### Storm Water Resource Plan for the Santa Clara Basin in Santa Clara County

#### **OVERVIEW**

This project will develop a Storm Water Resource Plan (SWRP) for the Santa Clara Basin (SCB) that will support the development and implementation of Green Infrastructure (GI) Plans within the Basin and produce a list of prioritized runoff capture and use projects eligible for future State implementation grant funds. These projects will improve water quality, reduce localized flooding, and increase water supplies for beneficial uses and the environment. The cooperating entities include the 13 cities and towns located within the Santa Clara County portion of the Santa Clara Basin, the County of Santa Clara, and the Santa Clara Valley Water District¹ (District), which serves as the lead agency applying for the grant on behalf of the cooperating entities. Through a Memorandum of Agreement (MOA), the District and the cooperating entities jointly fund the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), which conducts countywide efforts to comply with the San Francisco Bay Municipal Regional Storm Water Permit (MRP).

The SCBSWRP will be coordinated with the District's current efforts to develop its Integrated Water Resources Master Plan ("One Water" Plan), storm drain master planning efforts being conducted by the cooperating entities, and the cooperating entities' efforts to develop local Green Infrastructure Plans by 2019 as required by the MRP. Building on existing documents that describe the characteristics and water quality and quantity issues within the Santa Clara Basin, the SCBSWRP will identify and prioritize multi-benefit runoff capture projects throughout the Basin, using a metrics-based approach for quantifying project benefits. The metrics-based analysis will be conducted using hydrologic/hydraulic and water quality models coupled with GIS resources and other tools. The products of these analyses will be a map of opportunity areas for runoff capture and use throughout the watershed, an initial prioritized list of potential projects and strategies for implementation of these and future projects. The SCBSWRP will also include an education, outreach and public participation element throughout the planning process that builds on the stakeholder participation process begun in early 2015 for the District's One Water Plan.

#### 1. WATERSHED BOUNDARIES

### 1.a. Why Boundaries Were Chosen

The area that will be addressed by the SCBSWRP is comprised of the portions of the Santa Clara Basin and the Alameda Creek Watershed that are within the boundaries of the County (Exhibit A). These areas are collectively referred to as the "watershed" and comprise 931 sq. mi. The watershed boundary is consistent with the Bay Area Integrated Regional Water Management Plan (BAIRWMP) South Subregion (Exhibit B). The watershed includes one of the three major metropolitan areas in the San Francisco Bay Area Region; the City of San Jose and the 12 surrounding cities and towns (Exhibit C). For the purposes of storm water resource planning, the selected watershed is the largest practicable area that still allows for comprehensive and integrated storm water management across multiple jurisdictional boundaries. The area drains to the San Francisco Bay and fully encompasses four major subwatersheds, including Coyote Creek, Guadalupe River, West Valley and Lower Peninsula watershed areas, plus the marshy Baylands (Exhibit D). To fully address project opportunities in watersheds that cross county jurisdictional boundaries, the SCBSWRP will be developed and implemented in coordination with SWRPs in San Mateo and Alameda Counties.

Other pertinent factors in the determination of the watershed boundary include:

- The watershed is completely within the District's service area and is therefore within the planning sphere of the One Water Plan.
- The watershed lies completely within the boundaries of the Region 2 San Francisco Bay Regional Water Quality Control Board (Regional Water Board).
- The project aligns well with Groundwater Basin ID# 2-9.02 (Santa Clara Valley: Santa Clara) identified in the Regional Water Board's Basin Plan.
- The District and all cooperating agencies within the watershed area are Permittees under the same municipal stormwater NPDES permit.

### 1.b. Local Land Uses within the Watershed

Approximately one-third of the land area in the Santa Clara Basin is devoted to urban uses. The remainder is open space. Of the urban land area, residential land uses comprise about 64% and commercial/industrial land uses about 21% (Exhibit E). Most of the open space is either forest (34%) or rangeland (20%). The remaining open space is occupied by agriculture, parks, wetlands, and open water. Urban development is expected to continue in the Basin, with the majority of development occurring as redevelopment. The area of land devoted to urban use is expected to

Attachment 1

<sup>&</sup>lt;sup>1</sup> The District is the primary water resource agency for Santa Clara County, supplying wholesale water, providing flood protection, and serving as environmental steward for clean, safe creeks and healthy ecosystems. Water is supplied through both local and imported sources.

grow from 35% in 1995 to 36% in 2020; however, redevelopment of existing urban areas is expected to continue at a rapid pace.

#### 1.c. Types of Water Quality and Water Quantity Issues Present in the Watershed

Water resources within the watershed are intensively managed by the District through operation of groundwater recharge basins and reservoirs that are supplied by local and imported sources. Flow in several major streams is determined by controlled reservoir releases. The ongoing drought has impacted stream flows and water quality and has challenged many aspects of District operations. Receiving water quality in the watershed is also threatened by urbanization, storm water runoff, and legacy pollutants. Results of creek status monitoring conducted by SCVURPPP in compliance with the MRP suggest that urban streams in the Santa Clara Basin are generally in poor condition with impacted populations of aquatic life resulting from long-term changes in stream hydrology, channel geomorphology, in-stream habitat complexity, and other modifications to the watershed and riparian areas associated with the urban development that has occurred over the past 50 plus years. Stream channels have been altered for flood control purposes, riparian forests have been converted to urban land uses, and the network of MS4s constructed over the years limits opportunities for storm water percolation and increases peak rates of storm flow. Storm water runoff may convey trash, sediments, nutrients, pesticides, and metals directly to receiving waters. Historic mining operations and air deposition have released mercury into the watershed in concentrations known to adversely affect sensitive aquatic organisms, and PCBs have been detected at high concentrations in old industrial and old urban areas. Mercury, PCBs, and pesticides are being addressed through Total Maximum Daily Load (TMDL) water quality control plans that identify urban runoff as a source. The SCBSWRP will assist in identifying projects that can help achieve urban runoff load reductions identified in TMDLs, particularly for PCBs.

### 1.d. Ongoing Efforts Taken to Address Water Quality and Water Quantity Issues

Over its 25-year history, SCVURPPP and its member agencies have achieved considerable progress towards improving the water quality of the basin by actively implementing many storm water management programs designed to address water quality and water quantity concerns with the goal of protecting natural resources. In compliance with the MRP, various programs have had beneficial impacts such as: new and redevelopment projects are now constructed with Low Impact Development (LID) practices; green infrastructure planning is being initiated; pesticide toxicity control programs have controlled sources and prevented pollution with integrated pest management (IPM) policies/ordinances, public education, pesticide disposal programs and sustainable landscaping requirements; trash in local creeks has been reduced through installation and maintenance of trash capture systems, the adoption of ordinances to reduce the impacts of litter-prone items and enhanced institutional controls such as street sweeping, and the on-going removal and control of direct dumping; copper in stormwater runoff has been reduced through implementation of controls such as architectural and site design requirements, street sweeping, and participation in statewide efforts to significantly reduce the level of copper vehicle brake pads; and mercury and PCBs in storm water runoff have been reduced through implementation of the respective TMDL plans.

In addition to SCVURPPP actions, the District addresses water quantity issues through implementation of Its Water Supply and Infrastructure Master Plan (WSIMP), Groundwater Management Plan (GWMP), and Urban Water Management Plan (UWMP). The District, as the region's designated Groundwater Sustainability Agency, has an active managed groundwater recharge program that significantly increases groundwater storage and water supply availability each year, and is planning to construct additional recharge capacity within the watershed. Exhibit F provides a map of groundwater basins and recharge areas in the watershed. The District's One Water Plan is being developed to identify, prioritize and implement activities at a watershed scale to maximize established water supply, flood protection, and environmental stewardship goals and objectives. It will incorporate knowledge from past planning efforts (such as the WSIMP, GWMP, and UWMP) and coordinate with relevant internal and external programs (see Attachment 5 for more information). One Water Plan goals include: 1) valued rain (manage rainwater to improve flood protection, water supply, and ecosystems); 2) healthful and plentiful water; 3) ecologically effective streams/watersheds; 4) resilient Baylands; and 5) community collaboration. Tier 1 of the One Water Plan provided a countywide overview; Tier 2 will include greater detail on individual watersheds and will set targets and priorities to meet the goals. Other efforts include the BAIRWMP, a nine-county effort to coordinate and improve water supply reliability, protect water quality, manage flood protection, maintain public health standards, protect habitat and watershed resources, and enhance the overall health of the Bay. These ongoing efforts provide a firm foundation for developing the SCBSWRP and will be integrated into the metrics-based analysis of project benefits and project prioritization process.

#### 2. AGREEMENTS / MOU(S)

#### 2.a. Types of Agreement(s) the Applicant Has or Will Have with Cooperating Entities

SCVURPPP is an association of 13 cities and towns in Santa Clara Valley, the County of Santa Clara, and the Santa Clara Valley Water District that share a common NPDES permit to discharge storm water to South San Francisco

Bay. Member agencies include the cities and towns of Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, Sunnyvale; the County of Santa Clara; and the Santa Clara Valley Water District. These 15 agencies will be the cooperating entities for the grant.

SCVURPPP is organized, coordinated, and implemented in accordance with a MOA signed by each member agency. The MOA was signed in 1990 and updated in 1999, 2005, and 2006. It covers the responsibilities of each member agency and provides a cost-sharing formula for joint expenditures. SCVURPPP By-laws were updated and approved in 1999. The Management Committee is the official decision-making body for SCVURPPP. It consists of one representative from each member agency.

#### 2.b. Roles and Responsibilities of Each Entity

The Santa Clara Valley Water District is the lead entity for the grant application and will provide a Project Director and Project Manager for managing the overall project. SCVURPPP staff, with consultant assistance as needed, will perform the SCBSWRP Workplan tasks. The cooperating entities will have the following roles and responsibilities:

- Contribute funding for the grant match through their contributions to the adopted SCVURPPP budgets for fiscal years 2015-16 and 2016-17;
- Provide data on land use, infrastructure, development patterns, and other information for their jurisdictions as needed:
- Provide information on planned and potential storm water and dry weather runoff capture projects within their jurisdictions;
- Review, comment on, and approve the SCBSWRP document; and
- Participate in committees, public meetings and workshops as needed.

### 2.c. Status of the Agreement(s) Required and Letters of Support from Entities

The SCVURPPP MOA is currently in force and all cooperating entities for this grant are participants in the MOA. No additional agreements are needed to develop the SCBSWRP. Each SCVURPPP member agency has provided a letter of support for the development of the SCBSWRP (see Attachment 4).

## 2.d. If no cooperating entities, justify why an effort of collaboration was not chosen or feasible

Not Applicable - Cooperating entities are described in Section 2.a. above.

## 3. OUTREACH EFFORTS AND COLLABORATION WITH NGOs, DACs, AND EDAs

### 3.a. Stakeholder Involvement with Project Selection and Plan Preparation

Active stakeholder involvement during the development and implementation of the SCBSWRP and associated runoff capture and use projects will help ensure the desired environmental outcomes. The SCBSWRP stakeholder outreach effort will build upon the process currently underway through the District's One Water Plan project. The District has convened a Stakeholder Working Group (SWG) of diverse representatives from the following sectors: academic, agricultural, business, civic/public policy (including environmental justice), environmental, housing/neighborhoods (including DACs and EDAs), conservation agencies, local and state government, tribal government, recreation, transportation, and water supply/quality. The SWG met six times during 2015 and 2016 to provide input on Tier 1 of the One Water Plan (the countywide overview). As part of this process, the SWG members have been educated on watershed issues and have collaborated on defining goals, objectives, and implementation approaches for water resource management throughout the County. The SWG will continue to meet during Tier 2 of the One Water Plan to develop decision frameworks and implementation plans for five watershed areas within the County. For the SCBSWRP process, it is envisioned that a Subgroup of the SWG will be created to provide input on SWRP preparation and project selection, as described in the Workplan tasks in Section 5.c below, at selected SWRP development milestones. The SWG will meet roughly quarterly, with meetings timed to review task products and coordinated with One Water Plan meetings (see schedule in Attachment 3). In parallel with the SWG Subgroup, the cooperating entities (through SCVURPPP and its committees) will participate in review and acceptance of the products from each task described in Section 5, prior to the broader presentation to the SWG Subgroup (which will include some cooperating entities).

There are a number of DACs and EDAs scattered throughout the watershed, with the majority located in the City of San Jose. DACs in the watershed are shown in Exhibit G<sup>2</sup>. Many of these areas are included in the City's Strong Neighborhood Initiative redevelopment plan, and have formed Neighborhood Associations or Action Committees.

Attachment 1 Page 3 of 18

<sup>&</sup>lt;sup>2</sup> EDAs are not shown but are located in similar areas, per DWR maps online. The project team will coordinate with the BAIRWMP team as they work to better coordinate with DACs and EDAs to identify needs and projects in those areas.

These groups have participated as stakeholders in past projects and will be invited to participate in the SWG Subgroup, especially as projects in their areas are identified by the SCBSWRP.

Additional outreach on the concepts and benefits of green infrastructure as well as the content of the SCBSWRP will be conducted to various audiences within the watershed, including municipal agency staff and elected officials, the development community, regional planning and transportation agencies, and the general public, as described in Section 5.c of this Workplan. Cooperating entities will leverage these watershed-wide efforts to increase participation from their local communities.

### 3.b. Stakeholder Involvement in Implementing the Final Plan

The cooperating entities will continue to be involved in the process of updating sections, adding projects to, and adaptively managing the SCBSWRP. The SWG Subgroup will be notified of updates and reconvened as appropriate. However, a key step in implementing the final SCBSWRP will be incorporating prioritized projects into the cooperating entities' Green Infrastructure (GI) Plans and into the District's One Water Plan for implementation in local jurisdictions. Additional stakeholder involvement will take place at the local level as these GI Plans are adopted, and as individual projects are designed and constructed (see 3.c.).

### 3.c. Stakeholder Involvement in Completion of Projects

The cooperating entities will be responsible for completion of projects within their jurisdictions, and will involve appropriate stakeholders on each project, including the general public, neighborhood groups (including those from DACs and EDAs if applicable), and adjacent neighbors to the project location. Some projects may involve multiple entities and a more regional stakeholder process. The SCBSWRP will describe the stakeholder involvement process that cooperating entities should follow during project implementation and completion. SCVURPPP will be responsible for tracking compliance with the stakeholder process.

#### 4. SUBMISSION OF SWRP TO LOCAL IRWM GROUP

SCVURPPP and the District are coordinating with the BAIRWMP Coordinating Committee on the details of the project and will continue to do so as the SCBSWRP is developed, finalized and implemented. The completed SCBSWRP will be submitted to the Coordinating Committee and incorporated into the BAIRWMP as an additional appendix and/or added by reference. The following process will be used for submittal of the SCBSWRP to the Committee:

- The completed SCBSWRP will be submitted electronically to Committee.
- The Committee will approve the SCBSWRP as an addendum to the BAIRWMP, and post it on the BAIRWMP website.
- Any projects that go forward for implementation grant funding in the South Subregion will be submitted to the Committee via the website per their existing process for adding new projects to the BAIRWMP.

This process was discussed and agreed to by the BAIRWMP Coordinating Committee at its meeting on February 29, 2016. Documentation of this agreed upon coordination process can be provided if requested.

### 5. WORK TASKS

This section presents a detailed description of the work tasks that will be completed during development of the SCBSWRP. The tasks address each of the required elements of the Water Code and SWRP Guidelines and will provide a prioritized list of stormwater and dry weather runoff capture and use projects for implementation throughout the watershed. The SCBSWRP Workplan incorporates tasks related to development of cooperating entities' Green Infrastructure (GI) Plans and the District's One Water Plan that address SWRP goals and required elements, as well as additional tasks needed for the SCBSWRP beyond those current efforts. Stakeholders will be involved in most tasks as described in Section 3 and Section 5.c.

#### 5.a. Project Administration

Project administration will consist of management of the various project components during the development of the SCBSWRP, including grant application preparation, contract administration, management of project budget and schedule, coordination with State Board staff, and preparation of quarterly and annual progress reports, invoices, and other required submittals as outlined in the grant agreement. It is anticipated that project team meetings will be held on an approximately monthly basis to discuss the status of each of the tasks and coordinate activities between project components. The project team will consist of SCVURPPP staff, District staff (including those from Water Supply), and technical consultants as needed.

#### 5.b. Development of the Santa Clara Basin Storm Water Resource Plan

The development of the SCBSWRP will consist of the following tasks:

- 1. Compile and Review Required Information and Data: Existing information, related plans, hydrologic and hydrogeologic data, design criteria, and available GIS data needed for evaluating watersheds and identifying/prioritizing potential projects will be collected from the cooperating entities and other sources as needed. All information will be compiled, summarized, and shared with cooperating entities and stakeholders to document watershed condition and priorities for improvement (consistent with One Water objectives). Documents include those listed in Table 1, as well as storm drain master plans, Capital Improvement Program (CIP) project documents, land use and general plan documents, and associated GIS layers (e.g., storm drain infrastructure, land use, parcels, etc.). The product will be an annotated reference list for use in later tasks.
- 2. Evaluate and Select Appropriate Models and Tools: An evaluation of hydrologic/hydraulic models, water quality models and other GIS-based decision support tools will be conducted to select the appropriate tools and modeling approach to identify projects, conduct the metrics-based benefit analyses to prioritize projects, and track project implementation. Models and tools considered will include the "GreenPlan-IT" tool<sup>3</sup> and other models currently in use by cooperating entities. The tools and models selected should be compatible with those currently being used by some entities for the development of GI Plans and the Reasonable Assurance Analysis<sup>4</sup> required by the MRP for evaluation of PCB and mercury load reductions. A technical memorandum will be prepared that describes the purpose of the tools, data needs, and level of effort for use, and provides the recommended approach.
- 3. <u>Develop Process for Identifying, Analyzing, and Prioritizing Projects</u>: In this task, a process for identifying and prioritizing potential project opportunities using a metrics-based analysis of project benefits, will be developed and documented, including:
  - Development of an approach to identify publicly-owned parcels and rights-of-way with potential for
    green infrastructure for runoff capture/treatment. A key part of the approach will be identifying public
    parcels in areas with opportunities to augment local water supplies (i.e., those in groundwater recharge
    zones) and/or improve surface water quality while protecting groundwater quality.
  - Development of criteria for prioritizing parcels/projects using an analysis of multiple benefits, and the
    metrics and process for assessing those benefits. The metrics chosen will be consistent with the
    SWRP Guidelines.
  - Documentation of the process in a technical memorandum for review and approval by the cooperating entities as well as achieve consensus from the project Stakeholder Working Group (SWG).
- 4. <u>Identify Potential SWRP Projects</u>: Using the project identification approach developed in Task 5.b.3, the project team will assist cooperating entities and key stakeholders in identification of potential multi-benefit projects which may include opportunities to:
  - Augment local water supply through groundwater recharge or storage;
  - Pollutant and hydrologic source control, onsite/local infiltration and use;
  - Reestablish or mimic natural treatment and infiltration systems;
  - Develop, restore and/or enhance habitat and open space through stormwater management; and
  - Use existing publicly owned lands to capture, clean, store and use runoff.

GIS-based tools and/or models selected in Task 5.b.2 will be used to conduct a desktop analysis to identify public parcels and rights of way for potential project opportunities. Information on potential project opportunities will also be collected from the District's One Water Plan, the District's Water Supply and Infrastructure Master Plan, and from the cooperating entities' storm drain master plans and analysis of CIP project lists. The project team will assist cooperating entities with review of current and future CIP lists to identify opportunities for runoff capture and treatment by developing a process for conducting the review and reporting the results, including checklists, feasibility criteria, and/or other mechanisms by which projects can be effectively screened for GI measure implementation. The process and criteria will be coordinated regionally with other MS4s through the Bay Area Stormwater Management Agencies Association (BASMAA).

5. <u>Screen Potential Project Opportunities</u>: A screening process will be conducted by the project team to identify feasible project sites in terms of constructability and potential for runoff volume reduction/capture and

Attachment 1 Page 5 of 18

<sup>&</sup>lt;sup>3</sup> GreenPlan-IT is a watershed planning toolkit developed by the San Francisco Estuary Institute to support cost-effective selection and placement of green infrastructure in urban watersheds, funded by a grant from USEPA Region 9 Water Quality Improvement Fund.

<sup>&</sup>lt;sup>4</sup> A Reasonable Assurance Analysis (RAA) involves the identification and evaluation of potential best management practice (BMP) implementation scenarios to demonstrate achievement of water quality-based effluent limits for pollutants of concern in specific waterbodies.

pollutant load reduction. This will include field reconnaissance of selected potentially feasible project sites as needed to supplement the GIS information. The product of this task will be a list of potential projects that will be evaluated for benefits and prioritized in the next two tasks. The results of this task will be reviewed and approved by the cooperating entities as well as presented to the SWG.

- 6. Conduct Modeling and Benefits Analysis of Potential Projects: In this task, the model(s) selected in Task 5.b.2 will be developed and/or adapted for this project, and then applied to the list of potential projects from Task 5.b.5 to quantify runoff capture (water supply benefit) and pollutant removal effectiveness (water quality benefit). The resulting list of effective projects will be further analyzed for additional benefits, using the metrics-based approach defined in Task 5.b.3. The metrics-based analyses will be conducted on the selected projects based on model results and other data, and the results of the analyses will be used to develop the prioritized project list. Benefits evaluated in addition to increasing water supply and improving water quality will include (as applicable to the potential project): creating/restoring wetlands and/or riparian habitat; providing instream flows; increasing park and recreation lands and recreation opportunities; providing urban green space; increasing tree canopy; reducing heat island effect; improving air quality; maximizing flood management; and maximizing environmental and other community benefits. The outcome of this task will be a list of multi-benefit prioritized projects, based on application of a benefit scoring system, which will be reviewed by and refined based on input from cooperating entities and stakeholders.
- 7. Develop/Compile GI Guidelines, Design Details and Specifications: The project team will develop and/or compile guidelines, design details, and specifications for projects in public rights of way that address transportation, streetscapes, urban forestry, and stormwater requirements for different street typologies and land use zones. Design details and specifications will be compiled from various existing resources and modified as needed for use by cooperating entities. Guidelines will address protection of groundwater quality in recharge zones. Guidelines will also include alternative approaches for sizing stormwater treatment systems in roadways where space, catchment area, utilities, soils or other design factors present challenges to the use of standard sizing criteria, based on guidance being developed by BASMAA. The product will be a technical memorandum for review by cooperating entities and stakeholders.
- 8. <u>Prepare Conceptual Project Designs</u>: The project team will work with the cooperating entities to develop conceptual project designs for up to 10 selected high priority projects in their jurisdictions. Work will include additional field assessment and utility location confirmation. Conceptual design drawings will be prepared showing the project footprint, cross-sections, runoff capture and treatment facilities, and design assumptions, and capital and O&M costs will be estimated for each project.
- 9. Develop SCBSWRP Implementation Plan: The SCBSWRP and the prioritized projects within it will primarily be implemented through the District's One Water Plan and/or the cooperating entities' Green Infrastructure (GI) Plans. The District will have lead responsibility for managed recharge projects, and implementation of the SCBSWRP will be coordinated with the update of its Groundwater Management Plan to meet the Sustainable Groundwater Management Act requirements. The following subtasks will facilitate the development of GI Plans by the other cooperating entities and help ensure that they have created the legal, institutional, and financial mechanisms needed to implement priority GI projects. In addition, a plan will be developed for implementation of the SCBSWRP itself, including performance measures, tracking progress and reporting back to stakeholders, and an adaptive management strategy that includes a process for evaluating and adding new projects. The implementation plan and products from the subtasks below will be reviewed and approved by the cooperating entities and presented to the SWG to achieve consensus.
  - Prepare GI Scoping Guidance and Framework: To help cooperating entities determine resources needed to comply with the GI requirements, the project team will develop guidance on the approach, level of effort, and schedule to complete a GI Plan Framework (as required by the MRP) and other tasks needed to complete a GI Plan by 2019. The project team will also develop a Framework Template that contains guidance on the required elements, including a statement of purpose, tasks and timeframes. The team will also assist with the development and approval of the entities' specific Frameworks. A technical memorandum will be prepared for review by the cooperating entities.
  - <u>Prepare Model GI Plan Template</u>: The project team will complete a template for a model GI Plan for cooperating entities' use. The template will include the elements required by the MRP with examples of how to implement the various sections. The products will be draft and final Model GI Plan Templates.
  - <u>Develop Model GI Content for Related Plans</u>: The project team will assist the cooperating entities by collecting, creating and sharing model language for various plans that will need to be updated to

support implementation of the SCBSWRP and GI Plans. The list of plans may include: General, Specific, Transportation, Bike-Ped, Pavement Management, Storm Drain, Sewer, Urban Forestry, Parks and Open Space, Sustainability, Climate Action, Water Conservation and other plans. The products will be draft and final technical memoranda with model language for related plans.

- <u>Develop Legal Authority Guidance</u>: Guidance will be developed for cooperating entities that may
  need to supplement existing legal authority to implement or strengthen elements of their GI Plans.
  The project team will collect examples of adopted policies, resolutions, ordinances and regulations
  related to GI implementation and develop guidance and models for entities' use as needed. Products
  will include draft and final technical memoranda with examples of legal authority and model
  language.
- <u>Provide Guidance on Funding Mechanisms</u>: The project team will research and summarize possible
  options for funding mechanisms to design, construct and maintain prioritized GI projects, including
  in-lieu fees and alternative compliance. Guidance on funding mechanisms will be documented in
  draft and final technical memoranda.
- <u>Develop Process for Cooperating Entities' Adoption of the SCBSWRP:</u> Based on discussions with cooperating entities, develop an adoption process and schedule and provide template(s) for supporting resolutions or other mechanisms.
- 10. <u>Develop Tracking/Reporting Tools for SCBSWRP Implementation</u>: Tracking implementation of SCBSWRP will be coordinated with the tracking of planned and completed GI projects and the implementation of regionally-consistent methods to track and report the amount of tributary area to runoff capture/treatment facilities and "disconnected" impervious area on both public and private parcels, as required by the MRP. Following the review of available tools in Task 5.b.2, the project team will begin to develop, and/or collaborate with others to develop, a method for tracking/reporting implementation of priority projects, including GI projects, and tributary and disconnected impervious areas over time. The tracking/reporting method will be coordinated with regional efforts to track estimated PCB and mercury load reductions (and potentially reductions for trash as well) via GI and other measures.
- 11. <u>Prepare Draft and Final SCBSWRP Document</u>: A draft SCBSWRP, addressing the Water Code requirements, will be prepared and presented to the cooperating entities and SWG for review and comment. Input received throughout the SCBSWRP development will be incorporated. A SWG meeting will be held to achieve consensus on the document. Comments will be incorporated into the final SCBSWRP.
- 12. Incorporate the SCBSWRP into the BAIRWMP: The project team will coordinate with the BAIRWMP Coordinating Committee during development of the SCBSWRP and will submit the final SCBSWRP for incorporation into the BAIRWMP as an addendum, per the agreed upon process described in Section 4. As projects are proposed for grant funding, they will be added to the BAIRWMP list using established procedures.
- 13. <u>Prepare CEQA Documentation</u>: Required CEQA documentation will be clarified and prepared as needed. It is assumed that as a planning document, the SCBSWRP itself is statutorily exempt from CEQA analysis and documentation, per CEQA Guidelines Section 15262. This task does not include preparing CEQA documentation for the 10 priority projects for which conceptual designs will be prepared in Task 5.b.8.

#### 5.c. Education/Outreach

- 1. <u>Develop Outreach Strategy</u>: Education and outreach tasks will focus on five audiences: 1) cooperating entities (SCVURPPP member agency staff, upper level management, and elected officials); 2) a representative stakeholder group (the SWG); 3) the development community (e.g., developers, engineers, landscape architects, and contractors); 4) regional planning and transportation agencies; and 5) general public (countywide, and/or in the municipality or neighborhood in which project(s) are located). A comprehensive education and outreach strategy will be developed for addressing these different audiences in a coordinated approach throughout the planning and implementation process. The project team will work with cooperating entities to plan outreach, trainings and workshops, and development of materials and media as part of the strategy. The products will include a draft and final outreach strategy for the SCBSWRP development and implementation.
- 2. Outreach to Cooperating Entities: The scale of GI implementation throughout a municipality, both financially and temporally, requires that elected officials and municipal staff understand the concepts, intent and stacked benefits of the transition from gray to green infrastructure. The project team will develop outreach materials for conducting outreach to elected officials and municipal staff on both the GI and SCBSWRP

planning efforts. In addition, the project team will conduct a GI workshop for staff at cooperating entities to educate them on the GI and SCBSWRP planning and implementation process. The workshop may be provided via webcast or videotaped for future viewing. If needed, the project team will conduct additional staff trainings for individual cooperating entities. The products of this effort will be presentation materials and handouts, factsheets, model presentations, and technical guidance for study sessions.

- 3. Education/Involvement of the SWG: As described in Section 3, the SCBSWRP will build on the District's One Water Plan Stakeholder Working Group (SWG) which includes diverse representatives from a number of sectors. The SWG will be expanded as needed for the SCBSWRP process to collaborate on the SWRP preparation and project selection. The SWG will meet roughly quarterly, with meetings timed to review task products and coordinated with One Water Plan meetings (see schedule in Attachment 3).
- 4. Outreach to the Development Community: The project team will reach out to the development community to educate them on GI and SCBSWRP efforts, and project design guidelines and standards. This will be done by inviting members of the development community to local training workshop(s), presenting at professional society meetings, and writing articles for professional association newsletters. In addition, the SWG will include one or two members from the development community. The products will be workshop presentations and newsletter articles.
- 5. Outreach/Coordination with Regional Planning and Transportation Agencies: The project team will engage with regional, state and federal planning and transportation agencies, such as the Metropolitan Transportation Commission, Association of Bay Area Governments, Caltrans, EPA, Santa Clara Valley Transportation Authority (VTA) and Caltrain to promote the inclusion and funding of GI in various projects and receive their input on the SCBSWRP and potential projects. VTA is currently on the SWG and other agencies will be invited to participate. The project team will also participate in a regional GI-Transportation Roundtable series of meetings, in partnership with San Francisco Estuary Partnership and San Francisco Estuary Institute, that will bring together transportation, planning and storm water agencies to leverage the available funding for infrastructure improvements that address multiple benefits.
- 6. Outreach to the General Public: The project team will develop outreach materials for promoting GI concepts to the general public, and promote and connect the One Water Plan, SCBSWRP and GI Plans. The outreach will be integrated with existing outreach conducted by SCVURPPP and the cooperating entities. The products will be fact sheets, flyers, social media messages, and a map of local GI projects for website postings.
- 7. <u>Development/Maintenance of a GI/SWRP Resource Library</u>: To assist cooperating entities with the development and implementation of their GI Plans and facilitate participation of these entities and the SWG in the SCBSWRP development process, the project team will create a GI/SWRP Resource Library on the SCVURPPP website. The Resource Library will include examples of new GI projects, documents such as model policies and ordinances, design guidelines and specifications, and cost data. The Resource Library will also contain draft and final products related to SCBSWRP development and links to One Water Plan documents, and will be used as a mechanism for obtaining input from cooperating entities and the SWG on SCBSWRP products. The outcome of this task will be new webpage(s) on the SCVURPPP website with comprehensive information on GI and other SWRP topics.

## 6. STANDALONE PLAN OR SUPPLEMENTAL PLAN

The SCBSWRP will be a stand-alone Storm Water Resource Plan that will be coordinated with and draw upon information from several existing plans and planning efforts that address storm water resource management in the Santa Clara Basin. The District's One Water Plan that is currently in development will serve as an "umbrella" plan for the full suite of water issues in the County. The SCBSWRP will provide conceptual details of storm water runoff capture and use projects that address Goal 1 (Valued Rain) and other goals and objectives of the One Water Plan. The GI Plans required by the MRP for each cooperating entity will provide information and project ideas for the SCBSWRP multi-benefit analysis. The SCBSWRP will assist in the identification, prioritization, and tracking of projects required for the GI Plans. Other plans and planning efforts and their relationship to the SCBSWRP are described in Attachment 5 and Table 1.

### 7. WATER CODE AND SWRP GUIDELINE ELEMENTS

Table 1 illustrates how specific tasks in Section 5 of this Workplan and other existing plans or planning efforts in the watershed will address the mandatory elements required by the Water Code. The SCBSWRP will also address as many as possible of the recommended elements described in the SWRP Guidelines.

### 8. ASSESSMENT, MONITORING, AND STUDY TASKS

Data assessment and modeling study tasks conducted for the SCBSWRP will identify expected benefits and water quality outcomes for potential projects as described in Section 5 above. No additional monitoring will be conducted specifically for the SCBSWRP. However, the SCBSWRP will be based on extensive monitoring data collected in the past by the District and SCVURPPP. For example, SCVURPPP manages and implements a comprehensive water quality monitoring program, consistent with MRP requirements, on behalf of its member agencies. The monitoring program includes pollutant of concern monitoring in water and sediment, stressor source identification and evaluation, and biological assessment for Santa Clara Basin creeks. SCVURPPP also participates in the Regional Monitoring Program for San Francisco Bay. Baseline and/or post-construction effectiveness monitoring of specific projects that come out of the SCBSWRP may be conducted in the future as required for implementation grants.

#### 9. TMDLs, NPDES, WDRs, AND MS4

9.a. List any total maximum daily loads (TMDLs), national pollutant discharge elimination system (NPDES) permits, waste discharge requirement permits (WDRs), and municipal storm water (MS4) permits that apply to your watershed(s) boundaries.

Discharges of storm water and dry weather runoff from the MS4s in the watershed (i.e., the cooperating entities) are covered under the Municipal Regional Storm Water NPDES Permit (MRP) and associated WDRs. Other storm water-related general (statewide) NPDES permits apply to certain activities in areas within the watershed boundary, including the Construction, Industrial, and Drinking Water System General NPDES Permits. There are also three regional wastewater treatment facilities within the watershed that discharge to South San Francisco Bay under wastewater NPDES permits.

The MRP contains provisions for implementation of the urban runoff requirements of four TMDLs that apply to the watershed boundaries: the San Francisco Bay and Guadalupe River Watershed Mercury TMDLs; the San Francisco Bay PCBs TMDL; and the TMDL for Diazinon and Pesticide-Related Toxicity for Urban Creeks. The MRP also contains provisions for trash load reduction and copper site-specific objectives, although neither a trash nor a copper TMDL were formally adopted.

### 9.b. Identify how the Storm Water Resource Plan will assist in compliance with these permits.

The SCBSWRP will assist in compliance with the MRP and TMDLs. It will support development of the Green Infrastructure (GI) Plans that are required by the MRP for each SCVURPPP member agency. The GI Plans are required to identify means and methods to prioritize particular areas and projects for implementation of GI; the SCBSWRP will assist in the identification, prioritization, and tracking of projects required for the GI Plans.. Projects that are ultimately implemented as a result of the SCBSWRP process will have multiple benefits including reduction of pollutant loads required by the TMDLs, reduction of trash, and associated improvements in the receiving water quality. The MRP sets numeric effluent limits for mercury and PCBs loads that are intended to promote attainment of the wasteload allocations described in the TMDLs. The SCBSWRP will incorporate these goals and requirements into the project prioritization models, thereby assisting in MRP and TMDL compliance.

### 10. LOCAL ORDINANCE(S) AND LAW(S):

Changes in local and State law and Bay Area regulations over the last five years have removed many of the barriers that could pose problems for implementation of the SCBSWRP. Examples include:

- Updates to municipal stormwater ordinances to include Low Impact Development (LID) requirements and policies;
- 2. The addition of rainwater harvesting and graywater regulations to the State Plumbing Code;
- 3. The 2015 update to the State Model Water Efficient Landscaping Ordinance acknowledging watershed planning principles and practices; and
- 4. The recently adopted MRP requirements for Green Infrastructure.

In addition, the District has worked with local jurisdictions to adopt ordinances and policies for land use near streams, and to develop guidelines for locating and designing infiltration devices to minimize risk to groundwater quality.

The MRP provisions for GI planning will require SCVURPPP member agencies to further integrate "stormwater as a resource" and other SWRP-consistent policies inter-departmentally as part of institutionalizing green stormwater practices for public and private development projects. Agencies will need to examine existing ordinances and policies and update them as needed to be able to implement their GI Plans. If any barriers to implementing the SCBSWRP are identified, they can be addressed through that process.

Table 1. SCBSWRP Workplan Tasks and Relationship to Mandatory Elements and Other Regional and Local **Planning Efforts** 

				Regional Plan That Addresses Element <sup>1</sup>						
Work- plan Task #	Water Code/Storm Water Resource Plan Mandatory Element	SCBSWRP	Local GI Plans	Basin Plan	WMI WCR	WMIWAP	District GWMP	District WSIMP	BAIRWMP	One Water
1.a; 5.b.11	Plan identifies watershed and subwatershed(s) for storm water resource planning.	•	0	•	•				•	•
1.c; 5.b.11	Plan identifies activities that generate or contribute to the pollution of storm water or dry weather runoff, or that impair the effective beneficial use of storm water or dry weather runoff.	•	0	•		•				•
9.b; 5.b.11	Plan describes how it is consistent with and assists in, compliance with total maximum daily load implementation plans and applicable national pollutant discharge elimination system permits.	•	0	•						
9.a,b; 5.b.11	Plan identifies applicable permits and describes how it meets all applicable waste discharge permit requirements.	•	0	•						0
3.a,b; 5.c.3	Local agencies and nongovernmental organizations were consulted in Plan development.	•	0	•	•	•	•	•	•	•
3.a,b; 5.c.4,6	Community participation was provided for in Plan development.	•	0	•	•	•	•	•	•	•
5.b.4,11	Plan identifies opportunities to augment local water supply through groundwater recharge or storage for beneficial use of storm water and dry weather runoff.	•						•	o	o
5.b.4,11	Plan identifies opportunities for source control for both pollution and dry weather runoff volume, onsite and local infiltration, and use of storm water and dry weather runoff.	•	0						0	0
5.b.4,11	Plan identifies projects that reestablish natural water drainage treatment and infiltration systems, or mimic natural system functions to the maximum extent feasible.	•	0						0	o
5.b.4,11	Plan identifies opportunities to develop, restore, or enhance habitat and open space through storm water and dry weather runoff management, including wetlands, riverside habitats, parkways, and parks.	•	0						0	o
5.b.4,11	Plan identifies opportunities to use existing publicly owned lands and easements, including, but not limited to, parks, public open space, community gardens, farm and agricultural preserves, school sites, and government office buildings and complexes, to capture, clean, store, and use storm water and dry weather runoff either onsite or offsite.	•	0						o	o
5.b.7	For new development and redevelopments (if applicable): Plan identifies design criteria and best management practices to prevent storm water and dry weather runoff pollution and increase effective storm water and dry weather runoff management for new and upgraded infrastructure and residential, commercial, industrial, and public development.	•	0			•				
5.b.3,6	Plan uses appropriate quantitative methods for prioritization of projects. (This should be accomplished by using a metrics-based and integrated evaluation and analysis of multiple benefits to maximize water supply, water quality, flood management, environmental, and other community benefits within the watershed.)	•						•	o	o
5.b.4-8	Plan projects and programs are identified to ensure the effective implementation of the storm water resource plan pursuant to this part and achieve multiple benefits	•								o
5.b.2,6	The Plan identifies the development of appropriate decision support tools and the data necessary to use the decision support tools.	•	0							0
4; 5.b.12	The Plan will be submitted, upon development, to the applicable integrated regional water management (IRWM) group for incorporation into the IRWM plan.	•							•	
5.c	Outreach and Scoping: Community participation is provided for in Plan implementation.	•	•	•	•	•	•	•	•	•

<sup>&</sup>lt;sup>1</sup>Legend – Selected Local Regional Planning Documents and Efforts:

- Santa Clara Basin Storm Water Resource Plan (proposed) [SCBSWRP]
- Local Green Infrastructure Plans required by Municipal Regional Stormwater NPDES Permit (in progress) [Local GI Plans]
- San Francisco Bay Regional Water Quality Control Board, Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin, 2002 (as amended through March 20, 2015). [BASIN PLAN]
   Santa Clara Basin (SCB) Watershed Management Initiative (SCBWMI), Watershed Management Report Volume 1, Watershed Characteristic Report,
- May 2001. [WMI WCR]
- SCBWMI, Watershed Management Report Volume 3, Santa Clara Basin Watershed Action Plan, August 2003. [WMI WAP]
- Santa Clara Valley Water District, Groundwater Management Plan (2012) [GWMP]

- Santa Clara Valley Water District, Water Supply and Infrastructure Management Plan (2012) [WSIMP]
   San Francisco Bay Area Integrated Regional Water Management Plan (2006, rev. 2013) [BAIRWMP]
   Santa Clara Valley Water District Integrated Water Resources Master Plan (in progress) [ONE WATER]

## = Addressed or will be in the document.

• = Already partially addressed or will be partially addressed in the document (e.g., the document may address a different geographic area or scale and/or provide less specificity compared to the SCBSWRP). In the case of the BAIRWMP, some of the projects on project list may address the stated opportunities but they have not been identified using the same watershed-wide process as the SCBSWRP.

# **EXHIBITS**

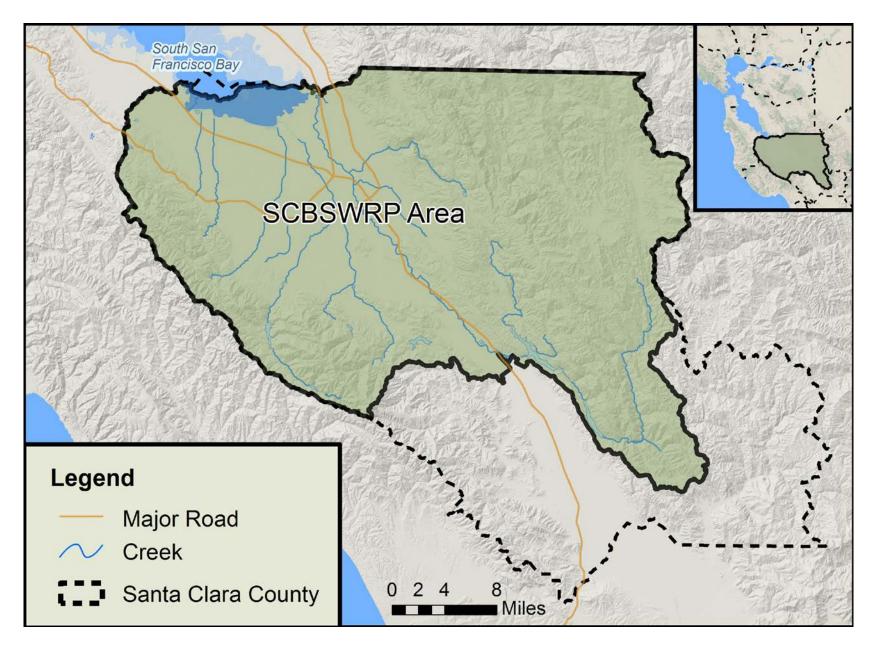


Exhibit A. Santa Clara Basin Storm Water Resource Plan (SCBSWRP) Watershed Area.

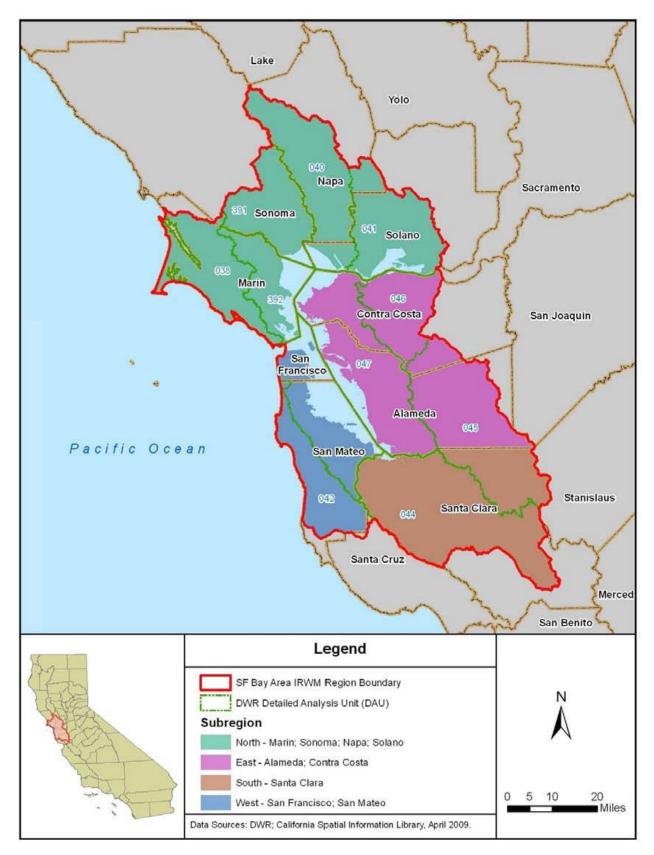


Exhibit B. Bay Area Integrated Regional Water Management Plan (BAIRWMP) Subregions (source: BAIRWMP 2013)

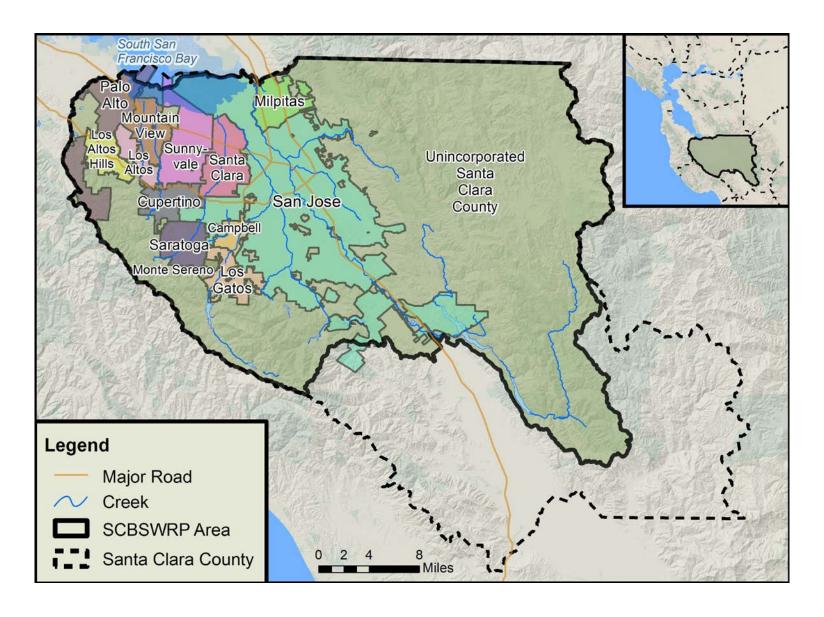


Exhibit C. Cooperating Entities/Municipalities within the Santa Clara Basin Storm Water Resource Plan (SCBSWRP) Watershed Area.

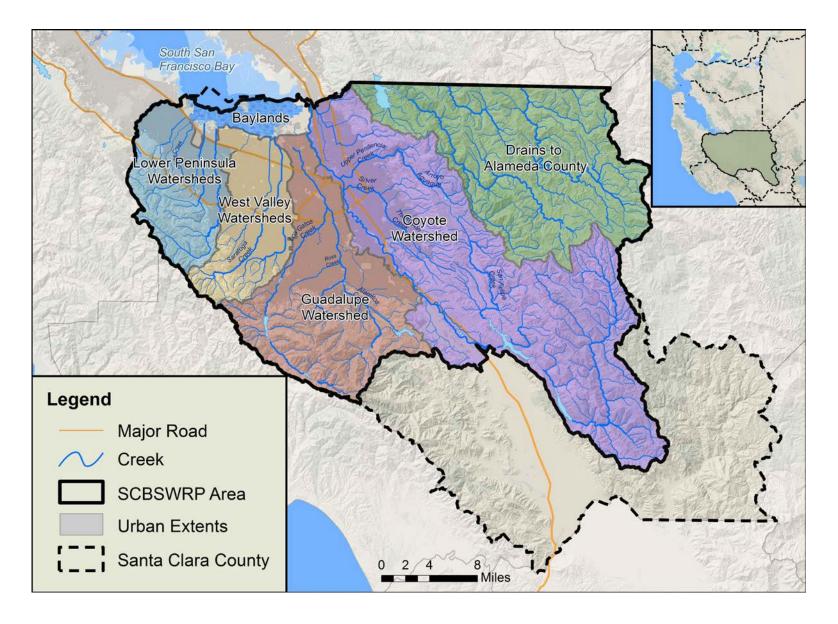


Exhibit D. Creek Watersheds within the Santa Clara Basin Storm Water Resource Plan (SCBSWRP) Watershed Area.

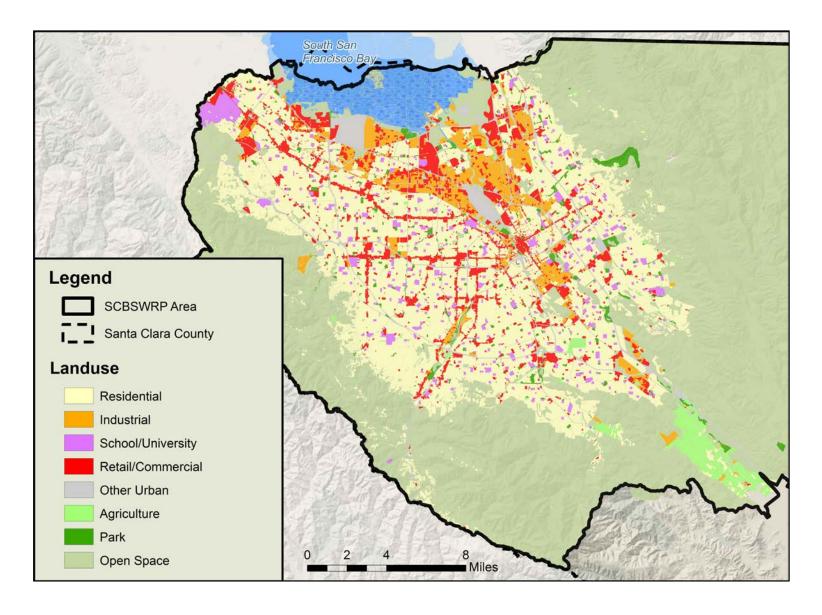


Exhibit E. Land Uses within the Santa Clara Basin Storm Water Resource Plan (SCBSWRP) Watershed Area.

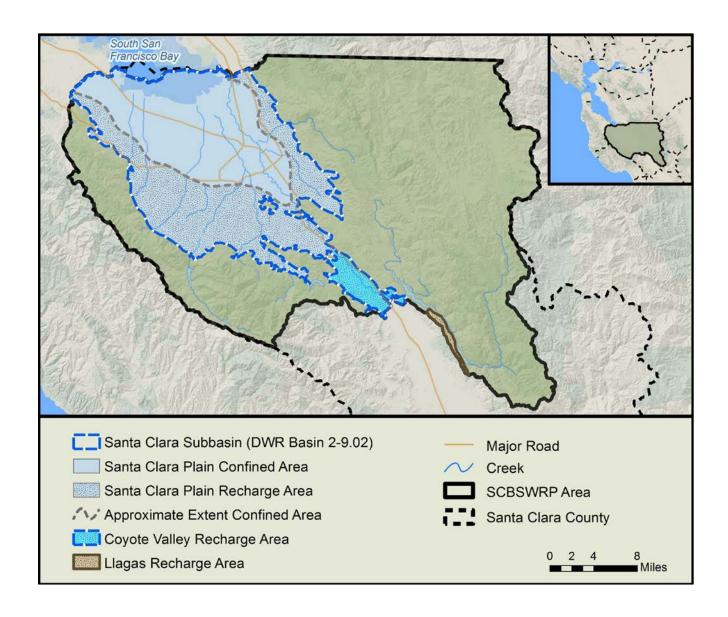


Exhibit F. Groundwater Basins and Recharge Areas within the Santa Clara Basin Storm Water Resource Plan (SCBSWRP) Watershed Area.

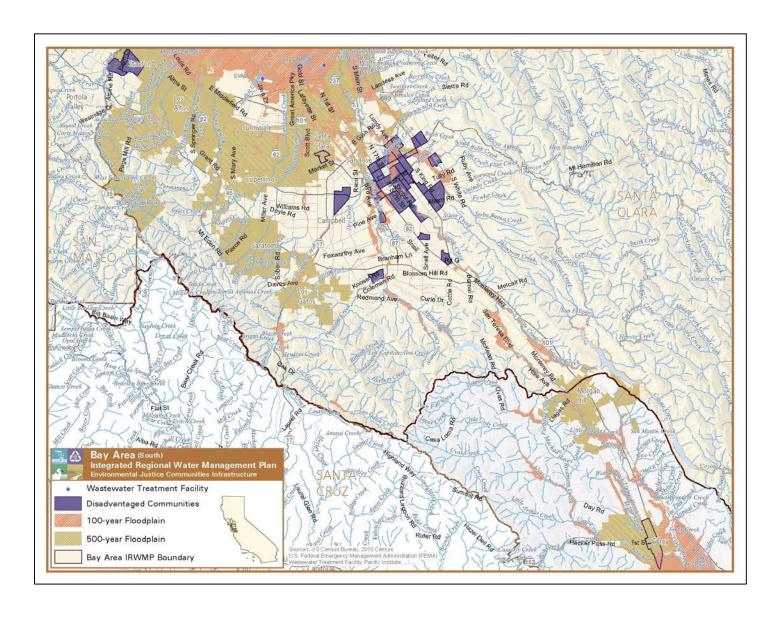


Exhibit G. Disadvantaged Communities (DACs) within the BAIRWMP South Sub Region (BAIRWMP 2012).