

San Mateo County Green Infrastructure Workplan

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The County of San Mateo developed this document from a template that was prepared by SCVURPPP to assist jurisdictions in complying with requirements in Provision C.3.j.i.(1) of the Municipal Regional Stormwater NPDES Permit (MRP) to develop a Workplan for preparing a Green Infrastructure Plan. The template was intended to provide jurisdictions with a format and suggested content for their Green Infrastructure Plan Frameworks. The Workplan must be approved by June 30, 2017 and submitted to the San Francisco Bay Regional Water Quality Control Board by September 30, 2017.

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ABBREVIATIONS

BASMAA	Bay Area Stormwater Management Agencies Association
Caltrans	California Department of Transportation
CASQA	California Stormwater Quality Association
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
COA	Condition of Approval
EPA	Environmental Protection Agency
FY	Fiscal Year
GI	Green Infrastructure
GI TAC	Green Infrastructure Technical Advisory Committee
GIS	Geographic Information System
GSI	Green Stormwater Infrastructure
Hg	Mercury
LID	Low Impact Development
LUS	Watershed Management Initiative Land Use Subgroup
MC	Management Committee
MEP	Maximum Extent Practicable
MRP	Municipal Regional Stormwater NPDES Permit
MS4	Municipal Separate Storm Sewer System
NGO	Non-Governmental Organization
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
PCBs	Polychlorinated Biphenyls
PIP	Public Information and Participation
POC	Pollutant of Concern
RFP	Request for Proposal
ROW	Right of Way
RWQCB	San Francisco Bay Regional Water Quality Control Board
SMCWPPP	San Mateo County Water Pollution Prevention Program
SFEI	San Francisco Estuary Institute
SFEP	San Francisco Estuary Partnership
SRP	Stormwater Resource Plan
State Board	State Water Resource Control Board
SWRP	Storm Water Resource Plan
SWRCB	State Water Resource Control Board
TMDL	Total Maximum Daily Load
Water Board	San Francisco Bay Regional Water Quality Control Board
WDR	Waste Discharge Requirements
WMI	Watershed Management Initiative

1.0 INTRODUCTION

1.1 What is Green Infrastructure?

“Green Infrastructure” (GI) is infrastructure that uses vegetation, soils, and natural processes to manage water and create healthier urban environments. At the scale of a city or county, green infrastructure refers to the patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water. At the scale of a neighborhood or project site, green infrastructure refers to stormwater management systems and features that mimic nature by absorbing and storing water.

Examples of GI include resilient, sustainable systems that slow, filter, harvest, infiltrate and/or evapotranspire precipitation runoff, such as bioswales, which are 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); rainwater harvesting systems (e.g., cisterns and rain barrels); and other methods to capture and treat stormwater. These practices are also known as Low Impact Development (LID) site design and treatment measures.

Green stormwater infrastructure provides amenities with many benefits beyond water quality improvement and groundwater replenishment, including creation of attractive streetscapes, reduction of heat island effect, bicycle and pedestrian accessibility, clean air, climate change resilience and mitigation, place making and community cohesion, energy savings, higher property values, and enhanced flood protection."

1.2 Stormwater Quality Regulatory Requirements

The County of San Mateo (County) is subject to the requirements of the recently reissued Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit for Phase I municipalities and agencies in the San Francisco Bay area (Order R2-2015-0049), also known as the Municipal Regional Permit (MRP), which became effective on January 1, 2016. The MRP applies to 76 large, medium and small municipalities (cities, towns and counties) and flood control agencies that discharge stormwater to San Francisco Bay, collectively referred to as Permittees.

Over the last 13 years, under the MRP and previous permits, new development and redevelopment projects on private and public property that exceed certain size thresholds (“Regulated Projects”) have been required to mitigate impacts on water quality by incorporating site design, pollutant source control, stormwater treatment and flow control measures as appropriate. LID treatment measures, such as rainwater harvesting and use, infiltration, and biotreatment, have been required on most Regulated Projects since December 2011. Construction of new roads is covered by these

requirements, but projects related to existing roads and adjoining sidewalks and bike lanes are not regulated unless they include creation of an additional travel lane.

A new section of the MRP requires Permittees to develop and implement long-term Green Infrastructure (GI) Plans for the inclusion of LID measures in storm drain infrastructure on public and private lands, including streets, roads, storm drains, parking lots, building roofs, and other elements. The GI Plan must be completed by September 30, 2019. As part of the GI planning process, the MRP requires Permittees to adopt a Green Infrastructure Workplan by June 30, 2017 and submit it to the Regional Water Quality Control Board (Water Board) by September 30, 2017. The Workplan, a framework for completing the GI Plan, must at a minimum include a statement of purpose, tasks and timeframes to complete the required elements of the GI Plan.

Other sections of the MRP include requirements for municipalities to control pollutants of concern to water quality in stormwater discharges, including polychlorinated biphenyls (PCBs), mercury, trash and pesticides. LID measures incorporated into green infrastructure can help remove these pollutants from stormwater runoff. For this reason, the MRP establishes a new linkage between public infrastructure retrofits 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 GI systems. Permittees in San Mateo County, collectively, must implement GI on public and private property to reduce mercury loading by 6 grams/year and PCB loading by 15 grams/year by 2020. The load reductions will continue in future permits. Therefore, these efforts will be integrated and coordinated countywide for the most effective program. Other pollutants, including trash and pesticides, should also be coordinated with the GI program since, when properly designed, constructed and maintained, biotreatment systems may also be credited towards trash and pesticide reduction goals.

A key component of the GI definition in the MRP is the inclusion of both private and public property locations for GI systems. This has been done in order to plan, analyze, implement and credit GI systems for pollutant load reductions on a watershed scale, as well as recognize all GI accomplishments within a municipality. However, the focus of the GI Plan and Workplan is the integration of GI systems into public rights-of-way. The GI Plan is not intended to impose retrofit requirements on private property, outside the standard development application review process for projects already regulated by the MRP, but may provide incentives or opportunities for private property owners to add or contribute towards GI elements if desired.

The County of San Mateo has developed this document to serve as the County's Green Infrastructure Workplan with support and assistance from the City/County Association of Governments of San Mateo County (C/CAG).

1.3 Statement of Purpose of Green Infrastructure Plan and Framework

The purpose of the County's GI Plan is to describe how the County will gradually transform its urban landscape and storm drainage systems from exclusively “gray” to a mix of gray and “green.” The GI Plan will be our guide to help the County shift from relying solely on traditional storm drain infrastructure, where stormwater runoff flows directly from impervious surfaces into storm drains and receiving waters, to a more resilient, sustainable system that reduces and slows runoff by dispersing it to vegetated areas, allows for infiltration and/or evapotranspiration of runoff, collects runoff for non-potable uses, and treats runoff using biotreatment and other green infrastructure practices. As part of the GI Plan, the County will develop monitoring tools to be used to demonstrate the County’s long-term progress in reducing loads of pollutants of concern, particularly mercury and PCBs, discharged in stormwater to local waterways through the implementation of green infrastructure. The GI Plan will be coordinated with other County plans, such as the General Plan, Area Plans, County ordinances, Parks plans and policies, the Sea Level Rise Vulnerability Assessment and County Flood and Resiliency Program plans.

The purposes of this Workplan are to:

1. Provide background on the MRP requirements for GI Planning;
2. Describe the purpose, goals, and tasks to develop the GI Plan; and,
3. Outline the time frames for the creation of the GI Plan and other GI tasks required in the MRP.

1.4 County of San Mateo Description and Background

Incorporated in 1856, the County of San Mateo covers 455 square miles and has a jurisdictional area of about 300 square miles. The County also includes 20 incorporated Cities. This Workplan will apply only to unincorporated areas, where the County has jurisdiction. Unincorporated census-designated communities are distributed throughout the County and include Broadmoor, Burlingame Hills, El Granada, Devonshire, Emerald Lake Hills, Highlands-Baywood Park, Kings Mountain, Ladera, Los Trancos, La Honda, Loma Mar, Menlo Oaks, Montara, Moss Beach, North Fair Oaks, Pescadero, Princeton-by-the-Sea, San Gregorio, Sequoia Tract, Sky Londa, and West Menlo Park. According to the 2010 Census, the unincorporated areas have a population of 61,222 persons.

The urbanized areas of the County of San Mateo are primarily comprised of the following land uses: commercial and services, industrial, residential, K-12 schools, and urban parks. Nearly 96 percent of the County’s jurisdictional area is not urbanized, with these rural areas supporting a mix of land uses such as agriculture, timber production, open space (i.e. parks, recreation areas, vacant undeveloped land, etc.), and more.

The vast majority of development in the County has occurred in the eastern section bordering the bay, on broad swaths of flat land, some of which was reclaimed from the Bay. Integrating stormwater management strategies into new development and retrofitting existing development on flat to gently sloping terrain is generally easier. However, these areas of dense urban development also correspond with soil conditions that are typically unfavorable for infiltration. This represents a special challenge; for example, a development project on flat land that is subject to stormwater treatment requirements may require an expensive underdrain for sufficient infiltration.

Not all developed areas are on flat ground. The Bayside and the coastal plain transition sharply upward to the Santa Cruz Mountains of the Coastal Range, where certain residential areas have been developed in moderately steep hillside areas. In particular, many bayside unincorporated areas are located in the sloped transition area from Bay flats to the Coastal Range. This presents another unique challenge for implementing GI because infiltration is more difficult to achieve on steep slopes, putting greater pressure on downslope and level areas.

Land use, soil permeability, topography, existing roadway configuration, and right-of-way widths vary considerably across the County. Many unincorporated areas lack constructed storm drain systems and/or typical curb, gutter, sidewalk configurations making standard GI bioretention retrofits more challenging and costly. All of these considerations must be taken into account to evaluate the unique opportunities and challenges for green infrastructure at any particular site.

1.5 County of San Mateo Goals and Overall Approach

The County will need to strategize on how to incorporate green infrastructure in both private and public projects. C/CAG and its consultants are working with member agencies to develop projections of future development patterns to estimate how much green infrastructure will be implemented on private sites. Once these projections are known, projections of additional public green infrastructure that would be needed to meet the mandated pollutant load reductions can be developed. This information will inform development of the County's and other cities' GI Plans. The County will take a collaborative approach to achieve green infrastructure goals in public projects through coordination internally across County departments and externally with regional partners.

Internal collaboration: Development and implementation of the Workplan and GI Plan is an interdepartmental effort led by the Office of Sustainability and involving the Department of Public Works, Planning and Building Department, Parks Department, and County Manager's Office. To encourage collaboration across departments, Office of Sustainability leads a monthly GI working group. The County also plans to work across departments to incorporate Green Infrastructure into multi-objective projects within the

County such as the County Flood and Resiliency Program and the Sea Level Rise Program to achieve benefits related to clean water and air, climate change resilience and mitigation, and habitat and energy savings.

External collaboration: The San Mateo County Water Pollution Prevention Program (SMCWPPP) is a resource to the County and cities to facilitate and encourage regional coordination. SMCWPPP coordinates the Green Infrastructure Technical Advisory Committee (GI TAC) and technical consultants that help the County and cities in the development and implementation of their GI Plans.

Because of the unique characteristics of the County related to land use, soil permeability, topography, existing roadway configuration, and right-of-way widths, which limit opportunities for GI, the County will need to be strategic in development of the GI Plan. The County plans to utilize watershed-scale partnerships and collaborative multi-benefit efforts to implement regional projects in coordination with neighboring cities and special, service districts, and transportation agencies. A major component of the process to implement regional projects will be clearly defining roles and responsibilities of the stakeholders involved.

Through collaboration with County departments and programs and regional partners, the County strives to meet green infrastructure requirements and load reduction milestones.

2.0 GREEN INFRASTRUCTURE PLAN ELEMENTS & APPROACH

2.1 Summary of Required Elements

To meet MRP requirements, the County's GI Plan will need to contain certain mandatory elements:

- **Project Identification and Prioritization Mechanism:** The GI Plan must describe the mechanism by which the County will identify, prioritize and map potential and planned projects that incorporate green infrastructure components in different drainage areas within the County. These include public and private projects that may be implemented over the long term, with milestones for implementation by 2020, 2030, and 2040. The mechanism must include the criteria for prioritization and outputs that can be incorporated into the County's long-term planning and capital improvement processes.
- **Prioritized Project Locations and Timeframes:** The GI Plan must contain the outputs resulting from the identification and prioritization mechanism described above, such as lists and maps of prioritized projects and timeframes for implementation. The outputs must also include "targets" or estimates of how much impervious surface within the County will be converted or "retrofit" to drain to a green infrastructure feature, such as a vegetated area or stormwater capture or treatment facility, by the 2020, 2030, and 2040 milestones.
- **Completed Project Tracking System:** The GI Plan must describe the County's process for tracking and mapping completed public and private projects and making the information available to the public.
- **Guidelines and Specifications:** The GI Plan must include general design and construction guidelines, standard specifications and details (or references to those documents) for incorporating green infrastructure components into projects within the County. These guidelines and specifications should address the different street and project types within the County, as defined by its land use and transportation characteristics, and allow projects to provide a range of functions and benefits, such as stormwater management, bicycle and pedestrian mobility and safety, public green space, urban forestry, etc.
- **Integration with Other Plans:** The GI Plan must describe its relationship to other planning documents and efforts within the County and how those planning documents have been updated or modified, if needed, to support and incorporate the green infrastructure requirements. If any necessary updates or modifications have not been accomplished by the completion of the GI Plan, the GI Plan must include a work plan and schedule to complete them.

- **Evaluation of Funding Options:** The GI Plan must include an evaluation of funding options for design, construction, and long-term maintenance of prioritized green infrastructure projects, considering local, state and federal funding sources.

In addition, the County must adopt **policies, ordinances, and/or other appropriate legal mechanisms** to allow implementation of the GI Plan. The County must also **conduct outreach and education** to elected officials, department managers and staffs, developers and design professionals, and the general public as part of development and implementation of the GI Plan and implementation of specific projects within the GI Plan.

2.2 Approach to Completion of Required Elements

The County Office of Sustainability is committed to coordinating key departments to develop the required GI Plan elements described in Section 2.1. Key departments include the Department of Public Works, Planning and Building Department, Parks Department, and County Manager's Office. The County will collaborate with SMCWPPP and other agencies to identify regional and cross-jurisdictional approaches to green infrastructure. This section describes the County's approach to each required element.

2.2.1 Outreach and Education

Outreach and education is an important step in developing the GI Plan in order to garner support from the local community, gain public input, and engage stakeholders in the process. County staff has prioritized outreach to County staff and elected officials and to the general public.

Internal Outreach

County staff have begun outreaching and communicating with department staff, managers, and elected officials about the purposes and goals of green infrastructure, the required elements of the GI Plan, and steps needed to develop and implement the GI Plan. The following summarizes completed and ongoing tasks related to internal outreach:

- *County GI Working Group:* The Office of Sustainability initiated and convened an interdepartmental GI Working Group with responsible department staff and management to discuss GI requirements and assigned tasks. The GI Working Group consists of staff from the Department of Public Works, Planning & Building Department, Parks Department, and the County Manager's Office. The County GI Working Group has convened 12 times between March 2016 and February 2017 in order to meet interim milestones and to stay on track for the development of the GI Plan. The group continues to meet monthly and more often as needed.
- *County staff and management:* The Office of Sustainability has engaged staff and management in key departments in meetings and presentations on GI

requirements. The Office of Sustainability continues to engage and update departments as the County progresses in the development of the Workplan and GI Plan required elements.

- *Member's memo:* In April 2017, the Office of Sustainability provided a background memo to the members of the Board of Supervisors on green infrastructure and stormwater regulations to raise awareness of the goals and requirements in the MRP and the concepts, intent, and multiple benefits of green infrastructure. The Office of Sustainability also offered assistance to each Board Member and their Aides to provide additional information. To keep the Board of Supervisors up to date on green infrastructure and stormwater regulations, the Office of Sustainability will provide an annual update to the Board in the form of a Member's memo.
- *Presentation to Board of Supervisors:* On April 25, 2017, the Office of Sustainability presented this Workplan and recommended that the Board of Supervisors adopt a resolution approving the Workplan. The Office of Sustainability will provide updates to the Board of Supervisors as departments develop the GI Plan.
- *Training:* County staff have participated in SMCWPPP-organized trainings, working sessions, and workshops. County staff continues to attend trainings and will organize future specific trainings for County departments on green infrastructure.
- *SMCWPPP GI Technical Advisory Committee (GI TAC):* County staff regularly participated and continues to participate in the SMCWPPP GI TAC. Through the SMCWPPP GI TAC, SMCWPPP and the consultant team provide model templates and technical support and coordinate regional approaches to meeting green infrastructure requirements.

External Outreach

The County continues to provide outreach and communication with the local community to gain public input and support with the following tasks:

- *Stormwater Resource Plan:* During development of the Stormwater Resource Plan (SRP) by SMCWPPP, three stakeholder workshops were held in January 2017 to educate the public and solicit public and stakeholder feedback on the SRP.
- *SMCWPPP Five-Year Public Education and Outreach Strategic Plan:* SMCWPPP consultants developed the Five-Year Public Education and Outreach Strategic Plan that details how the consultant team and jurisdictions will educate the public through social media, newsletters, public events, and school-aged outreach. The County plans to coordinate with SMCWPPP to continue to provide outreach to the general public.
- *Public Events:* SMCWPPP and County programs will continue to coordinate public events where County staff share information about green infrastructure. For example, Office of Sustainability staff attend Earth Day fairs and events where they share information on stormwater and green infrastructure efforts.

2.2.2 Project Prioritization and Mapping

The County will use the following approaches to identify, prioritize and map potential and planned projects that incorporate green infrastructure in different drainage areas within the County:

- **Development of GIS-based modeling tool for use in mapping, prioritizing, and phasing of potential and planned projects:** On behalf of the County and other municipalities within San Mateo County, SMCWPPP developed the Stormwater Resource Plan (SRP) in December 2016. In February 2017, the SRP was approved under Resolution 17-04 by the C/CAG Board of Directors, adopted by the Bay Area Integrated Regional Watershed Management Plan Coordinating Committee, and submitted to the Water Board for certification. The SRP supports the development and implementation of GI Plans within the San Mateo County region (including the County's GI Plan) through identification of local and regional opportunities for GI projects and development of modeling tools for estimating pollutant load reductions over future timeframes. The watershed-based approach for screening and prioritizing potential GI sites in the SRP will be used to create a further evolved methodology for planning and implementing GI projects according to the milestones in the MRP. The maps and tools will be available for local use by participating municipalities.
- **Development of prioritization criteria for GI project opportunities:** The SRP produced a list of prioritized GI projects eligible for future State implementation grant funds. Building on existing documents that describe the characteristics and water quality and quantity issues within the County, the SRP will identify and prioritize multi-benefit GI projects throughout the County, using a metrics-based approach for quantifying project benefits such as volume of stormwater infiltrated and/or treated and quantity of pollutants removed. The metrics-based analysis will be conducted using hydrologic/hydraulic and water quality models coupled with GIS resources and other tools. The methodology for prioritization for mapping private and public projects on a drainage-area-specific basis in the GI Plan will modify and expand on the methodology process in the SRP.
- **Development of mapping and associated database of GI project opportunities with information needed to perform a prioritization assessment of the opportunities:** One of the products of these analyses in the SRP will be a map of opportunity areas for GI projects throughout the watershed, an initial prioritized list of potential projects and strategies for implementation of these and future projects. As required by the MRP, the County has begun to prepare and maintain a list of public and private GI projects that are planned for implementation during the permit term, and public projects that have potential for GI measures. The first such list was submitted with the FY 15-16 Annual Report. Through SMCWPPP, estimates of new and redevelopment areas are currently

underway and will be incorporated in the database. The Interim Accounting Methodology developed at the regional level through BASMAA for GI project tracking and load reduction accounting will be integrated with the longer-term C.3 development projections and associated GI assumptions being compiled for the reasonable assurance analysis (RAA) to demonstrate adequate load reductions via GI through 2040. The project database will likely be based on the BASMAA Interim Accounting Methodology for tracking load reductions for this permit term and/or be an adaptation of the prioritized project list in the SRP.

- **Development of phasing plan for GI project opportunities:** A phasing plan will be developed that is consistent with the timeframes required of mercury and PCB load reductions by 2020, 2030, and 2040. The SRP includes the development of a web-based GIS tool for the County to view and track existing and planned projects, as well as a stormwater capture model to easily assess load volume and associated load reduction potential from prioritized GI projects. These will both be integrated with the RAA. The RAA will also include a cost-effectiveness analysis of various scenarios for identifying the most cost-effective allocation of GI projects within unincorporated County and across the entire county, accounting for potential to shift land use based yield categories for PCBs and mercury loading through retrofits, cost assumptions, and GI project types (such as green streets, LID, or regional projects). This work will also include establishing a schedule for project implementation consistent with the County's goals.
- **Development of a method for integrating the phasing plan into the County's long-term planning and capital improvement plans:** The method for integration will include projects that are intended to be implemented following the current permit term to achieve the 2030 and 2040 load reduction targets. An assessment of the alternate modeling scenarios in the model developed by SMCWPPP will assist the County in creating a phased implementation plan, which will include better alignment and integration with capital improvement projects.
- **Integration of the phasing plan:** The GI Plan will include the prioritized list of projects and map of locations within the County's jurisdiction. The outputs will also include "targets" or estimates of how much impervious surface within the County will be converted or "retrofit" to drain to a green infrastructure feature, such as a vegetated area or stormwater treatment facility, or converted to pervious surfaces, by the 2020, 2030, and 2040 milestones. The County will utilize the web-based GIS tool for viewing project information and the Stormwater Capture Model for assessing volume and treatment capacities of individual projects. The County will also utilize the planned project tracking database to stay on course or modify plans as needed over the MRP timeframes.

2.2.3 Workplan for Completion of Prioritized Projects

The GI Plan will include the timeframes for implementation of prioritized projects identified through 2.2.2 *Project Prioritization and Mapping*. SMCWPPP may offer support through the development of a model workplan.

2.2.4 Completed Project Tracking System

This section of the GI Plan must describe the County's process for tracking and mapping completed public and private projects and making the information available to the public. The SRP includes the development of a web-based GIS tool for the County to view and track existing and planned projects as well as a stormwater capture model to easily assess load volume and associated load reduction potential from prioritized GI projects. The County will work with SMCWPPP to refine this tool. Upcoming tasks include:

- Developing a publicly accessible element of the web-based mapping and data tool;
- Implementing a pilot period of mapping and database management, including a public portal; and
- Refining the mapping and data tool and public portal.

2.2.5 Guidelines and Specifications

The County will support and participate in the SMCWPPP process to develop the San Mateo County Model Green Infrastructure Guidelines and Standards. These model guidelines will be developed at the countywide level and will be used as a reference by the County. The County will evaluate the model documents for consistency with its own local standards, and revise existing guidelines, standard specifications, design details, and department procedures as needed.

The Guidelines and Standards will be used to implement the range of functions associated with projects, such as: street use for stormwater management and treatment; safe pedestrian travel; use as public space; for bicycle, transit, and vehicle movement; and as locations for urban forestry. These will also include identification of needs and model procedures for coordinated and consistent plan review of private projects, scoping and design for public projects, provisions for public/private implementation and maintenance agreements, and operations and maintenance.

The Guidelines and Standards will also include the results of the regional analysis of alternative approaches to sizing GI facilities where project constraints (e.g., limited space in public right-of-way, utility conflicts, etc.) preclude fully meeting the permit required sizing criteria for such facilities.

2.2.6 Adoption and Modification of Policies, Ordinances, and Other Legal Mechanisms

The County reviewed its existing policies, ordinances, and other legal mechanisms related to current planning procedures and implementation of MRP requirements to identify which documents may need to be updated or modified to help implement the GI Plan, and the timing for those actions. The County has sent SMCWPPP existing planning documents for review and will utilize model planning update materials provided by SMCWPPP.

Departments preliminarily identified the following planning documents to update:

- General Plan
- Zoning Ordinance
- Grading Ordinance
- Subdivision Regulations
- Tree Ordinance
- Local Coastal Program Policies
- Climate Action Plan
- Standard Drawings for Public Improvement
- Encroachment in the Public Right-of-Way Policy
- San Mateo County Guidelines for Drainage Review
- Stormwater Ordinance

As feasible, the County will make updates to relevant planning documents by September 30, 2019 and report these updates in the GI Plan. If any necessary updates or modifications have not been accomplished by the completion of the GI Plan, the GI Plan will include a work plan and schedule to complete them.

2.2.7 Evaluation of Funding Options

The potential long-term costs to retrofit existing urbanized areas with green infrastructure at levels necessary to achieve the required pollutant load reductions may be significant. C/CAG anticipates initial estimates of public vs. private green infrastructure needs for both short- and long-term load reduction requirements will be available to its member agencies by the end of Fiscal Year 2016-17. This information will impact discussions about long-term implementation costs and funding options. Funding will be explored for both capital GI costs and operation and maintenance (O&M) costs of these projects. The County will analyze possible funding options to raise additional revenue for the projects that will eventually be included in the County's GI Plan.

SMCWPPP has a draft "Potential Funding Source Analysis and Recommendations" study that can serve as a starting point for this work area. The scope of this effort will be developed through discussions with the GI TAC. This might include consideration of establishing a nexus to support implementation of a stormwater infrastructure impact fee. SMCWPPP will provide regional support and research to help the County in identifying and evaluating funding options.

Additional funding options that will be explored by County include:

- **Offsite Treatment by Developer** – An alternative compliance option in which a private Regulated Project (one required to treat runoff from created and replaced impervious surface on the project) would instead treat runoff from an equivalent amount of impervious surface offsite, potentially in the public right-of-way, in LID treatment facilities it would pay to construct (and/or maintain). That is, the private developer would fund and oversee construction of a potential green infrastructure project identified by the County.
- **Grants for Capital Projects** – Options for capital project funding include the State Proposition 1 Stormwater Grant Program implementation grants, Prop 1 IRWMP grants, California Urban Rivers Grants, etc. Not only will matching funds be required for many of these grants, the County will also have to develop initial project concepts and designs. For these reasons dedicated internal funding will be key to demonstrating the County's commitment to implementation of the GI Plan.
- **Payment of In-Lieu Fees** – An alternative compliance option in which the developer of a private Regulated Project, in lieu of constructing LID treatment facilities on-site, would pay equivalent in-lieu fees for construction and maintenance of a regional or municipal stormwater treatment (green infrastructure) facility.
- **Public-Private Partnerships** – An option in which green infrastructure facilities are jointly funded by the municipality and a private organization or land owner for the benefit of both parties.
- **Regional Project Cost-Sharing** – The County will also pursue regional projects in collaboration with neighboring cities, special districts, Caltrans, and other transportation agencies. These regional projects will involve cost-sharing among stakeholders.

2.2.8 Completion and Adoption of the GI Plan

The County will draft its GI Plan to contain all of the elements described above, obtain reviews and approvals by various departments, governing bodies, and the public as needed, and submit an approved GI Plan to the Water Board by September 30, 2019.

3.0 GREEN INFRASTRUCTURE PLAN DEVELOPMENT SCHEDULE

This section describes the time frames for completion of the tasks presented in Section 2 to develop and adopt the County's GI Plan. Ongoing tasks are currently being worked on; pending tasks are upcoming and have not been started.

Task No.	Green Infrastructure Plan Development Task	Responsible Organization(s)/ Department(s)	Estimated Completion Date	Status
1	Outreach and Education			
	<i>Internal Outreach</i>			
1.1	Participate in County GI Working Group meetings	OOS, DPW, P&B, Parks, CMO	Ongoing	Ongoing
1.2	Engage County staff and management on GI requirements	OOS	Ongoing	Ongoing
1.3	Develop and provide annual Member's Memo to the Board of Supervisors on an annual basis	OOS	Ongoing	Ongoing
1.4	Presentation to Board of Supervisors on Workplan	OOS	April 2017	Ongoing
1.5	County staff participation in GI trainings	SMCWPPP	Ongoing	Ongoing
1.6	County participation in SMCWPPP GI Technical Advisory Committee	OOS, DPW, P&B	Ongoing	Ongoing
	<i>External Outreach</i>			
1.7	Hold public workshops to conduct outreach and solicit public feedback related to SRP	SMCWPPP	Jan 2017	Completed
1.8	Implement Five-Year Public Education and Outreach Strategic Plan	OOS	Sept 2022	Ongoing
1.9	Provide GI outreach at public events	SMCWPPP, OOS	Ongoing	Ongoing
2	Project Prioritization and Mapping			
2.1	Draft and finalize San Mateo County Stormwater Resources Plan (SRP)	SMCWPPP, consultants	Feb 2017	Completed
2.2	Develop web-based GIS tool for use in mapping, prioritizing, and phasing of potential and planned projects	SMCWPPP, consultants	Feb 2017	Completed

2.3	Estimate and review new and redevelopment land areas	SMCWPPP, consultants	Feb 2017	Completed
2.4	Prepare and review RAA	SMCWPPP, consultants, OOS, DPW, P&B	June 2017	Ongoing
2.5	Develop and review mapping and database of GI project opportunities	SMCWPPP, consultants, OOS, DPW, P&B	June 2017	Ongoing
2.6	Draft and review volume/sediment capture goals to meet TMDL implementation milestones established through RAA	SMCWPPP, consultants, OOS, DPW, P&B	June 2017	Ongoing
2.7	Define and review method for integration of GI project opportunities into long-term planning and capital improvement plans	SMCWPPP, consultants, OOS, DPW, P&B	Dec 2017	Pending
2.8	Begin using GIS tool for tracking of GI implementation and annual reporting	OOS, DPW, P&B, Parks, CMO	Early 2018	Ongoing
2.9	Develop and review prioritization criteria based on SRP	SMCWPPP, consultants	Early 2018	Completed
2.10	Integrate phasing plan into GI Plan	OOS, DPW, P&B	Sep 2019	Pending
3	Workplan for Completion of Prioritized Projects			
3.1	Develop model workplan for implementation of prioritized projects	SMCWPPP and consultants	June 2018	Pending
3.2	Use model workplan to prepare County-specific workplan for implementation of prioritized projects	OOS, DPW, CMO, Parks	Sept 2019	Pending
4	Completed Project Tracking System			
4.1	Identify model methodology for mapping and database project information	SMCWPPP, OOS, DPW, P&B	Oct 2017	Pending
4.2	Identify County department/division responsibilities for mapping and finalizing database information as projects are completed	OOS, DPW, P&B	Feb 2018	Pending
4.3	Implement pilot period of mapping and database management. During this period the public "portal" of the web-based mapping and data tool will also be piloted.	OOS, DPW, P&B	May 2018	Pending
4.4	Review of pilot period mapping and revise database	SMCWPPP	May 2018	Pending

4.5	Refine web-based tool	SMCWPPP	June 2018	Pending
4.6	Refine and implement tracking procedures and public portal	SMCWPPP, OOS, DPW, P&B	Dec 2020	Pending
5	Develop Guidelines and Standards			
5.1	Review model guidelines and standards reference documents memorandum	OOS, DPW, P&B	Sept 2016	Completed
5.2	Review draft samples of guidelines and standards sections and provides comments	OOS, DPW, P&B	Feb 2017	Completed
5.3	Develop draft of model guidelines and standards	SMCWPPP	June 2017	Pending
5.4	Revise and finalize model guidelines and standards	SMCWPPP	Nov 2017	Pending
5.5	Revise and adopt County-specific guidelines and standards	OOS, DPW, P&B	Sept 2019	Pending
6	Adoption and Modification of Policies, Ordinances, and Other Legal Mechanisms			
6.1	Review local jurisdiction policies and ordinance language and develop model planning document update language	SMCWPPP	Jan 2017	Completed
6.2	Review existing policies, ordinances, and other legal mechanisms related to implementation of MRP	OOS, DPW, P&B	Jan 2017	Completed
6.2	Make modifications to County planning documents	OOS, DPW, P&B	Sept 2019	Pending
6.3	Develop summary of planning documents that have been updated/modified to be included in the GI Plan	OOS, DPW, P&B	Sept 2019	Pending
6.4	Develop a workplan for integration in future planning documents	OOS, DPW, P&B	Sept 2019	Pending
6.7	Update and modify policies/ordinances	OOS, DPW, P&B	Sept 2019	Pending
6.8	Describe any updates to ordinances, policies, plans or programs needed to implement the GI Plan and associated programs	OOS, DPW, P&B	Sept 2019	Pending
7	Evaluation of Funding Options			
7.1	Review existing studies and explore potential funding options	SMCWPPP	Sept 2019	Pending

7.2	Analyze possible funding options to raise revenue for projects that will eventually be included in County's GI Plan	OOS, DPW, P&B, Parks, CMO	Sept 2019	Pending
8	Completion and Adoption of GI Plan			
8.1	Prepare draft GI Plan	OOS, DPW, P&B, Parks, CMO	June 2019	Pending
8.2	Review draft GI Plan	OOS, DPW, P&B, Parks, CMO	June 2019	Pending
8.3	Gather public input on draft GI Plan	OOS, DPW, P&B, Parks, CMO	July 2019	Pending
8.4	Approve draft GI Plan	OOS, DPW, P&B, Parks, CMO	Aug 2019	Pending
8.5	Review/consider draft GI Plan	Board of Supervisors	Sept 2019	Pending
8.6	Approve final GI Plan	Board of Supervisors	Sept 2019	Pending
8.7	Submit final GI Plan to Water Board	OOS	Sept 2019	Pending