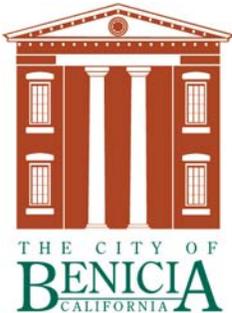


Public Works Department

**MEMORANDUM**



**Date:** May 25, 2022

**To:** File / SSMP

**From:** Carrie Wenslawski Public Works Management Analyst  
Ray Goebel, P.E., EOA, Inc.

**Re:** **City of Benicia 2022 SSMP Addendum**

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**Introduction**

This memorandum updates the City’s Sewer System Management Plan to incorporate certain actions described in a Settlement Agreement and Release (Agreement) made between California River Watch and the City of Benicia, executed by the parties in November 2021. The specified and their implementation by the City are described below, along with the SSMP sections into which the actions are incorporated.

Because the City anticipates that a more comprehensive update and of the SSMP will be needed upon the State Water Resources Control Board’s impending reissuance of *the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDR)*, which mandated creation and implementation of the SSMP, the actions described in this memorandum, along with any changes resulting from the WDR reissuance and other needed updates identified in the City’s March 2022 internal SSMP audit, will be incorporated into the relevant SSMP sections as part of that more comprehensive update. Until that time, this memorandum will serve as an addendum to the existing SSMP, which was last updated and approved by the City Council in November 2020.

**3.1 Condition Assessment [SSMP Section 4]**

*The City shall, within ten (10) years after the Effective Date of this Agreement, complete a condition assessment of all sewer pipes eight (8) inches in diameter and larger with its collection system using the Condition Assessment Rating System and industrial standards such as the PACP and Manhole Assessment Certification Program.*

Condition assessment via CCTV is an ongoing element of the City's O&M activities for the collection system. CCTV inspection videos are managed using the IT Pipes software that include PACP ratings. In addition, the City's 2020 Wastewater Master Plan and Major Facilities Condition Assessment included an assessment process that identified and prioritized 23 potential CIP projects for the collection system. A complete assessment of lines 8 inches and larger will be completed within 10 years. The assessment may incorporate historic data.

### **3.2. Collection System Repair [SSMP Section 4]**

*The City shall, within six (6) months after the Effective Date of this Agreement, or within six (6) months after discovering a Significantly Defective gravity line in the Collection System located within two hundred (200) feet of a surface water, repair any such sewer line that, in the City's professional judgment, may pose a risk to human health or the environment. During the term of the Agreement the City shall, for each Significantly Defective gravity line in the Collection System located within two hundred (200) feet of a surface water that the City in its professional judgment decides not to repair, provide CRW with the its basis for determining that the Significant Defective line does not pose a risk to health or the environment.*

The City prioritizes repair of defective lines that are within proximity to surface water, and initiates emergency repairs on lines that cause or are deemed to be in imminent danger of cause releases of wastewater. Such repairs are normally completed well within a six month period. However, repairs that involve significant engineering design effort and/or which must be addressed through the normal (non-emergency) public works procurement process may take longer than six months to complete. For lines within 200 feet of surface water identified as Significantly Defective Lines (i.e. PACP rating of 5) but which are deemed to not pose a risk to health or the environment, justification will be provided to CRW per the agreement

### **3.3 SSO Response [SSMP Section 6]**

*3.3 a. Respond to all SSOs on a Risk Basis, regardless of the size or location of the SSO. High risk SSOs are discharges in any location which pose an imminent and substantial endangerment to public health or the environment. Staff shall be trained in order to respond to all SSOs on a Risk Basis.*

Only rarely do multiple SSOs occur at the same time, requiring a risk-based response. In those rare cases when there are multiple SSOs, Category 1 SSOs, or SSOs where public contact is more likely, will be given a higher priority for response. The concept of risk-based response will be incorporated into staff training.

*3.3.b. Cause water quality sampling and testing on all SSOs to be completed in accordance with Section D.7 of the Statewide WDR. During the term of the Agreement, the City shall within fourteen (14) calendar days of receiving a request from CRW, provide the water quality sampling and testing results required by Section D.7 of the Statewide DWR to CRW.*

Results from any water quality sampling conducted pursuant to Section D.7 of the WDR will be provided to CRW.

*3.3.c. Place, post, and maintain appropriate public notification signs and barricades to keep vehicle and pedestrian traffic away from contact with spilled sewage during SSO response and cleanup.*

This is current City practice as described the SSMPs Overflow Emergency Response Plan (Section 6).

### **3.4. Chemical Root Control Procedures. [SSMP Section 4]**

*The City shall use root control chemicals approved and/or recommended by the federal Environmental Protection Agency or the RWQCB . Applications of chemicals shall comply with the recommendations of the manufacturer of the chemical and as required by Cal-OSHA. Within one (1) year after the Effective Date of this Agreement, the City shall develop methods for the safe and effective application of root control agents. These methods shall include:*

*3.3.a. Using root control agents that have a half-life of sixty (60) days or less and the breakdown products are non-toxic to aquatic plants or animals;*

*3.3.b. The City shall keep records identifying the section being treated, a map identifying locations where treatment occurred, the chemical(s) used, including the MSDS sheets, and the amount of chemicals applied; and*

*3.3.c. The City, or its agents, shall monitor areas where chemical root control has been used for vegetation die-off in a pattern that suggests root control chemicals have escaped from the sewer and caused plant mortality. If such vegetation die-off is observed, the City shall take action to avoid recurrence.*

The City plans to utilize chemical root control as a periodic ongoing O&M activity beginning in the summer of 2022. The City will utilize the services of an outside contractor (Dukes Root Control Inc.) for this purpose. The root control chemical, application procedures and monitoring will comply with the Agreement. Relevant information regarding the root control program will added to SSMP Section 4.

### **3.5. Infectious Vector Protocols [SSMP Section 6]**

*The City shall comply with all relevant guidelines promulgated by the Center for Disease Control and the Solano County Public Health Department for the protection of City employees and the public from any Infectious Vector to which those persons might be exposed through direct or indirect contact with sewage.*

During the Covid pandemic, the City followed guidance and requirements issued from CDC and Solano County Public Health. City employees whose work put them in in potential contact with wastewater utilize appropriate protective measures and hygienic practices at all times. As part of City's response to SSOs, the public is protected from potential exposure to wastewater through use of containment devices, barricades and warning signs, as described in the SSMPs Overflow Emergency Response Plan.

### **3.6. Updating of Sewer System Management Plan [SSMP Sections 4, 6, and update log]**

*By May 31, 2022, the City shall update its current Sewer System Management Plan and Overflow Emergency Response Plan to include the remedial terms set forth in Section 3 of this Agreement. The City's Sewer System Management Plan shall be kept current and properly certified. All documents relating to the certification shall be posted on the City's website.*

As described in the Introduction, this memorandum will be incorporated into the SSMP as an addendum to the City's SSMP pending a more comprehensive SSMP update following the

reissuance of the Statewide WDR. This memorandum will be added to the City's [SSMP web page](#), which provides access to the entire SSMP and related documents.

### **3.7 Receiving Water Compliance [NPDES Permit Section V]**

*The City shall comply with Section V of its NPDES Permit regarding Receiving Water Limitations, and shall submit effluent monitoring results to the RWQCB through the California Integrated Water Quality System Project ("CIWQS") in the form of eSMRs on a monthly basis demonstrating its ongoing compliance with each effluent limitation set forth in the NPDES Permit.*

The WWTP's treatment processes and effluent limitations/monitoring requirements are designed to ensure that receiving water limitations specified in the NPDES permit are met. Effluent monitoring data is submitted to the RWQCB in monthly compliance reports through CIWQS as specified in the Agreement.

### **3.8 Collection System Inundation [SSMP Section 6]**

*Any event that causes any City maintenance hole cover located within the FEMA 100-year flood zone to become submerged under two (2) inches or more of water at the same time as (a) upstream manholes or lateral cleanouts are surcharging; (b) human waste or discoloration consistent with an SSO is observed in the vicinity of the submerged maintenance hole; or (c) there are any other indicators that an SSO is occurring at the submerged maintenance hole, will be reported to CIWQS as an SSO unless the City can show through bacterial sampling that no sewage was released to surface areas.*

Any event that conforming to the above description will be reported in CIWQS as an SSO unless bacterial sampling demonstrates that no sewage was released. Any bacterial monitoring will be conducted in accordance with the SSMP's SSO Monitoring Plan.

### **3.9 Training [SSMP Section 6]**

*The City shall, within six (6) months after the Effective Date of this Agreement, develop a training program to ensure that all SSOs are reported and that the volume and fate of the discharge is accurately detailed in the CIWQS reports.*

Reporting of SSOs in CIWQS is done only by the Public Works Maintenance Superintendent or the Collection System Maintenance Supervisor, in order to ensure quality and consistency. Both are well versed in spill volume estimation methods and in CIWQS reporting requirements, and have the SWRCB's "Enrollee's Guide to the SSO Database" (available on the City's SSMP web page) for guidance if necessary. One of these two individuals is normally on-site during an SSO response and is responsible for the volume estimates submitted through CIWQS. Collection crew staff are also familiar with the volume estimating process, based on their experience and the tools provided in the SSMP's Overflow Emergency Response Plan.