

PUBLIC WORKS DEPARTMENT

CITY HALL 10300 TORRE AVENUE • CUPERTINO, CA 95014-3255 TELEPHONE: (408) 777-3354 • FAX: (408) 777-3333 CUPERTINO.ORG

CITY COUNCIL STAFF REPORT

Meeting: September 3, 2019

Subject

Resolution adopting the City of Cupertino's State-mandated Green Stormwater Infrastructure (GSI) Plan.

Recommended Action

Adopt Resolution No. 19-___ adopting the City of Cupertino's Green Stormwater Infrastructure (GSI) Plan which demonstrates the City's long-term commitment to implementation of green stormwater infrastructure as required by the City's Municipal Regional Stormwater Permit for the San Francisco Bay Region.

Discussion

The City of Cupertino is one of 76 municipalities (cities, towns, and counties) and flood control agencies that are subject to the requirements of the reissued Municipal Regional Stormwater NPDES Permit (MRP) for municipalities and agencies that discharge stormwater into San Francisco Bay (Order R2-2015-0049). The current MRP, which became effective on January 1, 2016, requires each permittee to adopt a long-term GSI Plan by September 30, 2019. This demonstrates a shift from traditional storm drainage infrastructure which is designed to rapidly convey stormwater and collected pollutants through impervious pipes directly to creeks with no opportunity for infiltration and pollutant removal. Conversely, GSI creates a more resilient and sustainable storm drain system that reduces the velocity of stormwater runoff, facilitates capture and infiltration of rainwater into soil, and provides treatment and filtering of urban stormwater runoff. Examples of GSI include:

- Landscape-based "biotreatment" areas that use soil and plants to treat stormwater
- Pervious paving systems (e.g., interlocking concrete pavers, porous asphalt, pervious concrete) which allows stormwater to soak into the ground
- Green roofs
- Rainwater harvesting systems (e.g., cisterns and rain barrels) which capture stormwater for non-potable uses, such as toilet flushing and landscape irrigation
- Other methods to capture, infiltrate and/or treat stormwater

GSI Plan Requirements

At a minimum, GSI plans must identify, prioritize, and map areas of opportunity for potential GSI projects over the next 20 years and, if applicable, identify planned or completed projects as noted in section 2.4 of the City's GSI Plan (Attachments A and B). As other municipal plans (such as the General Plan, Storm Drain Master Plan, Parks Master Plan, Climate Action Plan, etc.), are updated or developed, they are required to align with the City's adopted GSI Plan. The benefits of green infrastructure have been discussed with the Water Board for many years before the MRP mandated development of a plan. As a result, the City's environmental staff has worked closely with other City departments to ensure inclusion of GSI in all municipal plans (see GSI Plan section 3.1 Integration with other Planning Documents). The GSI Plan must also include potential funding mechanisms such as grant funding, new development and redevelopment cost sharing, etc.

The first step in formalizing a GSI plan, as required by the MRP, is for the City's Council to adopt a GSI Plan Framework by June 30, 2017, describing specific tasks and timeframes for development of the City's Green Infrastructure Plan. The GSI Plan Framework (Attachment C) was approved by City Council on April 18, 2017 and submitted to the San Francisco Bay Regional Water Quality Control Board (Water Board) as part of the City's Annual FY 16-17 Stormwater Report.

GSI Plan Development

The City retained a stormwater engineering consulting firm, EOA Inc. (EOA), to develop its Plan based on years of meetings with City staff and records from the City's annual stormwater reports. EOA provides assistance to public agencies in managing the impacts of stormwater and wastewater on local creeks, rivers and the Bay, and serves as the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) Management team. SCVURPPP is a collaborative of 15 government agencies in Santa Clara Valley, including the City of Cupertino, that work together to implement the MRP requirements cost efficiently and effectively.

Public Education Outreach and Commission Review

GSI Plan development and implementation includes a strong public education and outreach component. A GSI presentation was given to City Council by EOA on July 16, 2019 followed by comments and questions from Councilmembers and the public. Since the July 16th council meeting, EOA and City staff have presented to and asked for input from the Planning Commission (August 13, 2019) and the Sustainability Commission (August 15, 2019). Both commissions provided comments which have been included in the revised Plan brought to Council for adoption this evening. Both Commissions encouraged the City to expand GSI awareness and to look for more opportunities for incorporation into public projects.

The Planning Commission suggested looking at Wolfe Road as a future opportunity. The Sustainability Commission expressed interest in GSI demonstration gardens, similar to the one at City Hall, to be considered at all City parks to enhance public awareness and

inspire private property owners to use GSI. Both Commissions asked for cost estimates. Though data is being gathered regionally to provide costs for implementation and maintenance, each potential GSI project, ranging in size from a few hundred square feet to a more than a hundred acres, will have unique site conditions, opportunities, and feasible designs. Therefore, cost and funding for each project will vary significantly depending on the site, features selected, and opportunities for cost-sharing partnerships (e.g., with schools, Caltrans, and adjacent jurisdictions).

Private Funding Option

The Planning Commission is interested in opportunities for private developers to contribute funding for GSI projects on City property. This concept is consistent with section C.3.e of the Permit, which allows a city to establish and implement alternative or in-lieu compliance options for private development projects that must meet low impact development (LID) requirements (regulated projects), but have limited space or opportunity on their site. A regulated project may provide alternative compliance by: 1) treating a portion of the amount of runoff with Low Impact Development (LID) measures onsite or at a joint stormwater treatment facility; and 2) pay equivalent in-lieu fees to treat the remaining portion of the runoff with LID treatment measures at a regional or municipal (stormwater treatment) project site that discharges into the same watershed as the regulated project. This allows the City to prioritize a public GSI project and collect money via in-lieu fees from private developers to help fund it.

Permit Requirements

During the current stormwater permit term (approximately 5 years), there are no specific requirements to implement GSI. The mandate is focused on ensuring that there are "no missed opportunities". Permittees must conduct an annual review of each project on their Capital Improvement Program (CIP) list and identify all those that have potential to incorporate GSI. In each subsequent annual report, the permittee must provide a reason for any project that did not incorporate GSI in its design phase. The City of Cupertino has a GSI workgroup of staff from Public Works Engineering, Transportation, Maintenance, Trees, Environmental Programs, Sustainability, Planning, Parks and Recreation, and Geographic Information Systems (GIS). The group meets once or twice annually to discuss the City's GSI opportunities, and the potential cost and feasibility of potential projects.

Council Action

The City's Plan has been prepared for adoption by City Council. Without being prescriptive or requiring any commitment to build a specific project or number of projects, it addresses all of the MRP requirements and incorporates comments from the Planning and Sustainability Commissions.

Sustainability Impact

The benefits of GSI as a replacement for impervious hardscape include improving water and air quality, water conservation, preserving and creating habitat and biodiversity, traffic calming, increasing pedestrian mobility, urban greening, and enhancing urban forests. It is a forward-thinking approach to creating sustainable public streets, parking lots, and buildings.

CEOA Review

There is no environmental assessment required for the adoption of the GSI Plan. City staff has independently studied the GSI Plan and determined that it is exempt from environmental review pursuant to the exemption in Title 14-California Code of Regulations, §15061(b)(3), and §15378, in that it can be seen with certainty that there is no possibility that the approval of the GSI Plan will have a significant effect on the environment given that it does not involve approval of any specific project. Potential GSI projects will be evaluated for the application of CEQA to it and, as applicable, each project will conduct the appropriate level of environmental analysis before construction.

Fiscal Impact

The GSI Plan describes the City's goals, opportunities, and priorities for implementing GSI on approved capital improvement projects (CIP) over a 20-year time frame (2020 to 2040). The adoption of the GSI Plan will not result in an immediate fiscal impact; however, the City's CIP list must be evaluated annually to determine the feasibility of each project to include GSI. The total cost of GSI includes costs for planning, capital (design, engineering, construction) and on-going expenditures, including operations and maintenance, utility relocation, and future replacement. Specific explanation must be reported in the City's annual report to the Water Board for any CIP project that does not contain a GSI element.

Prepared by: Cheri Donnelly, Environmental Programs Manager

Alex Wykoff, Environmental Specialist

Reviewed by: Roger Lee, Director of Public Works

Approved for Submission by: Deborah Feng, City Manager

Attachments:

A - GSI Plan

B - GSI Plan Appendices

C - GSI Plan Framework

D - Resolution