



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: May 13, 2014

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Annual Wastewater Collection System Report

RECOMMENDATION:

That Council hear a report from staff on the wastewater collection system maintenance and management activities.

DISCUSSION:

The City operates 257 miles of wastewater collection system pipelines, the majority of which are 6 or 8 inches in diameter and serve to convey wastewater to the City's El Estero Wastewater Treatment Plant. The operation of the wastewater collection system is regulated by the State Water Resources Control Board under a Waste Discharge Requirement Permit.

In January 2011, the City contracted with the consultant, Brown and Caldwell, to assess collection system management practices and assist with modifying those practices to improve maintenance practices and reduce the sanitary system overflows.

In April 2011, Santa Barbara Channelkeeper filed a lawsuit against the City in Federal District Court alleging violations of the Clean Water Act. The City and Channelkeeper agreed to the terms of a consent decree in March 2012. By the time the consent decree was negotiated, the City had already committed over \$400,000 and very substantial staff resources to the development and implementation of management practices to improve collection system operations. The purpose of the Brown and Caldwell work was to address the same issues that were the basis of the Channelkeeper suit. Therefore, this work was incorporated into the consent decree and is the basis for most of the requirements of the consent decree.

By March 31st of each year, during the term of the consent decree, the City is required to report to Channelkeeper on the previous year's activities and to project the current year's work, particularly as it relates to the rehabilitation, replacement or repair of wastewater collection system pipes. These reports are available in the Council Reading File and in the City Clerk's office for review. The presentation to Council will summarize

the information provided to Channelkeeper in the annual reports. Channelkeeper will make a presentation to Council after the staff presentation.

BUDGET/FINANCIAL INFORMATION:

Funding for implementation of the consent decree, along with all wastewater system costs, is provided through the Wastewater Fund rates. In June 2012, the rates were increased by 10% to provide sufficient revenue to fund increased costs of compliance with the consent decree and meet other wastewater fund needs. In June 2013, the rates again were increased by 4% to continue sufficient revenue funding requirements.

SUSTAINABILITY IMPACT:

Limiting overflows and accelerating the renewal of the wastewater collection system will ensure that wastewater is effectively conveyed to the El Estero Wastewater Treatment Plant for treatment.

PREPARED BY: Joshua Haggmark, Acting Water Resources Manager/CJT/mh

SUBMITTED BY: Rebecca Bjork, Public Works Director

APPROVED BY: City Administrator's Office



Annual Wastewater Collection System Report



City Council
May 13, 2014



Presentation Summary

- ◆ Consent Decree Background
- ◆ Sewer System Management Plan (SSMP) Update
- ◆ Sanitary Sewer Overflow (SSO) History
- ◆ Sewer System Maintenance
- ◆ Condition Assessment / Rehabilitation
- ◆ Costs



Consent Decree Background

- ◆ High Number of Sanitary Sewer Overflow (SSO) Events Annually
- ◆ City Hired Consultants to Assist in Updating Work Practices in January, 2011
- ◆ Channelkeeper Filed Court Complaint Against City in April, 2011
- ◆ Consent Decree Filed in May, 2012

Consent Decree Milestones Completed To-Date

- SSMP Documentation Update
 - Includes All Work Plans (Enclosures)
 - GIS-Linked Computer Maintenance Management System
 - Database Development For Sewer Invert Elevations Relative To Storm Drain Pipe
- CIP Projects For 2012 – 2013
- Annual Reports for 2012 – 2013



SEWER SYSTEM MANAGEMENT PLAN UPDATE

SSMP Development: Work Plans

- ◆ Work Plans Developed and Implemented in 2011-2012, Updated in 2013
 - ✓ Fats, Oils, and Grease
 - ✓ SSO Response
 - ✓ Cleaning and Inspection
 - ✓ CCTV, Rehabilitation, and Replacement
 - ✓ Wastewater Master Plan
 - ✓ Lift Station Maintenance, Inspection, and Condition Assessment
 - ✓ IT Governance
 - ✓ Flow Monitoring
 - ✓ Exfiltration Abatement



SSMP Development

- ◆ Sewer System Management Plan (SSMP) Documentation Updated in CY 2012-2013
 - 2013 Edition Approved by City Council
 - Required by SWRCB WDR Order 06-0003 And WDR Order 2013-0058-EXEC
 - Incorporates Work Plan Documents As Appendices



SSO HISTORY

Consent Decree SSO Reduction Performance Standards

Year	SSO Limit	Actual
2012	18	20
2013	15	9
2014	12	5 (YTD)
2015	10	TBD
2016	8	TBD

SSO Calendar Year Event Performance History

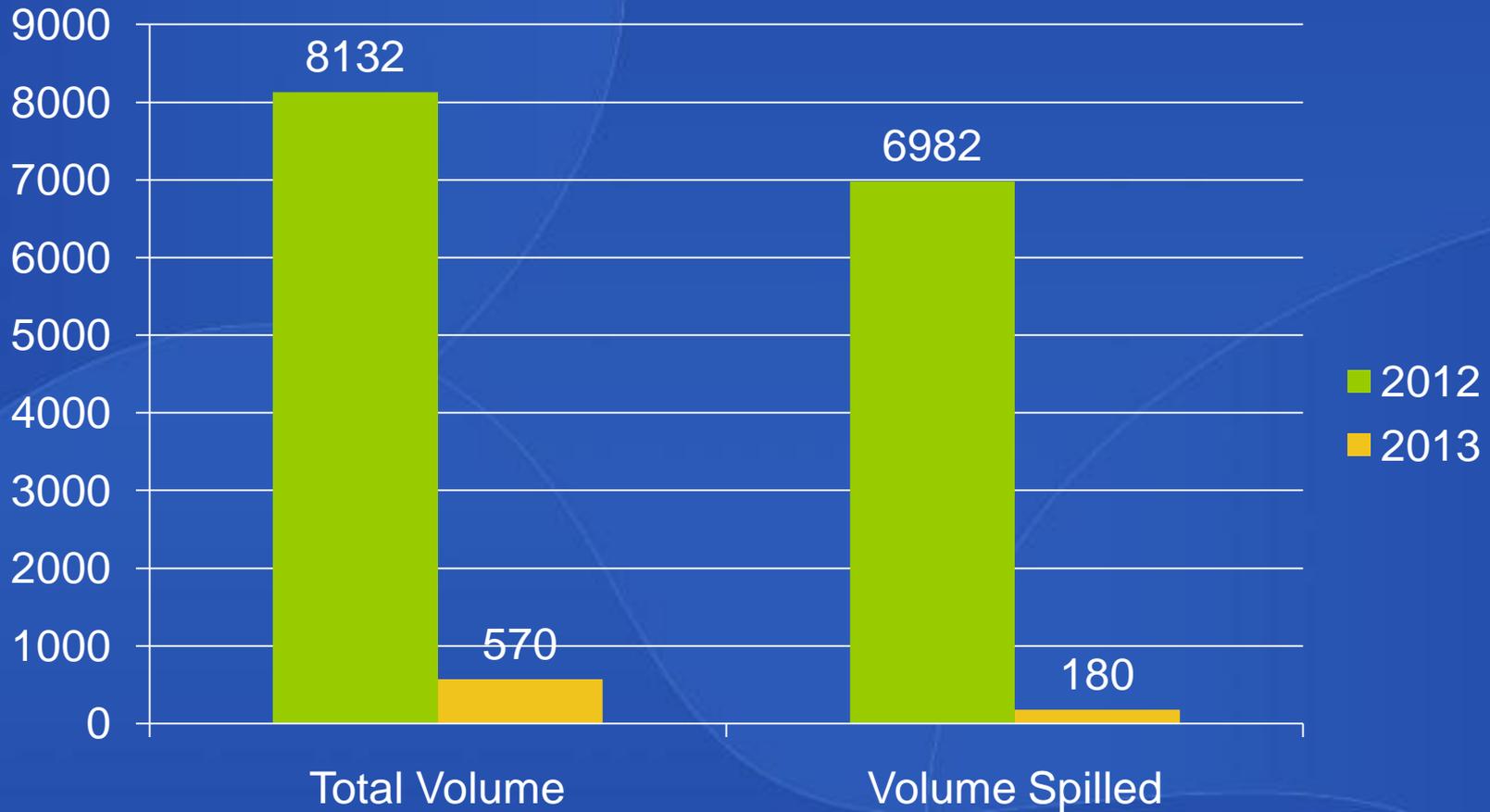
SSO Events



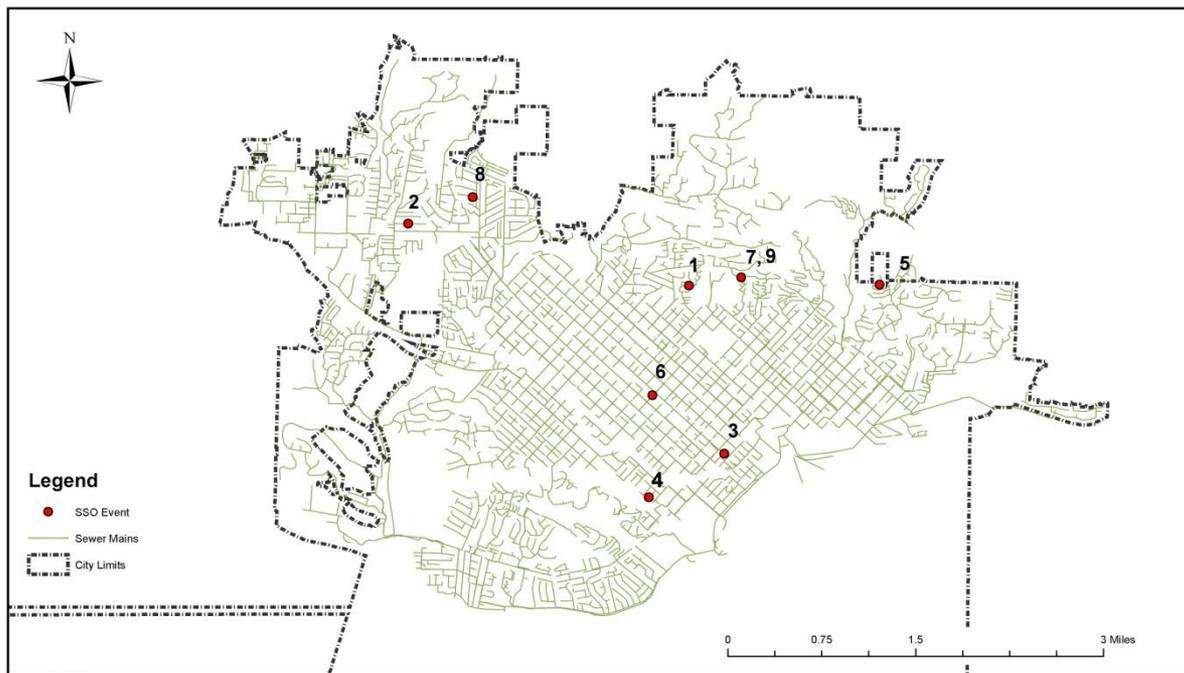
2012-2013 SSO Events By Cause



2012-2013 SSO Events By Volume (Gallons)



2013 SSO Location Map





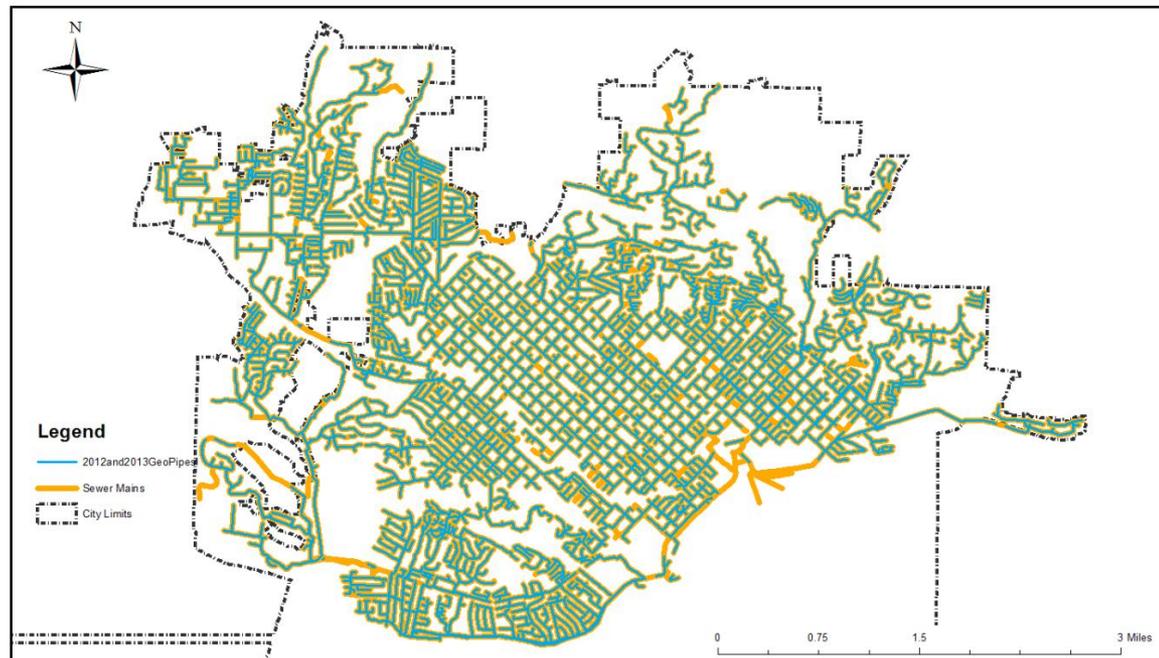
SEWER SYSTEM MAINTENANCE

Sewer System Cleaning Mileage History

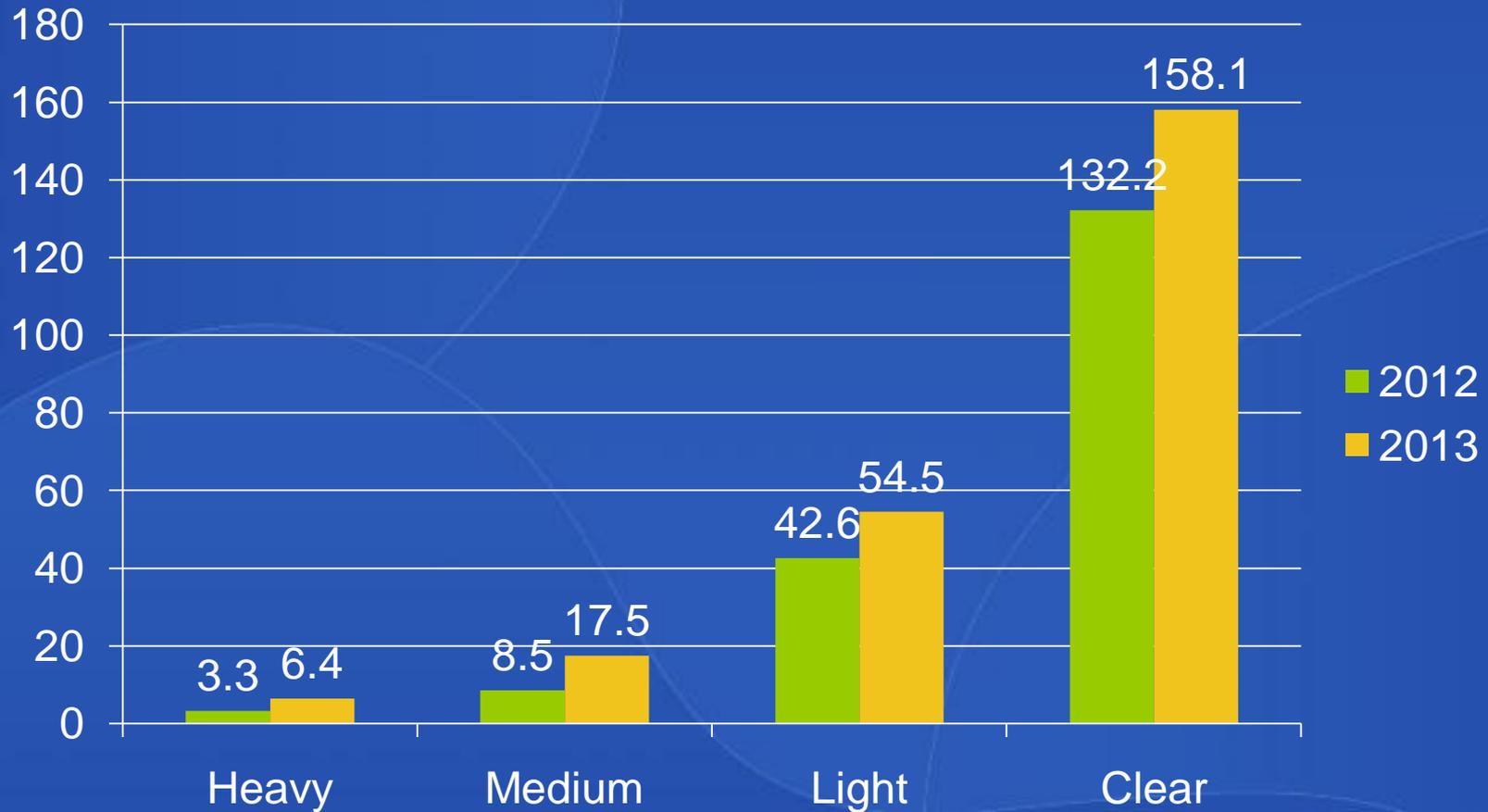


Sewer Mains Cleaning Map For Years 2012-2013

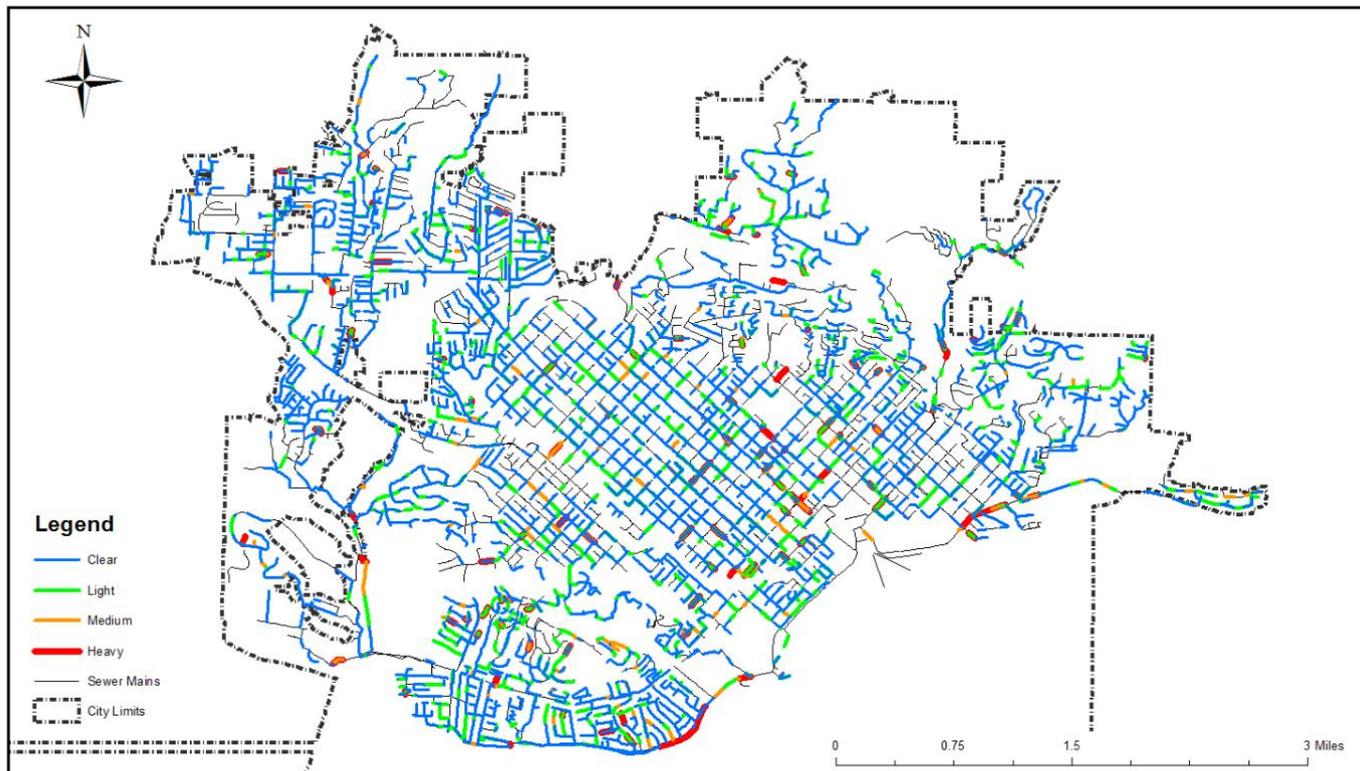
- ◆ 241 Geographic Miles Cleaned to-Date. 16.5 Miles Remain.



Overall Condition Findings Cleaning Mileage



Overall Condition Findings Cleaning Mileage Map





PIPE CONDITION ASSESSMENT

2013 CCTV Results

PACP Score	Pipe Mileage Receiving Each PACP Score
5	9.6
4	9.9
3	5.7
2	6.0
1	3.6
0	22.5

5 Represents the Worst Condition Pipe.
0 Represents the Best Condition Pipe.

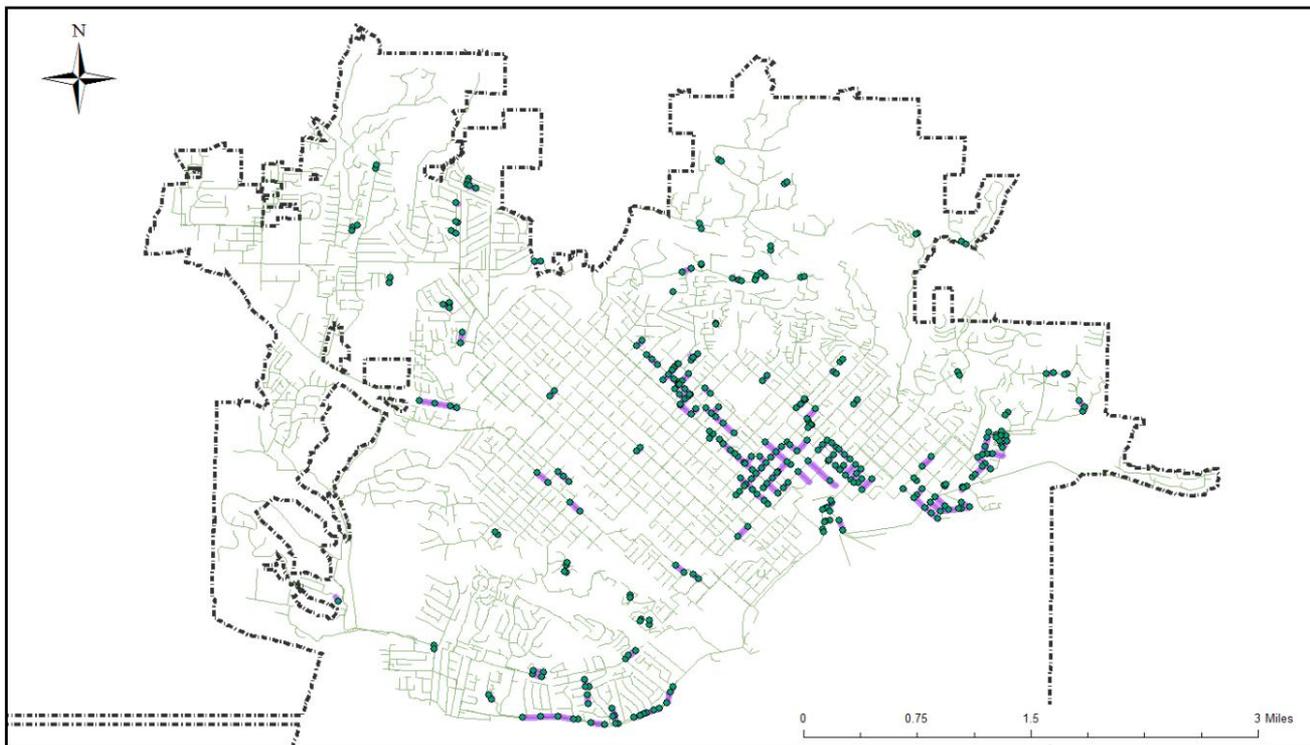
CCTV CY13

Contract Work: 28.7 Miles



CCTV CY14

Contract Work: 10.1 Miles

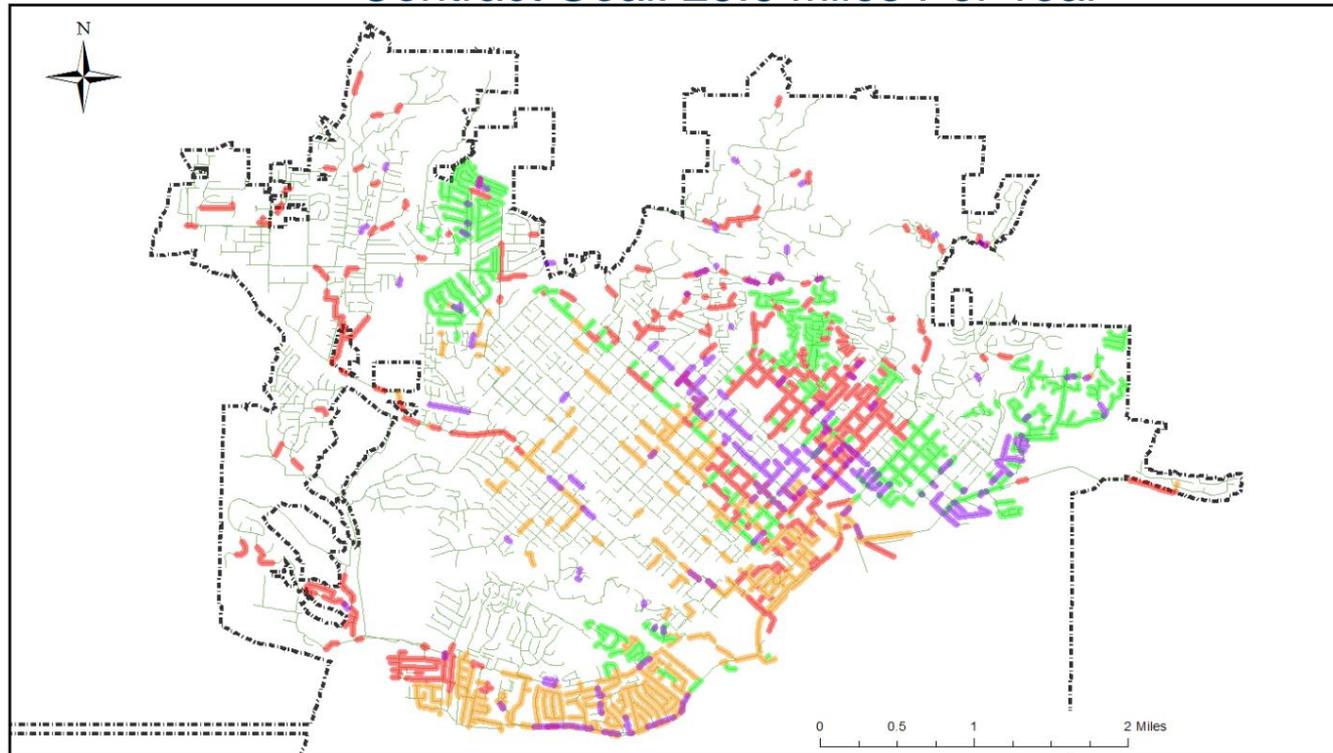


Legend

- CCTV FY14 Manhole Inspections (330 Manholes)
- Sewer Mains
- CCTV FY14 Sewer Mains (10.1 miles)
- - - City Limits

CCTV CY14-CY17

Contract Goal: 25.6 Miles Per Year



Legend

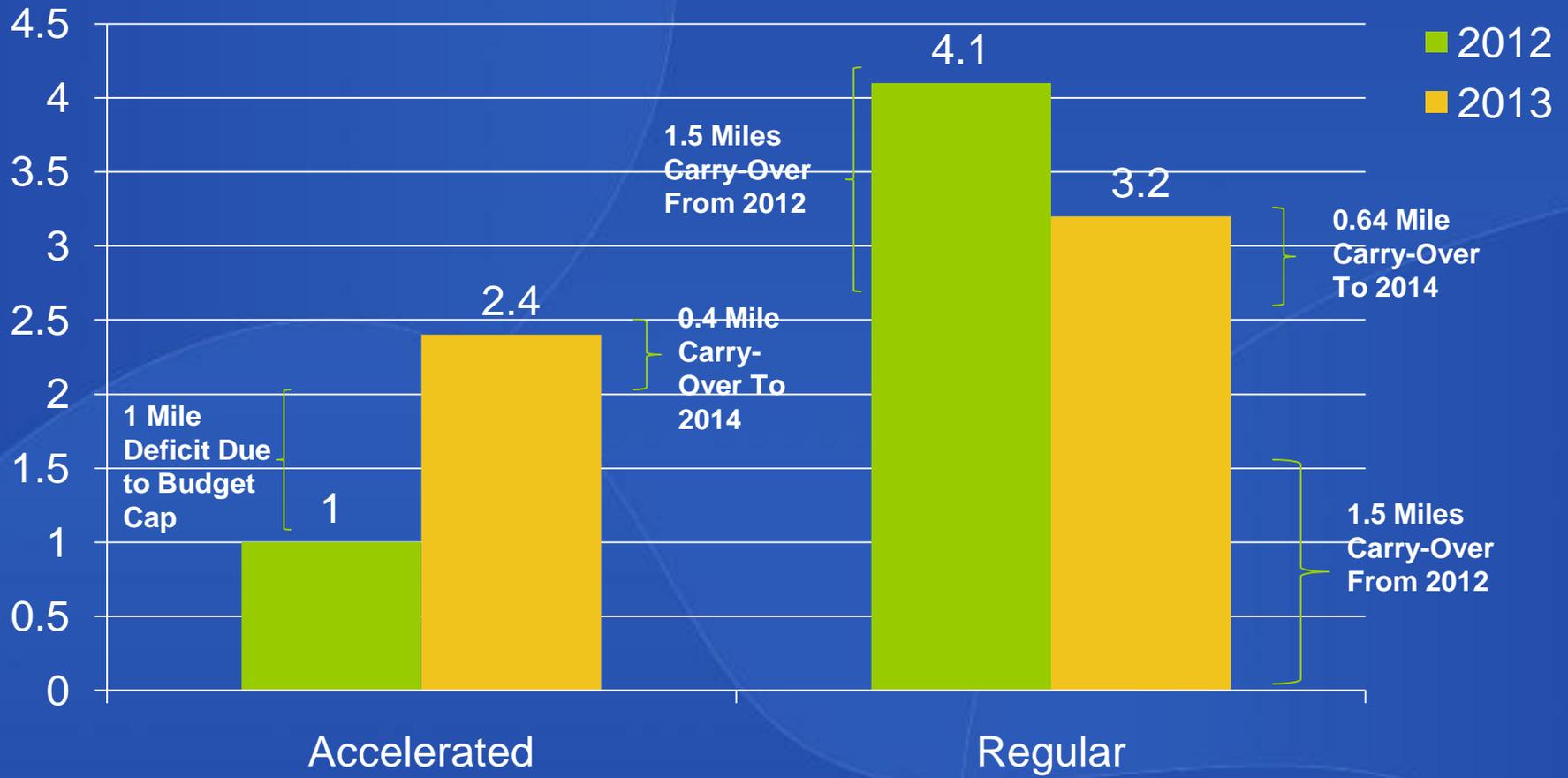
- CY 14 - Planned Work (10.1 miles)
- CY 15 - Estimated Work (25.5 miles)
- CY 16 - Estimated Work (25.3 miles)
- CY 17 - Estimated Work (25.4 miles)
- Sewer Mains
- City Limits

City ad-hoc televising work not shown on this map.

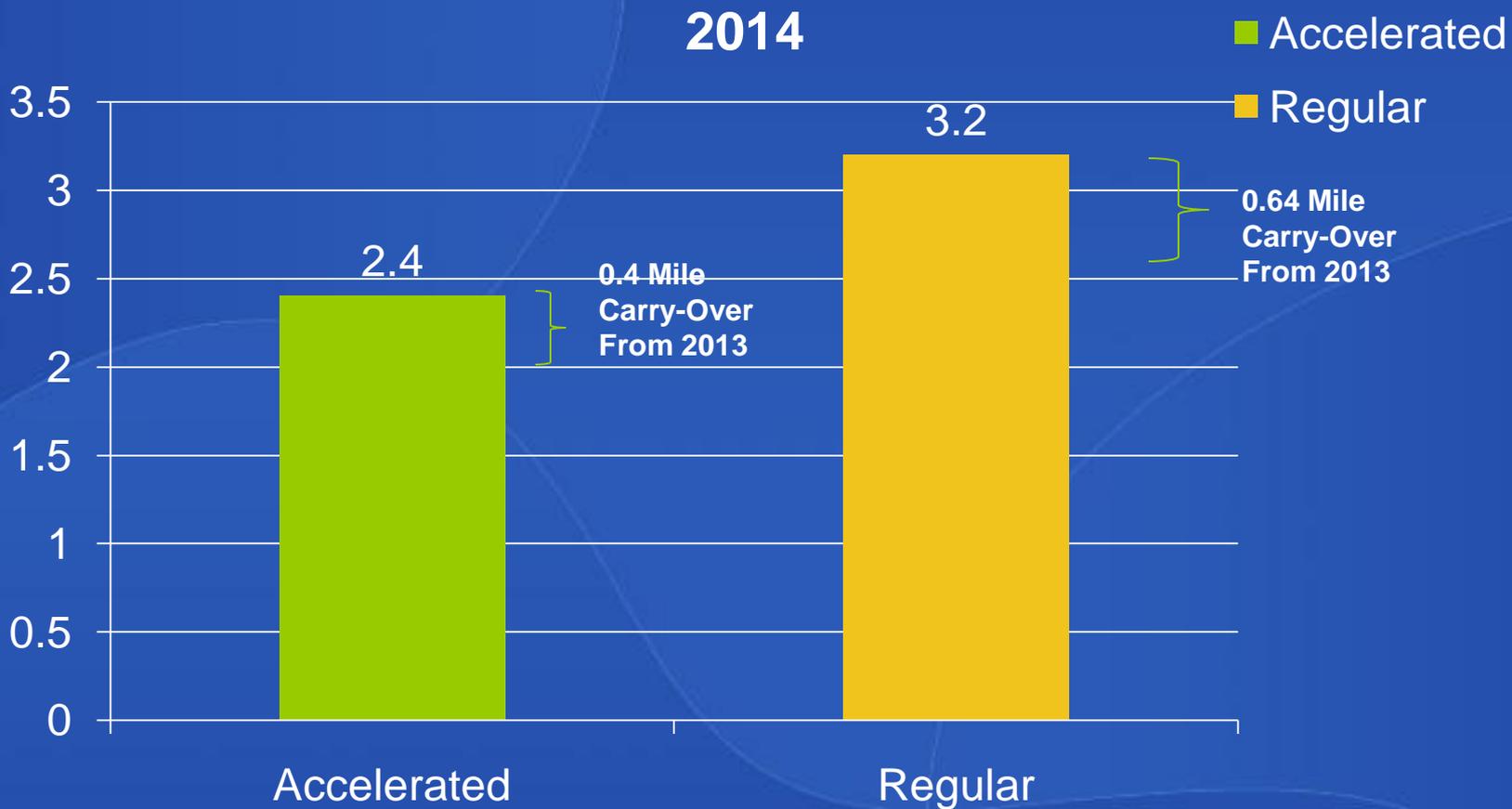


PIPE REHABILITATION AND REPAIR

2012-2013 Pipe Mileage Completed



2014 Scheduled Pipe Mileage





CONSENT DECREE COSTS

Consent Decree Costs

Description	CY 2012	CY 2013
Operations	\$2,637,948	\$2,692,117
Non-Capital	\$603,914	\$25,447
Capital	\$2,035,153	\$1,139,052
Accelerated Capital	\$642,922	\$994,529
Total Spent	\$5,919,937	\$4,851,145
Consent Decree Cap	\$5,100,891	\$5,151,900

Accelerated Pipe Costs

Description	CY 2012	CY 2013
CCTV	\$42,426.28	\$205,925.65
Survey And Analysis	\$276,610.81	\$38,135.00
Repair	\$109,119.03	\$40,824.09
Rehabilitation	\$214,765.95	\$709,644.31
Total	\$642,922.07	\$994,529.05

New Wastewater Collection System Activities in 2014

- ◆ Pilot Chemical Root Control Program
 - Goal: 16 Miles of Pipe in 2014
- ◆ Grease Control Program Contract
 - Improve Food Service Establishment Inspections / Enforcement – Contract Inspection Service Provided in 2014
 - May 29, 2014 Outreach Event
- ◆ Collection System Computer Model Update
 - Consultant Service Contract – Use of GIS to Analyze Entire Sewer System



Summary

- ◆ Successful Year for City Wastewater Collection System Activities in 2013
- ◆ Success Continues in 2014
- ◆ Sewer System Management Plan Implementation Ensures Activities Are Designed For Long-Term Success

Channelkeeper Comments

