

# City of Imperial Beach Sewer System Management Plan 2010 Audit Report

April 19, 2010

**Auditors:** Chris Helmer- Environmental Program Manager

*Chris Helmer*

A.J. Moeller- Sewer Division Supervisor

*A.J. Moeller*

Peter Lau- Public Works Superintendent

*Peter Lau*

Hank Levien- Public Works Director

*Hank Levien*

<b>System Overview</b>	
Miles of gravity sewer mains	39.5 miles
Miles of force mains	4.4 miles
Total miles of all sewer lines	43.9 miles
Number of pump stations	11 sewer and 1 storm drain
Number of private sewer lateral connections	10,892 equivalent units
Population served	26,543

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## **Introduction**

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The Sewer System Management Plan (SSMP) is a guiding document developed by the City of Imperial Beach and RBF Consulting to meet the requirements in Statewide Order 2006-003-DWQ. The SSMP is a living document that is updated and revised to reflect changes in practices, procedures, technology, and the collection system. The SSMP is designed to protect the public and the environment, to provide best management practices for the operation and maintenance of the collection system, and to conform to the Orders set forth by California's State Water Resources Control Board and the San Diego Region of California's Regional Water Quality Control Board.

Element 10.0 in the SSMP requires a biennial audit starting in calendar year 2010 of the program that provides the necessary review that may result in updates and modifications to the SSMP document. The City will determine the need to update its SSMP based on the results of the audit, as well as the performance of its waste collection system based on information collected for SSMP *Element 9.0-Monitoring Measurement and Program Modifications*. The following sections of this Audit Report are organized by each SSMP element as listed in the Statewide Order 2006-003-DWQ. The following report identifies key areas of performance measures within the SSMP, identifies areas where actual operations differs from documented procedures, provides criteria for measuring system performance and plan compliance, and documents the effectiveness of the program. If the City decides that an update to the SSMP is warranted then the necessary updates will be made to the SSMP document at the time of the audit.

Each section of the SSMP Audit presents a series of prompted questions that guide the auditor through the review process. Supporting information is then presented in a discussion for each section with any additional information provided as Attachments to the report.

## **Element 1.0 Goals:**

The City of Imperial Beach has developed a list of goals in accordance with the requirements of the GWDR. The City expects to meet these goals through the development and implementation of the SSMP.

### ***Audit Questions:***

Are the goals stated in the SSMP still appropriate and accurate?  Yes  No

### ***Discussion:***

The six goals developed by the City in accordance with the GWDR are still appropriate and accurate for the implementation of the SSMP. The six goals are as follows:

1. At least annually, use the approved *Sewer Utility Cost-of-Service Rate Study* (Foresight Study) to evaluate the funding needs to operate and maintain the sanitary sewer system.
2. Upon completion of RBF Consulting "Sewer System Capacity Study" in the spring of calendar year 2008, prepare an implementation plan as appropriate for sewer system's operations and maintenance (including budgeting and planning).
3. Update planned maintenance system checklists with each major equipment change.
4. Annually evaluate sewer system problem areas with an objective of designing maintenance and repair tasks that will result in reduced jetting frequencies.
5. Provide a minimum of 12 classroom hours per 24-month period for each sewer maintenance division employee.
6. Complete sewer system Capital Improvement Program (CIP) projects as scheduled in the adopted 5-year CIP budget.

## **Element 2.0 Organization:**

The Organization element includes the following subsections: *a) Authorized Representative, b) Contact Information, and c) Chain of communication.*

### ***Audit Questions:***

- |   |   |  |
|---|---|--|
| Is the Authorized Representative for the management of the City's collection system still Mr. Hank Levien, Public Works Director? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Is the SSMP contact information still current with agency and staffing contact information?                                       | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| Is the chain of communication within the City for reporting sanitary sewer overflow events current and up-to-date?                | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |

### ***Discussion:***

Mr. Hank Levien is still acting Public Works Director and the Authorized Representative for the City's sewer collection system as designated by the State Water Board.

Updates with current contact information and phone numbers were made to sub-sections *b) Contact Information* and *c) Chain of Communication*. The City has updated the following information:

- Environmental Program Manager- Chris Helmer
- Administrative Secretary II- Bobby Ortero
- City Attorney- Jennifer Lyons
- Maintenance Worker - Eric Bennett
- Maintenance Worker I - Miguel Ramos
- Environmental Program Specialist- Guy Nelson
- Removed Naima Finnie from the CIP Program Office and Jose Naranjo from Sewer
- County Department of Environmental Health- Ewan Moffat
- After hours phone number for San Diego RWQCB 858-822-8344

### **Element 3.0 Legal Authority:**

The intent of the Legal Authority element is to provide authority for the City to administer its collection system and to provide measures to enforce codes and regulations.

***Audit Questions:***

- Does the SSMP contain current information about the City’s legal authority?  Yes  No
- Is the SSMP Legal Authority matrix up-to-date?  Yes  No
- Are supporting legal documents provided in Appendix A of the SSMP?  Yes  No

***Discussion:***

Upon the completion of the SSMP document, RBF consulting provided a number of recommendations and suggested updates to consider while conducting future updates. The following table provides a short description on the changes suggested by RBF Consulting and how they were incorporated into the SSMP. Any updates made to this section as a result of the recommendations by RBF or through the process of this Audit were incorporated into the Legal Authority Matrix in the SSMP and included in Attachment 1 of this SSMP Audit report.

<b>Recommendations and Updates Suggested by RBF in the SSMP</b>	<b>How the City Incorporated Updates into the SSMP</b>
Under the General Waste Discharge Requirements (Order 2007-0003), legal authority over the City’s sewerage system must be in place by May 2, 2009.	Resolution No. 2009-6731, 2008-6683, and 2008-1077
Adopt legislation requiring that new manhole and cleanout structures be constructed within an access easement that will provide vehicular access for emergency response and maintenance. As some manholes are within the confines of a protected estuary, this restriction cannot be universally applied. City should adopt regulations which grandfather in existing manholes and provides for vehicular access to manholes constructed hereafter.	Resolution No. 2008-1077 IBMC. 13.04.180 B, 13.04.190
Strengthen Municipal Code §13.04.030.B, legislation prohibiting discharge of fats, oil, and debris into the sewer system. Refer to County Code §68.162 for wording.	Resolution No. 2008-1077 IBMC. 13.04030 B, 13.04.040 E
Adopt legislation prohibiting private storm water connections to the sewerage system. Refer to County Code §68.306, .307, and .332.	Resolution No. 2008-1077 IBMC. 13.04030 A
Adopt legislation giving the City authority to regulate grease haulers similar in intent to the San Diego Municipal Code §64.07 et al, which provides for oversight of food service establishments.	No changes to Municipal Code are necessary.
Adopt legislation requiring that an access easement be provided for all public sewers constructed that are not within a public right-of-way, and that any retirement of public right-of-way is reviewed to ensure that easements for utilities are preserved.	Resolution No. 2008-1077 IBMC. 13.04.180
Adopt legislation that provides right of entry for City crews to the sewer or any property upon which there is a structure housing the sewer, and also the right to transfer the right of entry to outside parties.	Resolution No. 2008-1077 IBMC. 13.04.190 A
Adopt legislation requiring that, in the event that a property is sold or undergoes a major remodeling, a licensed plumbing contractor inspect all sewer laterals for the property from the sewer main to the cleanout and if there is no cleanout to construct one. The legislation should then require remediation of deficiencies prior to the sale or permitting of the remodel.	Resolution No. 2008-1077 IBMC. 13.04.070 C
Strengthen legislation under which the City may sanction users if they fail to comply with regulations and/or cause deliberate or significant violations resulting in negative impacts to environmental and/or human health. The existing recourses should be strengthened so that they reflect the intent and structure as laid out in San Diego Municipal Code §64.0301.	IBMC. 13.04.170

## **Element 4.0 Operation and Maintenance:**

The Operation and Maintenance element includes the following subsections: *a) Collection System Map, b) Preventative Operation and Maintenance, c) Rehabilitation and Replacement Plan, d) Training, and e) Contingency Equipment and Replacement Inventories*. This element also includes the following relevant appendixes in the SSMP: Appendix B- System Maps, Appendix C- O&M Schedule, Appendix D- Rehabilitation and Replacement Plan, Appendix E- Training Program, and Appendix F- Contingency Equipment and Replacement Inventory.

### **Audit Questions:**

Are the City's sewer collection system maps/GIS complete?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the SSMP Appendix B contain current information about the sanitary sewer maps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the Operation and Maintenance schedule in Appendix C up-to-date for planned cleaning, inspection, and maintenance of the waste collection system?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are current maintenance activities sufficient and effective in reducing and preventing sewer system overflows?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are the City's resources and budget sufficient to support effective sewer system management?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Do the City's planning efforts support long-term goals?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is the City on track to complete the CCTV inspection for the entire sewer system?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the Rehabilitation and Replacement Plan in Appendix D provide up-to-date short and long term rehabilitation actions?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are all Sewer Division employees certified for their job title and have they received the necessary annual training as outlined in the Training Program Appendix E?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Do supervisors believe that their staff is sufficiently trained?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is staff satisfied with training opportunities and support?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is the inventory in Appendix F for Contingency Equipment and Replacement Part Inventories current?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conducted maintenance activities?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

### **Discussion:**

The following subsections of the SSMP have incorporated changes as a result of the biannual audit:

*a) Collection System Map:* The City maintains up-to-date maps of the wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities. Appendix B of the SSMP provides a map book of the entire collection system; however, the City's GIS database is where the most recent updates to the collection system maps are maintained. Revisions to the collection system maps are maintained on the City's GIS where both the Sewer Division Supervisor and City Management have access to print and download maps. Attachment 2 of this SSMP Audit provides a list and description of the changes made to the City's collection system maps since their initial development by RBF consulting.

*b) Preventative Operation and Maintenance:* The operation and maintenance activities for staff and contractors include routine preventative maintenance and cleaning (identified in the SSMP Appendix C), frequent cleaning of targeted known problem areas, and CCTV inspections of the collection system. Updates were made to the O&M schedule in Appendix C of the SSMP to most accurately present the current maintenance activities.

*c) Rehabilitation and Replacement Plan:* The Rehabilitation and Replacement Plan in the SSMP Appendix D identifies and prioritizes system deficiencies and presents short and long-term rehabilitation actions that address each deficiency. The Capital Improvement Project Division in Public Works maintains the most recent 5-year CIP revisions and adjusts the priorities based on the results of additional CCTV inspections and funding. The City is on track to start the second phase of the CCTV inspections of the collection system as outlined in the 5-year CIP.

*d) Training:* Regular training for sanitary sewer operations and maintenance staff ensures that employees are safe and adequately prepared on the job. No updates were made as a result of this audit to the Training Program in the SSMP Appendix E.

*e) Contingency Equipment and Replacement Inventories:* The list of sewer system operation equipment and replacement parts is provided in the SSMP Appendix F. No updates were made to the inventory during this audit.

### **Element 5.0 Design and Performance Design Standards:**

This element provides the standards for the design and performance for installation and repair as well as the inspection and testing of sewer facilities.

***Audit Questions:***

Are the design and performance standards current and up-to-date for installation, rehabilitation, and repair of equipment?  Yes  No

Are the design and performance standards current and up-to-date for inspection and testing of new, rehabilitated, and repaired facilities?  Yes  No

Is Appendix G for design and performance standards current with the most recent council resolution for the standards stated above?  Yes  No

***Discussion:***

The performance and design standards for the SSMP are listed in *The Standard Specifications for Public Works Construction (Greenbook)*, and the regional supplements to the Greenbook. A regional update to the GreenBook was made available in 2009 and subsequently adopted by the City in Resolution No. 2009-6718. The updates to the Greenbook by reference are included as part of this SSMP Audit. Appendix G in the SSMP was also updated to support the most recent Greenbook standard adopted by City Resolution No. 2009-6718.

**Element 6.0 Overflow Emergency Response Plan:**

The overflow emergency response plan identifies measures to protect public health and the environment. The Sewer Overflow Emergency Response Plan is provided in Appendix H.

***Audit Questions:***

- Does Appendix H contain up-to-date information on the emergency response plan?  Yes  No
- Is the current Sewer Overflow Emergency Response Plan effective in handling SSOs?  Yes  No

***Discussion:***

The Overflow Emergency Response Plan in Appendix H of the SSMP provides City staff with the direction and guidance for a quick and effective response to a sewer system overflow event. After the review of the Response Plan it was determined that the overall plan in Appendix H itself remained effective in handling SSOs, however two minor modifications were necessary to add clarity to the document. Updates were made to the Plan with respect to spill tracking procedures within the City's GIS system.

### **Element 7.0 Fats Oil and Grease Control Program:**

The fats, oil, and grease (FOG) control program identifies source control measures to reduce the amount of grease blockages in the sewer system.

***Audit Questions:***

Does the City's FOG Control Program in Appendix I adequately protect the sewer system from SSOs caused by grease?  Yes  No

***Discussion:***

Fats, oils, and grease from food service establishments are a significant source of sewer system overflows for many municipalities. However, Imperial Beach does not have a significant FOG problem from food service establishments that cause or contribute to sewer system overflows. The existing sewer system maintenance schedule and low number of food establishments are part of the reasons that makes FOG control a less critical issue for Imperial Beach. The existing FOG Control Program in Appendix I of the SSMP requires the Environmental Division to inspect and evaluate all food service establishments and to make modifications to the FOG Control Program as necessary.

In compliance with the SSMP FOG Control Program, the Environmental Division initiated a FOG inspection program for food service businesses in combination with the annual commercial storm water inspections. The food service establishments were evaluated on compliance with the Uniform Plumbing Code, training of staff, following of best management practices, and proper maintenance of grease treatment devices. An evaluation of the food service establishments is provided in Attachment 3 of this SSMP Audit. Even though the City does not have an identified FOG problem, the results from the inspections revealed a number of deficiencies in grease management practices from food service establishments in the City. As a result of FOG evaluation and this audit the City has decided to continue investigating management actions that will strengthen the FOG control program and ensure compliance from food service establishments. Such management actions may include strengthening the municipal code and modifying the FOG control program.

### **Element 8.0 System Evaluation and Capacity Assurance Plan:**

This element provides an evaluation of the sewer system in regards to current and future dry and wet weather peak flow events. The hydraulic model also evaluates the wet wells at the pump stations to determine additional capacity needs. The results from the hydraulic model should be used in conjunction with the CCTV inspections in the development and prioritization of sewer capital improvement projects.

***Audit Questions:***

- |   |   |                             |
|---|---|-----------------------------|
| Does the SSMP contain current information on the capacity assessment of the sewer system and adequately prepare the City for future growth?             | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Is the hydraulic model that is part of the Capacity Assurance Plan in Appendix J considered in the Sewer Division CIPs?                                 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have the recommended repairs identified from CCTV inspections and the capacity assurance model been included into a 5-year capital improvement program? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Does the City adequately evaluate the long term capacity assurance needs when developing future capital improvement projects?                           | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

***Discussion:***

Imperial Beach is almost completely developed out. Future sewer system capacity needs for the City are minor and will result from the redevelopment of existing facilities. The City evaluates the long term capacity assurance of the sewer system through the general planning process and the short term 5-year capital improvement program.

### **Element 9.0 Monitoring Measurement and Program Modifications:**

Each of the elements of the SSMP has methodology for updating the processes and maintaining records. In general, as a living document, the elements of the SSMP shall be modified as needed to represent the lessons learned through implementation.

***Audit Questions:***

- |  |   |                             |
|--|---|-----------------------------|
| Does the City maintain relevant documentation that can establish and prioritize activities?  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Did the Sewer Division Supervisor and Public Works Director monitor the implementation and, where appropriate, measure the effectiveness of each SSMP element? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Did the City make efforts to identify and illustrate SSO trends, including frequency, location, and volume?  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

***Discussion:***

The City properly maintains the documentation for each SSMP element and continuously reviews the effectiveness of the SSMP to ensure the highest level of service. One measure of effectiveness used by the City is a review of historic sewer system overflow to identify trends by cause, location, and frequency of spills. Attachment 4 of this Audit provides a report that summarizes the sewer overflows in the City from November 1997 through February 2010.

## Element 10.0 SSMP Audits:

Every even year (biennially), the Public Works Director shall oversee an audit of the SSMP program that will culminate in a report documenting the effectiveness of the program in regards to reducing sewer spills, maintaining the level of service of the sewer system, and providing sewer capacity for development. The report shall identify areas where actual operations differ from the documented procedures and provide recommendations for updating either the operations or documented procedures. The report shall identify deficiencies in the SSMP and provide steps to correct them. This report shall be kept on file.

### Audit Questions:

Is an update to the City's SSMP warranted based on the results of the audit?  Yes  No

### Discussion:

The following updates were made to the City's SSMP:

Section	Updates Needed
<b>2.0 Organization</b>	<b>b) Contact Information</b> and <b>c) Chain of Communication:</b> Update with current contact names and phone numbers.
<b>3.0 Legal Authority</b>	Update the legal authority matrix to be consistent with recent updates to the municipal code that were part of the adoption of this SSMP.
<b>4.0 Operation &amp; Maintenance</b>	<b>a) Collection System Map:</b> Maintain and up-to-date waste collection system map that is maintained on the City's GIS (Mike Piasecki). <b>b) Preventative Operation and Maintenance:</b> Appendix C for Operation and Maintenance Schedule was updated to reflect the current planned cleaning, inspection, and maintenance of the waste collection system <b>c) Rehabilitation and Replacement:</b> The City is on track with current 5-year CIP and in the process of starting the second phase of CCTV inspections.
<b>5.0 Design &amp; Performance Standards</b>	<b>a) Standards for Installation, Rehabilitation and Repair:</b> Updated 2009 Greenbook Resolution No. 2009-6718 <b>b) Standards for Inspection and Testing of New, Rehabilitated, and Repaired facilities:</b> Updated 2009 Greenbook Resolution No. 2009-6718
<b>6.0 Overflow Emergency Response Plan</b>	<b>Appendix H:</b> Minor updates were made to the Sewer Overflow Response Plan on spill tracking using GIS.
<b>7.0 Fats, Oil, and Grease</b>	Conducted investigation of existing restaurants and grease capture devices. As a result of FOG evaluation and this audit, the City has decided to continue evaluating management actions that will strengthen the FOG control program and ensure compliance from food service establishments.
<b>8.0 System Evaluation &amp; Capacity Assurance Plan</b>	The City evaluates the long term capacity assurance of the sewer system through the general planning process and the short term 5-year capital improvement program.

**Element 11.0 Communication Program:**

The SSMP process will be discussed and open for public input at the City Council meetings. In addition, the SSMP will be posted on the City's website along with contact information where interested parties can comment on the plan and the implementation.

***Audit Questions:***

None

***Discussion:***

None

**RESOLUTION NO. 2009-6718**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH, CALIFORNIA, ADOPTION OF THE 2009 EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK 2009), THE REGIONAL SUPPLEMENTS TO THE GREEN BOOK 2009, AND THE 2006 EDITION OF THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION**

**WHEREAS**, on April 18, 2007, City Council, City of Imperial Beach adopted Resolution No. 2007-6471 establishing the 2006 Edition of the Standard Specifications for Public Works Construction (Green Book 2006), the 2006 Edition of the Regional Supplement Amendments to the “Standard Specifications for Public Works Construction,” and the 2006 Edition of the San Diego Area Regional Standard Drawings as the operative standard construction specifications for public works projects; and

**WHEREAS**, the 2009 Edition of the “Green Book” has recently been published for use as a reference document with public works construction projects and is designed to replace the “2006 Green Book”; and

**WHEREAS**, each succeeding edition of the Green Book is prepared to reflect the constantly changing technology and advanced thinking of the construction industry; and

**WHEREAS**, the Green Book Committee has also published the “Standard Plans For Public Works Construction” 2006 Edition that is designed to be a companion document to the Green Book; and

**WHEREAS**, City Council has the authority to establish appropriate reference documents as the construction standard within the City when performing public works projects; and

**WHEREAS**, the “Standard Specifications for Public Works Construction”, “Regional Supplements to the Standard Specification for Public Works Construction,” and “Standard Plans for Public Works Construction“ provide specifications and plans respectively that have general applicability to public works construction projects; and

**WHEREAS**, the 2006 Edition of the San Diego Area Regional Standard Drawings adopted with modifications with Resolution No. 2007-6471 has not been revised and is still applicable.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Imperial Beach as follows:

1. The above recitals are true and correct.
2. This legislative body adopts “Green Book 2009”, Regional Supplements to Green Book 2009 and the Standard Plans for Public Works Projects, 2006 Edition as City of Imperial Beach construction standards documents for public works construction projects.
3. This legislative body retains the 2006 Edition of the “San Diego Area Regional

Attachment 1- Updated Legal Authority Documents

Standard Drawings” with modifications as approved in Resolution No. 2007-6471 as City of Imperial Beach construction standards documents for public works projects.

**PASSED, APPROVED, AND ADOPTED** by the City Council of the City of Imperial Beach at its meeting held on the 4<sup>th</sup> day of March 2009, by the following roll call vote:

<b>AYES:</b>	<b>COUNCILMEMBERS:</b>	<b>MCCOY, KING, MCLEAN, BRAGG, JANNEY</b>
<b>NOES:</b>	<b>COUNCILMEMBERS:</b>	<b>NONE</b>
<b>ABSENT:</b>	<b>COUNCILMEMBERS:</b>	<b>NONE</b>

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**JAMES C. JANNEY, MAYOR**

**ATTEST:**

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**JACQUELINE M. HALD, CMC**  
**CITY CLERK**

**ORDINANCE NO. 2008-1077**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH, CALIFORNIA, AMENDING IMPERIAL BEACH MUNICIPAL CODE CHAPTER 13.04 BY AMENDING SECTIONS 13.04.030, 13.04.040 AND 13.04.170 AND ADDING SECTIONS 13.04.180 AND 13.04.190 - SEWERS TO COMPLY WITH STATE WATER RESOURCES CONTROL BOARD ORDER NO. 2006-0003-DWQ**

**WHEREAS**, The State Water Resources Control Board issued Order No. 2006-003-DWQ hereafter requiring that all sewer systems larger than one mile long comply with certain standards; and

**WHEREAS**, the City of Imperial Beach, which administers a sewer system covered by Order No. 2006-0003-DWQ, has hired RBF Consulting to evaluate the City's sewer system for compliance with the Order; and

**WHEREAS**, changes adopted in this Ordinance, based on the recommendations to RBF Consulting, should ensure that the City is in compliance.

**NOW, THEREFORE, the City Council of the City of Imperial Beach, California does hereby ordain as follows:**

**SECTION 1:** Sections 13.04.030, 13.04.040, and 13.04.170 are amended to add the following:

**13.04.030. Prohibited Discharges**

A. It is unlawful for any person to discharge into the city sewer facility groundwater, surface water, stormwater, or solid or liquid matter from roof downspouts, roof drains, or area drain connections except as authorized by the City Council of the City of Imperial Beach and the wastewater treatment facility receiving the water for treatment.

B. It is unlawful to place, throw, or deposit, or cause or permit to be placed, thrown, or deposited, in any public or building sewer any dead animal, offal or garbage, fish, fruit or vegetable waste, or other solid matters or materials or obstructions of any kind whatever of such nature as shall clog, obstruct, or fill such sewer, or which shall interfere with or prevent the effective use or operation thereof. No person shall cause or permit to be deposited or discharged into any such sewer any water or sewage or liquid waste of any kind containing chemicals, greases, oils, tars, or other matters in solution or suspension which may be reason of chemical reaction or precipitation, clog, obstruct or fill the same, or which may in any way damage or interfere with or prevent the effective use thereof, or which may necessitate or require frequent repair, cleaning out or flushing of such sewer to render the same operative or which may obstruct or cause an unwarranted increase in the cost of treatment of the sewage.

**13.04.040. Connection to Public Sewer Required; Design Specifications.**

A. No person whose premises are so located that a public sewer is within two hundred feet of the place of origin of sewage on the premises shall install any septic tank or use any means of disposing of such sewage other than through a connection with the city sewer

## Attachment 1- Updated Legal Authority Documents

facility. Each such person shall be required to connect such premises with the sewer system and to pay all costs and charges provided for under this chapter.

B. All persons whose premises are connected to the public sewer shall be responsible for the installation, maintenance and upkeep of the building sewer and the sewer lateral to the point where the lateral attaches to the saddle connection on the public sewer or sewer main.

C. New sewers and connections to the sewer system will meet all requirements of the Uniform Plumbing Code, copies of which are on file with the Department of Public Works and the Building Department; the standard plans and specifications of the city for construction in the public right-of-way; and shall also meet the design requirements as established from time to time by the City Engineer.

D. Except as expressly provided in this Code, all work performed and all plans and specifications required under the provisions of this chapter shall conform to the requirements prescribed by the the editions of "The San Diego Area- Regional Standard Drawings" and "The Standard Specifications for Public Works Construction" and associated supplements, and "Standard Plans for Public Works Construction" in effect as of November 2, 2008, unless exempted or modified by the City Council of the City of Imperial Beach. To the extent possible, all designs and plans shall provide for vehicular access to all manholes and cleanouts in the sewer main system.

E. All Building Permit plans or designs submitted after November 2, 2008 shall comply with Section 1014.0 of the 2007 California Plumbing Code to eliminate or minimize the sewer system impacts due to Fats, Oils, and Grease discharge.

### **13.04.070. Connection Permit - Application- Inspection.**

A. A person desiring a permit to make a connection to a sewer lateral, sewer saddle connection or public sewer shall file with the city an application in writing on a form furnished by the city.

B. When applying for a building sewer connection to the public sewer, the city shall have not less than two full working days for inspection of the property and research of the maps and records to determine the possible existence of any unusual excavation problems which may require special equipment or pose difficulties as regards to obstruction, traffic control, underground water flow, etc. Permits will not be issued until after this inspection has been performed.

C. Within 30 days after any parcel of real property in the City of Imperial Beach containing one or more sewer laterals is sold or ownership of the property is otherwise transferred, the seller or transferor shall submit proof to the City of Imperial Beach that all sewer laterals on the property have been inspected and are in proper working order.

**SECTION 2.** Sections 12.04.180 and 13.04.190 are added as follows:

### **Section 13.04.180. Public Sewer Easements**

A. A public sewer easement must be recorded over any public sewer constructed after November 2, 2008, that is not in the public right-of-way.

B. A public sewer easement must be recorded over any existing public sewer system that transits an adjacent property and not in the public right-of-way after November 2, 2008, for any property development or redevelopment building permit submitted for approval that had not been previously recorded.

**Section 13.04.190. Right of Entry for Inspection.**

A. For any inspection authorized or maintenance or repair required by this code or any federal or state law, city employees or their designees have the right of entry to the sewer or any property upon which there is the City's sewer system infrastructure, for purposes of inspection or maintenance or for repair of sewer facilities or connections.

B. Notwithstanding any other provision of law, the City of Imperial Beach retains all necessary rights to access for maintenance, inspection, or repairs for portions of any sewer main owned or maintained by the City.

**SECTION 3:** This ordinance shall become effective no sooner than thirty (30) days following its passage and adoption by the City Council.

**INTRODUCED AND FIRST READ** at a regular meeting of the City Council of the City of Imperial Beach, California, held the 1<sup>st</sup> day of October 2008; and thereafter **PASSED AND ADOPTED** at a regular meeting of the City Council of the City of Imperial Beach, California, held on the 15<sup>th</sup> day of October 2008, by the following roll call vote:

<b>AYES:</b>	<b>COUNCILMEMBERS:</b>	<b>WINTER, MCLEAN, BRAGG, MCCOY, JANNEY</b>
<b>NOES:</b>	<b>COUNCILMEMBERS:</b>	<b>NONE</b>
<b>ABSENT:</b>	<b>COUNCILMEMBERS:</b>	<b>NONE</b>

*James C. Janney*  
\_\_\_\_\_  
**JAMES C. JANNEY, MAYOR**

**ATTEST:**

*Jacqueline M. Hald, CMC*  
\_\_\_\_\_  
**JACQUELINE M. HALD, CMC**  
**CITY CLERK**

**APPROVED AS TO FORM:**

*James P. Lough*  
\_\_\_\_\_  
**JAMES P. LOUGH**  
**CITY ATTORNEY**

**RESOLUTION NO. 2009-6731**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH, CALIFORNIA, APPROVING THE SEWER SYSTEM MANAGEMENT PLAN ELEMENTS – DESIGN AND PERFORMANCE PROVISIONS, SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN, MONITORING MEASUREMENT AND PROGRAM MODIFICATIONS, PROGRAM AUDITS, AND COMMUNICATION PROGRAM ELEMENTS – IN ACCORDANCE WITH THE STATE WATER RESOURCES CONTROL BOARD ORDER NO. 2006-0003-DWQ “STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS”**

**WHEREAS**, on May 2, 2006, the State Water Resources Control Board (SWRCB) adopted and implemented Order No. 2006-0003-DWQ “Statewide General Waste Discharge Requirements [WDR] for Sanitary Sewer Systems;” and

**WHEREAS**, the purpose of the WDR is to develop a regulatory mechanism to provide a consistent statewide approach for reducing sanitary sewer overflows; and

**WHEREAS**, the WDR requires preparation of a Sewer System Management Plan (SSMP) with 11 separate elements; and

**WHEREAS**, the first six elements have been previously approved and adopted by City Council in Resolution Nos. 2007-6541 and 2008-6683; and

**WHEREAS**, the SSMP Design and Performance Provisions, System Evaluation and Capacity Assurance Plan, Monitoring Measurement and Program Modifications, Program Audits, and Communication Program are the last five elements required for WDR compliance and must be approved and adopted not later than May 2, 2009, through a public meeting; and

**WHEREAS**, the SSMP elements Design and Performance Provisions, System Evaluation and Capacity Assurance Plan, Monitoring Measurement and Program Modifications, Program Audits, and Communication Program Elements – Exhibits A through E – have been prepared and are recommended for approval by City Council.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Imperial Beach as follows:

1. The above recitals are true and correct.
2. The SSMP elements Design and Performance Provisions, System Evaluation and Capacity Assurance Plan, Monitoring Measurement and Program Modifications, Program Audits, and Communication Program Elements – Exhibits A through E – required by the State Water Resources Control Board Order No. 2006-0003-DWQ “Statewide General Waste Discharge Requirements for Sanitary Sewer Systems” are approved.

**PASSED, APPROVED, AND ADOPTED** by the City Council of the City of Imperial Beach at its meeting held on the 1<sup>st</sup> day of April 2009, by the following roll call vote:

**AYES: COUNCILMEMBERS: MCCOY, KING, MCLEAN, BRAGG, JANNEY**  
**NOES: COUNCILMEMBERS: NONE**  
**ABSENT: COUNCILMEMBERS: NONE**

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**JAMES C. JANNEY, MAYOR**

**ATTEST:**

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**JACQUELINE M. HALD, CMC**  
**CITY CLERK**

**RESOLUTION NO. 2008-6683**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH, CALIFORNIA, APPROVING THE SEWER SYSTEM MANAGEMENT PLAN – LEGAL AUTHORITY, OPERATIONS AND MAINTENANCE PROGRAM, OVERFLOW EMERGENCY RESPONSE PROGRAM, AND FATS, OIL, AND GREASE (FOG) CONTROL PROGRAM ELEMENTS – AS REQUIRED BY THE STATE WATER RESOURCES CONTROL BOARD ORDER NO. 2006-0003 STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS**

**WHEREAS**, on May 2, 2006, the State Water Resources Control Board (SWRCB) adopted and implemented Order No. 2006-0003 Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems; and

**WHEREAS**, the purpose of the WDR is to develop a regulatory mechanism to provide a consistent statewide approach for reducing sanitary sewer overflows; and

**WHEREAS**, the WDR requires preparation of a Sewer System Management Plan (SSMP) with 11 separate elements; and

**WHEREAS**, the SSMP Legal Authority, Operations and Maintenance Program, Overflow Emergency Response Program, and FOG Control Program Elements are the next elements required for WDR compliance and must be approved not later than November 2, 2008; and

**WHEREAS**, the Public Works Director reviewed the SSMP Legal Authority, Operations and Maintenance Program, Overflow Emergency Response Program, and FOG Control Program Elements – Exhibits A-D – and recommended their approval by City Council.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Imperial Beach as follows:

2. The above recitals are true and correct.
2. The SSMP Legal Authority, Operations and Maintenance Program, Overflow Emergency Response Program, and FOG Control Program Elements – Exhibits A-D – required by the State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems are approved.

**PASSED, APPROVED, AND ADOPTED** by the City Council of the City of Imperial Beach at its meeting held on the 15<sup>th</sup> day of October 2008, by the following roll call vote:

**AYES: COUNCILMEMBERS: WINTER, MCLEAN, BRAGG, MCCOY, JANNEY**  
**NOES: COUNCILMEMBERS: NONE**  
**ABSENT: COUNCILMEMBERS: NONE**

*James C. Janney*  
\_\_\_\_\_  
**JAMES C. JANNEY, MAYOR**

**ATTEST:**

*Jacqueline M. Hald*  
\_\_\_\_\_  
**JACQUELINE M. HALD, CMC**  
**CITY CLERK**

\_\_\_\_\_  
CITY CLERK

\_\_\_\_\_  
DATE

## **Inventory of Sewer System GIS Database Changes**

**March 19, 2010**

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### Summary of Changes

1. Manhole MH-40, located approximately 150 feet west from the intersection of Seacoast and Palm and was shifted north from its prior location..
2. Force main gate valves PS5FMGTVLV-1 and PS5FMGTVLV-2 were added approximately 93 feet south from the intersection of Seacoast and Date.
3. Sewer line 2044 was added south from the intersection of Seacoast and Elm in between manholes MH-167 B and MH-22.
4. Sewer line 900 (located beneath the pier) was corrected by being shifted to the North. It runs in between manhole MH-733 and manhole Port-1943
5. Cleanout PS1A CO-1 located on Seacoast approximately 100 feet south from the intersection of Seacoast and Elder was added.
6. A section of sewer line 2014, from the intersection of Evergreen and Seacoast to the intersection of Imperial Beach and Seacoast was shifted towards the East.
7. Cleanout PS1ACO-2 was added on Seacoast approximately 75 feet south from the intersection of Elkwood and Seacoast.
8. Cleanout PS1ACO-3 was added approximately 45 feet north from the intersection of Seacoast and Imperial Beach.
9. A 135 foot section of sewer line 2018, located east from the intersection of Imperial Beach and Seacoast was corrected. It was shifted south from its prior location.
10. Cleanout PS1BCO-1 was added on Imperial Beach Blvd, approximately 260 feet west from the intersection of Imperial Beach Blvd. and 2<sup>nd</sup> Street.
11. Sewer line 2006 that's located on Seacoast and runs south from the intersection of Seacoast and Imperial Beach was corrected. It was shifted west from its prior location.
12. Sewer line 101 that's located on Seacoast and runs south from the intersection of Seacoast and Imperial Beach was corrected. It was shifted west from its prior location.
13. Cleanout PS2CO-4 was added 100 feet south from the intersection of Seacoast and Imperial Beach.
14. Manhole MH-77 was added on Seacoast approximately 60 feet south from the intersection of Seacoast and Admiralty.
15. Cleanout PS2CO-2 was added on Seacoast approximately 68 feet south from manhole MH-76
16. Cleanout PS2CO-1 was added approximately 210 feet north from the intersection of Seacoast and Cortez

## Attachment 2- Sewer System GIS Database Changes

17. Cleanout PS1BCO-3 was added 140 feet west from the intersection of Imperial Beach and 4<sup>th</sup>.
18. Cleanout PS10CO-2 was added approximately 35 feet southwest from the intersection of Cypress and 10<sup>th</sup>.
19. Cleanout PS10CO-1 was added approximately 160 feet southwest from the intersection of Cypress and Emory.
20. Cleanout PS10CO-3 was added 175 feet southwest from the intersection of Cypress and 12<sup>th</sup>.
21. Cleanout PS10CO-04 was added approximately 25 feet southeast from the intersection of Cypress and 12<sup>th</sup>.
22. Cleanout PS10CO-5 was added approximately 70 feet southwest from the intersection of Cypress and Florence.
23. Cleanout PS10CO-06 was added approximately 106 feet north from the intersection of Florence and Calla.
24. Cleanout PS10CO-7 was added approximately 190 feet north from the intersection of Florence and Palm.
25. Sewer line 2028 located east of the intersection of Florence and Palm was corrected. It was shifted approximately 6 feet to the South.
26. Sewer line 2026 located east from the intersection of Palm and Florence was corrected. It was shifted west, closer towards the intersection of Palm and Florence.
27. Sewer line 2040 located on the intersection of Florence and Palm was corrected. It was shifted approximately 100 feet from its prior location.
28. Manhole MH-761 was added approximately 150 feet west from the intersection of Palm and 10<sup>th</sup> Street.
29. Manhole MH-762 was added approximately 130 feet west from the intersection of Palm and Georgia.
30. Manhole MH-763 was added 55 feet east from the intersection of Palm and Georgia.
31. Manholes MH-759 and MH-760 were added 50 feet east from the intersection of Florence and Palm.
32. Cleanout PS9CO-10 was added on Florence approximately 85 feet south from the intersection of Palm and Florence.
33. Cleanout PS9CO-9 was added on Florence approximately 260 feet south from the intersection of Palm and Florence.
34. Cleanout PS9CO-8 was added on Florence, 175 feet south from the intersection of Donax and Florence.
35. Air Release Valve PS9ARV-2 was added on Florence 315 feet south from the intersection of Donax and Florence.

## Attachment 2- Sewer System GIS Database Changes

36. Cleanout PS9CO-7 was added on Florence, 125 feet south from the intersection of Elm and Florence.
37. Cleanout PS9CO-6 was added on Elder, approximately 60 feet west from the intersection of Florence and Elder.
38. Sewer line 2040, located on Elder, starting from the alley in between 9<sup>th</sup> Street and Emory then going towards the Florence was corrected. It was shifted approximately 20 feet to the north.
39. Sewer line 2040 was underneath the alley in between 9<sup>th</sup> and Emory was corrected. It was shifted approximately 105 feet east from its prior location. It also has two 45 degree bends as opposed to the single 90 degrees bend it had prior to the adjustment.
40. Sewer line 2043 was added in the alley in between 9<sup>th</sup> and Emory. It runs 400 feet South then turns towards the West and ends at Cleanout PS-9
41. Force main gate valves PS9FMGTVLV-1 and PS9FMGTVLV-2 were added at the Pump Station 9 site.
42. Bypass PS-9 and manhole MH-332 A were added on 9<sup>th</sup>, 240 feet north from the intersection of 9<sup>th</sup> and Ebony.
43. Cleanout PS9CO-1 was added approximately 60 feet west from the intersection of Emory and Elder
44. Cleanout PS9CO-2 was added on Elder, 70 feet east from the intersection of 10<sup>th</sup> and Elder
45. Air release valve PS9ARV-1 was added on Elder, 150 feet east from the intersection of 10<sup>th</sup> Street and Elder.
46. Cleanout PS9CO-3 was added on Elder, 40 feet east from the intersection of Elder and 11<sup>th</sup> Street.
47. Cleanout PS9CO-4 was added on Elder, 150 feet east from the intersection of 11<sup>th</sup> Street and Elder.
48. Cleanout PS9CO-5 was added on Elder, approximately 115 feet West from the intersection of Elder and 12<sup>th</sup> Street.
49. Cleanout PS10CO-5 was added on Cypress, approximately 68 feet west from the intersection of Florence and Cypress.
50. Cleanout PS10CO-6 was added on Florence, approximately 105 feet north from the intersection of Florence and Calla.
51. Cleanout PS10CO-7 was added on Florence, approximately 180 feet north from the intersection of Florence and Palm.
52. Sewer line 191 located on the intersection of Rainbow and Calla was corrected. It was shifted approximately 2 feet east.
53. Manhole MH-144 was added approximately 8 feet north from the intersection of Rainbow and Bonito.

## Attachment 2- Sewer System GIS Database Changes

54. Manhole MH-733 located near the beginning of the pier was removed.
55. Cleanout PS2CO-5 was added approximately 5 feet northwest from the intersection of Seacoast and Imperial Beach.
56. Manhole MH-1A and Bypass PS-1 B were added approximately 60 feet east from the intersection of Seacoast and Imperial Beach.
57. Sewer line 2022 located on Rainbow, South from the intersection of Rainbow and Calla was corrected. The lower part that runs south was shifted approximately 5 feet to the East. The upper portion was shifted approximately 25 feet to the North.
58. Sewer line 2020 was added on the intersection of Calla and 5<sup>th</sup>. It intersects with sewer lines 2022, 188, 186 and 189.
59. Pump station PS-6 was added approximately 20 feet south from the intersection of 5<sup>th</sup> and Calla.
60. Cleanouts PS6CO-1 and PS6CO-2 were added approximately 35 feet southeast from the intersection of 5<sup>th</sup> and Calla.
61. Cleanout PS8CO-16 was added on Coronado, approximately 45 feet east from the intersection of Coronado and 15<sup>th</sup> Street.
62. Cleanout PS8CO-15 was added on 15<sup>th</sup>, approximately 95 feet south from the intersection of Coronado and 15<sup>th</sup>.
63. Air release valve PS8ARV-4 was added on 15<sup>th</sup> Street approximately 230 feet north from the intersection of 15<sup>th</sup> and Fern.
64. Cleanout PS8CO-14 was added approximately 60 feet north from the intersection of 15<sup>th</sup> and Fern.
65. Cleanout PS8CO-13 was added on Fern, approximately 34 feet east from the intersection of Fern and Granger.
66. Cleanout PS8CO-12 was added on Fern, approximately 82 feet west from the intersection of Fern and Granger.
67. Air Release Valve PS8ARV-3 was added on Fern, approximately 30 feet east from the intersection of Fern and 14<sup>th</sup> Street.
68. Cleanout PS8CO-11 was added on Fern, in between 14<sup>th</sup> and Georgia, 10 feet south from manhole MH-540.
69. Cleanout PS8CO-10 was added on Fern, approximately 25 feet east from the intersection of Fern and Georgia.
70. Air release valve PS8ARV-2 was added on Fern, in between Georgia and 13<sup>th</sup>
71. Cleanout PS8CO-9 was added approximately 20 feet east from the intersection of Fern and 13<sup>th</sup> Street.
72. Cleanout PS8CO-8 was added on Fern, approximately 65 feet east from the intersection of Fern and Florence.

## Attachment 2- Sewer System GIS Database Changes

73. Cleanout PS8CO-7 and Air release valve PS8ARV-1 were added on Fern, approximately 115 feet west from the intersection of Florence and Fern.
74. Cleanout PS8CO-6 was added on Fern, approximately 45 feet east from the intersection of Fern and Florida.
75. Cleanout PS8CO-5 was added on Fern, approximately 35 feet East from the intersection of Fern and 11<sup>th</sup> Street.
76. Cleanout PS8CO-4 was added on Fern, approximately 145 feet west from the intersection of Fern and 11<sup>th</sup>.
77. Cleanout PS8CO-3 was added on Fern, approximately 150 feet west from the intersection of Fern and 10<sup>th</sup>.
78. Cleanout PS8CO-2 was added on Fern, 75 feet west from the intersection of Fern and Emory.
79. Cleanout PS8CO-1 was added on 9<sup>th</sup>, 64 feet south of the intersection of 9<sup>th</sup> and Downing.
80. Sewer line 2036 on 9<sup>th</sup> in between Delaware and Emory was corrected. It was shifted to the East. The Northern part of the sewer line was shifted to the North closer to the center of Imperial Beach. Also the sewer line has two 45 degree bends in it as opposed to the 90 degree angle it made before.
81. Bypass PS-9 was added 25 feet west from the intersection of 9<sup>th</sup> and Imperial Beach.
82. Bypass PS-8 was added on Imperial Beach approximately 150 feet southwest from the intersection of Imperial Beach and 9<sup>th</sup>.
83. Cleanout PS1BCO-2 was added on Imperial Beach Blvd. approximately 230 feet east from the intersection of Imperial Beach Blvd. and 2<sup>nd</sup> Street.
84. Sewer line 2046 was added on Grove West from the intersection of Grove and 15<sup>th</sup>. It runs 135 feet from MH-574 towards the South under the 1471 Grove parcel. Dead end DE-156 was also added at the end of this sewer line.
85. Manhole MH-610 was added on the Imperial Strand Holdings L L C parcel located on the corner of Caspian and 4<sup>th</sup> Street.
86. Dead end DE-0, located approximately 340 feet north from the intersection of Silver Strand and Carnation was removed.

## Details of Sewer System Database Changes in 2009

### **Legend:**

Blue Line- Old sewer line

Red Line- New sewer line

Red dot- Old manholes, cleanouts, pump stations etc.

Blue dot- New manholes, cleanouts, pump stations etc.

Yellow text- New manhole, pump station etc. ID label

Red text- Old manhole, pump station etc. ID label

Blue text- Sewer line ID label

Purple text- Street names



Manhole MH-40, located approximately 150 feet west from the intersection of Seacoast and Palm and was shifted north from its prior location.

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Force main gate valves PS5FMGTVLV-1 and PS5FMGTVLV-2 were added approximately 93 feet south from the intersection of Seacoast and Date.



Sewer line 2044 was added south from the intersection of Seacoast and Elm in between manholes MH-167 B and MH-22.



Sewer line 900 (located beneath the pier) was corrected by being shifted to the North. It runs in between manhole MH-733 and manhole Port-1943



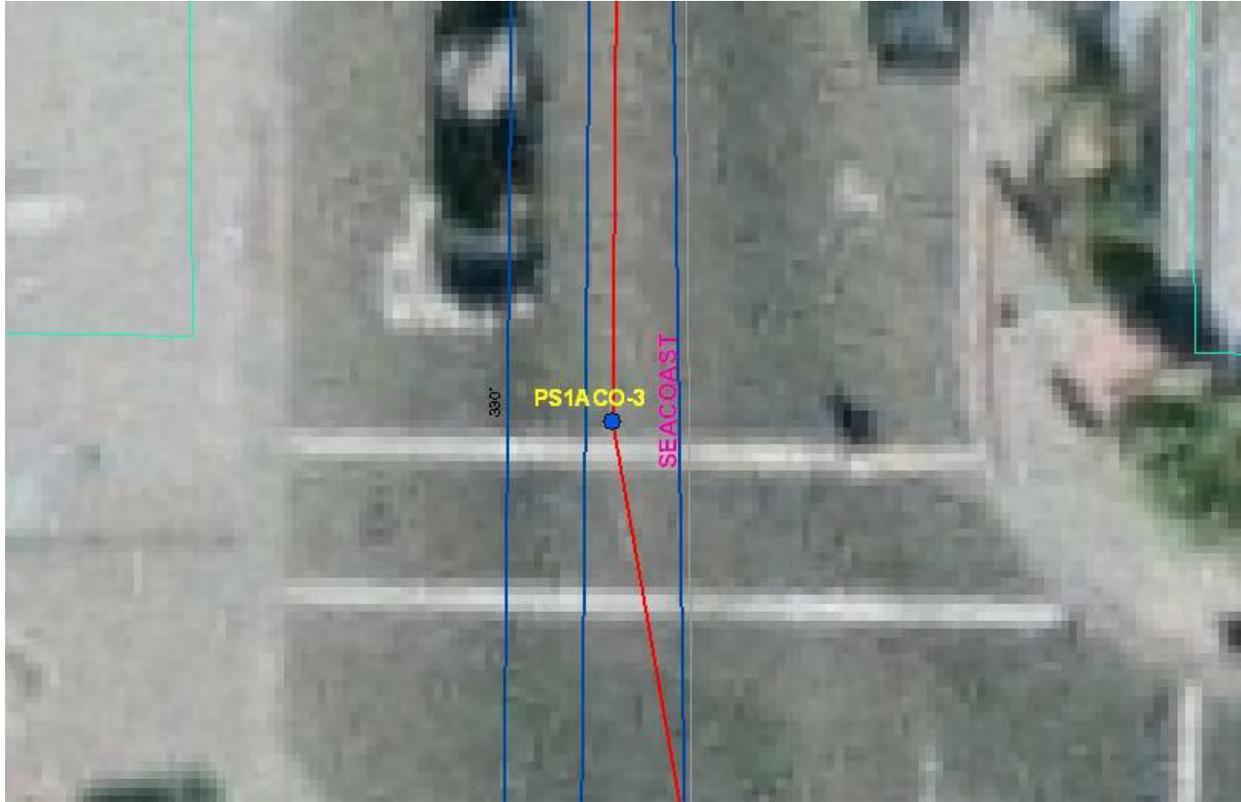
Cleanout PS1A CO-1 located on Seacoast approximately 100 feet south from the intersection of Seacoast and Elder was added.



A section of sewer line 2014, from the intersection of Evergreen and Seacoast to the intersection of Imperial Beach and Seacoast was shifted towards the East.



Cleanout PS1ACO-2 was added on Seacoast approximately 75 feet south from the intersection of Elkwood and Seacoast.



Cleanout PS1ACO-3 was added approximately 45 feet north from the intersection of Seacoast and Imperial Beach.



A 135 foot section of sewer line 2018, located east from the intersection of Imperial Beach and Seacoast was corrected. It was shifted south from its prior location.



Cleanout PS1BCO-1 was added on Imperial Beach Blvd, approximately 260 feet west from the intersection of Imperial Beach Blvd. and 2<sup>nd</sup> Street.



Sewer line 2006 that's located on Seacoast and runs south from the intersection of Seacoast and Imperial Beach was corrected. It was shifted west from its prior location.



Sewer line 101 that's located on Seacoast and runs south from the intersection of Seacoast and Imperial Beach was corrected. It was shifted west from its prior location.



Cleanout PS2CO-4 was added 100 feet south from the intersection of Seacoast and Imperial Beach.



Manhole MH-77 was added on Seacoast approximately 60 feet south from the intersection of Seacoast and Admiralty.



Cleanout PS2CO-2 was added on Seacoast approximately 68 feet south from manhole MH-76



Cleanout PS2CO-1 was added approximately 210 feet north from the intersection of Seacoast and Cortez



Cleanout PS1BCO-3 was added 140 feet west from the intersection of Imperial Beach and 4<sup>th</sup>.



Cleanout PS10CO-2 was added approximately 35 feet southwest from the intersection of Cypress and 10<sup>th</sup>.



Cleanout PS10CO-1 was added approximately 160 feet southwest from the intersection of Cypress and Emory.



Cleanout PS10CO-3 was added 175 feet southwest from the intersection of Cypress and 12<sup>th</sup>.



Cleanout PS10CO-04 was added approximately 25 feet southeast from the intersection of Cypress and 12<sup>th</sup>.



Cleanout PS10CO-5 was added approximately 70 feet southwest from the intersection of Cypress and Florence.



Cleanout PS10CO-06 was added approximately 106 feet north from the intersection of Florence and Calla.



Cleanout PS10CO-7 was added approximately 190 feet north from the intersection of Florence and Palm.



Sewer line 2028 located east of the intersection of Florence and Palm was corrected. It was shifted approximately 6 feet to the South.



Sewer line 2026 located east from the intersection of Palm and Florence was corrected. It was shifted west, closer towards the intersection of Palm and Florence.



Sewer line 2040 located on the intersection of Florence and Palm was corrected. It was shifted approximately 100 feet from its prior location.



Manhole MH-761 was added approximately 150 feet west from the intersection of Palm and 10<sup>th</sup> Street.



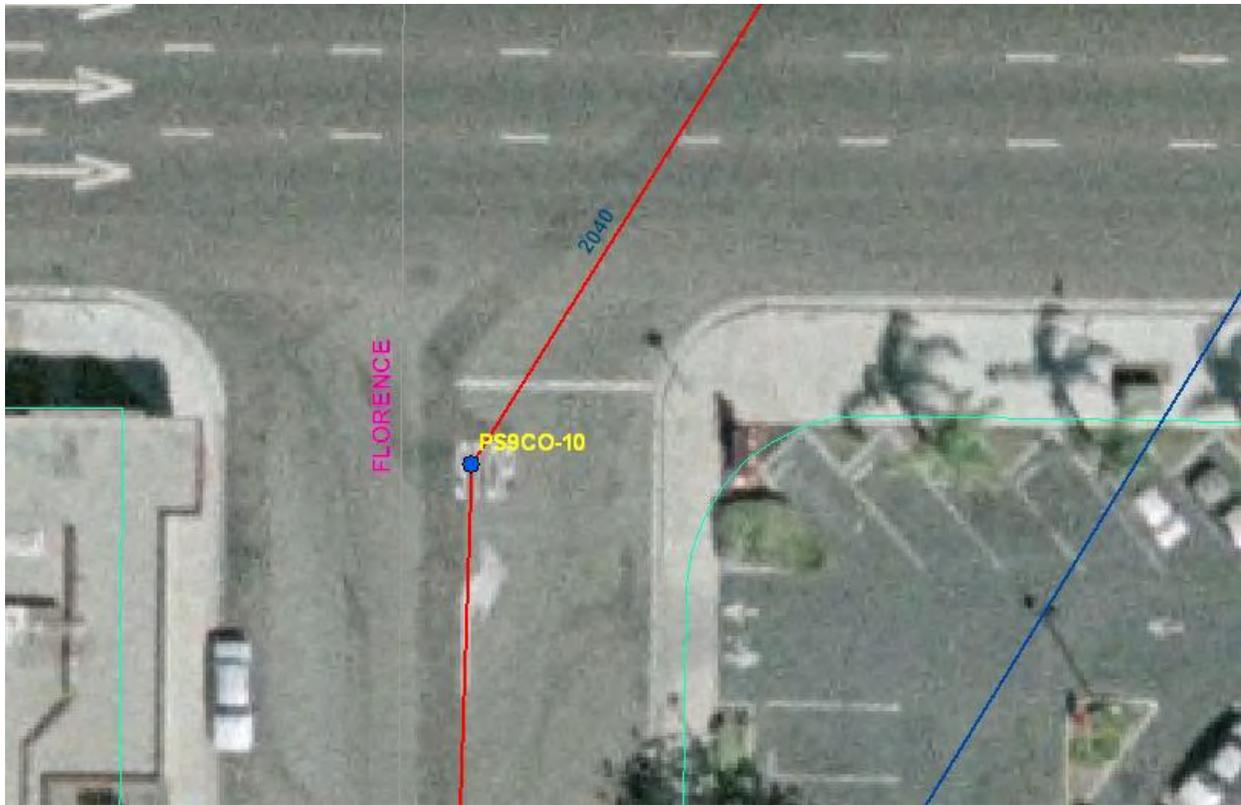
Manhole MH-762 was added approximately 130 feet west from the intersection of Palm and Georgia.



Manhole MH-763 was added 55 feet east from the intersection of Palm and Georgia.



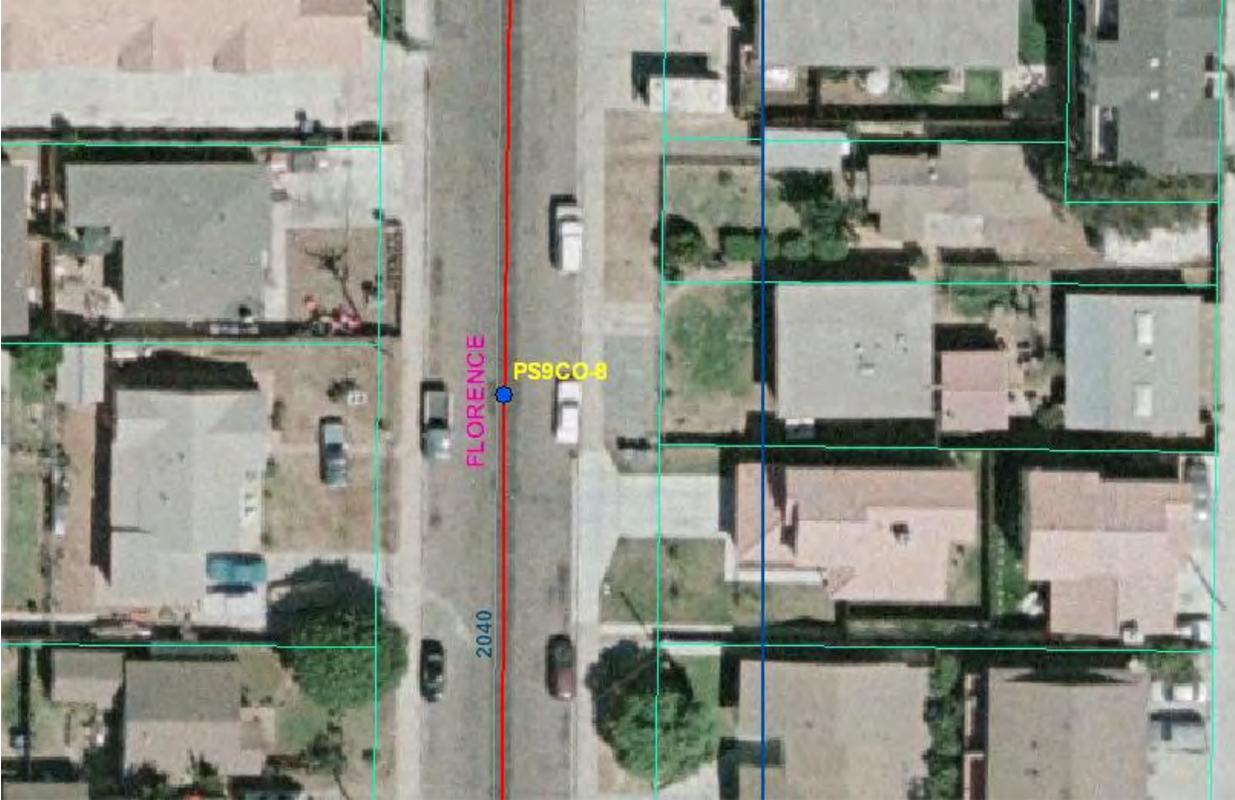
Manholes MH-759 and MH-760 were added 50 feet east from the intersection of Florence and Palm.



Cleanout PS9CO-10 was added on Florence approximately 85 feet south from the intersection of Palm and Florence.



Cleanout PS9CO-9 was added on Florence approximately 260 feet south from the intersection of Palm and Florence.



Cleanout PS9CO-8 was added on Florence, 175 feet south from the intersection of Donax and Florence.



Air Release Valve PS9ARV-2 was added on Florence 315 feet south from the intersection of Donax and Florence.



Cleanout PS9CO-7 was added on Florence, 125 feet south from the intersection of Elm and Florence.



Cleanout PS9CO-6 was added on Elder, approximately 60 feet west from the intersection of Florence and Elder.



Sewer line 2040, located on Elder, starting from the alley in between 9<sup>th</sup> Street and Emory then going towards the Florence was corrected. It was shifted approximately 20 feet to the north.



Sewer line 2040 was underneath the alley in between 9<sup>th</sup> and Emory was corrected. It was shifted approximately 105 feet east from its prior location. It also has two 45 degree bends as opposed to the single 90 degrees bend it had prior to the adjustment.



Sewer line 2043 was added in the alley in between 9<sup>th</sup> and Emory. It runs 400 feet South then turns towards the West and ends at Cleanout PS-9



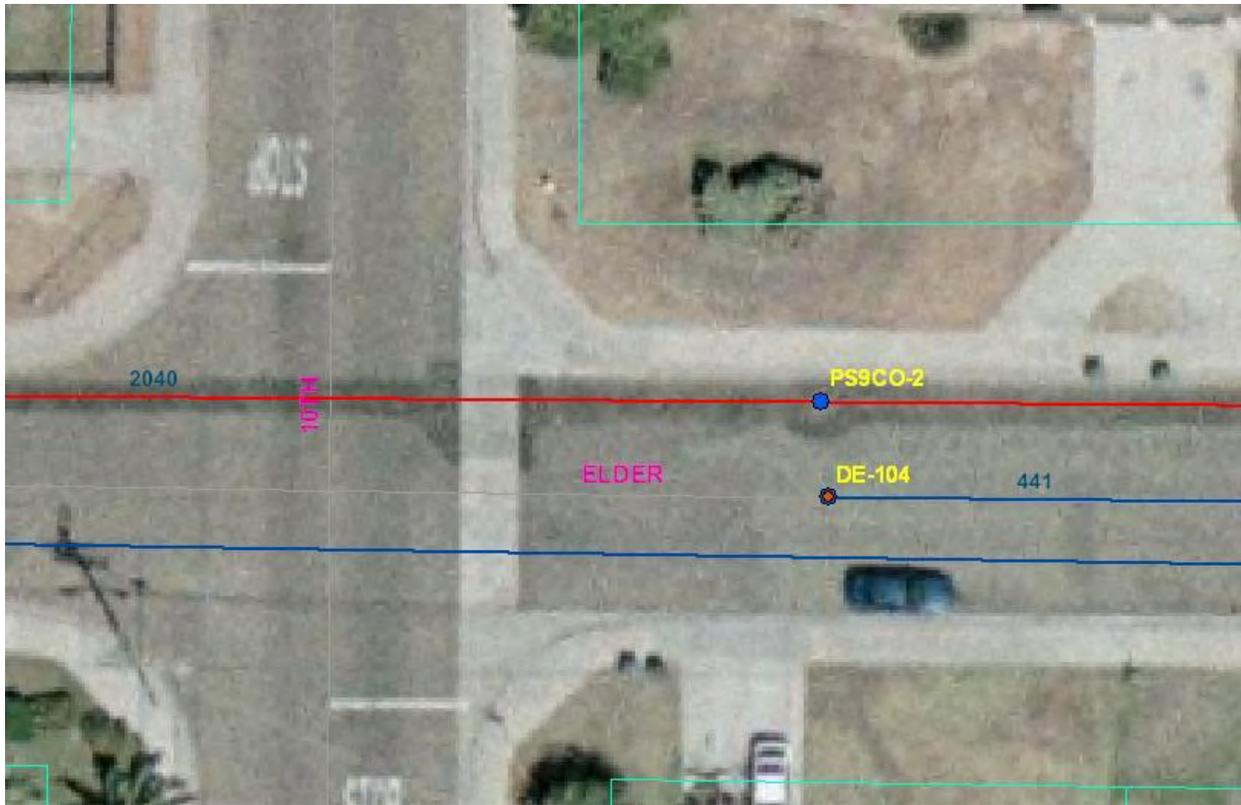
Force main gate valves PS9FMGTVLV-1 and PS9FMGTVLV-2 were added at the Pump Station 9 site.



Bypass PS-9 and manhole MH-332 A were added on 9<sup>th</sup>, 240 feet north from the intersection of 9<sup>th</sup> and Ebony.



Cleanout PS9CO-1 was added approximately 60 feet west from the intersection of Emory and Elder



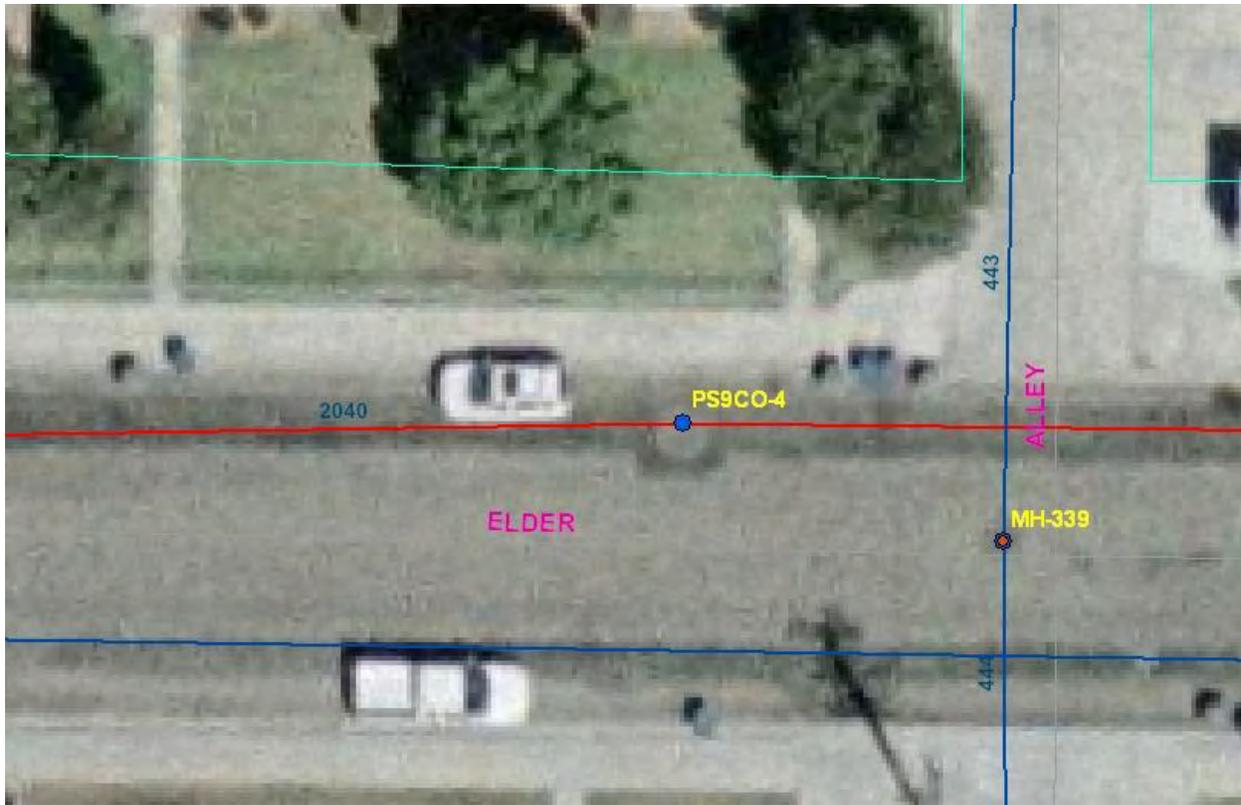
Cleanout PS9CO-2 was added on Elder, 70 feet east from the intersection of 10<sup>th</sup> and Elder



Air release valve PS9ARV-1 was added on Elder, 150 feet east from the intersection of 10<sup>th</sup> Street and Elder.



Cleanout PS9CO-3 was added on Elder, 40 feet east from the intersection of Elder and 11<sup>th</sup> Street.



Cleanout PS9CO-4 was added on Elder, 150 feet east from the intersection of 11<sup>th</sup> Street and Elder.



Cleanout PS9CO-5 was added on Elder, approximately 115 feet West from the intersection of Elder and 12<sup>th</sup> Street.



Cleanout PS10CO-5 was added on Cypress, approximately 68 feet west from the intersection of Florence and Cypress.



Cleanout PS10CO-6 was added on Florence, approximately 105 feet north from the intersection of Florence and Calla.



Cleanout PS10CO-7 was added on Florence, approximately 180 feet north from the intersection of Florence and Palm.



Sewer line 191 located on the intersection of Rainbow and Calla was corrected. It was shifted approximately 2 feet east.



Manhole MH-144 was added approximately 8 feet north from the intersection of Rainbow and Bonito.

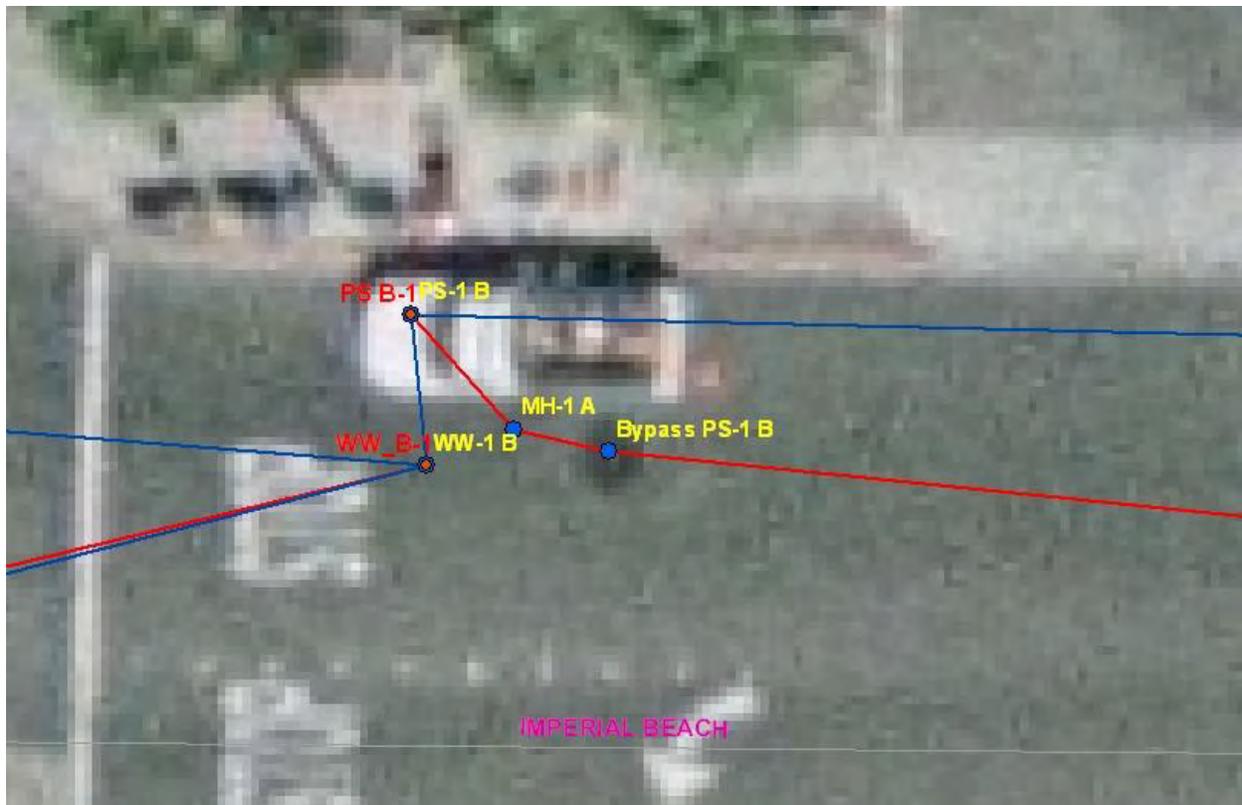


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Manhole MH-733 located near the beginning of the pier was removed.



Cleanout PS2CO-5 was added approximately 5 feet northwest from the intersection of Seacoast and Imperial Beach.



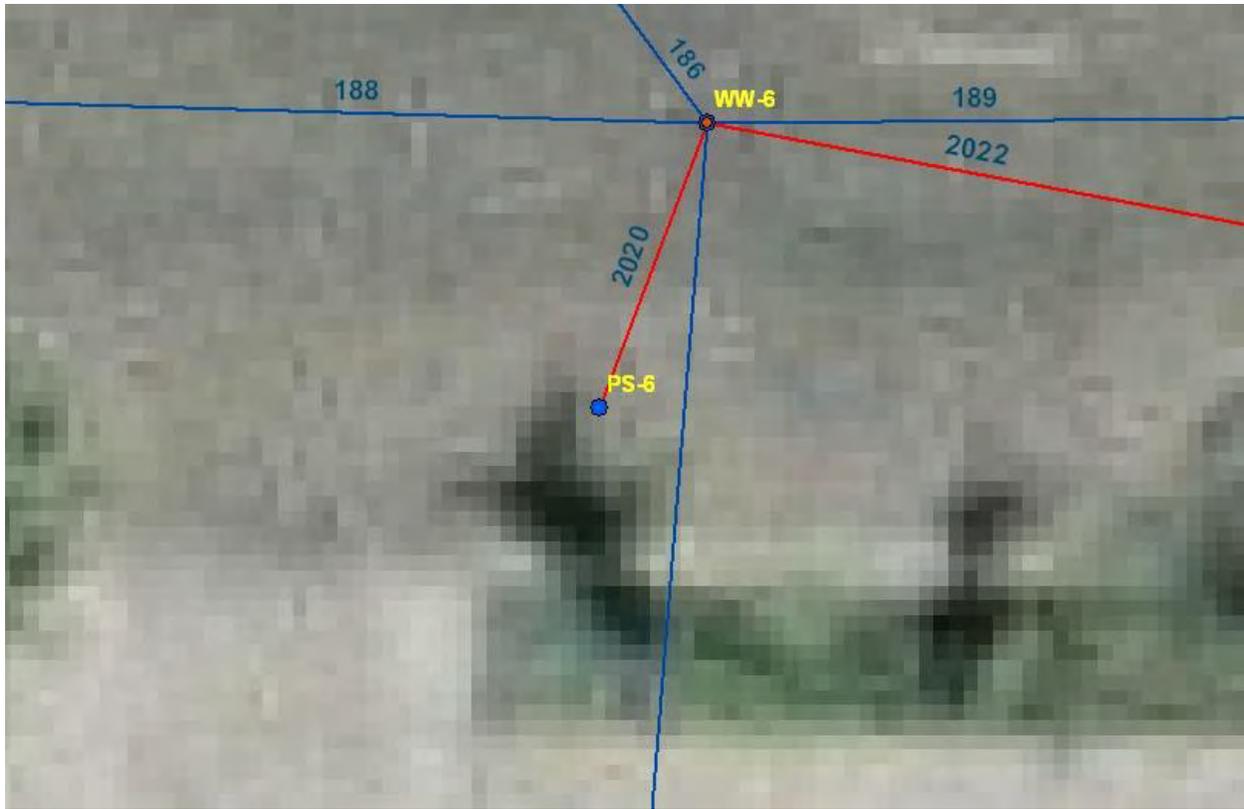
Manhole MH-1A and Bypass PS-1 B were added approximately 60 feet east from the intersection of Seacoast and Imperial Beach.



Sewer line 2022 located on Rainbow, South from the intersection of Rainbow and Calla was corrected. The lower part that runs south was shifted approximately 5 feet to the East. The upper portion was shifted approximately 25 feet to the North.



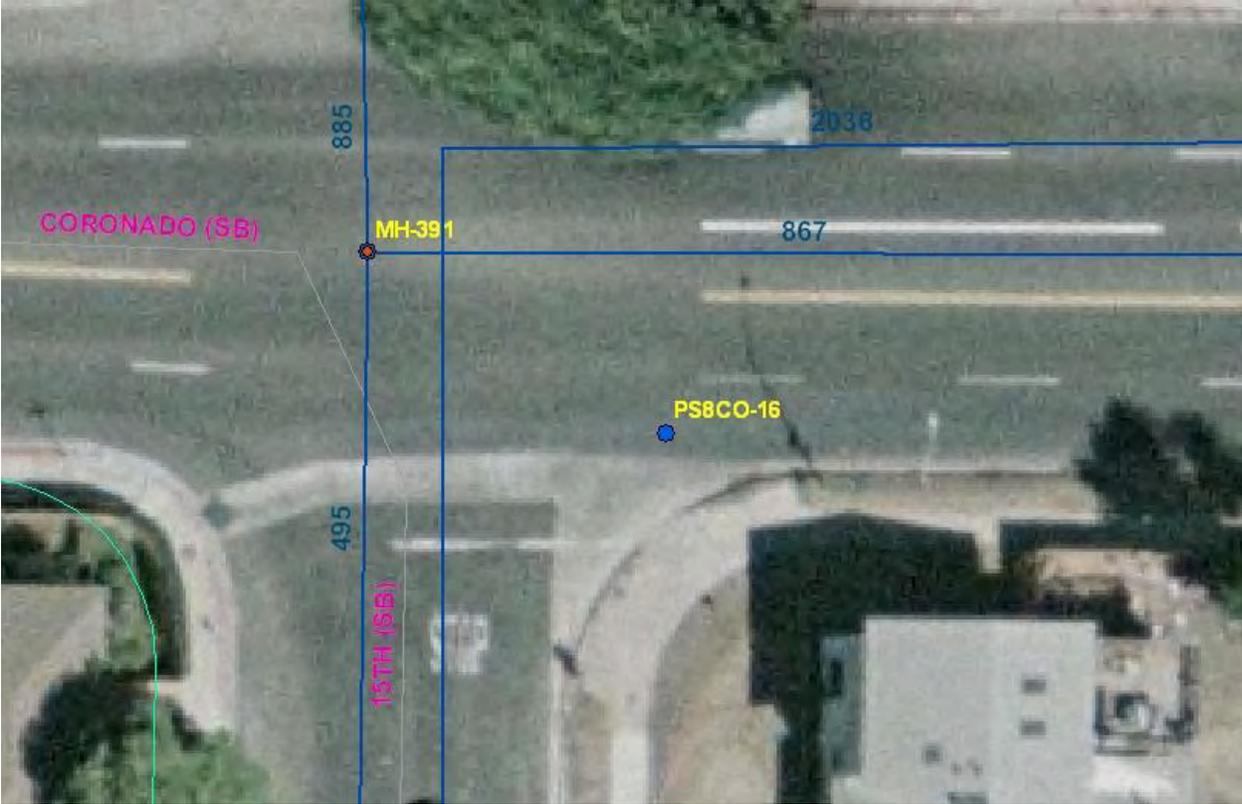
Sewer line 2020 was added on the intersection of Calla and 5<sup>th</sup>. It intersects with sewer lines 2022, 188, 186 and 189.



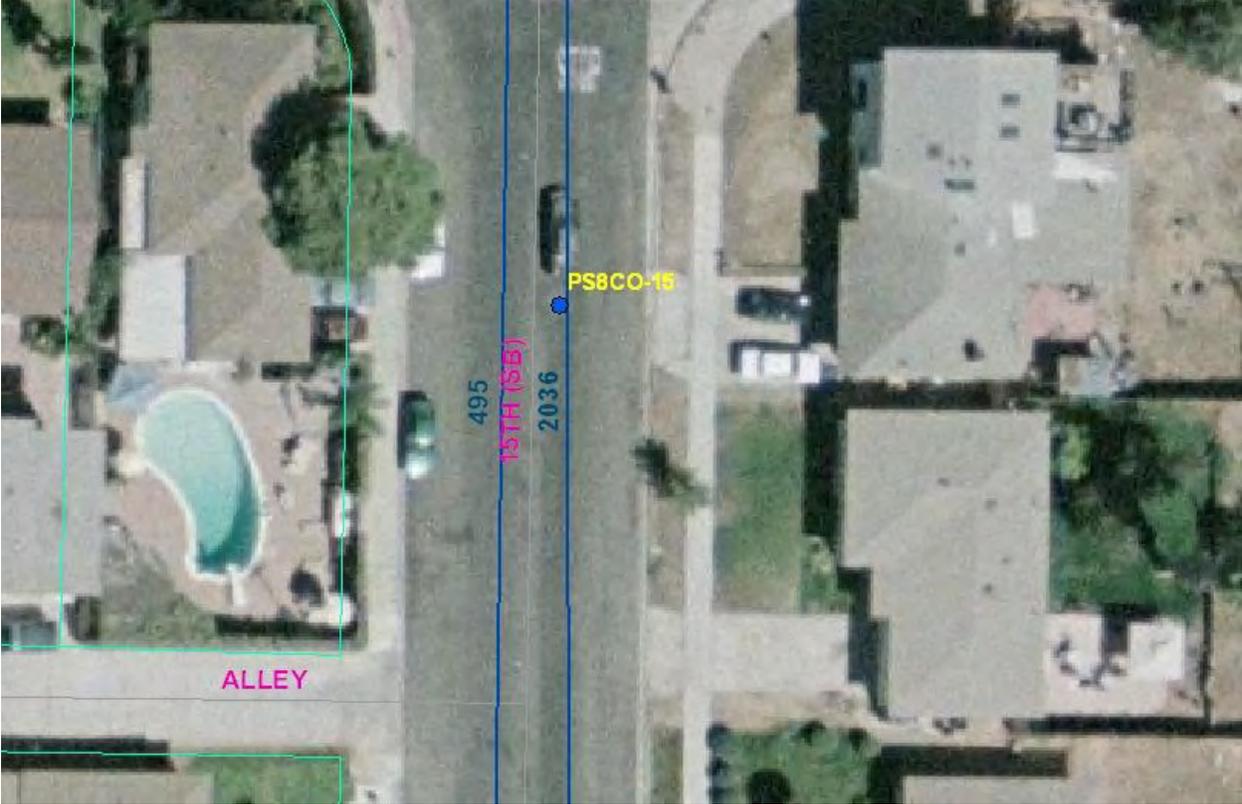
Pump station PS-6 was added approximately 20 feet south from the intersection of 5<sup>th</sup> and Calla.



Cleanouts PS6CO-1 and PS6CO-2 were added approximately 35 feet southeast from the intersection of 5<sup>th</sup> and Calla.



Cleanout PS8CO-16 was added on Coronado, approximately 45 feet east from the intersection of Coronado and 15<sup>th</sup> Street.



Cleanout PS8CO-15 was added on 15<sup>th</sup>, approximately 95 feet south from the intersection of Coronado and 15<sup>th</sup>.



Air release valve PS8ARV-4 was added on 15<sup>th</sup> Street approximately 230 feet north from the intersection of 15<sup>th</sup> and Fern.



Cleanout PS8CO-14 was added approximately 60 feet north from the intersection of 15<sup>th</sup> and Fern.



Cleanout PS8CO-13 was added on Fern, approximately 34 feet east from the intersection of Fern and Granger.



Cleanout PS8CO-12 was added on Fern, approximately 82 feet west from the intersection of Fern and Granger.



Air Release Valve PS8ARV-3 was added on Fern, approximately 30 feet east from the intersection of Fern and 14<sup>th</sup> Street.



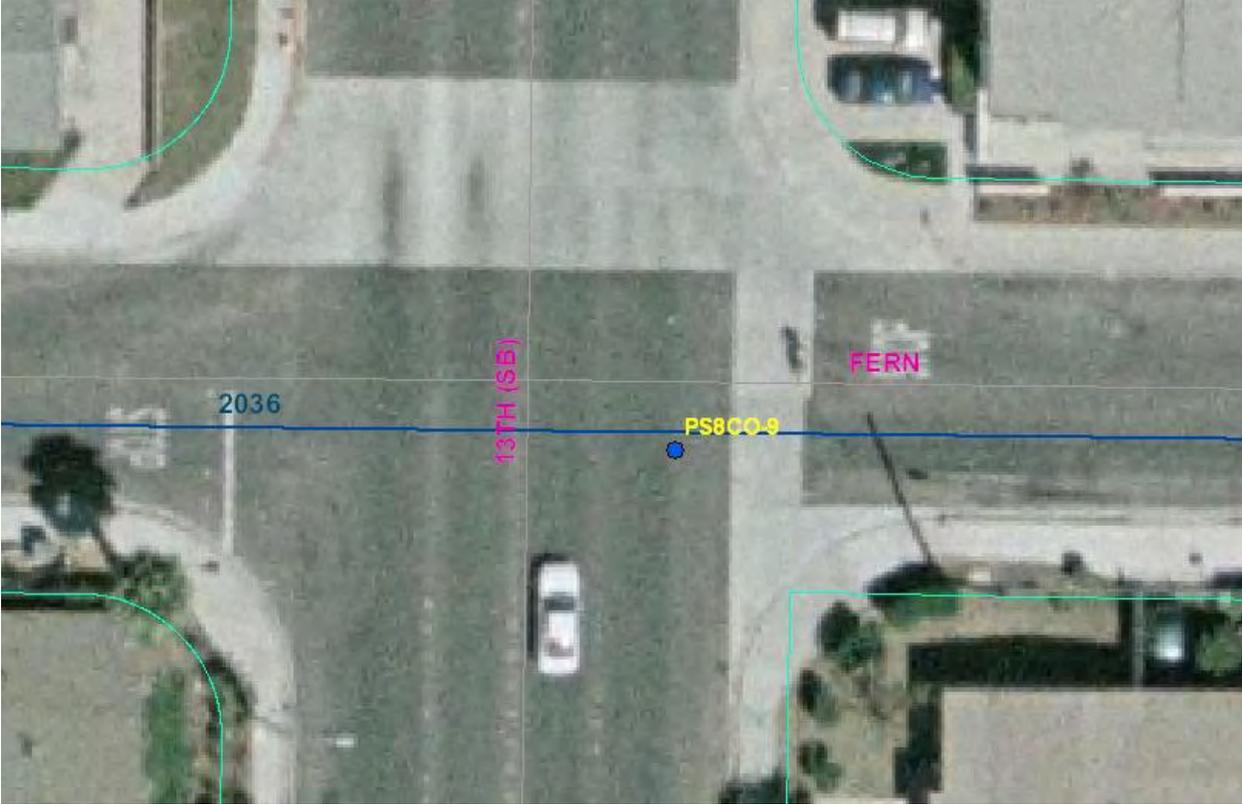
Cleanout PS8CO-11 was added on Fern, in between 14<sup>th</sup> and Georgia, 10 feet south from manhole MH-540.



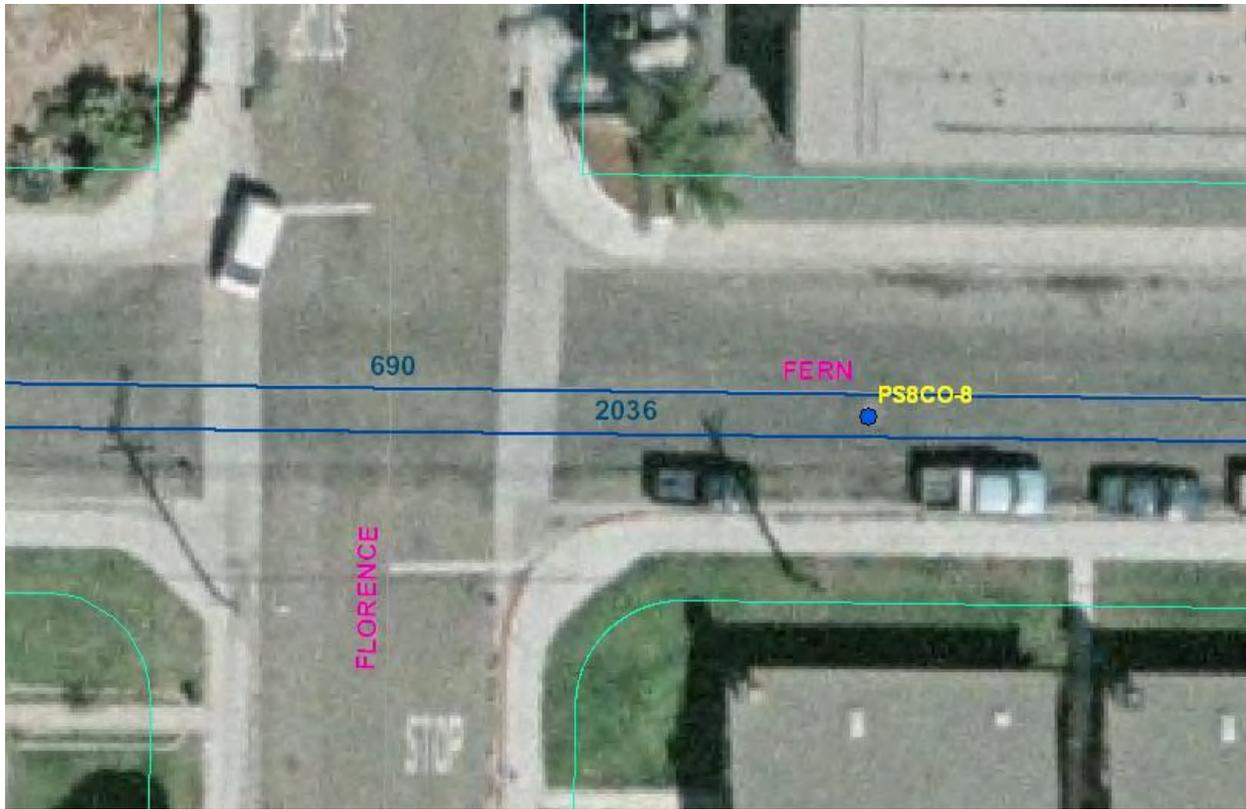
Cleanout PS8CO-10 was added on Fern, approximately 25 feet east from the intersection of Fern and Georgia.



Air release valve PS8ARV-2 was added on Fern, in between Georgia and 13<sup>th</sup>



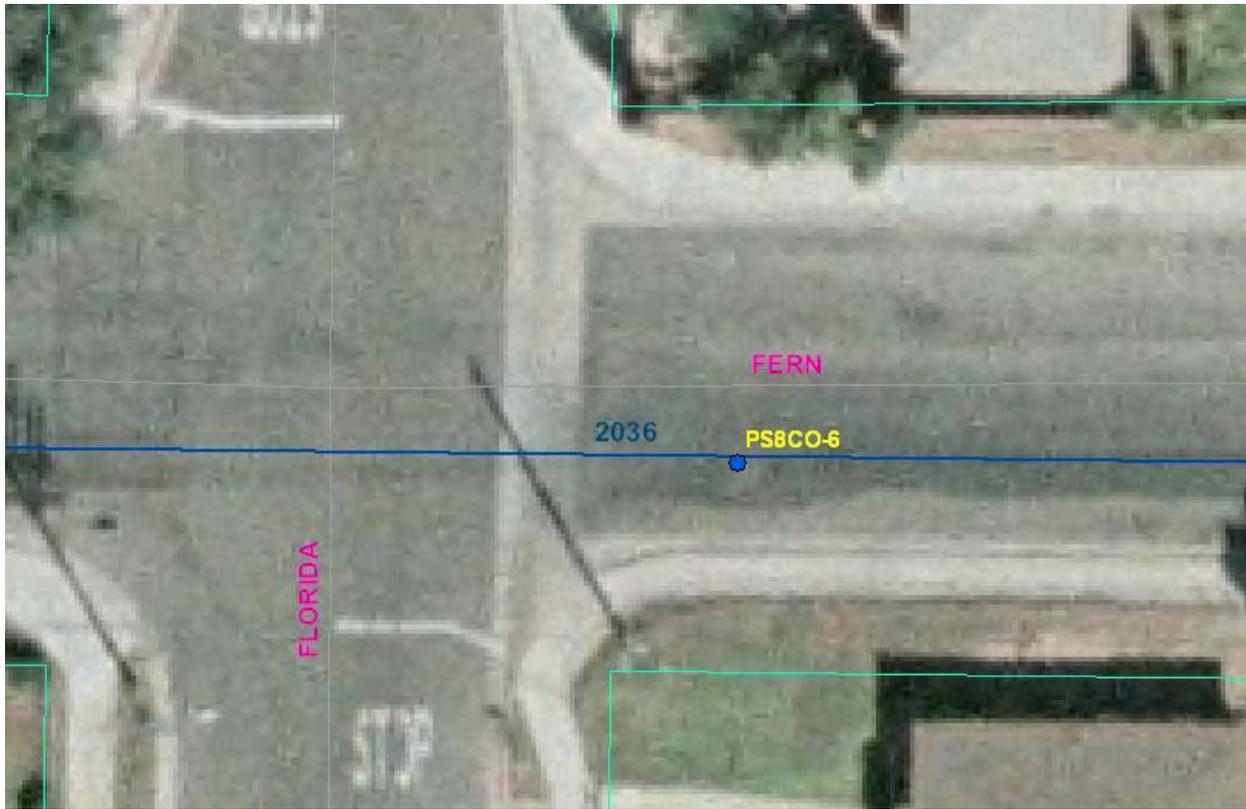
Cleanout PS8CO-9 was added approximately 20 feet east from the intersection of Fern and 13<sup>th</sup> Street.



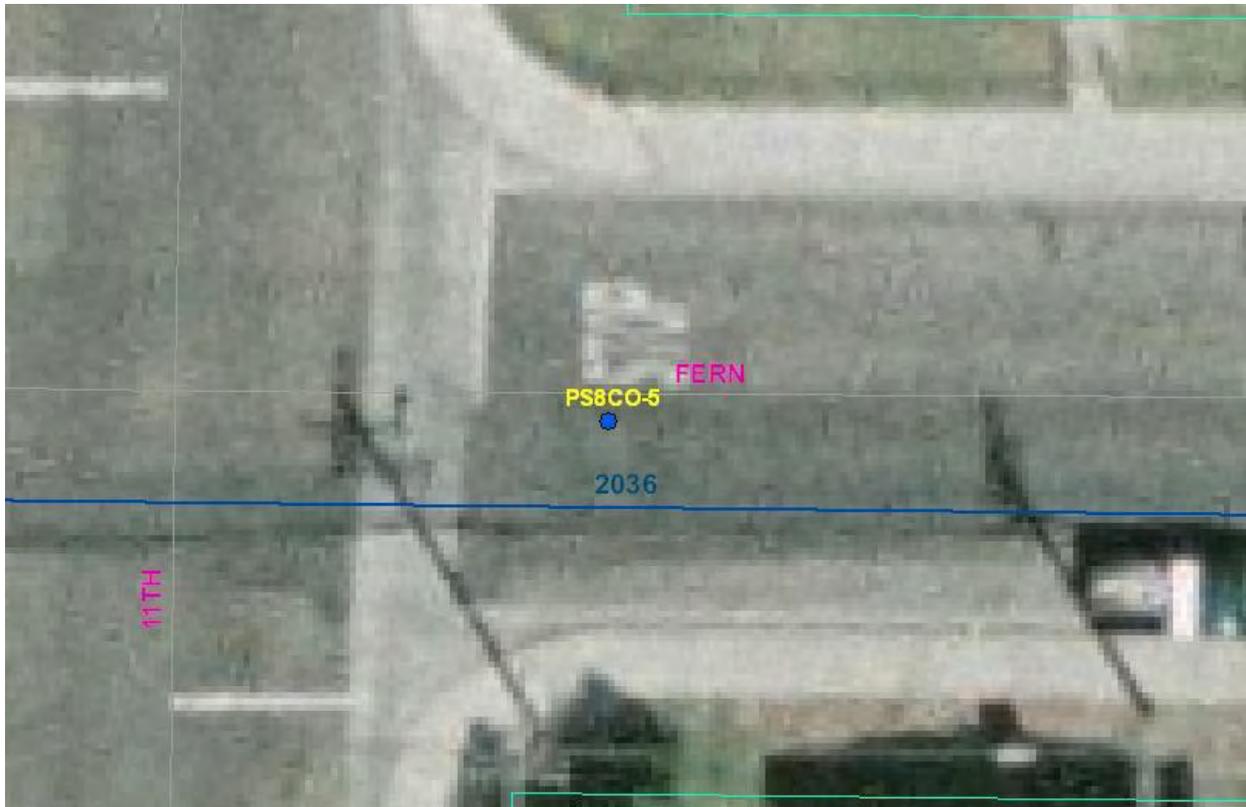
Cleanout PS8CO-8 was added on Fern, approximately 65 feet east from the intersection of Fern and Florence.



Cleanout PS8CO-7 and Air release valve PS8ARV-1 were added on Fern, approximately 115 feet west from the intersection of Florence and Fern.



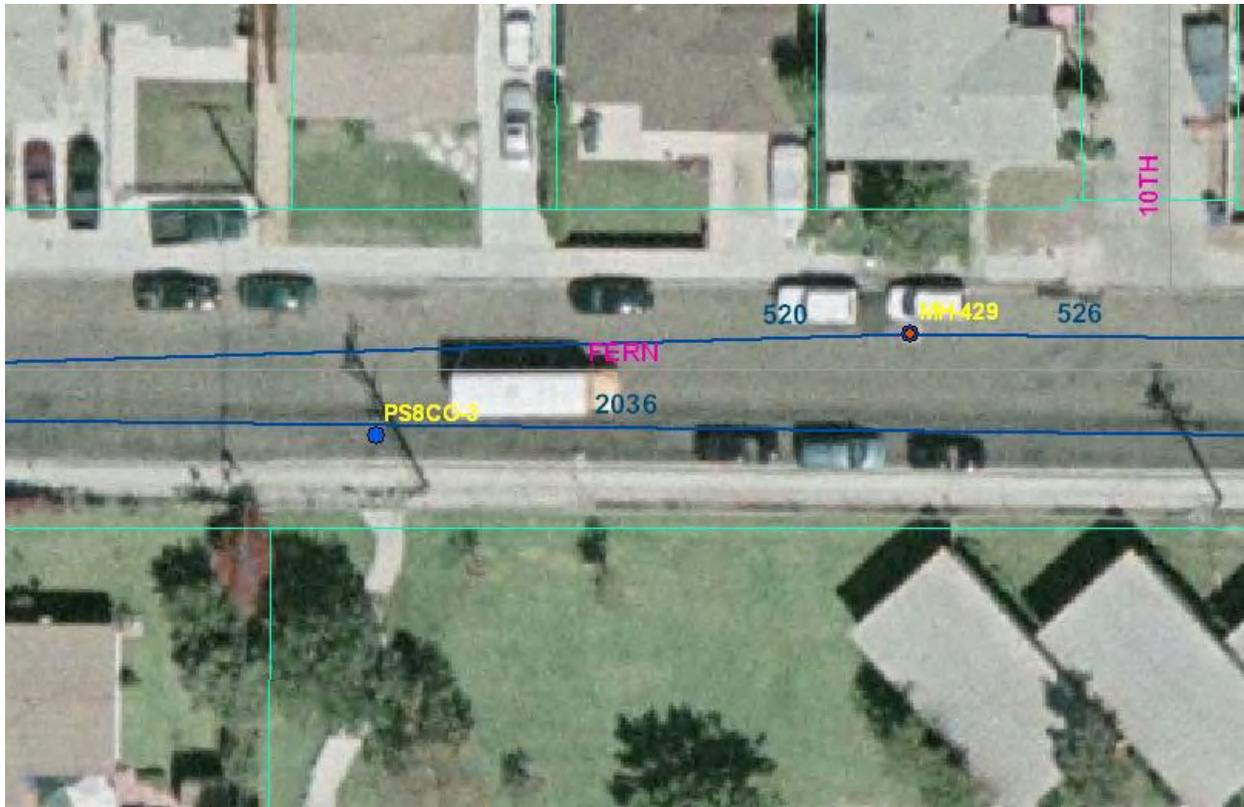
Cleanout PS8CO-6 was added on Fern, approximately 45 feet east from the intersection of Fern and Florida.



Cleanout PS8CO-5 was added on Fern, approximately 35 feet East from the intersection Fern and 11<sup>th</sup> Street.



Cleanout PS8CO-4 was added on Fern, approximately 145 feet west from the intersection of Fern and 11<sup>th</sup>.



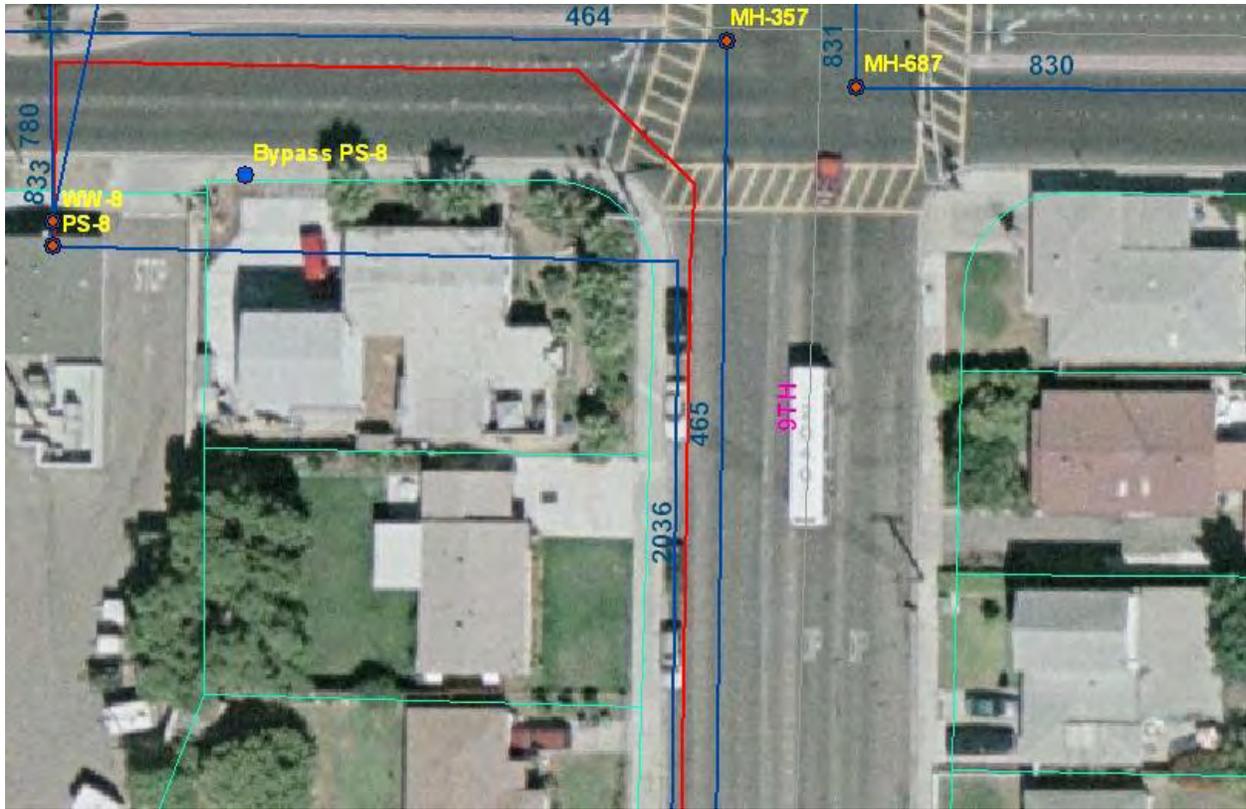
Cleanout PS8CO-3 was added on Fern, approximately 150 feet west from the intersection of Fern and 10<sup>th</sup>.



Cleanout PS8CO-2 was added on Fern, 75 feet west from the intersection of Fern and Emory.



Cleanout PS8CO-1 was added on 9<sup>th</sup>, 64 feet south of the intersection of 9<sup>th</sup> and Downing.



Sewer line 2036 on 9<sup>th</sup> in between Delaware and Emory was corrected. It was shifted to the East. The Northern part of the sewer line was shifted to the North closer to the center of Imperial Beach. Also the sewer line has two 45 degree bends in it as opposed to the 90 degree angle it made before.



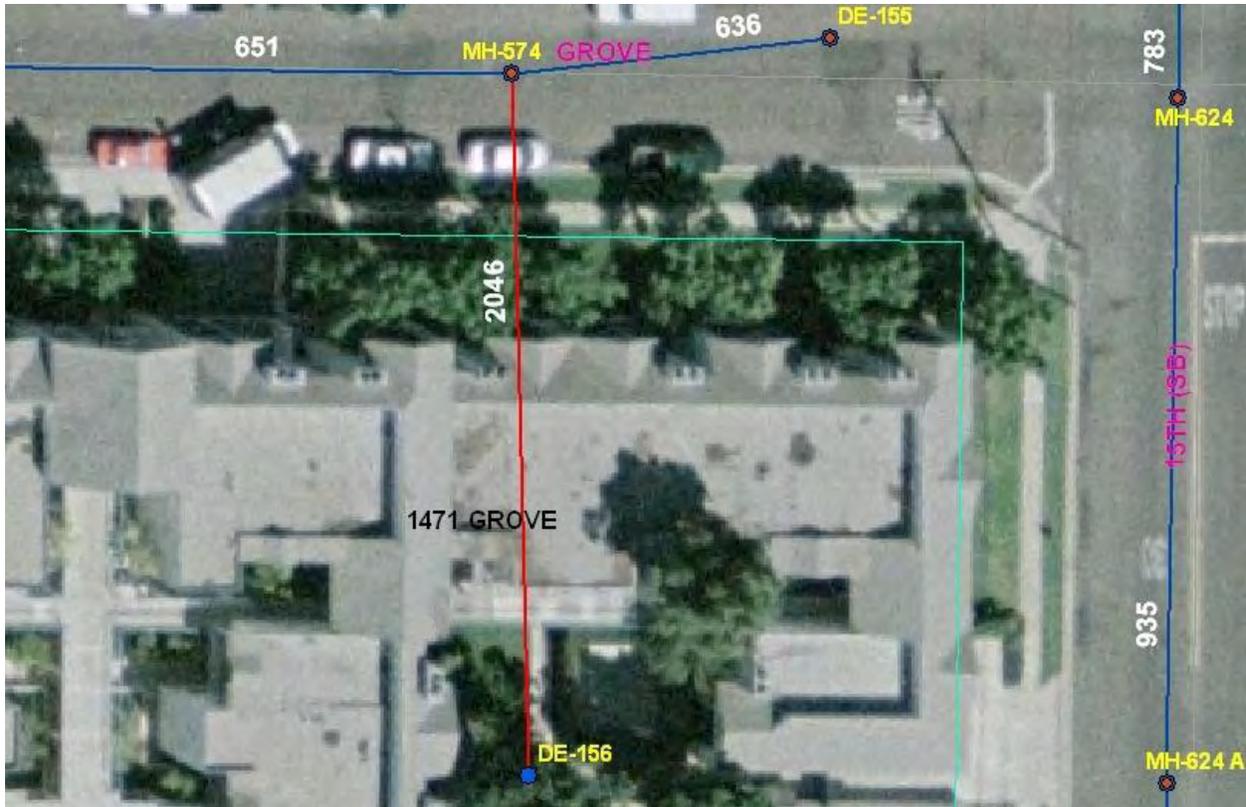
Bypass PS-9 was added 25 feet west from the intersection of 9<sup>th</sup> and Imperial Beach.



Bypass PS-8 was added on Imperial Beach approximately 150 feet southwest from the intersection of Imperial Beach and 9<sup>th</sup>.



Cleanout PS1BCO-2 was added on Imperial Beach Blvd. approximately 230 feet east from the intersection of Imperial Beach Blvd. and 2<sup>nd</sup> Street.



Sewer line 2046 was added on Grove West from the intersection of Grove and 15<sup>th</sup>. It runs 135 feet from MH-574 towards the South under the 1471 Grove parcel. Dead end DE-156 was also added at the end of this sewer line.



Manhole MH-610 was added on the Imperial Strand Holdings L L C parcel located on the corner of Caspian and 4<sup>th</sup> Street.



Dead end DE-0, located approximately 340 feet north from the intersection of Silver Strand and Carnation was removed.

CITY OF IMPERIAL BEACH

# SSMP Fats, Oils, and Grease Evaluation

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Inspection Results and Next Steps

3/30/2010

## SUMMARY

In order to start an effective Fats, Oils, and Grease (FOG) reduction program, an inventory of all grease collection devices was taken during storm water commercial inspections in FY 09-10. Twenty-five of our food facilities have these devices and sixteen do not have these devices. Table 1 provides a complete list of the food service establishments in the City and Figure 1 identifies the location of the facilities on a map. For the existing devices compliance will be achieved by monitoring these devices based on a yet to be determined set of criteria. For the establishments without these devices a minimum criterion will be established to determine the size of the device needed. Our current regulations use the 2007 California Plumbing Code to determine requirements. The Plumbing Code requirements are vague or unrealistic for implementation in Imperial Beach.

## EXISTING DEVICES

Of the twenty-five existing devices in place at food service facilities, most are in working order, but below the standards sought by other cities in the state. Lack of compliance with current plumbing code standards is also a concern. Most of the current devices are of the type seen in older establishments. **Most existing traps are located under a three section sink and typically have less than a 50 gallon capacity. Efficient interceptors usually have a capacity of 750 gallons or greater.** Current plumbing code standards require that devices be placed outside the facility and adequately prevent storm water pollution. Many of the current devices do not meet these standards and if they malfunction will cause storm water pollution at some point. For example, Meijo Sushi's outdoor interceptor has no seal preventing overflow into the storm drain.

While these standards are a good target for new facilities and those adding pretreatment devices, **exceptions will need to be made for the existing devices. These exceptions are typically made in the sizing and placement requirements, due to changing standards and conditions of approval.** However, changes will need to be made to existing devices to decrease the risk of storm water pollution, ensure less grease goes into the sewer system, and to make the devices more accessible to inspectors. Inaccessibility was found to be an issue, especially at the Tin Fish restaurant on the Imperial Beach Pier. In this case the inspector was unable to open the device because the trap was wedged into a pipe under the sink.

## RECOMMENDED STANDARDS

Recommended standards for a Fats, Oils, and Grease (FOG) pretreatment program should come from other agencies that have shown compliance from food service establishments and reduction of grease in the sewer system. **Effective programs generally have clearly defined standards for pretreatment device sizing, capacity, inspections, record keeping, and penalty for non compliance. Policies are best defined in municipal code sections rather than internal policies.** The following sections describe standards that should be considered for the Imperial Beach FOG program.

## Attachment 3- Food Service Establishments FOG Evaluation

### *Sizing of the Pretreatment Device*

The size of all new devices and devices for new establishments should continue to be based on the 2007 California Plumbing Code and be updated when the code is changed. Exceptions should be made where applicable for existing facilities and devices, establishments that do not produce a significant amount of grease, and areas where the installation of a large interceptor is infeasible. The following example from Oceanside illustrates possible exemption language:

**Existing food preparation and service establishments and commercial kitchens with a current City of Oceanside business license at the time of the adoption of this ordinance shall not be required to add a new or change an existing grease control device until the establishment undergoes remodeling that requires a building or tenant improvement permit or has a change in ownership, lease, transfer or assignment of the business or premises or a change in operations.**

### *Operating Fluid Capacity of the Pretreatment Device*

The following portion of Chapter 51 of the City of Santa Paula Municipal Code sets a clear standard for compliance for all FOG pretreatment devices. **“(3) An interceptor or gravity separation device must not be considered properly maintained if material accumulations total more than 25% of the operating fluid capacity.”** The operating fluid capacity is the total amount of substances in the device. According to the Santa Paula standard, a device must never contain more than 25% solids and grease or less than 75% water.

### *Inspection of the Pretreatment Device*

Standards for inspection of the pretreatment device also need to be set. The Oceanside Municipal Code sets the following standard for inspection:

**29.47.5. Inspection and sampling. The city shall inspect the facilities of any user at least annually to ascertain whether the purpose of this article is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the city or their representative ready access at all reasonable times to all parts of the premises for the purposes of inspection, sampling, records examination or in the performance of any of their duties.**

Important points in the Oceanside code include the frequency of inspections, the right of entry, and the accessibility to “all parts of the premises.” **The inspector must be able to adequately test the device for compliance.**

## Attachment 3- Food Service Establishments FOG Evaluation

### *Retention of Records*

One of the largest obstacles encountered in FOG compliance is the retention of records by food service facilities. The City of Imperial Beach must require that records are maintained on site and be available to the inspector when requested. The City of Oceanside provides the following example:

**B. Each commercial kitchen with a grease control device shall be required to keep records of cleaning, maintenance and grease removal. All such records must be retained on site by the permitted facility for a minimum of three (3) years.**

### *Penalty for Non Compliance*

The penalty for non compliance should be determined based on the level of compliance and on existing ordinances. Penalties in most jurisdictions match those that exist for other code violations.

### **THE NEED FOR PRETREATMENT**

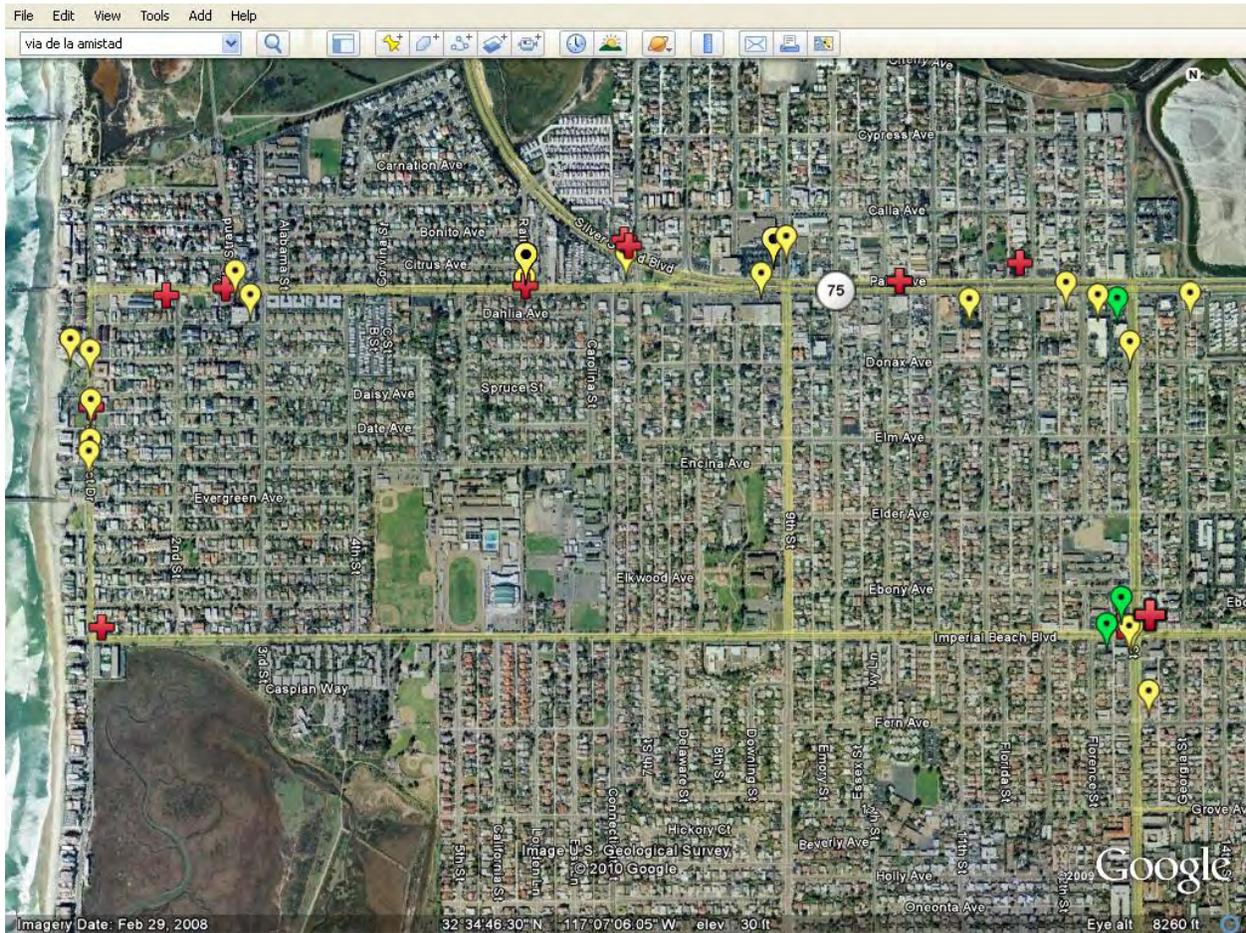
The need for pretreatment is currently hypothesized based on knowledge from study of other municipalities and the historical record of sewage spills and cleaning. Cities with a successful pretreatment program see fewer spills than before implementing the program, which results in lower sewer operating costs and improved water quality. Based on spill data and cleaning records, grease has been shown to contribute significant problems to the sewer system. Grease can block sewer lines and over time cause decay of sewer pipes. Our goal is to reduce the amount of grease in the sewer system in order to reduce costs and future problems.

Attachment 3- Food Service Establishments FOG Evaluation

**Table 1- Grease Trap Inventory**

Facility Name	Address Number	Street Name	Grease Trap or Interceptor	Cooking Oil
ALBERTO'S TACO SHOP	1183	13TH ST	Trap	
AROMA THAI RESTAURANT	757	SEACOAST DR	Trap	
BEACH CLUB GRILLE	710	SEACOAST DR	Trap	
BIG KAHUNA'S PIZZA N STUFFS	600	PALM AVE	Trap	Yes
BURGER KING #806	1180	PALM AVE	NONE	
C.H. DONUTS	1070	13TH ST	NONE	NONE
CARL'S JR. #585	700	13TH ST	Interceptor	Yes
COW-A-BUNGA CA	10	EVERGREEN AVE	N/A	
DON PANCHO'S MEXICAN FOOD	690	HIGHWAY 75	None	Bin
DOS MUNDOS TACO SHOP	1004	PALM AVE	None	
EL CILANTRO MEXICAN FOOD	764	13TH ST	Trap	Large bin
EL TAPATIO CATERING	667	SILVER STRAND	Trap	
EL TAPATIO RESTAURANT INC	260	PALM AVE	NONE	
EL ZASON	633	9TH ST	Trap	
GIANT PIZZA KING #4	1070	13TH ST	NONE	
GIANT PIZZA KING #5	600	PALM AVE	NONE	Yes
I.B. PIZZA	1293	IMPERIAL BEACH	Trap	w/ KFC
IB FORUM	1079	SEACOAST DR	None	Large Bin
IMPERIAL DONUTS +	1002	PALM AVE	Trap	Barrel
KATY'S CAFE	704	SEACOAST DR	NONE	
K-C'S CHINESE FOOD	1299	IMPERIAL BEACH	Trap	No
KFC CORP #Y450025	1056	13TH ST	Interceptor	Large bin
LA POSTA MARKET #2	1266	IMPERIAL BEACH	Interceptor	No
MARCO'S & RED HAWK	1205	PALM AVE		
MARISA'S MEXICAN SEAFOOD GR	285	PALM AVE	Trap	
MCDONALDS/SCAROB INC.	1135	PALM AVE	Trap	
MEIJO SUSHI, INC.	600	PALM AVE	Trap	Yes
MICKIES BAR AND GRILL	220	PALM AVE	none	Barrel
MZM SEACOAST BISTRO, LP	875	SEACOAST DR	Trap	
NFAROOQI ENT. LLC/JACK IN BOX	890	PALM AVE	?	
PIZZA INDUSTRY/DOMINO'S	1307	IMPERIAL BEACH	NONE	
PRETZLES AND MUCH MORE	10	EVERGREEN AVE	N/A	No
RODRIGO'S MEXICAN FOOD	600	PALM AVE	Trap	Yes
ROLANDO'S TACO SHOP #5	805	SEACOAST DR	NONE	
SANTANA MEXICAN FOOD	1337	PALM AVE	Trap	Yes
SEACOAST PIZZA	807	SEACOAST DR	NONE	
SOMBRERO MEXICAN FOOD	189	PALM AVE	none	
STARDUST DONUT SHOP	698	HIGHWAY 75	NONE	
SUBSMART DELI-FRESH	1231	PALM AVE	Trap	No
SUBWAY 20578	876	SEACOAST DR	Trap	No
THE SCOREBOARD	951	PALM AVE	NONE	
THE TINFISH RESTAURANT	910	SEACOAST DR	Trap	Bin
THE WAVE CAFE	809	SEACOAST DR	Trap	
WALLY'S IGA	836	PALM AVE	Trap	
WIENERSCHNITZEL #358	1253	PALM AVE	Trap	Yes
YE OLDE PLANK INN	24	PALM AVE	n/a	

Figure 1- Location of Food Service Establishments



**Legend**  
**Grease Intercept:** Green Marker  
**Grease Trap:** Yellow Marker  
**None:** Red Cross

## Sewer System Overflow Trends City of Imperial Beach (1997-2010)

March 19, 2010

The following presents a summary of the sewer system overflows in the City of Imperial Beach from jurisdictionally maintained sewer main lines reported November 1997 through February 2010 as reported on the CIWQS reporting system. The purpose of this analysis is to identify trends in sewer system overflows including cause, frequency, location, and volume. By understanding the history of sewer system overflows the City can more effectively implement or modify existing management programs to prevent future overflows from occurring. The complete list of sewer system overflows is provided in Attachment 1.

### Frequency, Volume, and Cause of Sewer System Overflows



Figure 1 Over the approximate 12 year reporting period, the City responded to 49 sewer main spills. The figure above illustrates the number of spills reported per year. Although the total number of spills is variable from year, there has been a noticeable decreasing trend in the number of system overflows since the year 2000.

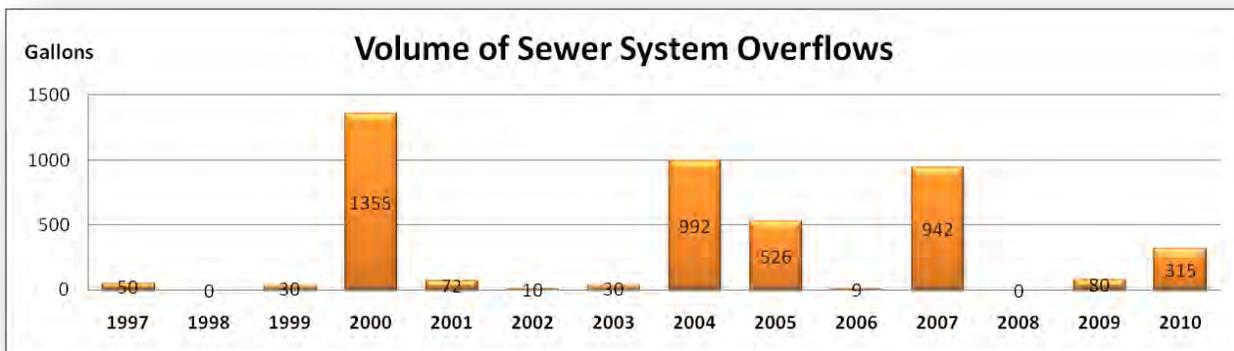


Figure 2 The figure above presents the total volume of spill that was not recovered by Sewer Division staff responding to the spill. The volume of spill released into the environment has the same general trend as the reported number of spills per year. That trend shows a general decrease in the frequency and volume of spills since the year 2000.

Volume of Spill Not Recovered (gallons)	50	0	30	1355	72	10	30	992	526	9	942	0	80	315
Number of Spills	1	0	3	9	4	1	6	7	6	3	4	0	2	2
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010

Table 1 This table presents a tabular representation of the two figures above that show the frequency and volume of sewer system overflows reported between 1997 through 2010.

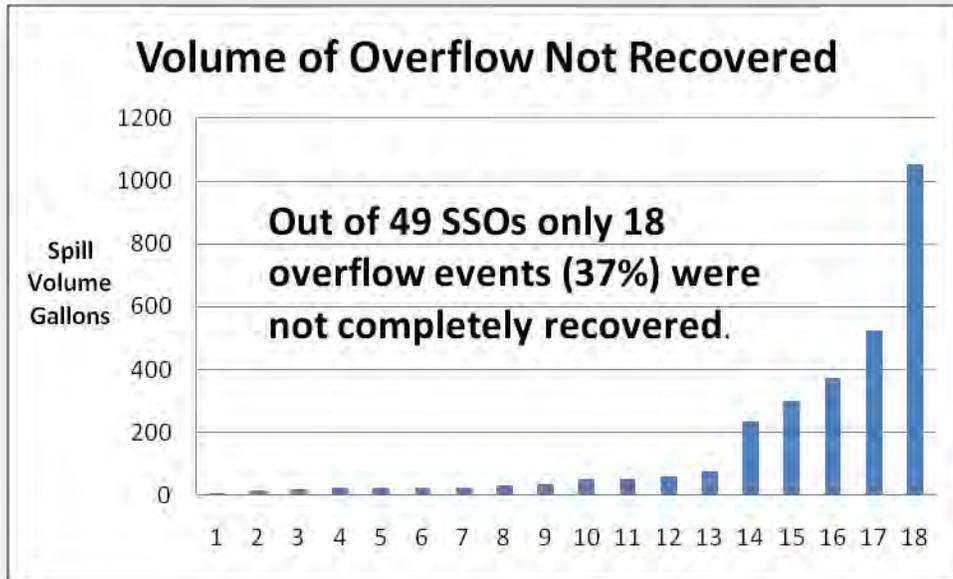


Figure 3 The City experienced 49 sewer system overflow events over the reporting period with only 18 of the overflow events (presented above) resulting in discharges being released into the environment. Sewer Division staff were able to respond and completely recover the overflow material in 31 out of the 49 overflow events (63%). The figure above graphically shows the volume of each overflow event that was not recovered by Sewer Division staff. The top five highest overflow events on the far left of the figure, contributed 85% of the total non recoverable spill.

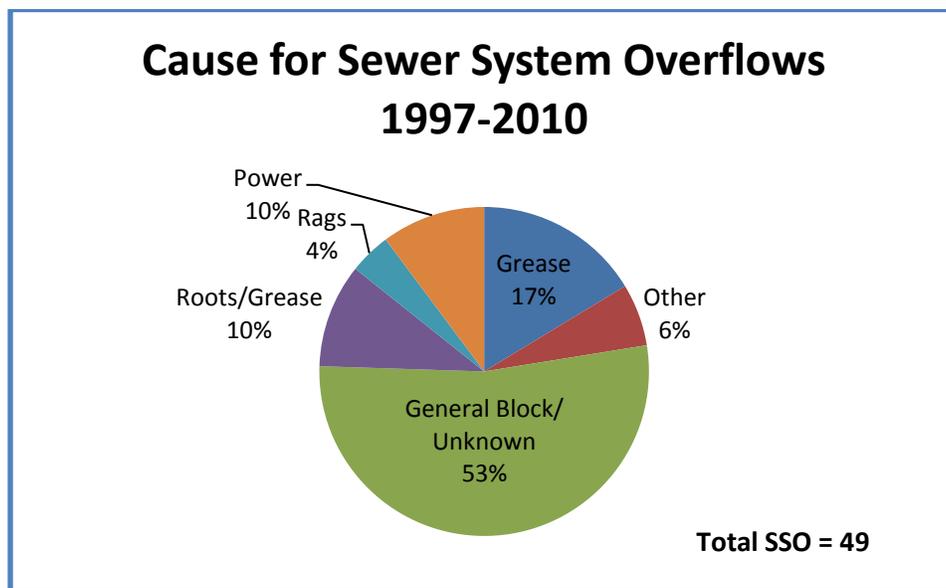


Figure 4 The figure above is a pie chart presenting the various causes of sewer system overflows in the City. Out of the total number of sewer spills 53% were the result of general blockages/unknown causes, 17% from grease, 10% from the combination of roots and grease, 10% from power failures, and 4% from rags. As seen in the figure, over half of the overflows are from general blockages or unknown sources. Greater effort should be made in determining the cause of unknown and general blockage spill in order to more effectively persistent causes of the overflow events.

## Attachment 4- Sewer System Overflow Trends Report

### Locations of Persistent Sewer System Overflows

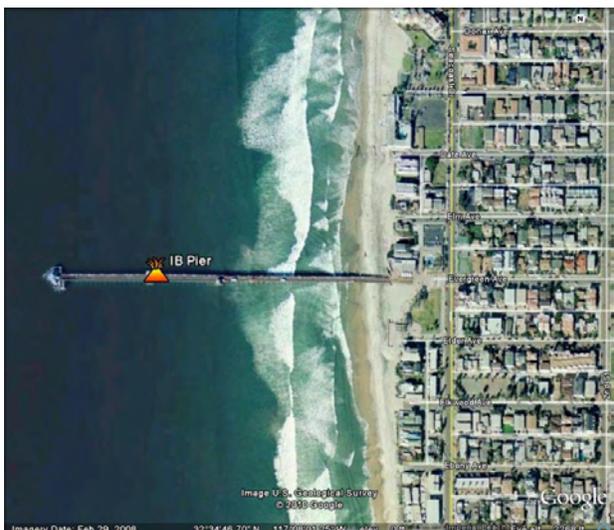
A persistent sewer system overflow is identified by having two or more sewer main overflows occurring from the same general location. The City has 8 locations where persistent sewer system overflows have occurred based on the CIWQS data from 1997 through 2010. These overflow locations are listed below and ordered based on the total number of spills from each location:

1. 7<sup>th</sup> and Basswood (MH 197)
2. Imperial Beach Pier
3. 5<sup>th</sup> and Elm (PS3, MH 91, and MH 85)
4. Fern and Ivy (MH 434 and MH 452)
5. 490 Emory (MH 211)
6. 221 Donax (MH 53)
7. Donax and Florida (MH 679 and MH 680)
8. Oneonta Street End (MH 456)

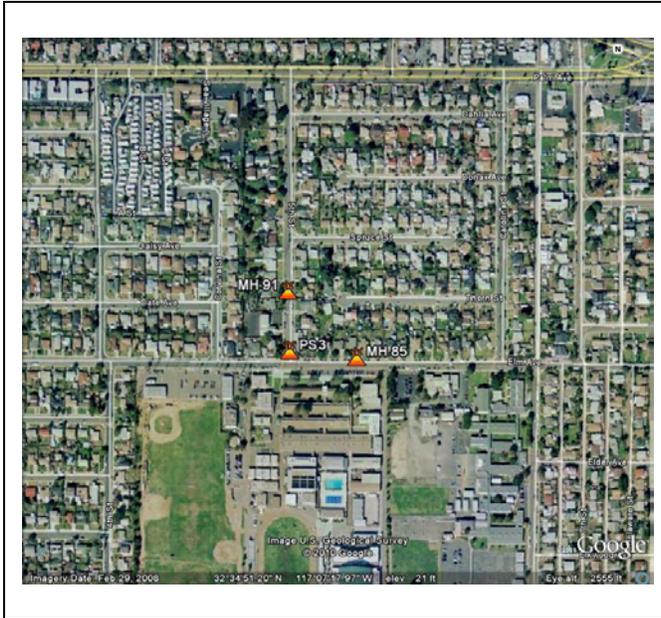
#### 7<sup>th</sup> and Basswood (MH 197)

	Date	SSO Cause	Overflow Volume Not Recovered (gal)
	12/30/2002	Grease	0
	1/8/2003	Grease	30
	12/16/2003	Grease	0
	11/17/2004	Grease	25
	7/14/2005	Grease	375
	7/22/2005	Grease	0
	9/25/2005	Grease	0
	1/13/2006	Grease	0
	1/7/2010	Grease	300

#### Imperial Beach Pier

	Date	SSO Cause	Overflow Volume Released to Environment
	9/28/2004	Blockage	60
	12/24/2004	Blockage	25
	12/27/2004	Blockage	75
	1/1/2005	Blockage	50
	1/17/2005	Blockage	25
	1/18/2005	Blockage	25
	1/19/2007	Line Break	233
	5/18/2007	Grease	20

Attachment 4- Sewer System Overflow Trends Report  
5<sup>th</sup> and Elm (PS3, MH 91, and MH 85)



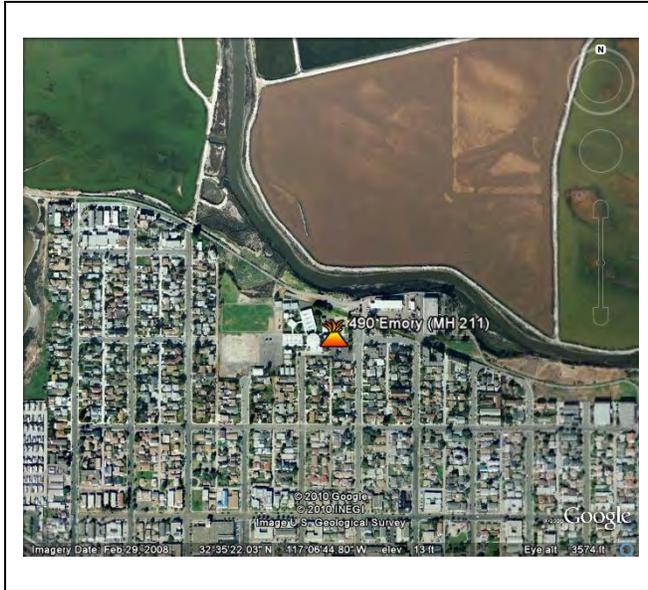
Date	SSO Cause	Overflow Volume Not Recovered (gal)
11/21/1997	Blockage	50
10/22/1999	Grease	0
11/28/1999	Power	0
1/12/2007	Blockage	522

Fern and Ivy (MH 434 and MH 452)



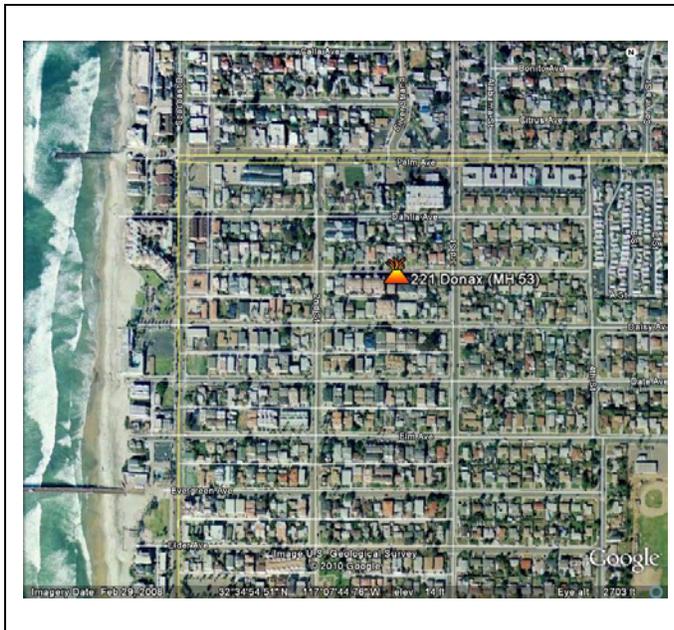
Date	SSO Cause	Overflow Volume Not Recovered (gal)
11/24/1999	Grease	0
1/20/2000	Grease/Roots	20
4/19/2001	Grease/Roots	0
10/8/2009	Blockage	0

Attachment 4- Sewer System Overflow Trends Report  
490 Emory (MH 211)



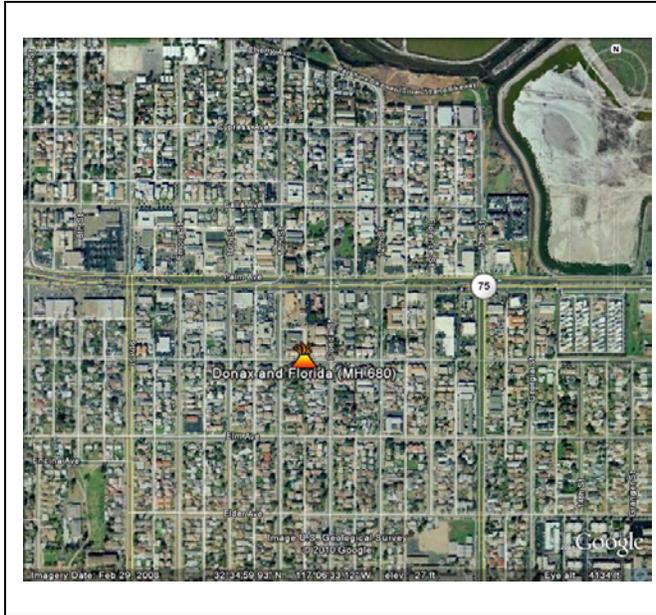
Date	SSO Cause	Overflow Volume Not Recovered (gal)
5/1/2001	Grease	0
1/13/2003	Grease	0
11/9/2006	Grease	0

221 Donax (MH 53)



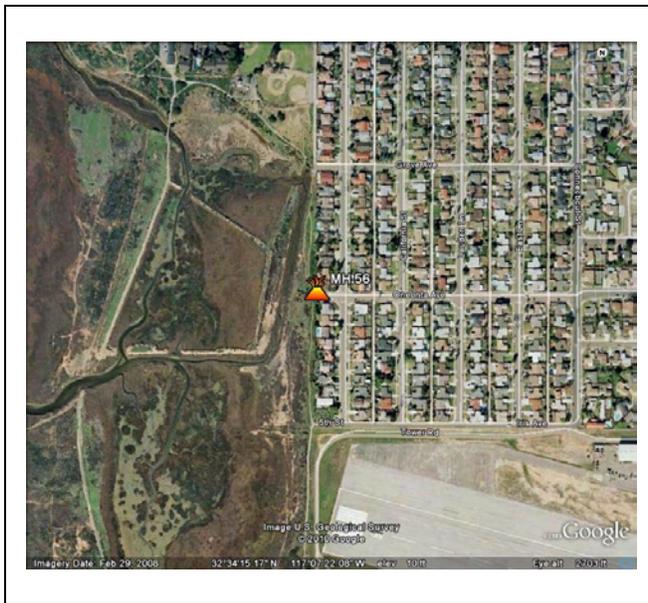
Date	SSO Cause	Overflow Volume Not Recovered (gal)
9/16/2000	Grease/Roots	0
5/13/2003	Grease/Roots	0
11/18/2003	Grease/Roots	0

Attachment 4- Sewer System Overflow Trends Report  
 Donax and Florida (MH 679 and MH 680)



Date	SSO Cause	Overflow Volume Not Recovered (gal)
3/7/2003	Grease	0
11/20/2004	Blockage	0

Oneonta Street End (MH 456)



Date	SSO Cause	Overflow Volume Released to Environment
3/28/2000	Grease	0
8/2/2001	Power	37

## Attachment 4- Sewer System Overflow Trends Report

**Attachment 1****List of Sewer System Overflows 1997-2010**

ID	Date	Location	Spill Amount	Spill Recovered	Total Spill
1	11/21/1997	542 Elm Avenue	50 gallons	0 gallons	50 gallons
2	10/22/1999	851 Fifth Street	25	25	0
3	11/24/1999	11th and Fern Ave	5	5	0
4	11/28/1999	501 Elm Ave	25	25	0
5	1/20/2000	Corner of Fern/California	25	5	20
6	3/28/2000	500 block Oneonta and Iris	35	35	0
7	5/7/2000	1143 14th Street M/H 537	25	25	0
8	7/7/2000	100 Block Citris Ave. MH# 68	20	20	0
9	7/25/2000	1035 Georgia St MH# 675	35	35	0
10	9/16/2000	221 Donax M/H#53	50	50	0
11	9/23/2000	740 Seventh M/H#107	75	75	0
12	11/30/2000	700 Block 8th Street in alley	1080	25	1055
13	12/6/2000	100 Block Calla Ave	10	10	0
14	3/29/2001	340 Citrus Ave	10	10	0
15	4/19/2001	Fern between Loudon /California	20	20	0
16	5/1/2001	490 Emory Street	2	2	0
17	8/2/2001	Oneonta Western Street End	40	3	37
18	12/30/2002	M/H#197	10	10	0
19	1/8/2003	M/H#197	90	60	30
20	1/13/2003	490 Emory	1800	1800	0
21	3/7/2003	Donax and Elm	40	40	0
22	5/13/2003	221 Donax	125	125	0
23	11/18/2003	221 Donax Ave.	158	158	0
24	12/16/2003	7th and Basswood	65	65	0
25	2/7/2004	2nd and Ebony	45	45	0
26	9/20/2004	Silver Strand Plaza	40	40	0
27	9/28/2004	Imperial Beach Pier	60	0	60
28	11/17/2004	7th & Basswood	750	725	25
29	11/20/2004	Donax and Florida	12	12	0
30	12/3/2004	550 HWY 75	30	25	5
31	12/24/2004	I.B. Pier Restroom	25	0	25
32	12/27/2004	I.B. Pier Restroom	75	0	75
33	1/1/2005	I.B. Pier Restroom	50	0	50
34	1/17/2005	I.B. Pier Restroom	25	0	25
35	1/18/2005	I.B. Pier Restroom	25	0	25
36	7/14/2005	7th & Basswood	400	25	375
37	7/22/2005	7th & Basswood	25	25	0
38	9/25/2005	7th & Basswood	1	1	0
39	1/13/2006	1211 7th Street	2	2	0
40	9/19/2006	814 Cypress Ave	2	2	0
41	11/9/2006	490 Emory Street	5	5	0
42	1/12/2007	500 Block 5th Street	672	150	522
43	1/19/2007	Imperial Beach Pier	233	0	233
44	3/29/2007	341 Calla Ave	2	2	0
45	5/18/2007	Imperial Beach Pier	35	15	20
46	7/18/2009	856 Seacoast Drive	5	5	0
47	10/8/2009	Fern Avenue	75	75	0
48	1/31/2010	600 Palm Avenue	15	0	15
49	1/7/2010	7th Street at Basswood	300	0	300



# Sewer System Management Plan

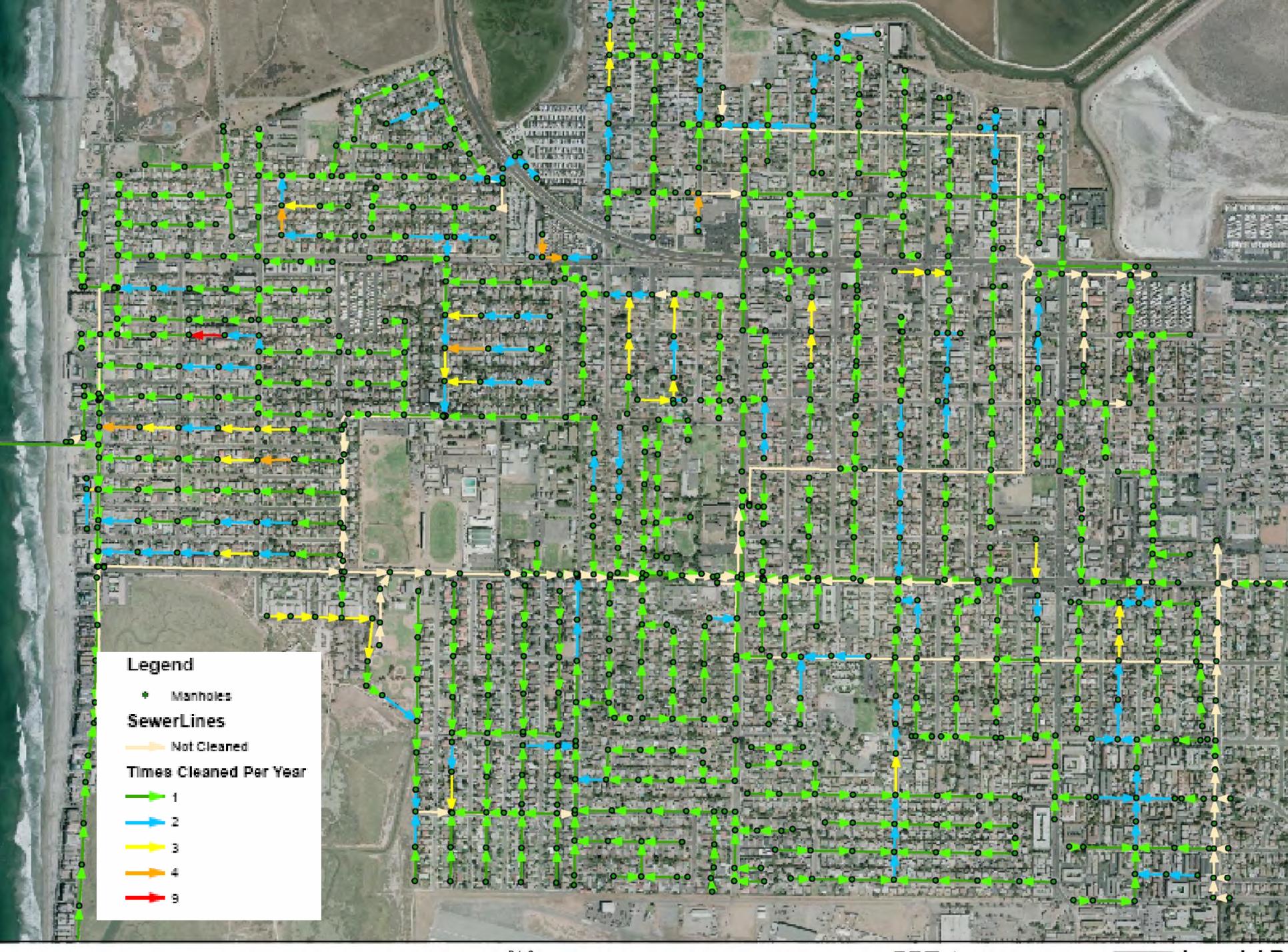
## 2010 Audit Report

Chris Helmer – Environmental Program Manager

# SSMP (Eleven Elements)



- 1.0 Goals
- 2.0 Organization
- 3.0 Legal Authority
- 4.0 Operation and Maintenance
- 5.0 Design and Performance Design Standards
- 6.0 Overflow Emergency Response Plan
- 7.0 Fats, Oil, and Grease Control Program
- 8.0 System Evaluation and Capacity Assurance
- 9.0 Monitoring Measurement and Program Modifications
- 10.0 SSMP Audit
- 11.0 Communication Program



**Legend**

• Manholes

**SewerLines**

Not Cleaned

**Times Cleaned Per Year**

1

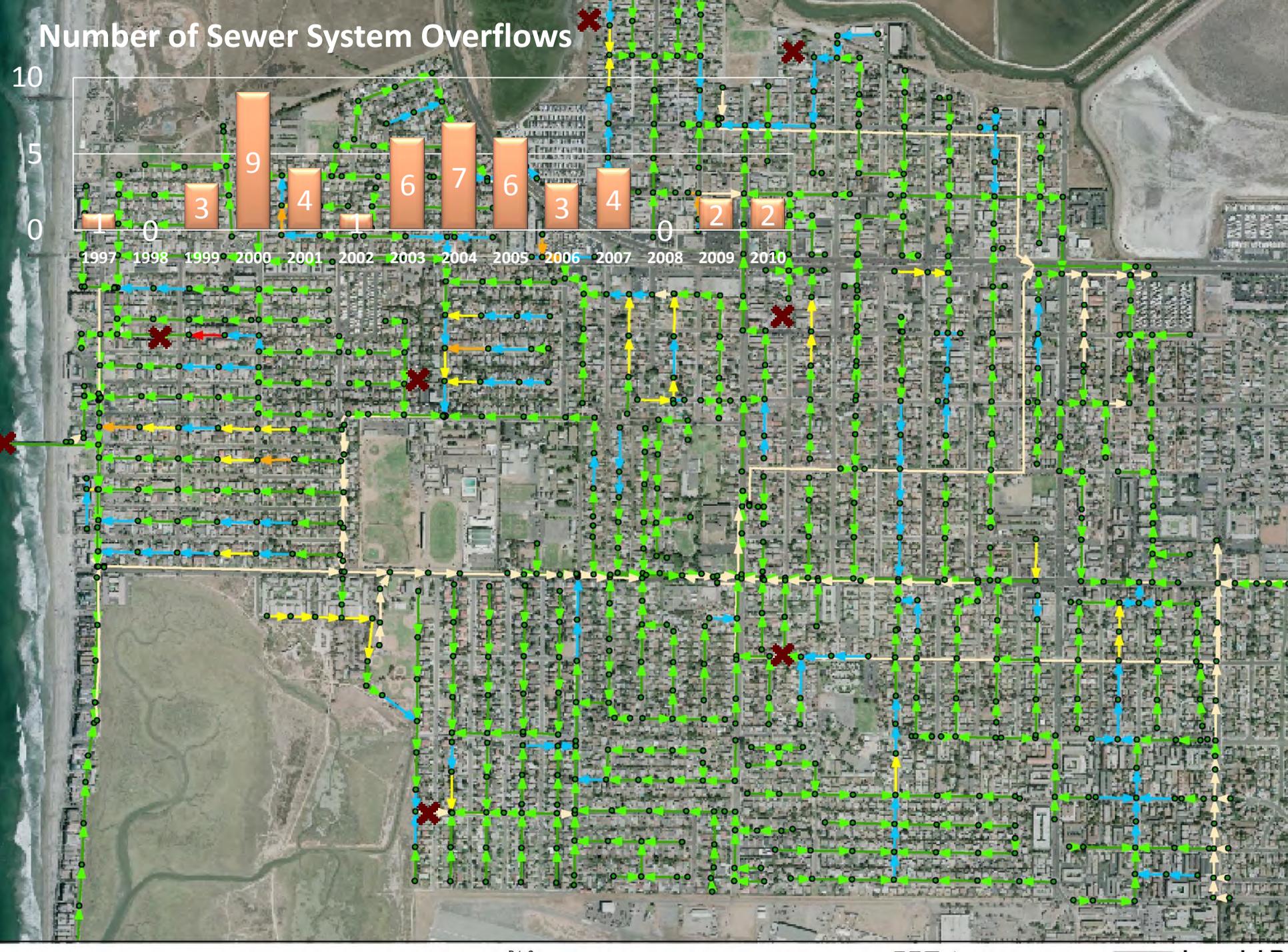
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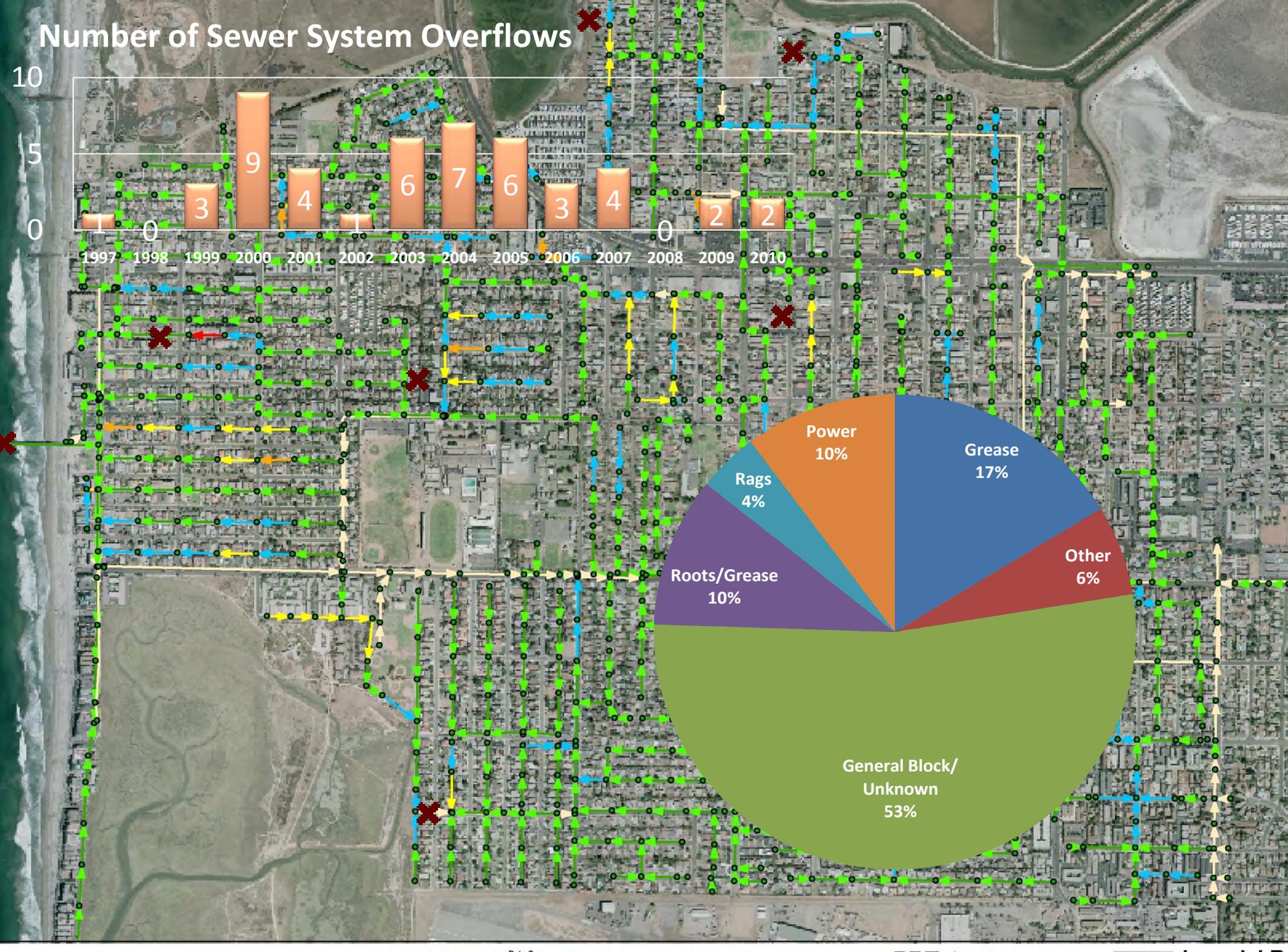
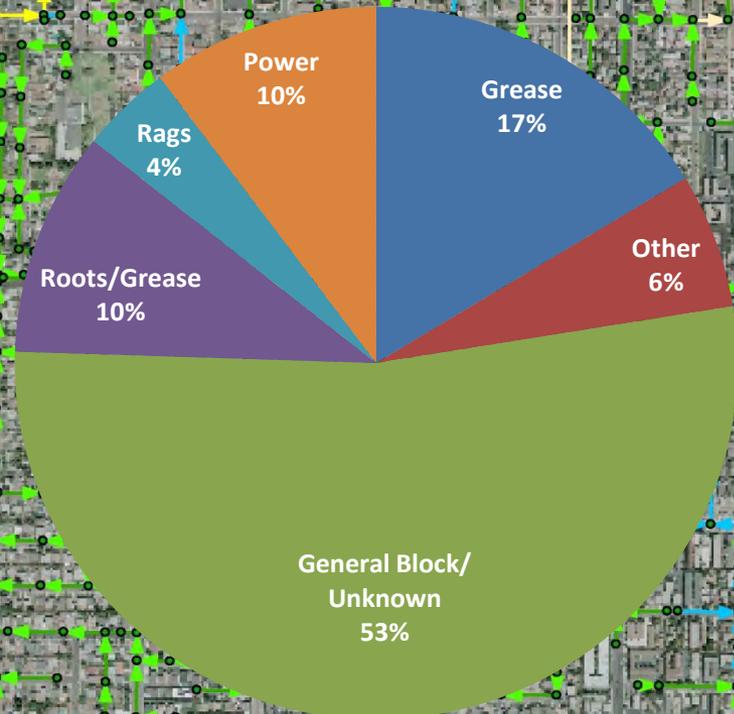
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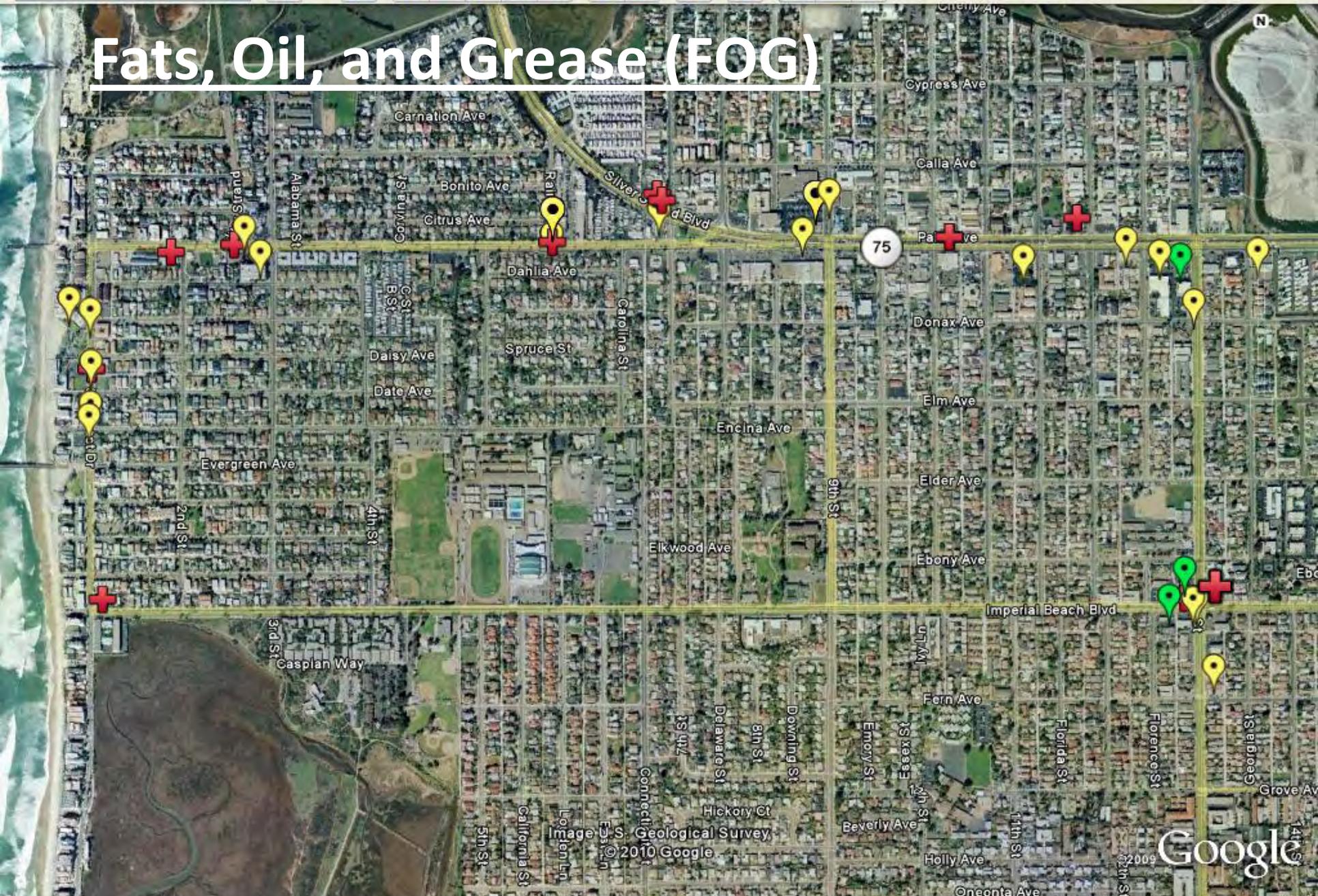
# Number of Sewer System Overflows



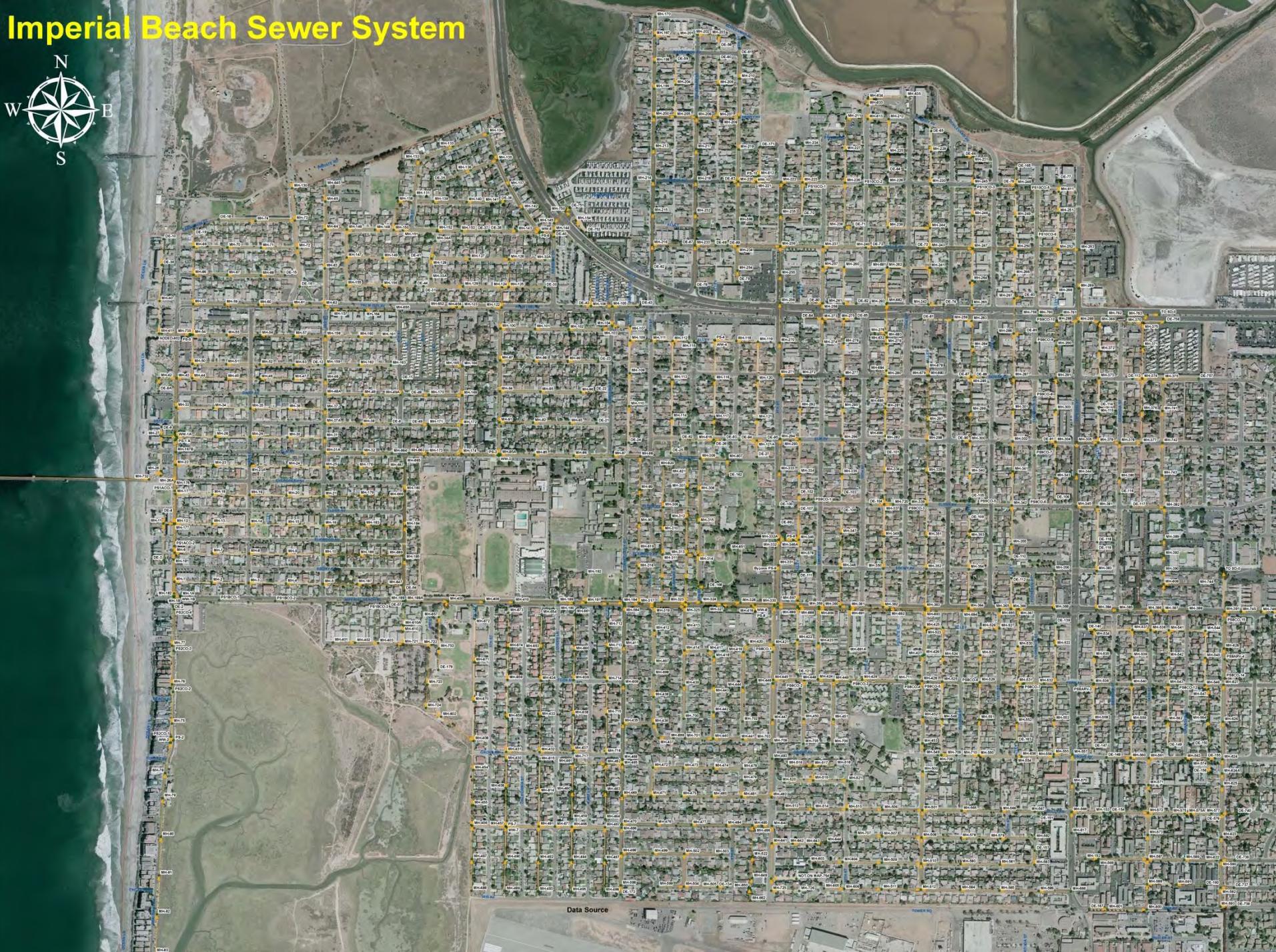
# Number of Sewer System Overflows



# Fats, Oil, and Grease (FOG)

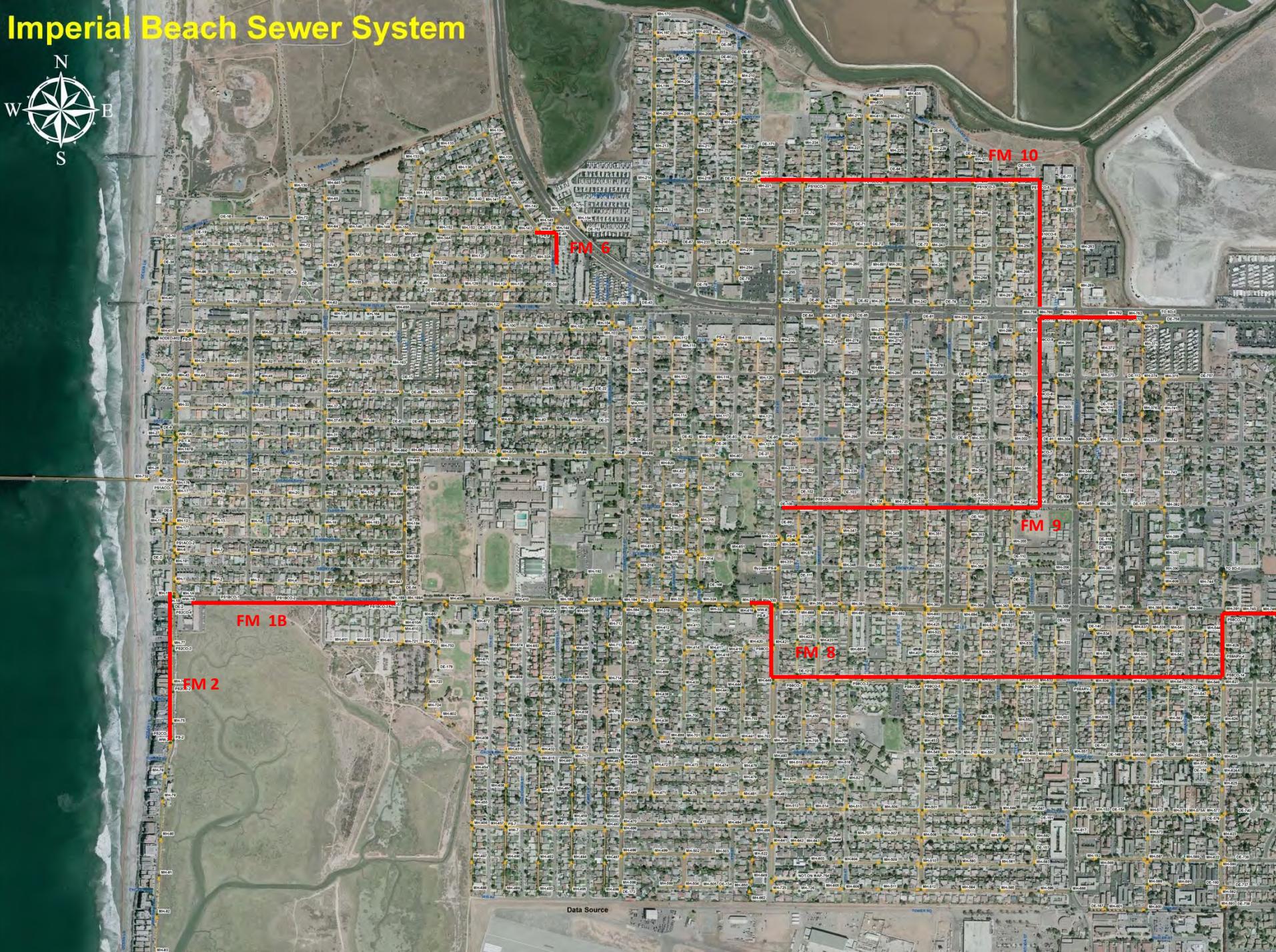


# Imperial Beach Sewer System



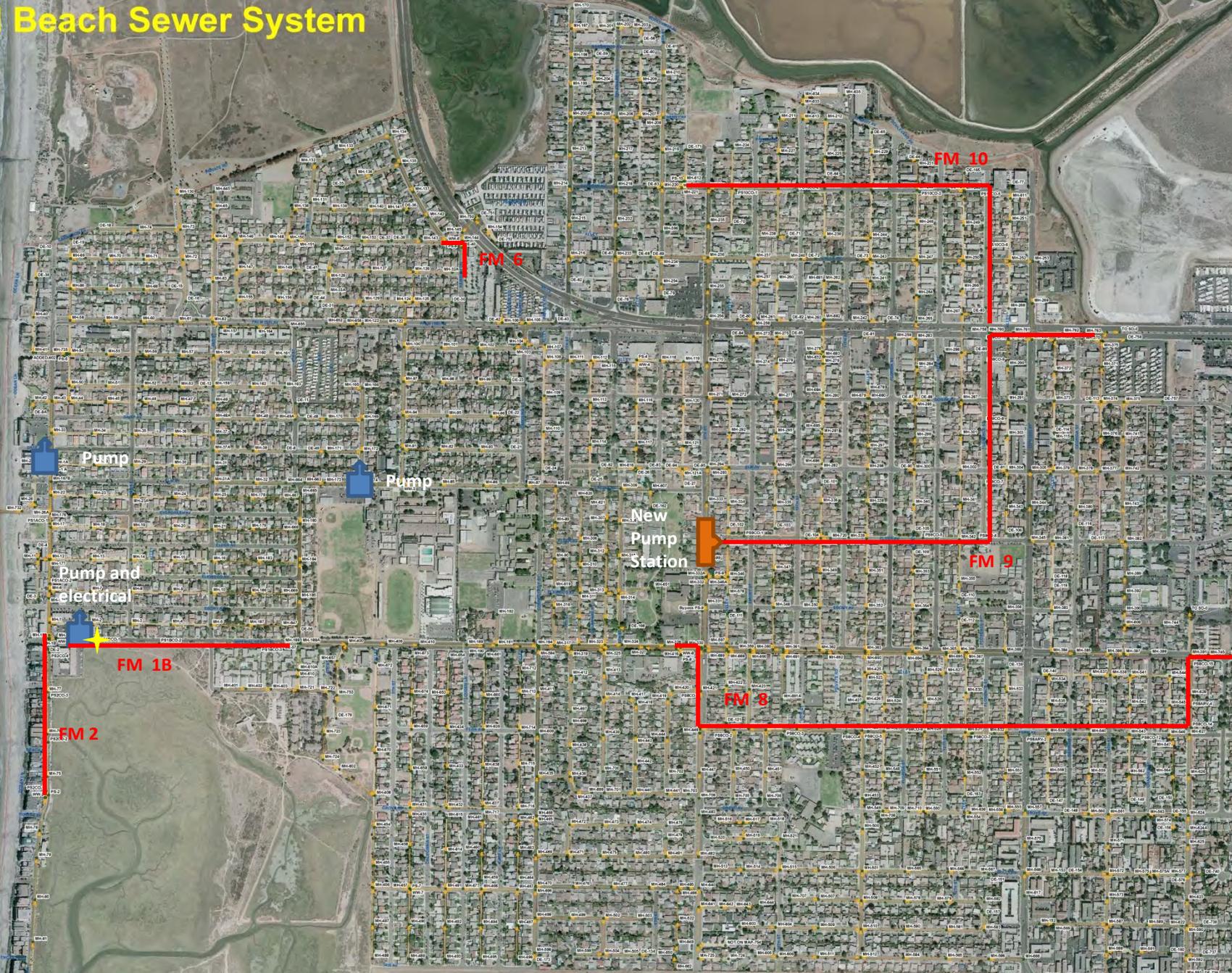
Data Source

# Imperial Beach Sewer System



Data Source

# Imperial Beach Sewer System



Data Source

# Imperial Beach Sewer System



- CCTV repairs on gravity lines
- Lining of 53 manholes and 7 pump stations
- GIS database of Sewer System
- New emergency generator
- Vactor truck

# Current Maintenance Plan

## Reduce Sewer System Maintenance Activities

- Complete repairs identified in the 3 year CIP
  - CCTV in 2008 televised 28% of lines
- Televising the known trouble lines in the City
  - Repair or replace broken lines
- Televising 100% of sewer system within 5 year CIP

