CITY OF SAN JOSE CAPITAL OF SILICON VALLEY

Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow

SUBJECT: STORMWATER PERMIT REISSUANCE

DATE: May 19, 2021

Approved	yet	Date
		05/24/21

RECOMMENDATION

Accept this update on the status of the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit reissuance.

OUTCOME

Approval of this recommendation will result in acceptance of the staff report.

EXECUTIVE SUMMARY

The City of San José operates a citywide stormwater program under the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (Stormwater Permit) issued by the San Francisco Bay Regional California Water Board (Water Board). The current 5-year Stormwater Permit, effective since January 1, 2016, was set to expire in January 2021 but has been extended until July 2022.

Recently, the Water Board issued the Administrative Draft for the next Stormwater Permit that will require 1) more stringent requirements, 2) new requirements, and 3) modification to or phase out of existing program credits.

The most significant proposed changes are in the following provisions regarding (1) new and redevelopment, (2) trash load reduction, and (3) polychlorinated biphenyls control measures. In addition, the Administrative Draft includes new requirements related to cost reporting and addressing water quality impacts from unhoused communities. This memorandum provides an update on key requirement changes or additions proposed in the Administrative Draft as well as the next steps for Stormwater Permit reissuance.

BACKGROUND

The City's storm sewer system captures stormwater through approximately 32,000 inlets where it is captured and then 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 into San Francisco Bay. San José has 26 distinct rivers and creeks and approximately 136 miles of waterways that provide habitat to native fish and other wildlife. When rainwater is discharged to the creeks it can transport pollutants such as oil and grease, metals, and trash from sidewalks, driveways, streets, rooftops, and landscaping that degrade the quality of the creeks and health of habitats.

The Federal Clean Water Act requires the City to operate its municipal separate storm sewer system under a National Pollutant Discharge Elimination System permit (Stormwater Permit) for the discharge of stormwater to surface waters. The State Water Resources Control Board and its regional agencies (Water Board) implement the Clean Water Act's permitting. The Stormwater 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 City is a member of The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) which consists of 13 towns and cities subject to the Stormwater Permit. These local agencies coordinate compliance and jointly hire a program consultant for support services.

The City's stormwater program is comprised of a variety of elements that minimize pollutants in stormwater runoff and into the creeks and rivers. 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. Responsible departments include: Environmental Services (ESD); Public Works (PW); Planning, Building and Code Enforcement (PBCE); Transportation (DOT); Parks, Recreation and Neighborhood Services (PRNS); Airport; Housing; Fire; and the City Attorney's Office.

The current Stormwater Permit became effective in January 2016 and was set to expire January 1, 2021 but the Water Board extended the term until the next Stormwater Permit becomes effective. Water Board staff began a stakeholder process in late 2018 for the development and reissuance of a new Stormwater Permit. City staff in collaboration with other local jurisdiction partners in SCVURPPP and Bay Area Stormwater Management Agencies Association (BASMAA) raised concerns about potential changes. The Water Board released the Administrative Draft in February 2021 and provided a 60-day review period. Recently, SCVURPPP provided comments in May 2021 and are continuing further discussions with Water Board staff.

ANALYSIS

Stormwater Permit Reissuance

The Administrative Draft of the Stormwater Permit proposes changes to the requirements aimed at improving water quality. While the intent of the changes is in alignment with the City, the aggregate would place a considerable strain on City resources, particularly given the impacts from the COVID-19 pandemic. City staff and other co-permittees appeared before the Water Board in July 2020 to express concerns detailing potential impacts because of these changes. Recently, SCUVRPPP formally provided comments in May 2021 in response during the review period of the Administrative Draft. 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.

Modifications to Existing Requirements

Proposed changes to Stormwater Permit requirements brought forth by Water Board staff in the Administrative Draft affect many Stormwater Permit provisions but most significantly the "New Development and Redevelopment", "Trash Load Reduction", and "PCBs Controls" provisions. Proposed changes to these provisions will result in increased pressure on existing budgets for staffing, capital, and ongoing operations within multiple City departments that are tasked with implementing programs and policies to maintain compliance with these provisions as shown in Table 1. In addition, the Administrative Draft includes new requirements related to Stormwater Permit cost reporting and addressing the unhoused community. The following sections summarize some of the significant changes and new requirements proposed by Water Board staff.

Stormwater Permit Provision	Responsible City Departments							
	ESD	DOT	Housing	PBCE	PRNS	PW	Airport	
New Development and Redevelopment (Green Stormwater Infrastructure)	Х	Х		Х	Х	Х	Х	
Trash Load Reduction	Х	X	Х	Х	Х	Х		
PCBs Controls	Х	Х		Х		Х		

Table 1. Department Stormwater Permit Responsibility by Provision

New Development and Redevelopment (Green Stormwater Infrastructure)

Existing Requirements

The current Stormwater Permit mandates that new development and redevelopment projects (Regulated Projects) include treatment measures (i.e. green stormwater infrastructure) to manage stormwater runoff pollutants and prevent increases in runoff flows from project sites when they create or replace 10,000 square feet or more of impervious surface or 5,000 square feet for certain heavy polluting land uses, such as gas stations. Road projects are also Regulated Projects

if they include the creation of 10,000 square feet of newly constructed contiguous impervious surface and add additional traffic lanes. Currently, detached single-family home projects that are not part of a larger plan of development are exempt.

Proposed Requirements

Administrative Draft Stormwater Permit language proposes changes to include stormwater treatment requirements for parcel-based Regulated Projects that are 5,000 square feet or larger. This requirement would also apply to sidewalks or any other portions of the public right-of-way (e.g. roadways) that are either developed or redeveloped as part of the projects at a cost of approximately \$27 per square foot. The Stormwater Permit may also impact trail development which often occurs along narrow corridors where space for stormwater capture or filtration may be limited. Additionally, they have proposed including stormwater treatment requirements (e.g. green stormwater infrastructure like bioretention) for new and redeveloped detached single-family homes if they create or replace 10,000 square feet or more of impervious surface. If these changes are included in the reissued Stormwater Permit, they will result in more public and private development projects in San José being subject to additional stormwater review led by PW and PBCE. The proposed changes would also result in more installation of stormwater treatment measures which could increase construction and operations and maintenance costs, for City-initiated projects, impacting City departments such as PW, DOT, PRNS, and the Airport.

The Administrative Draft of the Stormwater Permit proposes green stormwater infrastructure (GSI) implementation requirements based on population that would require the City to treat a minimum of 10 acres of drainage area using green stormwater infrastructure within the next Stormwater Permit term. Fortunately, The River Oaks Pump Station regional GSI project, which was identified in the City's GSI Plan and is currently in design, will exceed the requirement by treating over 200 acres of drainage area.

In addition, the Administrative Draft proposes requirements for GSI implementation with significantly reconstructed roadways regardless of whether new lanes are added. These proposed changes would apply to projects disturbing the base, extending the pavement edge, and changing gravel to asphalt or concrete which could require the inclusion of GSI into a greater number of DOT projects, including bikeway and maintenance projects. As one example, it is estimated that this new requirement has the potential to create approximately \$79 million in additional costs for DOT's pavement maintenance program over the course of a three-year pavement maintenance period if field conditions of poor/failed streets require stabilization of the base or subgrade layers. This amount is based upon a regionally developed GSI cost-per-acre estimate.

Trash Load Reduction

Existing Requirements

The current Stormwater Permit set a target of 100% trash load reduction, or no adverse impact to receiving waters from trash, by July 1, 2022 and established interim mandatory targets. In 2019, San José achieved 96.8% trash load reduction, far exceeding the interim target of 80%. This

reduction was achieved by implementing a combination of structural trash controls, source controls, trash assessments, creek cleanups, and direct discharge programming. Source control actions adopted by the City include the single-use plastic bag and polystyrene bans, in 2012 and 2014, respectively. These source control actions allow the City to claim a 10% credit and help to reduce the prevalence of single-use products that do not break down in the environment and pollute our waterways.

Also, the City currently receives 15% credit for the Direct Discharge Trash Control Program which removes trash and debris through cleanups of unhoused community encampments and represents the collective efforts with close coordination among various City departments (ESD, PRNS, Housing, and San José Police Department); contractors; local, state and federal agencies (Valley Water and California Department of Fish and Wildlife); and non-profit organizations (Downtown Streets Team, Keep Coyote Creek Beautiful and South Bay Clean Creeks Coalition). Additionally, the City receives 10% credit for additional creek cleanups which are often led by non-profit organizations who have conducted hundreds of cleanups that have removed 983 tons of trash from waterways. The benefits of these programs reach far beyond the tonnage of trash removed from San José waterways. Unlike structural trash controls, such as large trash capture devices, these programs offer an opportunity to educate and engage residents in a way that can create long lasting support of environmental and community efforts.

Proposed Requirements

The Administrative Draft Stormwater Permit proposes setting a new compliance date for 100% trash load reduction by 2025 with an interim target of 90% by 2023. However, Water Board staff removed credits for existing source control efforts and are phasing out offsets for direct discharge controls for river and creek cleanups which will be a significant impact to the City.

By including these offsets and credits in the Stormwater Permit, the Water Board provided cities leverage and another tool for obtaining support for direct discharge, source control, and additional creek cleanup programs. Now, without the percent reduction credits and offsets from these programs the City's total trash load reduction percentage will be reduced by 35%. The Water Board staff's proposed changes place a greater reliance on structural controls such as large trash capture devices. Since 2011, the City has installed 32 large trash capture devices at a cost of approximately \$27 million. The City has constructed more large trash capture devices than any other municipality in the Bay Area and anticipates installing additional devices to meet permit requirements. However, relying solely on these devices to address full trash capture requirements would be both financially and technically infeasible. Also, since 90% of trash in waterways is attributed to direct illicit discharge from the unhoused community and illegal dumping, expending resources to install new trash capture devices will likely have a limited impact on the overall trash in waterways.

In addition to the removal of current percent reduction credits and offsets, the Administrative Draft Stormwater Permit is requiring existing private parcels greater than 10,000 square feet that are plumbed directly to the municipal storm sewer system to install structural controls for trash or implement practices that would be equivalent for trash load reduction. This could create an

additional burden on Development Services permitting as well as ESD and PW inspection programs. The requirement also has the potential to create significant new costs for local businesses. The full trash capture device cost, design, installation, and inspection can exceed \$133,000. Approximately 74% of the 1,400 parcels impacted by this requirement fall within areas of the City that have the lowest three median household income ranges and highest percentage of people of color according to the San José Equity Atlas. City efforts to construct GSI and large trash capture devices may reduce the number of impacted parcels if funding and feasible locations are sufficiently available to construct projects that capture trash from these areas.

Polychlorinated Biphenyls Controls

Polychlorinated Biphenyls (PCBs) are toxic and exist in unhealthy quantities in the San Francisco Bay. As such, the Water Board has assigned a particularly high priority to PCBs in the Stormwater Permit since urban stormwater from industrial areas is thought to be the primary pathway and source of new PCBs loads to the San Francisco Bay. Bay-wide, stormwater permittees are required to reduce PCBs loads by implementing a variety of control measures that could include removal of impacted sediment in large trash capture devices, additional street sweeping, inlet cleaning, GSI, and the referral of suspected PCBs source properties to the Water Board.

Water Board staff are proposing much more prescriptive requirements to achieve PCBs load reductions. In addition to the referral of suspected PCBs source properties, the Administrative Draft includes a requirement to implement PCBs controls in old industrial areas that may have some concentrations but no identifiable sources of PCBs. The Administrative Draft proposes a county-wide requirement that South Bay permittees address approximately 600 acres, much of which could fall within San José since the majority of industrial areas fall within the City's jurisdiction. This presents potential costs in the millions of dollars range that the City would need to spend to implement the control measures described above and would impact Public Works-led GSI implementation, trash capture device installation, and DOT operations and maintenance activities.

New Requirements

Cost Reporting

The Administrative Draft Stormwater Permit includes additional requirements related to reporting costs for Stormwater Permit implementation. The details of the cost reporting approach will be included in a framework developed in coordination with Water Board staff during the first year of the next Stormwater Permit. However, the Administrative Draft Stormwater Permit includes requirements for the specific Stormwater Permit provisions and categories which costs will need to be reported including staff costs, capital costs, contract costs, operation and maintenance costs, and administrative costs. As noted above, the City operates a

robust multi-departmental stormwater program and the challenge is that this cost reporting requirement will likely result in departments tracking costs differently.

Unhoused and Recreational Vehicles

Federal, State, and regional agencies as well as nongovernmental organizations are expressing significant concern over the unhoused persons that live along the waterways which affects multiple environmental regulations. In addition, Water Board staff are more concerned that the unhoused community can create water quality impacts in local waterways. According to water monitoring analyses conducted by City staff to meet Stormwater Permit requirements, 90% of trash found in and along San José creeks originate specifically from unhoused communities living in riparian corridors. The Administrative Draft Stormwater Permit includes requirements to identify and implement appropriate management actions and track and report data related to homelessness such as annual point in time census data and related information, such as population numbers and locations. They also are requiring that permittees report on programmatic efforts such as interdepartmental coordination. The City's interdepartmental Direct Discharge Trash Control Program already tracks and reports homeless data and interdepartmental collaboration.

Next Steps

Staff continues to participate in regional workgroup meetings with Water Board staff and other co-permittees to discuss proposed changes for the next Stormwater Permit. Water Board staff has indicated that they anticipate releasing the Stormwater Permit Tentative Order by Summer 2021. There will be a review and written comment period for the Tentative Order prior to the Water Board hearing at which it will be approved. Water Board staff expect the Tentative Order to be adopted by their board in Fall 2021. The next Stormwater Permit will then become effective July 1, 2022.

EVALUATION AND FOLLOW-UP

Staff will return to the Transportation and Environment Committee to update the status of the Stormwater Permit Reissuance in Fall 2021.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the June 7, 2021 Transportation and Environment Committee Meeting.

COORDINATION

This memo has been coordinated with the Departments of Planning, Building and Code Enforcement; Public Works; Transportation; Parks, Recreation and Neighborhood Services; Airport, the Office of Economic Development, the City Attorney's Office, and the City Manager's Budget Office.

Staff additionally convened a citywide coordination team comprised of representatives from City departments including the departments of Planning, Building and Code Enforcement; Public Works; Transportation; Parks, Recreation and Neighborhood Services; and Airport to ensure key City departments impacted by the Stormwater Permit are updated on proposed changes and given the opportunity to provide input.

COST SUMMARY/IMPLICATIONS

The City will respond to cost implications in permit language in future budget processes.

<u>CEQA</u>

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 Jeff Sinclair, Senior Environmental Program Manager, Environmental Services, at (408) 793-5358.