Public Participation

- Annual newsletter (first due out before February 23, 2011)
- Annual public informational meeting with public notice (January 25, 2011)
- Public outreach regarding overflows
 - "...a public outreach program to inform the public of any SSO Outfalls within the Regional SS System, the possible health and environmental effects of SSOs and that recreational activities, such as swimming, should be limited as a result of such SSOs."



Reporting Requirements

- First annual report was submitted November
 1, 2010 for period through June 30, 2010
- Semi annual report is due May 1, 2011 for period of July 1, 2010 through December 31, 2010



Steps Citizens Can Take to Protect Receiving Waters

- Report Sanitary Sewer Overflows Call your local utility department
- Inspect home, yard and sewer service pipes to ensure separation between storm and sanitary systems
- Practice proper disposal of pharmaceuticals, food wastes and kitchen grease – minimize use or eliminate garbage disposal
- Reduce stormwater runoff by using rain barrels, rain gardens and establishing a buffer



Steps Citizens Can Take to Protect Receiving Waters (Cont.)

- Improve water quality by raising oysters
- Limit synthetic fertilizer and other lawn chemical applications – use natural products like Nutri-Green®
- Pick up animal waste
- Avoid feeding wildlife
- Support "No Dumping" and use boater pump out facilities



Questions?

