



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Kerrie Romanow

**SUBJECT: STORMWATER PERMIT  
ANNUAL REPORT 2019-2020**

**DATE:** September 8, 2020

Approved

Date

9/11/20

## **RECOMMENDATION**

Approve a resolution authorizing certification and submittal of the FY 2019-2020 Stormwater Permit Annual Report to the San Francisco Bay Regional Water Quality Control Board by September 30, 2020, in conformance with the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit requirements, pursuant to the Federal Clean Water Act.

## **OUTCOME**

Approval of this recommendation will result in a change of the report status to final, and certification and submittal of the final FY 2019-2020 Annual Report to the Regional Water Quality Control Board (Water Board) as required by the Permit.

## **EXECUTIVE SUMMARY**

The Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Permit) requires the City to submit a Stormwater Management Annual Report (Annual Report) by September 30 of each year certifying implementation of and compliance with the Stormwater Permit requirements. The Annual Report fulfills the requirement for reporting on activities undertaken from July 1, 2019, through June 30, 2020.

The Permit specifies actions necessary to reduce the discharge of pollutants in stormwater to the maximum extent practicable and effectively prohibits non-stormwater discharges into the municipal storm sewer system to protect local creeks and the Bay. The current 5-year Permit, effective January 1, 2016, includes a wide range of requirements such as those related to green stormwater infrastructure, trash load reduction, and polychlorinated biphenyls (PCBs) control measures in addition to others. Staff implemented programs and activities to address these and other requirements in FY 2019-2020. This memorandum highlights the City's activities supporting compliance with the Permit during the reporting period and highlights activities planned for FY 2020-2021.

## **BACKGROUND**

Stormwater enters the City's storm sewer system through approximately 32,000 inlets, is conveyed through approximately 1,130 miles of sewer mains, and discharged largely without treatment, through 1,500 outfalls, to local creeks and streams and ultimately to San Francisco Bay. Discharged water is comprised of rainfall, irrigation water, and other water used outdoors along with pollutants it can collect and transport as it flows across rooftops, sidewalks, driveways, streets, and landscaping.

The Federal Clean Water Act requires the City to operate its municipal separate storm sewer system under a National Pollutant Discharge Elimination System permit for the discharge of stormwater to surface waters. The Permit specifies actions necessary to reduce the discharge of pollutants in stormwater to the maximum extent practicable and effectively prohibit non-stormwater discharges into the municipal storm sewer system to protect local creeks and the Bay. The Permit includes provisions that require reduction of pollutants to storm drains resulting from routine municipal operations; appropriate site design and treatment measures to manage stormwater runoff quality and quantity from new and redevelopment project sites; inspection of construction sites and industrial and commercial facilities that could potentially contribute to stormwater pollution; prohibition, detection, control, and elimination of illicit discharges; implementation of control methods for pollutants of concern such as PCBs, pesticides, mercury, and trash; and monitoring to track water quality status and trends.

The Permit requires the City to submit an Annual Report by September 30 of each year, documenting performance of Permit required actions and certifying Permit compliance. The Annual Report follows a standardized reporting template developed by the Bay Area Stormwater Management Agencies Association (BASMAA), approved by Water Board staff, and used by all 76 agencies regulated by this regional permit. This standardized reporting template is intended to provide the Water Board with consistent information about permittee compliance throughout the Bay Area. The referenced Annual Report fulfills the requirement for reporting on activities undertaken from July 1, 2019, through June 30, 2020.

Actions to prevent pollution from entering the City's storm sewer system involve various City operations, as well as the daily activities of San José residents and businesses. Accordingly, multiple City departments are actively engaged. Collaborative efforts are critical to preventing stormwater pollution and protecting water quality. Collaborating departments include: Environmental Services (ESD); Public Works (PW); Planning, Building and Code Enforcement (PBCE); Transportation (DOT); Parks, Recreation and Neighborhood Services (PRNS); Housing, and the City Attorney's Office. ESD provides Permit oversight and coordinates implementation across the various City departments. Table 1 lists the Permit elements and identifies departments engaged in their implementation.

Table 1

Permit Provision	City Departments					
	ESD	DOT	Housing	PBCE	PRNS	PW
Municipal Operations	X	X			X	X
New Development and Redevelopment (Green Infrastructure)	X	X		X	X	X
Industrial and Commercial Site Controls	X					
Illicit Discharge and Detection Elimination	X	X				
Construction Site Control	X			X		X
Public Information and Outreach	X				X	
Water Quality Monitoring	X					
Pesticides Toxicity Control	X	X			X	X
Trash Load Reduction	X	X	X		X	X
Mercury, PCBs, and Copper Controls	X			X		X
Exempted and Conditionally Exempted Discharges	X			X		

**ANALYSIS**

**Permit Implementation Highlights for FY 2019-2020**

City departments implementing the Permit requirements worked diligently to meet the challenge of conducting compliance activities. Accomplishments during FY 2019-2020 demonstrate the collective efforts of City departments to improve the condition of local creeks and waterways and reduce pollutant loads to San Francisco Bay.

Highlights of key Permit implementation activities for FY 2019-2020 and the upcoming year are summarized below:

**New Development and Redevelopment and Green Stormwater Infrastructure**

The Permit mandates that new development and redevelopment projects meeting certain criteria include appropriate source control, site design, and treatment measures to manage stormwater runoff pollutants and prevent increases in runoff flows from project sites (i.e., “Regulated Project”). Compliance is achieved primarily through the development review, planning, and the permitting process by ensuring water quality protection is integrated into new and redevelopment projects. The Permit further requires regular inspections to ensure proper installation, operation, and maintenance of treatment systems. To aid in the implementation of inspections and operation and maintenance practices the City created a Green Stormwater Infrastructure (GSI) Maintenance Field Guide in FY 2018-2019. ESD conducted a GSI Maintenance Field Guide training for City maintenance staff in FY 2019-2020 and plans to conduct more in FY 2020-2021.

Council approved the Green Stormwater Infrastructure Plan (GSI Plan) on September 10, 2019 that was subsequently submitted to the Water Board by the September 30, 2019 deadline with the

Annual Report. The Green Stormwater Infrastructure Plan serves as an implementation guide as the City shifts from impervious surface drainage to green stormwater infrastructure.

#### Trash Load Reduction

The goal of this Permit provision is to reduce and eliminate trash passing through the municipal separate storm sewer system (MS4) to protect uses of waterways to which the system discharges. This provision includes mandatory trash load reduction goals and compliance targets of 70% trash load reduction by 2017, 80% trash load reduction by 2019, and a goal of 100% trash load reduction from the MS4 by 2022. The City's trash load reduction as of July 1, 2020 is 99.4%.

The City achieved the current reduction through a combination of full trash capture systems; source control actions; a Direct Discharge Trash Control Program; additional creek and shoreline cleanups conducted by non-profit groups; and on-land trash control efforts verified by visual assessments. Each of these program efforts, and the associated trash load reductions are described below:

#### Full Trash Capture Device Installation

The City has installed a combination of large and small full trash capture devices to prevent trash from polluting waterways in previous fiscal years and continued to maintain the devices in FY 2019-2020. Since 2011, the City has installed a total of 27 Hydrodynamic Separator (HDS) systems. Large full trash capture HDS systems are devices that are installed underground in the MS4 and intercept trash entering the system from large drainage areas encompassing multiple neighborhoods. The City currently has 108 Connector Pipe Screens (CPS) installed. CPSs are small full trash capture devices installed in storm drain inlets retaining trash and debris in the catch basin. Collectively, these HDS and CPS systems treat 12,924 acres of trash generating areas in the City. The City is claiming 49.6% trash load reduction credit for full trash capture systems.

#### Direct Discharge Trash Control Program

In August 2016, the City received approval of the Direct Discharge Trash Control Program (DDTCP) from the Water Board Executive Officer and authorization to claim up to a 15% trash load reduction offset for encampment cleanups conducted in connection with the program. ESD, Housing, PRNS and SJPD continued to partner on implementing the DDTCP with the objective to remove trash from significant stretches of San José creeks impacted by homelessness. The DDTCP documents the coordinated efforts of the four departments, Valley Water and partner non-profit organizations to conduct outreach to homeless individuals, dismantle encampment structures, remove residual trash from creeks, and patrol focus areas to prevent re-establishment of encampments. In FY 2019-2020, the DDTCP efforts removed 446 tons of trash from creeks. ESD, Housing, PRNS and SJPD plan to continue working together along with external partners to implement this key program in FY 2020-2021. The City is claiming the maximum allowable 15% trash load reduction offset based on the volume of trash removed in FY 2019-2020.

### *Additional Creek and Shoreline Cleanups*

City partners including Downtown Streets Team (DST), Keep Coyote Creek Beautiful (KCCB), South Bay Clean Creeks Coalition (SBCCC) and the Creek Connections Action Group (CCAG) continued cleanups along Coyote Creek, Los Gatos Creek, and the Guadalupe River. DST crews removed 60 tons of trash from San José waterways. More than 1,977 volunteers participated in 51 creek cleanups led by KCCB and SBCCC and removed 86 tons of trash. CCAG hosted Coastal Cleanup Day on September 21, 2019, where 1,338 volunteers removed 19 tons of trash. Collectively, these partners removed 165 tons of trash from San José's creeks in FY 2019-2020. The City claimed a 10% trash load reduction offset for Additional Creek and Shoreline Cleanups. The City plans to continue this effort in FY 2020-2021.

### *Jurisdictional Source Controls*

The City continued to implement and assess the Expanded Polystyrene - EPS Foam Food Container Ordinance that became effective for all food service establishments January 1, 2015, and the Single-Use Carryout Bag Ban ordinance that became effective January 1, 2012. Creek and river litter surveys have shown a 69% reduction in the number of bags found in storm drain inlets, and a 78% reduction in the number of bags found in creeks. Since full implementation of the Foam Food Container Ordinance, most restaurants have successfully transitioned from using foam food ware to alternative products. In FY 2019-2020, staff responded to five complaints of non-compliance and inspected 14 facilities with potential EPS violations. The City estimates an approximate 73% reduction in the amount of EPS food service ware in stormwater based on a study conducted by The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). The City is claiming the maximum 10% trash load reduction credit for its jurisdiction-wide source control programs.

### *On-land Visual Trash Assessments*

SCVURPPP conducts on-land visual trash assessments to evaluate changes in the level of trash that could be transported into the storm sewer system. At least 10% of street miles in trash-impacted areas where control measures other than full trash capture are implemented are assessed. Assessments are conducted at least three times each year on randomly selected qualifying street segments. In FY 2019-2020, assessments showed a 14.8% trash load reduction. The results may reflect the impact of City trash control measures such as street sweeping, the Removing and Preventing Illegal Dumping Team, public litter cans, the Anti-Litter Program, BeautifySJ, or public outreach. The trash load reduction percentage documented by the assessments may vary over time.

### *Polychlorinated Biphenyls (PCBs) Controls*

The Water Board has assigned a particularly high priority to PCBs in the Permit since urban stormwater is thought to be the primary pathway of new PCBs loads to the San Francisco Bay. Bay-wide, stormwater Permittees are required to reduce PCBs loads within the Permit term by implementing a variety of control measures including screening for PCBs before demolishing a building. As of July 1, 2019, project applicants must complete PCBs screening forms prior to City approval of building demolitions. Information about the program is available at [www.sanjoseca.gov/ManagingPCBs](http://www.sanjoseca.gov/ManagingPCBs). The City must provide documentation to the Water Board

of the number of applicable structures that applied for a demolition permit during the reporting year, and a running list of the applicable structures that had materials with high PCBs concentration via the SCVURPPP Annual Report.

The draft *FY 2019-2020 Stormwater Permit Annual Report* is available on the City website at [www.sanjoseca.gov/stormwaterannualreports](http://www.sanjoseca.gov/stormwaterannualreports)<sup>1</sup>

### **Stormwater Permit Reissuance**

Staff is participating in regional workgroup meetings with Water Board staff and other co-permittees to discuss potential changes for the next Stormwater Permit. Water Board staff is evaluating several changes with potentially substantial impact to the City. The most concerning modifications under consideration include phasing out trash reduction offsets, setting a mandatory GSI implementation target, and additional programs to address PCBs loads. City staff and other co-permittees have expressed concerns and detailed potential impacts that could occur as a result of these changes. City staff and co-permittees continue to meet with Water Board staff and express the importance of limiting Permit changes in consideration of the social and economic impacts from the COVID-19 pandemic.

### **CONCLUSION**

The Permit requires the City to submit an Annual Report by September 30 of each year, documenting performance of actions supporting Permit compliance. Multiple City departments implemented compliance activities summarized in the draft Annual Report. Highlights for FY 2019-2020 include approval of the GSI Plan, exceeding trash load reduction requirements, and implementing activities to address PCBs in demolition materials. Staff, along with other co-permittees, will continue to meet with Water Board staff regarding the next Permit.

### **EVALUATION AND FOLLOW-UP**

Staff will provide an update on the status of Stormwater Permit development to the Transportation and Environment Committee in November 2020.

### **CLIMATE SMART SAN JOSE**

The recommendation in this memo has no effect on Climate Smart San José energy, water, or mobility goals.

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<sup>1</sup> All documents referenced as web links are also available for review in the City Clerk's Office or the Environmental Services Department. To find a report at the website, select the Council date and item number.

## **PUBLIC OUTREACH**

This memorandum will be posted on the City's Council Agenda website for the September 22, 2020 City Council Meeting.

## **COORDINATION**

The draft Annual Report was developed by the Environmental Services Department in collaboration with the departments of Planning, Building and Code Enforcement; Public Works; Transportation; Housing; Parks, Recreation and Neighborhood Services; and the City Attorney's Office. The draft Annual Report was reviewed by each of these departments to ensure that the data and information presented in the report accurately and properly reflects their respective operations.

## **COMMISSION RECOMMENDATION/INPUT**

There is no commission recommendation or input associated with this action.

## **COST SUMMARY/IMPLICATIONS**

There are no direct costs associated with submittal of the Annual Report, as the report summarizes activities that were already funded and have already occurred. Ongoing programs related to the Permit are funded primarily through the Storm Sewer Operating Fund (Fund 446). Certain programs discussed in this memorandum that cannot be funded by Fund 446 are funded from the General Fund.

HONORABLE MAYOR AND CITY COUNCIL

September 8, 2020

**Subject: Stormwater Permit Annual Report 2019 - 2020**

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**CEQA**

Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City Action.

/s/

**KERRIE ROMANOW**

Director, Environmental Services

For questions, please contact Sharon Newton, Deputy Director, Environmental Services, at (408) 793-5351.

Attachment – Draft City of San Jose Annual Stormwater Permit Report 2019-2020