AGENDA DATE: January 29, 2019

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Sewer System Management Plan Recertification

RECOMMENDATION:

That Council recertify the updated Sewer System Management Plan.

DISCUSSION:

Background

On May 2, 2006, the California State Water Resources Control Board adopted statewide general Waste Discharge Requirements (WDR) for publicly owned sanitary sewer systems. The WDR requires the development and implementation of a system-specific Sewer System Management Plan (SSMP). The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system to help reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any overflows that do occur.

According to WDR requirements, staff must conduct internal audits at least every two years and shall focus on evaluating the effectiveness of the SSMP and compliance with SSMP requirements. The SSMP must be updated every five years and must include any significant program changes. Recertification by Council is required when significant updates are made to the SSMP.

The City initially developed and received Council certification of its SSMP in 2008. The SSMP was audited in June 2013 and subsequently recertified by Council on June 25, 2013. Staff completed an internal audit in October 2015 and again in June 2018. Although staff has not made significant changes to work practices, because the document has not been certified by Council since 2013, staff desires to have Council recertify the document at this time.

Recent Efforts

In 2017, staff spent several months performing a detailed review of wastewater collection system business practices in conjunction with Computerized Maintenance Management
System (Cartegraph) upgrades, and made changes to these practices at the time of the Cartegraph upgrade in January 2018. In addition, an analysis of the trends of SSOs over the past six years was performed to examine the effectiveness of the wastewater collection system operation and maintenance programs. Because of these two work efforts, the 2017 SSMP audit was postponed to June 2018 to incorporate the resulting changes into the SSMP.

As a result of the June 2018 audit, the following general changes were made to the SSMP and associated work plans:

- The look, feel, and organization of the SSMP was updated to provide clear information and easily identifiable appendices, and change logs were added to the work plans to record the date of updates.
- The City has taken ownership of many of the work plans, where previously Brown and Caldwell, the consultant contracted to support the wastewater collection system group, made changes to the work plans.
- Work plans were updated to reflect the collection system reorganization, specifically personnel responsible for various tasks.
- Changes from the 2018 SSO Reduction Action Plan and Consent Decree Amendment were incorporated into the work plans, such as the new accelerated root cleaning program and cleaning frequencies.
- The work plans were updated to reflect the recent software change from Cartegraph Navigator to Cartegraph OMS. Cartegraph OMS is built on GIS and has allowed staff to streamline documentation of work. The software upgrade changed how, not what, work was performed.

While there are many changes regarding how work is done, there are no significant changes to the program. The SSMP itself provides an overview of how the City conducts its wastewater management activities for successful, ongoing WDR compliance. The investment made in updating business strategies and activities within the SSMP will serve the City well in future years.

The Water Commission reviewed this item at its regular meeting on January 17, 2019 and voted X-X-X in support of staff’s recommendation.

**BUDGET/FINANCIAL INFORMATION:**

Funding for the projects and programs documented in the SSMP is included in the Wastewater Fund capital and operating budgets.

**SUSTAINABILITY IMPACT:**

Scheduled maintenance and repair of the collection system reduces the potential for SSOs and extends the life expectancy of the system.
A copy of the updated SSMP and Appendices is available for public review in the City Clerk’s Office.

Environmental Review

The action to certify the SSMP is exempt from the California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq.) because it is an action taken by the City to assure the protection of the environment, and pursuant to a regulatory process involves procedures for protection of the environment (Cal. Code Regs., title 14, §15308). In addition, the action is exempt from CEQA pursuant to Cal. Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute “existing facilities,” and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

PREPARED BY: Gaylen Fair, Acting Wastewater System Manager/GF/js

SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator’s Office
Presentation Overview

1. SSMP Background
2. Changes from 2015 SSMP
3. Recommendation
Background

- In 2006, CA State Water Resources Control Board adopted statewide general Waste Discharge Requirements (WDRs)
- The WDRs require publicly owned sanitary sewer systems to develop and implement a SSMP
- Report all SSOs to the State Water Boards online SSO database (CIWQS)
- SSMP needs to be recertified every 5 years
Purpose

Goal of the SSMP is to:

- Provide a plan and schedule to properly manage, operate and maintain the sewer system
- Reduce and prevent Sanitary Sewer Overflows (SSOs)
- Mitigate SSO impacts
What is the SSMP?

<table>
<thead>
<tr>
<th>Element</th>
<th>Title</th>
<th>Element</th>
<th>Title</th>
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<tbody>
<tr>
<td>Element 1</td>
<td>Goals</td>
<td>Element 7</td>
<td>Fats, Oils and Grease (FOG) Program (Source Control Program)</td>
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<td>Element 2</td>
<td>Organization</td>
<td>Element 8</td>
<td>System Evaluation and Capacity Assurance Plan</td>
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<tr>
<td>Element 3</td>
<td>Legal Authority</td>
<td>Element 9</td>
<td>Monitoring, Measurement and Program Modifications</td>
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<tr>
<td>Element 4</td>
<td>Operation and Maintenance Program</td>
<td>Element 10</td>
<td>SSMP Program Audits</td>
</tr>
<tr>
<td>Element 5</td>
<td>Design and Performance Provisions</td>
<td>Element 11</td>
<td>Communication Program</td>
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<tr>
<td>Element 6</td>
<td>Overflow Emergency Response Plan</td>
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Requirements of SSMP

“Living Document” – updated as necessary

WDR Requires:

• SSMP must be updated every 5 years
• Recertified by governing board
• Must Include significant program changes
• Audited at least every two years
  • Evaluate effectiveness of plan
  • Evaluate compliance with plan requirements
Timeline of Past Actions

SWRCB adopted WDRs
- Order 2006-003-DWQ

Initiated
- Document written
- Certified by City Council

Recertified
- Audited in 2012
- Added CD Work Plans
- Recertified by City Council June 2013

Audited
- October 2015
- Finalized Document in December 2015

2006
2008
2013
2015
SSMP Updates

• Modified SSMP format to allow for easy future updates

• Capture changes to programs from last certified SSMP, including:
  • 2016 Consent Decree Amendment
  • 2018 SSO Reduction Action Plan (RAP)
  • 2017 Wastewater Collection Staff reorganization
  • Upgrade CMMS (Cartegraph-OMS)

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Document Title</th>
<th>Updated</th>
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<tbody>
<tr>
<td>A</td>
<td>Regulatory Documents</td>
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<tr>
<td>A2</td>
<td>Monitoring and Reporting Requirements Order No. WQ 2013-0058-EXEC</td>
<td>7/15/2013</td>
</tr>
<tr>
<td>B</td>
<td>Reserved for Future Use</td>
<td></td>
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<tr>
<td>C</td>
<td>Element 2 Appendices (Organizational)</td>
<td></td>
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<tr>
<td>C1</td>
<td>Legally Responsible Officials and Data Submitters</td>
<td>6/18/2018</td>
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<tr>
<td>C2</td>
<td>Staff Responsible for SSMP Implementation</td>
<td>6/18/2018</td>
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<tr>
<td>C3</td>
<td>Wastewater Organizational Chart</td>
<td>6/18/2018</td>
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<tr>
<td>D</td>
<td>Reserved for Future Use</td>
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<tr>
<td>E</td>
<td>Element 4 Appendices (Operations and Maintenance Program)</td>
<td></td>
</tr>
<tr>
<td>E1</td>
<td>Collection System Information Technology Governance Plan</td>
<td>06/2018</td>
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<tr>
<td>E2</td>
<td>Map of Wastewater Collection System</td>
<td>7/16/2018</td>
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<tr>
<td>E3</td>
<td>Cleaning and Inspection Improvement Plan</td>
<td>09/2018</td>
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<td>E4</td>
<td>Lift Station and Force Main Condition Assessment</td>
<td>06/2018</td>
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<td>E5</td>
<td>Flow Monitoring Program</td>
<td>06/2018</td>
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<tr>
<td>E6</td>
<td>CCTV and Repair, Rehabilitation and Replacement Work Plan</td>
<td>06/2018</td>
</tr>
<tr>
<td>E7</td>
<td>Wastewater Collection Vehicle and Equipment List</td>
<td>6/18/2018</td>
</tr>
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## 2016 Amended Consent Decree

### 2016 Consent Decree Amendment
**(effective March 24, 2017):**

<table>
<thead>
<tr>
<th>Changes</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>New cleaning programs</td>
<td></td>
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<tr>
<td>Required Frequency Change Codes</td>
<td></td>
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<tr>
<td>Removal of Exfiltration Abatement Program</td>
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<td>Capital replacement goal to 3.56 miles</td>
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# 2018 SSO Reduction Action Plan

### 2018 SSO Reduction Action Plan (March 31, 2018)

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Established new cleaning frequencies</td>
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<tr>
<td>Adjusts all 8” diameter and smaller sewer mains to a maximum 36-month frequency</td>
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<tr>
<td>“On-Call” contractor support contracts to augment City resources</td>
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</tbody>
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2017 Wastewater Collection Staff Reorganization

Restructured Wastewater Collection Section to address issues:

- Field Supervisor
- CCTV Planner/Scheduler
- CIP Project Coordinator
- SLIP Coordinator
Upgrade to the Computer Maintenance Management System

- Cartegraph Navigator to Cartegraph OMS
  - Mobile, web-based

- Updates to Workflows
  - Preventative Maintenance and Automation tools

- Simplification of task assignments
Next Steps

2018 Audit
- Evaluate performance
- Capture changes
- Update document

Water Commission
- Inform and seek policy direction

Recertify
- City Council

Next Audit

June 2018

January 17, 2019

January 29, 2019

June 2020

Next Steps
Recommendation

That Council recertify the updated SSMP