



Memorandum

TO: TRANSPORTATION AND
ENVIRONMENT COMMITTEE

**SUBJECT: STORMWATER PERMIT
REISSUANCE**

FROM: Kerrie Romanow

DATE: October 13, 2021

Approved

Date

10/22/21

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 five-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 released the 669-page Tentative Order for the next Stormwater Permit (Tentative Order) that contains 1) more stringent requirements, 2) new requirements, and 3) modification to or phase out of existing program credits. This will be effective as of July 1, 2022 until June 30, 2027.

The most significant proposed changes are in the following provisions regarding:

- (1) New Development and Redevelopment,
- (2) Trash Load Reduction, and
- (3) Polychlorinated Biphenyls (PCBs) Controls

In addition, the Tentative Order includes two new provision requirements related to cost reporting and addressing water quality impacts from unhoused communities. This memorandum

provides an update, potential impacts on key requirement changes or additions in the Tentative Order, and next steps for Stormwater Permit reissuance.

BACKGROUND

The City's storm sewer system captures stormwater through approximately 35,000 inlets where it is then conveyed through approximately 1,070 miles of storm sewer mains, and discharged largely without treatment, through 1,700 outfalls into 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 into 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 for the discharge of stormwater to waterways. The State Water Resources Control Board and its regional agencies administer 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 essentially 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 which consists of 13 towns and cities within the same watershed that is subject to the Stormwater Permit. These local agencies coordinate compliance and jointly hire a program consultant, EOA, Inc., for countywide programmatic and 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 citywide operations, as well as the daily activities of San José residents, schools, and businesses. Accordingly, multiple City departments are actively engaged. Collaborative efforts are critical in preventing stormwater pollution and protecting water quality. Responsible departments include: Environmental Services; Public Works; Planning, Building and Code Enforcement; Transportation; Parks, Recreation and Neighborhood Services; 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 the Santa Clara Valley Urban Runoff Pollution Prevention Program and Bay Area Stormwater Management Agencies Association raised concerns about potential changes. The Water Board released an Administrative Draft in February 2021 and, more recently, the Tentative Order on September 10, 2021, with a 60-day review period. The Santa Clara Valley Urban Runoff Pollution Prevention Program provided comments in May 2021 for the

Administrative Draft and continued further discussions with Water Board staff until the release of the Tentative Order. Both the Santa Clara Valley Urban Runoff Pollution Prevention Program and the City will be submitting comment letters before the comment period ends on November 9, 2021 to express the City's position on specific changes to the requirements.

ANALYSIS

Stormwater Permit Reissuance

The Tentative Order proposes changes to the Stormwater Permit requirements aimed at improving water quality. While the intent of the changes is in alignment with the City's General Plan, the aggregate would place a considerable strain on City resources, particularly given the extent of 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. The Santa Clara Valley Urban Runoff Pollution Prevention Program formally provided comments in May 2021 during the review period of the Administrative Draft. City staff and co-permittees continued to meet with Water Board staff and participated in two public workshops on October 12 and 13, 2021, to express the importance of limiting Stormwater Permit changes in consideration of the social and economic impacts from the COVID-19 pandemic.

Modifications to Existing Requirements

The Tentative Order's proposed changes to requirements affect many provisions that impact several City department programs related to stormwater, however not all are listed in the table below. The most significant impacts are the New Development and Redevelopment, Trash Load Reduction, and PCBs Controls provisions. Proposed changes to these provisions will result in increased administrative costs with implementing programs and policies to maintain compliance with these provisions as shown in Table 1. In addition, the Tentative Order includes two new provision requirements related to cost reporting and addressing the unhoused community. The following sections summarize some of the significant changes that may impact several City departments once the Stormwater Permit becomes effective on July 1, 2022.

Table 1. Department Stormwater Permit Responsibility by Provision

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

New Development and Redevelopment (Green Stormwater Infrastructure)

Existing Requirements

The current Stormwater Permit mandates that new development and redevelopment projects, which are regulated projects, that create and/or replace 10,000 square feet or more impervious surface or 5,000 square feet for certain heavy polluting land uses, such as gas stations, to include treatment measures (e.g., green stormwater infrastructure, bioretention, low impact development) to manage stormwater runoff pollutants and prevent increases in runoff flows. Road projects are also regulated projects if they include the creation of 10,000 square feet of newly constructed contiguous impervious surface and add traffic lanes. Currently, detached single-family home projects that are not part of a larger plan of development are exempt.

Proposed Requirements

The Tentative Order proposes to now regulate 5,000 square feet or larger new development or redevelopment projects to include stormwater treatment. This requirement would also apply to sidewalk improvements or any other portions of the public right-of-way (e.g., roadways) that are either developed or redeveloped as part of the projects. Additionally, the Tentative Order includes stormwater treatment requirements (e.g., green stormwater infrastructure or bioretention) for new and redeveloped detached single-family homes that are not part of a larger development. Treatment will be required for the new or replaced impervious surfaces such as roofs and driveways if they are equal to or greater than 10,000 square feet. It is unclear how many homes could be impacted because they were previously exempt and not reviewed for stormwater.

This provision will also impact trail development because most projects include pavement installation exceeding 5,000 square feet. Trails are often along narrow corridors where space for stormwater treatment may be limited or reasonably addressed by existing natural vegetation and landscapes. Past trail planning did not evaluate viable sites for stormwater treatment which may require projects to find offsite, in lieu treatment sites. Project costs will increase design, construction and operation and maintenance costs for stormwater treatment adjacent to trails or at in lieu offsite locations. This could be a similar issue for the Airport as it balances the need for stormwater treatment with its Federal Aviation Administration requirements. In addition, the Tentative Order proposes requirements for significantly reconstructed roadways one acre in size, regardless of whether new lanes are added. These proposed changes would apply to projects that disturb the subbase below the pavement, extend the roadway width, or change surfaces from pervious to impervious (e.g., gravel to asphalt or concrete). This may require the inclusion of green stormwater infrastructure (GSI) into a greater number of Department of Transportation projects, including bikeway and maintenance projects.

The Tentative Order goes further in its requirements aimed at improving creek health through GSI implementation by requiring treatment of a minimum of 10 acres of drainage area. Fortunately, the River Oaks pump station regional GSI project, which was identified in the City's GSI Plan and is currently under design, will exceed the requirement by treating over 200 acres of drainage area.

Overall Potential Impact

The benefit in these changes is that they will result in more public and private development projects contributing to the City's goals for GSI implementation and improved creek health. However, this could increase construction and operations and maintenance costs for City-initiated projects as well as private projects. The City will request that the Stormwater Permit provide additional time for requirements to take effect to allow updates to its Municipal Code and Council policies, and train staff in preparation for these changes.

Trash Load Reduction

Existing Requirements

The current Stormwater Permit sets a target of 100% trash load reduction, or no adverse impact to receiving waters (i.e., creeks and rivers) from trash, by July 1, 2022 and established interim mandatory targets. San José continually achieves a trash load reduction percentage that far exceeds the current interim target of 80%. This reduction is achieved by implementing a combination of various trash control measures such as underground full trash capture systems, a comprehensive Direct Discharge Trash Control Program, additional creek cleanups and citywide source control ordinances.

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 (Environmental Services; Parks, Recreation and Neighborhood Services; 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 resulting in the removal of over 1,000 tons of trash from waterways. Nevertheless, 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 becoming more connected with the waterways so that it can help create long lasting support of environmental and community efforts throughout the city and City partners in Santa Clara County. Removal of these credits will impact not only trash removal progress but also decrease important educational opportunities for the community.

Source control ordinances adopted by the City include the Bring Your Own Bag ordinance in 2012, and Foam Food Container ordinance in 2014. 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. Trash characterizations conducted before and after plastic bag and polystyrene bans, found that 69% fewer single-use bags and 73% less polystyrene from foodware were observed in the storm sewer system.

Proposed Requirements

The Tentative Order proposes setting a new compliance date for 100% trash load reduction by 2025 with an interim target of 90% by 2023. The Tentative Order requires that the City update its Direct Discharge Trash Control Plan by September 1, 2022 for approval by the Water Board if the City intends to continue to claim this credit. However, the Tentative Order includes phasing out offsets for direct discharge controls for river and creek cleanups which will be a significant impact to the City. Also, the Tentative Order is proposing to remove credits for policy efforts for source controls (i.e., single-use plastic bag and expanded polystyrene ordinances). By not including these offsets and credits in the Stormwater Permit, the City's total trash load reduction percentage will be reduced by 35%.

This change also directs the Stormwater Permit focus of trash reduction solely onto the municipal storm sewer system, despite the majority of trash in creeks originating from direct discharge sources. This would place a greater reliance on structural controls such as large and small trash capture devices. The City has already done more than any other municipality in the Bay Area at a cost of approximately \$27 million for 32 large trash capture devices. However, in Fiscal Year 2019-2020, the Direct Discharge Trash Control Program removed over 400 tons of trash from creeks while about eight tons of trash were removed from large trash capture devices in the municipal storm sewer system. Also, in accordance with water monitoring analyses conducted by City staff to meet Stormwater Permit requirements, over 90% of trash in waterways is attributed to direct illicit discharge from people living within waterways and illegal dumping. Expending resources to install new trash capture devices will likely have a limited impact on the overall trash in waterways. While staff anticipates installing additional devices to meet permit requirements, relying only on these devices to meet trash load reduction requirements would be both financially and technically infeasible.

In addition to the removal of current percent reduction credits and offsets, the Tentative Order is requiring all existing private parcels 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 a significant burden on Planning, Building and Code Enforcement Department's Development Services permitting staff as well as Environmental Services Department and Department of Public Works inspection programs. The requirement also has the potential to increase significant new costs for local businesses. The full trash capture device cost, design, installation, and inspection can exceed \$133,000. Approximately 74% of the approximately 1,400 parcels impacted by this requirement that are 10,000 square feet or larger 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.

Overall Potential Impact

The overall impact is a potential loss of 35% credit towards the trash load reduction requirements. Given the limitations on the use of stormwater sewer use fees and the challenge to implement this provision citywide, the City will recommend that the Stormwater Permit continue to focus on the major sources of trash by allowing the trash load reduction offsets for Direct Discharge Trash Control Programs and additional creek cleanups. The City will also request that the Stormwater Permit give credit towards existing source control ordinances that continue to

demonstrate trash reduction benefit. In addition, Environmental Services Department staff will coordinate with Office of Economic Development, Planning Building and Code Enforcement Department, and Department of Public Works to inform private stakeholders about the permit requirements.

Polychlorinated Biphenyls Controls

Existing Requirements

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. Also, as of July 1, 2019, project applicants must complete PCBs screening forms prior to City approval of building demolitions. Those projects are then responsible for the testing and proper disposal of demolition materials if PCBs are found in them.

Proposed Requirements

The Tentative Order proposes much more prescriptive requirements to achieve PCBs load reductions. In addition to the referral of suspected PCBs source properties, the Tentative Order includes a requirement to implement PCBs controls in old industrial areas that have not been redeveloped. This requirement assumes that the old industrial acres in the region that have not yet been redeveloped are likely to have moderate to high amounts of PCBs which should be addressed with controls. The Tentative Order proposes a county-wide requirement that South Bay permittees address approximately 600 acres of old industrial areas and approximately half would fall within San José's jurisdiction.

The Tentative Order also includes an increased workload to permitting requirements for demolition activities. In addition to tracking and reporting on structures being demolished that contained PCBs, the Tentative Order now requires contractors to provide notification to the permittees, the Water Board, and U.S. Environmental Protection Agency at least one week before any demolition is to occur. The City will then be responsible for inspecting the demolition site to ensure controls are in place for minimizing the migration of PCBs. Following demolition, the permit applicant will need to provide verification to the City that PCBs in demolished buildings were properly disposed.

Overall Potential Impact

This presents potential significant increased costs to private property owners or the City for investigative costs and the implementation of control measures such as GSI, street sweeping, and storm sewer pipe cleaning. The City will be required to develop a detailed plan for implementing the control measures which is aggressively scheduled for submittal by September 2022, roughly three months after the effective date. This requirement would also impact Department of Public

Works -led GSI implementation, trash capture device installation, and Department of Transportation operations and maintenance activities. The City will recommend that the Stormwater Permit allow additional time to meet these new requirements and to reduce the requirement for old industrial areas such that it only focuses on areas with known moderate to high amounts of PCBs.

These additional requirements may alter and further extend the overall permitting approval process that could further delay and increase costs on development activities. City staff will coordinate with the Office of Economic Development to inform businesses about the permit requirements.

New Requirements

Cost Reporting

The Tentative Order includes additional requirements related to reporting costs for publicly funded projects required to implement the new Stormwater Permit. The details of the cost reporting approach will be included in a framework developed during the first year of the next Stormwater Permit. However, the Tentative Order includes requirements to report detailed costs such as staff, capital, additional contractual, operation and maintenance, and administrative costs.

Overall Potential Impact

As noted above, the City operates a robust multi-departmental stormwater program, and it will create administrative challenges that will increase staff time to review each department's cost tracking approach.

Unhoused and Recreational Vehicles

Federal, State, and regional agencies as well as nongovernmental organizations are expressing significant concern over the conditions that are present when people are living outside along the waterways which affects multiple environmental regulations. In addition, the Water Board is 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, over 90% of trash in waterways is attributed to direct illicit discharge from people living along waterways and illegal dumping. The Tentative Order 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, including population numbers and locations. The Tentative Order requires mapping of the unsheltered populations in relation to storm drain inlets and existing streams, rivers, flood control channels, and other surface water bodies. The City is required to "identify and implement" appropriate best management practices to address discharges associated with homelessness that impact water quality, and report on the effectiveness of the control measures.

Overall Potential Impact

The City's interdepartmental Direct Discharge Trash Control Program already tracks and reports homeless data, and the City already actively engages in efforts to establish relationships with the

unhoused, including such programs as cash for trash, regular trash pickups, and coordination with non-profits to provide social services. However, these mandatory components of the Tentative Order do not address the costs associated with the increased compliance, nor are they part of a voluntary program that will result in credits toward trash reduction targets. The Tentative Order will be effective for five years, and the City does not currently have an identified funding source for these added costs as they are not directly tied to the collection of stormwater and therefore, stormwater collection fees cannot be used.

Next Steps

Staff reviewed the Tentative Order and will submit a comment letter to the Water Board by the November 9, 2021 public comment due date. There will be a hearing in January or February 2022, at which the Water Board will hear testimony before adoption of the Tentative Order. The 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 Summer 2022.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the November 1, 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; Housing; Airport; the Office of Economic Development; the City Attorney's Office; and the City Manager's Budget Office.

Staff additionally convened a 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 departments impacted by the Stormwater Permit are updated on proposed changes and given the opportunity to provide input.

COST SUMMARY/IMPLICATIONS

The Tentative Order includes changes that, if approved, will incur a significant cost to programs in several City departments including Environmental Services; Planning, Building and Code Enforcement; Transportation; Public Works; Housing; and Airport. Permit changes for the New Development and Redevelopment permit provisions will increase costs for City-funded capital and maintenance projects such as building a new City facility or constructing a bikeway or trail, as well as private residential development projects due to more stringent stormwater treatment requirements. The proposed changes will require many projects to include additional stormwater treatment square footage which will also increase costs for project design, permitting, and operations and maintenance costs. Additionally, the cost of program administration will increase as a result of the increase in New and Redevelopment Projects provisions that require stormwater permit review and oversight. Specific cost estimates and funding needs will be addressed as part of the City's budget process once necessary program changes are identified.

Changes to the Trash Reduction provision of the Stormwater Permit will also have significant cost implications for the City. The Tentative Order is proposing a greater use of structural controls (i.e., large trash capture devices) that are costly to install and to operate and maintain. The main issue with this approach is that it will not effectively address the trash that is directly discharged within the waterways. Additionally, the Tentative Order includes new requirements on certain private parcels to install structural trash control devices or implement equivalent trash reduction methods that will be expensive to design, permit, and operate for private developments. The City will also incur significant cost to permit and inspect these facilities and programs to comply with the Tentative Order.

Updates to the PCBs Control provision presents potential significant increased costs to private property owners and the City for investigative costs and the implementation of control measures. The City will be required to develop a detailed plan for implementing the control measures. This requirement would also impact Department of Public Works-led GSI implementation, trash capture device installation, and Department of Transportation operations and maintenance activities. These additional requirements may alter and further extend the overall permitting approval process that could further delay and increase costs on development activities.

In addition to the impacts to stormwater program costs, the Tentative Order includes provisions related to Unhoused and Recreational Vehicles that are not directly tied to stormwater collection and may have legal challenges associated with the use of stormwater funds for these programs. Alternate funding sources, such as federal and state grants or the General Fund would likely need to be identified to support these one-time and ongoing program costs.

The City will respond to the cost implications of the permit language in future budget processes. It is important to note that the City currently faces legal constraints on increasing stormwater related revenues. Assuming there are no rate increases for the Storm Sewer Service Charge fees, the flat assessment revenue in the Storm Sewer Operating Fund, and the need to maintain ongoing operations and maintenance costs for the storm sewer system are expected to result in limited funding availability to address flooding, maintenance, and water quality projects in the Storm Sewer System beginning in 2023-2024 of the 2022-2026 Adopted Capital Improvement

Program. Since this Stormwater Permit has a five-year term limit that permittees are obligated to comply with, this will conflict with other high priority projects and ongoing operation and maintenance needs if new stormwater revenue sources are not identified. The Administration is reviewing potential strategies and revenue measures to provide additional resources for the stormwater program and will review these options with the City Council later this fiscal year.

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/

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