



**DATE:** July 16, 2019

**TO:** Mayor and City Council

**FROM:** Director of Public Works

**SUBJECT:** Adopt a Resolution Approving the Green Infrastructure Plan

**RECOMMENDATION**

That Council adopts a resolution (Attachment II) approving the Green Infrastructure Plan, which describes the City’s implementation for Green Infrastructure as required by the Municipal Regional Permit for stormwater regulatory compliance.

**SUMMARY**

To comply with the provisions of the reissued Municipal Regional Stormwater Permit (MRP 2.0), the City is required to adopt a Green Infrastructure (GI) Plan by September 30, 2019. The MRP regulates municipalities within Alameda, Contra Costa, Santa Clara, and San Mateo counties as well as the cities of Fairfield, Suisun, and Vallejo and the Vallejo Sanitation and Flood Control District. All these jurisdictions are required to adopt GI Plans and install GI. Staff has developed a GI Plan, which serves as an implementation guide as well as a tracking and reporting tool to provide reasonable assurance the City will meet set goals for increasing stormwater treatment and reducing pollution in waterways.

On May 13, 2019, the City Council Sustainability Committee considered portions of the draft GI Plan including the project list and map as well as potential funding options. The Committee suggested staff consider increasing the storm water fee as the primary funding source. The Committee agreed the list of projects included good potential sites for GI. Due to the timing of the development of the draft GI Plan, the Committee was not able to review the full document. As such, while generally supportive, the Committee did not make a formal recommendation on adoption of the GI Plan.

**BACKGROUND**

To comply with the MRP, the City is required to prepare a GI Plan for the inclusion of vegetated landscape into appropriate projects on public rights-of-way and public and private properties including streets, storm drains, parking lots, building roofs, and other storm drain infrastructure elements. Vegetated or green landscape is required by the MRP to address the storm water quality impacts from paved roadways, parking lots, and other areas where

stormwater collects pollutants, which would otherwise flow to the San Francisco Bay. Green Infrastructure slows runoff, filters pollutants, and allows absorption of stormwater for recharging of groundwater.

Provision C.3.b requires stormwater treatment for new development or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface and road projects that create 10,000 square feet or more of newly constructed contiguous impervious surface. Provision C.3.j requires the GI Plan and expands the requirements for stormwater treatment to apply to smaller projects and road projects that replace existing impervious surface area. In addition, GI is intended to decrease the release of certain pollutants to the Bay such as polychlorinated biphenyls (PCBs) and mercury.

The requirements for the Plan include a description of how the City will shift impervious surfaces and storm drain infrastructure away from gray, or traditional storm drain infrastructure where runoff flows directly into the storm drain and then the receiving water, to a green and more sustainable system. GI in rights-of-way include innovative designs to fit in stormwater treatment measures such as bioretention, tree wells, or underground structural cells in the street or sidewalk areas. These treatment measures collect drainage from the rights-of-way, filter it, and drain it to the public stormwater network. Examples of GI are shown below:



*A bioretention area with gutter modification to allow inflow of stormwater.*



*A curb extension or “bulb out” creating space for green infrastructure.*

To begin the development of a GI Plan, the City was required to prepare a GI Framework that describes specific tasks and timeframes for developing the GI Plan. To complete this task and begin early implementation of the Green Infrastructure requirements, staff convened a “GI Team” including staff from Environmental Services, Planning, Building, Streets and Maintenance, Engineering, Transportation, Fire, and Economic Development. The GI Team reviewed all capital improvement projects to incorporate GI features into the design as feasible and drafted GI Framework. On May 2, 2017<sup>1</sup>, upon a recommendation from the Council Sustainability Committee, Council approved a GI Framework document that describes the tasks and timeframes for development of the City’s GI Plan. Within this framework, the City committed to meeting the mandated deadline and completing the GI Plan prior to submittal of the City’s annual stormwater report, which must be filed by September 30, 2019.

## **DISCUSSION**

The GI Team worked with Geosyntec, a consulting firm that specializes in GI and stormwater compliance, to draft the City’s GI Plan to fulfill the MRP mandate and shift the City’s development, both public and private, to “green” versus “gray.” The attached GI Plan (see Attachment III) contains the following required elements:

- A mechanism to prioritize and map areas for potential and planned projects, both public and private, by 2020, 2030 and 2040.
- A target for the amount of impervious surface, from public and private projects to be retrofitted over the time schedule
- A process for tracking and mapping completed projects and making the information publicly available

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<sup>1</sup> <https://hayward.legistar.com/LegislationDetail.aspx?ID=3034173&GUID=7CE8F3EE-E594-4B32-BB6C-125F25904974&Options=&Search=>

- Guidelines for design and construction for projects that are concurrent with other project needs such as street improvements
- Standard specifications for projects
- A summary of the planning documents the City must update or modify to incorporate GI requirements
- An evaluation of prioritized project funding options

In addition to the GI Plan, the City is required to adopt a legal mechanism such as a planning document or policies to ensure implementation of the GI Plan, conduct outreach to professionals involved in infrastructure planning and design, train staff for implementation of the GI Plan, and educate elected officials of the GI requirements in the MRP. As noted in Section 2.5 of the Plan, GI requirements will apply to private development on a case by case basis to be determined during the discretionary review and approval of proposed development projects through negotiations with project proponents and documented in either Conditions of Approval or a Development Agreement.

The GI Plan includes the following appendices:

A. Map and List of Prioritized Projects.

Selection of projects in the GI Plan were aligned with existing development and known future development. The twelve planned projects listed in the City's GI Plan (see Appendix A) are located primarily in industrial areas known to have legacy pollution and are suitably sized and feasible for GI design. Nine of these projects are in public right of ways. Three projects are either private or public projects already in the design phase or undergoing construction. Overall, 80 acres has been identified as suitable for GI implementation and located in areas where a high potential of pollution can be removed from treating stormwater runoff.

B. General Guidelines for GI Projects

- Section B.1 Functions Associated with GI
- Section B.2 Guidelines for GI Retrofits of Existing Streets
- Section B.3 Guidelines for GI Retrofits of Public Parcels
- Section B.4 Guidelines for Coordination of Projects
- Attachment B-1 Hydraulic Sizing Requirements
- Attachment B-2 Worksheet for Calculating the Combination Flow and Volume Method
- Attachment B-3 Mean Annual Precipitation Map of Alameda County
- Attachment B-4 Standard Specifications and Typical Designs
- Attachment B-5 Model Sign-off Form for Capital Improvement Projects
- Attachment B-6 (1) Guidance for Sizing Green Infrastructure Facilities in Street Projects
- Attachment B-6 (2) Green Infrastructure Facility Sizing for Non-Regulated Street Projects

C. Workplan to Incorporate Green Infrastructure Requirements in City of Hayward's Bicycle and Pedestrian Master Plan Update.

**ECONOMIC IMPACT**

The development community will share in the cost of implementing green infrastructure as new development or redevelopment is required to use green infrastructure to treat stormwater on their frontages. Given the regional and statewide reach of the GI requirements, the cost impacts will not be unique to Hayward.

**FISCAL IMPACT**

Implementation of the GI Plan will impact staff resources though the exact costs are unknown at this time. Funding for MRP-related activities is currently provided by the Stormwater Enterprise Fund. The City's Stormwater Enterprise is funded by an assessment on property tax bills; however, expenditures have increased and are expected to increase further in future years. The Sustainability Committee asked staff to explore a potential increase in the stormwater assessment. Staff will continue to pursue additional funding opportunities, especially those identified in the GI Plan to complete the GI projects. Staff will also continue to work collaboratively as a member of the Alameda Countywide Clean Water Program to comply with the MRP 2.0 as well as taking advantage of collective efforts to develop tools and funding resources to satisfy future GI implementation. Geosyntec was hired to assist staff with the GI Plan for a budget under \$75,000. The contract was paid for from the Stormwater Enterprise Fund.

**STRATEGIC INITIATIVES**

This item indirectly supports Council's Complete Streets initiative as some GI projects will be constructed in conjunction with bicycle and pedestrian infrastructure. The GI Plan also supports the Complete Communities initiative as GI projects will help to create more resilient and sustainable neighborhoods. The GI Plan also supports the Tennyson Corridor initiative as it will enhance bicycle and pedestrian safety and help improve the community appearance.

**SUSTAINABILITY FEATURES**

Green Infrastructure aims to capture and reuse stormwater. GI also helps create more green landscape and filtration of stormwater. GI is also consistent with the City's Complete Streets Policy by creating more open space.

**PUBLIC CONTACT**

The GI requirements and Framework were discussed during the September 2016 and March 2017 Sustainability Committee meetings and Council approved the GI Framework on May 2, 2017. The GI Plan requirements, project list, and funding options were presented during the May 2019 Sustainability Committee meeting. Staff will conduct comprehensive outreach with developers upon adoption of the Green Infrastructure Plan.

## **ENVIRONMENTAL REVIEW**

The adoption of the GI Plan has been determined to be exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA categorical exemptions under Guideline 15307 (Actions by Regulatory Agencies for Protection of Natural Resources). Individual projects will be reviewed pursuant to CEQA for potential adverse impacts to the environment.

## **NEXT STEPS**

If Council adopts the plan, staff will include and report on the GI Plan in the City's 2018/2019 stormwater annual report and future annual reports to the Regional Water Quality Control Board. Staff will implement the GI Plan as allowed by funding and may develop standard specifications and details in the City documents to facilitate GI implementation in private projects. In addition, staff will review current and future Capital Improvement Projects and private projects for GI inclusion and report on progress in the annual reports.

*Prepared by:* Elisa Wilfong, Water Pollution Control Administrator

*Recommended by:* Alex Ameri, Director of Public Works

Approved by:



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Kelly McAdoo, City Manager