



EPA Consent Decree
Annual Information Meeting
Regional Wet Weather
Management Plan

January 27, 2015

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 consultation 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

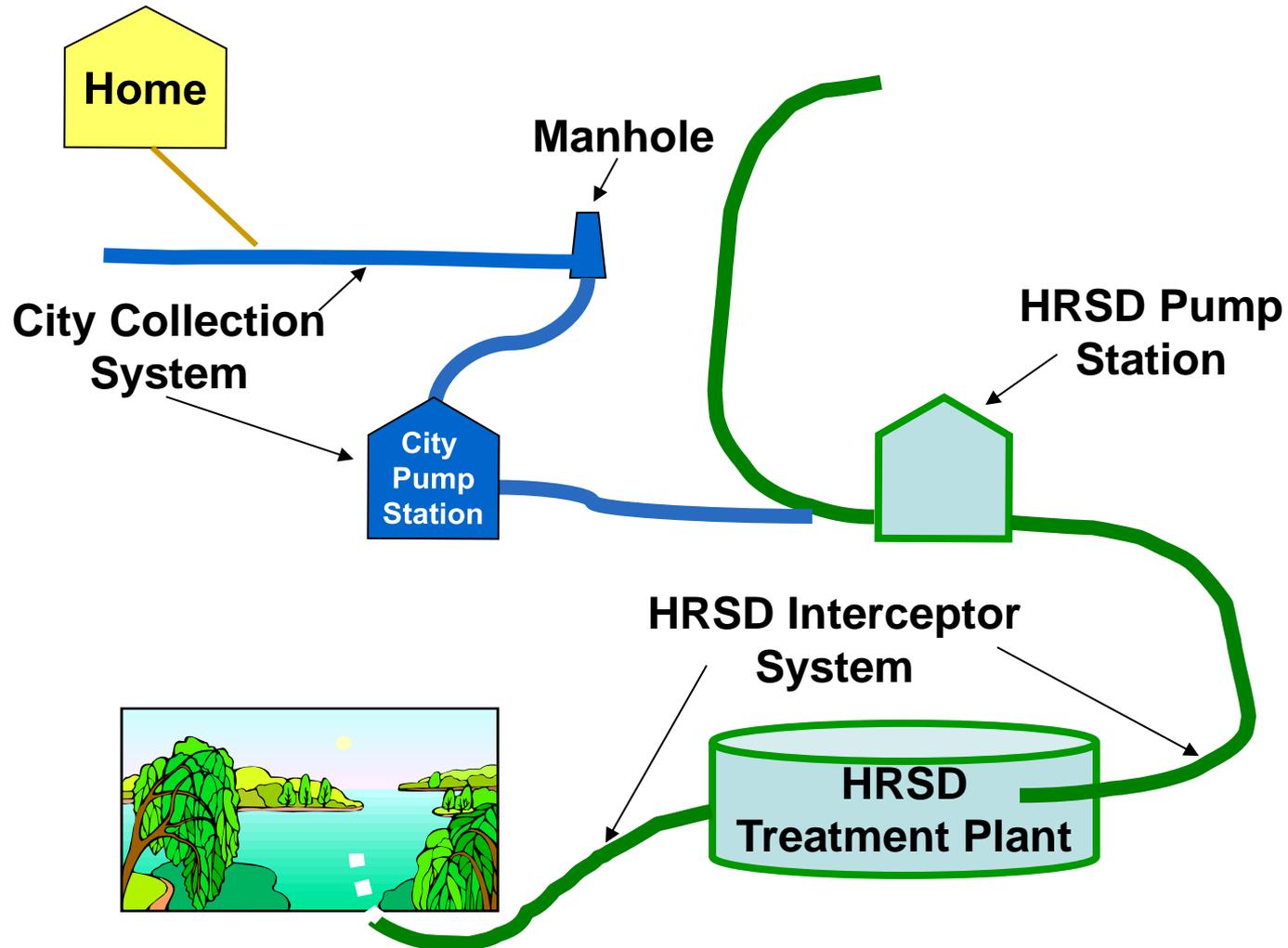
HRSD System

- ~ 430 miles of large diameter force main
- ~ 50 miles of gravity sewer
- 82 pump stations
- 13 treatment plants

Regional Network

- 1.6 million served
- 5,800 miles of gravity sewer
- 1,500 pump stations
- 1,200 miles of force main

Regional Sanitary Sewer System



Major Change in Compliance Orders

- Consent Decree Modification No. 3 on August 26, 2014 puts sole responsibility on HRSD for:
 - Development of RWWMP
 - Implement RWWMP
- Special Order by Consent (SOC) modified on December 19, 2014 to focus on Management, Operations and Maintenance (MOM) issues
 - Eliminates HRSD from SOC
 - Adds Norfolk to SOC and terminates prior Order

Localities included in Modified State Order

Effective December 19, 2014

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

- Participants include EPA, DEQ and localities
- Twice per year in quarters when annual or semiannual reports are not due (July and January)
- Next briefing will be held today after Annual Public Meeting

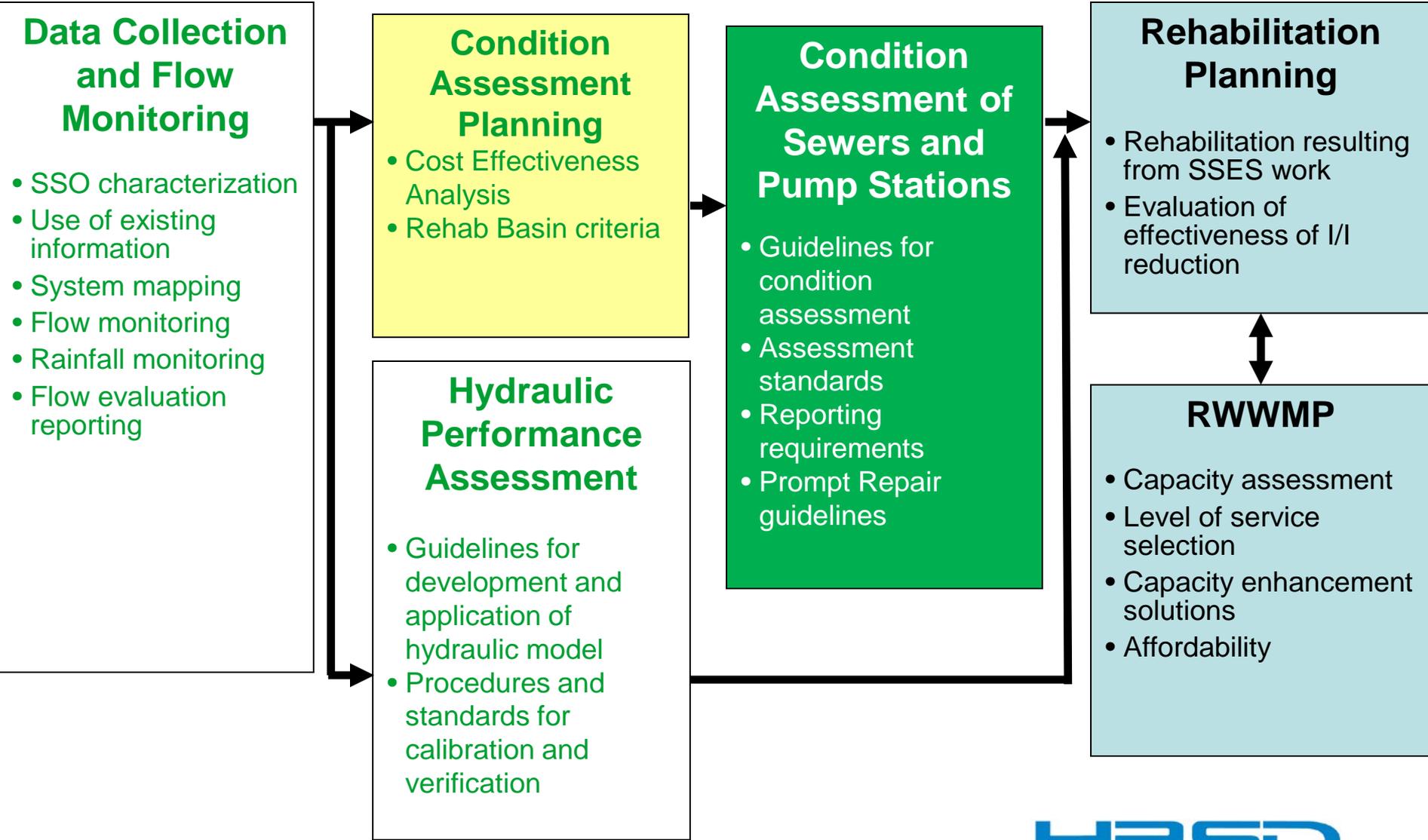
Overall Regulatory Status

- Localities are in compliance with the modified DEQ Special Order by Consent
- HRSD continues to implement requirements of Federal Consent Decree which was originally entered with the court on February 23, 2010, modified first on January 24, 2013, second June 17, 2013 and finally August 26, 2014
- 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)
- Regional Wet Weather Management Plan (RWWMP)
- Post RWWMP Implementation Monitoring and Performance Assessment

Consent Decree Overview



Regional Data Collection Efforts

- Consent Decree flow monitoring requirements completed in 2011
- HRSD is maintaining an extensive Flow, Pressure and Rainfall network (greater than 360 measurement instruments) operational since completion of requirements
- Data Quality Assurance Program is in place

Regional Hydraulic Model

- Regional Hydraulic Model Report (submitted on July 31, 2011) was accepted with no further comments by EPA/DEQ in July 2012
- Extensive coordination with localities continues on model inputs

Condition Assessment Program

- Field activities under the Consent Decree are complete
- Prompt Repair contract is ongoing to address severe defects
- Final Condition Assessment Report and Action Plan Update was submitted to EPA/DEQ on February 10, 2014
- Plan was renamed the Rehabilitation Action Plan

- Addresses condition defects identified in Consent Decree Condition Assessment Program
- Addresses gravity mains, force mains, pump stations, and associated system components
- Plan updated on December 3, 2014 based on EPA comments, outlines \$183 M in projects
- EPA/DEQ approved the plan (based on minor modifications) on June 10, 2014
- Project implementation is underway

Prompt Repairs Program

- Systematic review of data to identify defects requiring Prompt Repair
- 68 individual sewer system defects have been identified as meeting criteria
- 42 of 68 Prompt Repair defects have been completed with the remaining in the planning/ construction phase

Interim System Improvements

- Consent Decree includes requirement to complete 45 CIP projects totaling \$306.8 M by February 23, 2018 (with exception of two projects for VIP due December 31, 2018)
- Of the 45 projects:
 - 16 are completed
 - 19 are in construction
 - 10 are in planning/design
- On track for completion by 2018 deadline

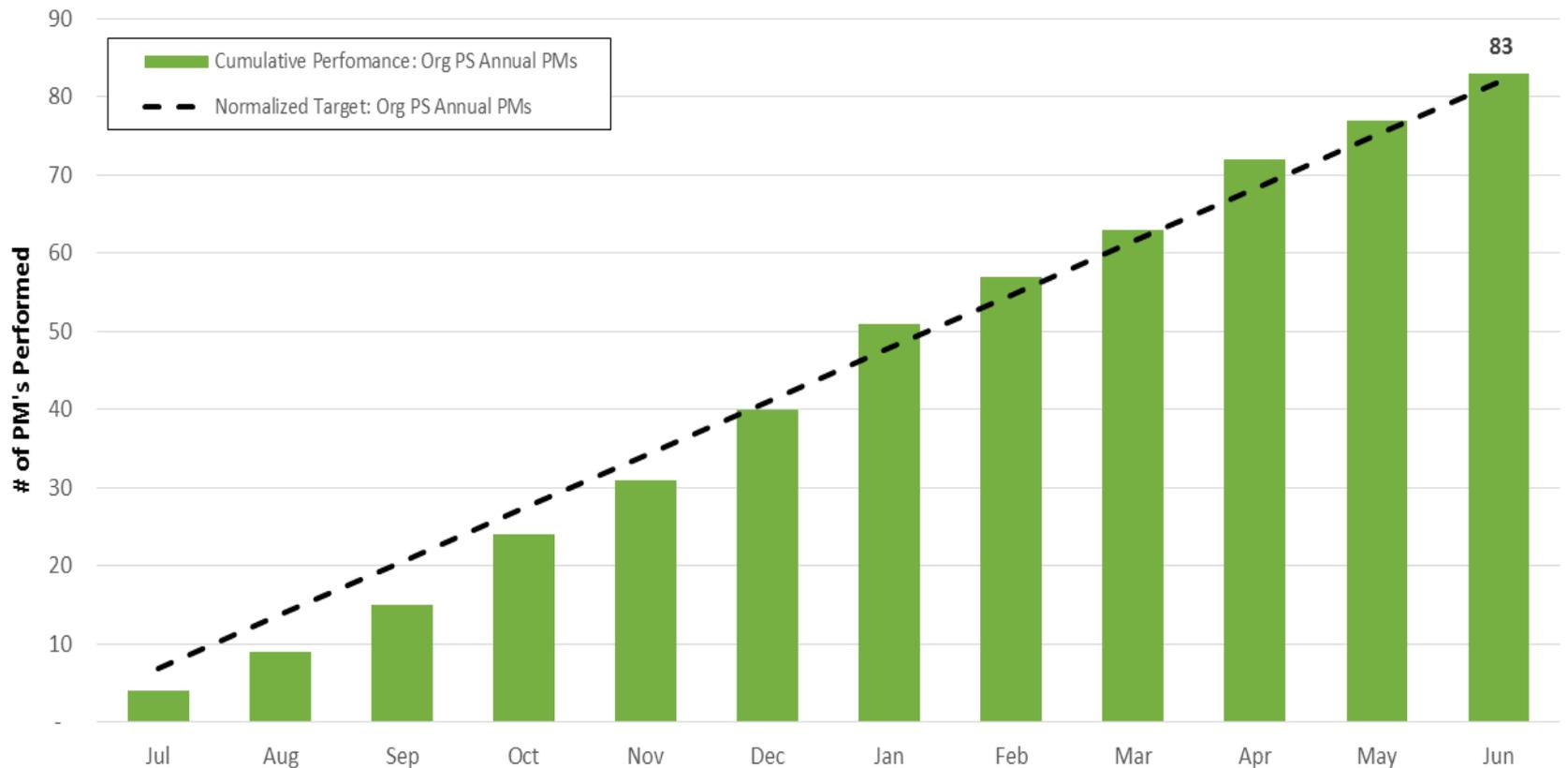
- MOM Program approved by EPA/DEQ in 2011
- The MOM Program is currently undergoing an update to:
 - Capture organizational updates
 - Identify current programs and update status of initiatives
- Performance measures are continuing to be tracked to evaluate the effectiveness of the programs
- Continuous improvements initiatives are being completed and new ones added accordingly

FY-2014 MOM Program Performance

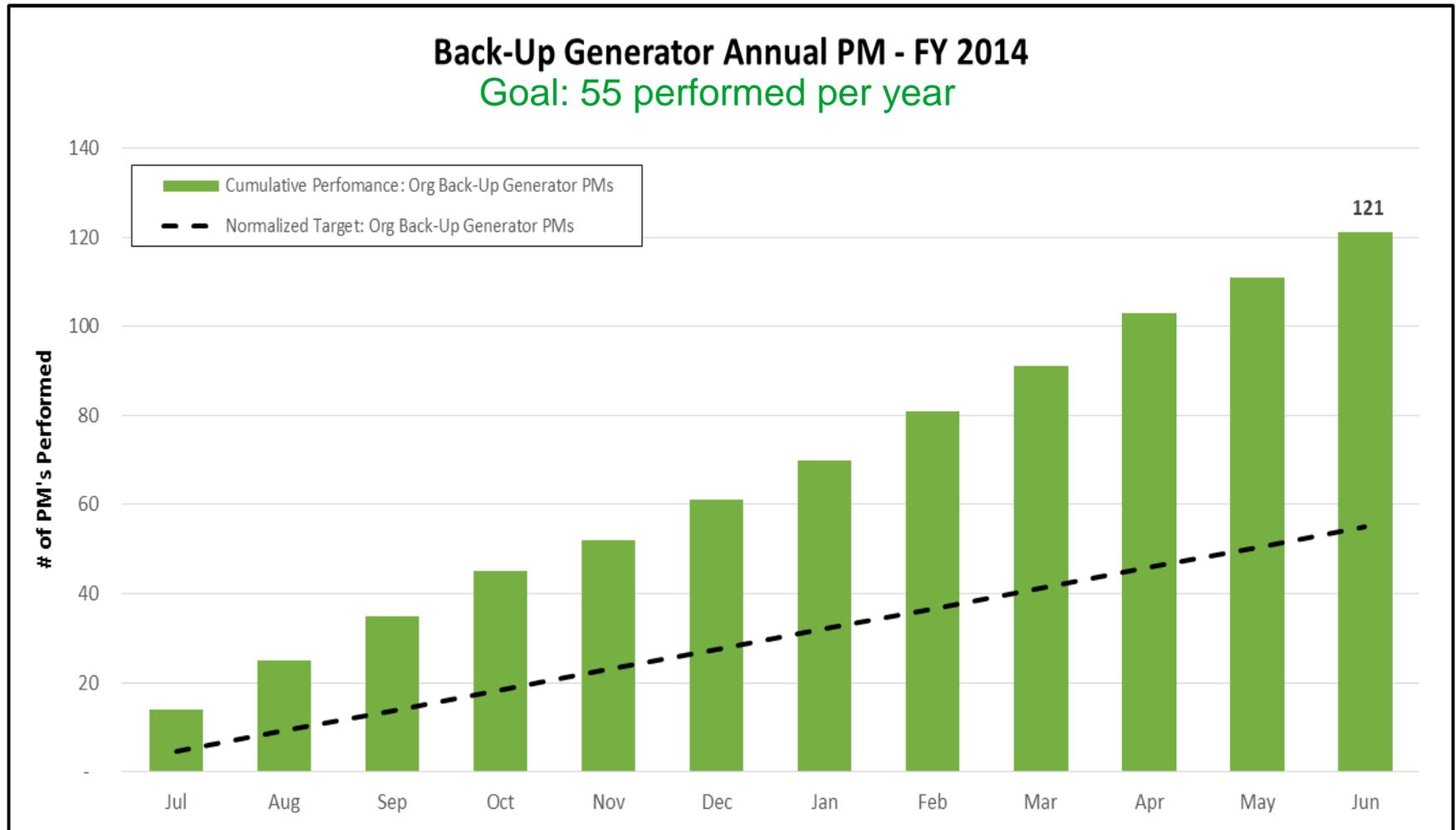
- 56 metrics targeted for FY-14
- 45 met or exceeded specified goals
 - Includes 6 Consent Decree required metrics
- 5 require updated tracking mechanisms
- 6 metrics fell short of targets
 - Cathodic Protection Systems inspections (none completed – changing to biannual inspections)
 - Routine Quarterly Safety inspections (99%)
 - “Miss” Utility Responses – 4 missed 16,200
 - 14 Locality Meetings were held, 24 is the annual target
 - No. of CIP Projects Substantially Completed versus Planned (56%)
 - \$ spent on Consent Decree Projects versus \$ planned to be spent (58%)

Consent Decree Performance Measures Review

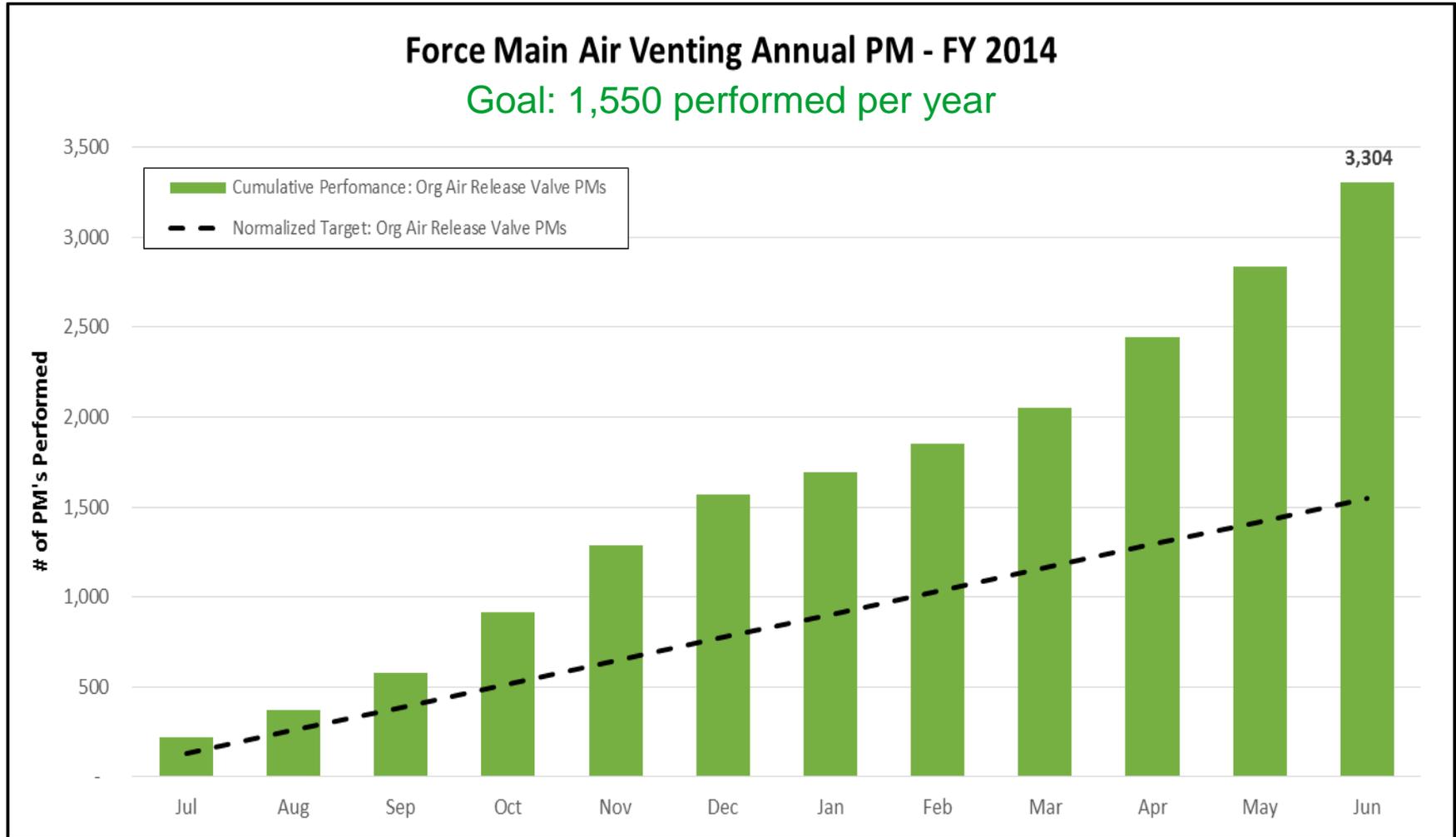
Pump Station Annual PM - FY 2014
Goal 82 performed per year



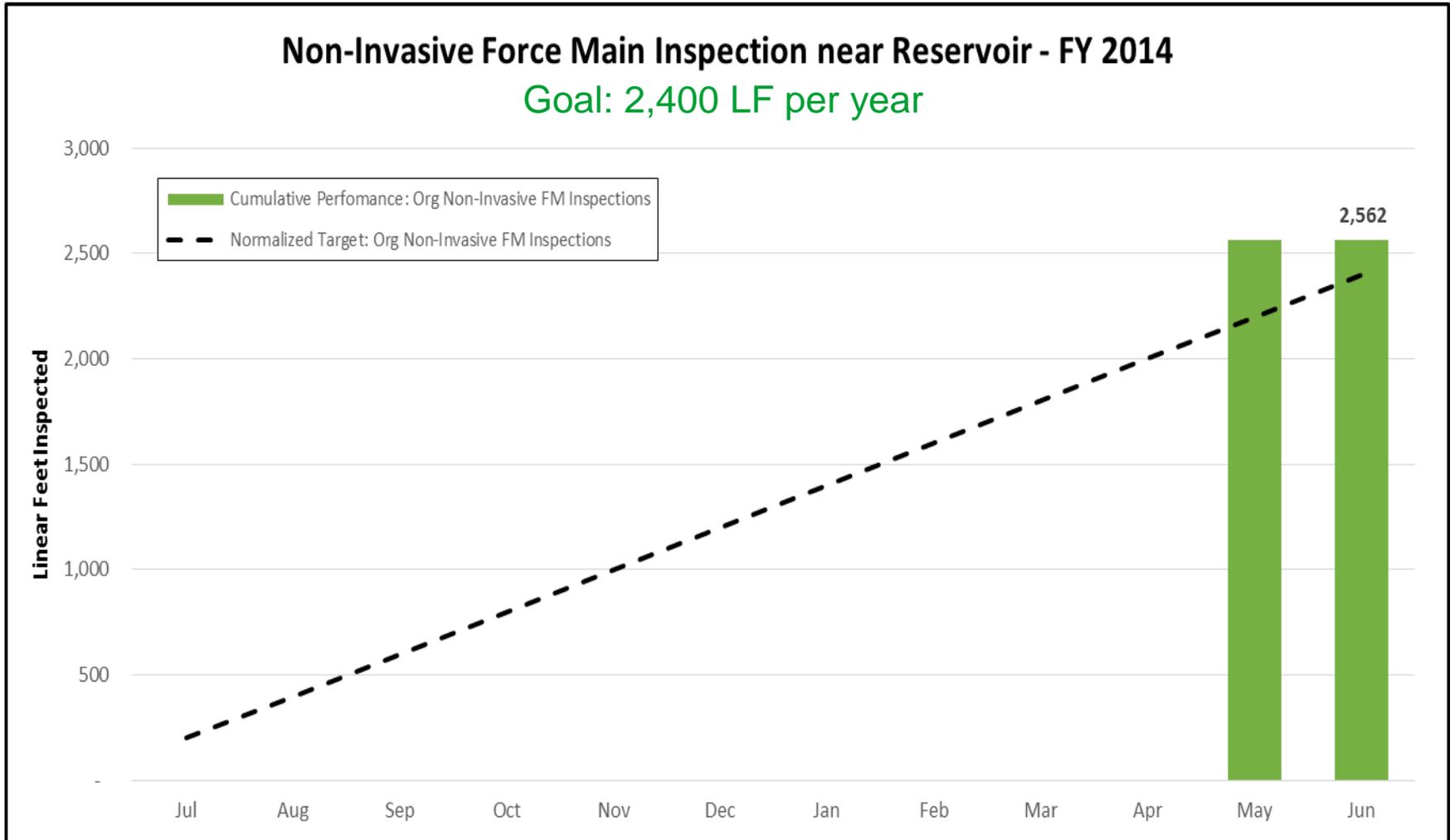
Consent Decree Performance Measures Review (Cont.)



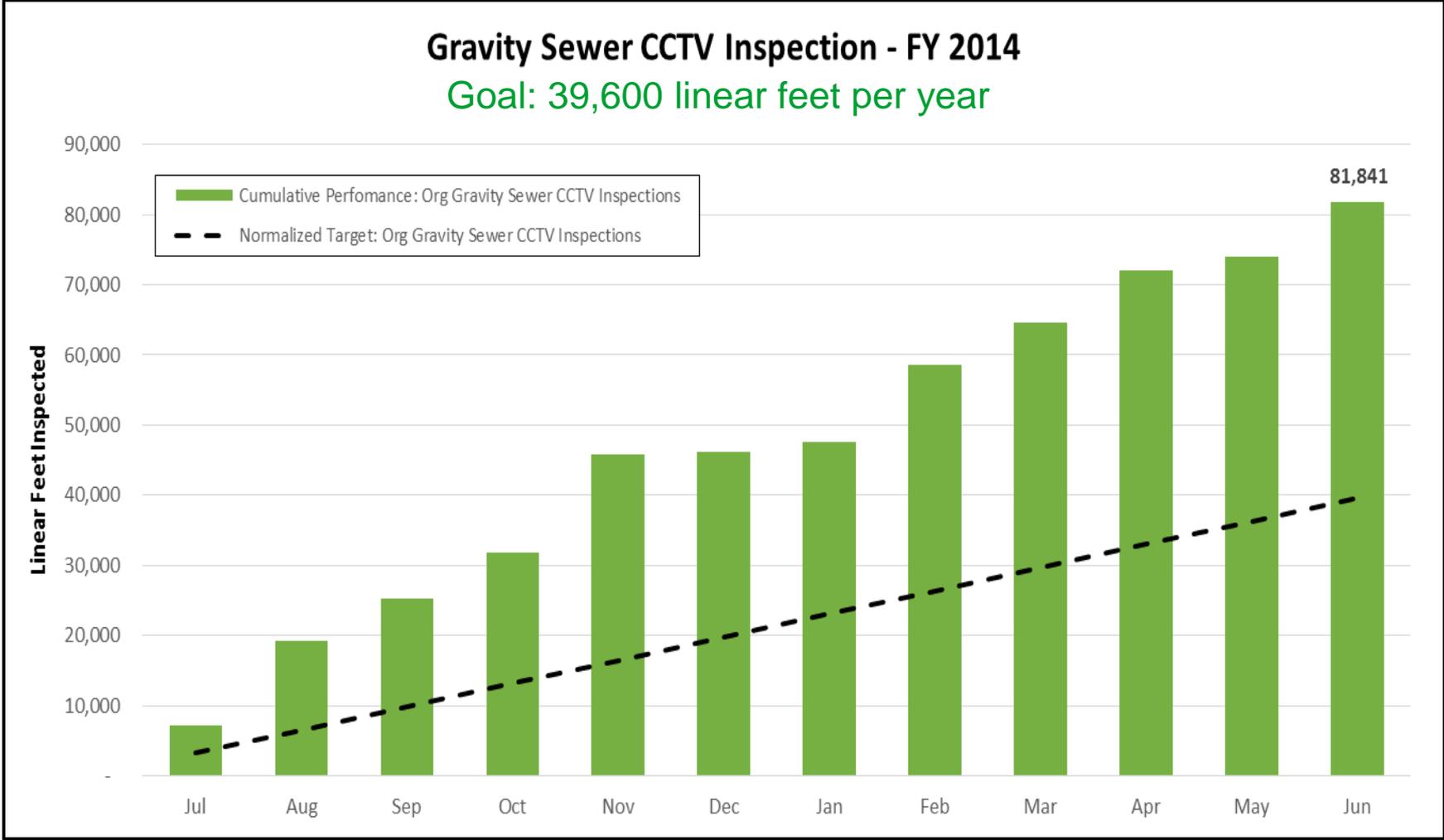
Consent Decree Performance Measures Review (Cont.)



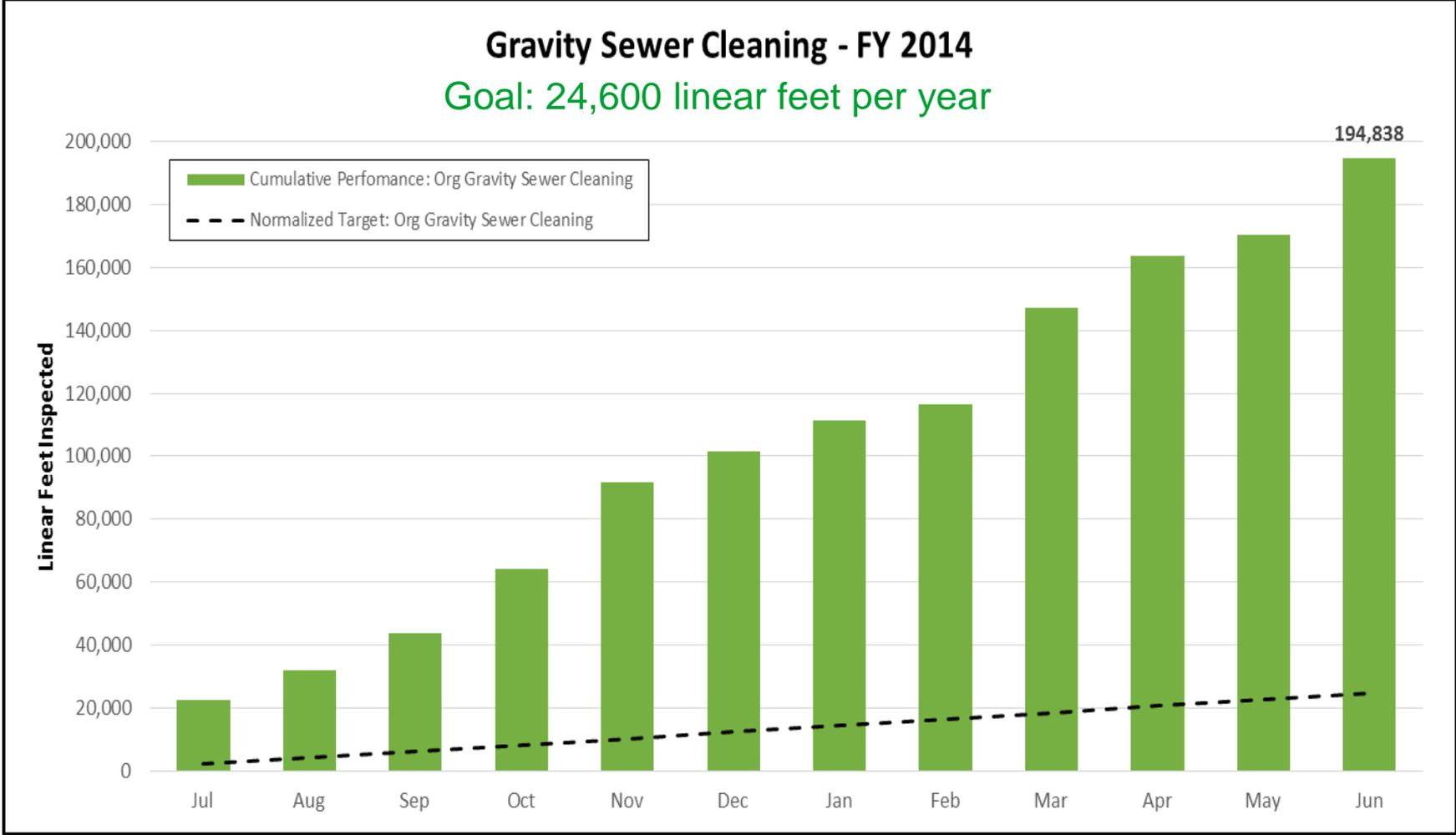
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Consent Decree Performance Measures Review

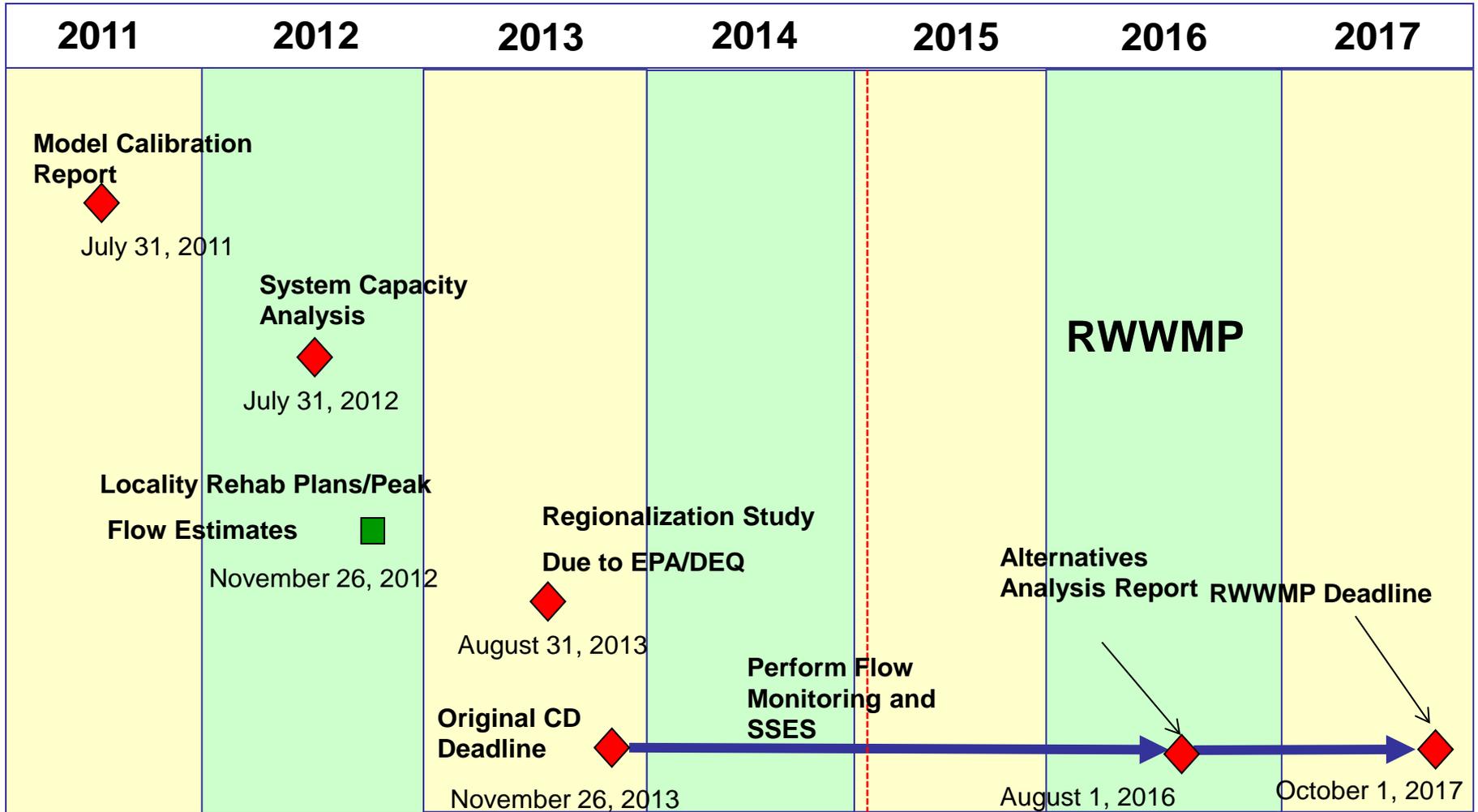
Metric	Target	FY-12 Actual	FY-13 Actual	FY-14 Actual
Pump Station Annual PM	83	84	83	83
Back-up Generator Annual PM	55	112	81	121
Force Main Air Vent PM	1,550	3,096	3,274	3,304
Non-Invasive Force Main Inspection	2,400 LF	15,098 LF	2,800 LF	2,562 LF
Gravity Sewer Inspection	39,600 LF	72,730 LF	98,185 LF	81,841 LF
Gravity Sewer Cleaning	29,400 LF	234,463 LF	207,724 LF	194,838 LF

- 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

Regionalized Approach

- Localities and HRSD agreed on a Memorandum of Agreement to a Regionalized Approach for the RWWMP dated March 10, 2014
- HRSD is conducting additional flow monitoring and Sanitary Sewer Evaluation Survey (SSES) in Locality systems (completion estimate by May 2015)
- Capacity Evaluation to be conducted in fall 2015

Consent Decree RWWMP Development Schedule



◆ Consent Decree Submittal

■ Original SOC Submittal



Short Term Wet Weather Operational Plan

- Purpose of the Plan is to identify how to get the most capacity out of the existing system prior to RWWMP
- EPA/DEQ approved plan on April 23, 2012
- Plan reviewed periodically for updates

- Purpose of the plan is to document SSO response, reporting, recordkeeping and resolution practices
- Original plan approved by EPA/DEQ
- Updated Plan submitted to EPA/DEQ in January 7, 2015

SSO Response Plan

HRSD	2011	2012	2013	2014
SSOs	35	40	14	17
Volume (gal)	1,879,591	22,847,617*	714,077	780,510
Unknown Volume	13	6	2	3
Total Rain near ORF (inches)	55	52	50	45

*Included single SSO at Wilroy Road of 18,352,000 gallons. Remaining volume ~4,500,000 gallons for 2012

Consultation with Localities

- Periodic meetings of Capacity Team
- Monthly Directors' of Utilities meetings
- HRSD providing GIS, flow, pressure and rainfall data to localities

- Annual newsletter (fourth due February 23, 2015)
- Annual public informational meeting with public notice (January 27, 2015)
- 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

- Annual report was submitted November 1, 2014 for period July 1, 2013 through June 30, 2014
- Semi annual report is due May 1, 2015 for period of July 1, 2014 through December 31, 2014

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 storm water 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 compost
- Pick up animal waste
- Avoid feeding wildlife
- Support “No Dumping” and use boater pump out facilities

Questions?
