



# City of Sunnyvale

## Agenda Item-No Attachments (PDF)

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### REPORT TO SUSTAINABILITY COMMISSION

#### **SUBJECT**

Forward a recommendation to City Council to Approve the Green Stormwater Infrastructure Plan, Approve Budget Modification No. 7, and Find that the Action is Exempt from CEQA Pursuant to CEQA Guidelines Section 15308

#### **BACKGROUND**

The City of Sunnyvale owns and operates a separate storm drainage system, which is regulated under the Federal National Pollutant Discharge Elimination System (NPDES) Program. Consequently, the City is subject to the San Francisco Bay Municipal Regional Stormwater NPDES Permit (Order R2-2015-0049), also known as the Municipal Regional Permit (Permit) issued by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board). In addition to Sunnyvale, the Permit applies to 75 other large, medium and small agencies (cities, towns, counties and flood control agencies) that discharge stormwater to the San Francisco Bay. The current permit, effective 2016 through 2020, contains new requirements including more aggressive trash reduction targets, implementation of new activities to control targeted pollutants such as mercury and polychlorinated biphenyls (PCBs), and the development of a Green Stormwater Infrastructure (GSI) plan.

Permittees are specifically required to develop and begin implementing long-term Green Stormwater Infrastructure (GSI) Plans to gradually shift from traditional "gray" storm drainage infrastructure to a more protective and resilient storm drain system that combines gray infrastructure with "green infrastructure," which generally consists of landscape-based treatment features that slow and filter stormwater before it enters the conventional collection system and flows to local waterways. Such treatment features can be implemented on public and private lands, including streets, roads, storm drains, parking lots, and building roofs.

The GSI Plan must be completed, approved by the City Council and submitted to the Regional Water Board by September 30, 2019. As part of the GSI planning process, the Permit required Permittees to develop and submit to the Regional Water Board a framework document intended to serve as a work plan for completing the GSI Plan. The City Council approved the City's Green Infrastructure Plan Framework on June 20, 2017 (RTC No. 17-0398).

The City Council is scheduled to consider this item on September 10, 2019.

#### **EXISTING POLICY**

##### **Sunnyvale General Plan, Chapter 7 Environmental Management**

**EM-8 Protection of Creeks and Bay** - Assure the reasonable protection of beneficial uses of creeks and San Francisco Bay, established in the Regional Board's Basin Plan, and Protect Environmentally Sensitive Areas.

**Goal EM-10 Reduced Runoff and Pollutant Discharge** - Minimize the quantity of runoff and discharge of pollutants to the maximum extent practicable by integrating surface runoff controls into new development and redevelopment land use decisions.

Pursuant to Sunnyvale Charter Section 1305, at any meeting after the adoption of the budget, the City Council may amend or supplement the budget by motion adopted by affirmative votes of at least four members so as to authorize the transfer of unused balances appropriated for one purpose to another, or to appropriate available revenue not included in the budget.

## **ENVIRONMENTAL REVIEW**

The GSI Plan is a planning document that will serve as a guide for the siting, implementation, tracking, and reporting of GSI projects on private and City-owned land over the next several decades. The GSI Plan does not approve any construction activities. All construction projects will be reviewed in accordance with the California Environmental Quality Act (CEQA) prior to approval. As such, the adoption of the GSI Plan is exempt from environmental review because it is a regulatory action for the protection of the environment where the regulatory process involves procedures for the protection of the environment (CEQA Guidelines, Section 15308).

## **DISCUSSION**

### *What is “Green Stormwater Infrastructure”?*

Traditional storm drain infrastructure has been designed with the primary purpose of conveying stormwater flows away from the developed urban environment to local creeks and channels to minimize surface flooding. Stormwater is collected and moved from city streets into local waterways through a system of curbs, gutters, and pipes (commonly comprised of concrete) and which is considered “grey infrastructure.” Green infrastructure is a new approach designed to transform traditional “grey infrastructure” by integrating natural systems of vegetation, soils, and natural processes to manage and treat stormwater and create healthier urban environments.

Green stormwater infrastructure can provide many benefits beyond water quality improvement. It can provide creation of attractive streetscapes, habitat, groundwater replenishment, reduction of heat island effect, and bicycle and pedestrian accessibility. Examples of green infrastructure measures include resilient, sustainable systems that slow, filter, capture and reuse, or infiltrate stormwater runoff such as: landscape-based stormwater “biotreatment” using soil and plants ranging in size from grasses to trees; pervious paving systems (e.g., interlocking concrete pavers, porous asphalt, and pervious concrete); and rainwater harvesting systems (e.g., cisterns and rain barrels). These practices are also known as Low Impact Development (LID) site design and treatment measures.

Under previous stormwater permits, LID measures have been required since 2011 to treat onsite stormwater for private development and capital projects of a certain size. Roadway projects had been generally exempt unless additional vehicle lanes were included. The goal of the GSI Plan is to meet specified pollutant reduction targets and to strategically integrate LID measures as a part of public infrastructure projects such as roadway projects, public parks and facilities, or other infrastructure improvements.

### *What is the driver for Green Stormwater Infrastructure?*

The current Permit continues to increase the requirements on Permittees to reduce priority pollutants including polychlorinated biphenyls (PCBs) and mercury. Both are toxic pollutants that impact aquatic

and human health through the food chain. These pollutants bind to dirt and sediment and can be conveyed from land to waterways with stormwater. Both have Total Maximum Daily Load requirements for reductions in San Francisco Bay, especially from stormwater sources. Due to historic usages and applications of these chemicals in commercial and industrial products, trace amounts of these pollutants are found throughout the Bay Area though there are some land uses identified as having a greater potential to have elevated levels (older industrial areas). Widespread integration of LID measures incorporated through green infrastructure over time can help prevent these pollutants from being transported to the Bay via stormwater runoff. For this reason, the Permit establishes this explicit linkage between stormwater infrastructure and required reductions in discharges of certain pollutants, specifically PCBs and mercury. Over the next few decades, Permittees must reduce the loads of PCBs and mercury in stormwater discharges through various means, with a portion of these load reductions achieved through the installation of green infrastructure systems.

Green Infrastructure is also recognized as providing multiple benefits beyond PCB and mercury pollutant reductions. Integrating green infrastructure features with other public improvements such as street improvements or bicycle or pedestrian improvements can also lead to increased multi-modal travel and safety; cleaner water and air; climate change resilience and mitigation; placemaking and community cohesion; increased wildlife habitat; and energy savings.

#### *Sunnyvale's Green Stormwater Infrastructure Approach*

The purpose of the City of Sunnyvale's GSI Plan (Attachment 2) is to describe how the City will gradually transform its urban landscape and storm drainage systems from "gray" to "green"; that is, shift from traditional storm drain infrastructure to a more resilient, sustainable system. The GSI Plan demonstrates the City's long-term commitment to implementation of green infrastructure to help reduce loads of pollutants of concern, particularly mercury and PCBs, discharged in stormwater to local waterways. The GSI Plan does not itemize a list of specific City projects, but rather provides guidance on how the City will identify, prioritize and implement projects over time. Key elements of the GSI Plan include:

- Methodology for identifying and prioritizing areas for implementing GSI;
- Projections for GSI implementation through 2040;
- Evaluation of funding opportunities to support implementation including operations and maintenance;
- Assessment of GSI potential on capital projects for consideration as part of the City's Projects Budget; and
- Implementation approach including leveraging regional resources such as GSI tracking database and GSI design guidelines, details, and specifications.

Sunnyvale has already implemented significant green stormwater infrastructure as part of the existing requirements for private development and public projects to treat stormwater from project sites. In a generally built-out city like Sunnyvale, new and redevelopment projects typically improve water quality with existing requirements, compared to a city where new development happens on undeveloped land. Given the high level of development activity, Sunnyvale has made substantial progress toward the pollutant reduction goals of the permit. The stormwater permit requires a regional analysis, which is currently in progress, to quantify the amount of pollutant reduction achieved and projected to be achieved through various strategies, including GSI. That analysis is due next year; preliminary analysis suggests that Sunnyvale could meet its proportional share of current

pollutant reduction targets largely from projected, ongoing development activity implementing onsite GSI. This could give the City flexibility in phasing investment in additional GSI in public roadways, parking lots, and other rights-of-way. The GSI Plan is required to include projections of future GSI implementation; Sunnyvale's plan uses projections based on past private development activity as the basis for this element.

Sunnyvale has also begun to implement additional GSI in the public right-of-way. The City has three projects completed or in progress. 1) A small bioretention area was installed adjacent to the Old Mountain View-Alviso Road crossing at Calabazas Creek Bridge; 2) Green street features are being integrated into sidewalks improvements under construction on Persian Drive as part of an affordable housing project; and 3) The Caribbean Drive project includes green street features and is partially funded by a grant from the United States Environmental Protection Agency (EPA).

As described in the GSI Plan, the City can implement additional GSI in public rights-of-way through various mechanisms. One mechanism is by evaluating and expanding the scope of planned Capital Improvement Projects (CIP). Staff has begun and will continue to screen the Projects Budget for potential opportunities for a planned project to be expanded to include GSI features where not already required and to potentially treat adjacent roadway storm runoff in addition to the runoff generated onsite. Additional resources are needed to support evaluating planned projects and developing cost estimates for GSI implementation on those projects. Such estimates can then be incorporated into the Projects Budget for Council consideration, or for more near-term projects, GSI funding can be considered as design and construction contracts are awarded. Near term examples of CIP projects that will be assessed for GSI potential include the Civic Center Project and the SNAIL Neighborhood Active Transportation improvements.

Another mechanism for implementing additional GSI in public rights-of-way is to leverage private development projects. The GSI Plan proposes that the City will explore working with property developers to install GSI facilities in the public rights-of-way near the properties being developed, such as along street frontages. The Moffett Park Specific Plan update provides an exemplary opportunity to consider this approach as part of the update.

The GSI Plan is facilitated by the Environmental Services Department, with Public Works and Community Development Departments leading implementation of projects associated with public and private projects respectively. The GSI Plan may be revised as the City continues to gain experience with implementation or as regulatory requirements evolve with future editions of the regional stormwater permit.

### **FISCAL IMPACT**

The cost of implementing specific GSI capital projects will be incorporated into the City's Project Budget Process. Staff is recommending approval of Budget Modification No. 7 to appropriate funding to support consultant assistance for the review and technical assessment of capital projects for potential GSI measures. This will include developing cost estimates for implementing GSI on specific projects, which will then be considered as part of the City's Projects Budget process. The \$100,000 would be funded by the General Fund and is expected to provide for assessment of up to ten CIP projects.

Implementation of GSI in public rights-of-way also requires resources for ongoing maintenance of the treatment features. Staff is evaluating the resources needed to maintain current and planned features and will include a funding request in the FY 2020/21 Recommended Budget.

**Budget Modification No. 7  
FY 2019/20**

	<b>Current</b>	<b>Increase/ (Decrease)</b>	<b>Revised</b>
<b>General Fund</b>			
<u>Expenditures</u>			
New Project - Green Stormwater Infrastructure	\$0	\$100,000	\$100,000
<u>Reserves</u>			
Budget Stabilization Fund	\$45,847,467	(\$100,000)	\$45,747,467

**PUBLIC CONTACT**

Public contact was made through posting of the Sustainability Commission agenda on the City's official-notice bulletin board, on the City's website, and the availability of the agenda and report in the Office of the City Clerk.

**ALTERNATIVES**

Recommend that the City Council:

1. Approve the Green Stormwater Infrastructure Plan, Approve Budget Modification No. 7 in the amount of \$100,000, and Find that the Action is Exempt from CEQA Pursuant to CEQA Guidelines Section 15308.
2. Approve the Green Stormwater Infrastructure Plan, Approve Budget Modification No. 7 in the amount of \$100,000, and Find that the Action is Exempt from CEQA Pursuant to CEQA Guidelines Section 15308, with modifications.
3. Other recommendation provided by the Commission.

**RECOMMENDATION**

Recommend Alternative 1 to the City Council: Approve the Green Stormwater Infrastructure Plan, Approve Budget Modification No. 7 in the amount of \$100,000, and Find that the Action is Exempt from the California Environmental Quality Act (CEQA) Pursuant to CEQA Guidelines Section 15308. The Green Stormwater Infrastructure Plan guides the City's continued transition to green infrastructure as a means of achieving regulatory water quality goals while also achieving other environmental and community benefits. The GSI Plan is required to be submitted to the Regional Water Board by September 30, 2019.

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**ATTACHMENTS**

1. Reserved for Report to Council
2. Draft Green Stormwater Infrastructure Plan