

Contra Costa County Green Infrastructure Workplan

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Approved by: Contra Costa County Board of Supervisors

Submitted by:

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Green Infrastructure Plan Technical Advisory Group

Contra Costa County developed this document from two templates, one prepared by [Santa Clara Valley Urban Runoff Pollution Prevention Program](#) and the other from the Contra Costa Clean Water Program, 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 Framework. 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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ACRONYMS

ABAG	Association of Bay Area Governments
BASMAA	Bay Area Stormwater Management Agencies Association
Caltrans	California Department of Transportation
CCCWP	Contra Costa Clean Water Program
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
DCD	Department of Conservation and Development (Contra Costa County)
DWR	CA Department of Water Resources
EPA	Environmental Protection Agency
FY	Fiscal Year
GI	Green Infrastructure
GI TAG	Green Infrastructure Technical Advisory Group
GIS	Geographic Information System
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
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
SFEI	San Francisco Estuary Institute
SFEP	San Francisco Estuary Partnership
SRP	Stormwater Resources Plan
State Board	State Water Resource Control Board
SWRP	Storm Water Resource Plan
SWRCB	State Water Resource Control Board
TMDL	Total Maximum Daily Load
TWIC	Transportation, Water and Infrastructure Committee (of the Board of Supervisors)
Water Board	San Francisco Bay Regional Water Quality Control Board
WDR	Waste Discharge Requirements

1.0 INTRODUCTION

1.1 What is Green Infrastructure?

“Green Infrastructure” (GI) is infrastructure that uses vegetation, soils, and natural processes to manage stormwater and create healthier urban environments. At the scale of a city or county, GI 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, GI refers to stormwater management systems and features that mimic wetland processes by absorbing, filtering, and storing water.

GI offers resilient, sustainable landscape features, such as bioswales, that slow, filter, harvest, infiltrate and/or evaporate precipitation runoff through engineered soil and plants (from grasses to trees). GI can also include 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.

GI is a “multi-benefit” stormwater treatment solution. That is, it 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

Contra Costa County (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 (including 71 cities and towns and 5 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 stormwater permits, new development and redevelopment projects on private and public property that exceeded certain size thresholds (“Regulated Projects”) were 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 bio-treatment, have been required on most regulated projects since December 2011. Construction of new roads is also 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 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 calls upon Permittees to adopt a GI 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, and tasks and timeframes to complete the required elements of the GI Plan.

Provisions C.11 and C.12 in the MRP require Contra Costa Permittees (Contra Costa County and its 19 cities and towns) to reduce estimated PCB loading by 23 grams/year and estimated mercury loading by 9 grams/year using GI by June 30, 2020. Regionally, Permittees must also project the load reductions achieved via GI by 2020, 2030, and 2040, showing that collectively, reductions will amount to 3 kg/year PCBs and 10 kg/year mercury by 2040. The GI Plan will provide estimates of the reductions in the quantity of these pollutants based on implementation of the elements outlined in the Plan.

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 of 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's Watershed Program has developed this document in collaboration with a multi-departmental Technical Advisory Group convened for this purpose.

1.3 Purpose of Green Infrastructure Plan and Framework

The purpose of the GI Plan is to provide a blueprint as to how the County will gradually transform its urban landscape and storm drainage systems from exclusively “gray” to a mix of gray and “green” infrastructure. The County’s GI Plan will guide a shift from gray, conventional “collect and convey” storm drain infrastructure to more resilient, sustainable stormwater management that reduces runoff volumes, disperses runoff to vegetated areas, harvests and uses runoff where feasible, promotes infiltration and evapotranspiration, and uses natural processes to detain and treat runoff.

As required by Provisions C.3.a. through C.3.i. in the MRP, “Low Impact Development” practices are currently implemented on land development projects throughout the County. Specific methods and design criteria are spelled out in the Contra Costa Clean Water Program’s (CCCWP) *Stormwater C.3 Guidebook*, which the County has referenced in its Stormwater Management and Discharge Control Ordinance (Ordinance No. 2005-01, Title 10.14).

The proposed Plan will detail how similar methods will be incorporated into County project development processes to retrofit existing infrastructure, including streets, roads, and storm drains, using stormwater treatment facilities constructed on public and private parcels and within the public right-of-way.

To prepare the Plan, the County will:

- Review planned capital projects to identify the potential to incorporate Low Impact Development drainage design.
- Identify and prioritize areas and projects within the County to implement additional GI projects.
- Coordinate within and between the County’s departments to develop concepts for integrated projects that serve multiple objectives (e.g., multi-modal transportation, recreation, streetscape improvements, and parks, as well as GI).
- Document resources and a process for completing conceptual designs.
- Document a funding strategy for future projects, including a process to pursue funding and align project funding sources and schedules to successfully build integrated projects.
- Develop and implement a system to track GI projects, including land development projects subject to Provision C.3.a. through C.3.i. requirements, and project future implementation.
- Evaluate and predict the resulting reductions in the quantity of pollutants—including PCBs, mercury, and trash—transported to creeks and the Bay/Delta.

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 GI. The GI Plan will be coordinated with other County plans, as described below and as shown in Table 1.

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 Contra Costa County Goals, Preliminary Planning, and Overall Approach

The GI Plan will provide a strategic blueprint on how to incorporate GI in both private and public projects, especially in relation to the County's road network. Two existing initiatives will give substantial guidance and an evaluative framework for the GI Plan. These two supportive initiatives are the Contra Costa Watersheds Stormwater Resources Plan and the "Green Plan Bay Area — Green Plan-IT." The Stormwater Resources Plan will be managed by the CCCWP and is anticipated to be underway by the summer of 2017; it will provide comprehensive watershed and water quality goals/objectives and a preliminary analytic framework for the GI Plan, thus reducing the level of effort required to prepare it. "Green Plan Bay Area — Green Plan-IT," is a versatile GIS toolset being developed by the San Francisco Estuary Institute (SFEI) that aids municipalities with their efforts to place GI in the landscape and track the effectiveness of these installations. The County's Watershed Program and IT Division of the Public Works Department (PWD) has been actively engaged with SFEI staff in developing and applying this innovative evaluative toolset to several unincorporated communities in the County, most notably for North Richmond. GIS layers for most fields/topics to be addressed in a GI Plan have been furnished to SFEI to enable this toolset to be used to identify, rank, and map potential GI locations within the County's Watersheds, as well as provide a hydrologic and water quality modeling tool. These will also be helpful in identifying and prioritizing potential GI project locations and bioretention basin sizing. The CCCWP is also developing a GIS layer to facilitate tracking GI projects.

The County will take a collaborative approach to achieve GI goals in public projects through coordination internally across County departments and externally with regional partners.

Internal collaboration: Development and implementation of the GI Plan is an interdepartmental effort led by the County's Watershed Program and involving the PWD and constituent divisions, including Engineering Services, Transportation Engineering, Capital Projects, and Design/Construction, along with the Department of Conservation and Development (DCD), (current, advance, and sustainability). To ensure a realistic Workplan and encourage collaboration across departments, the Watershed Program has convened and coordinated a monthly GI Technical Advisory Group (TAG). The County also plans to work across departments to incorporate GI into multi-objective projects and plans within the County, among them the County General Plan Update (2020) and the Countywide Bike and Pedestrian Plan update (2017), in order to achieve multiple benefits, among them clean water and air, climate change resilience and mitigation, enhanced habitat values, and energy savings.

Because of the diversified characteristics of the County related to its land uses, soil permeability (varying from clay to sand), topography, existing roadway configurations, and right-of-way widths, which constrain 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 districts, 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 among its departments and programs and with its regional and nonprofit partners, the County will meet GI requirements and load reduction milestones.

2.0 GREEN INFRASTRUCTURE PLAN ELEMENTS & APPROACH

2.1 Interdepartmental Coordination and Community Outreach

To be successful, the GI Plan must engage a wide variety of stakeholders in plan, policy, and project concept development. Planned projects with multiple benefits may be proposed for streets, parks, schools or other public parcels. A successful GI planning team will include representatives from the municipal departments who plan and implement projects on these streets and parcels.

A necessary part of a successful planning approach is a robust and inclusive input and engagement of municipal staff and the community members who live, work, and play near proposed GI projects.

2.1.1 Interdepartmental Coordination

The County has developed a strategy to engage and educate its staff on the purposes and goals of GI, the required elements of the GI Plan, and the steps needed to develop and implement the GI Plan.

The County has also convened an interdepartmental committee, or Technical Advisory Group (TAG), coordinated by the County Watershed Program, to help define and implement the framework for the GI Plan. The County's GI Plan TAG consists of the departments and staff representatives shown in Table 1, (see following page).

The TAG has met four times in FY 16-17 to discuss the required elements and development of the County's GI Plan. (See also Section 1.4 for a more detailed discussion of the GI Plan TAG).

2.1.2. Community Engagement and Outreach

The County will develop a comprehensive community engagement and education strategy in order to educate public stakeholders on GI benefits and requirements and to engage them in the development of the County's GI Plan. Such outreach will include general outreach and targeted outreach and training for professionals involved in infrastructure planning and design. This effort is ongoing and will be coordinated countywide with the CCCWP.

Table 1. Interdepartmental Green Infrastructure Plan Technical Advisory Group

Staff	Department/Division and Role
Mitch Avalon	County Flood Control and Water Conservation District (FCD); <i>Strategic Planning relative to flood control and stormwater</i>
Mary Halle	PWD —Transportation Engineering; <i>Senior Transportation Engineer, Capital Road Projects</i>
Will Wahbeh	Capital Projects; Senior Project Mgr. <i>Capital Projects and GI</i>
Slava Gospodchikov	PWD — Design/Construction Division; <i>Senior Civil Engineer</i>
Jody London	DCD — <i>Sustainable Development and Climate Change Coordination</i>
Will Nelson	DCD — <i>Principal Planner, Advance Planning</i>
Gary Kupp	DCD — <i>Current Planning, C.3 Coordination with PWD</i>
Cece Sellgren	PWD — Watershed Program; <i>Stormwater Manager</i>
John Steere	PWD — Watershed Program; <i>TAG Convener/Coordinator</i>

2.2 Green Infrastructure Project Identification and Prioritization

The GI Plan must describe the mechanism by which the County will identify, prioritize and map potential and planned projects that incorporate GI 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.

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 GI feature, such as a vegetated area or stormwater capture or treatment facility, by the 2020, 2030, and 2040 milestones.

The County will use the following mechanisms to identify, prioritize, and map future GI projects:

2.2.1 Review of Capital Improvement Program Projects

The County must prepare and maintain a list of public and private GI projects planned for implementation during the permit term and public projects that have potential for GI measures. Public projects include all facility and infrastructure projects undertaken by the County, such as projects associated with roads, drainage systems, airports, parks, buildings, and parking lots. All projects must be evaluated for GI and include GI components as appropriate. Those projects that require GI but cannot due to, for example, limited right-of-way or limited opportunity for Pollutant of Concern (POC) load reduction, can meet the requirement through Alternative Compliance (see section 2.2.4 below). The County has begun this process and an initial list was submitted with the FY 2015-16 MRP Annual Report to the Regional Board.

The creation and maintenance of this list for public projects is supported by guidance developed by BASMAA: "Guidance for Identifying GI Potential in Municipal Capital Improvement Projects" (May 6, 2016). The BASMAA Guidance is attached to this document as **Appendix A**.

The GI Plan will document current implementation of this process within the County and will identify planned changes or needed improvements. Resultant project lists will be used to provide potential projects for incorporation into the GI Plan.

2.2.2 County Tools and Processes for GI Project Identification and Prioritization

County staff will develop a process and the resources for identifying and pursuing, on an ongoing basis, additional opportunities to construct GI projects in the County. This process and necessary resources to carry them out will be documented in the Plan and will address how multi-objective projects will be identified through a collaborative interdepartmental planning process. Using the "BASMAA Guidance for Identifying GI Potential..." the County Watershed Program will meet annually in the early spring with members of the TAG to review their Capital Improvement Projects (CIPs) to identify, prioritize, and map GI projects.

2.2.3 Use of Contra Costa Watersheds Stormwater Resource Plan Tools and Project Lists

The CCCWP has obtained a planning grant from the State Water Resources Control Board to develop a Stormwater Resource Plan for Contra Costa County. The Contra Costa Watersheds Stormwater Resources Plan (CCWSRP) will support the development and implementation of GI Plans within each Basin through identification of local and regional opportunities for GI projects and development of modeling tools for estimating pollutant load reductions over future timeframes. The resulting maps and tools will be available for local use by Contra Costa municipalities.

The CCWSRP will also produce a list of prioritized GI projects. The CCWSRP 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. Project concepts will also be assessed for additional benefits such as flood control, community greening, and habitat creation. The product of these analyses will be a map of opportunity areas for GI projects throughout the County, an initial prioritized list of potential projects, and strategies for implementation of these and future projects. The list of potential projects within Contra Costa County will be available for incorporation into the GI Plan project list.

The scope of work and schedule for the CCWSRP is provided in **Appendix B**.

2.2.4 Alternative Compliance

Provision C.3.e allows a project to meet its requirement for stormwater treatment through an alternative means. If a road project, for example, in an urbanized area has limited right-of-way for including GI, that requirement can be met by constructing a GI project elsewhere. The GI Plan will include developing GI projects to accommodate requirements for projects in other parts of the County that cannot meet their GI requirement within the limits of the project. This can include developing regional scale GI projects that can accommodate alternative compliance needs for multiple projects. The GI Plan will also include a mechanism for projects to pay an in-lieu fee towards funding alternative compliance GI projects.

2. 3 Evaluating Pollutant Load Reductions

The GI project prioritization criteria will consider opportunities to reduce loads of trash, mercury, PCBs, and other pollutants. It is anticipated that mercury and PCB pollutant load reductions will be evaluated for each project using a regionally developed Interim

Accounting Methodology, which is based on watershed locations and historic land uses. A draft of this regionally developed methodology was submitted to the Regional Board in the 2016 MRP Annual Report and the finalized methodology was released on March 23, 2017. Furthermore, it is anticipated that a Reasonable Assurance Analysis will be developed in cooperation with both regional and Countywide partners to demonstrate that reductions will be achieved in the timeframe required by the 2006 Mercury TMDL and the 2008 PCBs TMDL. The County's GI Plan will include a description of these two methodologies and they will be incorporated into the project prioritization criteria as much as possible.

The County also anticipates that these two methodologies will be used to help develop and/or confirm targets for the amount of impervious surface, from both public and private projects, within the County, which will need to be converted or "retrofitted" to drain to GI features, such as a vegetated area or stormwater treatment facility, or converted to pervious surfaces, by the MRP's 2020, 2030, and 2040 milestones.

2.4 Projecting Green Infrastructure Implementation

To develop the Reasonable Assurance Analysis demonstrating that pollutant load reductions will be achieved in the required timeframes, the GI Plan will include an estimate of the pace of future GI Implementation on public and private parcels. To estimate the pace of future implementation, the County will participate in development of a consistent Countywide or regional methodology for projecting private development in future decades. The projections will likely incorporate or adapt regional scenarios created by the Association of Bay Area Governments/Metropolitan Transportation Commission (ABAG/MTC) to estimate future implementation of GI in each municipality.

2.5 Completed Project Tracking System

The GI Plan will describe the County's process for tracking and mapping completed public and private projects and making the information available to the public. This information will include the area treated by each GI project. Through the CCCWP, the County is participating in development of a GIS that will allow spatial tracking and representation (maps) of GI projects and associated tributary drainage areas. The database will be used for tracking and reporting public projects, Regulated Projects (MRP Provision C.3.b.) including Special Projects (MRP Provision C.3.e.) and tracking operation and maintenance verification inspections of installed stormwater treatment facilities (MRP Provision C.3.h.).

The County's GI Plan will include an update on this Countywide/ regional project and the County's status and plans for integrating this tool into its processes for implementing

GI. Note that this initiative is currently underway, with cooperation and cost-sharing between the CCCWP and the Alameda Countywide Clean Water Program (ACCWP). The final framework will include an updated version of this project description, if available.

2.6 Design Guidance and Specifications for GI Projects

The GI Plan must include general design and construction guidelines, standard specifications and details (or references to those documents) for incorporating GI 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.

The County will collaborate with other Permittees, Countywide and regionally, to compile, reference, and/or develop this design guidance. Questions to be addressed in the review and compilation period include:

- Does existing design guidance address local needs? Are there local conditions or characteristics that require different guidance?
- To what extent would additional guidance, if developed, address the needs of multiple projects? Or are the design issues presented by local GI projects so site-specific that designs must be developed individually for each project?

The results of this review, and the status of design guidance to be used in future projects, will be discussed and presented in the GI Plan.

2.7 Sizing Requirements for Green Infrastructure Projects

The County's GI Plan must include a requirement that projects be designed to meet the treatment and hydromodification sizing requirements in MRP Provisions C.3.c. and C.3.d. The Permittees may collectively propose an approach on how to proceed should project constraints in nonregulated right of way projects preclude fully meeting the C.3.d. sizing requirements.

A BASMAA project is currently underway to analyze hydrologic data and bioretention facility performance under different sizing scenarios. It is anticipated that this project will result in recommendations for sizing GI in nonregulated right of way projects. The County's GI Plan will describe the outcomes of BASMAA's efforts and how those outcomes have been incorporated into local GI planning and design practices. BASMAA's guidance may include criteria to assist Permittees to determine when higher-

rate tree-box-type biofilters may be a more practical and effective mode of treatment than bioretention. The final framework will include an updated version of this project description, if available.

3.0 Integration with Existing Plans

3.1 Updates to Planning Documents

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 GI requirements. If any necessary updates or modifications have not been accomplished by the completion of the GI Plan in September 2019, then the GI Plan must include a workplan and schedule to complete them.

The County has reviewed its existing municipal planning documents and identified which documents need to be updated or modified to support and/or be consistent with the GI Plan. A summary of the results of the municipal plan review and a schedule for updates or modifications is in **Table 2**.

The GI Plan will also describe a process or processes, including criteria, to ensure future planning documents are consistent with its policies, processes, and tasks.

Table 2. Plans Requiring Updates/Coordination to Support Green Infrastructure Implementation

Name of Plan	Responsible Department/Staff	Last Updated	Next Projected Update (completed)
<i>General Plan Update</i> [by DCD]	DCD: Will Nelson	2005	2020
<i>Climate Action Plan for Unincorporated Contra Costa County</i>	DCD: Jody London	2015	NA
Capital Road Improvements Preservation Program (CRIPP)	Transportation Engineering (TE): Mary Halle	2016	2018
Countywide Bike and Pedestrian Plan	TE: Mary Halle; DCD: Robert Sarmiento	2009	2017
Storm Water Resources Plan	CCCWP: Rachel Kraai	Summer 2017 to 2018	NA
County FAA Airport Plans: Buchanan Airport Master Plan (MP) was completed; Byron Airport Master Plan	Airports: Keith Freitas; Beth Lee	2008 (Buchanan MP) 2006 (Byron)	2028 2026

Source: County GI Plan TAG (March 2017)

3.2 Adoption of Policies, Ordinances, and Other Legal Mechanisms to Support Green Infrastructure

The County will review its existing policies, ordinances, and other legal mechanisms (see **Table 3** below), to identify which documents may need to be updated or modified to help implement the GI Plan, and the timing for those actions. All needed updates, modifications, or new mechanism(s) will be completed and adopted (if necessary) by September 30, 2019.

County Staff will also collaborate with other Permittees, Countywide and regionally, to ensure policies, ordinances, and other legal mechanisms are consistent with those of other Permittees Countywide and regionally, while being tailored to the specific needs and characteristics of the County.

Table 3. Policies, Ordinances, and Legal Mechanisms to be Reviewed

Policy, Ordinance or Mechanism	Potential Action and Timeframe
Stormwater Management and Discharge Control; Ordinance No. 2005-01, Title 10.14	Revise Application (Chapter 1014-4 to include GI planning requirement; Full Trash capture devices for new commercial and Multi-family development as part of Land Use Permit COA's
Grading Ordinance; Title 7 (Bldg. Regulations), Chapter 716-2	Revisions to Grading Ordinance to be put in Stormwater Mgmt. and Discharge Ordinance
PWD — Design Manual	GI design criteria and references
Title 10 FCD and Drainage Fee Ordinance to accommodate Impervious Surface drainage improvement requirements	Drainage fees to be paid for LID (for County bldgs.) but not GI (for roads)
Subdivision Ordinance, Title 9	Applicant responsibilities toward GI/SW systems improvement; PWD: Engineering Services

Source: County GI Plan TAG (March 2017)

4.0 Evaluation of Funding Options

The GI Plan must include an evaluation of funding options for design, construction, and long-term maintenance of prioritized GI projects, considering local, state, and federal funding sources. The County will analyze possible funding options to raise additional revenue for the projects that will eventually be included in its GI Plan, including capital and operation and maintenance (O&M) costs of these projects. Options for capital project funding include: CA Proposition 1 Stormwater Grant Program implementation grants from the Regional Board; Prop 1 IRWMP, State Coastal Conservancy, Resource Agency, and DWR grants; EPA State Revolving Fund (zero interest loans); the EPA's San Francisco Bay Water Quality Improvement Fund grants; and California Urban Rivers Grants; Options for O&M funding include development of community facilities districts (CFDs) around roads or business districts to fund and/or maintain GI to be installed. Additional funding options that will be explored by County include:

- **Off-site 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 off-site, 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 GI 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 essential 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 (GI) facility.
- **Public-Private Partnerships** — An option in which GI 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.

5.0 Task List, Timeframes, and Budget

5.1 Tasks and Timeframes

This section describes the timeframes 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 so have not been started yet. The tasks identified for this framework are shown in **Table 4** below. CCCWP staff and consultants have provided this Model Table with task descriptions, roles, and timeframes that was approved by the CCCWP Management Committee. CCCWP staff made an initial determination of which tasks can be supported by the CCCWP and the CCSWRP and which tasks will need to be completed by the County; it was conducted based on an understanding of available staff time, budget, and resources. It was reviewed and corroborated by the GI Plan TAG.

5.2 Budget

The County has included \$150,000 in its FY 2017-2018 budget for completion of these tasks toward the preparation of a GI Plan Framework and initiation of the Plan. Based on initial cost estimates, County staff currently plans to propose an additional \$200,000 budget for this purpose in Fiscal Year 2018-2019, for a total of \$350,000 to be expended on preparation of the GI Plan. See **Appendix C** for a GI Plan process and budget analysis.

Table 4 Green Infrastructure Planning Tasks, Roles, and Timeframes

#	Task Description (+ reference to the specific sub-provision within Provision C.3.j. that is addressed by the task)	Lead			Estimated Timeframe	Resources and Notes <i>This task list and schedule is a living document and will be refined over the course of the Green Infrastructure Plan development process.</i>
		Local	CCCWP	BASMAA		
Tasks that should have been completed or should be scheduled now						
1	Provide a staff report to the County Board of Supervisors (BOS) - Transportation, Water and Infrastructure Committee regarding the Green Infrastructure Provision (C.3.j.i.(4)(c))	●			June - October, 2016	<i>See the CCCWP model staff report; given by Mitch Avalon</i>
2	Provide a presentation and training to interdepartmental staff regarding the Green Infrastructure Provision (C.3.j.i.(4)(b))	●			Feb. 2017	<i>Adapted the CCCWP model presentation and gave to County GI Plan TAG</i>
3	Convene an interdepartmental Green Infrastructure Plan TAG	●			Feb. 2017	
4	Identify planning documents requiring updates and integration with Green Infrastructure planning (C.3.j.i.(4)(h))	●			Feb. 2017	
5	Develop a draft budget and staff assignments for completing the Green Infrastructure Plan during 2017-2019	●			October 2016	<i>Given to BOS - Transportation, Water and Infrastructure Committee</i>
6	Establish procedures and responsibilities for reviewing capital improvement projects (early implementation) (C.3.j.ii.)	●			April - June 30, 2016	<i>Used BASMAA "Guidance for Identifying Green Infrastructure Potential in Municipal Capital Improvement Projects" and met with relevant County PWD divisions.</i>
7	Begin discussions of strategy for developing capacity to plan, seek funding for, and implement Green Infrastructure projects	●			June 2016 to Feb. 2017	
8	Coordinate within and between departments to develop concepts for integrated projects that serve multiple objectives	●			Dec. 2016 to Feb. 2017	<i>State Coastal Conservancy Urban Greening Grant Proposal: "N. Richmond Watershed Connections"</i>
Tasks to complete by June 30, 2017						
9	Complete the Green Infrastructure Plan Framework and have it approved by the Council, Board, or City/Town Manager (C.3.j.i.(1)) and (C.3.j.i.(5)(a))					
A	Create a schedule for approval of the Framework	●			April 2017	
B	Prepare a draft Framework	●			April 2017	<i>See the Framework template provided by CCCWP</i>
C	Circulate and obtain comments on the draft Framework from TAG	●			April 2017	
D	Finalize Framework	●			May 2017	
E	Prepare a Staff Report and Presentation (as needed) for the Framework	●			May 2017	
F	Obtain Board of Supervisors Action	●			By June 30	
Tasks to complete July 1, 2017 - September 30, 2019						
10	Draft Green Infrastructure Plan (C.3.j.i.(2))					
A	Review and revise schedule for provision of resources to be provided countywide or regionally		●		July-Aug. 2017	

#	Task Description (+ reference to the specific sub-provision within Provision C.3.j. that is addressed by the task)	Lead			Estimated Timeframe	Resources and Notes <i>This task list and schedule is a living document and will be refined over the course of the Green Infrastructure Plan development process.</i>
		Local	CCCWP	BASMAA		
B	Obtain consultant resources to assist with Plan preparation	●			Aug. 2017	
C	Create a detailed schedule for completion and approval of the Green Infrastructure Plan, and for submittal with the 2019 Annual Report	●			Aug. 2017	
D	Prepare a Green Infrastructure Plan Template		●		Dec. 2017	<i>The scope of this deliverable was discussed with the CCCWP Development Committee in March 2017.</i>
E	Draft the Green Infrastructure Plan	●			Jan. 2018 – Feb. 2019	<i>The Green Infrastructure Plan will include locally originated elements and adaptation of resources produced countywide and regionally (see tasks below)</i>
F	Circulate, obtain comments and revise the draft Plan	●			Mar.-May 2019	
G	Board of Supervisors action to approve the Green Infrastructure Plan and any policies required to implement the Plan	●			May – Aug. 2019	
H	Submit the Green Infrastructure Plan	●			Sept. 2019	
11	Mechanism for Identifying and Prioritizing Projects					
A	Create or adopt a mechanism to locate, prioritize, and map areas for potential and planned public projects on a drainage-area-specific basis (C.3.j.i.(2)(a))		●		March 2018*	<i>*Tasks 4.4 & 4.5 in CCSWRP Scope of Work. Note that this schedule is currently under review with the State Water Board.</i>
B	Identify targets for the amount of impervious surface to be retrofitted by 2020, 2030, and 2040 (C.3.j.i.(2)(c))	●	●		March 2018	<i>The task will be further discussed with the CCCWP Development Committee in 2017. It is assumed that the CCCWP will, at a minimum, provide guidance on the methodology to complete this task</i>
C	Identify and prioritize projects and/or areas for potential projects for implementation by 2020, 2030, and 2040, consistent with the Reasonable Assurance Analysis (C.3.j.i.(2)(b) and C.3.j.iv.(1))	●	●		March 2018	<i>The task will be further discussed with the CCCWP Development Committee in 2017. It is assumed that the CCCWP will, at a minimum, provide guidance on the methodology to complete this task</i>
12	Project Amount and Locations of Private Development (C.3.j.i.(2)(c))					
A	Identify or develop a methodology for projecting amount and locations of private development		●		July 2017	<i>CCCWP will coordinate with other countywide stormwater programs with the aim of making methodologies consistent regionally.</i>
B	Apply methodology and revise/validate projections of private development based on local understanding and knowledge of development patterns	●			June 2018	
13	List of Prioritized Projects (C.3.j.i.(2)(b))					
A	Develop list of project concepts and prioritize based on evaluation of multiple benefits		●		Dec. 2017*	<i>*Task 4.5 in the CCSWRP Scope of Work. Note that this schedule is currently under review with the State Water Board.</i>
B	Revise/validate project lists based on local knowledge	●			Jan.-Mar. 2018	

#	Task Description (+ reference to the specific sub-provision within Provision C.3.j. that is addressed by the task)	Lead			Estimated Timeframe	Resources and Notes <i>This task list and schedule is a living document and will be refined over the course of the Green Infrastructure Plan development process.</i>
		Local	CCCWP	BASMAA		
	C Identify projects that may be candidates for grant funding, including funding under Round 2 of the Prop. 1 Stormwater Grant Program	●			March 2018	
14	Early Implementation					
	A Prepare workplans to complete prioritized projects produced from capital improvement program review (C.3.j.i.(2)(j))	●			Nov.-Dec. 2017	<i>And subsequent years. Workplans should be produced following reporting of projects in Annual Report and in time for consideration in following year's budget.</i>
	B Prepare workplans for additional staff-identified Green Infrastructure projects	●			Nov.-Dec. 2017	<i>And for subsequent years.</i>
	C Incorporate the lists of early implementation projects and additional staff-identified projects and associated workplans into the Green Infrastructure Plan	●			Jan. 2019	
15	Supporting Elements and Associated Tasks					
	A Develop a model ordinance, policy or policies for Green Infrastructure Plan Implementation (C.3.j.i.(3))		●		Dec 2018	<i>The need for CCCWP assistance with this task, and the scope of any resulting deliverables, will be discussed with the CCCWP Development Committee in 2017 and 2018.</i>
	B Review local ordinances, policies, and resolutions and determine if updates are needed to support implementation of Green Infrastructure. Document this review in the 2019 Annual Report (C.3.j.i.(5)(c))	●			June 2018	
	C Prepare an analysis of potential funding options for Green Infrastructure Projects (C.3.j.i.(2))		●		Dec 2017	<i>The scope of this deliverable will be further discussed with the CCCWP Development Committee in Spring 2017.</i>
	D Analyze funding options for Green Infrastructure Projects and applicability to local conditions (C.3.j.i.(2)(k))	●			June 2018	
	E Develop Green Infrastructure Design Guidelines for streetscapes and other public infrastructure (C.3.j.i.(2)(e))		●		June 2018	<i>The scope of this deliverable will be further discussed with the CCCWP Development Committee in Spring 2017.</i>
	F Develop specifications and typical design details for Green Infrastructure (C.3.j.i.(2)(f))		●		June 2018	<i>The scope of this deliverable will be further discussed with the CCCWP Development Committee in Spring 2017.</i>
	G Develop sizing criteria for Green Infrastructure facilities in non-Regulated right-of-way projects (C.3.j.i.(2)(g))			●	Sep. 2017	<i>See BASMAA's December 2016 RFP to analyze hydrologic data and bioretention facility performance</i>
	H Develop regionally consistent methods to track and report implementation of green infrastructure measures, including load reductions achieved (C.3.j.iv.(1))			●	Dec. 2017	<i>Being developed in cooperation with ACCWP</i>
16	Update Planning Documents (C.3.j.i.(2)(h))					
	A Review planning documents and identify potentially needed updates	●			Mar. 2017	
	B Update planning documents	●			Jul. 2017 – Jun. 2019	

#	Task Description (+ reference to the specific sub-provision within Provision C.3.j. that is addressed by the task)	Lead			Estimated Timeframe	Resources and Notes <i>This task list and schedule is a living document and will be refined over the course of the Green Infrastructure Plan development process.</i>
		Local	CCCWP	BASMAA		
C	Identify remaining updates and reference in Green Infrastructure Plan (C.3.j.i.(2)(i))	●			Jul. 2019	
17	Outreach and Education (C.3.j.i.(4))					
A	Participate in countywide and regional Green Infrastructure outreach and education efforts, including general outreach and targeted outreach and training for professionals involved in infrastructure planning and design (C.3.j.iii.)		●		Jul. 2017 – Jun. 2019	
B	Implement Green Infrastructure outreach and education in connection with planning and design of green infrastructure projects (C.3.j.i.(4)(a))	●			Now – Jun. 2019	<i>And ongoing</i>
C	Develop a stakeholder education and engagement plan for Green Infrastructure Plan development, including outreach and education about the required Green Infrastructure Plan elements.	●				<i>CCCWP to assist with content</i>
D	Incorporate Green Infrastructure outreach on municipal websites	●			Now – Jun. 2019	<i>CCCWP to assist with content</i>
E	Provide updates to elected officials on Green Infrastructure requirements and methods of implementation (C.3.j.i.(4)(c))	●			Periodic	<i>CCCWP to assist with content</i>

BASMAA Development Committee

Guidance for Identifying Green Infrastructure Potential
in Municipal Capital Improvement Program Projects
May 6, 2016

Background

In the recently reissued [Municipal Regional Stormwater Permit](#) (“MRP 2.0”), Provision C.3.j. requires Permittees to develop and implement Green Infrastructure Plans to reduce the adverse water quality impacts of urbanization on receiving waters over the long term. Provisions C.11 and C.12 require the Permittees to reduce discharges of Mercury and PCBs, and portion of these load reductions must be achieved by implementing Green Infrastructure. Specifically, Permittees collectively must implement Green Infrastructure to reduce mercury loading by 48 grams/year and PCB loading by 120 grams/year by 2020, and plan for substantially larger reductions in the following decades. Green Infrastructure on both public and private land will help to meet these load reduction requirements, improve water quality, and provide multiple other benefits as well. Implementation on private land is achieved by implementing stormwater requirements for new development and redevelopment (Provision C.3.a. through Provision C.3.i.). These requirements were carried forward, largely unchanged, from MRP 1.0.

MRP 2.0 defines Green Infrastructure as:

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 site, green infrastructure refers to stormwater management systems that mimic nature by soaking up and storing water.

In practical terms, most green infrastructure will take the form of diverting runoff from existing streets, roofs, and parking lots to one of two stormwater management strategies:

1. Dispersal to vegetated areas, where sufficient landscaped area is available and slopes are not too steep.
2. LID (bioretention and infiltration) facilities, built according to criteria similar to those currently required for regulated private development and redevelopment projects under Provision C.3.

In some cases, the use of tree-box-type biofilters may be appropriate¹. In other cases, where conditions are appropriate, existing impervious pavements may be removed and replaced with pervious pavements.

In MRP 2.0, Provision C.3.j. includes requirements for Green Infrastructure planning and implementation. Provision C.3.j. has two main elements to be implemented by municipalities:

1. Preparation of a Green Infrastructure Plan for the inclusion of LID drainage design into storm drain infrastructure on public and private land, including streets, roads, storm drains, etc.
2. Early implementation of green infrastructure projects (“no missed opportunities”),

This guidance addresses the second of these requirements. The intent of the “no missed opportunities” requirement is to ensure that no major infrastructure project is built without assessing the opportunity for incorporation of green infrastructure features.

Provision C.3.j.ii. requires that each Permittee prepare and maintain a list of green infrastructure projects, public and private, that are already planned for implementation during the permit term (not including C.3-regulated projects), and infrastructure projects planned for

¹ Standard proprietary tree-box-type biofilters are considered to be non-LID treatment and will only be allowed under certain circumstances. Guidance on use and sizing of these facilities will be provided in a separate document.

implementation during the permit term that have potential for green infrastructure measures. The list must be submitted with each Annual Report, including:

“... a summary of how each public infrastructure project with green infrastructure potential will include green infrastructure measures to the maximum extent practical during the permit term. For any public infrastructure project where implementation of green infrastructure measures is not practicable, submit a brief description for the project and the reasons green infrastructure measures were impracticable to implement”.

This requirement has no specified start date; “during the permit term” means beginning January 1, 2016 and before December 31, 2020. The first Annual Report submittal date will be September 30, 2016.

Note that this guidance primarily addresses the review of proposed or planned public projects for green infrastructure opportunities. The Permittee may also be aware of proposed or planned private projects, not subject to LID treatment requirements, that may have the opportunity to incorporate green infrastructure. These should be addressed in the same way as planned public projects, as described below.

Procedure for Review of Planned Public Projects and Annual Reporting

The municipality’s Capital Improvement Program (CIP) project list provides a good starting point for review of proposed public infrastructure projects. Review of other lists of public infrastructure projects, such as those proposed within separately funded special districts (e.g., lighting and landscape districts, maintenance districts, and community facilities districts), may also be appropriate. This section describes a two-part procedure for conducting the review.

Part 1 – Initial Screening

The first step in reviewing a CIP or other public project list is to screen out certain types of projects from further consideration. For example, some projects (e.g., interior remodels, traffic signal replacement) can be readily identified as having no green infrastructure potential. Other projects may appear on the list with only a title, and it may be too early to identify whether green infrastructure could be included. Still others have already progressed past the point where the design can reasonably be changed (this will vary from project to project, depending on available budget and schedule).

Some “projects” listed in a CIP may provide budget for multiple maintenance or minor construction projects throughout the jurisdiction or a portion of the jurisdiction, such as a tree planting program, curb and sidewalk repair/upgrade, or ADA curb/ramp compliance. It is recommended that these types of projects not be included in the review process described herein. The priority for incorporating green infrastructure into these types of projects needs to be assessed as part of the Permittees’ development of Green Infrastructure Plans, and standard details and specifications need to be developed and adopted. During this permit term, Permittees will evaluate select projects, project types, and/or groups of projects as case studies and develop an approach as part of Green Infrastructure planning.

The projects removed through the initial screening process do not need to be reported to the Water Board in the Permittee’s Annual Report. However, the process should be documented and records kept as to the reason the project was removed from further consideration. Note that projects that were determined to be too early to assess will need to be reassessed during the next fiscal year’s review.

The following categories of projects may be screened out of the review process in a given fiscal year:

1. **Projects with No Potential** - The project is identified in initial screening as having no green infrastructure potential based on the type of project. For example, the project does not include any exterior work. Attachment 1 provides a suggested list of such projects that Permittees may use as a model for their own internal process.

2. **Projects Too Early to Assess** – There is not yet enough information to assess the project for green infrastructure potential, or the project is not scheduled to begin design within the permit term (January 2016 – December 2020). If the project is scheduled to begin within the permit term, an assessment will be conducted if and when the project moves forward to conceptual design.
3. **Projects Too Late to Change** – The project is under construction or has moved to a stage of design in which changes cannot be made. The stage of design at which it is too late to incorporate green infrastructure measures varies with each project, so a “percent-complete” threshold has not been defined. Some projects may have funding tied to a particular conceptual design and changes cannot be made even early in the design process, while others may have adequate budget and time within the construction schedule to make changes late in the design process. Agencies will need to make judgments on a case-by-case basis.
4. **Projects Consisting of Maintenance or Minor Construction Work Orders** – The “project” includes budgets for multiple maintenance or minor construction work orders throughout the jurisdiction or a portion of the jurisdiction. These types of projects will not be individually reviewed for green infrastructure opportunity but will be considered as part of a municipality’s Green Infrastructure Plan.

Part 2 – Assessment of Green Infrastructure Potential

After the initial screening, the remaining projects either already include green infrastructure or will need to go through an assessment process to determine whether or not there is potential to incorporate green infrastructure. A recommended process for conducting the assessment is provided later in this guidance. As a result of the assessment, the project will fall into one of the following categories with associated annual reporting requirements. Attachment 2 provides the relevant pages of the FY 15-16 Annual Report template for reference.

- **Project is a C.3-regulated project and will include LID treatment.**

Reporting: Follow current C.3 guidance and report the project in Table C.3.b.iv.(2) of the Annual Report for the fiscal year in which the project is approved.

- **Project already includes green infrastructure and is funded.**

Reporting: List the project in “Table B-Planned Green Infrastructure Projects” in the Annual Report, indicate the planning or implementation status, and describe the green infrastructure measures to be included.

- **Project may have green infrastructure potential** pending further assessment of feasibility, incremental cost, and availability of funding.

Reporting: If the feasibility assessment is not complete and/or funding has not been identified, list the project in “Table A-Public Projects Reviewed for Green Infrastructure” in the Annual Report. In the “GI Included?” column, state either “TBD” (to be determined) if the assessment is not complete, or “Yes” if it has been determined that green infrastructure is feasible. In the rightmost column, describe the green infrastructure measures considered and/or proposed, and note the funding and other contingencies for inclusion of green infrastructure in the project. Once funding for the project has been identified, the project should be moved to “Table B-Planned Green Infrastructure Projects” in future Annual Reports.

- **Project does not have green infrastructure potential.** A project-specific assessment has been completed, and Green Infrastructure is impracticable.

Reporting: In the Annual Report, list the project in “Table A-Public Projects Reviewed for Green Infrastructure”. In the “GI Included?” column, state “No.” Briefly state the reasons for the determination in the rightmost column. Prepare more detailed documentation of the reasons for the determination and keep it in the project files.

Process for Assessing Green Infrastructure Potential of a Public Infrastructure Project

Initial Assessment of Green Infrastructure Potential

Consider opportunities that may be associated with:

- Alterations to roof drainage from existing buildings
- New or replaced pavement or drainage structures (including gutters, inlets, or pipes)
- Concrete work
- Landscaping, including tree planting
- Streetscape improvements and intersection improvements (other than signals)

Step 1: Information Collection/Reconnaissance

For projects that include alterations to building drainage, identify the locations of roof leaders and downspouts, and where they discharge or where they are connected to storm drains.

For street and landscape projects:

- Evaluate potential opportunities to substitute pervious pavements for impervious pavements.
- Identify and locate drainage structures, including storm drain inlets or catch basins.
- Identify and locate drainage pathways, including curb and gutter.

Identify landscaped areas and paved areas that are adjacent to, or down gradient from, roofs or pavement. These are potential facility locations. *If there are any such locations, continue to the next step.* Note that the project area boundaries may be, but are not required to be, expanded to include potential green infrastructure facilities.

Step 2: Preliminary Sizing and Drainage Analysis

Beginning with the potential LID facility locations that seem most feasible, identify possible pathways to direct drainage from roofs and/or pavement to potential LID facility locations—by sheet flow, valley gutters, trench drains, or (where gradients are steeper) via pipes, based on existing grades and drainage patterns. Where existing grades constrain natural drainage to potential facilities, the use of pumps may be considered (as a less preferable option).

Delineate (roughly) the drainage area tributary to each potential LID facility location. Typically, this requires site reconnaissance, which may or may not include the use of a level to measure relative elevations.

Use the following preliminary sizing factor (facility area/tributary area) for the potential facility location and determine which of the following could be constructed within the existing right-of-way or adjacent vacant land. Note that these sizing factors are guidelines (not strict rules, but targets):

- Sizing factor ≥ 0.5 for dispersal to landscape or pervious pavement² (i.e., a maximum 2:1 ratio of impervious area to pervious area)
- Sizing factor ≥ 0.04 for bioretention
- Sizing factor ≥ 0.004 (or less) for tree-box-type biofilters

For bioretention facilities requiring underdrains and tree-box-type biofilters, note if there are potential connections from the underdrain to the storm drain system (typically 2.0 feet below soil surface for bioretention facilities, and 3.5 feet below surface for tree-box-type biofilters).

² Note that pervious pavement systems are typically designed to infiltrate only the rain falling on the pervious pavement itself, with the allowance for small quantities of runoff from adjacent impervious areas. If significant runoff from adjacent areas is anticipated, preliminary sizing considerations should include evaluation of the depth of drain rock layer needed based on permeability of site soils.

If, in this step, you have confirmed there may be feasible potential facility locations, *continue to the next step.*

Step 3: Barriers and Conflicts

Note that barriers and conflicts do not necessarily mean implementation is infeasible; however, they need to be identified and taken into account in future decision-making, as they may affect cost or public acceptance of the project.

Note issues such as:

- Confirmed or potential conflicts with subsurface utilities
- Known or unknown issues with property ownership, or need for acquisition or easements
- Availability of water supply for irrigation, or lack thereof
- Extent to which green infrastructure is an “add on” vs. integrated with the rest of the project

Step 4: Project Budget and Schedule

Consider sources of funding that may be available for green infrastructure. It is recognized that lack of budget may be a serious constraint for the addition of green infrastructure in public projects. For example, acquisition of additional right-of-way or easements for roadway projects is not always possible. Short and long term maintenance costs also need to be considered, and jurisdictions may not have a funding source for landscape maintenance, especially along roadways. The objective of this process is to identify opportunities for green infrastructure, so that if and when funding becomes available, implementation may be possible.

Note any constraints on the project schedule, such as a regulatory mandate to complete the project by a specific date, grant requirements, etc., that could complicate aligning a separate funding stream for the green infrastructure element. Consider whether cost savings could be achieved by integrating the project with other planned projects, such as pedestrian or bicycle safety improvement projects, street beautification, etc., if the schedule allows.

Step 5: Assessment—Does the Project Have Green Infrastructure Potential?

Consider the ancillary benefits of green infrastructure, including opportunities for improving the quality of public spaces, providing parks and play areas, providing habitat, urban forestry, mitigating heat island effects, aesthetics, and other valuable enhancements to quality of life.

Based on the information above, would it make sense to include green infrastructure into this project—*if funding were available for the potential incremental costs of including green infrastructure in the project?* Identify any additional conditions that would have to be met for green infrastructure elements to be constructed consequent with the project.

Attachment 1

Examples of Projects with No Potential for Green Infrastructure

- Projects with no exterior work (e.g., interior remodels)
- Projects involving exterior building upgrades or equipment (e.g., HVAC, solar panels, window replacement, roof repairs and maintenance)
- Projects related to development and/or continued funding of municipal programs or related organizations
- Projects related to technical studies, mapping, aerial photography, surveying, database development/upgrades, monitoring, training, or update of standard specs and details
- Construction of new streetlights, traffic signals or communication facilities
- Minor bridge and culvert repairs/replacement
- Non-stormwater utility projects (e.g., sewer or water main repairs/replacement, utility undergrounding, treatment plant upgrades)
- Equipment purchase or maintenance (including vehicles, street or park furniture, equipment for sports fields and golf courses, etc.)
- Irrigation system installation, upgrades or repairs

Attachment 2

**Excerpts from the C.3 Section of the FY 15-16 Annual Report Template:
Tables for Reporting C.3-Regulated Projects and Green Infrastructure Projects**

Permittee Name: _____

C.3.b.iv.(2) ► Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location ⁹ , Street Address	Name of Developer	Project Phase No. ¹⁰	Project Type & Description ¹¹	Project Watershed ¹²	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New Impervious Surface Area (ft ²) ¹³	Total Replaced Impervious Surface Area (ft ²) ¹⁴	Total Pre-Project Impervious Surface Area ¹⁵ (ft ²)	Total Post-Project Impervious Surface Area ¹⁶ (ft ²)
Private Projects											
Public Projects											
Comments:											
Guidance: If necessary, provide any additional details or clarifications needed about listed projects in this box. Do not leave any cells blank.											

⁹Include cross streets

¹⁰If a project is being constructed in phases, indicate the phase number and use a separate row entry for each phase. If not, enter "NA".

¹¹Project Type is the type of development (i.e., new and/or redevelopment). Example descriptions of development are: 5-story office building, residential with 160 single-family homes with five 4-story buildings to contain 200 condominiums, 100 unit 2-story shopping mall, mixed use retail and residential development (apartments), industrial warehouse.

¹²State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.

¹³All impervious surfaces added to any area of the site that was previously existing pervious surface.

¹⁴All impervious surfaces added to any area of the site that was previously existing impervious surface.

¹⁵For redevelopment projects, state the pre-project impervious surface area.

¹⁶For redevelopment projects, state the post-project impervious surface area.

Permittee Name: _____

C.3.b.iv.(2) ► Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (public projects)

Project Name Project No.	Approval Date ²⁹	Date Construction Scheduled to Begin	Source Control Measures ³⁰	Site Design Measures ³¹	Treatment Systems Approved ³²	Operation & Maintenance Responsibility Mechanism ³³	Hydraulic Sizing Criteria ³⁴	Alternative Compliance Measures ^{35/36}	Alternative Certification ³⁷	HM Controls ^{38/39}
Public Projects										
Comments: Guidance: If necessary, provide any additional details or clarifications needed about listed projects in this box. Note that MRP Provision C.3.c. contains specific requirements for LID site design and source control measures, as well as treatment measures, for <u>all</u> Regulated Projects. Entries in these columns should not be "None" or "NA". Do not leave any cells blank.										

²⁹For public projects, enter the plans and specifications approval date.

³⁰List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.

³¹List site design measures approved for the project. Examples include: minimize impervious surfaces; conserve natural areas, including existing trees or other vegetation, and soils; construct sidewalks, walkways, and/or patios with permeable surfaces, etc.

³²List all approved stormwater treatment system(s) to be installed onsite or at a joint stormwater treatment facility (e.g., flow through planter, bioretention facility, infiltration basin, etc.).

³³List the legal mechanism(s) (e.g., maintenance plan for O&M by public entity, etc...) that have been or will be used to assign responsibility for the maintenance of the post-construction stormwater treatment systems.

³⁴See Provision C.3.d.i. "Numeric Sizing Criteria for Stormwater Treatment Systems" for list of hydraulic sizing design criteria. Enter the corresponding provision number of the appropriate criterion (i.e., 1.a., 1.b., 2.a., 2.b., 2.c., or 3).

³⁵For Alternative Compliance at an offsite location in accordance with Provision C.3.e.i.(1), on a separate page, give a discussion of the alternative compliance site including the information specified in Provision C.3.b.v.(1)(m)(i) for the offsite project.

³⁶For Alternative Compliance by paying in-lieu fees in accordance with Provision C.3.e.i.(2), on a separate page, provide the information specified in Provision C.3.b.v.(1)(m)(ii) for the Regional Project.

³⁷Note whether a third party was used to certify the project design complies with Provision C.3.d.

³⁸If HM control is not required, state why not.

³⁹If HM control is required, state control method used (e.g., method to design and size device(s) or method(s) used to meet the HM Standard, and description of device(s) or method(s) used, such as detention basin(s), bioretention unit(s), regional detention basin, or in-stream control).

C.3.j.ii.(2) ► Table A - Public Projects Reviewed for Green Infrastructure

Project Name and Location ⁴³	Project Description	Status ⁴⁴	GI Included? ⁴⁵	Description of GI Measures Considered and/or Proposed or Why GI is Impracticable to Implement ⁴⁶
EXAMPLE: Storm drain retrofit, Stockton and Taylor	Installation of new storm drain to accommodate the 10-yr storm event	Beginning planning and design phase	TBD	Bioretention cells (i.e., linear bulb-outs) will be considered when street modification designs are incorporated

C.3.j.ii.(2) ► Table B - Planned Green Infrastructure Projects

Project Name and Location ⁴⁷	Project Description	Planning or Implementation Status	Green Infrastructure Measures Included
EXAMPLE: Martha Gardens Green Alleys Project	Retrofit of degraded pavement in urban alleyways lacking good drainage	Construction completed October 17, 2015	The project drains replaced concrete pavement and existing adjacent structures to a center strip of pervious pavement and underlying infiltration trench.

⁴³ List each public project that is going through your agency’s process for identifying projects with green infrastructure potential.
⁴⁴ Indicate status of project, such as: beginning design, under design (or X% design), projected completion date, completed final design date, etc.
⁴⁵ Enter “Yes” if project will include GI measures, “No” if GI measures are impracticable to implement, or “TBD” if this has not yet been determined.
⁴⁶ Provide a summary of how each public infrastructure project with green infrastructure potential will include green infrastructure measures to the maximum extent practicable during the permit term. If review of the project indicates that implementation of green infrastructure measures is not practicable, provide the reasons why green infrastructure measures are impracticable to implement.
⁴⁷ List each planned (and expected to be funded) public and private green infrastructure project that is not also a Regulated Project as defined in Provision C.3.b.ii. Note that funding for green infrastructure components may be anticipated but is not guaranteed to be available or sufficient.

WHEREAS,

1. The State Water Board is authorized to provide funding under this Agreement pursuant to the following:
 - Proposition 1 Storm Water - Section 79747 of the Water Code (Prop 1)
2. The State Water Board determines eligibility for financial assistance, determines a reasonable schedule for providing financial assistance, establishes compliance with Prop 1, and establishes the terms and conditions of a funding agreement.
3. The Recipient has applied to the State Water Board for funding for the Project described in Exhibit A of this Agreement and the State Water Board has selected the application for funding through a competitive process.
4. The State Water Board proposes to assist in funding the costs of the Project, and the Recipient desires to participate as a recipient of financial assistance from the State Water Board, upon the terms and conditions set forth in this Agreement, all pursuant to Prop 1;

NOW, THEREFORE, in consideration of the premises, mutual representations, covenants and agreements in this Agreement, the State Water Board and the Recipient, each binding itself, its successors and assigns, do mutually promise, covenant, and agree as follows:

1. Definitions.

Unless otherwise specified, each capitalized term used in this Agreement has the following meaning:

“Agreement” means this Grant Agreement, including all exhibits and attachments hereto.

“Authorized Representative” means the duly appointed representative of the Recipient as set forth in the certified original of the Recipient’s authorizing resolution that designates the authorized representative by title.

“Days” means calendar days unless otherwise expressly indicated.

“Disbursement Period” means the period during which Grant Funds may be disbursed.

“Disbursement Request” means the form used by the Recipient to document Match Funds and request reimbursement of Project Costs.

“Division” means the Division of Financial Assistance of the State Water Board or any other segment of the State Water Board authorized to administer the funding program(s) set forth in Section 1.

“Eligible Start Date” means the date set forth in Exhibit B, establishing the date on or after which reimbursable Project Costs may be incurred and eligible for reimbursement hereunder.

“Final Disbursement Request Date” means the date established in Exhibit B, after which date, no further Grant Funds disbursements may be requested.

“Fiscal Year” means the period of twelve (12) months terminating on June 30 of any year.

“Force Account” means the use of the Recipient's own employees or resources for the Project.

“GAAP” means generally accepted accounting principles, as issued by the Governmental Accounting Standards Board.

“Grant Contact” means the employee of the Recipient that has been delegated by the Project Director to oversee the day-to-day activities of the Project.

“Grant Funds” means funds provided by the State Water Board towards eligible reimbursable Project Costs.

“Grant Manager” means the person designated by the State Water Board to manage performance of the Agreement. The Grant Manager is set forth in Section 2 of this agreement.

“Guidelines” means the State Water Board’s “Proposition 1 Storm Water Grant Program Guidelines,” as amended from time to time.

“Indirect Costs” means those costs that are incurred for a common or joint purpose benefiting more than one cost objective and are not readily assignable to the Project (i.e., costs that are not directly related to the Project). Examples of Indirect Costs include, but are not limited to: central service costs; general administration of the Recipient; non-project-specific accounting and personnel services performed within the Recipient’s organization; depreciation or use allowances on buildings and equipment; the costs of operating and maintaining non-project-specific facilities; tuition and conference fees; generic overhead or markup; and taxes.

“Match Funds” means funds provided by the Recipient towards the Project Costs incurred after November 4, 2014.

“Party Contact” means, for the Recipient, the Authorized Representative of the Recipient or any designee of the Authorized Representative, and, for the State Water Board, the Grant Manager, or the Program Analyst.

“Project” means the Project as described in Exhibit A and in the documents incorporated by reference.

“Project Completion” means, as determined by the Division, that the Project is complete to the reasonable satisfaction of the Division.

“Project Costs” means the incurred costs of the Recipient which are eligible under this Agreement, which are allowable costs as defined under the Guidelines, and which are reasonable, necessary and allocable by the Recipient to the Project under GAAP.

“Project Director” means an employee of the Recipient designated by the Authorized Representative to be responsible for the overall management of the administrative and technical aspects of the executed Agreement. The Project Director is set forth in Section 2 of this Agreement.

“Recipient” means the Contra Costa County Flood Control and Water Conservation District.

“Regional Water Quality Control Board” or “Regional Water Board” means the appropriate Regional Water Quality Control Board.

“State” means State of California.

“State Water Board” means the California State Water Resources Control Board, an administrative and regulatory agency of the State of California.

“SWRP Guidelines” means the State Water Resources Control Board’s “Storm Water Resource Plan Guidelines” as amended from time to time.

“Work Completion” means the Recipient’s submittal of all work set forth under Exhibit A for review and approval by the Division. The Division may require corrective work to be performed prior to Project Completion. Any work occurring after the Work Completion Date will not be reimbursed under this Agreement.

“Work Completion Date” means the date set forth in Exhibit A that is the last date on which Project Costs may be incurred under this Agreement.

“Year” means calendar year unless otherwise expressly indicated.

2. Party Contacts.

The Party Contacts during the term of this Agreement are:

State Water Board	Recipient: Contra Costa County Flood Control and Water Conservation District
Section: Division of Financial Assistance	Section:
Name: Kelley List, Grant Manager	Name: Rachel Kraai, Project Director
Address: 1001 I Street, 17 th Floor	Address: 255 Glacier Drive
City, State, Zip: Sacramento, CA 95814	City, State, Zip: Martinez, CA 94553
Phone: (916) 319-9226	Phone: (925) 313-2042
Fax: (916) 341-5296	Fax: (925) 313-2301
e-mail: Kelley.List@waterboards.ca.gov	e-mail: Rachel.Kraai@pw.cccounty.us

Direct inquiries to:

State Water Board	Recipient: Contra Costa County Flood Control and Water Conservation District
Section: Division of Financial Assistance	Section:
Attention: Kari Holzgang, Program Analyst	Name: Fan Ventura, Grant Contact
Address: 1001 I Street, 17 th Floor	Address: 255 Glacier Drive
City, State, Zip: Sacramento, CA 95814	City, State, Zip: Martinez, CA 94553
Phone: (916) 341-5461	Phone: (925) 313-2194
Fax: (916) 341-5296	Fax: (925) 313-2301
e-mail: Kari.Holzgang@waterboards.ca.gov	e-mail: Fan.Ventura@pw.cccounty.us

The Recipient may change its Project Director upon written notice to the Grant Manager, which notice shall be accompanied by authorization from the Recipient’s Authorized Representative. The State Water Board will notify the Project Director of any changes to its Party Contacts.

3. Exhibits and Appendices Incorporated.

The following exhibits and appendices to this Agreement, including any amendments and supplements hereto, are hereby incorporated herein and made a part of this Agreement:

- EXHIBIT A – SCOPE OF WORK
- EXHIBIT B – FUNDING PROVISIONS
- EXHIBIT C – STANDARD TERMS AND CONDITIONS

4. Recipient Representations and Commitments.

The Recipient represents, warrants, and commits to the following as of the date signed by the Recipient and continuing thereafter for the term of the Agreement:

- (a) **General Commitments.** The Recipient accepts and agrees to comply with all terms, provisions, conditions, and commitments of this Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and commitments made by the Recipient in its application, accompanying documents, and communications filed in support of its request for financial assistance and throughout the term of this Agreement.
- (b) **Authorization and Validity.** The execution and delivery of this Agreement, including all incorporated documents, has been duly authorized. This Agreement constitutes a valid and binding obligation of the Recipient, enforceable in accordance with its terms, except as such enforcement may be limited by law.
- (c) **No Violations.** The execution, delivery, and performance by Recipient of this Agreement, including all incorporated documents, do not violate any provision of any law or regulation in effect as of the date set forth on the first page hereof, or result in any breach or default under any contract, obligation, indenture, or other instrument to which Recipient is a party or by which Recipient is bound as of the date set forth on the first page hereof.
- (d) **No Litigation.** There are no pending or, to Recipient's knowledge, threatened actions, claims, investigations, suits, or proceedings before any governmental authority, court, or administrative agency which affect the financial condition or operations of the Recipient, and/or the Project.
- (e) **Solvency.** None of the transactions contemplated by this Agreement will be or have been made with an actual intent to hinder, delay, or defraud any present or future creditors of Recipient. As of the date set forth on the first page hereof, Recipient is solvent and will not be rendered insolvent by the transactions contemplated by this Agreement. Recipient is able to pay its debts as they become due.
- (f) **Legal Status and Eligibility.** Recipient is duly organized and existing and in good standing under the laws of the State of California, and will remain so during the term of this Agreement. Recipient shall at all times maintain its current legal existence and preserve and keep in full force and effect its legal rights and authority. Recipient shall maintain its eligibility for funding under this Agreement for the term of this Agreement.
- (g) **Good Standing.** The Recipient is currently in compliance with the state requirements set forth in Exhibit C. Within the preceding ten years, the Recipient has not failed to demonstrate compliance with previous state audit disallowances.
- (h) **Insurance.** Recipient maintains sufficient insurance coverage considering the scope of this Agreement, including, for example, but not necessarily limited to, General Liability, Automobile Liability, Worker's Compensation and Employer's Liability, Professional Liability.

5. Project Completion.

The Recipient shall expeditiously proceed with and complete the Project in accordance with this Agreement.

6. Notice.

- (a) The Recipient shall notify the Division in writing within five (5) working days of the occurrence of the following:
 - (1) Bankruptcy, insolvency, receivership or similar event of the Recipient; or
 - (2) Actions taken pursuant to state law in anticipation of filing for bankruptcy.
- (b) The Recipient shall notify the Division within 10 working days of any litigation pending or threatened against Recipient regarding its continued existence, consideration of dissolution, or disincorporation.
- (c) The Recipient shall notify the Division promptly of the following:
 - (1) Any proposed change in the scope of the Project. Under no circumstances may the Recipient make changes to the scope of the Project without receiving prior review and approval by the Division. Most changes will require an amendment to this Agreement;
 - (2) Cessation of work on the Project where such cessation of work is expected to or does extend for a period of thirty (30) days or more;
 - (3) Any circumstance, combination of circumstances, or condition, which is expected to or does delay Work Completion;
 - (4) Any monitoring activities such that the State Water Board Division of Drinking Water and/or Regional Water Quality Control Board staff may observe and document such activities;
 - (5) Any public or media event publicizing the accomplishments and/or results of this Agreement and provide the opportunity for attendance and participation by state representatives with at least ten (10) working days' notice to the Division; or
 - (6) Work Completion, and Project Completion.

7. No Obligation of the State; State Budget Act Contingency.

Any obligation of the State Water Board herein contained shall not be an obligation, debt, or liability of the State and any such obligation shall be payable solely out of the moneys appropriated by the State Legislature to the State Water Board from the special fund associated with this Agreement.

If the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of the State Water Board to make any payments under this Agreement. In this event, the State shall have no liability to pay any funds whatsoever to Recipient or to furnish any other considerations under this Agreement and Recipient shall not be obligated to perform any provisions of this Agreement. Nothing in this Agreement shall be construed to provide the Recipient with a right of priority for payment over any other recipient. If this Agreement's funding for any Fiscal Year is reduced or deleted by the Budget Act, by Executive Order, or by order of the Department of Finance, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an Agreement amendment to the Recipient to reflect the reduced amount.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

**CONTRA COSTA COUNTY FLOOD CONTROL AND WATER
CONSERVATION DISTRICT**

By: _____

Name: Julie Bueren

Title: Chief Engineer

Date: _____

STATE WATER RESOURCES CONTROL BOARD:

By: _____

Name: Leslie Laudon

Title: Deputy Director
Division of Financial Assistance

Date: _____

EXHIBIT A – SCOPE OF WORK

A-1. Completion Dates.

The Work Completion Date is established as JUNE 30, 2019. Work occurring after the Work Completion Date, including corrective actions, is not eligible for reimbursement with Grant Funds and cannot be paid for using Match Funds.

A-2. Purpose.

This grant is for the benefit of the Recipient. This grant is for the purpose of preparing a Storm Water Resource Plan (SWRP) for Contra Costa County, that is compliant with the SWRP Guidelines adopted December 15, 2015, and the California Water Code Section 10561-10573, and for storm water resource planning to support the Green Infrastructure (GI) Program Plan development as required of entities permitted under the Municipal Regional Permit (MRP). The Recipient's receipt of funding under this Agreement is not a commitment to and does not obligate the State Water Board to provide funding for any eventual construction/implementation project.

A-3. Project-Specific Scope of Work.

The Recipient agrees to do the following:

1. Project Management

- 1.1 Provide all technical and administrative services as needed for Project completion; monitor, supervise, and review all work performed; and coordinate budgeting and scheduling to ensure the Project is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.
- 1.2 Notify the Grant Manager at least fifteen (15) working days in advance of upcoming meetings, workshops, and trainings.
- 1.3 Provide and update appropriately a detailed Project schedule using a format provided, to include key Project milestones, and submit to the Grant Manager.
- 1.4 Conduct Project status review meetings as requested by the Grant Manager.

2. Technical Advisory Group (TAG)

- 2.1 Establish a TAG for the development of the SWRP that includes the State Water Board, Regional Water Board and interested parties such as municipalities, water suppliers, local agencies, non-governmental organizations, public utilities, and regulatory agencies. Submit the final list of TAG members, their roles and responsibilities, affiliations, to the Grant Manager.
- 2.2 Convene a kickoff meeting to develop the SWRP water management goals and objectives, formalize roles, and develop a schedule for future meetings. Submit a summary of SWRP objectives, meeting schedule and any updates to the TAG participant list to the Grant Manager in the associated quarterly progress report(s).
- 2.3 Conduct a minimum of four (4) meetings and submit the agendas, meeting notes, sign-in sheets, and a list of current action items for each meeting to the Grant Manager in the associated quarterly progress report(s).

3. Data Collection and Watershed Identification

- 3.1 Gather and review existing data appropriate to development of the SWRP including maps, geographic information system (GIS) data, analytical tools, related plans, permits, and additional storm water management information. Submit an annotated list of reviewed data and reports to the Grant Manager.
 - 3.1.1 Identify mapping resources needed to create the GIS platform and identify priority mapping data gaps to be addressed in Task 5.1. Prepare a memo summarizing existing data resources, identifying digital map needs to create the GIS tools, and approaches to bridge the gaps necessary to support the GIS analysis and submit to the Grant Manager.
 - 3.1.2 Review existing plans developed by stakeholders to generate a list of potential storm water management project concepts for inclusion in the SWRP. Plans to be reviewed include: Integrated Regional Water Management (IRWM) plans; creek restoration or watershed enhancement plans; MRP and Total Maximum Daily Loads (TMDL) compliance plans; municipal capital improvement plans (CIPs); and other watershed management and low impact development (LID) planning efforts.
- 3.2 Review and identify the SWRP watershed and sub-watersheds planning boundaries. The review shall include characterization of land use and natural or open space, public agency and water utility boundaries, surface and groundwater resources, and water quality priorities. Submit a SWRP planning area description, map, and justification of planning area boundaries to the Grant Manager for review and approval.

4. Storm Water Resource Plan Development

- 4.1 Develop and submit a detailed SWRP outline that demonstrates compliance with the SWRP Guidelines to the Grant Manager for review and approval.
- 4.2 Develop necessary components for a complete SWRP that achieves the recommendations set forth in the SWRP Guidelines and complies with the Water Code Sections 10561 - 10573. The SWRP shall include at a minimum, the following sections: Watershed Identification; Water Quality Compliance; Organization, Coordination, Collaboration; Quantitative Methods; Identification and Prioritization of Projects; Implementation Strategy and Schedule; Education, Outreach, and Public Participation. Submit update(s) on the development of each of the sections in the associated quarterly progress report(s).
- 4.3 Provide a description of the approach to address water quality requirements in the SWRP to the Grant Manager for approval. The description shall include consideration of the following:
 - 4.3.1 Activities generating or contributing to polluted runoff or that impair beneficial use of storm water and dry weather runoff.
 - 4.3.2 Strategies in which the SWRP will be used to address the pollutant runoff or sources, and how the SWRP will be consistent with and help to implement applicable regulatory permits, TMDL, and other relevant water quality requirements.
- 4.4 Develop quantitative methodologies for integrated identification, prioritization, and analysis of multiple benefit projects and programs to ensure the SWRP will achieve the water management objectives. The metrics-based analysis shall consider, at a minimum, opportunities to attain water quality improvements, storm water capture and use, water

supply, flood management, and environmental and community benefits using the following approaches:

- 4.4.1 Complete an evaluation of hydrologic/hydraulic models, water quality models, LID planning tools, including the GreenPlan-IT tool, and other GIS and spreadsheet-based decision support tools and models suitable to conduct the metrics-based benefit analysis and prioritization of projects, project implementation tracking, and to support the development of Green Infrastructure Plans (GI Plan) and associated reasonable assurance analyses (RAA) required by the MRP.
 - 4.4.2 Prepare a technical memo describing the selected hydrologic/hydraulic modeling tools and quantitative methodologies that will be utilized and submit to the Grant Manager for review and approval.
 - 4.4.3 Develop criteria and a scaled scoring system to screen public right-of-ways and publicly owned parcels for GI suitability and multiple benefits including community values.
 - 4.4.4 Prepare a technical memorandum describing the screening process to identify rights-of-way and parcels with characteristics that are appropriate for implementation of GI projects and the scaled scoring system to prioritize project opportunities using the multiple benefits metrics. Submit the technical memorandum to the Grant Manager for review.
- 4.5 Complete the analysis, prioritization process and project(s) selection using the approaches identified in Item 4.4 and submit the results to the Grant Manager. At a minimum, the steps shall include:
- 4.5.1 Identify potential opportunities and multi-benefit storm water projects that augment water supply, water quality, flood protection, environmental benefits, and other community benefits within the watershed using the developed approach.
 - 4.5.2 Evaluate multi-benefit projects and develop a list of prioritized projects using the developed approach.
- 4.6 Select a minimum of ten (10) high priority projects evaluated in Item 4.5.2, and prepare GI Best Management Practices (BMPs) Project concept plans showing the project footprint, storm water treatment facilities, and cost estimates for each selected project. Submit the BMP Project concept plans to the TAG and Grant Manager.
- 4.7 Develop an implementation strategy for the SWRP that includes stakeholder involvement, performance-measures, development of decision support tools, monitoring, and an adaptive management approach.
- 4.7.1 Identify monitoring and data requirements to support implementation of the SWRP.
 - 4.7.2 Develop data collection, storage, and management protocols that include mechanisms to make the data available to stakeholders, assess monitoring programs and data quality control, update data, and fill data gaps.
 - 4.7.3 Prepare a technical memo of the draft implementation strategy and submit to the Grant Manager for review and approval.

- 4.8 Submit an administrative draft SWRP and draft SWRP Guidelines Appendix A checklist and self-certification (self-certification checklist) to the TAG and the Grant Manager for review and comment.
 - 4.9 Address all comments received on the administrative draft SWRP and prepare a public draft SWRP. Submit the public draft SWRP to the Grant Manager.
 - 4.10 Post the public draft SWRP online and solicit comments from the public, the local IRWM group, and interested stakeholders. Submit a summary of the comments received to the Grant Manager.
 - 4.11 Address all applicable public comments and prepare a final draft SWRP. Submit the final draft SWRP to the TAG and Grant Manager for review and approval.
 - 4.12 Prepare the final SWRP and submit with the signed self-certification checklist to the TAG, local IRWM group, and the Grant Manager.
5. Digital Maps and GIS-based Tool Development
- 5.1 Consolidate and digitize data to address the mapping need identified in Task 3.1.1. Submit the resultant GIS layer(s) to the Grant Manager
 - 5.2 Develop and publish a GIS-based web mapping application available to authorized users that employs tools to screen and prioritize potential public parcels for multi-benefit storm water projects. Conduct a demonstration of the GIS platform over a webconference link for the Grant Manager.
6. Stakeholder Outreach, Education, and Public Participation
- 6.1 Facilitate the organization, coordination, and collaboration among stakeholders and provide opportunities for general public participation and education throughout development of the SWRP.
 - 6.1.1 Prepare a stakeholder outreach, education, and engagement plan and submit to the Grant Manager for review and approval.
 - 6.1.2 Implement the stakeholder/public outreach, education, and engagement plan. At a minimum, conduct the following outreach events to engage stakeholders in the SWRP development:
 - 6.1.2.1 Conduct a minimum of one (1) project initiation meeting at the Contra Costa Watershed Forum and seek input from watershed stakeholders and the public.
 - 6.1.2.2 Conduct a minimum of six (6) additional stakeholder/public outreach events in the watershed planning units to engage stakeholders in the SWRP development and identification of projects. Target outreach events for key points in the development of the SWRP as identified in the engagement plan.
 - 6.2 Prepare and submit a summary of stakeholder outreach, education, public participation, and collaboration activities including meeting agenda(s) and materials, meeting summaries, sign-in sheets, and photos in the associated quarterly progress report(s).

- 6.3 Prepare and submit a summary of the stakeholder outreach work conducted by American Rivers in the Marsh Creek, San Pablo, Rheem, and Wildcat Creek Watersheds, including lists of the multi-benefit stormwater management projects identified through the engagement process, to the Grant Manager.

7. GI Program Plan Development

- 7.1 Prepare a guidance document to assist municipal staff in incorporation of SWRP technical resources and outputs into their GI Plans. Conduct up to four (4) meetings to assist the Contra Costa Clean Water Program in incorporating SWRP technical resources and outputs into the development of the RAA. Submit the guidance document and meeting summaries to the Grant Manager.

A-4. Disclosure.

The Recipient shall include the following disclosure statement in any document, written report, or brochure prepared in whole or in part pursuant to this Agreement:

“Funding has been provided in full or in part through an agreement with the State Water Resources Control Board using funds from Proposition 1. The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.”

A-5. Reporting.

- (a) Progress Reports. The Recipient shall submit quarterly progress reports to the Grant Manager within forty-five (45) days following the end of the calendar quarter (March, June, September, and December). Progress Reports shall provide a brief description of activities that have occurred, milestones achieved, monitoring results (if applicable), and any problems encountered in the performance of the work under this Agreement during the applicable reporting period. Reporting shall be required even if no grant related activities occurred during the reporting period. The Recipient shall document all activities and expenditures in progress reports, including work performed by contractors.
- (b) As Needed Information or Reports. The Recipient agrees to provide expeditiously, during the term of this Agreement, such reports, data, and information as may be reasonably required by the Division, including but not limited to material necessary or appropriate for evaluation of the funding program or to fulfill any reporting requirements of the state or federal government.
- (c) Annual Progress Summaries. The Recipient shall prepare and provide an Annual Progress Summary annually by November 15 that covers the time period from October 1 of the previous year through September 30 of the current year. The summary must be no more than two (2) pages, and shall include pictures as appropriate. The Recipient shall upload an electronic copy of the Annual Progress Summary in pdf format to the Financial Assistance Application Submittal Tool (FAAST) system. The summary shall include the following:
- (1) A summary of the conditions the Project is meant to alleviate, the Project's objective, the scope of the Project, and a description of the approach used to achieve the Project objective.
 - (2) A summary of the progress made to date, significant milestones achieved, and the current schedule of completing the Project.
- (d) Final Reports. At the conclusion of the Project, the Recipient must submit the following to the Grant Manager:

- (1) Final Project Summary. Prepare and submit a Final Project Summary in a format provided by the Grant Manager, which includes accomplishments, recommendations, and lessons learned, as appropriate. Upload an electronic copy of the Final Project Summary in pdf format to the FFAST system.

A-6. Project Schedule.

Failure to provide items by the due dates indicated in the Project Schedule below may constitute a material violation of this agreement. However, the dates in the “Estimated Due Date” column of this Project Schedule may be adjusted as necessary during the Disbursement Period with Grant Manager approval. All work or submittals must be achieved with relevant submittals approved by the Division prior to the Work Completion Date, and the final Disbursement Request submitted, prior to the Final Disbursement Request Date set forth in Exhibit B.

ITEM	DESCRIPTION OF SUBMITTAL	CRITICAL DUE DATE	ESTIMATED DUE DATE
EXHIBIT A-3 PROJECT-SPECIFIC SCOPE OF WORK			
1.	Project Management		
1.2	Notification of Upcoming Meetings, Workshops, and Trainings		Ongoing
1.3	Detailed Project Schedule	30 Days After Execution	
1.4	Status Review Meetings with the Grant Manager		As Needed
2.	Technical Advisory Group (TAG)		
2.1	List of TAG Members, Roles and Responsibilities, and Affiliations		April 2017
2.2	TAG Kickoff Meeting Summary		Quarterly
2.3	TAG Meeting Agenda, Notes, Sign-In Sheets, and Action Items		Quarterly
3.	Data Collection and Watershed Identification		
3.1	Annotated List of Data and Reports		May 2017
3.1.1	Memo of Existing Map Resources and Needs		May 2017
3.2	Planning Area Description, Map and Boundaries		June 2017
4.	Storm Water Resource Plan Development		
4.1	Detailed SWRP Outline	July 31, 2017	
4.3	Description of Approach Addressing Water Quality		July 2017
4.4.2	Technical Memo on Modeling Tools and Methodologies		July 2017
4.4.4	Technical Memo Describing Screening Process		October 2017
4.5	Results of Analysis, Prioritization and Project(s) Selection		January 2018
4.6	GI BMP Project Concept Plans		May 2018
4.7.3	Technical Memo of Draft Implementation Strategy		February 2018
4.8	Administrative Draft SWRP and Draft Self-Certification Checklist	July 31, 2018	

ITEM	DESCRIPTION OF SUBMITTAL	CRITICAL DUE DATE	ESTIMATED DUE DATE
EXHIBIT A-3 PROJECT-SPECIFIC SCOPE OF WORK			
4.9	Public Draft SWRP		July 2018
4.10	Summary of Comments		October 2018
4.11	Final Draft SWRP		November 2018
4.12	Final SWRP and Signed Self-Certification Checklist	January 31, 2019	
5.	Digital Maps and Online GIS-based Tool Development		
5.1	GIS Layers		January 2019
5.2	GIS Mapping Demonstration		January 2019
6.	Stakeholder Outreach, Education, and Public Participation		
6.1.1	Stakeholder/Public Engagement Plan		June 2017
6.2	Summary of Stakeholder Activities		Quarterly
6.3	Summary of American Rivers Outreach Activities		June 2017
7.	GI Program Plan Development		
7.1	Guidance Document and Meeting Summaries		February 2019
EXHIBIT A-5 REPORTING			
(a)	Progress Reports	Quarterly	
(b)	As Needed Information or Reports		
(c)	Annual Progress Summaries	Annually by 11/15	
(d)(1)	Final Project Summary	April 30, 2019	
EXHIBIT B – FUNDING PROVISIONS			
4 (b)	Final Disbursement Request	July 31, 2019	
9 (b)(4)	Disbursement Requests	Quarterly	

EXHIBIT B – FUNDING PROVISIONS

B-1. Project Funding.

Subject to the terms of this Agreement, the State Water Board agrees to provide Grant Funds in the amount of up to FOUR HUNDRED NINETY-NINE THOUSAND, ONE HUNDRED EIGHTY DOLLARS (\$499,180).

B-2. Match Funds.

- (a) The Recipient agrees to provide Match Funds in the amount of FIVE HUNDRED THOUSAND, SEVEN HUNDRED SIXTY DOLLARS (\$500,760).
- (b) This Match Funds amount is based on the budget, funding sources, and amounts submitted by the Recipient in its application and during the negotiation of this Agreement. Any Match Funds changes or adjustments requested by the Recipient must be approved, in advance and in writing, by the Grant Manager and may require an amendment to this Agreement.
- (c) Only expenses that would be considered eligible under Prop 1 and the Guidelines will be counted towards the Recipient's Match Funds.
- (d) Any costs incurred prior to the adoption of Prop 1 on November 4, 2014, will not count towards the Recipient's Match Funds.
- (e) If, at Work Completion, the Recipient has provided Match Funds in an amount that is less than the Match Funds amount set forth above, the State Water Board may proportionately reduce the Grant Funds amount and/or Recipient's Match Funds amount, upon approval of the Deputy Director of the Division, provided the reduced amount(s) satisfy statutory requirements and Guidelines.

B-3. Estimated Reasonable Total Project Cost.

The estimated reasonable cost of the total Project is NINE HUNDRED NINETY-NINE THOUSAND, NINE HUNDRED FORTY DOLLARS (\$999,940).

B-4. Funding Dates.

- (a) The Eligible Start Date is [Date]. Otherwise eligible costs incurred prior to this date will not be reimbursed.
- (b) The Final Disbursement Request Date is JULY 31, 2019. The Deputy Director of the Division may extend this date for good cause. Extensions may require an amendment to this Agreement. All disbursement requests must be submitted to the Division such that they are received prior to this date. Late disbursement requests will not be honored and remaining amounts will be deobligated.

B-5. Funding Conditions and Exclusions.

- (a) This Agreement reflects planning funding only. If the Recipient desires implementation/construction funding, the Recipient must apply for implementation/construction funding, and execute an implementation/construction funding agreement. Costs associated with the implementation/construction phase of the possible eventual implementation/construction project are not eligible for reimbursement under this Agreement.

- (b) The State Water Board's disbursement of funds hereunder is contingent on the Recipient's compliance with the terms and conditions of this Agreement.
- (c) Grant Funds may not be used for any Indirect Costs. Any Disbursement Request submitted including Indirect Costs will cause that Disbursement Request, in its entirety, to be disputed and will not be paid until the dispute is resolved. This prohibition applies to the Recipient and any subcontract or sub-agreement for work on the Project that will be reimbursed with Grant Funds pursuant to this Agreement. (Gov. Code, § 16727.)

B-6. Budget Summary.

LINE ITEM	GRANT FUNDS	MATCH FUNDS	TOTAL PROJECT COSTS
Direct Project Administrative Costs	\$73,600	\$36,800	\$110,400
Planning/Design/Engineering/Environmental	\$359,540	\$278,780	\$638,320
Construction/Implementation	\$0	\$0	\$0
Monitoring/Performance	\$0	\$0	\$0
Education/Outreach	\$66,040	\$174,780	\$240,820
TOTAL	\$499,180	\$500,760	\$999,940

B-7. Budget Flexibility.

- (a) Subject to the prior review and approval of the Grant Manager, adjustments between existing line item(s) may be used to defray allowable direct costs up to fifteen percent (15%) of the total amount (excluding Match Funds), including any amendment(s) thereto. Line item adjustments in excess of fifteen percent (15%) require an Agreement amendment. If the detailed budget includes an amount for the Recipient's personnel costs, that amount is based on the hours, classifications, and rates submitted by the Recipient in its application. Any changes to the hours, classifications, and rates must be approved, in advance and in writing, by the Grant Manager.
- (b) The Recipient may submit a request for an adjustment in writing to the Grant Manager. Such adjustment may not increase or decrease the total grant amount. The Recipient shall submit a copy of the original Agreement Budget sheet reflecting the requested changes and shall note proposed changes by striking out the original amount(s) followed with proposed change(s) in bold and underlined. Budget adjustments deleting a budget line item or adding a new budget line item shall require a formal amendment. The Division may also propose budget adjustments.
- (c) The sum of adjusted line items shall not exceed the total budget amount.

B-8. Amounts Payable by the Recipient.

The Recipient agrees to pay any and all costs connected with the Project including, without limitation, any and all Project Costs. If the Grant Funds are not sufficient to pay the Project Costs in full, the Recipient shall nonetheless complete the Project and pay that portion of the Project Costs in excess of available Grant Funds, and shall not be entitled to any reimbursement therefor from the State Water Board.

B-9. Disbursement of Grant Funds; Availability of Grant Funds.

- (a) The State Water Board's obligation to disburse Grant Funds is contingent upon the availability of sufficient funds to permit the disbursements provided for herein. If sufficient funds are not available for any reason, including but not limited to failure of the State government to appropriate funds necessary for disbursement of Grant Funds, the State Water Board shall not be obligated to make any disbursements to the Recipient under this Agreement. This provision shall be construed as a condition precedent to the obligation of the State Water Board to make any disbursements under this Agreement. Nothing in this Agreement shall be construed to provide the Recipient with a right of priority for disbursement over any other recipient. If any disbursements due the Recipient under this Agreement are deferred because sufficient funds are unavailable, it is the intention of the State Water Board that such disbursement will be made to the Recipient when sufficient funds do become available, but this intention is not binding. If this Agreement's funding for any fiscal year is reduced or deleted by the Budget Act, by Executive Order, or by order of the Department of Finance, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an amendment to the Recipient to reflect the reduced amount.
- (b) Except as may be otherwise provided in this Agreement, disbursement of Grant Funds will be made as follows:
- (1) Upon execution and delivery of this Agreement, the Recipient may submit a Disbursement Request for eligible Project Costs as well as to support Match Funds specified in this Exhibit from the Project Costs through submission to the State Water Board using the Disbursement Request form provided by the Grant Manager.
 - (2) Disbursement Requests shall contain the following information:
 - a. The date of the request;
 - b. The time period covered by the request, i.e., the term "from" and "to";
 - c. The total amount requested;
 - d. Documentation of match;
 - e. Original signature and date (in ink) of Recipient's Authorized Representative; and,
 - f. The Final Disbursement Request shall be clearly marked "FINAL DISBURSEMENT REQUEST" and shall be submitted NO LATER THAN JULY 31, 2019.
 - (3) Disbursement Requests must be itemized based on the line items specified in the budget in this Exhibit. Disbursement Requests must be signed by the Authorized Representative or designee and must be addressed to the Grant Manager as set forth in the Party Contacts section of this Agreement. Requests for disbursement submitted in any other format than the one provided by the State Water Board will cause a Disbursement Request to be disputed. In the event of such a dispute, the Grant Manager will notify the Recipient. Payment will not be made until the dispute is resolved and a corrected Disbursement Request submitted. The Grant Manager has the responsibility for approving Disbursement Requests. Disbursement Requests must be complete and executed by the Recipient. Project Costs incurred prior to the Eligible Start Date of this Agreement will not be reimbursed.
 - (4) Grant Funds must be requested via Disbursement Request quarterly for eligible costs incurred during the reporting period of the corresponding Progress Report, describing the

activities and expenditures for which the disbursement is being requested. Each Disbursement Request must be accompanied by a Progress Report. Failure to provide timely Disbursement Requests may result in such requests not being honored.

- (5) The Recipient agrees that it will not submit any Disbursement Requests that include any Project Costs until such costs have been incurred and are currently due and payable by the Recipient, although the actual payment of such costs by the Recipient is not required as a condition of Disbursement Request. Supporting documentation (e.g., receipts) must be submitted with each Disbursement Request as well as to support Match Funds claimed, if any. The amount requested for administration costs must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = total amount claimed). Disbursement of Grant Funds will be made only after receipt of a complete, adequately supported, properly documented, and accurately addressed Disbursement Request.
- (6) The Recipient will not seek reimbursement of any Project Costs that have been reimbursed from other funding sources.
- (7) Recipient shall use Grant Funds within 30 days of receipt to reimburse contractors, vendors, and other Project Costs. Any interest earned on Grant Funds shall be reported to the State Water Board and will either be required to be returned to the State Water Board or deducted from future disbursements. In the event that the Recipient fails to disburse Grant Funds to contractors or vendors within thirty (30) days from receipt of the funds, the Recipient shall immediately return such funds to the State Water Board. Interest shall accrue on such funds from the date of disbursement through the date of mailing of funds to the State Water Board. If the Recipient held such funds in interest-bearing accounts, any interest earned on the funds shall also be due to the State Water Board.
- (8) Recipient shall submit its final Disbursement Request no later than the Final Disbursement Request Date specified herein unless prior approval is granted by the Division. If the Recipient fails to do so, then the undisbursed balance of this Agreement will be deobligated.
- (9) The Recipient agrees that it will not request a disbursement unless that cost is allowable, reasonable, and allocable.
- (10) Notwithstanding any other provision of this Agreement, no disbursement shall be required at any time or in any manner that is in violation of or in conflict with federal or state laws, policies, or regulations.
- (11) The Recipient agrees that it shall not be entitled to interest earned on undisbursed Grant Funds.
- (12) Any reimbursement for necessary travel and per diem shall be at rates not to exceed those set by the California Department of Human Resources. These rates may be found at <http://www.calhr.ca.gov/employees/Pages/travel-reimbursements.aspx>. Reimbursement will be at the State travel and per diem amounts that are current as of the date costs are incurred by the Recipient. No travel outside the State of California shall be reimbursed unless prior written authorization is obtained from the Grant Manager.
- (13) The Recipient must include any other documents or requests required or allowed under this Agreement.

B-10. Withholding of Disbursements and Material Violations.

- (a) Notwithstanding any other provision of this Agreement, the Recipient agrees that the State Water Board may retain an amount equal to ten percent (10%) of the Grant Funds until Project

Completion. Any retained amounts due to the Recipient will be promptly disbursed to the Recipient, without interest, upon Project Completion.

(b) The State Water Board may withhold all or any portion of the funds provided for by this Agreement in the event that:

- (1) The Recipient has materially violated, or threatens to materially violate, any term, provision, condition, or commitment of this Agreement; or
- (2) The Recipient fails to maintain reasonable progress toward Project Completion.

B-11. Remaining Balance.

In the event the Recipient does not request all of the funds encumbered under this Agreement, any remaining funds revert to the State.

B-12. Fraud and Misuse of Public Funds.

All requests for disbursement submitted shall be accurate and signed under penalty of perjury. Any and all costs submitted pursuant to this Agreement shall only be for the tasks set forth herein. The Recipient shall not submit any Disbursement Request containing costs that are ineligible or have been reimbursed from other funding sources unless required and specifically noted as such (i.e., match costs). Any eligible costs for which the Recipient is seeking reimbursement shall not be reimbursed from any other source. Double or multiple billing for time, services, or any other eligible cost is illegal and constitutes fraud. Any suspected occurrences of fraud, forgery, embezzlement, theft, or any other misuse of public funds may result in suspension of disbursements of Grant Funds and/or termination of this Agreement requiring the repayment of all funds disbursed hereunder. Additionally, the Deputy Director of the Division may request an audit and refer the matter to the Attorney General's Office or the appropriate district attorney's office for criminal prosecution or the imposition of civil liability. (Civ. Code, §§ 1572-1573; Pen. Code, §§ 470, 489-490.)

EXHIBIT C – STANDARD TERMS AND CONDITIONS

C-1. Accounting and Auditing Standards.

The Recipient must maintain Project accounts according to GAAP. The Recipient shall maintain GAAP-compliant Project accounts, including GAAP requirements relating to the reporting of infrastructure assets.

C-2. Amendment.

No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties and approved as required. No oral or written understanding or agreement not incorporated in this Agreement is binding on any of the parties.

C-3. Assignability.

This Agreement is not assignable by the Recipient, either in whole or in part.

C-4. Audit.

- (a) The Division, at its option, may call for an audit of financial information relative to the Project, where the Division determines that an audit is desirable to assure program integrity or where such an audit becomes necessary because of state or federal requirements. Where such an audit is called for, the audit shall be performed by a certified public accountant independent of the Recipient and at the cost of the Recipient. The audit shall be in the form required by the Division.
- (b) Audit disallowances will be returned to the State Water Board. Failure to comply with audit disallowance provisions shall disqualify the Recipient from participating in State Water Board funding programs.

C-5. [Reserved]

C-6. [Reserved]

C-7. Claims.

Any claim of the Recipient is limited to the rights, remedies, and claims procedures provided to the Recipient under this Agreement.

C-8. Competitive Bidding.

Recipient shall adhere to any applicable state or local ordinance for competitive bidding and applicable labor laws.

If Recipient is a private entity, any construction contracts related in any way to the Project shall be let by competitive bid procedures that ensure award of such contracts to the lowest responsible bidders. Recipient shall not award a construction contract until a summary of bids and identification of the selected lowest responsible bidder is submitted to and approved in writing by the Division. Recipient must provide a full explanation if Recipient is proposing to award a construction contract to anyone other than the lowest responsible bidder.

C-9. Compliance with Law, Regulations, etc.

The Recipient agrees that it will, at all times, comply with and require its contractor and subcontractors to comply with all applicable federal and state laws, rules, guidelines, regulations, and requirements. Without limitation of the foregoing, the Recipient agrees that, to the extent applicable, the Recipient will:

- (a) Comply with the Guidelines;
- (b) Comply with and require compliance with the list of state laws (cross-cutters) in Section C-32 of this Agreement.

C-10. Conflict of Interest.

The Recipient certifies that its owners, officers, directors, agents, representatives, and employees are in compliance, and shall remain compliant through Project Completion, with applicable state and federal conflict of interest laws, including but not limited to laws related to conflict of interest laws related to contracting and procurement.

C-11. Damages for Breach Affecting Tax-Exempt Status or Federal Compliance.

In the event that any breach of any of the provisions of this Agreement by the Recipient shall result in the loss of tax-exempt status for any bonds of the State or any subdivision or agency thereof, including bonds issued on behalf of the State Water Board, or if such breach shall result in an obligation on the part of the State or any subdivision or agency thereof to reimburse the federal government by reason of any arbitrage profits, the Recipient shall immediately reimburse the State or any subdivision or agency thereof in an amount equal to any damages paid by or loss incurred by the State or any subdivision or agency thereof due to such breach. In the event that any breach of any of the provisions of this Agreement by the Recipient shall result in the failure of Grant Funds to be used pursuant to the provisions of this Agreement, or if such breach shall result in an obligation on the part of the State or any subdivision or agency thereof to reimburse the federal government, the Recipient shall immediately reimburse the State or any subdivision or agency thereof in an amount equal to any damages paid by or loss incurred by the State or any subdivision or agency thereof due to such breach.

C-12. Disputes.

- (a) The Recipient may appeal a staff decision within 30 days to the Deputy Director of the Division or designee, for a final Division decision. The Recipient may appeal a final Division decision to the State Water Board within 30 days. The Office of the Chief Counsel of the State Water Board will prepare a summary of the dispute and make recommendations relative to its final resolution, which will be provided to the State Water Board's Executive Director and each State Water Board Member. Upon the motion of any State Water Board Member, the State Water Board will review and resolve the dispute in the manner determined by the State Water Board. Should the State Water Board determine not to review the final Division decision, this decision will represent a final agency action on the dispute.
- (b) This clause does not preclude consideration of legal questions, provided that nothing herein shall be construed to make final the decision of the State Water Board, or any official or representative thereof, on any question of law.
- (c) Recipient shall continue with the responsibilities under this Agreement during any dispute.

C-13. Financial Management System and Standards.

The Recipient agrees to comply with federal standards for financial management systems. The Recipient agrees that, at a minimum, its fiscal control and accounting procedures will be sufficient to permit preparation of reports required by the federal or state government and tracking of Project Costs to a level of expenditure adequate to establish that such funds have not been used in violation of federal or state law or the terms of this Agreement.

C-14. Governing Law.

This Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.

C-15. Income Restrictions.

The Recipient agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by the Recipient under this Agreement shall be paid by the Recipient to the State, to the extent that they are properly allocable to costs for which the Recipient has been reimbursed by the State under this Agreement.

C-16. Indemnification and State Reviews.

The parties agree that review or approval of Project documents by the State Water Board is for administrative purposes only, including conformity with application and eligibility criteria, and expressly not for the purposes of design defect review or construction feasibility, and does not relieve the Recipient of its responsibility to engage in proper planning. To the extent permitted by law, the Recipient agrees to indemnify, defend, and hold harmless the State Water Board, and its officers, employees, and agents (collectively, "Indemnified Persons"), against any loss or liability arising out of any claim or action brought against any Indemnified Persons from and against any and all losses, claims, damages, liabilities, or expenses, of every conceivable kind, character, and nature whatsoever arising out of, resulting from, or in any way connected with (1) the Project or the conditions, occupancy, use, possession, conduct, or management of, work done in or about, or the planning, design, acquisition, installation, or construction, of the Project or any part thereof; (2) the carrying out of any of the transactions contemplated by this Agreement or any related document; (3) any violation of any applicable law, rule or regulation, any environmental law (including, without limitation, the Federal Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, the California Hazardous Substance Account Act, the Federal Water Pollution Control Act, the Clean Air Act, the Toxic Substances Control Act, the Occupational Safety and Health Act, the Safe Drinking Water Act, the California Hazardous Waste Control Law, and California Water Code Section 13304, and any successors to said laws), rule or regulation or the release of any toxic substance on or near the Project; or (4) any untrue statement or alleged untrue statement of any material fact or omission or alleged omission to state a material fact necessary to make the statements required to be stated therein, in light of the circumstances under which they were made, not misleading with respect to any information provided by the Recipient for use in any disclosure document utilized in connection with any of the transactions contemplated by this Agreement. To the fullest extent permitted by law, the Recipient agrees to pay and discharge any judgment or award entered or made against Indemnified Persons with respect to any such claim or action, and any settlement, compromise or other voluntary resolution. The provisions of this section shall survive the term of this Agreement and the discharge of the Recipient's Obligation hereunder.

C-17. Independent Actor.

The Recipient, and its agents and employees, if any, in the performance of this Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State Water Board.

C-18. Integration.

This Agreement is the complete and final Agreement between the parties.

C-19. Non-Discrimination Clause.

- (a) During the performance of this Agreement, Recipient and its contractors and subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, sexual orientation, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, denial of family care leave, or genetic information, gender, gender identity, gender expression, or military and veteran status.
- (b) The Recipient, its contractors, and subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment.
- (c) The Recipient, its contractors, and subcontractors shall comply with the provisions of the Fair Employment and Housing Act and the applicable regulations promulgated thereunder. (Gov. Code, §12990, subs. (a)-(f) et seq.; Cal. Code Regs., tit. 2, § 7285 et seq.) Such regulations are incorporated into this Agreement by reference and made a part hereof as if set forth in full.
- (d) The Recipient, its contractors, and subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- (e) The Recipient shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

C-20. No Third Party Rights.

The parties to this Agreement do not create rights in, or grant remedies to, any third party as a beneficiary of this Agreement, or of any duty, covenant, obligation, or undertaking established herein.

C-21. [Reserved]

C-22. Other Assistance.

If funding for Project Costs is made available to the Recipient from sources other than this Agreement and approved match sources, the Recipient shall immediately notify the Grant Manager.

C-23. Permits, Contracting, Disqualification.

The Recipient shall comply in all material respects with all applicable federal, state and local laws, rules and regulations. Recipient shall procure all permits, licenses and other authorizations necessary to accomplish the work contemplated in this Agreement, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work.

For any work related to this Agreement, the Recipient shall not contract with any individual or organization on the State Water Board's List of Disqualified Businesses and Persons that is identified as debarred or suspended or otherwise excluded from or ineligible for participation in any work overseen, directed, funded, or administered by the State Water Board program for which funding under this Agreement is authorized. The State Water Board's List of Disqualified Businesses and Persons is located at http://www.waterboards.ca.gov/water_issues/programs/ustcf/dbp.shtml. The Recipient shall not

contract with any party who is debarred or suspended or otherwise excluded from or ineligible for participation in federal assistance programs under Executive Order 12549, "Debarment and Suspension."

C-24. Public Records.

The Recipient acknowledges that, except for a subset of information regarding archaeological records, the Project records and locations are public records, including but not limited to all of the submissions accompanying the application, all of the documents incorporated by reference into this Agreement, and all reports, disbursement requests, and supporting documentation submitted hereunder.

C-25. Prevailing Wages.

The Recipient agrees to be bound by all applicable provisions of State Labor Code regarding prevailing wages. The Recipient shall monitor all agreements subject to reimbursement from this Agreement to ensure that the prevailing wage provisions of the State Labor Code are being met.

C-26. Professionals.

The Recipient agrees that only professionals with valid licenses in the State of California will be used to perform services under this Agreement where such services are called for. All technical reports required pursuant to this Agreement that involve planning, investigation, evaluation, design, or other work requiring interpretation and proper application of engineering, architecture, or geologic sciences shall be prepared by or under the direction of persons registered to practice in California. All technical reports must contain the statement of the qualifications of the responsible registered professional(s). Technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

C-27. Public Funding.

This Project is publicly funded. Any service provider or contractor with which the Recipient contracts must not have any role or relationship with the Recipient, that, in effect, substantially limits the Recipient's ability to exercise its rights, including cancellation rights, under the contract, based on all the facts and circumstances.

C-28. Recipient's Responsibility for Work.

The Recipient shall be responsible for all work and for persons or entities engaged in work performed pursuant to this Agreement, including, but not limited to, contractors, subcontractors, suppliers, and providers of services. The Recipient shall be responsible for any and all disputes arising out of its contracts for work on the Project. The State Water Board will not mediate disputes between the Recipient and any other entity concerning responsibility for performance of work.

C-29. Records.

Without limitation of the requirement to maintain Project accounts in accordance with GAAP, the Recipient agrees to:

- (a) Establish an official file for the Project which shall adequately document all significant actions relative to the Project.
- (b) Establish separate accounts which will adequately and accurately depict all amounts received and expended on the Project, including all assistance funds received under this Agreement.

- (c) Establish separate accounts which will adequately depict all income received which is attributable to the Project, specifically including any income attributable to assistance funds disbursed under this Agreement.
- (d) Establish an accounting system which will accurately depict final total costs of the Project, including both direct and indirect costs. Indirect Costs are not eligible for funding under this Agreement.
- (e) Establish such accounts and maintain such records as may be necessary for the State to fulfill federal reporting requirements, including any and all reporting requirements under federal tax statutes or regulations.
- (f) If Force Account is used by the Recipient for the Project, accounts will be established which reasonably document all employee hours charged to the Project and the associated tasks performed by each employee.
- (g) Maintain separate books, records and other material relative to the Project.
- (h) Retain such books, records, and other material for itself and for each contractor or subcontractor who performed work on this Project for a minimum of thirty-six (36) years after Work Completion. The Recipient shall require that such books, records, and other material be subject at all reasonable times (at a minimum during normal business hours) to inspection, copying, and audit by the State Water Board, the Bureau of State Audits, the Internal Revenue Service, the Governor, or any authorized representatives of the aforementioned, and shall allow interviews during normal business hours of any employees who might reasonably have information related to such records. The Recipient agrees to include a similar right regarding audit, interviews, and records retention in any subcontract related to the performance of this Agreement. The provisions of this section shall survive the term of this Agreement.

C-30. Related Litigation.

A Recipient is prohibited from using Grant Funds or Match Funds to pay costs associated with any litigation the Recipient pursues. Regardless of whether the Project or any eventual construction project is the subject of litigation, the Recipient agrees to complete the Project funded by the Agreement or to repay all Grant Funds plus interest to the State Water Board.

C-31. Rights in Data.

The Recipient agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes, and other written or graphic work produced in the performance of this Agreement are subject to the rights of the State as set forth in this section. The State shall have the right to reproduce, publish, and use all such work, or any part thereof, in any manner and for any purposes whatsoever and to authorize others to do so. If any such work is copyrightable, the Recipient may copyright the same, except that, as to any work which is copyrighted by the Recipient, the State reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, and use such work, or any part thereof, and to authorize others to do so, and to receive electronic copies from the Recipient upon request.

C-32. State Cross-Cutter Compliance.

Recipient represents and certifies that, to the extent applicable, it is in compliance with the following conditions precedent and agrees that it will continue to maintain compliance during the term of this Agreement:

- (a) Agricultural Water Management Plan Consistency. A Recipient that is an agricultural water supplier as defined by section 10608.12 of the Water Code must comply with the Agricultural Water Management Planning Act. (Wat. Code, § 10800 *et seq.*)
- (b) California Environmental Quality Act (CEQA). Implementation and construction activities must comply with CEQA and potentially other environmental review requirements, including the National Environmental Policy Act (NEPA). Proceeding with work subject to CEQA and/or NEPA without environmental clearance by the State Water Board shall constitute a breach of a material provision of this Agreement.
- (c) Charter City Project Labor Requirements. (Labor Code, § 1782 and Pub. Contract Code, § 2503.)
 - (1) Prevailing Wage

Where Recipient is a charter city or a joint powers authority that includes a charter city, Recipient certifies that no charter provision nor ordinance authorizes a construction project contractor not to comply with Labor Code's prevailing wage rate requirements, nor, within the prior two years (starting from January 1, 2015 or after) has the city awarded a public works contract without requiring the contractor to comply with such wage rate requirements according to Labor Code section 1782.
 - (2) Labor Agreements

Where Recipient is a charter city or a joint powers authority that includes a charter city, Recipient certifies that no charter provision, initiative, or ordinance limits or constrains the city's authority or discretion to adopt, require, or utilize project labor agreements that include all the taxpayer protection antidiscrimination provisions of Public Contract Code section 2500 in construction projects, and that Recipient is accordingly eligible for state funding or financial assistance pursuant to Public Contract Code section 2503.
- (d) Contractor and Subcontractor Requirements. (Labor Code, §§ 1725.5 and 1771.1.) To bid for public works contracts, Recipient acknowledges that Recipient and Recipient's subcontractors must register with the Department of Industrial Relations.
- (e) Delta Plan Consistency Findings. (Wat. Code, § 85225 and Cal. Code of Regulations, title 23, § 5002.) If Recipient is a state or local public agency and the proposed action is covered by the Delta Plan, Recipient will submit a certification of project consistency with the Delta Plan to the Delta Stewardship Council prior to undertaking the implementation/construction project associated with this Project.
- (f) Eminent Domain Prohibited. (Wat. Code, § 79711.) Where land acquisition is otherwise authorized under this Agreement, Grant Funds and Match Funds shall not be used to acquire land via eminent domain.
- (g) Governor's Infrastructure Plan. (Gov. Code, § 13100.) The Recipient shall ensure that the Project shall maintain consistency with section 13100 of the Government Code (five year infrastructure plan).
- (h) State Water Board's Drought Emergency Water Conservation regulations. (Cal. Code of Regulations, Title 23, article 22.5.) The Recipient will include a discussion of its implementation in Progress Reports submitted pursuant to this Agreement.

- (i) Urban Water Demand Management. (Wat. Code, § 10631.5.) If Recipient is an “urban water supplier” as defined by Water Code section 10617, Recipient certifies that it is implementing water demand management measures approved by the Department of Water Resources.
- (j) Urban Water Management Planning Act. (Wat. Code, § 10610 et seq.). If Recipient is an “urban water supplier” as defined by Water Code section 10617, the Recipient certifies that it has submitted an Urban Water Management Plan that has been deemed complete by the Department of Water Resources and is in compliance with that plan. This shall constitute a condition precedent to this Agreement.
- (k) Urban Water Supplier. (Wat. Code, §§ 526 and 527.) If Recipient is an urban water supplier as defined by Water Code section 10617, it shall have complied and maintain compliance with sections 526 and 527 of the Water Code relating to installation of meters and volumetric charging.
- (l) Water Diverter. (Wat. Code, § 5103.) If Recipient is a water diverter, Recipient must maintain compliance by submitting monthly diversion reports to the Division of Water Rights of the State Water Resources Control Board.
- (m) Water Quality Compliance. (Wat. Code, § 79707.) The Recipient shall ensure that the Project shall maintain consistency with Division 7 of the Water Code (commencing with section 13000) and Government Code section 13100.
- (n) Water Quality Monitoring. (Wat. Code, § 79704.) If water quality monitoring is required as part of the Project, the Recipient shall collect and report water quality monitoring data to the State Water Board in a manner that is compatible and consistent with surface water monitoring data systems or groundwater monitoring data systems administered by the State Water Board.
- (o) Wild and Scenic Rivers. (Wat. Code, § 79711.) The Recipient shall ensure that the Project will not have an adverse effect on the values upon which a wild and scenic river or any other river is afforded protections pursuant to the California Wild and Scenic Rivers Act or the federal Wild and Scenic Rivers Act.

C-33. State Water Board Action; Costs and Attorney Fees.

The Recipient agrees that any remedy provided in this Agreement is in addition to and not in derogation of any other legal or equitable remedy available to the State Water Board as a result of breach of this Agreement by the Recipient, whether such breach occurs before or after completion of the Project, and exercise of any remedy provided by this Agreement by the State Water Board shall not preclude the State Water Board from pursuing any legal remedy or right which would otherwise be available. In the event of litigation between the parties hereto arising from this Agreement, it is agreed that each party shall bear its own costs and attorney fees.

C-34. Termination; Immediate Repayment; Interest.

- (a) This Agreement may be terminated at any time prior to the End Date set forth on the cover and in Exhibit B, at the option of the State Water Board, upon violation by the Recipient of any material provision of this Agreement after such violation has been called to the attention of the Recipient and after failure of the Recipient to bring itself into compliance with the provisions of this Agreement within a reasonable time as established by the Division.
- (b) In the event of such termination, the Recipient agrees, upon demand, to immediately repay to the State Water Board an amount equal to Grant Funds disbursed hereunder, accrued interest, penalty assessments, and Additional Payments. In the event of termination, interest shall accrue on all amounts due at the highest legal rate of interest from the date that notice of termination is mailed to the Recipient to the date all monies due have been received by the State Water Board.

C-35. Timeliness.

Time is of the essence in this Agreement.

C-36. Unenforceable Provision.

In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have force and effect and shall not be affected thereby.

C-37. [Reserved]

C-38. Venue.

The State Water Board and the Recipient hereby agree that any action arising out of this Agreement shall be filed and maintained in the Superior Court in and for the County of Sacramento, California.

C-39. Waiver and Rights of the State Water Board.

Any waiver of rights by the State Water Board with respect to a default or other matter arising under the Agreement at any time shall not be considered a waiver of rights with respect to any other default or matter.

Any rights and remedies of the State Water Board provided for in this Agreement are in addition to any other rights and remedies provided by law.

GREEN INFRASTRUCTURE

Developing a Green Infrastructure Plan for Contra Costa County

A requirement of the current Municipal Regional Permit (MRP 2.0)

I. Objective and Purpose

The following are the stated objectives and purpose of the Green Infrastructure Plan requirement in the Municipal Regional Permit 2.0:

- Include LID drainage design into public projects
- Provide an implementation guide and planning tool to meet TMDL requirements
- Develop a reasonable assurance analysis that waste load allocations will be met
- Monitor/track implementation effectiveness
- Provide a vision and strategy to convert gray infrastructure to green infrastructure
- Provide criteria and methodology to prioritize Green Infrastructure projects
- Incorporate other waste load reduction plans into a Green Infrastructure Plan, creating an overall master plan
- Track area treated by Green Infrastructure and track amount of directly connected impervious surfaces

Note: This provision C.3.j defines the concept of and outlines the requirements for Green Infrastructure. The compliance costs for implementing Green Infrastructure to effectuate pollutant load reduction, however, will be found in the PCB requirements.

II. Plan Development Process and Cost

The following is a step by step process and resultant costs to meet Green Infrastructure Plan requirements specified in the Municipal Regional Permit 2.0:

Provision C.3.j.i Green Infrastructure Program Plan Development

\$35k

1. Prepare a Green Infrastructure Plan framework document. (2017)

This will describe the detailed process for the County Board of Supervisors to approve a Plan by June 30, 2017. The framework must include a statement of purpose, specific tasks, and time frames to complete the required elements listed in MRP 2.0. This will entail a primary author, likely an engineer or consultant, for two weeks at \$16,000 (80 x 200), coordination with staff at \$2,000, three team meetings at \$1,500 each, and a review process at \$5,000. To receive Board Approval will require a TWIC meeting with a report and other documentation at \$5,000 and a Board of Supervisors report and presentation at \$2,000.

2.c. Develop urban built environment retrofit targets. (2019) It is assumed that the load reduction calculations to determine the targets will be included in the costs for Provision C.11 and C.12. There will be an administrative cost to adapt the load reduction calculations into targets and prepare a report at \$10,000 each for public and private spaces.

- Targets to retrofit the public urban built environment. \$10,000
- Targets to retrofit the private urban built environment. \$10,000

2.d. Develop a process for tracking and mapping completed GI projects. (2019, 20) It is assumed this capability will be available for both public and private projects with SFEI's tool and general coordination will be all that is needed at \$2,000 each year.

- Annual coordination costs. \$2,000

2.e. Develop guidelines for project development, design, and construction to ensure that green infrastructure is not precluded but is included in projects. (2019) The process to develop these guidelines would be required for all types of projects, such as roads, buildings, parking lots, parks, airports, and drainage. It is assumed this would be done at a regional level and our role would be to coordinate the development of guidelines. For example, perhaps MTC for ABAG would take the lead in developing some or all of these guidelines. There would be a cost share to the County for the regional entity to hire the consultant at \$5,000, staff involvement at \$10,000, and staff cost to tweak the guidelines to meet the County's specific needs at \$5,000.

- Develop a suite of guidelines. \$20,000

2.f. Prepare standard specifications and standard plans. (2019) It is assumed this could be done at a regional level, however, we have a significant amount of unique requirements for specifications and construction details that would add additional costs. There would be a cost share to the County for the regional entity to hire a consultant at \$5,000, staff involvement at \$10,000, and staff cost to tweak the standard specifications and standard plans to meet the County's specific needs at \$25,000.

- Prepare standard specifications and plans. \$40,000

2.g. Develop options to include hydro-modification in GI projects. (2019) Hydro-modification must be included in Regulated Projects but a variety of options could be used for non-Regulated Projects. The options analysis should consider watershed health, creek improvements, TMDL load reductions, etc. To achieve this will require developing an options analysis at \$25,000, a

policy level discussion and decision at \$10,000, and staff cost to integrate the options into our project development, design, and construction checklists and other planning and implementation processes at \$20,000.

- Develop options for HMP. \$55,000

2.h. Update County's foundational planning documents. (2019) This entails updating the County's General Plan, Specific Plans, Transportation Plan, the Flood Control District's 50 Year Plan, and other key planning documents that impact the design of impervious surfaces. The cost to update the General Plan is likely \$100,000, to develop a Flood Control District plan is also likely \$100,000, and to modify the Transportation Plan is likely \$50,000. Other plans would have to be identified and update costs estimated. These costs represent a placeholder estimate, as it is difficult to estimate the cost of updating these documents until more specifics are known about the Green Infrastructure program, which will be determined when we get closer to implementation and the program is better defined. For example, if an EIR is needed the costs would be substantially more.

- Update County planning documents. \$250,000

2.i. Develop work plan to ensure GI and LID measures are included in developing and amending future planning documents. (2019) This would entail developing a process in those departments and programs that have or will develop or update a key planning document (primarily DCD and PWD) to ensure GI and LID design elements and requirements are included at \$25,000.

- Develop work plan. \$25,000.

2.j. Develop work plan to complete prioritized GI projects. (2019) This work plan is meant to ensure completion of projects identified in an Alternative Compliance Program or part of the Early Implementation list of projects, but these underlying processes will also be used for future GI projects. This will entail developing a separate Green Infrastructure Capital Improvement Program (CIP) at \$50,000, updating our existing road infrastructure CRIP at \$25,000, and modifying our Facilities CIP in Capital Projects at \$25,000, and developing a work plan outlining the process to achieve this at \$25,000.

- Develop work plan and CIP modifications. \$125,000

2.k. Develop a Green Infrastructure Financing Plan. (2019) This requires an evaluation and prioritization of project funding options, such as Alternative Compliance funds, grants, transportation funding from federal, state, and local sources, etc. To achieve this will require research of available funding options, analysis of which projects best fit the various funding options and development of a strategic plan to go after specific funding for specific projects at \$25,000.

- Develop Financing Plan. \$25,000
- 3. Develop and adopt policies, ordinances, etc., to ensure implementation of the Green Infrastructure Plan. (2019)** This will entail developing standard conditions of approval at \$10,000, revising design manuals and checklists at \$10,000, developing ordinance code language at \$10,000, and going through the review and adoption process for the ordinance code revisions at \$25,000.
- Adopt policies and ordinances. \$45,000
- 4.a. Conduct public outreach on the Green Infrastructure Plan and its requirements. (2017, 18, 19, 20)** This will entail making presentations at various organizations, such as the Contra Costa Watershed Forum, East Bay Municipal Engineers, Public Managers Association, City County Engineering Advisory Committee, etc. at \$5,000, and planning, preparing, and holding three workshops at \$2,000 each.
- Annual cost to conduct public outreach. \$11,000
- 4.b. Provide training to staff on the Green Infrastructure Plan, its requirements, and implementation methods. (2017, 18, 19, 20)** This will entail developing a staff training program at \$3,000, and implementing a staff training program at \$3,000 per year.
- Develop staff training. \$3,000
 - Annual cost to train staff. \$3,000
- 4.c. Educate County elected officials on the Green Infrastructure Plan and its requirements and implementation methods. (2017, 18, 19, 20)** This will entail planning, preparing, and holding a workshop for the County Planning Commission, the Transportation, Water, and Infrastructure Committee, and the Board of Supervisors at \$5,000 and conduct a workshop at \$2,000 each year thereafter.
- Develop and conduct workshop for County elected officials. \$5,000
 - Annual cost to hold workshop. \$2,000
- 5. Report on Green Infrastructure planning progress. (2017, 18, 19, 20)** This entails preparing a report each year outlining the progress on developing and implementing the County's Green Infrastructure Plan at \$5,000 per year.
- Annual cost to report on Green Infrastructure Plan progress. \$5,000

Provision C.3.j.ii. Early Implementation of Green Infrastructure Projects (No Missed Opportunities)

- 1. Prepare and maintain a list of public and private GI projects, and infrastructure projects that could include GI measures. (2017, 18, 19, 20)** This would entail reviewing all development projects and developing a list of GI projects and other projects that could include GI at \$5,000, and reviewing our current CIP project lists to determine which projects could include a GI component at \$5,000. There would also be an annual cost to update and maintain the list at \$1,000 per year for each list.
 - Prepare list of public and private GI projects. \$10,000
 - Annual cost to update project lists. \$2,000

- 2. Prepare a status summary for each public and private GI project. (2017, 18, 19, 20)** The intent of this requirement is to report how each public and private project is incorporating Green Infrastructure elements, and explain why Green Infrastructure was not added to those projects that do not have a Green Infrastructure element. These status summaries would be provided in the Annual Report. This would entail researching and drafting a summary report for each private development project each year at \$3,000 and for each public project each year at \$3,000.
 - Annual cost to provide project status reports. \$6,000

Provision C.3.j.iii. Participate in Processes to Promote Green Infrastructure

- 1. Influence regional, state, and federal agencies to fund and incorporate GI measures into local projects. (2017, 18, 19, 20)** This requires an annual effort to track political, grant, and financial processes at all levels of government and advocate for the development of Green Infrastructure, the need for additional funding, and ways to increase efficiencies. It is assumed this would be performed at the regional level (for example BASMAA) and would result in a cost share for the County and staff coordination of \$5,000 each year.
 - Annual cost to advocate for Green Infrastructure. \$5,000

- 2. Report on participation goals. (2017, 18, 19, 20)** It is assumed this would be performed at a regional level and would entail the County's share in an effort to report on the goals and outcomes of participating in the promotion and advocacy for Green Infrastructure each year at \$5,000.
 - Annual cost to develop participation goals. \$5,000

3. **Prepare a plan and schedule for new advocacy efforts. (2019)** This is required in the 2019 Annual Report. It is assumed this would be performed at a regional level and would entail the County's share in an effort to develop a plan of new and ongoing efforts to promote and advocate for Green Infrastructure at \$5,000.

- Prepare an advocacy plan and schedule. \$5,000

Provision C.3.j.iv. Tracking and Reporting Progress

1. **Develop regionally consistent tracking method for Green Infrastructure. (2019)** The intent is to have a tracking system that has information from each jurisdiction (in a format that is consistent throughout the Bay Area) of Green Infrastructure, treated area, and connected and disconnected impervious areas for both public and private projects. The system must also provide information necessary to develop reasonable assurance analysis for TMDL waste load allocations. It is assumed this would be developed at a regional level, possibly through SFEI or BASMAA, with a required cost share from the County at \$10,000 and staff coordination costs of \$10,000.

- Develop tracking method for Green Infrastructure. \$20,000

2. **Report progress on tracking methods each year. (2017, 18, 19, 20)** This will entail reviewing the activities for the year, extracting information from the regional tracking entity, and preparing a report for the Annual Report at \$2,000.

- Annual cost to report on tracking method. \$2,000

3. **Submit tracking methods and status in 2019 Annual Report. (2019)** This information would have been developed in the two items above so no additional cost is needed.

- No additional cost for this item.