CITY OF CUPERTINO

Urban Runoff Management Program

Stevens Creek, McClellan Ranch Preserve – Hooded Merganser Ducks

Annual Report FY 2018-2019

CUPERTINO GREEN

PUBLIC WORKS DEPARTMENT

CITY HALL
10300 TORRE AVENUE ~ CUPERTINO, CA 95014-3266
(408) 777-3354 ~ FAX (408) 777-3333

September 30, 2019

Mr. Michael Montgomery
Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: **City of Cupertino FY 2018-2019 Annual Report**

Dear Mr. Montgomery:

This letter and Annual Report with attachments is submitted by the City of Cupertino pursuant to Permit Provision C.17.a of the Municipal Regional Stormwater NPDES Permit (MRP), Order R2-2015-0049, NPDES Permit No CAS612008 issued by the San Francisco Bay Regional Water Quality Control Board. The Annual Report provides documentation of activities conducted during FY 2018-2019 and consists of the following:

A. Certification Statement
B. Annual Report

- Table of Contents
- Completed Annual Report Form: Sections 1-15

C. Appendix

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- Appendices

City Highlights

In FY 2018-2019 the City of Cupertino demonstrated its commitment to water quality and watershed stewardship by continuing to develop a safer, healthier, and more aesthetically pleasing community through programs, initiatives, and policies in alignment with MRP requirements and priorities. Development and adoption of a Green Stormwater Infrastructure Plan, early adoption and implementation of a PCB screening management policy for demolition of buildings, commitment of fiscal and staff resources toward trash reduction, and steadfast

enforcement of municipal code provisions related to protection of stormwater runoff were all priorities this fiscal year.

Green Stormwater Infrastructure Planning and Implementation

In FY 18-19 the City continued with its vision and goal of Green Stormwater Infrastructure planning and implementation. A multi-disciplinary GSI working group of City staff from the Transportation Division, Capital Improvements Projects Division, Civil Engineering Division, Street Tree/Forestry Division, and the Environmental Programs Division continued to meet and discuss opportunities within future capital improvement projects which would incorporate GSI features. The City partnered with EOA, Inc. to develop the City's Green Stormwater Infrastructure Plan which was adopted by the Cupertino City Council on September 3, 2019. As the Plan was being developed, members of the aforementioned GSI working group reviewed and provided input to ensure that the Plan was achievable and aligned with key strategic long-term City development and transportation planning documents.

PCB Screening for Demolition Management Policy

The City is an active participant in the SCVURPPP Pollutants of Concern AHTG and attended the regional workshops and meetings for the development of a PCB Screening and Assessment program. The City implemented its PCB Demolition management policy in January 2019, six months ahead of the required July deadline, which established the authority to enforce the MRP provisions for PCB screening and assessment. The expedited implementation allowed the City to capture demolition phases planned for one of the City's largest commercial sites. The City wanted to ensure there was not a missed opportunity in requiring the appropriate screening and assessment of the buildings. This site was the first covered project subject to the new management policy and BASMAA protocol for screening and assessment.

Trash Load Reduction

In FY 18-19, the City achieved a 90.4% trash load reduction from its base trash generation level. Especially effective has been the direct engagement with many facets of our community: residents, schools, commercial and residential land developers, and business owners. Inspection and outreach staff allocate significant time reaching out to private property owners and tenants to educate and enforce, as needed, Best Management Practices and stormwater control measures on lands they own and/or occupy.

In addition to staff conducting regular creek cleanups in the tunnels under Interstate 280, at one of Cupertino's more challenged areas for litter and illegal dumping, several control

measures implemented by the City after the MRP was adopted continue to prove effective. The City's 2013 litter prevention ordinance requires commercial property owners to maintain litter-free premises, including parking lots and sidewalks at the perimeter of their property. Through the IND and IDDE (C.4 and C.5) programs, inspections are conducted both proactively and in response to community complaints. Property owners may incur a $275 re-inspection fee for a littered property that cannot be cleaned up while the inspector is on site.

When private property comes through the building permit process with new building or redevelopment plans, the City requires private installation and maintenance of trash reduction improvements as a condition of approval. Installation of full trash capture systems and waste trios placed along the property frontage adjacent to the sidewalk are two such examples of combating trash and street litter. In FY 18-19 the following were completed:

- Four waste trios were installed for public litter control
- Seven properties in medium and high trash management areas (totaling 17.2 acres) installed inlet-based full trash capture devices

In addition to the requirements for private property owners to install and maintain trash control measures on their properties, the City also made significant investment to reduce trash entering the MS4. The City contracted with United Stormwater to fabricate and install 189 partial capture devices (auto-retractable curb screens, or ARS) which were installed in one primary drainage management area. Many of the inlets treated with the ARS devices had previously been fitted with inlet based full trash capture devices in medium and high trash management areas, thereby providing double coverage in reducing trash from entering these inlets. The ARS devices were also installed in low trash generating, residential areas. The ARS devices are custom labeled "No Dumping Drains To Creek" and as they are not common in residential areas, they provide an impactful and visible message to these neighborhoods that Cupertino cares about stormwater quality and trash reduction.

Enforcement

In FY 18-19, through the IND and IDDE programs, the City proactively inspected 125 commercial business facilities and responded to 80 reports of actual or potential discharges on both private and public lands. The first goal of the City's IND/IDDE program is education; however, non-compliance is also addressed through the issuance of administrative citations and assessment of fees for re-inspections. The penalty aspect

of fines and fees are an integral component in the effectiveness of our program as they provide a financial incentive for facility owner/operators to effectively maintain their properties.

Thank you for your review of our Annual Report. Please contact me at 408-777-3255 or via email at alexw@cupertino.org regarding any questions or concerns.

Very truly yours,

Alex Wykoff
Acting Environmental Programs Manager
Public Works Department
City of Cupertino

CUPERTINO GREEN

CITY OF CUPERTINO
FY 2018-2019 ANNUAL REPORT

Certification Statement

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature by Duly Authorized Representative:

September 30, 2019

Roger Lee
Director of Public Works

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Section 1 – Permittee Information

Background Information					
Permittee Name:	City of Cupertino				
Population:	59,879				
NPDES Permit No.:	CAS612008				
Order Number:	R2-2015-0049				
Reporting Time Period (month/year):	July 2018 through June 2019				
Name of the Responsible Authority:	Roger Lee			**Title:**	Director of Public Works
Mailing Address:	10300 Torre Avenue				
City:	Cupertino	**Zip Code:**	95014	**County:**	Santa Clara
Telephone Number:	408-777-3354		**Fax Number:**		408-777-3333
E-mail Address:	rogerl@cupertino.org				
Name of the Designated Stormwater Management Program Contact (if different from above):	Alex Wykoff			**Title:**	Acting Environmental Programs Manager
Department:	Public Works, Environmental Programs Division				
Mailing Address:	Cupertino City Hall, 10300 Torre Avenue				
City:	Cupertino	**Zip Code:**	95014	**County:**	Santa Clara
Telephone Number:	408-777-3255		**Fax Number:**		408-777-3333
E-mail Address:	alexw@cupertino.org				

*Population derived from: http://dof.ca.gov/Forecasting/Demographics/Estimates/e-1/documents/E-1_2019PressRelease.pdf

Cupertino Acronyms/Abbreviations

AERC	A full service recycling company facility in Hayward which collects universal waste such as lamps, ballast, batteries, electronic scrap and mercury containing material. AERC Specialists provide regulatory compliance and consulting for handling U-waste.
CESSWI	Certified Erosion Sediment Storm Water Inspector
CIP	Capital Improvement Project
EC	Erosion Control
IND/IDDE Inspector	Illegal Discharge Detection and Elimination Inspector
MRP	Municipal Regional Permit
NPS Inspector	Non Point Source Inspector also called the IND/IDDE Inspector
PCA	Pest Control Advisor
Pub Ed	TAC Public Education Sub Group
PW	Public Works
QAC	Qualified Applicator Certificate. A category of the DPR licensing and certification Program. To be certified, the applicant must demonstrate specific knowledge on topics such as pesticide application drift problems and prevention, soil and water problems resulting from restricted use pesticides, phytotoxicity, potential for environmental contamination, etc.
R-O-W	Right of Way
SCC RWRC TAC	Santa Clara County Recycling & Waste Reduction Commission Technical Advisory Committee
WV	West Valley (communities)
ZLI	Zero Waste Initiative

SCVURPPP Acronyms/Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ABC	Annual Budget Review Compilation
ACCWP	Alameda Countywide Clean Water Program
ACOE	U.S. Army Corps of Engineers
AHTG	Ad Hoc Task Group
AR	Annual Report
ASCE	American Society of Civil Engineers
BAAQMD	Bay Area Air Quality Management District
BART	San Francisco Bay Area Rapid Transit
BATG	Budget Ad Hoc Task Group
Basin	Santa Clara Basin
Basin Plan	Water Quality Control Plan for the San Francisco Basin
BACWA	Bay Area Clean Water Agencies
BAHM	Bay Area Hydrology Model
BAMBI	Bay Area Macroinvertebrate Bioassessment Information
BASMAA	Bay Area Stormwater Management Agencies Association
Bay	San Francisco Bay
Bay Area	San Francisco Bay Area
BMI	Benthic Macroinvertebrate
BMM	Lower South Bay Monitoring and Modeling Subgroup
BMP	Best Management Practice
BOMA	Building Owners and Managers Association
BPP	Brake Pad Partnership
BU	beneficial use
C	Celsius
C.3	Permit Provision C.3
C3PO	C.3 Provision Oversight
CA	California
Cal-EPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAMLnet	California Aquatic Macroinvertebrate Laboratory Network
Campaign	Watershed Watch Campaign

SCVURPPP Acronyms/Abbreviations

CAP	Copper Action Plan
CASQA	California Stormwater Quality Association
CB	Copper Baseline
CCC	Continuous Concentration Criterion
CD-ROM	Compact Disk-Read Only Memory
CDS	Continuous Deflective Separation
CEP	Clean Estuary Partnership
CEQA	California Environmental Quality Act
CESQG	Conditionally Exempt Small Quantity Generator
CESSWI	Certified Erosion Sediment and Storm Water Inspector
CEUs	Continuing Education Units
CFR	Code of Federal Regulations
cfs	cubic feet per second
CI	Continuous Improvement
CIWMB	California Integrated Waste Management Board
CMIA	Conceptual Model Impairment Assessment
CMS	Copper Management Strategy
COA	Condition of Approval
CoHHW	Santa Clara County Household Hazardous Waste Program
CoHHW Program	Santa Clara County Household Hazardous Waste Program
COLD	cold freshwater habitat
CRMP	Coordinated Resources Management and Planning
CSBP	California Stream Bioassessment Procedures
CTR	California Toxic Rule
Cu	Copper
CWA	Clean Water Act
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
DEH	Santa Clara County Department of Environmental Health
District	Santa Clara Valley Water District
DO	Dissolved Oxygen
DOE	Department of Energy

SCVURPPP Acronyms/Abbreviations

DPR	Department of Pesticide Regulation
DWR	Department of Water Resources
E. Coli	Enterococus Coli
EEC	SF Bay Wildlife Refuge Environmental Education Center
EEDMS	Environmental Enforcement Data Management System
EEPS	Exposure and Effects Pilot Study
e.g.	for example
EIR	Environmental Impact Report
EMAP	Environmental Monitoring Program
EMB	Executive Management Board
EOA	Eisenberg, Olivieri, and Associates
EPA	U.S. Environmental Protection Agency
ERP	Enforcement Response Plan
Estuary	San Francisco Bay Estuary
F	Fahrenheit
FTCD	Full Trash Capture Devices
FLT	Fluorescent Light Tube
FY	Fiscal Year
GCRCD	Guadalupe-Coyote Resource Conservation District
GIASP	General Industrial Activities Stormwater Permit
GIS	Geographic Information System
GRTS	Generalized Random Tessellation Stratified
HBANC	Home Builders Association of Northern California
Hg	Mercury
HHW	Household Hazardous Waste, Santa Clara County
HMP	Hydromodification Management Plan
HVAC	Heating, Ventilation and Air Conditioning
IBI	Index of Biotic Integrity
IDDE	Illicit Discharge Detection and Elimination
IC/ID	Illicit Connection and Illegal Dumping
ID	Identification
IND	Industrial/Commercial
i.e.	that is

SCVURPPP Acronyms/Abbreviations

IPM	Integrated Pest Management
JPA	Joint Powers Authority
K	Kindergarten
KAB	Keep America Beautiful
kg	Kilogram
L	Liter
Lb	Pound
LA	load allocation
LFA	Limiting Factors Analysis
LID	Low Impact Development
LID Treatment	Rain water harvesting, Water re-use, Infiltration, Evapotranspiration, or Biotreatment
LSSB	Lower South San Francisco Bay
LUS	Land Use Subgroup
MC	Management Committee
MCMP	Metals Control Measures Plan
MCTT	Multi-Chambered Treatment Train
MDDB	Metadata Database
MDL	Most Downstream Location
MEP	Maximum Extent Practicable
Mercury Plan	Mercury Pollution Prevention Plan
Mg	milligram
mgd	million gallons per day
MIGR	Fish Migration
MOA	Memorandum of Agreement
MOFO	Morrison & Foerster
MOU	Memorandum of Understanding
MP	Monitoring Priority
MROSD	Mid-Peninsula Regional Open Space District
MRP	Municipal Regional Stormwater NPDES Permit – 10/14/2009
MS4	Municipal Separate Storm Sewer Systems
MYRWMP	Multi-Year Receiving Waters Monitoring Plan
NAP	Nickel Action Plan

SCVURPPP Acronyms/Abbreviations

NEMA	National Electrical Manufacturers Association
NAIOP	National Association of Industrial and Office Properties
NEPA	National Environmental Policy Act
ng	Nanogram
Ni	Nickel
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OC	Organochlorine
O&M	Operation and Maintenance
OP	Organophosphate
OPP	U.S. EPA Office of Pesticide Programs
OW	U.S. EPA Office of Water
OWOW	Our Water Our World
P2	Pollution Prevention
PAHs	Polynuclear Aromatic Hydrocarbons
PBDE	Polybrominated Diphenyl Ether
Pb	Lead
PCBs	Polychlorinated Biphenyls
PCDD	Polychlorinated Dibenzo-p-Dioxins
PCDF	Polychlorinated Dibenzofurans
PCO	Pest Control Operator
pg	Picogram
PHAB	Physical Habitat Assessments
PIP	Public Information and Participation
PI/P	Public Information and Participation
PIPP	Public Information and Participation Program
PMPS	Pest Management Performance Standard
POC	Pollutant of Concern
POTW	Publicly Owned Treatment Works
PPDC	Pesticide Program Dialogue Program
PPPS	Planning Procedures Performance Standard
Program	Santa Clara Valley Urban Runoff Pollution Prevention Program
PS	Performance Standard

SCVURPPP Acronyms/Abbreviations

PSC	CASQA Pesticide Subcommittee
PVC	Polyvinyl Chloride
Q	Quarter
QAPP	Quality Assurance Project Plan
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practiioner
RA	Risk assessment
RAC	Regional Ad Campaign
RARE	Preservation of rare and endangered species
RCRA	Resource Conservation and Recovery Act
REC- 1	Water contact recreation
REC-2	Non-contact water recreation
Regional Board	San Francisco Bay Regional Water Quality Control Board
RFP	Request for Proposal
RMAS	Regional Monitoring and Assessment Strategy
RMP	Regional Monitoring Program
RPT	Report Preparation Team
RS	Regulatory Subgroup
RTA	Rapid Trash Assessment
RWQCB	San Francisco Bay Regional Water Quality Control Board
SC	Steering Committee
SCC	Santa Clara County
SCBWM1	Santa Clara Basin Watershed Management Initiative
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
SCVWD	Santa Clara Valley Water District
SETAC	Society of Environmental Toxicology and Chemistry
SF	San Francisco
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SFEI	San Francisco Estuary Institute
SFEP	San Francisco Estuary Project
SIC	Standard Industrial Classification
SMaRT®	Sunnyvale Materials Recovery and Transfer
SOP	Standard Operating Procedures

SCVURPPP Acronyms/Abbreviations

South Bay	Lower South San Francisco Bay
SPCWC	Stevens and Permanente Creeks Watershed Council
SPLWG	Sources, Pathways and Loadings Work Group (RMP)
SPWN	Fish Spawning
SSC	Suspended Sediment Concentration
SSI	Inventory of Santa Clara Basin Stream Studies
SSO	Water Quality Site-Specific Objective
State Board	State Water Resources Control Board
STOPPP	San Mateo Countywide Stormwater Pollution Prevention Program
SWAMP	Surface Waters Ambient Monitoring Program
SWANA	Solid Waste Association of North America
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TMDL	Total Maximum Daily Load
TO	Tentative Order
TP	Total Phosphorus
TPH	Total Petroleum Hydrocarbons
TRC	Technical Review Committee
ug	Microgram
UP3	Urban Pesticides Pollution Prevention Partnership
UPC	Urban Pesticide Committee
URMP	Urban Runoff Management Plan
URQM	Urban Runoff Quality Management
USA	Unified Stream Assessment
USEPA	U. S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VTA	Santa Clara Valley Transportation Authority
WAC	Watershed Assessment Consultant
WAMS	Watershed Assessment and Monitoring Subgroup
WAR	Watershed Assessment Report

SCVURPPP Acronyms/Abbreviations

WARM	Warm Freshwater Habitat
Water Board	San Francisco Bay Regional Water Quality Control Board
Water Boards	California State Water Resources Control Board together
Water District	Santa Clara Valley Water District
WEF	Water Environment Federation
WEO	Watershed Education and Outreach
WE&O	Watershed Education and Outreach
WERF	Water Environment Research Foundation
WG	Work Group
WILD	Wildlife Habitat
WLA	Waste Load Allocation
WMI	Watershed Management Initiative
Work Group “I”	SCBWMI Phase I Indicators Work Group
WP	Work Plan
WRPC	Water Resources Protection Collaborative
WVC	West Valley Communities
WVCWP	West Valley Clean Water Program
WW	Watershed Watch
WWTP	Wastewater Treatment Plant
WY	Water Year
YSI	Youth Science Institute
Zn	Zinc

Section 2 - Provision C.2 Reporting Municipal Operations

Program Highlights and Evaluation
Highlight/summarize activities for reporting year:

Summary:

Staff Training

A trained municipal operations staff who are knowledgeable of and can implement stormwater BMPs into their daily activities in an important component in our stormwater program. Furthermore, discussion about awareness of actual or potential stormwater discharges they may observe on private and/or property during their travels in the community and how to route them for investigation is equally important. On June 20, 2019 the Environmental Programs Specialist and IND/IDDE Inspector provided a one-hour Municipal Maintenance and Operations stormwater compliance training program. Topics of discussion included:

1. overview of the MRP and Clean Water Act
2. discussion of the facility SWPPP and its purpose
3. pollutants of concern
4. effective BMPs for municipal staff and City contractors
5. spill response/containment
6. dry cleanup methods
7. best practices for material storage
8. wash rack area use and maintenance
9. protocol to report actual or potential discharges encountered in the field
10. storm drain inlet maintenance and overview of full trash capture devices and auto-retractable curb inlet screens
11. surface cleaning BMPs
12. responsibilities and procedures for on-call after hours/weekend staff responding to reports of spills/discharges

The City Environmental Programs Specialist is also a participant in the Program's Municipal Operations AHTG, which provides additional information concerning municipal operations and practices employed by other jurisdictions within the County. Refer to the C.2 Municipal Operations section of the Program's FY 18-19 Annual Report for a description of activities implemented at the countywide and/or regional level.

C.2.a. ►Street and Road Repair and Maintenance

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

Y	Control of debris and waste materials during road and parking lot installation, repaving or repair maintenance activities from polluting stormwater
Y	Control of concrete slurry and wastewater, asphalt, pavement cutting, and other street and road maintenance materials and wastewater from discharging to storm drains from work sites.
Y	Sweeping and/or vacuuming and other dry methods to remove debris, concrete, or sediment residues from work sites upon completion of work.

Comments:

Implementation of these BMPs are discussed with staff during the annual Municipal Maintenance and Operations training. Staff is reminded that as they are out in the field, they should be aware of both private and public roadway, sidewalk, or parking lot repairs and report any actual or potential discharges, including inadequate BMPs to the City's IND/IDDE Inspector.

In FY 18-19 the City conducted a significant amount of roadway paving projects and sidewalk repairs. BMP implementation and adherence for these projects are required contractually for those private companies under contract to perform the work. These projects are overseen by two City Maintenance Supervisors who are trained in BMP implementation and management. Roadway paving projects are typically conducted June to early October to avoid the rain season. BMPs are installed by the contractors prior to street grinding and are removed at the completion of the paving. Similarly, curb and gutter improvements are overseen by a City project manager and BMP implementation are monitored by the private contractors retained by the City to perform the work.

C.2.b. ►Sidewalk/Plaza Maintenance and Pavement Washing

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

Y	Control of wash water from pavement washing, mobile cleaning, pressure wash operations at parking lots, garages, trash areas, gas station fueling areas, and sidewalk and plaza cleaning activities from polluting stormwater
Y	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs

Comments:

The City uses dry method cleanup whenever possible which is discussed during the annual Municipal Maintenance and Operations training. Dry method spill kits are stationed in various locations around the Service Center, including the fueling island canopy and hazardous waste building.

The Service Center utilizes a closed system power washing rack for equipment and vehicles, keeping wash water and solids removed from the equipment isolated from run-on to, and run-off from, the cleaning area. The catchment system is completely separated from the storm drain system and no wash water or solids are discharged to the storm drain or MS4.

C.2.c. ►Bridge and Structure Maintenance and Graffiti Removal

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

Y	Control of discharges from bridge and structural maintenance activities directly over water or into storm drains
Y	Control of discharges from graffiti removal activities
Y	Proper disposal for wastes generated from bridge and structure maintenance and graffiti removal activities
Y	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs for graffiti removal
Y	Employee training on proper capture and disposal methods for wastes generated from bridge and structural maintenance and graffiti removal activities.
Y	Contract specifications requiring proper capture and disposal methods for wastes generated from bridge and structural maintenance and graffiti removal activities.

Comments:

The City Streets Maintenance Division did not report any graffiti removal or bridge repairs near waterways this FY.

C.2.e. ►Rural Public Works Construction and Maintenance

Does your municipality own/maintain rural[1] roads:	X	Yes		No

If your answer is **No** then skip to **C.2.f**.

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

X	Control of road-related erosion and sediment transport from road design, construction, maintenance, and repairs in rural areas
X	Identification and prioritization of rural road maintenance based on soil erosion potential, slope steepness, and stream habitat resources
N/A	No impact to creek functions including migratory fish passage during construction of roads and culverts
Y	Inspection of rural roads for structural integrity and prevention of impact on water quality
Y	Maintenance of rural roads adjacent to streams and riparian habitat to reduce erosion, replace damaging shotgun culverts and excessive erosion
N/A	Re-grading of unpaved rural roads to slope outward where consistent with road engineering safety standards, and installation of water bars as appropriate
N/A	Inclusion of measures to reduce erosion, provide fish passage, and maintain natural stream geomorphology when replacing culverts or design of new culverts or bridge crossings

Comments including listing increased maintenance in priority areas:

The City does not have any unpaved rural roads. The combined length of paved rural roads in Cupertino is less than 5 miles, including Regnart Road, Lindy Lane and Stevens Canyon Road to the southern City limit. In a typical year, inspection and maintenance of this limited amount of rural roadway is part of the City's ongoing planned and prioritized street maintenance. Minor maintenance generally consists of vegetation control, done by hand with supervising City staff trained annually on IPM and BMP practices for rural roads. The Public Works Superintendent ensures that BMPs are implemented in the City's rural areas.

Two staff from the Environmental Programs Division attended the rural roads training workshop hosted by the Program and Valley Water on June 24, 2019.

[1]Rural means any watershed or portion thereof that is developed with large lot home-sites, such as one acre or larger, or with primarily agricultural, grazing or open space uses.

C.2.f. ►Corporation Yard BMP Implementation

Place an **X** in the boxes below that apply to your corporations yard(s):	
	We do not have a corporation yard
	Our corporation yard is a filed NOI facility and regulated by the California State Industrial Stormwater NPDES General Permit
X	We have a **Stormwater Pollution Prevention Plan (SWPPP)** for the Corporation Yard(s)
Place an **X** in the boxes below next to implemented SWPPP BMPs to indicate that these BMPs were implemented in applicable instances. If not applicable, type **NA** in the box. If one or more of the BMPs were not adequately implemented during the reporting fiscal year then indicate so and explain in the comments section below:	
X	Control of pollutant discharges to storm drains such as wash waters from cleaning vehicles and equipment
X	Routine inspection prior to the rainy seasons of corporation yard(s) to ensure non-stormwater discharges have not entered the storm drain system
X	Containment of all vehicle and equipment wash areas through plumbing to sanitary or another collection method
X	Use of dry cleanup methods when cleaning debris and spills from corporation yard(s) or collection of all wash water and disposing of wash water to sanitary or other location where it does not impact surface or groundwater when wet cleanup methods are used
X	Cover and/or berm outdoor storage areas containing waste pollutants

Comments:

Service Center Vehicle and Equipment Closed-loop Wash Rack

The Service Center utilizes a closed loop, self-contained wash rack and pad which does not discharge to the storm or sanitary sewer systems. The wash rack and pad are used to clean mowers, vehicles, and other equipment requiring rinsing and cleaning of pollutants such as sediment, vegetative material, and residual vehicle/equipment lubricants. Materials are captured as sludge and disposed in landfill when solidified and the wash water is recycled. The wash system receives monthly inspection and twice per year cleaning from its manufacturer. Service Center staff conduct regular inspections to ensure continued efficiency and proper capture of solids and effluent. An inspection checklist is included in the City's SWPPP. The nearest drain inlet to the wash rack and pad, DI#2, is protected with a Full Trash Capture device including a hydrocarbon filter which is cleaned or replaced three times per year. A permanent rubber berm is installed at the low area of the wash rack and pad to keep run-off from leaving the wash rack area.

Service Yard Pre-Rainy Season Inspection

The City's contracted street sweeper provides a monthly sweep of the Service Center. The Service Center undergoes a thorough annual inspection each September conducted by the Environmental Programs Specialist and Senior Service Center Staff. All storm drain inlets, service activity areas, vehicle and equipment parking, and storage areas are inspected to identify deficiencies, potential improvements and to ensure that the facility is prepared for the upcoming rainy season. Eight of the 17 drain inlets at the facility are fitted with REM Full Trash Capture devices including hydrocarbon filters which are inspected, cleaned and/or replaced three times per year by the vendor. All inlets are inspected and cleaned quarterly by workers in the County's Weekend Work Program while being supervised by a Public Works Supervisor. See the results of the annual September inspection in the table below.

Staff Training

The annual stormwater training meeting for all City maintenance staff was held on June 20, 2019 at a mandatory Division meeting. See details on page 2-1

If you have a corporation yard(s) that is not an NOI facility, complete the following table for inspection results for your corporation yard(s) or attach a summary including the following information:

Corporation Yard Name	Corp Yard Activities w/ site-specific SWPPP BMPs	Inspection Date[2]	Inspection Findings/Results	Date and Description of Follow-up and/or Corrective Actions
Municipal Service Yard (Service Center)	Exterior of vehicle/equipment maintenance building.	9/4/18	Washing sink adjacent to the vehicle maintenance building had an accumulation of dried paint residue on side shed wall the pavement.	9/13/18 conducted re-inspection. The shed wall and pavement were cleaned to the maximum extent practicable.

[2] Minimum inspection frequency is once a year during September.

Service Center	Scrap metal bin area.	9/4/18	Surplus street lamp heads (bulbs intact) were stored outside of a container without secondary containment.	9/13/18 conducted re-inspection. Lamp heads were properly disposed.
Service Center	Adjacent to (outside) of Haz-Mat storage building.	9/4/18	Partially filled five gallon bucket of latex paint with missing top stored on ground without secondary containment.	9/13/18 conducted re-inspection, violation not corrected. Re-inspected on 9/20/18 and the paint bucket was moved inside of Haz-Mat storage building.
Service Center	Debris box storage area adjacent to material bunkers.	9/4/18	Dirt/debris accumulation around debris box (spillage from loading not swept).	9/13/18 conducted re-inspection. Area swept clean.
Service Center	Exterior of vehicle/equipment repair shop.	9/4/18	Hydraulic oil leak from heavy equipment being serviced.	9/13/18 conducted re-inspection. Pavement cleaned, leaking part was placed in a containment bucket for repair.
Service Center	Employee parking lot landscaped area.	9/4/18	Sprinkler run-off from un-vegetated landscaped area.	9/13/18 conducted re-inspection. Sprinklers were decommissioned.

Section 3 - Provision C.3 Reporting New Development and Redevelopment

C.3.b.iv.(2) ►Regulated Projects Reporting

Fill in attached table **C.3.b.iv.(2)** or attach your own table including the same information.

C.3.e.iv. ►Alternative or In-Lieu Compliance with Provision C.3.c.

Is your agency choosing to require 100% LID treatment onsite for all Regulated Projects and not allow alternative compliance under Provision C.3.e.?	X	**Yes**		**No**
Comments (optional):				

C.3.e.v ► Special Projects Reporting

1. In FY 2018-19, has your agency received, but not yet granted final discretionary approval of, a development permit application for a project that has been identified as a potential Special Project based on criteria listed in MRP Provision C.3.e.ii(2) for any of the three categories of Special Projects (Categories A, B or C)?		**Yes**	X	**No**
2. In FY 2018-19, has your agency granted final discretionary approval to a Special Project? If yes, include the project in both the **C.3.b.iv.(2)** Table, and the **C.3.e.v.** Table.		**Yes**	X	**No**

If you answered "Yes" to either question,

1) Complete Table C.3.e.v.
2) Attach narrative discussion of 100% LID Feasibility or Infeasibility for each project.

C.3.h.v.(2) ► Reporting Newly Installed Stormwater Treatment Systems and HM Controls (Optional)

On an annual basis, before the wet season, provide a list of newly installed (installed within the reporting year) stormwater treatment systems and HM controls to the local mosquito and vector control agency and the Water Board. The list shall include the facility locations and a description of the stormwater treatment measures and HM controls installed.

See attached Table **C.3.h.v.(2)** for list of newly installed Stormwater Treatment Systems/HM Controls.

C.3.h.v.(3)(a) –(c) and (f) ► Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

The calculation of the percentage of Regulated Projects for which O&M verifications were conducted during the reporting period is based on the total number of projects in the Permittee's database at the end of the previous fiscal year because projects added during the reporting fiscal year will likely have installation inspections and not O&M verification inspections, and it allows an agency to plan the required number of inspections to be conducted during the reporting period.

Site Inspections Data	Number/Percentage
Total number of Regulated Projects (including offsite projects, and Regional Projects) in your agency's database or tabular format at the end of the previous fiscal year (FY 17-18)	**35**
Total number of Regulated Projects (including offsite projects, and Regional Projects) in your agency's database or tabular format at the end of the reporting period (FY 18-19)	**38**
Total number of Regulated Projects (including offsite projects, and Regional Projects) for which O&M verification inspections were conducted during the reporting period (FY 18-19)	**17**
Percentage of the total number of Regulated Projects (including offsite projects, and Regional Projects) inspected during the reporting period (FY 18-19)	**48%**[1]

C.3.h.v.(3)(d)-(e) ► Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

Provide a discussion of the inspection findings for the year and any common problems encountered with various types of treatment systems and/or HM controls. This discussion should include a general comparison to the inspection findings from the previous year.

Summary:

The City's engineering inspector verifies the O&M for vault-based systems. The City of Cupertino does not use a 3rd party for C.3 inspections. The City's Public Works Inspector inspected 17 Regulated Project sites and inspected all the treatment structures at each site. Additionally, 4 inspections of newly installed bio-retention facilities were conducted in fiscal year 18-19. The only verbal warning was for trash accumulation in bio-swale and it was mitigated within 2 days. All other installed treatment systems were operational and well maintained. With the exception

[1] Based on the number of Regulated Projects in the database or tabular format at the end of the previous fiscal year, per MRP Provision C.3.h.ii.(6)(b).

of a few pieces of litter observed in media filters in previous years, there have not been any maintenance issues since 2009 when Bio-swales at one grocery store parking lot had to be revegetated and protected by a two-rail fence.

Provide a discussion of the effectiveness of the O&M Program and any proposed changes to improve the O&M Program (e.g., changes in prioritization plan or frequency of O&M inspections, other changes to improve effectiveness program).

Summary:

No changes are proposed for the C.3 O&M inspection program. As in previous years, the post construction stormwater BMP operation and maintenance program inspections for FY 18-19, did not present significant challenges. The combination of increased awareness, education provided by City staff, and meetings at regulated project sites, continues to strengthen the program. Property owners have accepted the responsibility of maintaining stormwater treatments and HM controls. Cupertino is fortunate, as a smaller city, to have a manageable list of these treatments and the opportunity to provide direct education and guidance to property owners and managers.

The City's Regulated Project O&M inspection program is ensured through a recorded stormwater BMP operation and maintenance agreement between the property owner and the City, and are reinforced by requirements in City Municipal Code sections 9.18.150 – 9.18.200, giving the City the legal authority to remediate any deficiencies and recover the costs from the private property owner. Operational procedures that contribute to the program's success include:

Selection of Annual O&M Inspection Sites:

- All newly installed treatment measures, HM controls, and pervious pavement systems that total at least 3,000 sf are inspected by the Public Works Inspector upon installation.
- All treatments and controls on at least 20% of the City's C.3 regulated sites are inspected annually, as allowed under C.3.h.ii. (6). In FY18-19, twenty (20) regulated project sites were inspected.

Inspection Program Responsibilities

- Public Works engineers review development plans for MRP C.3 compliance.
- The Public Works Engineering Inspector (a certified CESSWI) observes the construction of regulated project treatment measures during his routine construction site inspections (C.6) and performs O&M inspections and enforcement for all of the City's C.3 regulated projects. Inspection details and outcomes are tracked in his Excel regulated project reporting database.
- The Public Works Inspector field-checks construction of the on-site C.3 treatments and signs-off on the grading permits. Prior to City-approval for site occupancy, he notes when the project was completed.
- The Public Works Inspector submits a Permanent Treatment O&M Inspection summary table for the previous fiscal year to the Environmental Programs Manager by July 1st of each year.
- The Environmental Programs Manager reviews the inspection summary table and reports the required O&M inspection data in the City's Annual Report.

Pre-Inspection Preparation

- The Public Works Inspector reviews the C.3 regulated project reporting table and the O&M Inspection records prior to beginning annual inspections.
- Prior to an initial site inspection, the Public Works Inspector may review the site's Storm Water Management Plan, including applicable as-built construction plans, for permanent treatment information, as well as treatment types and locations. This will cease to be necessary as he becomes very familiar with the existing treatment measures throughout the City.

- The Inspector will review previous City inspection results and the property owner's O&M maintenance records.
- The Public Works Inspector is familiar with SCVURPPP fact sheets on specific treatment measures and uses them as guidance when addressing questions raised during the inspection by the site owners or operators.

Enforcement Procedures

- If any deficiency is noted, the Public Works Inspector will document it. If the Inspector issues a written notice of violation, it will include the O&M inspection results, a list of corrective actions needed, and a compliance schedule. This notice will be given to the property owner/manager and compliance will be expected and verified within ten working days of the inspection or before the next anticipated rain whichever occurs first.
- In the event of a deficiency, the inspector will complete a follow-up inspection, noting whether all recommended maintenance activities have been completed and if other actions are needed to ensure proper operation of the facility.
- If repairs are not undertaken or are not done properly within the time allotted in the compliance schedule, the City will begin enforcement proceedings as provided in City's C.3 O&M Verification Enforcement Response Plan (ERP) and documented in Municipal Code Section 9.18.190.

The Public Works Inspector will note the date that all necessary repairs have been completed in the City's C.3 O&M Excel database, including other pertinent information regarding maintenance of the site (e.g., City intervention to complete corrective work if needed).

C.3.i. ►Required Site Design Measures for Small Projects and Detached Single Family Home Projects

On an annual basis, discuss the implementation of the requirements of Provision C.3.i, including ordinance revisions, permit conditions, development of standard specifications and/or guidance materials, and staff training.

Summary:

The City did not make any changes to its watershed protection ordinance (Chapter 9.18) in FY 18-19. BASMAA prepared standard specifications in four fact sheets regarding the site design measures listed in Provision C.3.i, as a resource for Permittees. In 2013 Cupertino's City Engineer modified the City's C.3 regulated project review conditions of approval, policies, procedures, and checklists to require all small and single-family projects approved after December 1, 2012 to direct roof runoff onto vegetated areas and consider implementing additional site design measures listed in Provision C.3.i.

C.3.j.i.(5).(b) ► Green Infrastructure Plan

(For FY 2018-19 Annual Report only) Did your agency complete a Green Infrastructure Plan?	X	**Yes, see attached Green Infrastructure Plan**		**No**
If No, provide schedule for completion:				

C.3.j.i.(5).(c) ► Legal Mechanisms

(For FY 2018-19 Annual Report only) Does your agency have legal mechanisms in place to ensure implementation of the Green Infrastructure Plan?	X	**Yes, see attached Resolution and Staff Report; or links provided below**		**No**

If Yes, describe the legal mechanisms in place and the documents attached or links provided.

As part of the GSI Plan development process, the City of Cupertino reviewed its existing policies and ordinance (Section 9.18) related to the implementation of stormwater NPDES permit requirements and found that it has sufficient legal authority to implement its GSI Plan. Adoption of the GSI Plan by the City Council of the City of Cupertino on September 3, 2019 has further strengthened this authority. **See Attached Resolution and Staff Report.**

C.3.j.i.(5)(d) ► Green Infrastructure Outreach

On an annual basis, provide a summary of your agency's outreach and education efforts pertaining to Green Infrastructure planning and implementation.

Summary:

See the SCVURPPP's FY 18-19 Annual Report for a summary of outreach efforts implemented by SCVURPPP permittees. Cupertino staff also conducted the following outreach to its Council, commissioners, and the community:

- On July 16, 2019 SCVURPPP's Assistant Program Manager, Jill Bicknell, gave a presentation on the City's draft GSI Plan to Cupertino's City Council during one of their regularly-scheduled, televised meetings. Ms. Bicknell answered questions from councilmembers and the public. She and City staff received comments from the Council and residents that were answered and incorporated into the City's GSI Plan.
- At the suggestion of the Mayor, presentations on the draft GSI Plan were given to the Planning Commission and the Sustainability Commission at their next regularly-scheduled meetings on August 13, 2019 and August 15, 2019 respectively. The Planning commissioners and Sustainability commissioners as well as members of the public who attended the meetings asked questions about funding, maintenance, and opportunities for more green stormwater infrastructure in Cupertino.
- Recommendations received at the commission meetings were included in the City's final GSI Plan, which was adopted by City Council on September 3, 2019.

The City of Cupertino's Green Stormwater Infrastructure (GSI) workgroup met periodically as needed in FY 18-19, to identify potential opportunities for incorporating GSI in projects that have not yet been approved, to review projects that had been approved to determine feasibility for GSI, and to review the City's draft GSI work plan. The GSI work group includes the City Engineer, CIP Manager, Transportation Manager, City's arborist (Street Trees and Medians Supervisor), two CIP project managers, City's Park Restoration and Improvement Manager, Environmental Programs Manager, Environmental Specialist, and Environmental Programs Coordinator. The work group met on August 13, 2019 to review the recently approved 5 year CIP plan and identify potential opportunities to incorporate GSI.

C.3.j.ii.(2) ► Early Implementation of Green Infrastructure Projects

On an annual basis, submit a list of green infrastructure projects, public and private, that are already planned for implementation during the permit term and infrastructure projects planned for implementation during the permit term that have potential for green infrastructure measures. Include the following information:

- A summary of planning or implementation status for each public and private green infrastructure project that is not also a Regulated Project as defined in Provision C.3.b.ii. **(see C.3.j.ii.(2) Table B - Planned Green Infrastructure Projects).**
- 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. For any public infrastructure project where implementation of green infrastructure measures is not practicable, submit a brief description of the project and the reasons green infrastructure measures were impracticable to implement **(see C.3.j.ii.(2) Table A - Public Projects Reviewed for Green Infrastructure**).

Background Information:

Describe how this provision is being implemented by your agency, including the process used by your agency to identify projects with potential for green infrastructure, if applicable.

Annually, the City's GSI work group reviews the latest approved CIP work plan. Each new project, existing multi-year project, existing completely funded projects, and project with external funding (grants, donations etc. are reviewed by the City's GSI workgroup to ensure that no opportunities are missed. (The GSI work group is described in GI outreach section above). All potential, planned and completed GSI projects are entered into the early implementation tables in this section of the City's annual report.

Summary of Planning or Implementation Status of Identified Projects: **See attached C.3.j.ii.(2) Table A - Public Projects Reviewed for Green Infrastructure and C.3.j.ii.(2) Table B - Planned Green Infrastructure Projects.**

C.3.j.iii.(2) and (3) ► Participate in Processes to Promote Green Infrastructure

On an annual basis, report on the goals and outcomes during the reporting year of work undertaken to participate in processes to promote green infrastructure. *(For FY 2018-19 Annual Report only)* Submit a plan and schedule for new and ongoing efforts to participate in processes to promote green infrastructure.
See the SCVURPPP FY 18-19 Annual Report for: 1) a summary of efforts conducted to help regional, State, and federal agencies plan, design and fund incorporation of green infrastructure measures into local infrastructure projects, including transportation projects; and 2) a plan and schedule for new and ongoing efforts to participate in processes to promote green infrastructure.

C.3.j.iv.(2) and (3) ► Tracking and Reporting Progress

On an annual basis, report progress on development and implementation of methods to track and report implementation of green infrastructure measures and provide reasonable assurance that wasteload allocations for TMDLs are being met.

(For FY 2018-19 Annual Report only) Submit the tracking methods used and report implementation of green infrastructure measures including treated area, and connected and disconnected impervious area on both public and private parcels within their jurisdictions.

Please refer to the Program's FY 18-19 Annual Report for; 1) a summary of methods being developed to track and report implementation of green infrastructure measures, and 2) a report on green infrastructure measures implemented to date, including acres of impervious area (total and treated), countywide and by permittee.

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[2], Street Address	Name of Developer	Project Phase No.[3]	Project Type & Description[4]	Project Watershed[5]	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New Impervious Surface Area (ft^2)[6]	Total Replaced Impervious Surface Area (ft^2)[7]	Total Pre-Project Impervious Surface Area[8](ft^2)	Total Post-Project Impervious Surface Area[9](ft^2)
Private Projects											
Bank of America	21020 Homestead Rd	Hedong LLC	1	Redevelopment, New 4,200 SF of commercial building with site improvements	Stevens Creek	.584	.584	0	14,704	18,675	16,031
Apple Campus 2 – Tantau 14 Office Building	10500 N Tantau Ave	Apple Inc.	2	Redevelopment, commercial office building with underground parking structure, and site improvements	Calabazas Creek	4.33	4.33	0	117,070	162,750	117,070
The Forum Senior Community	23500 Cristo Rey Dr	Greenbrier Development/ The Forum at Rancho San Antonio	1	New construction of 9 single villas, 8 duplex villas, a new memory care center, addition to existing facility, other renovations, and site improvements	Permanente Creek	51.5	9.05	174,396	4,252	25,959	200,355

[2]Include cross streets
[3]If a project is being constructed in phases, indicate the phase number and use a separate row entry for each phase. If not, enter "NA".
[4]Project 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.
[5]State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.
[6]All impervious surfaces added to any area of the site that was previously existing pervious surface.
[7]All impervious surfaces added to any area of the site that was previously existing impervious surface.
[8]For redevelopment projects, state the pre-project impervious surface area.
[9]For redevelopment projects, state the post-project impervious surface area.

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[2], Street Address	Name of Developer	Project Phase No.[3]	Project Type & Description[4]	Project Watershed[5]	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New Impervious Surface Area (ft^2)[6]	Total Replaced Impervious Surface Area (ft^2)[7]	Total Pre-Project Impervious Surface Area[8](ft^2)	Total Post-Project Impervious Surface Area[9](ft^2)
Public Projects											
N/A											

Comments:
No regulated public projects were approved in Cupertino this fiscal year.

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

Project Name Project No.	Application Deemed Complete Date[10]	Application Final Approval Date[11]	Source Control Measures[12]	Site Design Measures[13]	Treatment Systems Approved[14]	Type of Operation & Maintenance Responsibility Mechanism[15]	Hydraulic Sizing Criteria[16]	Alternative Compliance Measures[17/18]	Alternative Certification[19]	HM Controls[20/21]
Private Projects										
Bank of America	10/11/17	Approval: 10/26/17 Building Permit Issuance: 3/27/19	Covered trash enclosure, beneficial landscaping, storm drain labeling	Minimize impervious surface, include existing trees, permeable pavement, disconnected downspouts	Bioretention facility	O&E agreement with private owner	2c flow based design. (4% of Impervious Surface)	N/A	Third Party review and Certification (Schaaf & Wheeler)	Not required. Project does not create more than 1 Acre of impervious area.
Apple Campus 2 – Tantau 14 Office Building	9/16/13	Approval: 10/15/13 Building Permit Issuance: 1/17/19	Trash compactors with covers, beneficial landscaping and efficient irrigation; maintenance and good housekeeping	Minimize impervious surfaces, minimum impact street design, cluster structures/pavement, disconnected downspouts, self-treating, self retaining	Bioretention Flow through planter	O&E agreement with private owner	3 (Combination Flow and Volume Design Basis)	N/A	Third Party certification by Sandis	Not Required (impermeable area reduced compared

[10]For private projects, state project application deemed complete date. If the project did not go through discretionary review, report the building permit issuance date.
[11]For private projects, state project application final discretionary approval date. If the project did not go through discretionary review, report the building permit issuance date.
[12]List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.
[13]List 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.
[14]List 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.).
[15]List the legal mechanism(s) (e.g., O&M agreement with private landowner; O&M agreement with homeowners' association; 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.
[16]See 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).
[17]For 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.
[18]For 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.
[19]Note whether a third party was used to certify the project design complies with Provision C.3.d.
[20]If HM control is not required, state why not.
[21]If 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), biodetention unit(s), regional detention basin, or in-stream control).

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

Project Name Project No.	Application Deemed Complete Date[10]	Application Final Approval Date[11]	Source Control Measures[12]	Site Design Measures[13]	Treatment Systems Approved[14]	Type of Operation & Maintenance Responsibility Mechanism[15]	Hydraulic Sizing Criteria[16]	Alternative Compliance Measures[17/18]	Alternative Certification[19]	HM Controls[20/21]
				areas, riparian creek buffer						to existing site)
The Forum Senior Community Update	4/3/18	Approval: 4/17/18 Building Permit Issuance: 5/1/19	properly designed trash enclosure	Conserve natural areas, create permeable surfaces.	Bioretention facility	O&E agreement with private owner	1.b (Flow Hydraulic Design Basis – 2X the 85th percentile hourly rainfall)	N/A	Third Party certification by ENGEO	BAHM model used. Bioretention area with orfice on the outfall and underdrain is used.

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[22]	Date Construction Scheduled to Begin	Source Control Measures[23]	Site Design Measures[24]	Treatment Systems Approved[25]	Operation & Maintenance Responsibility Mechanism[26]	Hydraulic Sizing Criteria[27]	Alternative Compliance Measures[28/29]	Alternative Certification[30]	HM Controls[31/32]
Public Projects										
N/A										

Comments:
No regulated public projects were approved in Cupertino this fiscal year.

[22]For public projects, enter the plans and specifications approval date.
[23]List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.
[24]List 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.
[25]List 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.).
[26]List 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.
[27]See 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).
[28]For 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.
[29]For 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.
[30]Note whether a third party was used to certify the project design complies with Provision C.3.d.
[31]If HM control is not required, state why not.
[32]If 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), biodetention unit(s), regional detention basin, or in-stream control).

C.3.h.v.(2). ►Table of Newly Installed[33] Stormwater Treatment Systems and Hydromodification Management (HM) Controls (Optional)

Fill in table below or attach your own table including the same information.

Name of Facility	Address of Facility	Party Responsible[34] For Maintenance	Type of Treatment/HM Control(s)
Hyatt Hotel	10380 Perimeter Rd	KCR Development	Bioretention Facility
The Veranda	19160 Stevens Creek Blvd.	Stevens Creek, LP	Bioretention Facility
Cupertino Village (Phase 3)	10869 N. Wolfe Road Cupertino, CA 95014 (at Homestead Rd)	Kimco Realty Cupertino Village LP	Bioretention facility Silva Cell
Apple Campus 2 (Main Campus)	19050 Pruneridge Ave (1 Apple Parkway)	Apple Inc	Bioretention Facility

[33] "Newly Installed" includes those facilities for which the final installation inspection was performed during this reporting year.
[34] State the responsible operator for installed stormwater treatment systems and HM controls.

C.3.e.v.Special Projects Reporting Table

Reporting Period – July 1 2018 - June 30, 2019

Project Name & No.	Permittee	Address	Application Submittal Date[35]	Status[36]	Description[37]	Site Total Acreage	Gross Density DU/Acre	Density FAR	Special Project Category[38]	LID Treatment Reduction Credit Available[39]	List of LID Stormwater Treatment Systems[40]	List of Non-LID Stormwater Treatment Systems[41]
No Special Projects were approved in Cupertino.												

[35]Date that a planning application for the Special Project was submitted.
[36] Indicate whether final discretionary approval is still pending or has been granted, and provide the date or version of the project plans upon which reporting is based.
[37]Type of project (commercial, mixed-use, residential), number of floors, number of units, type of parking, and other relevant information.
[38] For each applicable Special Project Category, list the specific criteria applied to determine applicability. For each non-applicable Special Project Category, indicate n/a.
[39]For each applicable Special Project Category, state the maximum total LID Treatment Reduction Credit available. For Category C Special Projects also list the individual Location, Density, and Minimized Surface Parking Credits available.
[40]**:** List all LID stormwater treatment systems proposed. For each type, indicate the percentage of the total amount of runoff identified in Provision C.3.d. for the Special Project's drainage area.
[41]List all non-LID stormwater treatment systems proposed. For each type of non-LID treatment system, indicate: (1) the percentage of the total amount of runoff identified in Provision C.3.d. for the Special Project's drainage area, and (2) whether the treatment system either meets minimum design criteria published by a government agency or received certification issued by a government agency, and reference the applicable criteria or certification.

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

Project Name and Location[42] The following projects from the City's 5-yr CIP Plan were reviewed and updated by the City's GSI Work Group on 8/13/19.	**Project Description** The City's GSI work group reviews the newest CIP Plan prior to the end of each fiscal year. In FY 18-19 staff were focused on providing outreach and developing the City's 2019 GSI Plan, so review was completed at the beginning of FY 19-20.	**Status**[43]	**GI Included?**[44]	**Description of GI Measures Considered and/or Proposed or Why GI is Impracticable to Implement**[45]
1. Homestead Rd stormdrain improvement. Between Bluejay Dr. and Blaney Ave. (from FY 18/19)	Improve stormdrain system to prevent flooding	Planning was to start in FY 18-19, after City Council's acceptance of the of Storm Drain Master Plan (Resolution adopted (1/15/19)	Taken off public project list - defunded	Per City Council's approval of the FY 2020-2024 Adopted CIP Plan, project was defunded in FY 18-19 due to low prioritization. Will be taken off list.
2. Historic De Anza Trail – (formerly: Union Pacific RR Trail Feasibility Study)	Feasibility study; proposed 5 mile trail. If it becomes a project, City will look for opportunity to include GSI	Too early. Current status at: https://www.cupertino.org/our-city/departments/public-works/transportation-mobility/bicycle-and-pedestrian-travel/bicycle-transportation-plan-implementation/historic-deanza-trail-feasibility-study Trail would be part of the "Loop", (City's 2016 Bicycle Transportation Plan).	TBD	UPRR underwent a company-wide reorganization over the last 6 months that has significantly impacted our project schedule. Community outreach is currently paused while the City focuses on discussions with UPRR and re-engages with their engineering staff. This project will not likely present opportunities for GSI.

[42] List each public project that is going through your agency's process for identifying projects with green infrastructure potential.
[43] Indicate status of project, such as: beginning design, under design (or X% design), projected completion date, completed final design date, etc.
[44] 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.
[45] 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.

3. McClellan Road Bike Corridor (separated bike lanes) – Byrne Ave to Bubb Rd; Bubb Rd to S. Stelling Rd; De Anza Blvd/McClellan Rd Intersection	Design a Bike Corridor adding separated bike lanes starting at McClellan Rd to connect Monte Vista High and Cupertino High.	Under Construction. Insufficient utility-free right-of-way to incorporate GSI.	No	Not feasible given the width of the street and constraints such as underground utilities. This project will be removed from the list.
4. Park renovations pending the approval of the Citywide Parks Master Plan	Park renovation: partial funding for Creekside, Jollyman, & Memorial Parks. Projects will not be designed until after approval of the City Parks Master Plan (FY 19-20).	Too early – City Parks Master Plan has not yet been approved. Potentially initiate design in FY19-20, and construction in FY 19-20 to FY20-21after Plan approval.	TBD	Citywide Parks Master Plan aligns with the City's GSI goals, planning, and policy; will look for opportunities in the renovation of the funded park projects
5. Sidewalk Improvements on Byrne Ave.	Design and construct sidewalks to enhance pedestrian safety. Monte Vista area was annexed to the City without sidewalks.	GSI treatment is likely too costly for the amount of area that could be treated.	TBD	Will look for opportunities on Byrne Ave.
6. Lawrence Mitty Park on several acres of land adjacent to Saratoga Creek, near the intersection of Lawrence Expressway and Mitty Way	Develop a neighborhood park on several acres of land, which is currently owned by the County and within the City of San Jose. Acquire the land, annex the land, design and construct.	No change. Completely funded; discussions are still underway and will continue with property owner. Preliminary site investigation & land appraisal completed. Site survey conducted in April 2017	TBD	Due to the proposed size of the park this might be a regulated project. It depends on the amount of impervious surface that would be redeveloped. Pending the City acquiring the land from the County, and annexing San Jose parcels, If not a regulated project, green infrastructure design features could be incorporated.
7. Stevens Creek Bank Repair – south of 22100 Stevens Creek Blvd Previously a residential parcel (Blesch)	Stevens Creek bank stabilization and restoration project; a continuation of restoration project (phase 1/2 and 2)	Not yet a funded project, will be considered after approval of the Parks Master Plan	TBD	Too early to determine. May consider removal of concrete channel to incorporate natural, self-maintaining, creek stabilization.
8. Regnart Creek Trail formerly "2016 Bicycle Plan implementation"	Off-street bicycle and pedestrian facility that would run parallel to existing Regnart Creek. www.cupertino.org/bikeplan	In design and environmental review.	TBD	Most likely not feasible due to limited space (residential parcels back up to the potential trail).

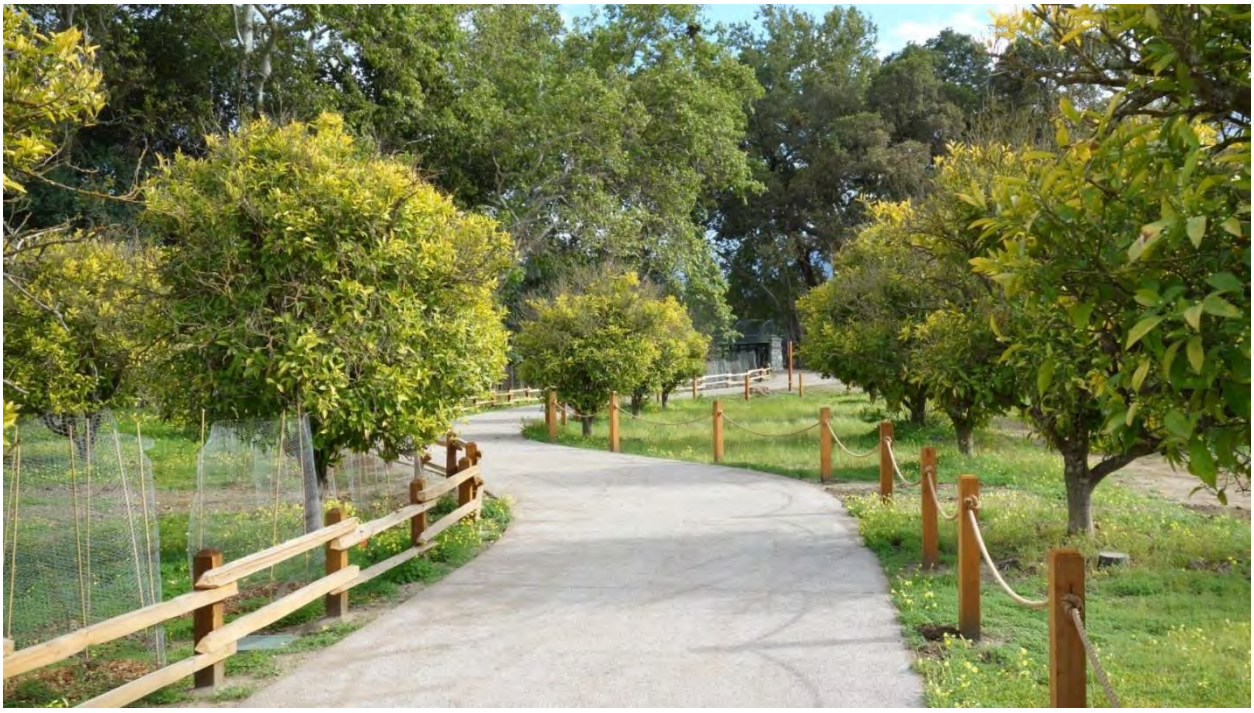
9. Blackberry Farm Entrance Road – 10301 Byrne Ave	Entrance road to enhance bicyclist and pedestrian access to the park	Completely funded; still in feasibility study phase	TBD	If the project advances, staff will look for green infrastructure opportunities.
10. Landscaping at south west corner of Vista Dr. and Lazaneo Dr.	In house project to aesthetically improve street corner. Measured from aerial, ~1800 square feet to be replaced. There is a drain inlet in the area	Complete	Yes	See completed project table; will be removed from this list
11. Phase 2 De Anza Blvd Median replacement, covers the length of De Anza Blvd between I-280 & Mariani Ave.	Design and construct replacement arbor, irrigation and plantings of street medians. .	Design phase	Yes	Replace compacted mounded islands and grade medians with dipped mulched area, planted with drought tolerant plants to retain and infiltrate stormwater
12. (New) All-inclusive Playground at Jollyman Park	Design and construct an all-inclusive playground. Received grant funding	Design phase FY 19-20	TBD	Permeable surface will be considered.

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

Project Name and Location[46]	Project Description	Planning or Implementation Status	Green Infrastructure Measures Included
1. McClellan West-Parking Lot Improvement located across Stevens Creek from 22221 McClellan Rd, the McClellan Ranch Preserve	Construct additional pervious parking to support programs at McClellan Ranch Preserve and the Environmental Education Center	Substantially completed in FY 18-19; will be completed in FY 19-20	Pervious concrete parking lot has an underlying infiltration trench – the area that would have been meadow parking is now plantings and riparian green belt.
2. Phase 1 De Anza Median Islands	Renovated ~ 1,900 linear feet of mounded compacted median islands on a main arterial road that	Completed Phase 1	Replaced compacted mounded islands and grade medians with dipped mulched area, planted with drought tolerant plants to retain and infiltrate stormwater. Banks of trees were preserved; soil and

[46] 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.

De Anza Blvd between Bollinger Rd & Rodrigues Ave	bisects the City & connects highway 85 with Interstate 280. Mounds were replaced with rain garden-like depressions and low-flow drip irrigation.		understory was replaced. New drip Irrigation systems have improved water efficiency and reduced runoff.
3. Landscaping at south west corner of Vista Dr. and Lazaneo Dr. in residential area	In-house project to aesthetically improve street corner. Measured from aerial, ~1800 square feet to be replaced. There is a drain inlet in the area.	In-house maintenance project, completed in FY 18-19	Replaced impervious surface (approximately 1800sf is now drought tolerant landscaping, completely self-treating.



City of Cupertino

Green Stormwater Infrastructure Plan

Approved on: September 3, 2019

Approved by: The City Council of the City of Cupertino

Submitted by:
City of Cupertino
10300 Torre Avenue
Cupertino, CA 95014

In compliance with Provision C.3.j.i.(2) of Order R2-2015-0049

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City of Cupertino

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LIST OF ACRONYMS

ABAG	Association of Bay Area Governments
BASMAA	Bay Area Stormwater Management Agencies Association
Caltrans	California Department of Transportation
CFD	Community Facilities District
CIP	Capital Improvement Program
DOF	Department of Finance
EPA	United States Environmental Protection Agency
FY	Fiscal Year
GI	Green Infrastructure
GIS	Geographic Information System
GSI	Green Stormwater Infrastructure
IRWMP	Integrated Regional Water Management Plan
LID	Low Impact Development
MRP	Municipal Regional Stormwater NPDES Permit
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
O&M	Operation and Maintenance
PDA	Priority Development Area
PICP	Permeable Interlocking Concrete Pavers
PP	Permeable Pavers
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
State Water Board	State Water Resource Control Board
STORMS	Strategy to Optimize Resource Management of Stormwater
SWRP	Storm Water Resource Plan
Valley Water	Santa Clara Valley Water District
Regional Water Board	San Francisco Bay Regional Water Quality Control Board

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EXECUTIVE SUMMARY

Development of this Green Stormwater Infrastructure (GSI) Plan is required by the City's Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit. Urban development has traditionally involved replacing natural landscapes with solid pavements and buildings, using underground metal-pipe storm drainage systems to carry increased amounts of stormwater runoff and pollutants directly into local creeks, which empty into San Francisco Bay. To reduce the impact of urban development on waterways, Bay Area municipalities are required to begin augmenting traditional stormwater drainage systems with Green Stormwater Infrastructure (GSI) treatments.

GSI features mimic nature, and use plants, soils, and/or pervious surfaces to collect stormwater, allowing it to soak into the ground and be filtered by the soil. This reduces the quantity of water and pollutants flowing directly into local creeks. The City began the process of incorporating GSI into public projects in 2014, with the completion of the 18-acre Stevens Creek Corridor Park and Restoration.

The City of Cupertino has prepared this GSI Plan, specifically in accordance with its MRP requirements, to guide the siting, implementation, tracking, and reporting of GSI projects on City-owned land, including the public right of way, over the next several decades (2020 – 2040).

Cupertino's GSI Plan describes the City's approach to identifying and prioritizing potential areas for implementing GSI, and estimating targets for the City's area that could be addressed by GSI through 2040. The Plan lays out the City's GSI implementation strategy and includes maps of the City's prioritized areas and potential project opportunities. Key elements of the strategy include: coordination with State-mandated GSI requirements for private development and opportunities in adjacent public rights-of-way; identification of GSI opportunities in capital projects; and aligning GSI goals and policies with other City planning documents to achieve multiple benefits and provide safer, sustainable, and attractive public streetscapes. The Plan contains guidance and standards for GSI project design and construction, and describes how the City will track and map constructed GSI projects and make the information available to the public. Lastly, it explains existing legal mechanisms to implement the GSI Plan, and identifies potential sources of funding for the design, construction, and maintenance of GSI projects.

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1. INTRODUCTION

Urban development has traditionally involved replacing natural landscapes with solid pavements and buildings, and using storm drain systems to carry increased amounts of stormwater runoff and pollutants directly into local streams. Green stormwater infrastructure (GSI), however, uses plants and soils to mimic natural watershed processes, capture stormwater and create healthier environments. Bay Area cities and counties are required by State and regional regulatory agencies to move from traditional (grey) stormwater conveyance systems to GSI systems over time. This GSI Plan serves as an implementation guide for the City of Cupertino (City) to incorporate GSI into storm drain infrastructure on public and private lands where feasible over the next several decades.

1.1 Purpose and Goals of the GSI Plan

The purpose of the City's GSI Plan is to demonstrate the City's commitment to gradually transform its traditional storm drainage infrastructure to green stormwater infrastructure. The GSI Plan will guide the identification, implementation, tracking, and reporting of green stormwater infrastructure projects within the City. The GSI Plan will be coordinated with other City plans, such as the General Plan, the Climate Action Plan, the Bicycle Transportation Plan, the Pedestrian Transportation Plan, and other specific and master plans, to achieve multiple potential benefits to the community, including improved water and air quality, reduced local flooding, increased water supply, traffic calming, safer pedestrian and bicycle facilities, climate resiliency, improved wildlife habitat, and a more pleasant urban environment.

Specific goals of the GSI Plan are to:

- Align the City's goals, policies and implementation strategies for GSI with the General Plan and other related planning documents;
- Identify and prioritize GSI opportunities throughout the City;
- Establish targets for the extent of City area to be addressed by GSI over certain timeframes;
- Provide a workplan and legal and funding mechanisms to implement prioritized projects; and
- Establish a process for tracking, mapping, and reporting completed projects

1.2 City Description

Incorporated in 1955, the City of Cupertino is located in Santa Clara County, on the western edge of Silicon Valley against the foothills of the Santa Cruz Mountains. It has a jurisdictional area of 7,235 acres (11.3 square miles).

1.2.1 Population Size and Growth

According to the General Plan, "Community Vision 2040", Cupertino's population grew from 3,664 in 1960 to over 50,500 in 2000. Most of the population growth was from tract development during the 1970s and 1980s and annexation of unincorporated County land. Between 2000 and 2010 the City of Cupertino's population increased by 15.3 percent, from 50,546 (18,204 households) to 58,302 persons (20,181 households), with a population density of 5,179 people per square mile and average household size of 2.87. A portion of this population growth can be attributed to the City's annexation of 168 acres

of land between 2000 and 2008. As of 2019 according to the California Department of Finance (DOF)[1], the estimated population is 59,879. The City's population is projected to grow to 66,110 by 2040 (Plan Bay Area, 2013), which is approximately a 12% increase over 30 years.

1.2.2 City Characteristics

Cupertino's land use pattern was largely built on a conventional suburban model, with predominantly single-family residential subdivisions and distinct commercial and employment centers. This development pattern was also heavily influenced by the topography of the area, with more intensive growth located on the valley floor and lower design residential on the foothills. The western area by the foothills is semi-rural with steep terrain, larger residential lots and access to open space. The pattern becomes more suburban immediately west of Highway 85 where residential neighborhoods have a more uniform pattern with smaller lots and older commercial and industrial areas along Stevens Creek Boulevard and Bubb Road. The land use pattern becomes more urban east of Highway 85, with a relatively connected street grid and commercial development along major boulevards such as Stevens Creek, De Anza, Homestead, Stelling and Wolfe. This area also has significant amounts of multi-family development in and around the major boulevards.

The suburban pattern is also reflected in building locations, with most of the older buildings set back from the street with parking lots in the front. Streets have also been historically widened to accommodate larger volumes of traffic, often to the detriment of other forms of transportation such as walking, biking and transit. According to the 2015 General Plan Land Use Element, the City has made strides in the last 20 years towards improving walkability and bikeability by retrofitting existing streets to include bike lanes; creating sidewalks lined with trees along major boulevards; and encouraging development to provide a more pedestrian-oriented frontage with active uses, gathering places and entries lining the street.

1.2.3 Roadways

The City is defined by its four major roadways: Homestead Road, Wolfe Road, De Anza Boulevard and Stevens Creek Boulevard. These major mixed-use corridors have been the center of retail, commercial, office and multi-family housing in Cupertino for decades.

Common residential street widths range from 20 feet (for streets with no street parking) to 36 feet (for those with parking on both sides). Developers are typically required to install curb, gutters, and sidewalks. The City prefers detached sidewalks with a landscaped buffer in between the street and the pedestrian walk to enhance community aesthetics and improve pedestrian safety.

Two state highways traverse Cupertino. The City is linked to the cities of San Francisco and San José by Interstate Highway 280 which runs along most of the its northern border. State Route 85, which runs from Mountain View to South San José, cuts diagonally across the City at its northwest boundary to its southeast boundary. All state highways are owned and maintained by the California Department of Transportation (Caltrans).

[1] Source: State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2018 and 2011. Sacramento, California, May 2019. Online at http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/.

The City has approximately 1.5 miles of rural road in the residential hillside area.

1.2.4 Hillsides and Water Resources

Cupertino's hillsides are an irreplaceable resource shared by the entire Santa Clara Valley. They provide important habitat for plants and wildlife; watershed capacity to prevent flooding in downstream areas; a wide vegetative belt that cleanses the air of pollutants; and a natural environment that provides a contrast to the built environment. Significant water bodies and water sources within Cupertino are:

- Stevens Creek
- Permanente Creek
- Regnart Creek
- Heney Creek
- Calabazas Creek

1.3 Regulatory Context

1.3.1 Federal and State Regulations and Initiatives

The U.S. Environmental Protection Agency (EPA) has authority under the Clean Water Act to promulgate and enforce stormwater related regulations. For the State of California, EPA has delegated the regulatory authority to the State Water Resources Control Board (State Water Board), which in turn, has delegated authority to the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) to issue National Pollutant Discharge Elimination System (NPDES) permits in the San Francisco Bay Region. Stormwater NPDES permits allow stormwater discharges from municipal separate storm sewer systems (MS4s) to local creeks, San Francisco Bay, and other water bodies as long as they do not adversely affect the beneficial uses of or exceed any applicable water quality standards for those waters. Since the early 2000's, the EPA has recognized and promoted the benefits of using GSI in protecting drinking water supplies and public health, mitigating overflows from combined and separate storm sewers and reducing stormwater pollution, and it has encouraged the use of GSI by municipal agencies as a prominent component of their MS4 programs.

The State and Regional Water Boards have followed suit in recognizing not only the water quality benefits of GSI but the opportunity to augment local water supplies in response to the impacts of drought and climate change as well. The 2014 California Water Action Plan called for multiple benefit stormwater management solutions and more efficient permitting programs. This directive created the State Water Board's "Strategy to Optimize Resource Management of Stormwater" (STORMS). STORMS' stated mission is to "lead the evolution of storm water management in California by advancing the perspective that storm water is a valuable resource, supporting policies for collaborative watershed-level storm water management and pollution prevention, removing obstacles to funding, developing resources, and integrating regulatory and non-regulatory interests."

These Federal and State initiatives have influenced approaches in Bay Area municipal stormwater NPDES permits, as described in Section 1.3.2.

1.3.2 Municipal Regional Stormwater Permit

The City is subject to the requirements of the Municipal Regional Stormwater NPDES Permit (MRP) for Phase I municipalities and agencies in the San Francisco Bay area (Order R2-2015-0049), which became

effective on January 1, 2016. The MRP applies to 76 municipalities and flood control agencies that discharge stormwater to San Francisco Bay, collectively referred to as permittees.

Over the last 13 years, under Provision C.3 of the MRP and previous permits, new development and redevelopment projects on private and public property that exceed certain size thresholds ("regulated projects") have been required to mitigate impacts on water quality by incorporating "Low Impact Development" (LID) measures, including site design, pollutant source control, stormwater treatment and flow control measures as appropriate. LID treatment measures, such as rainwater harvesting and use, infiltration, and biotreatment, have been required on most regulated projects since December 2011.

Provision C.3.j of the 2016 MRP requires the City to develop and implement a long-term GSI Plan[2] for the inclusion of LID measures into storm drain infrastructure on public and private lands, including streets, roads, storm drains, parking lots, building roofs, and other elements. The GSI Plan must be completed and submitted to the Regional Water Board by September 30, 2019.

While Provision C.3.j of the MRP contains the GSI program planning and analysis requirements, other provisions (C.11 and C.12) establish a linkage between public and private GSI features and required reductions of pollutants in stormwater discharges. Permittees in Santa Clara County (County), collectively, must implement GSI on public and private property to achieve specified pollutant load reduction goals by the years 2020, 2030, and 2040. These efforts will be integrated and coordinated countywide for the most effective and resource-efficient program. As an indication as to whether these load reductions will be met, Permittees must include in their GSI Plans estimated "targets" for the amounts of impervious surface to be "retrofitted" as part of public and private projects (i.e., redeveloped or changed such that runoff from those surfaces will be captured in a stormwater treatment system or GSI measure) over the same timeframes (2020, 2030, and 2040).

A key part of the GSI definition in the MRP is the inclusion of GSI systems at both private and public property locations. This has been done in order to plan, analyze, implement and credit GSI systems for pollutant load reductions on a watershed scale, as well as recognize all GSI accomplishments within a municipality. The focus of the GSI Plan is the integration of GSI systems into public buildings, parks, parking lots, and rights-of-way (e.g. road or bike path). However, the GSI Plan may also establish opportunities to include GSI facilities at private properties or in conjunction with private development, so they can contribute to meeting the target load reductions on a county-wide level as well as implement GSI on a larger scale.

1.4 GSI Plan Development Process

1.4.1 GSI Plan Development and Adoption

The GSI Plan development process began with the preparation of the City's GSI Plan Framework (Framework), a work plan describing the goals, approach, tasks, and schedule needed to complete the GSI Plan. Development of the Framework was a regulatory requirement (Provision C.3.j.i(1) of the MRP)

[2] Although the MRP uses the term green infrastructure (GI), the agencies within Santa Clara County, including the City of Cupertino, prefer to use the term green stormwater infrastructure (GSI). Therefore, the term GSI is used in this document.

to demonstrate the City's commitment to completing the GSI Plan by September 30, 2019. The City completed the Framework and City Council approved it on April 18, 2017.

The City established a GSI Work Group, consisting of staff from the City's Public Works and Planning Departments. The GSI Work Group worked with a consultant team to develop the GSI Plan. Staff attended the Sustainability Commission on March 16, 2017 where SFEI's (San Francisco Estuary Institute) Robin Grossinger gave a presentation on healthier landscapes for people in nature (GSI concepts). City staff followed with an overview of the GSI Framework that City staff was in the process of developing. More recently, an overview of the MRP requirements and summary of the proposed Plan was presented to City Council on July 16, 2019. GSI presentations for soliciting comments and feedback were given to the Planning Commission on August 13, 2019 and the Sustainability Commission on August 15, 2019. The final GSI Plan was adopted by the City Council on September 3, 2019.

1.4.2 Regional Collaboration

The City is a member of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), an association of thirteen cities and towns in the Santa Clara Valley, the County of Santa Clara, and the Santa Clara Valley Water District (Valley Water) that collaborate on stormwater regulatory activities and compliance. The City's GSI Plan was developed in collaboration with SCVURPPP; SCVURPPP input included technical guidance, templates, and completion of certain GSI Plan elements at the countywide level. SCVURPPP guidance and products are discussed in more detail in relevant sections of the GSI Plan.

The City, via SCVURPPP, also coordinated with the Bay Area Stormwater Management Agencies Association (BASMAA) on regional GSI guidance and received feedback through BASMAA from MRP regulators on GSI expectations and approaches. BASMAA members include other countywide stormwater programs in Alameda, Contra Costa, and San Mateo Counties, and area-wide programs in the Vallejo and Fairfield-Suisun portions of Solano County, whose participating municipalities are permittees under the MRP.

1.4.3 Education and Outreach

One of the first and most important steps in the development of the GSI Plan is educating a municipality's department staff, managers, and elected officials about the purposes and goals of green infrastructure, the required elements of the GSI Plan, and steps needed to develop and implement the GSI Plan, and get their support and commitment to the Plan and this new approach to urban infrastructure. Another important first step is local community and stakeholder outreach to gain public support. The City of Cupertino began this process in FY 15-16 and FY 16-17 and completed the following tasks:

- Convened 3-4 interdepartmental meetings with Public Works, GIS, Capital Improvement Program (CIP), and Environmental staff and management to discuss GSI requirements and assigned tasks.
- Discussed with appropriate department staff the MRP requirements to analyze proposed capital projects for opportunities to incorporate GSI and completed the first list of planned and potential GSI projects.
- Provided training to department staff on GSI requirements and strategies via presentations and workshops.

- Invited elected officials to a SCVURPPP Green Infrastructure presentation to raise awareness of the goals and requirements in the MRP and the concepts, intent and multiple benefits of GSI.
- At the suggestion of the Vice Mayor, the Sustainability Commission invited guest speaker Robin Grossinger, a scientist from San Francisco Estuary Institute (SFEI), to give his presentation on the vision for a resilient Silicon Valley landscape[3].
- Public Works Environmental staff participated in the Green Infrastructure Leadership Conversation and the Regional Roundtable on Sustainable Streets

Public and stakeholder support is also essential for the successful implementation of the GSI Plan and future GSI projects. To this end, the City has coordinated with SCVURPPP and the Watershed Education and Outreach subgroup on a comprehensive outreach and education program. Key audiences include: the general public (countywide, and in the neighborhood or municipality where GSI projects are located); the development community (e.g., developers, engineers, landscape architects, and contractors); and elected officials. The GSI outreach and education program includes a GSI website[4], public presentations, and radio and online advertising to promote GSI features. The City of Cupertino will conduct or continue to conduct education and outreach activities as part of development of the GSI Plan and seek community input as specific projects are designed and constructed.

1.5 GSI Plan Structure and Required Elements

The remainder of the GSI Plan is structured as follows:

Chapter 2 describes the definition, purpose, and benefits of GSI, and describes the different types of GSI facilities.

Chapter 3 describes the relationship of the GSI Plan to other planning documents and how those planning documents have been updated or modified, if needed, to support and incorporate GSI requirements. For documents whose desired updates and modifications have not been accomplished by the completion of the GSI Plan, a work plan and schedule are laid out to complete them.

Chapter 4 outlines the materials being developed by SCVURPPP and the City to provide guidelines, typical details, specifications and standards for municipal staff and others in the design, construction, and operation and maintenance of GSI measures.

Chapter 5 presents information on the different types of GSI projects and the methodology and results for identifying and prioritizing areas for potential GSI projects.

Chapter 6 outlines the City's strategy for implementing potential GSI projects within the next ten years and through 2040, discusses the variety of mechanisms to be employed by the City in order to

[3] SFEI's recommendations for a more sustainable South Bay looks at what the City can do to integrate resilient landscape within the reality of new and re-development. From a practical perspective, the City of Cupertino can consider actions over the course of the next generations to improve the ecology of the area and how it can work with larger developments to incorporate these types of principles in its planning.

[4] http://www.mywatershedwatch.org/residents/green-streets/

implement the GSI Plan, and presents the estimated targets for the amounts of impervious surface to be "retrofitted" as part of public and private projects by 2020, 2030, and 2040.

The GSI Plan elements required by Provision C.3.j.i.(2) of the MRP and the section of the document in which each component can be found are summarized in Table 1-2 below.

Table 1-1 Summary of GSI Plan Elements required by Provision C.3.j.i of the MRP.

MRP Provision	GSI Plan Elements	GSI Plan Section
C.3.j.i.(2)(a)	Project Identification and Prioritization Mechanism	Chapter 5
C.3.j.i.(2)(b)	Prioritized Project Locations	Section 5.3
C.3.j.i.(2)(c)	Impervious Surface Targets	Section 6.6
C.3.j.i.(2)(d)	Completed Project Tracking System	Section 6.7
C.3.j.i.(2)(e,f)	Guidelines and Specifications	Chapter 4
C.3.j.i.(2)(g)	Alternative Sizing Requirements for Green Street Projects	Section 4.1
C.3.j.i.(2)(h,i)	Integration with Other Municipal Plans	Chapter 3
C.3.j.i.(2)(i)	Workplan for Integration of GSI Language into City Planning Documents	Section 3.1.8
C.3.j.i.(2)(j)	Workplan to Complete C.3.j. Early Implementation Projects	Section 6.3
C.3.j.i.(2)(k)	Evaluation of Funding Options	Section 6.5
C.3.j.i.(3)	Legal and Implementation Mechanisms	Section 6.4

2. WHAT IS GREEN STORMWATER INFRASTRUCTURE?

In natural landscapes, most of the rainwater soaks into the soil or is taken up by plants and trees. However, in urban areas, building footprints and paved surfaces such as driveways, sidewalks, and streets prevent rain from soaking into the ground. As rainwater flows over and runs off these impervious surfaces, this "urban runoff" or "stormwater runoff" can pick up pollutants such as motor oil, metals, pesticides, sediment, pet waste, and litter. It then carries these pollutants into the City's storm drains, which flow directly to local creeks and San Francisco Bay, without any cleaning or filtering to remove pollutants. Stormwater runoff is therefore a major contributor to water pollution in urban areas.

As urban areas develop, the increase in impervious surface also results in increases in peak flows and volumes of stormwater runoff from rain events. Traditional "gray" stormwater infrastructure, like most of the City's storm drain system, is designed to convey stormwater flows quickly away from urban areas. However, the increased peak flows and volumes can cause erosion, flooding, and habitat degradation in downstream creeks to which stormwater is discharged, damaging habitat, property, and infrastructure.

2.1 Green Stormwater Infrastructure

A new approach to managing stormwater is to implement green stormwater infrastructure. GSI uses vegetation, soils, and other elements and practices to capture, treat, infiltrate and slow urban runoff and thereby restore some of the natural processes required to manage water and create healthier urban environments. GSI facilities can also be designed to capture stormwater for uses such as irrigation and toilet flushing.

GSI integrates building and roadway design, complete streets, drainage infrastructure, urban forestry, soil conservation and sustainable landscaping practices to achieve multiple benefits. At the city or county scale, GSI is a patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water. At the neighborhood or site scale, GSI comprises stormwater management systems that mimic nature and soak up and store water.[5]

2.2 Benefits of Green Stormwater Infrastructure

GSI can provide multiple benefits beyond just managing rainfall and runoff. These benefits include environmental, economic, and social improvements.

GSI measures can mitigate localized flooding and reduce erosive flows and quantities of pollutants being discharged to local creeks and the San Francisco Bay. Vegetated GSI systems can beautify public places and help improve air quality by filtering and removing airborne contaminants from vehicle and industrial sources. They can also reduce urban heat island effects by providing shade and absorbing heat better than paved surfaces, and provide habitat for birds, butterflies, bees, and other local species. When GSI facilities are integrated into traffic calming improvements such as curb extensions and bulb-outs at intersections, they can help increase pedestrian and bicycle safety and promote active transportation, which in turn can result in improved human health.

[5] https://www.epa.gov/green-infrastructure/what-green-infrastructure

GSI facilities designed with extra storage can capture stormwater for later use as irrigation water or non-potable uses such as toilet flushing and cooling tower supply, thus conserving potable water supplies.

Widespread implementation of GSI potentially offers significant economic benefits, such as deferring or eliminating the need for some gray infrastructure projects. By providing more storage within the watershed, GSI can help reduce the costs of conveyance and pumping of stormwater. When cost-benefit analyses are performed, GSI is often the preferred alternative due to the multiple benefits provided by GSI as compared to conventional infrastructure.

2.3 Types of Green Stormwater Infrastructure Facilities

Integrating GSI into public spaces typically involves construction of stormwater capture and treatment measures in public streets, parks, and parking lots or as part of public buildings. Types of GSI measures that can be constructed in public spaces include: (1) bioretention; (2) stormwater tree well filters; (3) pervious pavement, (4) infiltration facilities, (5) green roofs, and 6) rainwater harvesting and use facilities. A description of these facility types is provided below.

2.3.1 Biotreatment/Bioretention

Bioretention areas are depressed landscaped areas that consist of a ponding area, mulch layer, plants, and a special biotreatment soil media composed of sand and compost, underlain by drain rock and an underdrain, if required. Bioretention is designed to retain stormwater runoff, filter stormwater runoff through biotreatment soil media and plant roots, and either infiltrate stormwater runoff to underlying soils as allowed by site conditions, or release treated stormwater runoff to the storm drain system, or both. They can be of any shape and are adaptable for use on a building or parking lot site or in the street right-of-way.

Figure 2-1 Stormwater curb extension, Southgate Neighborhood, Palo Alto (Source: EOA)

Bioretention systems in the streetscape have specific names: stormwater planters, stormwater curb extensions (or bulb-outs), and stormwater tree well filters (described in the next section).

A stormwater curb extension (Figure 2-1) is a bioretention system that extends into the roadway and involves modification of the curb line and gutter. Stormwater curb extensions may be installed midblock or at an intersection. Curb bulb-outs and curb extensions installed for pedestrian safety, traffic calming, and other transportation benefits can also provide opportunities for siting bioretention facilities.

A stormwater planter is a linear bioretention facility in the public right-of-way along the edge of the street, often in the planter strip between the street and sidewalk. They are typically designed with vertical (concrete) sides. However, as shown in Figure 2-2, they can also have sloped sides depending on the amount of space that is available.

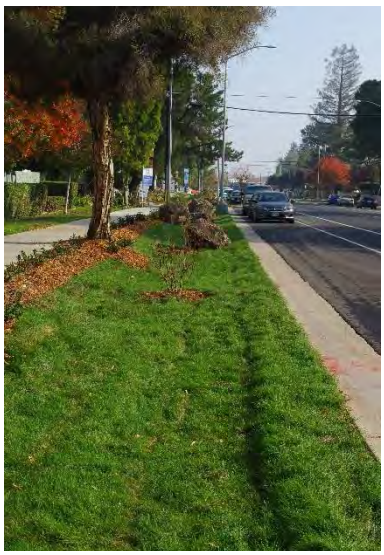


Figure 2-2 Stormwater planter, Hacienda Avenue, Campbell (Source: City of Campbell)

2.3.2 Stormwater Tree Well Filters and Suspended Pavement Systems

A stormwater tree well filter is a type of bioretention system consisting of an excavated pit or vault that is filled with biotreatment soil media, planted with a tree and other vegetation, and underlain with drain rock and an underdrain, if needed. Stormwater tree well filters can be constructed in series and linked via a subsurface trench or underdrain. A stormwater tree well filter can require less dedicated space than other types of bioretention areas.

Suspended pavement systems may be used to provide increased underground treatment area and soil volume for tree well filters. These are structural systems designed to provide support for pavement while preserving large volumes of uncompacted soil for tree roots. Suspended pavement systems may be any engineered system of structural supports or commercially available proprietary structural systems.

Stormwater tree well filters and suspended pavements systems are especially useful in settings between existing sidewalk elements where available space is at a premium. They can also be used in curb extensions or bulb-outs, medians, or parking lots if surrounding grades allow for drainage to those areas. The systems can be designed to receive runoff through curb cuts or catch basins or allow runoff to enter through pervious pavers on top of the structural support.

Figure 2-3 Stormwater tree well filter conceptual examples: modular suspended pavement system (left), column suspended pavement system (right). (Courtesy of Philadelphia Water Department)

2.3.3 Pervious Pavement

Pervious pavement is hardscape that allows water to pass through its surface into a storage area filled with gravel prior to infiltrating into underlying soils. Types of pervious pavement include permeable interlocking concrete pavers, pervious concrete, porous asphalt, and grid pavement. Pervious pavement is often used in parking areas or on streets where bioretention is not feasible due to space constraints or if there is a need to maintain parking. Pervious pavement does not require a dedicated surface area for treatment and allows a site to maintain its existing hardscape.

Figure 2-4 Permeable interlocking concrete pavers, Mayfield Playing Fields, Palo Alto (Source: EOA)

There are two types of pervious pavers: Permeable Interlocking Concrete Pavers (PICP) and Permeable Pavers (PP). PICP allows water to pass through the joint spacing between solid pavers, and PP allows water to pass through the paver itself and therefore can have tighter joints. Porous asphalt and pervious concrete are similar to traditional asphalt and concrete, but do not include fine aggregates in the mixture, allowing water to pass through the surface. All types are supported by several layers of different sizes of gravel to provide structural support and water storage.

2.3.4 Infiltration Facilities

Where soil conditions permit, infiltration facilities can be used to capture stormwater and infiltrate it into native soils. The two primary types are infiltration trenches and subsurface infiltration systems.

Figure 2-5 Infiltration trench, San Jose (Source: City of San Jose)

An infiltration trench is an excavated trench backfilled with a stone aggregate and lined with a filter fabric. Infiltration trenches collect and detain runoff, store it in the void spaces of the aggregate, and allow it to infiltrate into the underlying soil. Infiltration trenches can be used along roadways, alleyways, and the edges or medians of parking lots. An example of an infiltration trench is shown in Figure 2-5.

Subsurface infiltration systems are another type of GSI measure that may be used beneath parking lots or parks to infiltrate larger quantities of runoff. These systems, also known as infiltration galleries, are underground vaults or pipes that store and infiltrate stormwater while preserving the uses of the land surface above parking lots, parks and playing fields. An example is shown in Figure 2-6. Storage can take the form of large-diameter perforated metal or plastic pipe, or concrete arches, concrete vaults, plastic chambers or crates with open bottoms. Prefabricated, modular infiltration galleries are available in a variety of shapes, sizes, and material types that are strong enough for heavy vehicle loads.

Figure 2-6 Subsurface infiltration system (Source: Conteches.com)

2.3.5 Green Roofs

Figure 2-7 Green roof at Fourth Street Apartments, San José (Source: EOA)

Green roofs are vegetated roof systems that filter, absorb, and retain or detain the rain that falls upon them. Green roof systems are comprised of a layer of planting media planted with vegetation, underlain by other structural components including waterproof membranes, synthetic insulation, geofabrics, and underdrains. A green roof can be either "extensive", with 3 to 7 inches of lightweight planting media and low-profile, low-maintenance plants, or "intensive", with a thicker (8 to 48 inches) of media, more varied plantings, and a more garden-like appearance. Green roofs can provide high rates of rainfall retention via plant uptake and evapotranspiration and can decrease peak flow rates in storm drain systems because of the storage that occurs in the planting media during rain events.

2.3.6 Rainwater Harvesting and Use

Figure 2-8 Rainwater harvesting cistern, Environmental Innovation Center, San José (Source: City of San Jose)

Rainwater harvesting is the process of collecting rainwater from impervious surfaces and storing it for later use. Storage facilities that can be used to capture stormwater include rain barrels, above-ground or below-ground cisterns (Figure 2-8), open storage reservoirs (e.g., ponds), and various underground storage devices (tanks, vaults, pipes, and proprietary storage systems)(Figure 2-9). The captured water is then fed into irrigation systems or non-potable water plumbing systems, either by pumping or by gravity flow. Uses of captured water may include irrigation, vehicle washing, and indoor non-potable use such as toilet flushing, heating and cooling, or industrial processing.

The two most common applications of rainwater harvesting are 1) collection of roof runoff from buildings; and 2) collection of runoff from at-grade surfaces or diversion of water from storm drains into large underground storage facilities below parking lots or parks. Rooftop runoff usually contains lower quantities of pollutants than at-grade surface runoff and can be collected via gravity flow. Underground storage systems typically include pre-treatment facilities to remove pollutants from stormwater prior to storage and use.

Figure 2-9 Subsurface vault, under construction (Source: Conteches.com)

2.4 Existing GSI Facilities

The City of Cupertino completed an 18-acre Stevens Creek Corridor Park and Restoration project in July 2014. The City is also installing GSI measures at the McClellan Ranch Preserve as part of expansion and improvements at the site, with construction expected to be completed by September 1, 2019. GSI projects such as this, completed by the City prior to or during the current permit term (2016-2020), are also referred to in the permit as "Early Implementation" projects (see Section 5.1.1 of this GSI Plan). Both projects are described below. A description of the Apple Park project, which included GSI improvements in the public right-of-way, is also described below.

2.4.1 Stevens Creek Corridor and Creek Restoration project

The Stevens Creek Corridor and Creek Restoration project at Blackberry Farm in Cupertino consisted of two phases.

Phase 1 of the project restored a portion of Stevens Creek, enhanced natural hydrologic processes, and improved wildlife and habitat values. Impervious cover was reduced by 3.4 acres, including removal of an asphalt driveway and parking lot, and concrete surfaces in the creek corridor. The former parking lot, which drained directly into the creek, was replaced by a smaller green parking area, set back from the creek and made entirely of permeable material. Drive aisles are made of porous concrete that is colored to reduce heat gain. Parking bays were constructed using recycled plastic geocells to support vehicle weight filled with special soil and planted with turf grass (see Figure 2-10). During heavy rains, excess water flows to bioretention areas in a center median. Dozens of native trees were also planted. The design aimed to use all rain and storm flows to water native plantings. The project site is located within a flood plain. It was designed to accommodate being submerged during unusually high creek flows without damage to new infrastructure, water quality or wildlife and to retain stormwater onsite. The design enables the site's ability to attenuate flooding, and naturally filter and return rainfall and runoff from the site to groundwater.

Figure 2-10 Completed green parking bays (above left) and parking bays under construction, showing the recycled plastic geocells that support vehicle weight (above right).(Source: City of Cupertino)

Phase 2 of the Stevens Creek Corridor project included four new bioswales and an infiltration area installed on the adjacent golf course to capture and infiltrate runoff from the golf course, buildings, and the parking lot that previously flowed directly into the creek. Additionally, an all-weather trail was installed using pervious concrete (Figure 2-11). The trail material is compatible with floodplain standards and protects the fishery and wildlife.

Figure 2-11 Pervious concrete bike path and walkway at Blackberry Farm. (Source: City of Cupertino)

2.4.2 McClellan West Parking Lot

McClellan Ranch Preserve overflow parking had historically been relegated to the 1.4 acre vacant unimproved parcel which lies west of the Preserve and adjacent to Stevens Creek. The site experienced poor drainage and contributed to track out of sediment during all seasons. With the construction of the Environmental Education Center and other improvements within the Preserve, expanded community and school use, there was need for additional parking during large events and for oversized vehicles such as school buses. To meet the parking demand and provide habitat restoration, the project was designed to create a "green" meadow-style parking area compatible with the existing riparian setting. Components of this improvement include 0.53 acres of parking surface paved with permeable concrete including a gravel overflow area, planting thirty-seven native species trees, and adding approximately 20,000 square feet of new native riparian plants which will enhance the existing native habitat along Stevens Creek. Construction is expected to be completed by September 1, 2019.

2.4.3 Apple Park

Apple Park lies on 152 acres of land that was formerly occupied by more traditional office space with expansive impervious parking lots and multiple office buildings. Putting parking underground and emphasizing California native landscaping, the Apple project reduced the impervious surface from 5,085,000 square feet (117 acres) to 2,615,000 square feet (60 acres). There was an emphasis on planting native trees, enlisting the expertise of Stanford arborist, David Muffly. The campus drains to flow-through planter bioretention treatment before entering the Calabazas watershed and features 9,000 trees, nearly double the 4,596 trees at the pre-project site. The project exceeded regulatory requirements by providing stormwater treatment in the public right-of-way.

3. INTEGRATION WITH OTHER PLANNING DOCUMENTS

To ensure the success of the GSI Plan and its implementation, its goals, policies and implementation strategies should align with the City's General Plan and other related planning documents. The MRP requires that municipal agencies review such documents and include in their GSI Plans a summary of any planning documents aligned with the GSI Plan or updated or modified to appropriately incorporate GSI requirements. The GSI Plan must also include a workplan identifying how GSI measures will be included in future plans.

3.1 City Planning Document Review

The City completed a review of its existing planning documents to determine the extent to which GSI-related language, concepts and policies have been incorporated. The plans that were reviewed are listed below, with the General Plan as guiding planning document first, followed by remaining plans in order of most recently prepared/adopted:

- General Plan – Community Vision 2040 (2015)
- Pedestrian Transportation Plan (2018)
- Storm Drain Master Plan (2018)
- Bicycle Transportation Plan (2016)
- Climate Action Plan (2015)
- Heart of the City Specific Plan (2014)
- Citywide Parks & Recreation System Master Plan (Draft)

The following sections provide a brief discussion of each plan and the extent to which it supports GSI implementation. A prioritized workplan for the integration of GSI language into existing and future City planning documents is provided in Section 3.1.18.

3.1.1 General Plan – Community Vision 2040

The City's Community Vision 2040 functions as the City of Cupertino's State-mandated General Plan and covers a time frame of 2015–2040. Community Vision 2040 provides a framework for integrating the aspirations of residents, businesses, property owners and public officials into a comprehensive strategy for guiding future development and managing change. It describes long-term goals and guides decision-making by the City Council and appointed commissions. The document was last amended in October 2015 and includes language that is very supportive of GSI. Examples of supportive language in the plan are summarized below. No updates related to GSI are recommended at this time.

> ***ES-3: Context, Urban Ecosystems (page ES-6):****…the City is committed to enhancing the urban ecosystem in the form of urban forestry management, integration of green infrastructure, treatment of parks and open space, landscape and building requirements.*
>
> ***Strategy ES-1.1.1: Climate Action Plan (Page ES-14):*** *Integrate multiple benefits of green infrastructure with climate resiliency and adaptation*
>
> ***Goal ES-2.1.5 Urban Forest (Page ES-16):*** *Encourage the inclusion of additional shade trees, vegetated stormwater treatment and landscaping to reduce the "heat island effect" in development projects.*

SE-5.1.1 Landscaping (page ES-21): *Ensure that the City's tree planting, landscaping and open space policies enhance the urban ecosystem by encouraging medians, pedestrian crossing and curb-extension planting that is native, drought-tolerant, treats stormwater and enhances urban plant, aquatic and animal resources in both, private and public development.*

ES-5.1.2: Built Environment (page ES-21): *Ensure that sustainable landscaping design is incorporated in the development of City facilities, parks and private projects with the inclusion of measures such as tree protection, stormwater treatment and planting of native, drought tolerant landscaping that is beneficial to the environment.*

Policy ES-7.1 Natural Water Bodies and Drainage Systems (page ES-24): *In public and private development, use Low Impact Development (LID) principles to manage stormwater by mimicking natural hydrology, minimizing grading and protecting or restoring natural drainage systems.*

Policy ES-7.2: Reduction of Impervious Surfaces (page ES-24): *Minimize stormwater runoff and erosion impacts resulting from development and use low impact development (LID) designs to treat stormwater or recharge groundwater*

Strategy ES-7.2.1: Lot Coverage (page ES-24): *Consider updating lot coverage requirements to include paved surfaces such as driveways and ongrade impervious patios to incentivize the construction of pervious surfaces.*

Strategy ES-7.2.2: Pervious Walkways and Driveways (page ES-24): *Encourage the use of pervious materials for walkways and driveways…*

Policy ES-7.2.3: Maximize Infiltration (page ES-25): *Minimize impervious surface areas, and maximize on-site filtration and the use of on-site retention facilities.*

Strategy ES-7.3.1: Development Review (Page ES-25): *Require LID designs such as vegetated stormwater treatment systems and green infrastructure to mitigate pollutant loads and flows.*

Strategy ES-7.4.1 Storm Drainage Master Plan (Page ES-25): *Develop and maintain a Storm Drainage Master Plan which identifies facilities needed to prevent "10-year" event street flooding and "100-year" event structure flooding and integrate green infrastructure to meet water quality protection needs in a cost effective manner.*

Strategy ES-7.11.5 On-site Recycled Water (Page ES-27): *Encourage on-site water recycling including rainwater harvesting and gray water use.*

Strategy ES-7.11.7 Green Business Certification and Water Conservation (Page ES-27): *Continue to support the City's Green Business Certification goals of long-term water conservation within City facilities, vegetated stormwater infiltration systems, parks and medians, including installation of low-flow toilets and showers, parks, installation of automatic shut-off valves in lavatories and sinks and water efficient outdoor irrigation.*

Strategy INF-4.1.1: Stormwater Management (page INF-14): *Reduce the demand on storm drain capacity through implementation of programs that meet and even exceed on-site drainage requirements*

3.1.2 Pedestrian Transportation Plan

Cupertino adopted its Pedestrian Transportation Plan (PTP) in 2002; an update was completed in February 2018. The purpose of the PTP is to establish a guiding framework for the development and maintenance of pedestrian facilities throughout Cupertino and recommend policies, programs, and messaging to support and promote walking. Existing language in the PTP to support GSI is summarized here:

> ***Curb Extension Benefits (Page 38):*** *Extended sidewalk space can be used for plantings, street furniture, or green stormwater infrastructure.*
>
> ***Choker/Pinch Point Benefits (Page 41)*** *Stormwater and greenspace elements can be combined to calm traffic while also making the street more attractive.*

3.1.3 Storm Drain Master Plan

The latest version of the City's Storm Drain Master Plan (SDMP) dated September 2018, was accepted by City Council Resolution on January 15, 2019. The objective of the SDMP is to provide an examination of the flood risks within the City limits and recommend actions necessary to accomplish defined levels of service for storm drain systems owned by the City so as to appropriately manage flood risks. The SDMP includes a discussion of the C.3 MRP Requirements and a discussion of GSI. Existing language to support GSI is summarized here:

> ***Section 2.2.2 Future Land Use:*** *The majority of future development will involve the redevelopment of sites, such as infill projects. Future development will need to comply with C.3 requirements of the Municipal Regional Permit (MRP) for the Bay Area. These requirements to treat storm water runoff may result in a reduction of impervious surface…*
>
> ***Section 5.7 Green Infrastructure:*** *The City should look for and evaluate opportunities to incorporate green infrastructure and LID facilities into the design of capital projects recommended in the master plan.*

3.1.4 Bicycle Transportation Plan

The City adopted a Bicycle Transportation Plan (BTP) in 2011 that describes long-term goals with respect to the creation of a safe, convenient, and comprehensive network of bicycle facilities throughout the City. The BTP was updated in 2016 to identify which priority projects have already been completed and which remain to be implemented, and to identify any new projects that should be included for prioritization. The BTP currently does not include language to support GSI. However, all bike lane projects will be CIP projects and therefore reviewed annually as part of the review of projects for potential GSI opportunities (See Section 6.2).

3.1.5 Climate Action Plan

The Climate Action Plan (CAP) defines Cupertino's path toward creating a healthy, livable, and vibrant place for its current and future residents to live, learn, work, and play. The CAP seeks to identify emissions reduction strategies that are informed by the goals, values, and priorities of the community. The document was completed in January 2015. The CAP emissions reduction measures are organized into five goals, one of which is "Expand Green Infrastructure". Existing language in support of GSI is summarized below.

GHG Overarching Goals (Pages ES-14 and 66): *Expand Green Infrastructure: enhance the City's existing urban forest and landscapes on public and private land.*

Measure C-W-2 Recycled Water Irrigation Program (Page 116): *As an alternative to recycled water use…small-scale, on-site rainwater catchment systems could be installed to better utilize natural precipitation for irrigation purposes, as opposed to use of scarce potable water resources. The City will develop a demonstration project on municipal property …*

Goal 5 – Expand Green Infrastructure (Page 127): *In Cupertino, green space includes the urban forest, parks, landscaped medians and parkways, and natural stormwater-absorbing landscapes. Healthy and robust green infrastructure systems can mitigate the urban heat island effect, lower building energy use, provide natural stormwater management and wildlife habitat, improve local air quality, and increase community pride.*

Measure C-G-1 Urban Forest Program (Page 128): *The City should incentivize Green roofs for their role in "protecting water resources adversely impacted by climate change by reducing electricity usage and improving air quality.*

Measure C-G-1 Action D (Page 130)*: Evaluate opportunities to expand current ordinances and codes to prioritize expansion of City's green and cool roofs, as well as pervious and cool pavement.*

Measure C-G-1 Action F (Page 130): *Expand community and school gardens, and evaluate opportunities to develop prevalent demonstration garden that incorporates water-sensitive design and advanced irrigation control technology (if irrigation system is necessary.*

Measure M-F-7 Action E. Install Graywater and Rainwater Catchment Systems in New Construction and Major Retrofit Projects (page 186): *In the absence of access to utility-supplied recycled water in our community, Cupertino will strive to lead by example by installing graywater and rainwater catchment systems in new municipal construction and major retrofit projects…These projects can also serve as models for community members and businesses seeking to achieve the same environmental and financial benefits, and should be showcased to reconnect Cupertino's suburban residents to their backyard gardens and the natural water cycle.*

3.1.6 Heart of the City Specific Plan

The Heart of the City Specific Plan provides specific development guidance for the most important commercial corridor in the City of Cupertino. The purpose of the specific plan is to guide the future development and redevelopment of the Stevens Creek Boulevard Corridor in a manner that creates a greater sense of place and community identity in Cupertino. The Streetscape Element implements community design goals contained in the 1993 General Plan, design concepts subsequently developed and revised in the 1993 "Heart of the City" Design Charette, and any new policies and concepts identified in the 2005 General Plan. The document was enacted by the City Council in December 2014 and does not include language to support GSI. However, consistent with the City's strategy to ensure no missed opportunities (Section 6), any development related to the Heart of the City will go through the CIP review for identifying and evaluating GSI opportunities.

3.1.7 Citywide Parks & Recreation System Master Plan (Draft)

The City is preparing a Citywide Parks & Recreation System Master Plan (Draft), which provides guidance to create a park system for the future aligned with the community's values and priorities. The Master Plan creates a vision through the year 2040 to guide future development, renovation, management and activation of City parks and recreation facilities. Elements of the Master Plan goals include conservation of trees and natural areas which support wildlife and ecological functions and establish sustainable practices in management of parks and recreation facilities. Existing language in support of GSI in the draft plan dated January 2019 is summarized here:

> ***Conservation Goal 1.D.v (Page 39):*** *Embrace storm water management, incorporating green infrastructure elements such as rain gardens, bioswales, permeable pavers and detention ponds to help reduce flooding, filter pollutants and replenish groundwater during storm events.*
>
> ***Sustainability Goal 7.C.ix (Page 73):*** *Train staff in maintenance and stewardship of natural areas, green infrastructure, and bioswales, so that these features thrive and the integrity of natural resources on City property is maintained. Involve expert professional services as needed to support informed and ongoing care for habitat areas.*
>
> ***Sustainability Goal 7.C.xi (Page 74):*** *Focus on storm water management and green infrastructure when designing or renovating City parks. For example, consider installing a 'storm water management garden' on City or public property to showcase green infrastructure techniques.*
>
> ***Enhancements to Existing Parks, Creekside Park and Connection to Regnart Creek Trail (page 84):*** *Consider adding trail amenities, enhancing and protecting the riparian corridor, and adding green infrastructure. Encourage connections between school, parks and trail.*
>
> ***Enhancements to Existing Parks, Saratoga Creek Trail (Page 84):*** *Consider adding trail amenities, enhancing and protecting the riparian corridor, and adding green infrastructure. Encourage connections northward to Stevens Creek Blvd. and to regional destinations.*
>
> ***Enhancements to Existing Parks, Stevens Creek Trail (Page 84):*** *Consider adding trail amenities and adding green infrastructure. Encourage pedestrian and bike connections between trail, City parks, County parks and nearby schools.*

3.1.8 Workplan for Integration of GSI Language into Existing and Future City Planning Documents

The General Plan, Climate Action Plan, Pedestrian Transportation Plan, Storm Drain Master Plan, and the draft Citywide Parks and Recreation System Master Plan all include adequate language to support the implementation of GSI in Cupertino. The Heart of the City Plan was last amended with the General Plan in 2014. Unless there are development triggers, the Heart of the City Plan will be updated with GSI language during future General Plan amendments. Consistent with the City's strategy (See Section 6.1), any progress on the Heart of the City will go through the CIP review and green stormwater infrastructure will be considered as part of that review.

When preparing new planning documents, the City will review GSI Plan requirements during the planning process to ensure that GSI requirements and policies are incorporated. Examples of GSI related language can be found in existing City plans, and in references such as SCVURPPP's Model Green Infrastructure Language for Incorporation into Municipal Plans (2016).

3.2 Regional Plans

The City is collaborating with SCVURPPP, Valley Water, and other agencies on several large-scale planning efforts including those described below.

3.2.1 Santa Clara Basin Stormwater Resource Plan

A collaboration between SCVURPPP and Valley Water during 2017 and 2018, the Santa Clara Basin Storm Water Resources Plan (SWRP) supports municipal GSI Plans by identifying and prioritizing potential multi-benefit GSI opportunities on public parcels and street rights-of-way throughout the Basin (i.e., Santa Clara Valley) and allows them to be eligible for State bond-funded implementation grants. The SWRP includes a list of prioritized GSI opportunity locations for each SCVURPPP agency, including Cupertino. As described in Section **Error! Reference source not found.**, the City's GSI Plan builds on the SWRP output to further identify, evaluate, and prioritize potential projects.

3.2.2 Santa Clara Valley Water District's One Water Plan

Valley Water's Watershed Division is leading an effort to develop an Integrated Water Resources Master Plan to identify, prioritize, and implement activities at a watershed scale to maximize established water supply, flood protection, and environmental stewardship goals and objectives. The "One Water Plan" establishes a framework for long-term management of Santa Clara County water resources, which eventually will be used to plan and prioritize projects that maximize multiple benefits. The One Water Plan incorporates knowledge from past planning efforts, builds on existing and current related planning efforts; and coordinates with relevant internal and external programs. The One Water Plan has five goals:

1. "Valued and Respected Rain" – Manage rainwater to improve flood protection, water supply, and ecosystem health.
2. "Healthful and Reliable Water" – Enhance the quantity and quality of water to support beneficial uses.
3. "Ecologically Sustainable Streams and Watersheds" – Protect, enhance and sustain healthy and resilient stream ecosystems.
4. "Resilient Baylands" – Protect, enhance and sustain healthy and resilient baylands ecosystems and infrastructure.
5. "Community Collaboration" – Work in partnership with an engaged community to champion wise decisions on water resources.

Tier 1 of the effort, for which a draft plan was completed in 2016[6], is a countywide overview of major resources and key issues along with identified goals and objectives. Tier 2 (2016 to 2020) will include greater detail on each of the County's major watersheds. The City's GSI Plan aligns with the goals of the

[6] Santa Clara Valley Water District. 2016. One Water Plan for Santa Clara County. An Integrated Approach to Water Resources Management. Preliminary Draft Report 2016.

One Water Plan and may be able to coordinate with specific projects yet to be identified in the West Valley area.

3.2.3 Bay Area Integrated Regional Water Management Plan

The Bay Area Integrated Regional Water Management Plan (IRWMP) is a comprehensive water resources plan for the Bay region that addresses four functional areas: 1) water supply and water quality; 2) wastewater and recycled water; 3) flood protection and stormwater management; and 4) watershed management and habitat protection and restoration. It provides a venue for regional collaboration and serves as a platform to secure state and federal funding. The IRWMP includes a list of over 300 project proposals, and a methodology for ranking those projects for the purpose of submitting a compilation of high priority projects for grant funding. The Santa Clara Basin SWRP was submitted to the Bay Area IRWMP Coordinating Committee and incorporated into the IRWMP as an addendum. As SWRP projects are proposed for grant funding, they will be added to the IRWMP list using established procedures.

4. GSI DESIGN GUIDELINES, DETAILS, AND SPECIFICATIONS

The MRP requires that the GSI Plan include general design and construction guidelines, standard specifications and details (or references to those documents) for incorporating GSI components into projects within the City. These guidelines and specifications should address the different street and project types within the City, 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, and urban forestry.

The City, along with other SCVURPPP agencies, helped fund and provided input to the development of countywide guidelines by SCVURPPP to address the MRP requirements and guide the implementation of GSI Plans. The resulting SCVURPPP GSI Handbook (Handbook)[7] is a comprehensive guide to planning and implementation of GSI projects in public streetscapes, parking lots and parks. The Handbook consists of two parts, the contents of which are described in the following sections. The City intends to use this Handbook as a reference when creating City-specific guidelines and specifications to meet the needs of the various departments.

4.1 Design Guidelines

Part 1 of the Handbook provides guidance on selection, integration, prioritization, sizing, construction, and maintenance of GSI facilities. It includes sections describing the various types of GSI, their benefits, and design considerations; how to incorporate GSI with other uses of the public right-of-way, such as bicycle and pedestrian infrastructure and parking; and guidelines on utility coordination and landscape design for GSI. In addition, the Handbook also provides guidance on post-construction maintenance practices and design of GSI to facilitate maintenance.

Part 1 also contains a section on proper sizing of GSI measures. Where possible, GSI measures should be designed to meet the same sizing requirements as Regulated Projects, which are specified in MRP Provision C.3.d. In general, the treatment measure design standard is capture and treatment of 80% of the annual runoff (i.e., capture and treatment of the small, frequent storm events). However, if a GSI measure cannot be designed to meet this design standard due to constraints in the public right-of-way or other factors, the City may still wish to construct the measure to provide some runoff reduction and water quality benefit and achieve other benefits. For these situations, the Handbook describes (in Section 4.2) regional guidance on alternative design approaches developed by the Bay Area Stormwater Management Agencies Association (BASMAA) for use by MRP permittees.

4.2 Details and Specifications

Part 2 of the Handbook contains typical details and specifications that have been compiled from various sources within California and the U.S. and modified for use in Santa Clara County. The Handbook includes details for pervious pavement, stormwater planters, stormwater curb extensions, bioretention in parking lots, infiltration measures, and stormwater tree wells, as well as associated components such as edge controls, inlets, outlets, and underdrains. It also provides typical design details for GSI facilities

[7] SCVURPPP (2019) Green Stormwater Infrastructure Handbook. February. Online at http://scvurppp.org/scvurppp_2018/swrp/resource-library/

in the public right-of-way that address utility protection measures and consideration of other infrastructure in that space.

4.3 Incorporation of SCVURPPP Details and Specifications into City Standards

The City plans to reference the SCVURPPP GSI Guidelines and Specifications for design of GSI projects. The City will review these for consistency with its own local standards, and revise existing guidelines, standard specifications, design details, and department procedures as needed. The City will also reference details and build on its experience from design and construction of the Stevens Creek Corridor and Creek Restoration Project (Section 2.4.1).

5. GSI PROJECT PRIORITIZATION AND IMPERVIOUS TARGETS

To meet the requirements of the MRP, the City's GSI Plan must contain a mechanism to prioritize and map areas for potential and planned projects, both public and private, for implementation over the 2020, 2030, and 2040 milestones. The mechanism must include the criteria for prioritization and outputs that can be incorporated into the City's long-term planning and capital improvement processes.

This chapter describes different GSI project categories considered within the City, followed by a description of the process employed by the City to identify public lands that offer opportunities to implement GSI and prioritize those opportunities, and the results of the process.

5.1 Project Types

GSI project types that have been or may be implemented in the City fall into the following categories: Early Implementation Projects, C3 Regulated Projects, Green Streets, LID Retrofits, and Regional Projects. Green Streets, LID Retrofits, and Regional Projects are types of GSI capital projects that the City may implement to meet the water quality goals in the MRP and multi-benefit objectives defined in the GSI Plan. GSI capital projects are typically not regulated projects (although they must conform to the sizing and design requirements contained in Provision C.3, except under certain circumstances) and they are primarily public projects under control of the City. These three project types are the focus of the prioritization process described in Section 5.2, but all five GSI project types are considered as part of the City wide GSI strategy presented in Chapter 6. Several factors, such as change in scope of work, funding, site conditions, etc. determine the ability of the City to implement GSI capital projects.

5.1.1 Early Implementation Projects

Early Implementation Projects are GSI projects that have already been implemented by the City or are already scheduled and funded for implementation during the permit term (i.e., through December 2020). The City has already implemented one GSI projects, as discussed in Section 2.4. The City has identified an additional Early Implementation project through a review of its Capital Improvement Program (CIP), as discussed in Section 5.2.2 below.

5.1.2 Regulated Projects

C3 Regulated Projects are those implemented as part of new and redevelopment within the City, both private and public, that must meet the post-construction stormwater treatment requirements per Provision C.3 of the MRP. Regulated projects include private development or redevelopment projects, such as multi-family residential buildings, commercial office buildings, or shopping plazas, as well as public projects, such as libraries, police stations, and parking lots, exceeding the impervious surface thresholds. The "Apple Park" project, a 176-acre site that replaced the former Hewlett Packard industrial campus and includes LID measures, is an example of a regulated project.

5.1.3 LID Projects

LID projects mitigate stormwater impacts by reducing runoff through capture and/or infiltration and treating stormwater on-site before it enters the storm drain system. LID projects may include bioretention facilities, infiltration trenches, detention and retention areas in landscaping, pervious pavement, green roofs, and systems for stormwater capture and use. For the purposes of the GSI Plan, LID projects are GSI facilities that treat runoff generated from a publicly-owned parcel on that parcel.

5.1.4 Regional Projects

Regional projects capture and treat stormwater runoff from on-site and off-site sources, including surface runoff and diversions from storm drains. Benefits of regional stormwater capture projects can include flood risk reduction, stormwater treatment and use, and groundwater recharge. These projects may take a variety of forms such as detention and retention basins and subsurface vaults and infiltration galleries. The site characteristics will determine what types of regional projects are feasible, e.g., whether a project is on-line or off-line from the storm drain network, whether it is desirable to change the functionality of the site, whether the project is above ground or underground, and the size of the project.

5.1.5 Green Street Projects

Green street projects are GSI opportunities in the public right-of-way that capture runoff from the street and adjacent areas that drain to the street. The technologies used for green streets are similar to those used in LID projects but are limited to designs that can be used in the right-of-way. Green street projects may include bioretention (e.g., stormwater planters, stormwater curb extensions or stormwater tree filters), pervious pavement, and/or infiltration trenches. Green street GSI features can be incorporated into other improvements in the right-of-way, including complete streets designs and improvements for pedestrian and cyclist safety.

5.2 Identification and Prioritization Process

The City of Cupertino GSI opportunity identification and prioritization process involved two steps. The first step was the screening and prioritization methodology used in the Santa Clara Basin SWRP (see Section 3.2.1) to identify and prioritize GSI opportunities on public parcels and street segments within the region. The second step in the process involved overlaying City-specific priorities, planning areas, and upcoming City projects onto the regional prioritization results to align the results of the SWRP prioritization process with the City's priorities. These steps are described in detail below.

City projects in areas associated with a project opportunity identified in the SWRP can qualify for State bonded-funded stormwater capture project implementation grants (e.g., Proposition 1). Opportunities for GSI implementation that arise in areas that are not adjacent to a prioritized project opportunity identified in the SWRP may be considered on a case by case basis for feasibility, cost effectiveness, and availability of funding.

5.2.1 Step 1: Stormwater Resource Plan Prioritization

Building on existing documents that describe the characteristics and water quality and quantity issues within the Santa Clara Basin (i.e., the portion of Santa Clara County that drains to San Francisco Bay), the SWRP identified and prioritized multi-benefit GSI opportunities throughout the Basin, 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 was conducted using hydrologic/ hydraulic and water quality models coupled with Geographic Information System (GIS) resources and other tools. The products of these analyses were a map of opportunity areas for GSI projects throughout the watershed, an initial prioritized list of potential project opportunities, and strategies for implementation of these and future projects.

The process began by identifying and screening public parcels and public rights-of-way[8] that can support GSI. Project opportunities were split into the three categories described above – LID, regional, and green streets projects -- because of fundamental differences in GSI measures used, project scale, and measures of treatment efficiency. Screening factors are presented in Table 5-1.

After the identification of feasible GSI opportunity locations, screened streets and parcels were prioritized to aid in the selection of project opportunities that would be the most effective and provide the greatest number of benefits. In addition to physical characteristics, several special considerations were included in the prioritization methodology to consider coordination with currently planned projects provided by agencies, as well as consideration of additional benefits that projects could provide. A discussion of the screening and prioritization process for each project category is presented in the subsequent sections. Figure 5-1 presents the results of the various steps.

LID and Regional Stormwater Capture Project Opportunities

The screening criteria for LID and regional projects were ownership (focusing only on public parcels), land use, and site slope. As shown in Table 5-1, parcel size was used to determine whether a location could support a regional or LID project.

Parcels that met the screening criteria were prioritized based on physical characteristics such as soil group, slope, and percent impervious area, proximity to storm drains, proximity to flood-prone creeks and areas, proximity to potential pollutant sources (e.g., PCBs[9]), whether they were in a priority development area (PDA), whether they were within a defined proximity to a planned project, and whether the project was expected to have other benefits such as augmenting water supply, providing water quality source control, re-establishing natural hydrology, creating or enhancing habitat, and enhancing the community. Prioritization metrics for LID project scoring and regional project scoring are shown in separate tables in Appendix A. The result of the parcel prioritization was a list and map of potential project locations based on the above criteria. This subset of projects from the SWRP was carried over into Step 2 City-Specific Prioritization (Section **Error! Reference source not found.**).

[8] Public parcels can include those not owned by the City, such as public school grounds, County, State, and Federal properties, and property owned by the Water District.

[9] Polychlorinated biphenyls – manmade chemicals which resist extreme temps, and were used in electrical equipment such as transformers and capacitors; and building materials such as caulking, adhesives, mastics etc. primarily from 1950s through 1981. PCBs pose developmental or neurological risks to fetuses, babies, and children, and have been shown to cause cancer in animals and evidence supports cancer causing effect in PCB workers.

Table 5-1 Screening factors for parcel-based and right-of-way project opportunities

Screening Factor	Characteristic	Criteria	Reason
Parcel-based			
Public Parcels	Ownership	County, City, Town, Valley Water, State, Open Space Agencies	Identify all public parcels for regional stormwater capture projects or onsite LID retrofits
	Land Use	Park, School, Other (e.g., Golf Course)	
Suitability	Parcel Size	≥ 0.25 acres	Opportunity for regional stormwater capture project
		< 0.25 acres	Opportunity for on-site LID project
	Site Slope	< 10 %	Steeper grades present additional design challenges
Right-of-Way			
Selection	Ownership	Public	Potential projects are focused on public right-of-way opportunities
Suitability	Surface	Paved	Only roads with paved surfaces are considered suitable. Dirt roads were not considered.
	Slope	< 5%	Steep grades present additional design challenges; reduced capture opportunity due to increased runoff velocity
	Speed	≤ 45mph	Excludes higher speed roads such as major arterials and highways

Green Street Project Opportunities

The screening criteria for green streets projects in the public right-of-way were ownership, surface material, slope, and speed limit (Table 5-1). The screened public right-of-way street segments were then prioritized based on physical characteristics, proximity to storm drains, proximity to flood-prone creeks and areas, proximity to potential pollutant sources (e.g., PCBs[10]), whether they were in a priority development area, whether they were in proximity to a planned project, and whether the project was

[10] Polychlorinated biphenyls – manmade chemicals which resist extreme temps, and were used in electrical equipment such as transformers and capacitors; and building materials such as caulking, adhesives, mastics etc. primarily from 1950s through 1981. PCBs pose developmental or neurological risks to fetuses, babies, and children, and have been shown to cause cancer in animals and evidence supports cancer causing effect in PCB workers.

expected to have other benefits (similar to LID and regional projects). Prioritization metrics for green streets projects are shown in Appendix A.

The initial prioritization process resulted in a large number of potential green streets project opportunities within the Santa Clara Basin. In order to identify the optimal locations for green street projects, the street segments in each municipality's jurisdiction with scores in the top 10 percent of ranked green street opportunities were identified and mapped.

5.2.2 Step 2: City-Specific Prioritization

The City reviewed the results from the SWRP prioritization (Section 5.2.1) and refined the list of parcels and street segments based on current knowledge of City plans and project opportunities. The resulting parcel-based and green street opportunities for the City of Cupertino are presented in Figure 5-1. The City's list of parcel-based and green street opportunities is provided in tabular format in Appendix B.

Next, as discussed in the remainder of this section, the City-specific prioritization incorporated local priorities for GSI project implementation, which include: 1) opportunities to implement GSI projects in conjunction with anticipated areas of private development and 2) upcoming capital improvement projects that can potentially be combined with GSI projects.

Priority Development Areas

Priority Development Areas, commonly known as PDAs, are areas within existing communities that local city or county governments have identified and approved for future growth. These areas typically are accessible by one or more transit services; and they are often located near established job centers, shopping districts and other services. PDAs are expected to accommodate 78% of new housing production (over 500,000 units) and 62% of employment growth (almost 700,000 jobs) in the Bay Area through the year 2040[11]. As PDAs are developed, they offer good opportunities to construct GSI facilities.

Cupertino's PDA area includes properties within a quarter mile of Stevens Creek Boulevard from Highway 85 to its eastern border and a portion of North and South De Anza Boulevards. The boundary of the PDA is shown in Figure 5-2.

[11] From Table 4.2 and Table 4.3 of the Association of Bay Area Governments and Metropolitan Transportation Commission "Plan Bay Area 2040" Report, adopted July 26, 2017.

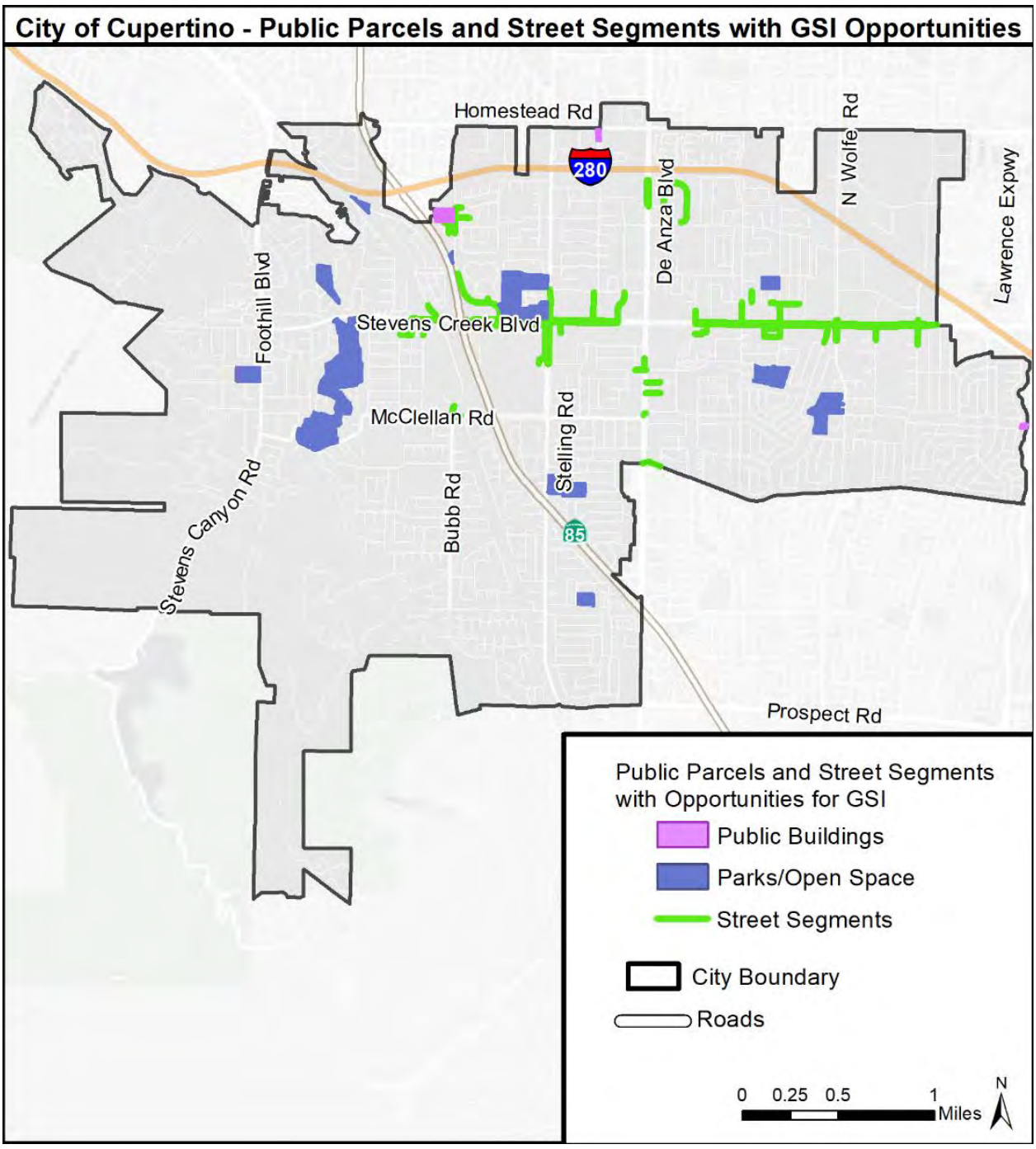


Figure 5-1 City of Cupertino Public Parcels and Street Segments with Opportunities for GSI (Source: EOA, and Santa Clara Basin Stormwater Resource Plan, 2018).

Special Areas

The City's General Plan identifies nine Special Areas within Cupertino:

- Heart of the City
- Vallco Shopping District
- North Vallco Park
- South De Anza
- North De Anza
- Homestead
- Bubb Road
- Monta Vista Village
- Other Non-Residential/ Mixed-Use Special Areas

Each Special Area is located along one of the four major mixed-use corridors in the city, which represent key areas within Cupertino where future development and reinvestment will be focused. Goals for these areas include more bicycle- and pedestrian-friendly streets and improved walkable, bikeable connectivity to adjacent areas and services. Because these Special Areas are where the most development is expected to occur, they will likely have the best opportunities to construct GSI facilities. The GSI projects could be part of private redevelopment projects or public improvement projects.

The location of the Special Areas are shown on Figure 2-2, with the exception of the Other Non-Residential/ Mixed-Use Special Areas. These Other Non- Residential/Mixed-Use Special Areas are located throughout Cupertino and include the following: west side of Stevens Canyon Road across from McClellan Road; intersection of Foothill Boulevard and Stevens Creek Boulevard; Homestead Road near Foothill Boulevard; northwest corner of Bollinger Road and Blaney Avenue; and all other non-residential properties not referenced in an identified commercial area.

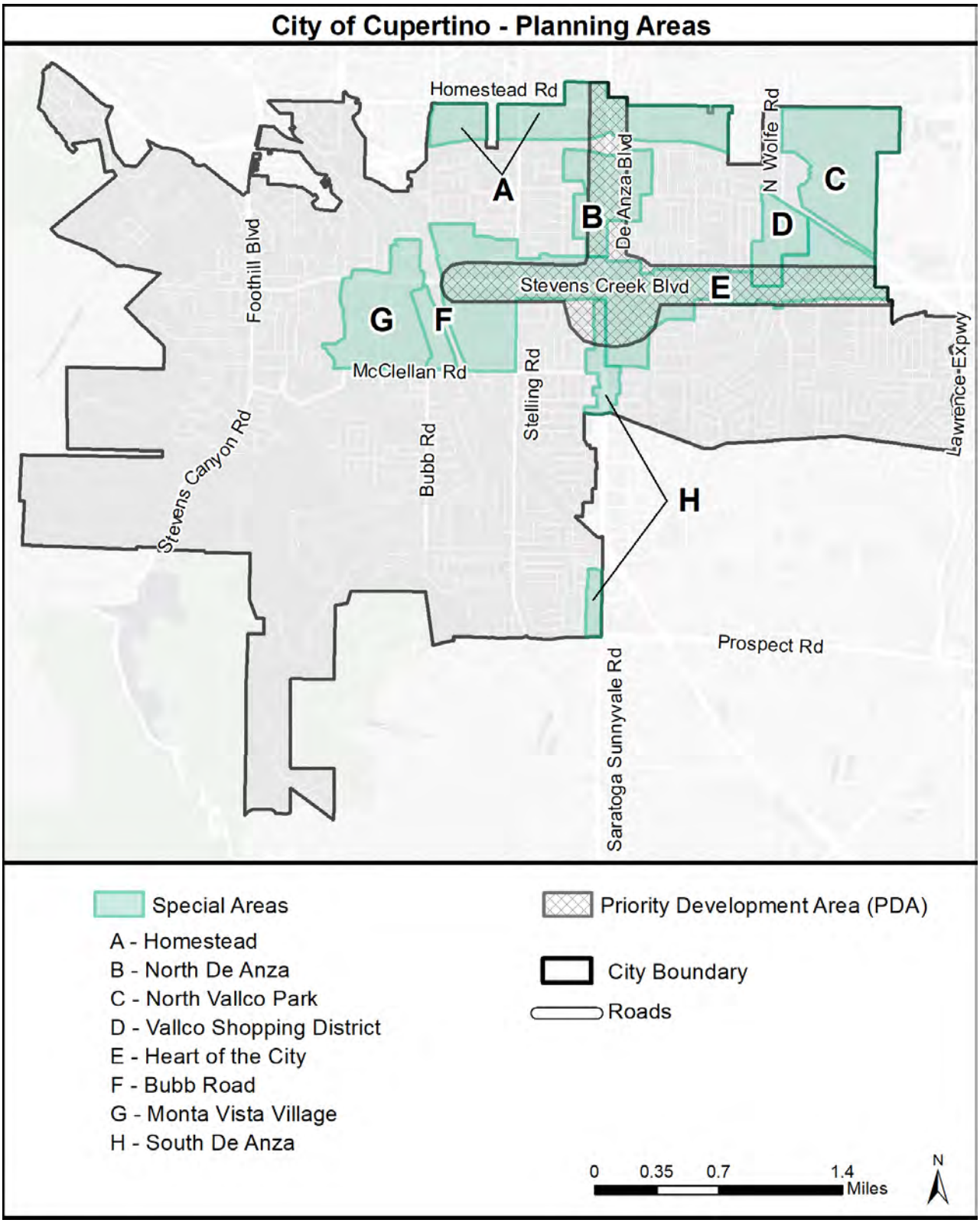


Figure 5-2. City of Cupertino Special Project Areas and Priority Development Area (Source: City of Cupertino General Plan)

Capital Improvement Projects

As required by the MRP, the City reviews its CIP project list annually to identify opportunities for GSI. Based on this review, the City prepares and maintains a list of any public GSI projects that are planned for implementation during the permit term and a list of public projects that have potential for GSI measures.

As discussed in Section 2.4.2, the City has completed one public GSI project (Stevens Creek Corridor and Creek Restoration Project). The second public GSI project (McClellan Ranch West Parking Lot Improvement) is under construction and expected to be completed in September 2019. The project locations are shown on the map in Figure 5-4.

In addition, through its CIP project review, the City identified the following projects as having potential to include GSI:

- **South Foothill Blvd and N. Foothill Blvd. Green Street:** Reconstruct the medians to reduce runoff and better infiltrate stormwater, and consider bioretention areas along the outer edges of the boulevard
- **Union Pacific Railroad Trail Feasibility Study:** Incorporate bioretention areas and pervious trails, if the study results in a project. Currently this is just a study.
- **Mary Avenue Greenbelt and Trail Project:** Create a wide bioretention-enhanced green belt on the west side of Mary Avenue. Include a pervious multi-use pathway to accommodate bicyclists, pedestrians, strollers, and joggers. Install bioretention tree wells at optimal intervals on the east side of the street to treat stormwater, and on the west side of the street where feasible to create a future tree canopy over Mary Ave.
- **Junipero Serra Trail Extension**: Incorporate bioretention areas and pervious trails where feasible.
- **Memorial Park Renovation:** Look for an opportunity to construct an infiltration basin at the park to treat runoff from Stevens Creek Blvd.
- **Regnart Creek Trail:** Incorporate bioretention areas and pervious trails where feasible.
- **Lawrence Mitty Park:** Pending the City acquiring the land, look for opportunities to incorporate GSI features to treat runoff from the adjacent expressway.
- **Stelling Road Potential Future Storm Drain and Street Upgrades:** Incorporate bioretention areas to treat street runoff where feasible.
- **Rainbow Drive Storm Drain Pipeline Rehabilitation:** Incorporate bioretention areas to treat street runoff where feasible.
- **Wolfe Road Widening**: Incorporate bioretention areas where feasible
- **Bike Boulevard Projects:** Cupertino is planning a network of bicycle-friendly routes along residential streets throughout the City in order to encourage bicycling. Traffic circles and bulb outs will be considered and designed, where feasible, to include GSI features.
- **Citywide Parks and Recreation Master Plan:** Install GSI at Linda Vista, Memorial, Monte Vista, Wilson, Portal, Creekside and other parks where feasible, which could include enhanced educational signage explaining the function and purpose of the GSI improvements.

These potential CIP project locations are shown on the map in Figure 5-3. A GSI concept for the Mary Avenue Greenbelt and Trail Project was completed for the SWRP. The project is currently unfunded, and the concept design is intended to assist with the grant application process should the City decide to pursue funding via Proposition 1 or other State bond-funded grant program.

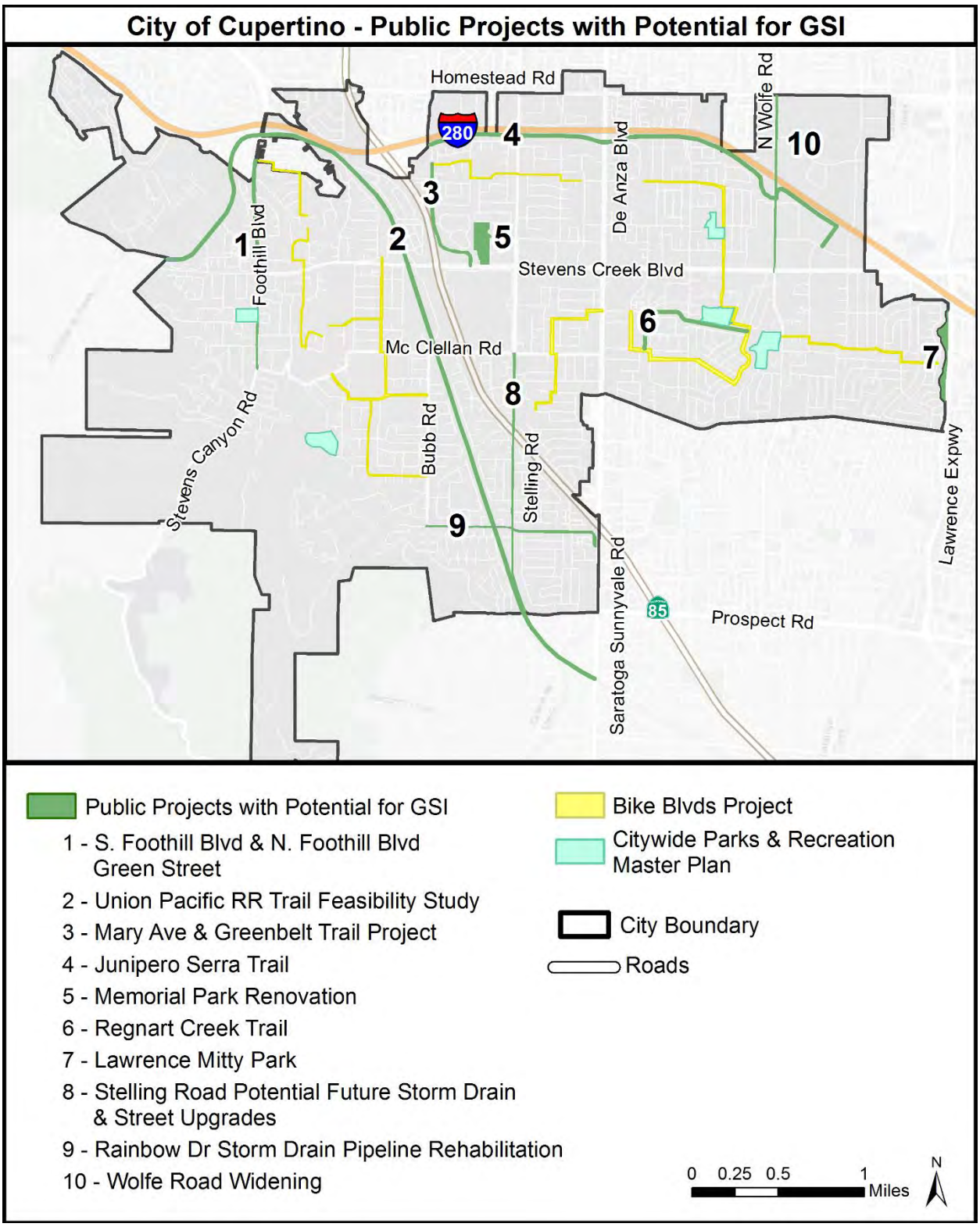


Figure 5-3. City of Cupertino Public Projects with Potential for GSI (Source: City of Cupertino FY 17-18 Annual Report, and 2018 Santa Clara Basin Stormwater Resource Plan)

5.3 Prioritization Output

The map in Figure 5-4 presents a compilation of the factors used to identify and prioritize the City's opportunities for GSI projects: the City's list of parcel-based and green street project opportunities, overlaid with the City's PDA, Special Areas, and CIP projects that may have potential to include GSI. The locations of the City's completed GSI projects, including the McClellan Ranch West Parking Lot project which is under construction and expected to be completed by September 2019, are also shown. As shown in Figure 5-4, a large number of the green street opportunities identified in the SWRP are located within the City's PDA and Special Areas. This indicates a strong correlation between the areas identified as having potential for GSI and the City's construction and redevelopment plans.

The City's list of parcel-based and green street opportunities is provided in tabular format in Appendix B. The list includes additional information for each parcel and green street opportunity, including general information such as APN, landowner and land use or street name, the SWRP prioritization score for each project opportunity, and co-location with a City criteria for prioritization (CIP project, PDA or Special Area).

An implementation plan is described in Section 6 to guide the development, design, and construction of GSI projects.

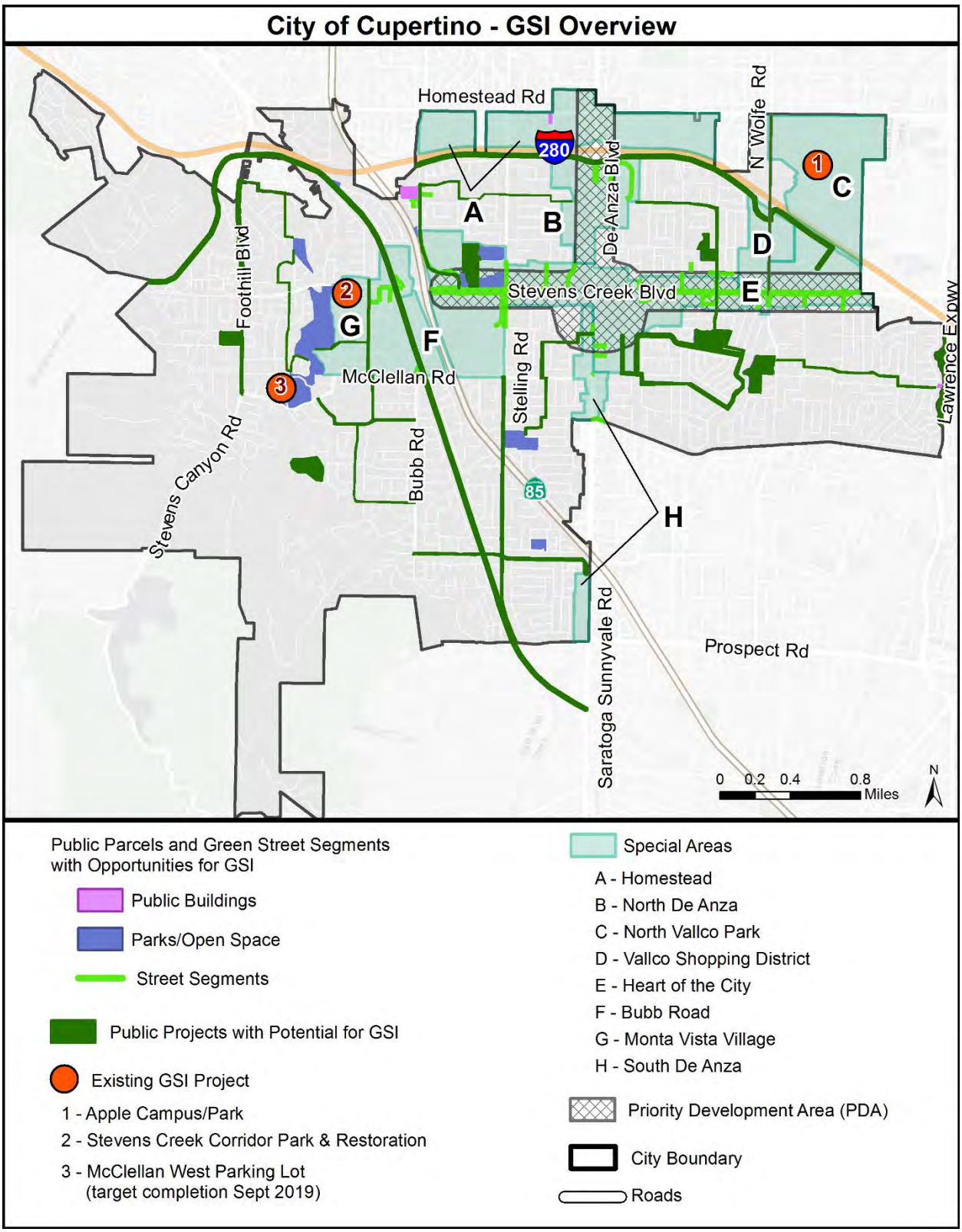


Figure 5-4 City of Cupertino GSI Overview

6. GSI Implementation Plan

This chapter provides an overall strategy and steps for implementing GSI within the City of Cupertino over the long term. The implementation plan has the following components: (1) the Citywide GSI strategy; (2) a process for identifying and evaluating GSI opportunities, (3) a workplan to complete Early Implementation Projects, (4) the legal and funding mechanisms that enable implementation, (5) estimated targets for the amounts of impervious surface to be "retrofitted" (i.e., redeveloped with GSI facilities to treat runoff from impervious surfaces), and (5) the technical tools that ensure the tracking of implemented projects.

6.1 City-wide GSI Strategy

The City of Cupertino's approach to GSI planning will be consistent with the City's Community Vision 2040 (See Section 3.1.1), which has as guiding principle to:

> *"Preserve Cupertino's environment by enhancing or restoring creeks and hillsides to their natural state, limiting urban uses to existing urbanized areas, encouraging environmental protection, promoting sustainable design concepts, improving sustainable municipal operations, adapting to climate change, conserving energy resources and minimizing waste."*

The City's approach will also be guided by various other existing plans that support the implementation of GSI, such as the Climate Action Plan, and the Storm Drain Master Plan. Cupertino has already completed one project, the Stevens Creek Corridor and Restoration Project (Section 2.1.4), which incorporated GSI and preserved an 18-acre site and restored creek habitat in the City to maintain biodiversity and ecological integrity of local natural systems. As the City seeks to achieve sustainability and community health objectives, future growth and retrofitting of existing infrastructure will create mixed-use, commercial, employment and neighborhood centers; pedestrian-oriented and walkable spaces for the community to gather; and distinct and connected neighborhoods with easy walkable and bikeable access to services, including schools, parks and shopping.

The City of Cupertino's GSI implementation strategy consists of the following:

- Priority Development Areas - The City will focus future change within the Special Areas that are located on Cupertino's major mixed-use corridors. These areas already have a mix of commercial, office, hotel and residential uses, and are located along roadways that will be enhanced with "Complete Streets" features, improved landscaping and expanded public spaces (e.g., parks and plazas). Complete Streets can be enhanced with GSI features to become green "Sustainable Streets".
- Evaluation of CIP Projects for Opportunities – The City will continue to review its CIP list annually for opportunities to incorporate GSI into CIP projects and evaluate the feasibility of such projects. The City has established a process for CIP review to avoid missing GSI opportunities (see Section 6.2).
- Evaluation of Opportunities Identified in the Stormwater Resource Plan – The public parcels and street segments identified in the SWRP (See Section 5.1 of this report) are opportunity areas for GSI projects. The City will use the SWRP list to help identify potential project locations for GSI implementation, as described in Section 6.2.

- Evaluation of Non-CIP Project Opportunities - As awareness of GSI increases, municipal staff or local community members may also identify and recommend GSI projects opportunities. These projects will be considered using the methodology described in Section 6.2.
- Coordination with Private Development – The City of Cupertino will explore working with private property developers to install green infrastructure facilities in public rights-of-way near the properties they are developing, such as along street frontages.
- Community Outreach and Engagement – The City will provide outreach to the Sustainability Commission, the Bike and Pedestrian Commission, the local community, and other stakeholders to get input and support for the implementation of the GSI Plan. The City will also continue to engage with San Francisco Estuary Institute (SFEI) and/or other potential partners that offer a regional perspective for enhancing sustainable natural landscaping with multi-faceted benefits.

The City will also continue to require future development projects to comply with C.3 requirements of the Municipal Regional Permit (MRP), and include site design, source control, treatment control, and hydromodification management measures as applicable.

6.2 Process for Identifying and Evaluating GSI Project Opportunities

The City will use the various mechanisms described in its strategy (Section 6.1) to identify GSI opportunities in public projects.

The City will use the guidance developed by BASMAA[12] (see Appendix D) and the SWRP prioritization criteria to evaluate public projects to determine the potential for the inclusion of GSI measures at the project planning level. The evaluation may include site reconnaissance, drainage area delineation, and cost analysis. If not already on the CIP list, projects identified through this process will be added to the CIP list when it is updated. Projects with a GSI component may be included in the CIP as funded or unfunded projects. An unfunded project's inclusion in the CIP demonstrates that it is a City priority pending adequate funding. The City prepares the CIP Budget biennially. The next Biennial CIP Budget will be prepared in 2020 covering FY 2020-21 and FY 2021-22.

The City will map all potential GSI project opportunities to determine their proximity to green street or parcel-based project opportunities identified in the SWRP (Section 5.2.1). Potential GSI projects that are adjacent to SWRP opportunity areas may be eligible for state bond funding. Projects with opportunities for GSI measures may be submitted to the SWRP during the SWRP update process if they are not already included in the SWRP. This will allow those projects to be eligible for future state bond funding. The SWRP will likely be updated in the 2022-2023 timeframe. At this time, SCVURPPP will reach out to all member agencies to provide their project lists for prioritization and inclusion in the updated SWRP.

6.3 Workplan to Complete Early Implementation Projects

As discussed in Section 5.2.2 of this GSI Plan, Provision C.3.j. of the MRP requires that the City identify, prepare, and maintain a list of GSI projects that are planned for implementation during the permit term (i.e., through December 2020), and infrastructure projects that have potential for GSI measures. The list

[12] BASMAA Development Committee (2016) Guidance for Identifying Green Infrastructure Potential in Municipal Capital Improvement Program Projects. May.

is submitted with each Annual Report to the Regional Water Board. Projects with GSI that are scheduled and funded for implementation during the permit term are considered "Early Implementation Projects". The City has already identified and completed one early implementation project (Stevens Creek Corridor and Creek Restoration Project), with a second project (McClellan West Parking Lot) currently under construction and expected to be completed by September, 2019(see Section 2.4).

The City will continue to review its CIP list annually, using the SWRP prioritization and the guidance developed by BASMAA for identifying opportunities to incorporate GSI into CIP projects. A copy of the BASMAA Guidance is provided in Appendix D.

6.4 Legal Mechanisms for GSI Implementation

Provision C.3.j.i.(3) of the MRP requires permittees to "Adopt policies, ordinances, and/or other appropriate legal mechanisms to ensure implementation of the Green Infrastructure Plan in accordance with the requirements of this provision."

As described in Section 1.3.2, the City of Cupertino and other municipalities subject to Provision C.3 of the MRP must require post-construction stormwater control measures on regulated development projects. Post-construction stormwater controls reduce pollutants from flowing to streams, creeks, and the Bay and reduce the risk of flooding by managing peak flows. Section 9.18.100 (Permanent Stormwater Measures Required for Development and Redevelopment Projects) of the City's Municipal Code provides legal authority for the City to require regulated private development projects to comply with MRP requirements.

GSI projects are typically not regulated projects (although they must conform to the sizing and design requirements contained in Provision C.3 except under certain circumstances) and they are primarily public projects under control of the City. As part of the GSI Plan process, the City reviewed its existing policies, ordinances, and other legal mechanisms related to the implementation of stormwater NPDES permit requirements and found that it has sufficient legal authority to implement the GSI Plan. Adoption of the GSI Plan by the City Council further strengthened the authority.

6.5 Evaluation of Funding Options

The GSI Plan prioritizes specific projects for near-term integration into CIPs and long-term integration into City planning efforts. Implementation of these projects is contingent upon the City identifying funding sources for GSI planning, design, construction, and maintenance.

The total cost of GSI includes costs for planning, capital (design, engineering, construction) and ongoing expenditures, including operations and maintenance (O&M), utility relocation, and feature replacement. It is likely that no single source of revenue will be adequate to fund implementation of GSI, and a portfolio of funding sources will be needed. There are a variety of approaches available to help fund up-front and long-term investments. This section discusses the City's current stormwater management funding sources and then describes additional funding strategies available to implement GSI that are being considered by the City for future funding.

6.5.1 Current Funding Sources for GSI Program Elements

The City of Cupertino currently uses a combination the City's General Fund and Federal, State, and other applicable grants to fund construction of projects in its capital improvement program (CIP) and other projects. The General Fund, and when applicable, CalRecycle grants, are used for public street, parking

lot and building maintenance; maintenance of stormwater control measures installed at public projects; and maintenance of other landscaped areas (e.g., parks, medians, public plazas, etc.)

6.5.2 Potential Future Funding Options

As required by the MRP, the City analyzed possible funding options to raise additional revenue for design, construction, and long-term operation and maintenance (O&M) of GSI projects. The City used the guidance on stormwater funding options developed by SCVURPPP (2018) as a reference for conducting its analysis. Table 6-1 summarizes the funding options that will be considered by the City as the Plan is implemented. For each type of funding mechanism, the table provides a brief overview and specifics related to GSI, pros and cons, and applicability to funding planning, capital, and/or long-term O&M costs.

6.6 Impervious Area Targets

As mentioned in Section 1.3.2, the focus of the GSI Plan is the integration of GSI systems into public rights-of-way. However, the MRP (Provisions C.11 and C.12) establishes a linkage between public and private GSI features and required reductions of pollutants in stormwater discharges. To help estimate the pollutant load reductions that can be achieved by GSI during the 2020, 2030, and 2040 timeframes, the MRP requires that Permittees include in their GSI Plans estimated targets for the amounts of impervious surface to be "retrofitted" (i.e. redeveloped with GSI facilities to treat runoff from impervious surfaces) as part of public and private projects during the same timeframes.

The City worked with SCVURPPP staff to develop a methodology to predict the extent and location of privately- and publicly-owned land areas that will be redeveloped in their jurisdictions and whose stormwater runoff will be addressed via GSI facilities, and to derive impervious surface targets for GSI retrofits associated with these redevelopment projects. The methodology and results are described in Sections 6.6.1 and 6.6.2 below.

6.6.1 Methodology

The first step in the process used historic development trends and City staff's knowledge of planned/projected redevelopment in the City to estimate the acres of redevelopment that will occur in the City by 2020, 2030, and 2040 via redevelopment of privately- and publicly-owned parcels that would trigger C.3 requirements under the current MRP (i.e. C.3 regulated projects). Stormwater runoff associated with these parcels will be addressed via GSI facilities, as required by the permit.

The second step was to estimate the acres of impervious surface associated with future redevelopment of these private and public parcels. To do this, it was necessary to predict the likely locations and types of land areas that are anticipated to be addressed by GSI in the future. Growth patterns and time horizons for development, along with algorithms to identify which parcels are likely to redevelop, resulted in preliminary estimates of the land area that is predicted to be addressed by GSI facilities in the City of Cupertino by 2020, 2030, and 2040. Using the current land uses of the predicted locations of GSI implementation and associated impervious surface coefficients for each land use type, estimates of the amount of impervious surface that would be retrofitted with GSI on privately-owned parcels were developed.

The methodology focused on parcel-based redevelopment as the location and timing of projects in the public right-of-way is uncertain and the contribution of these projects to overall impervious surface area treated by GSI expected to be minor relative to the acreage projected to be treated by C.3 projects.

Table 6-1 Potential GSI Funding Options

Section/Overview	GSI Specifics	Pros	Cons	Type of Funding
Parcel Taxes: revenue stream through taxing property or other system.	Can be used to set up, fund and maintain a stormwater program and MRP compliance.	• Well understood tax • Stable revenue stream over many years • Legally reliable • Can also be done by mail.	• High political threshold • Vulnerable to competition with other measures on the ballot. • Considerable effort and resources required with uncertain odds of success.	• Planning • Capital • O&M
Property-related Fees: fees on real property.	• Fee on property contributing stormwater runoff to MS4. • Can be used to set up, fund and maintain a stormwater program and MRP compliance.	• Most-commonly used mechanism for funding stormwater programs. • Easier to pass with 50% threshold and mailing process.	• Property-based fees must use a standardized methodology for calculating the fee. • Considerable effort and resources required with uncertain odds of success. • Approval process is more time consuming and expensive for staff. • Schools may have large fees and public schools may be exempt from fees depending on the agency's specific ordinance.	• Planning • Capital • O&M
General Obligation Bonds	• Tax on property owners through debt obligation taken on by municipality. • Long term payback period typically 10-30 years.	• Typically a lower interest rate than what is available from commercial banks. • Allows funds to be used in the near term and paid back over the long term.	• Interest rate variable depending on financial markets • Some risk to general fund for municipality if payments cannot be made. • Can only be used for capital costs – not O&M	• Planning • Capital

Section/Overview	GSI Specifics	Pros	Cons	Type of Funding
Development Impact Fees: paid by an applicant seeking approval of a development project.	Could potentially be used to fund retrofits of adjacent public right-of-way areas with GSI as part of development or redevelopment projects.	Cost for retrofitting streets can be leveraged through development activities.	If a fee is found to not relate to the impact created by the development project, or to exceed the reasonable cost of providing the public service, then the fee may be declared a "special tax" subject to approval by a two-thirds majority of voters.	• Planning • Capital
Grants: one time funds that require an application from a funding agency.	Could be used to plan, design and/or build GSI.	Can fund programs or systems that would otherwise take up significant general fund revenues.	• Usually a one-time source of funding only. • May need to create new programs and systems for each grant. • Usually have strings attached for matching funds and other requirements. • Little control over timing of applications and payment can lead to difficulties in coordination with other programs and grants. • Can be very competitive and resource intensive to apply. • No guarantee of success. • Post-project O&M costs must be borne by the agency.	• Planning • Capital
Benefit Assessment and Community Facility Districts	Typically used to build and/or maintain facilities such as GSI improvements and/or services.	Can be used to fund maintenance and operations.	Requires property owners and/or businesses to agree that the need is present and that they should be (at least partially) responsible for funding it.	• Capital • O&M

Section/Overview	GSI Specifics	Pros	Cons	Type of Funding
Business Improvement Districts	Businesses and property owners tax themselves and manage the funds to build or maintain GSI assets.	Can provide sense of ownership and pride in the neighborhood when results are visible.	Can burden businesses, property owners and others to the extent that they are unwilling to approve other funding measures.	• Planning • Capital • O&M
Infrastructure Financing Districts	Captures increase in ad valorum tax increases (similar to redevelopment agencies) for infrastructure improvements such as GSI	Can be jointly done with multiple cities.	Cannot capture any of the local school district's portion of tax increment.	• Planning • Capital • O&M
Motor Vehicle License Fees: fees on each motor vehicle that is registered.	Could be used to plan, design and/or build GSI.	Can be flexible in purpose and can supply a long-term stable revenue source.	• If the total number of new annual motor vehicle registrations decline over time (as may happen with car-sharing, transit increases, biking and walking and the rollout of automated vehicles) revenues will decline. • Difficult to achieve the 2/3 majority needed to pass due to Prop 26. • Only for activities that are deemed to help mitigate impacts from motor vehicles.	• Planning • Capital

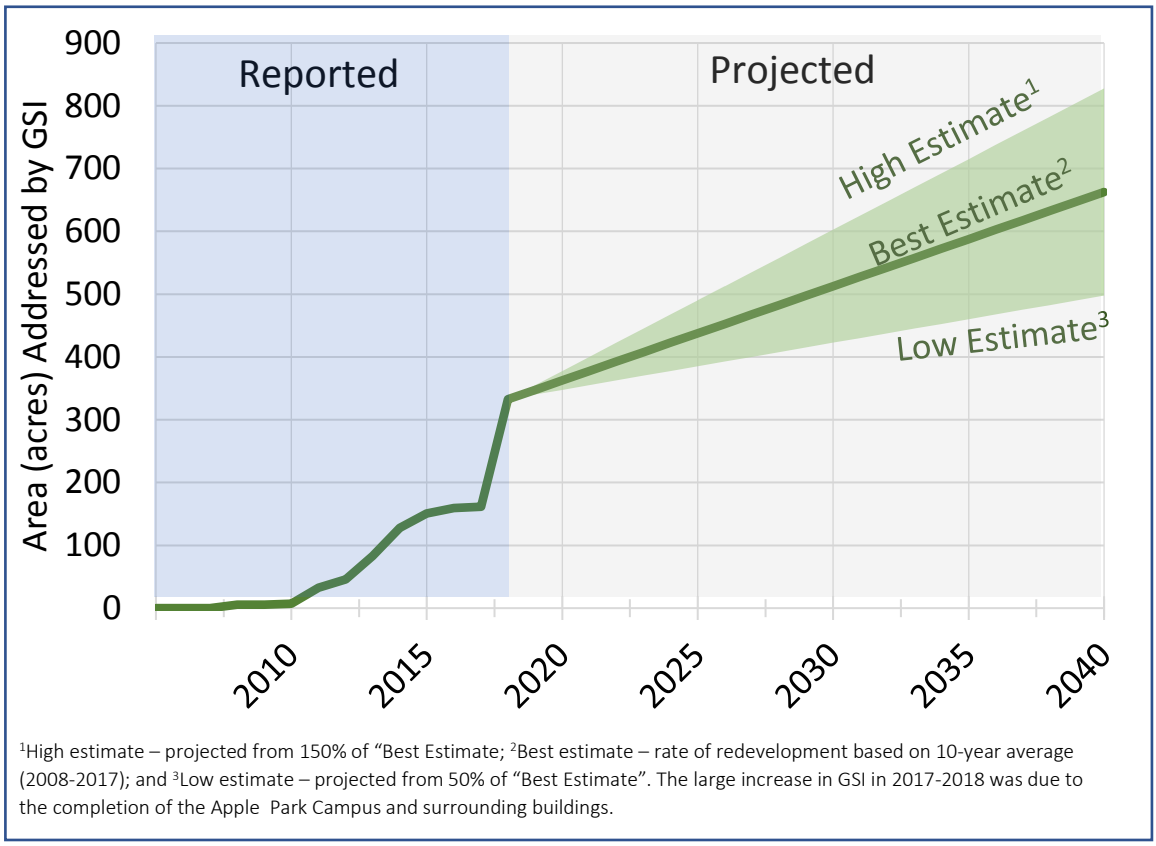
Section/Overview	GSI Specifics	Pros	Cons	Type of Funding
Realignment of Municipal Services: municipalities shift costs to programs where revenue can be increased such as sewer, water and trash.	Could be used to plan, design, build and/or maintain GSI where there is a nexus between the two programs.	A means of leveraging existing or new resources funded by non-balloted fee structures.	• Bureaucratic issues can be difficult to overcome. • Sewer, trash and water may be controlled by different agencies that may not be able to coordinate or share resources. • There may be political restrictions to significant increases in rates.	• Planning • Capital • O&M
Integration with Transportation Projects: transportation funding is leveraged to cost-effectively include stormwater quality elements.	Installation and maintenance of GSI facilities as part of integrated roadway programs.	• Roadway projects have more funding than stormwater programs and are generally more popular with the public. • Complete and green streets may be more popular with the public than traditional car-focused streets. • Green streets may be less expensive than traditional streets based on a life cycle cost analysis.	• Roadways have been designed in certain ways with expectations of costs and purposes for decades. • Many roadways are in poor condition and there is not enough funding to fix them all. • GSI is perceived as an “added” cost which, could reduce the number of roadways that can be maintained. • Transportation funding is often restricted to certain roadway construction elements.	• Planning • Capital

Section/Overview	GSI Specifics	Pros	Cons	Type of Funding
Alternative Compliance: Allows developers the flexibility to build, or fund through payment of an in-lieu fee, off-site stormwater treatment systems for regulated projects or set up credit trading programs.	Leveraging development activities to build and maintain GSI systems. In lieu fees can be used by developers who would rather make a lump sum payment and quickly complete their compliance requirements. Credit trading programs can incentivize non-regulated properties to retrofit impervious surfaces.	• Gives flexibility to site GI systems in locations that optimize pollutant loading reduction and other benefits to the community. • Allows for off-site stormwater treatment when stormwater management requirements can't be met within a regulated project site. • An in-lieu fee and/or credit trading system can be used to achieve additional retrofits and installation of GSI.	• Can be difficult to come up with viable alternative locations for GSI installations. • Can be difficult to quantify how much a developer should pay upfront for long-term maintenance costs that the municipality will bear. • May require agencies to modify the stormwater sections of their municipal codes to allow for the creation and/or use of the desired options/programs.	• Planning • Capital • O&M
Existing Permittee Resources: Utilize general funds for GSI.	Could be used to plan, design, build and/or maintain GSI.	Voter approval or new revenue sources not required.	• GSI must compete with many other municipal priorities and essential services. • Normally not a viable option for substantial GI implementation.	• Planning • Capital • O&M
Long Term Debt: borrow money up-front against a dedicated stream of revenue projected over the life of the program.	Can borrow money from future revenues to construct GSI systems in the present.	• Well understood process of raising funds. • Allows acceleration of improvements to compliance deadlines	• Need a dedicated stream of revenue to pay off debt. • If the general fund is used, can put the general fund at risk if jurisdiction cannot make the payments, credit rating will be downgraded jeopardizing other programs.	• Planning • Capital

Section/Overview	GSI Specifics	Pros	Cons	Type of Funding
Public-Private Partnerships (P3s): agreements or contracts between a municipality and a private company to perform specific tasks.	Can provide for the design, construction and maintenance of GSI systems over a long period.	• Leverages public funds while minimizing impacts to a municipality's debt capacity. • Access to advanced technologies. • Improved asset management. • Draws on private sector expertise and financing. • Benefits local economic development and "green jobs." • Relieves pressure on internal local government resources.	• Stormwater fee or other source of stable revenue over the life of the P3 contract is required. • Contracts out to the private sector the construction and maintenance of GSI systems, possibly removing some municipal control.	• Planning • Capital • O&M
Volunteer Programs: provide community-based volunteer labor for specific tasks.	Use volunteer programs to help build or maintain GSI facilities.	• A low-cost source of labor. • Educational program for community. • Can build support for a stormwater fee or other funding source.	• Can be time intensive for staff to set up and administer. • May not be dependable in the long run • May result in loss of municipal control depending on program specifics.	• Planning • Capital • O&M

6.6.2 Results

Using the methodology described above, a predicted redevelopment rate of 15 acres per year was calculated for the City of Cupertino. "Best" estimates of the magnitude of land areas that is predicted to be addressed by future GSI facilities by the 2020, 2030, and 2040 milestones were calculated using the rate. "High" (i.e., 50% > "best") and "Low" (i.e., 50% < "best") estimates of future GSI implementation were also calculated to provide a range of potential redevelopment levels and account for uncertainty in the "Best" estimate. Figure 6-1 and Table 6-2 present the outputs of the analysis and represent the total acreage known to be addressed by GSI in Cupertino through 2018, and the best estimate of the cumulative land area that will be addressed in 2020 (363 acres), 2030 (513 acres), and 2040 (663 acres) by GSI on privately- and publicly-owned parcels in the City of Cupertino.



[1]High estimate – projected from 150% of "Best Estimate; [2]Best estimate – rate of redevelopment based on 10-year average (2008-2017); and [3]Low estimate – projected from 50% of "Best Estimate". The large increase in GSI in 2017-2018 was due to the completion of the Apple Park Campus and surrounding buildings.

Figure 6-1 Existing and projected cumulative land area (acres) anticipated to be addressed via Green Stormwater Infrastructure facilities installed via private redevelopment in the City of Cupertino by 2020, 2030, and 2040.

Table 6-2 Projected cumulative land area (acres) anticipated to be addressed via Green Stormwater Infrastructure facilities via private redevelopment in the City of Cupertino by 2020, 2030, and 2040.

Year	Low[1]	Best[2]	High[3]
Existing GSI[4]	-	333	-
2020	348	363	378
2030	423	513	603
2040	498	663	828

[1]Low estimate – projected from 50% of "Best Estimate"; [2]Best estimate – rate of redevelopment based on 10-year average (2009-2018); and [3]High estimate – projected from 150% of "Best Estimate"; [4]Total area addressed by parcel-based redevelopment projects with GSI completed through 2018 (excludes non-jurisdictional and green street and regional projects).

Table 6-3 lists the impervious surface percentage for each land use class, based on impervious surface coefficients typically utilized, and the estimated impervious surfaces that are predicted to be retrofitted by 2020, 2030, and 2040 in the City via GSI implementation on private and public parcels: 275 acres by 2020, 431 acres by 2030 and 557 acres by 2040. Note that these predictions do not include impervious surface that may be addressed by projects in the public right-of-way, and that these predictions have a high level of uncertainty because future redevelopment rates may increase or decrease relative to the historic development trends and staff knowledge that the rate for Cupertino was based on. Therefore, actual impervious surface addressed by GSI by the various milestones may increase or decrease relative to what is presented in Table 6-3.

Table 6-3 Actual (2002-2018) and predicted (2019-2040) extent of impervious surface retrofits via GSI implementation on privately- and publicly-owned parcels in the City of Cupertino by 2020, 2030, and 2040.

Previous Land Use	% of Area Impervious [a]	Retrofits via GSI Implementation									
		2002-2018		2019-2020		2021-2030		2031-2040		Total (2002-2040)	
		Total Area (acres)	Impervious Area (acres)	Total Area (acres)[c]	Impervious Area (acres)	Total Area (acres)	Impervious Area (acres)	Total Area (acres)	Impervious Area (acres)	Total Area (acres)	Impervious Area (acres)
Commercial	83%	26	22	1	0	45	37	99	83	171	142
Industrial	91%	189	172	0	0	25	23	4	4	219	199
Residential - High Density	82%	26	21	0	0	24	20	16	13	66	54
Residential - Low Density	47%	4	2	0	0	0	0	0	0	4	2
Retail	96%	58	55	3	2	78	75	27	26	166	159
Urban Parks	20%	0	0	0	0	0	0	3	1	3	1
Open Space[b]	1%	30	0	1	0	3	0	0	0	34	0
Totals		333	272	4	3	176	155	150	126	662	557
Cumulative [d]		333	272	337	275	512	431	662	557		

[a] Source: Existing Land Use in 2005: Data for Bay Area Counties, Association of Bay Area Governments (ABAG), January 2006

[b] Development totals from 2002-2018 may include new development of open space and vacant properties.

[c] The total area for 2019-2020 is based on facilities that are currently under construction or planned to occur prior to 2020 and not the Phase I redevelopment rate and may therefore deviate from the "Best" acres presented for 2020 in Table 6-2.

[d] Totals in this table differ slightly from predictions presented in Table 6-2 due to the inclusion of entire parcels in this table, as opposed to more generic "land areas" projections presented in Table 6-2.

6.7 Project Tracking System

A required component of the GSI Plan is to develop a process for tracking and mapping completed public and private GSI projects and making the information available to the public. The City will continue to implement existing internal tracking procedures for processing public and private projects with GSI, meeting MRP reporting requirements, and managing inspections of stormwater treatment facilities. In addition, the City will provide data to SCVURPPP for countywide tracking of completed public and private GSI projects. This countywide tracking tool can be used to document a project's pollutant reduction performance as well as overall total progress toward city or county-level stormwater goals

6.7.1 City Project Tracking System (Regulated and GSI)

The City currently utilizes an internal tracking system to manage information about installed stormwater treatment measures (including GSI), operation and maintenance (O&M) of public facilities, O&M verification program inspections, and enforcement actions. The tracking system consists of a site specific GIS layer for installed stormwater treatment measures, an internal database (CityWorks) for O&M of public facilities, and a spreadsheet for installed LID O&M and enforcement actions on private property.

6.7.2 SCVURPPP Project Tracking System

SCVURPPP has developed a centralized, web-based data management system, with a connection to GIS platforms, for tracking and mapping all GSI projects in the Santa Clara Valley. The GSI Database provides a centralized, accessible platform for municipal staff to efficiently and securely collect, upload, and store GSI project data, and enhances SCVURPPP's ability to efficiently and accurately calculate and report water quality benefits associated with GSI projects. It also allows portions of the GSI project information to be made publicly available.

City staff will collect and manage information on GSI projects locally using the data management systems described above. City staff will directly enter project data into the SCVURPPP GSI Database on an annual basis through a web-based data entry portal for individual projects or upload data for multiple projects in batch using standardized formats.

Appendix A

Prioritization Metrics for Scoring GSI Project Opportunities

Table A-1. Prioritization Metrics for LID Project Opportunities

Metric	Points						Weighting Factor
	0	1	2	3	4	5	
Parcel Land Use			Schools/ Golf Courses	Park / Open Space	Public Buildings	Parking Lots	
Impervious Area (%)	X < 40	40 ≤ X < 50	50 ≤ X < 60	60 ≤ X < 70	70 ≤ X < 80	80 ≤ X < 100	2
Hydrologic Soil Group		C/D		B		A	
Slope (%)		10 > X > 5	5 ≥ X > 3	3 ≥ X > 2	2 ≥ X > 1	1 ≥ X	
Within flood-prone storm drain catchments	No					Yes	
Contains PCB Interest Areas	None			Moderate		High	2
Within Priority Development Area	No					Yes	
Co-located with another agency project	No					Yes	
Augments water supply	No	Opportunity for capture and use				Above groundwater recharge area and not above groundwater contamination area	2
Water quality source control	No	Yes					
Reestablishes natural hydrology	No	Yes					
Creates or enhances habitat	No	Yes					
Community enhancement	No	Opportunities for other enhancements				Within DAC or MTC Community of Concern	

Table A-2. Prioritization Metrics for Regional Stormwater Capture Project Opportunities

Metric	Points						Weighting Factor
	0	1	2	3	4	5	
Parcel Land Use			Schools/Golf Courses	Public Buildings	Parking Lot	Park / Open Space	
Impervious Area (%)	X < 40	40 ≤ X < 50	50 ≤ X < 60	60 ≤ X < 70	70 ≤ X < 80	80 ≤ X < 100	2
Parcel Size (acres)	0.25 ≤ X < 0.5	0.5 ≤ X < 1	1 ≤ X < 2	2 ≤ X < 3	3 ≤ X < 4	4 ≤ X	
Hydrologic Soil Group		C/D		B		A	
Slope (%)		10 > X > 5	5 ≥ X > 3	3 ≥ X > 2	2 ≥ X > 1	1 ≥ X	
Proximity to Storm Drain (feet)	X > 1,000	1,000 ≥ X > 500		500 ≥ X > 200		200 ≥ X	
Within flood-prone storm drain catchments	No					Yes	
Contains PCB Interest Areas	None			Moderate		High	2
Within Priority Development Area	No					Yes	
Co-located with another agency project	No					Yes	
Augments water supply	No	Opportunity for capture and use				Above groundwater recharge area and not above groundwater contamination area	2
Water quality source control	No	Yes					
Reestablishes natural hydrology	No	Yes					
Creates or enhances habitat	No	Yes					
Community enhancement	No	Opportunities for other enhancements				Within DAC or MTC Community of Concern	

Table A-3. Prioritization Metrics for Green Street Project Opportunities

Metric	Points						Weighting Factor
	0	1	2	3	4	5	
Imperviousness (%)	X < 40	40 ≤ X < 50	50 ≤ X < 60	60 ≤ X < 70	70 ≤ X < 80	80 ≤ X < 100	2
Hydrologic Soil Group		C/D		B		A	
Slope (%)		5 > X > 4	4 ≥ X > 3	3 ≥ X > 2	2 ≥ X > 1	1 ≥ X > 0	
Within flood-prone storm drain catchments	No					Yes	
Contains PCB Interest Areas	None			Moderate		High	2
Within Priority Development Area	No					Yes	
Co-located with another agency project	No					Yes	
Augments water supply	No	Opportunity for capture and use				Above groundwater recharge area and not above groundwater contamination area	2
Water quality source control	No	Yes					
Reestablishes natural hydrology	No	Yes					
Creates or enhances habitat	No	Yes					
Community enhancement	No	Opportunities for other enhancements				Within DAC or MTC Community of Concern	

Appendix B

City of Cupertino Street Segments and Parcels with Opportunities for GSI

City of Cupertino
Potential Parcel-based GSI Opportunities

Parcel Information			City Prioritization Criteria		SWRP Project Scoring[1]													
APN	Owner	Land Use	Co-location with Special Area	Co-location with Public project	Land Use Score	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	PDA Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Re-established Natural Habitat Score	Enhances Habitat Score	Community Score	TOTAL SCORE
36230098	City of Cupertino	Park/Open Space			3	0	1	2	0	0	0	0	10	1	1	0	1	19
35706018	City of Cupertino	Park/Open Space			3	0	5	2	0	0	0	0	10	1	1	0	1	23
36915002	City of Cupertino	Park/Open Space			3	0	1	2	0	0	0	0	10	1	1	0	1	19
32614005	City of Cupertino	Park/Open Space			3	0	1	1	0	0	0	0	10	1	1	0	1	18
32609071	City of Cupertino	Public Buildings	Homestead		4	6	1	4	0	0	0	0	10	1	1	0	1	28
32649036	City of Cupertino	Park/Open Space			3	0	1	2	0	10	0	0	10	1	1	0	1	29
31631041	City of Cupertino	Park/Open Space		Citywide Parks and Recreation System Master Plan - Portal Park; Bike Boulevard Project	3	0	1	2	0	0	0	5	10	1	1	0	1	24
36904044	City of Cupertino	Park/Open Space		Citywide Parks and Recreation System Master Plan - Wilson Park	3	0	1	4	0	0	0	5	10	1	1	0	1	26
35925024	City of Cupertino	Park/Open Space		Jollyman Park pathway installation	3	0	1	3	0	0	0	5	10	1	1	0	1	25
37523047	City of Cupertino	Public Buildings		Lawrence Mitty Park	4	0	1	2	0	0	0	5	10	1	1	0	1	25
32627030	City of Cupertino	Park/Open Space		Mary Avenue Rennovation and Park	3	8	1	2	0	0	0	5	10	1	1	0	1	32

City of Cupertino
Potential Parcel-based GSI Opportunities

32606052	City of Cupertino	Public Buildings		Mary Avenue Rennovation and Park	4	8	1	2	0	10	0	5	10	1	1	0	1	43
32629022	City of Cupertino	Park/Open Space	Heart of the City	Memorial Park Renovation; Stevens Creek Blvd protected bike lanes (separated bike	4	6	1	3	0	0	5	5	10	1	1	0	1	37
32629006	City of Cupertino	Park/Open Space	Heart of the City	Memorial Park Renovation; Stevens Creek Blvd protected bike lanes (separated bike	3	0	1	3	0	0	5	5	10	1	1	0	1	30
34215038	City of Cupertino	Park/Open Space		S Foothill Blvd and N Foothill Blvd Green Street; Citywide Parks and Recreation Master Plan	3	0	1	3	0	0	0	5	10	1	1	0	1	25
35710008	City of Cupertino	Park/Open Space		Blackberry Farm Retreat Center; Orange and Byrne Avenue sidewalk improvements	3	0	5	1	0	0	0	5	10	1	1	0	1	27

[1]SWRP = Stormwater Resources Plan (SCVURPPP, 2018). See Appendix A for prioritization metrics and scoring of GSI opportunities.

City of Cupertino
Potential Green Street Project Opportunities

Street Information			City Prioritization Criteria		SWRP Project Scoring[1]												
SWRP Project ID	Street Name	Jurisdiction	Co-location with Public project	Co-location with Special Area	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	Priority Development Area Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Reestablishes Natural Hydrology Score	Enhances Habitat Score	Community Enhancement Score	TOTAL SCORE
60501447	WHEATON DR	CUPERTINO	Bike Boulevard Project		6	1	5	0	0	5	5	10	1	1	1	1	36
60501446	WHEATON DR	CUPERTINO	Bike Boulevard Project		6	1	5	0	0	5	5	10	1	1	1	1	36
60501557	WHEATON DR	CUPERTINO	Citywide Parks and Recreation System Master Plan; Bike Boulevard Project		4	1	5	0	0	5	5	10	1	1	1	1	34
60500926	BILICH PL	CUPERTINO	Bike Boulevard Project		4	1	5	0	0	5	5	10	1	1	1	1	34
60500612	S DE ANZA BLVD	CUPERTINO	Bike Boulevard Project	South De Anza	10	1	5	0	0	5	5	10	1	1	1	1	40
60501621	BOLLINGER RD	CUPERTINO	Bike Boulevard Project		10	1	4	0	0	0	5	10	1	1	1	1	34
1000715919	CIVIK PARK LN	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	1	0	0	5	5	10	1	1	1	1	34
60501804	RODRIGUES AVE	CUPERTINO	Bike Boulevard Project	South De Anza	10	1	4	0	0	5	5	10	1	1	1	1	39
1000715916	TOWN CENTER LN	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60501620	BOLLINGER RD	CUPERTINO	Bike Boulevard Project		10	1	4	0	0	0	5	10	1	1	1	1	34
60502513	RODRIGUES AVE	CUPERTINO	Bike Boulevard Project	South De Anza	10	1	4	0	0	5	5	10	1	1	1	1	39
60502170	N DE ANZA BLVD	CUPERTINO	Bike Boulevard Project	North De Anza	6	1	5	0	0	5	5	10	1	1	1	1	36
60500883	INFINITE LOOP	CUPERTINO	Bike Boulevard Project	North De Anza	6	1	3	0	0	5	5	10	1	1	1	1	34
60502172	N DE ANZA BLVD	CUPERTINO	Bike Boulevard Project	North De Anza	6	1	3	0	0	5	5	10	1	1	1	1	34
60500901	MARY AVE	CUPERTINO	Bike Boulevard Project		8	1	4	0	10	0	5	10	1	1	1	1	42
60500368	DORADO	CUPERTINO	Bike Boulevard Project		4	1	2	0	10	0	5	10	1	1	1	1	36
60502363	MARY AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60500370	MARY AVE	CUPERTINO	Bike Boulevard Project		6	1	4	0	10	0	5	10	1	1	1	1	40
60500369	MARY AVE	CUPERTINO	Bike Boulevard Project		6	1	4	0	10	0	5	10	1	1	1	1	40

City of Cupertino
Potential Green Street Project Opportunities

Street Information			City Prioritization Criteria		SWRP Project Scoring[1]												
SWRP Project ID	Street Name	Jurisdiction	Co-location with Public project	Co-location with Special Area	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	Priority Development Area Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Reestablishes Natural Hydrology Score	Enhances Habitat Score	Community Enhancement Score	TOTAL SCORE
60500362	SEGOVIA	CUPERTINO	Bike Boulevard Project		6	1	4	0	10	0	5	10	1	1	1	1	40
60500367	DORADO	CUPERTINO	Bike Boulevard Project		6	1	3	0	10	0	5	10	1	1	1	1	39
60500902	METEOR DR	CUPERTINO	Bike Boulevard Project		8	1	4	0	10	0	5	10	1	1	1	1	42
60502362	PARKWOOD DR	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60502218	MILLARD LN	CUPERTINO	Bike Boulevard Project		6	1	5	0	10	0	5	10	1	1	1	1	41
60502720	PACIFICA RD	CUPERTINO	Bike Boulevard Project	South De Anza	10	1	4	0	0	0	5	10	1	1	1	1	34
60500741	MARY AVE	CUPERTINO	Memorial Park Renovation; Stevens Creek Blvd protected bike lanes (separated bike lanes)	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60500568	GRANADA AVE	CUPERTINO	Bike Boulevard Project	Monta Vista Village	4	1	4	0	6	0	5	10	1	1	1	1	34
60501097	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60501095	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	3	0	0	5	5	10	1	1	1	1	34
60501156	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	4	1	5	0	0	5	5	10	1	1	1	1	34
60501496	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	5	0	0	5	5	10	1	1	1	1	36
60501501	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60500619	S STELLING RD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	3	0	0	5	5	10	1	1	1	1	34
60500096	N WOLFE RD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39
60500913	SAICH WAY	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37

City of Cupertino
Potential Green Street Project Opportunities

Street Information			City Prioritization Criteria		SWRP Project Scoring[1]												
SWRP Project ID	Street Name	Jurisdiction	Co-location with Public project	Co-location with Special Area	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	Priority Development Area Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Reestablishes Natural Hydrology Score	Enhances Habitat Score	Community Enhancement Score	TOTAL SCORE
60500623	S STELLING RD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	5	0	0	5	5	10	1	1	1	1	36
60501267	CAMPUS DR	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	3	0	0	5	5	10	1	1	1	1	34
60501940	PENINSULA AVE	CUPERTINO	Bike Boulevard Project	Monta Vista Village	8	1	4	0	10	0	5	10	1	1	1	1	42
60502506	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60502021	S PORTAL AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	3	0	0	5	5	10	1	1	1	1	34
60500628	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60502508	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60501977	IMPERIAL AVE	CUPERTINO	Bike Boulevard Project	Monta Vista Village	8	1	4	0	10	0	5	10	1	1	1	1	42
60500744	FINCH AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60500443	N TANTAU AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	3	0	0	5	5	10	1	1	1	1	36
60501096	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	3	0	0	5	5	10	1	1	1	1	36
60501556	N PORTAL AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60501525	N WOLFE RD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39
60501507	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39
60501508	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39
60501509	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60500889	SAICH WAY	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39

City of Cupertino
Potential Green Street Project Opportunities

Street Information			City Prioritization Criteria		SWRP Project Scoring[1]												
SWRP Project ID	Street Name	Jurisdiction	Co-location with Public project	Co-location with Special Area	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	Priority Development Area Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Reestablishes Natural Hydrology Score	Enhances Habitat Score	Community Enhancement Score	TOTAL SCORE
60501502	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	5	0	0	5	5	10	1	1	1	1	36
60501503	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	4	1	5	0	0	5	5	10	1	1	1	1	34
60502679	TORRE AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60501494	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	5	0	0	5	5	10	1	1	1	1	36
60500105	E ESTATES DR	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60500206	PASADENA AVE	CUPERTINO	Bike Boulevard Project	Monta Vista Village	8	1	4	0	10	0	5	10	1	1	1	1	42
60500097	N WOLFE RD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60502335	TANTAU AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39
60501500	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60501571	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60502035	BIANCHI WAY	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	3	0	0	5	5	10	1	1	1	1	34
60502507	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60502493	N BLANEY AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	3	0	0	5	5	10	1	1	1	1	36
60501217	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Monta Vista Village	8	1	3	0	10	0	5	10	1	1	1	1	41
60501524	MILLER AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60500104	E ESTATES DR	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60500095	MILLER AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38

City of Cupertino
Potential Green Street Project Opportunities

Street Information			City Prioritization Criteria		SWRP Project Scoring[1]												
SWRP Project ID	Street Name	Jurisdiction	Co-location with Public project	Co-location with Special Area	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	Priority Development Area Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Reestablishes Natural Hydrology Score	Enhances Habitat Score	Community Enhancement Score	TOTAL SCORE
60502505	PORTAL PLZ	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60502197	S TANTAU AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60502331	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	5	0	0	5	5	10	1	1	1	1	40
60502367	VISTA DR	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	3	0	0	5	5	10	1	1	1	1	34
60502180	CAMPUS DR	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60500666	BANDLEY DR	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	3	0	0	5	5	10	1	1	1	1	36
60501504	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	4	1	5	0	0	5	5	10	1	1	1	1	34
60502755	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60500745	FINCH AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39
60500449	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Monta Vista Village	10	1	4	0	10	0	5	10	1	1	1	1	44
60502650	BANDLEY DR	CUPERTINO	Bike Boulevard Project	North De Anza	6	1	3	0	0	5	5	10	1	1	1	1	34
60502179	CAMPUS DR	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60502756	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60501523	N WOLFE RD	CUPERTINO	Bike Boulevard Project		8	1	4	0	0	5	5	10	1	1	1	1	37
60502753	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60501499	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60501497	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39

City of Cupertino
Potential Green Street Project Opportunities

Street Information			City Prioritization Criteria		SWRP Project Scoring[1]												
SWRP Project ID	Street Name	Jurisdiction	Co-location with Public project	Co-location with Special Area	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	Priority Development Area Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Reestablishes Natural Hydrology Score	Enhances Habitat Score	Community Enhancement Score	TOTAL SCORE
60502425	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Monta Vista Village	10	1	4	0	0	0	5	10	1	1	1	1	34
60500624	S STELLING RD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60501506	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project		8	1	3	0	0	5	5	10	1	1	1	1	36
60501495	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	5	0	0	5	5	10	1	1	1	1	36
60501505	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project		8	1	5	0	0	5	5	10	1	1	1	1	38
60500740	MARY AVE	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	3	0	0	5	5	10	1	1	1	1	34
60501093	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	2	0	0	5	5	10	1	1	1	1	35
60500618	S STELLING RD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	4	0	0	5	5	10	1	1	1	1	37
60502509	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60501094	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	6	1	4	0	0	5	5	10	1	1	1	1	35
60502328	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	5	0	0	5	5	10	1	1	1	1	40
60501252	N STELLING RD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60502326	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	4	0	0	5	5	10	1	1	1	1	39
60501572	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	8	1	5	0	0	5	5	10	1	1	1	1	38
60500155	STEVENS CREEK BLVD	CUPERTINO	Bike Boulevard Project	Heart of the City	10	1	3	0	0	5	5	10	1	1	1	1	38
60500451	MC CLELLAN RD	CUPERTINO	Union Pacific RR Trail Feasibility Study; McClellan Road Bike Corridor (separated bike lanes)	Monta Vista Village	8	1	1	0	10	0	5	10	1	1	1	1	39

City of Cupertino
Potential Green Street Project Opportunities

Street Information			City Prioritization Criteria		SWRP Project Scoring[1]												
SWRP Project ID	Street Name	Jurisdiction	Co-location with Public project	Co-location with Special Area	Impervious Score	Soil Group Score	Slope Score	Flood-prone Catchment Score	PCB Area Score	Priority Development Area Score	Co-located Project Score	Augments Water Supply Score	WQ Source Control Score	Reestablishes Natural Hydrology Score	Enhances Habitat Score	Community Enhancement Score	TOTAL SCORE
60501944	BUBB RD	CUPERTINO	Citywide Parks and Recreation System Master Plan; Bike Boulevard Project	Monta Vista Village	6	1	4	0	10	0	5	10	1	1	1	1	40

[1] SWRP = Stormwater Resources Plan (SCVURPPP, 2018). See Appendix A for prioritization metrics and scoring of GSI opportunities.

Appendix C
GSI concept for the Mary Avenue Greenbelt and Trail Project

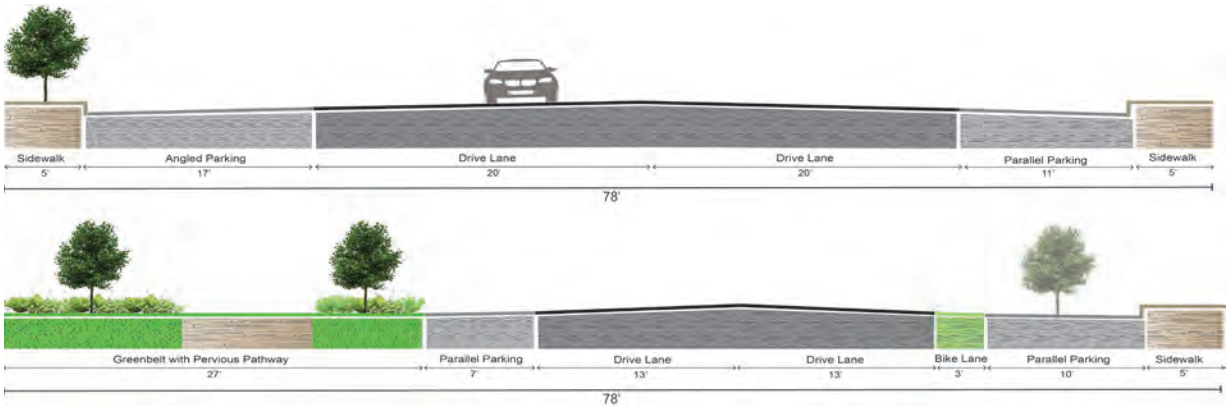
Mary Avenue Green Street

Cupertino

Concept Description

Mary Avenue is an important connector road in the City of Cupertino that is at the hub of many important destinations: Homestead High School, Dan Burnett bicycle-pedestrian bridge over I-280, Mary Avenue Dog Park, City of Cupertino Service Center, The Oaks shopping center, Cupertino Senior Citizen Center, De Anza College, Memorial Park, and the commercial corridor on Stevens Creek Blvd. The road has an 80-ft wide right-of-way with a variety of abutting land uses running 0.72 miles from Stevens Creek Blvd to I-280. It presents a tremendous opportunity for a "complete street" retrofit integrating stormwater management with multiple community and environmental benefits. The City has been considering a complete street concept on Mary Avenue for several years, with a vision of transforming the existing inefficient roadway into a multi-functional corridor.

Surveys have identified "trails and pathways" and "access to nature" as the top two most sought after community benefits among Cupertino residents. Stormwater, habitat, and community benefits will be realized by creating a wide bioretention-enhanced green belt on the west side of the street containing a pervious multi-use pathway to accommodate bicyclists, pedestrians, strollers, and joggers. Tree wells will be installed every 100 feet on the east side of the street to treat stormwater and, along with new trees in the green beltway, eventually form an arbor archway of green canopy over Mary Avenue. To create space for the proposed improvements, the City plans to remove the center turn lane, convert 20'-wide angled parking on the west side to 7'-wide parallel parking, and incorporate the existing bike lane on the west side into the green belt . A typical cross-section has been developed to show how the roadway could be reconfigured. Pervious pavement will be employed in the roadway closer to the Stevens Creek Blvd intersection where space is in higher demand. Bioretention has a 5% sizing ratio (based on available space and to achieve better performance), and the pervious pavement has a 20% sizing ratio (4 parts run-on area to 1 part pervious pavement).



Pre-construction (top) & Post-construction (bottom) Street Section

Concept Metrics

WATERSHED CHARACTERISTICS

Watershed
SUNNYVALE EAST CHANNEL

Drainage Management Area
12.1 AC

% Impervious of DMA
90

Total Runoff Volume
6.6 AC-FT/YR

FACILITY INFORMATION

Bioretention

Total Facility Area
23,958 SF

Number of Facilities
40

Maximum Surface Ponding
0.5 FT

Storage Volume
0.7 AC-FT

Pervious Pavement

Total Facility Area
9,583 SF
LOCATED IN PARKING LANE

Storage Volume
0.2 AC-FT

DESIGN CRITERIA

Total Storage
0.9 AC-FT

Infiltration Rate
0.2 IN/HR

Total Runoff Captured
6.6 AC-FT/YR (100%)

Concept Basemap

LEGEND

- Catch Basins
- Storm Drain Network
- Flow Direction
- Drainage Management Area
- Greenway with Integrated Stormwater Treatment
- Pervious Pavement
- Tree Wells
- A See Precedent Image on Next Page

0 250 500 ft

PARADIGM ENVIRONMENTAL Lotus Water

Preliminary concept for discussion purposes only

Mary Avenue Green Street

Example of Integration of Bioretention with Bike and Pedestrian Crossings in Lyon, France

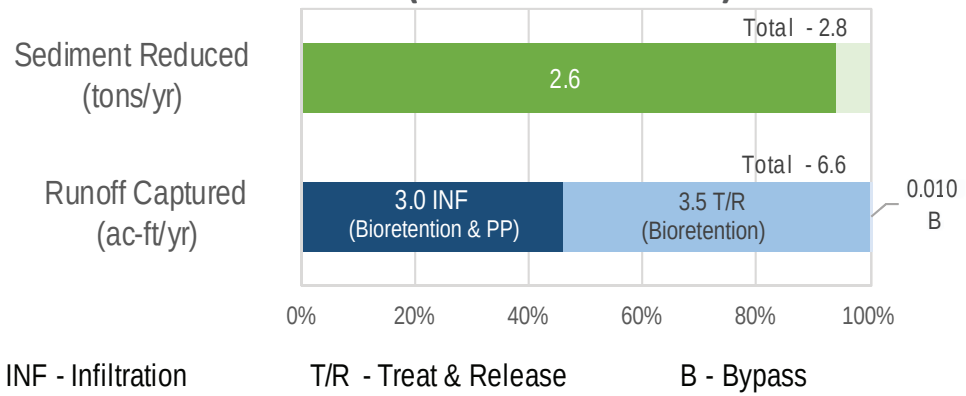
Example of Stormwater and Multi-modal Transportation Options in Lyon, France

Budget-Level Cost Estimates

DESCRIPTION	UNIT COST	UNIT	QUANTITY	SUBTOTAL
Utilities Protection/Relocation	$90,000	LS	1	$90,000
Demo, Excavation & Offhaul	$10	SF	33,541	$335,400
Curb and 36" Sidewalls	$185	LF	9,073	$1,678,600
Bio-soil Media	$250	CY	1,331	$332,800
Pervious pavement	$15	SF	9,583	$143,700
Underdrains	$5	SF	33,541	$167,700
Drain Rock Subbase	$150	CY	1,242	$186,300
Plantings & Mulch	$22	SF	23,958	$527,100
Catch Basin Relocation	$7,500	EA	11	$82,500
Storm Drain Connections	$5,000	EA	20	$100,000
			CONSTRUCTION SUBTOTAL	**$3,644,000**
Mobilization (10% Construction)				$364,000
Contingency (30% Construction)				$1,093,000
Design (15% Total)				$765,000
			TOTAL PROJECT COST (DESIGN + CONSTRUCTION)	**$5,866,000**

- These are planning-level cost estimates ($2018) for design and construction. Soft costs for City administration and project management and post-construction operations and maintenance are not included. Other factors that may affect the cost of future construction include escalation and market conditions.
- This cost estimate only includes stormwater management components appropriately sized to treat runoff from the project area. The City of Cupertino will procure additional funding for non-stormwater related components of the complete street retrofit.

Concept Effectiveness (Annual Average)



- Effectiveness is defined as the modeled ability of the proposed project to capture stormwater runoff from the management area, remove the identified constituents from that stormwater, and infiltrate or reuse the captured water.
- For planning purposes, recharge is approximated as being equivalent to infiltration if the project is located in the groundwater recharge zone.
- Modeling and performance estimates are based on an historical rainfall time series from water year 2007 through water year 2015.

Additional Potential Benefits

- Within Priority Development Area
- Augments Water Supply
- Groundwater Recharge
- Community Enhancement
- Reestablishes Natural Hydrology

Additional Considerations

This project concept is planning-level and subject to revision as additional information related to geotechnical, environmental, and stakeholder considerations becomes available. Factors to be considered include but are not limited to the following:

- Infiltration Potential. The project is in a designated recharge area. The map of Depth to First Groundwater for the Santa Clara Basin in Appendix A of the SCVURPPP C.3 Stormwater Handbook shows depth to groundwater as approximately 50 feet; therefore, no conflicts with groundwater are anticipated. The NRCS SSURGO database lists soils in the projects area as having an infiltration capacity of 0.20-0.57 in/hr; facilities are assumed to require installation of an underdrained. Undrained facilities are not lined and, therefore, a portion of the stormwater entering the facility will infiltrate into underlying soil. Site-specific infiltration tests should be performed during early design so that facilities are adequately sized and drained.
- Parking Analysis. Mary Avenue is currently used for all-day parking by visitors, particularly DeAnza College students. Instituting metering or parking permits would encourage students to park at the college, which appears to have capacity but is not free of charge.
- Utility Coordination. Additional spatial data showing all utility mains along the roadway corridor should be collected and evaluated for potential conflicts; proposed facility locations should be adjusted as necessary to avoid any identified conflicts.
- Historical Lead Contamination. There is historical lead contamination in the landscape between Mary Avenue and Hwy 85. Lead was detected above background levels and impacted soil offhauled for proper disposal during construction of the Mary Avenue Dog Park.
- Stakeholder Coordination. Outreach should be conducted to area residents and others that may be affected by roadway configuration changes and less on-street parking.
- The Oaks shopping center at the intersection of Stevens Creek Blvd is likely to be redeveloped in the coming years, and retrofit of its parking lot area may provide an additional synergy opportunity.
- Maintaining traffic flow and adequate parking while improving pedestrian and bicycle safety will transform Mary Avenue into a critical link in Cupertino's Safe Routes to School network.

Appendix D

Guidance for Identifying Green Infrastructure Potential in Municipal Capital Improvement Program Projects

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 appropriate[1]. 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 pavement[2] (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

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.

[9]Include cross streets
[10]If a project is being constructed in phases, indicate the phase number and use a separate row entry for each phase. If not, enter "NA".
[11]Project 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.
[12]State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.
[13]All impervious surfaces added to any area of the site that was previously existing pervious surface.
[14]All impervious surfaces added to any area of the site that was previously existing impervious surface.
[15]For redevelopment projects, state the pre-project impervious surface area.
[16]For redevelopment projects, state the post-project impervious surface area.

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 all Regulated Projects. Entries in these columns should not be "None" or "NA". Do not leave any cells blank.

[29]For public projects, enter the plans and specifications approval date.
[30]List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.
[31]List 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.
[32]List 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.).
[33]List 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.
[34]See 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).
[35]For 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.
[36]For 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.
[37]Note whether a third party was used to certify the project design complies with Provision C.3.d.
[38]If HM control is not required, state why not.
[39]If 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), biodetention 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.

RESOLUTION NO. 19-112

A RESOLUTION OF THE CUPERTINO CITY COUNCIL FOR ADOPTING A GREEN STORMWATER INFRASTRUCTURE PLAN IN ACCORDANCE WITH PROVISION C.3.J OF THE MUNICIPAL REGIONAL PERMIT

WHEREAS, the City of Cupertino is a permittee under the San Francisco Bay Regional Water Quality Control Board's Municipal Regional Permit (MRP) that regulates stormwater discharges from municipal storm drain systems throughout Santa Clara Valley; and

WHEREAS, the City of Cupertino is a member of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), and implements the MRP in collaboration with other members of the SCVURPPP; and

WHEREAS, Provision C.3.j of the MRP requires each permittee to develop a Green Stormwater Infrastructure Plan that demonstrates how permittees will gradually shift from traditional "gray" storm drain infrastructure to a more resilient and sustainable storm drain system comprised of "green" infrastructure, which captures, stores and treats stormwater using natural processes; and

WHEREAS, all permittees under the MRP are required to submit by September 30, 2019 a Green Stormwater Infrastructure Plan to the Regional Water Quality Control Board; and

WHEREAS, the Cupertino Green Stormwater Infrastructure Plan guides the identification, implementation, tracking, and reporting of green stormwater infrastructure projects within the City of Cupertino over the long term; and

WHEREAS, the City of Cupertino is committed to complying with requirements of the MRP and implementing sustainable approaches and practices within the City.

NOW, THEREFORE, BE IT RESOLVED that the City Council does hereby adopt and intends to support implementation of the City of Cupertino Green Stormwater Infrastructure Plan to achieve a more sustainable stormwater management system that provides multiple benefits to the community.

BE IT FURTHER RESOLVED that this Resolution is not a project under the requirements of the California Quality Act of 1970, together with related State CEQA Guidelines (collectively, "CEQA") because it has no potential for resulting in physical change in the environment. In the event that this Plan is found to be a project under CEQA, it is subject to the CEQA exemption contained in CEQA Guidelines section 15061(b)(3) because it can be seen with certainty to have no possibility of a significant effect on the environment. CEQA applies only to projects which have the potential of causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. In this circumstance, the adoption of a Green Stormwater Infrastructure Plan would have no or only a de minimis impact on the environment. The foregoing determination is made by the City Council in its independent judgment.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Cupertino this 3rd day of September, 2019, by the following vote:

Vote:	Members of the City Council
AYES:	Scharf, Chao, Paul, Sinks, Willey
NOES:	None
ABSENT:	None
ABSTAIN:	None

SIGNED: Steven Scharf, Mayor City of Cupertino	9/5/19 Date
ATTEST: Grace Schmidt, City Clerk	9-5-19 Date

CITY OF
CUPERTINO

PUBLIC WORKS DEPARTMENT

CITY HALL
10300 TORRE AVENUE • CUPERTINO, CA 95014-3255
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CUPERTINO.ORG

CITY COUNCIL STAFF REPORT

Meeting: September 3, 2019

Subject

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

Recommended Action

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

Discussion

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

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

GSI Plan Requirements

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

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

GSI Plan Development

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

Public Education Outreach and Commission Review

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

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

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

Private Funding Option

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

Permit Requirements

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

Council Action

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

Sustainability Impact

The benefits of GSI as a replacement for impervious hardscape include improving water and air quality, water conservation, preserving and creating habitat and biodiversity, traffic calming, increasing pedestrian mobility, urban greening, and enhancing urban

forests. It is a forward-thinking approach to creating sustainable public streets, parking lots, and buildings.

CEQA Review

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

Fiscal Impact

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

Prepared by: Cheri Donnelly, Environmental Programs Manager
Alex Wykoff, Environmental Specialist
Reviewed by: Roger Lee, Director of Public Works
Approved for Submission by: Deborah Feng, City Manager
Attachments:
A - GSI Plan
B - GSI Plan Appendices
C - GSI Plan Framework
D - Resolution

Section 4 – Provision C.4 Industrial and Commercial Site Controls

Program Highlights and Evaluation
Highlight/summarize activities for reporting year:

Summary:

In FY 18-19 the City prioritized and conducted facility (IND) inspections at businesses identified as having the likelihood of contributing to pollution of stormwater runoff or that had recently documented violations encountered through the IDDE program. The facilities included in the inspection program and consistent with the Business Inspection Plan (BIP) included: high volume retail and shopping centers, restaurants, grocery stores and markets, and automotive facilities. In FY 18-19, the City inspected 125 different business, a slight decrease in the number (126) inspected the previous FY.

IND inspections are conducted by the IND/IDDE Inspector, Program Specialist, Environmental Community Assistant, and the Building Inspectors. The City finds importance in having the Building Inspectors participate in the IND inspection program which keeps them engaged and vigilant in monitoring all sites they visit as potential stormwater pollution sources. Each year the Program Specialist provides in-house training to all Building Inspectors in advance of their stormwater business inspections. IN FY 18-19, the training was provided to fourteen Building Inspectors and administrative staff. See Section C.4.e.iii below for further detail on training topics covered.

The City has a re-inspection fee program that is intended to incentivize property oversight and adherence to stormwater pollution BMPs. It provides for monetary penalties to be assessed for properties that are inspected and found to have violations. The FY 18-19 re-inspection fee was $275 per inspection. The fee is assessed for each inspection which is required to confirm compliance and complete mitigation of any potential or actual discharge identified during the initial inspection. In FY 18-19, nine different property owners were assessed re-inspection fees totaling $3,850. Several months before the IND inspections begin, re-inspection fee letters are mailed to all property and business owners scheduled for an IND inspection. An explanation of the IND program and educational brochure are provided to encourage active oversight and engagement of the businesses concerning stormwater pollution prevention. Also included is a brochure explaining the County's CESQG program which provides small business owners that may generate modest amounts of hazardous waste (e.g. fluorescent tubes, cleaners, etc.) a low-cost resource for disposal. The goal is to reduce the storage of these unused/broken materials in trash enclosures and other exterior areas which present a threatened discharge condition. The City requests the IND program letters to be signed and returned acknowledging receipt. Of the 125 letters mailed out in FY 18-19, only 21 (17%) were returned. This is a 10% decrease from FY 17-18. While the decrease in response this past year is discouraging, a property owner's failure to return the signed letter does not absolve them from any responsibilities under the MRP, municipal code, or the assessment of re-inspection fees or fines. In addition to the re-inspection fee, businesses and property owners may also be issued an administrative citation for up to $500 per violation ($100 for the first violation, $200 for the second violation, and $500 for the third and any subsequent violations within 12 months). In FY 18-19, there were two administrative citations totaling $300 issued for violations discovered during an IND inspection.

Through the IND program, private properties that are inspected and do not have legible markers or stenciling reading "No Dumping Drains to Creek" are identified. The IND inspector works with the property owner to have labeling of all drains on their property completed. In FY 18-19, 30 properties were identified, 5 properties completed labeling a total of 16 inlets. Contacting the property owners and having this work done, takes considerable time. The remaining 25 properties will be followed up on in FY 19-20 to ensure they are labeled.

The City continues to be an active participant in the SCVURPPP IND/IDDE AHTG. Refer to the C.4. Industrial and Commercial Site Controls section of the Program's FY 18-19 Annual Report for a description of activities of the Program.

C.4.b.iii ► Potential Facilities List (i.e., List of All Facilities Requiring Stormwater Inspections)

List below or attach your list of industrial and commercial facilities in your Inspection Plan to inspect that could reasonably be considered to cause or contribute to pollution of stormwater runoff.

Please see Attachment C.4-1 Potential Facilities List.

C.4.d.iii.(2)(a) & (c) ►Facility Inspections

Fill out the following table or attach a summary of the following information. Indicate your reporting methodology below.

	X	Permittee reports multiple discrete potential and actual discharges at a site as one enforcement action.
		Permittee reports the total number of discrete potential and actual discharges on each site.

	Number
Total number of inspections conducted (C.4.d.iii.(2)(a))	125
Violations, enforcement actions, or discreet number of potential and actual discharges resolved within 10 working days or otherwise deemed resolved in a longer but still timely manner (C.4.d.iii.(2)(c))	9

Comments:

This FY, the City determined that 9 separate facilities were found to have one or more violations. Of the 9 facilities, there were a total of 19 separate enforcement actions administered (Verbal Warning, NOV, administrative pre-citation notice, administrative citation) as some facilities had enforcement escalated due to non-compliance. Of the 9 facilities found with violations, three facilities exceeded 10 business days, but were deemed resolved in a longer but still timely manner due to administration of the ERP. These are as follows:

1) Homestead Square (common area): Shopping center common area was found to have uncontained trash/litter in multiple areas of the property. Inspector met with property owner to identify which areas still needed attention. The responsible party showed progress during each re-inspection, but failed to satisfactorily resolve the violations so enforcement was escalated pursuant to the ERP. The property owner ultimately achieved compliance within 35 business days. The property owner was issued a Verbal Warning, NOV, Administrative Pre-Citation, and an Administrative Citation. The City imposed $1,100 in re-inspection fees and a $100 Administrative Citation fee as penalty for non-compliance.
2) PG&E Service Center: Several deficiencies were identified: uncovered waste and scrap material bins/storage areas, uncontained litter, and inadequate BMPs near wood utility power pole lay down area. The company progress during each re-inspection, ultimately complying within 25 business days. The utility was issued two Verbal Warnings and two re-inspection fees, totaling $550.
3) Target: Major retailer was found to have areas with uncontained trash/litter in multiple areas of the property. The responsible party showed progress during each re-inspection, ultimately complying within 18 business days. The property owner was issued two Verbal Warnings and two re-inspection fees, totaling $550.

Notes on tables below:

- Table C.4.d.iii.(2)(b): Two facilities (PG&E and Target) as described above, were issued two verbal warnings as progress was being demonstrated to correct the violations, therefore, the number of verbal warnings exceeded the number of facilities inspected.
- C.4.d.iii.(2)(d): There are 21 total discharges reported; however, only 19 total enforcement actions taken. This is explained as some facilities had both an actual and potential violation which the City counts as one enforcement action.

C.4.d.iii.(2)(b) ►Frequency and Type of Enforcement Conducted

Fill out the following table or attach a summary of the following information.

	Enforcement Action (as listed in ERP)[1]	**Number of Enforcement Actions Taken**
Level 1	Verbal Warning	13
Level 2	Written Notice of Violation (NOV)	3
Level 3	Administrative Pre-Citation	1
Level 4	Administrative Citation	2
Level 5	Referral to City Attorney	0
Level 6	Referral to Water Board	0
Total		19

C.4.d.iii.(2)(d) ► Frequency of Potential and Actual Non-stormwater Discharges by Business Category

Fill out the following table or attach a summary of the following information.

Business Category[2]	**Number of Actual Discharges**	**Number of Potential Discharges**
Automotive (repair, cleaning, and fueling)	1	1
Corporation Yards	1	1
Pesticide facilities (nurseries, garden centers, golf courses)	1	1
Food facilities	3	6
Retail shopping centers	2	3

[1]Agencies to list specific enforcement actions as defined in their ERPs.
[2]List your Program's standard business categories.

Office	0	0
Hotel	0	0
Other – Major Entertainment	0	0
Other – Major Retail	1	0
Other – Medical and Dental Lab	0	0
Other – Misc.	0	0

C.4.d.iii.(2)(e) ►Non-Filers

List below or attach a list of the facilities required to have coverage under the Industrial General Permit but have not filed for coverage:

In FY 18-19 there were no facilities inspected or identified that are required to have coverage under the Industrial General Permit, but were found to not have filed for coverage.

C.4.e.iii ►Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Industrial/ Commercial Site Inspectors in Attendance	Percent of Industrial/ Commercial Site Inspectors in Attendance	No. of IDDE Inspectors in Attendance	Percent of IDDE Inspectors in Attendance
Building Inspector Training	4/16/19	1. IND Inspection process overview and goals -Urban runoff pollution prevention* -Business inspection plan* -Enforcement response plan* -Based on challenge properties, prior violation history (IDDE and IND), high potential discharge sites 2. Year 4 of MRP 2.0 -Trash -PCBs, Mercury, other POCs (demo/construction/standard sites) -Mobile businesses 3. Review inspection forms -IND brochures for business owner	7	100%	3	100%

		-Inspection forms 4. Review guidance sheet -Whole site inspection procedures* -Full trash capture devices -Referral of process for potential/actual discharges -Building inspector/all City employee's role in IDDE -Residential and Commercial site inspection stormwater awareness (Non-IND)				
SCVURPPP	5/30/19	Inspector safety, Residential RVs and stormwater, Case Studies (rubber manufacturing facility, MRFs/landfills, and illicit discharge investigation.	3	43%	2	67%

Comments:

The City makes an effort to encourage any staff that perform site inspections to attend as much training as possible to be better equipped and knowledgeable of stormwater inspection and enforcement. The Building Inspectors perform a portion of the IND inspections and as they are often unavailable to attend the annual SCVURPPP IND/IDDE workshop, a separate in-house training is provided. The SCVURPPP training this year only had one building inspector who was able to attend with the other staff who perform IND/IDDE inspections. We did however, have one of the on-call Service Center maintenance workers take advantage of this training opportunity. The City will continue to encourage training of as many staff as possible who perform IND/IDDE inspections and will continue to provide in-house staff training in FY 19-20.

Attachment C.4-1
Fiscal Year 2019-2020
C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
1	10262 IMPERIAL AVE	Automotive	Alan White Service (Alan's Auto)
2	19990 STEVENS CREEK BLVD	Automotive	Alliance Gas
3	10264 IMPERIAL AVE	Automotive	Auto Smog
4	10023 S DE ANZA BLVD	Automotive	Chevron
5	11010 N DE ANZA BLVD	Automotive	Chevron
6	10270 IMPERIAL AVE	Automotive	Clark's Auto Parts and Machine
7	22510 STEVENS CREEK BLVD	Automotive	Cupertino Auto Care/Beacon
8	10073 IMPERIAL AVE	Automotive	Cupertino Auto Tech
9	10280 IMPERIAL	Automotive	Cupertino Service
10	10625 N DE ANZA BLVD	Automotive	Cupertino Smog Pro/Union 76
11	21530 STEVENS CREEK BLVD	Automotive	Cupertino Union 76
12	11025 N DE ANZA BLVD	Automotive	De Anza Auto Repair
13	20999 STEVENS CREEK BLVD	Automotive	De Anza Shell
14	10100 BUBB RD	Automotive	Driving Machine, The
15	10550 S DE ANZA BLVD	Automotive	European Auto Performance
16	10931 N DE ANZA BLVD	Automotive	Goodyear Tire
17	10490 S DE ANZA BLVD	Automotive	Henry's Union 76
18	21855 HOMESTEAD RD	Automotive	Homestead Union 76
19	21680 LOMITA AVE	Automotive	House of Miracles
20	10261 IMPERIAL AVE	Automotive	Imperial Automotive
21	10221 IMPERIAL AVE	Automotive	International Auto Clinic
22	19480 STEVENS CREEK BLVD	Automotive	Jiffy Lube
23	10151 IMPERIAL AVE	Automotive	JST Auto Care
24	10100 BUBB RD STE 100B	Automotive	Pan American Body Shop
25	10218 IMPERIAL AVE	Automotive	Pan American Collision Center
26	19030 STEVENS CREEK BLVD	Automotive	Rotten Robbie
27	19550 STEVENS CREEK BLVD	Automotive	Vallco Union 76
28	1699 S DE ANZA BLVD	Automotive (Car Wash)	Valero
29	10002 N DE ANZA BLVD	Automotive (Car Wash)	Valero
30	10230 IMPERIAL AVE	Building Supplies/Services	Cupertino Supply
31	10200 IMPERIAL AVE	Building Supplies/Services	Ekim Painting
32	21621 STEVENS CREEK BLVD	Building Supplies/Services	Halo Custom Guitar

Attachment C.4-1
Fiscal Year 2019-2020
C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
33	1505 S DE ANZA BLVD	Building Supplies/Services	Kelly Moore
34	10171 S DE ANZA BLVD	Building Supplies/Services	S & G Carpet
35	10650 S DE ANZA BLVD	Building Supplies/Services	Sherwin Williams
36	20149 STEVENS CREEK BLVD	Building Supplies/Services	Sun Design Center
37	7458 STANFORD PL	Building Supplies/Services	Universal Painting
38	ONE APPLE PARK WAY M/S 105-2PRO	Building Supplies/Services	Yoon Hyup
39	10151 IMERIAL AVE	Concrete/Stone Products	Reyes Concrete
40	21220 HOMESTEAD RD	Grocery	7-Eleven
41	21490 MCCLELLAN RD	Grocery	7-Eleven
42	10983 N WOLFE RD	Grocery	99 Ranch Market
43	10425 S DE ANZA BLVD	Grocery	99 Ranch Market
44	22690 STEVENS CREEK BLVD	Grocery	Bateh Brothers Market
45	7335 BOLLINGER RD STE D	Grocery	Cupertino International Foods
46	19750 STEVENS CREEK BLVD	Grocery	Marukai
47	19944 HOMESTEAD RD	Grocery	Oakmont Market
48	20620 HOMESTEAD RD	Grocery	Safeway
49	20558 STEVENS CREEK BLVD	Grocery	Sprouts
50	10629 S FOOTHILL BLVD	Grocery	Stevens Creek Market
51	10255 S DE ANZA BLVD	Grocery	Trinethra Indian Supermarket
52	20955 STEVENS CREEK BLVD	Grocery	Whole Foods
53	21530 STEVENS CREEK BLVD	Grocery/Fueling Station	7-Eleven
54	10201 TORRE AVENUE	Office	Amazon
55	10101 N DE ANZA BLVD	Office	Apple, Inc.
56	10001 N DE ANZA BLVD	Office	Apple, Inc.
57	10441 BANDLEY AVENUE	Office	Apple, Inc.
58	20563 STEVENS CREEK BLVD	Office	Bank of America
59	21020 HOMESTEAD RD	Office	Bank of America
60	20573 STEVENS CREEK BLVD	Office	Chase Bank
61	10240 BUBB RD	Office	Durect
62	10260 BUBB RD	Office	Durect
63	19240 STEVENS CREEK BLVD	Office	Lighthouse Bank
64	10500 N WOLFE RD	Office	Office Complex

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C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
65	19400 STEVENS CREEK BLVD	Office	Office Complex
66	21040 HOMESTEAD RD STE 204	Office	Office Complex
67	10601 S DE ANZA BLVD	Office Park	De Anza Professional Center
68	20330 TORRE AVENUE	Office/Food Service	Apple, Inc.
69	19333 VALLCO PARKWAY	Office/Food Service	Apple, Inc.
70	MCCLELLAN RD & CLUBHOUSE LN	Other	McClellan Ranch Park West
71	10885 N STELLING RD	Other	Valley Church
72	19000 HOMESTEAD RD	Other - Hospital	Kaiser Permanente
73	10095 SAICH WAY, STE 2	Other - Misc.	Parlour 17
74	10110 CALIFORNIA OAK WAY	Other- Agriculture	Whispering Creek Equestrian Center
75	10020 IMPERIAL AVE	Other- Dry Cleaners	Classic Cleaners
76	10477 S DE ANZA BLVD	Other- Dry Cleaners	De Anza Laundromat
77	20379 STEVENS CREEK BLVD	Other- Dry Cleaners	Dryclean Pro
78	21749 STEVENS CREEK BLVD	Other- Dry Cleaners	N&K Cleaners
79	10045 E ESTATES DR	Other- Dry Cleaners	One Hour Cleaners By Lee
80	10620 S DE ANZA BLVD	Other- Dry Cleaners	Scotty's Cleaners
81	10151 S DE ANZA BLVD	Other- Dry Cleaners	Sierra Cleaners
82	19775 STEVENS CREEK BLVD	Other- Dry Cleaners	Zarin Sewing Alteration and Dryclean
83	10165 N DE ANZA BLVD	Other- Hotel	Aloft Hotel
84	10889 N DE ANZA BLVD	Other- Hotel	Cupertino Inn
85	19429 STEVENS CREEK BLVD	Other- Hotel	Marriot Residence Inn
86	10101 N WOLFE RD	Other- Major Entertainment	Bay Club
87	21979 SAN FERNANDO AVE	Other- Major Entertainment	Blackberry Farm Picnic Grounds
88	21275 STEVENS CREEK BLVD	Other- Major Entertainment	Bluelight Cinema Theatres
89	10123 N WOLFE RD	Other- Major Entertainment	Bowlmor Lanes
90	20990 HOMESTEAD RD	Other- Major Entertainment	Homestead Lanes
91	10123 N WOLFE RD STE 1020	Other- Major Entertainment	Vallco Ice Center
92	20600 STEVENS CREEK BLVD	Other- Major Retail	Aaron Brothers
93	20149 STEVENS CREEK BLVD	Other- Major Retail	Concept Creation Interior Design
94	10455 S DE ANZA BLVD	Other- Major Retail	CVS
95	19750 STEVENS CREEK BLVD	Other- Major Retail	Daiso
96	20640 HOMESTEAD RD	Other- Major Retail	Michael's

Attachment C.4-1
Fiscal Year 2019-2020
C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
97	20740 STEVENS CREEK BLVD	Other- Major Retail	Party City
98	20610 STEVENS CREEK BLVD	Other- Major Retail	Pier 1 Imports
99	20572 HOMESTEAD RD	Other- Major Retail	Rite Aid
100	20650 HOMESTEAD RD	Other- Major Retail	Ross
101	19900 STEVENS CREEK BLVD	Other- Major Retail	Scandanavian Designs
102	20830 STEVENS CREEK BLVD	Other- Major Retail	Staples
103	20600 HOMESTEAD RD	Other- Major Retail	Steinmart
104	20149 STEVENS CREEK BLVD	Other- Major Retail	Sun Design Center
105	20745 STEVENS CREEK BLVD	Other- Major Retail	Target
106	20730 STEVENS CREEK BLVD	Other- Major Retail	TJ Maxx / Home Goods
107	10815 N WOLFE RD STE 103	Other- Major Retail	T-Mobile
108	20580 HOMESTEAD RD	Other- Major Retail	Ulta Beauty
109	10075 E ESTATES DR	Other- Major Retail	United Furniture Club
110	20011 BOLLINGER RD	Other- Major Retail	Walgreens
111	22555 CRISTO REY DR	Other- Misc.	Gate of Heaven Cemetary
112	22100 STEVENS CREEK BLVD	Other- Pesticide Facilities	Blackberry Farm Golf Course
113	10700 CLUBHOUSE LN	Other- Pesticide Facilities	Deep Cliff Golf Course
114	1491 S DE ANZA BLVD	Other- Pesticide Facilities	Summer Winds Nursery
115	1361 S DE ANZA BLVD	Other- Pesticide Facilities	Yamagami Nursery
116	10012 N FOOTHILL BLVD	Other- Veterinary	Acadia Veterinary Clinic
117	10026 PENINSULA AVE	Other- Veterinary	Cupertino Animal Hospital
118	20674 HOMESTEAD RD	Restaurant & Food Service	1000 Degrees Pizzeria
119	19998 HOMESTEAD RD STE A	Restaurant & Food Service	212 New York Pizza
120	19459 STEVENS CREEK BLVD STE 100	Restaurant & Food Service	85°C Bakery Cafe
121	10425 S DE ANZA BLVD	Restaurant & Food Service	99 Ranch Market
122	10445 S DE ANZA BLVD	Restaurant & Food Service	99 Ranch Market Food Court
123	19700 VALLCO PKWY STE160	Restaurant & Food Service	A & M Squared Inc
124	21265 STEVENS CREEK BLVD STE 205	Restaurant & Food Service	A Plus Tea House
125	20803 STEVENS CREEK BLVD, STE 110	Restaurant & Food Service	Afuri Ramen + Dumpling
126	10445 SO. DEANZA BLVD, #104	Restaurant & Food Service	Agu Ramen Cupertino LLC
127	10893 N WOLFE RD	Restaurant & Food Service	Ai Noodle
128	7335 BOLLINGER RD STE C	Restaurant & Food Service	Ajito Izakaya Dining

Attachment C.4-1
Fiscal Year 2019-2020
C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
129	1655 S DE ANZA BLVD STE 7	Restaurant & Food Service	Alchena Capital LLC
130	19379 STEVENS CREEK BLVD	Restaurant & Food Service	Alexander's Steakhouse
131	20835 ALVES DR	Restaurant & Food Service	Ancient Agro
132	10118 BANDLEY DR STE G	Restaurant & Food Service	Apple Café
133	10885 N WOLFE RD	Restaurant & Food Service	Apple Green Bistro
134	10630 S DE ANZA BLVD	Restaurant & Food Service	Aqui's
135	10310 S DE ANZA BLVD	Restaurant & Food Service	Arirang Tofu & BBQ
136	19930 STEVENS CREEK BLVD	Restaurant & Food Service	Arya Global Cuisine
137	10789 S BLANEY AVE	Restaurant & Food Service	Aya Japan House
138	19645 STEVENS CREEK BLVD	Restaurant & Food Service	Azuma Restaurant
139	10591 N DE ANZA BLVD	Restaurant & Food Service	Bagel Street Café Cupertino
140	19748 STEVENS CREEK BLVD	Restaurant & Food Service	Beard Papa's
141	10207 IMPERIAL AVE	Restaurant & Food Service	Bees At Home
142	10883 S BLANEY AVE STE B	Restaurant & Food Service	Beijing Duck House Restaurant
143	10851 N WOLFE RD	Restaurant & Food Service	Bel Cool Tasty Pot
144	10123 N WOLFE RD STE 2074	Restaurant & Food Service	Benihana
145	20560 TOWN CENTER LN	Restaurant & Food Service	Bitter+Sweet
146	10690 N DE ANZA BLVD	Restaurant & Food Service	Bj'S Restaurant & Brewhouse
147	10033 SAICH WAY	Restaurant & Food Service	Blast 825 Pizza
148	19505 STEVENS CREEK BLVD STE 102	Restaurant & Food Service	Blue & Brownie LLC DBA T4
149	22100 STEVENS CREEK BLVD	Restaurant & Food Service	Blue Pheasant Restaurant
150	1361 S DE ANZA BLVD	Restaurant & Food Service	Bobbie's Café
151	10567 STERLING BLVD	Restaurant & Food Service	Boho Llc
152	19634 STEVENS CREEK BLVD	Restaurant & Food Service	Boiling Fish
153	21678 STEVENS CREEK BLVD	Restaurant & Food Service	Bongo's
154	20682 STEVENS CREEK BLVD	Restaurant & Food Service	Boudin
155	19501 STEVENS CREEK BLVD, STE 101	Restaurant & Food Service	Cafe Lattea
156	20343 STEVENS CREEK BLVD	Restaurant & Food Service	Café Torre
157	19634 STEVENS CREEK BLVD	Restaurant & Food Service	CBI Kitchen
158	21267 STEVENS CREEK BLVD STE 320	Restaurant & Food Service	Chaat House
159	19369 STEVENS CREEK BLVD STE 100	Restaurant & Food Service	Chef Hung Noodle
160	20800 HOMESTEAD RD	Restaurant & Food Service	Chef Salud LLC

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C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
161	20956 HOMESTEAD RD STE D	Restaurant & Food Service	Chili Pot
162	10385 S DE ANZA BLVD	Restaurant & Food Service	Chipotle Mexican Grill
163	20688 HOMESTEAD RD	Restaurant & Food Service	Chipotle Mexican Grill
164	19805 STEVENS CREEK BLVD	Restaurant & Food Service	Chuck E. Cheese
165	21678 STEVENS CREEK BLVD	Restaurant & Food Service	City Fish, The
166	20010 STEVENS CREEK BLVD	Restaurant & Food Service	Coconut's Fish Café
167	10800 TORRE AVE STE 100	Restaurant & Food Service	Coffee Society
168	10123 N WOLFE RD STE 2020	Restaurant & Food Service	Cold Stone Creamery
169	20080 STEVENS CREEK BLVD	Restaurant & Food Service	Counter, The
170	10275 S DE ANZA BLVD	Restaurant & Food Service	Crab Lover
171	19501 STEVENS CREEK BLVD #102	Restaurant & Food Service	Cream
172	10815 N WOLFE RD STE 102	Restaurant & Food Service	Creamistry
173	7335 BOLLINGER RD STE D	Restaurant & Food Service	Cupertino Specialty Foods
174	10350 S DE ANZA BLVD	Restaurant & Food Service	Curry House Cupertino
175	20080 STEVENS CREEK BLVD #106	Restaurant & Food Service	Curry Pizza House
176	10591 N DE ANZA BLVD	Restaurant & Food Service	De Anza Bagel Cafe
177	10467 S DE ANZA BLVD	Restaurant & Food Service	De Anza Pure Water
178	20750 STEVENS CREEK BLVD	Restaurant & Food Service	Dish N Dash
179	10250 N DE ANZA BLVD	Restaurant & Food Service	Donut Wheel
180	10088 N WOLFE RD STE 120	Restaurant & Food Service	Doppio Zero Pizzeria
181	10801 N WOLFE RD	Restaurant & Food Service	Duke Of Edinburgh
182	10123 N WOLFE RD STE 1688	Restaurant & Food Service	Dynasty Seafood Restaurant
183	10445 S DE ANZA BLVD STE 106	Restaurant & Food Service	Emperor Shao-Bing
184	21275 STEVENS CREEK BLVD STE 510	Restaurant & Food Service	Enzo's
185	10200 S DE ANZA BLVD	Restaurant & Food Service	Epicurean Café (Seagate)
186	19369 STEVENS CREEK BLVD STE 130	Restaurant & Food Service	Eureka
187	10933 N WOLFE RD	Restaurant & Food Service	Fantasia Coffee & Tea
188	10631 S. FOOTHILL BLVD	Restaurant & Food Service	Farmhouse Chick
189	20672 HOMESTEAD RD	Restaurant & Food Service	Fish Is Wild Fish Grill & More
190	20333 STEVENS CREEK BLVD	Restaurant & Food Service	Flight Wine & Food
191	21678 STEVENS CREEK BLVD	Restaurant & Food Service	Flour And Spice
192	20840 STEVENS CREEK BLVD	Restaurant & Food Service	Fontanas

Attachment C.4-1
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C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
193	948 FORTBAKER DR	Restaurant & Food Service	Fort Bakery LLC
194	20080 STEVENS CREEK BLVD	Restaurant & Food Service	Fresh Pixx
195	19780 STEVENS CREEK BLVD	Restaurant & Food Service	Galpao Gaucho
196	19990 HOMESTEAD RD	Restaurant & Food Service	Gamba Karaoke
197	19980 HOMESTEAD RD	Restaurant & Food Service	Gochi
198	10815 N WOLE RD	Restaurant & Food Service	Gogigo
199	10851 N WOLFE RD	Restaurant & Food Service	Guan Dong House Inc
200	19620 STEVENS CREEK BLVD STE 150	Restaurant & Food Service	Gyu-Kaku
201	20735 STEVENS CREEK BLVD	Restaurant & Food Service	Habit Burger
202	19409 STEVENS CREEK BLVD STE 100	Restaurant & Food Service	Hai Di Lao Hot Pot
203	19754 STEVENS CREEK BLVD	Restaurant & Food Service	Harumi Sushi
204	10815 N WOLFE RD STE 105	Restaurant & Food Service	Heavenly Holding Ventures Inc
205	10619 S DE ANZA BLVD	Restaurant & Food Service	Hechaa
206	10631 FOOTHILL EXPWY	Restaurant & Food Service	Heekah Hookah & Fafy Coffee
207	19066 STEVENS CREEK BLVD	Restaurant & Food Service	Hi Pot
208	21267 STEVENS CREEK BLVD STE 310	Restaurant & Food Service	Hobee's Restaurant
209	19590 STEVENS CREEK BLVD	Restaurant & Food Service	House Of Falafel
210	19058 STEVENS CREEK BLVD	Restaurant & Food Service	I Chef Restaurant
211	10129 S DE ANZA BLVD	Restaurant & Food Service	I Love Bento
212	20371 STEVENS CREEK BLVD	Restaurant & Food Service	I Shshi & Grill
213	19929 STEVENS CREEK BLVD	Restaurant & Food Service	Icebox
214	19622 STEVENS CREEK BLVD	Restaurant & Food Service	Icicles Creamrolls LLC
215	19600 VALLCO PKWY STE 100	Restaurant & Food Service	I-cool
216	21000 STEVENS CREEK BLVD	Restaurant & Food Service	Ike's Lair
217	19505 STEVENS CREEK BLVD	Restaurant & Food Service	Inteanet
218	19540 VALLCO PARKWAY, SUITE 130	Restaurant & Food Service	Ippudo # 32006
219	20750 STEVENS CREEK BLVD	Restaurant & Food Service	Islands
220	20950 STEVENS CREEK BLVD	Restaurant & Food Service	J & J Hawaiian BBQ Restaurant
221	10271 TORRE AVE	Restaurant & Food Service	J S Stew House
222	1451 S DE ANZA BLVD	Restaurant & Food Service	Jack In The Box
223	19772 STEVENS CREEK BLVD	Restaurant & Food Service	Jaje Foods, Inc.
224	20080 STEVENS CREEK BLVD	Restaurant & Food Service	Jersey Mike's

Attachment C.4-1
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C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
225	10911 N WOLFE RD	Restaurant & Food Service	Joy Luck Palace
226	19066 STEVENS CREEK BLVD	Restaurant & Food Service	Joy Palace
227	10851 N WOLFE RD	Restaurant & Food Service	Joy Square
228	10495 S DE ANZA BLVD STE C	Restaurant & Food Service	Juanxiang
229	10635 S FOOTHILL BLVD	Restaurant & Food Service	Judys Kitchen
230	19700 VALLCO PKWY STE 150	Restaurant & Food Service	Kebab Shop, The
231	10370 S DE ANZA BLVD	Restaurant & Food Service	Kee Wah
232	10520 S DE ANZA BLVD	Restaurant & Food Service	Kentucky Fried Chicken
233	1655 S DE ANZA BLVD STE 7	Restaurant & Food Service	Kikusushi Japanese Restaurant
234	21271 STEVENS CREEK BLVD STE 410	Restaurant & Food Service	Kobe Pho & Grill
235	19700 VALLCO PKWY STE 130	Restaurant & Food Service	Koja Kitchen
236	19626 STEVENS CREEK BLVD	Restaurant & Food Service	Kong Tofu & Bbq
237	19600 VALLCO PKWY STE 160	Restaurant & Food Service	Kula Sushi
238	19758 STEVENS CREEK BLVD	Restaurant & Food Service	La Patisserie
239	19960 HOMESTEAD RD	Restaurant & Food Service	La Terra
240	19359 STEVENS CREEK BLVD	Restaurant & Food Service	Lazy Dog
241	20488 STEVENS CREEK BLVD	Restaurant & Food Service	Le Boulanger
242	20363 STEVENS CREEK BLVD	Restaurant & Food Service	Lee's Sandwiches
243	19732 STEVENS CREEK BLVD	Restaurant & Food Service	Legends Pizza
244	10125 BANDLEY DR	Restaurant & Food Service	Lei Garden
245	19675 STEVENS CREEK BLVD	Restaurant & Food Service	Lepi Dor Bakery
246	19772 STEVENS CREEK BLVD	Restaurant & Food Service	Liang's Kitchen
247	20588 STEVENS CREEK BLVD	Restaurant & Food Service	Little Dipper Cupertino LLC
248	19062 STEVENS CREEK BLVD	Restaurant & Food Service	Little Sheep
249	20956 HOMESTEAD RD STE H	Restaurant & Food Service	Local Cafe
250	19732 STEVENS CREEK BLVD	Restaurant & Food Service	LPC Cupertino Investment Corp DBA Legends
251	10895 S BLANEY AVE	Restaurant & Food Service	Lu Dumpling
252	20558 STEVENS CREEK BLVD	Restaurant & Food Service	Lwin Family Co
253	19399 STEVENS CREEK BLVD	Restaurant & Food Service	Lyfe Kitchen
254	19052 STEVENS CREEK BLVD	Restaurant & Food Service	Ma Ma Chen's Kitchen
255	10145 N DE ANZA BLVD	Restaurant & Food Service	Mandarin Gourmet
256	10991 N DE ANZA BLVD STE B	Restaurant & Food Service	Manley's Donuts

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C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
257	10990 N STELLING RD	Restaurant & Food Service	McDonald's
258	21250 STEVENS CREEK BLVD	Restaurant & Food Service	Mediterranean Café
259	19449 STEVENS CREEK BLVD STE 120	Restaurant & Food Service	Meet Fresh
260	19409 STEVENS CREEK BLVD	Restaurant & Food Service	Meet Fresh Tea Chansii
261	20803 STEVENS CREEK BLVD STE 110	Restaurant & Food Service	Melt, The
262	19628 STEVENS CREEK BLVD	Restaurant & Food Service	Merlion
263	19110 STEVENS CREEK BLVD	Restaurant & Food Service	Miao's Deli & Roasted Coffee Beans
264	21265 STEVENS CREEK BLVD STE 205	Restaurant & Food Service	Mitasu
265	10815 N WOLFE RD STE 106	Restaurant & Food Service	Mod Superfast Pizza
266	10787 S BLANEY AVE	Restaurant & Food Service	Monster Boba Tea and Dessert
267	10123 N WOLFE RD STE 2054	Restaurant & Food Service	Mrs Fields Cookies
268	19700 VALLCO PARKWAY # 130	Restaurant & Food Service	Naked Chicken
269	19700 VALLCO PKWY STE 190	Restaurant & Food Service	Nosh Bagels
270	10935 N WOLFE RD	Restaurant & Food Service	Nutrition Restaurant
271	19998 HOMESTEAD RD STE C	Restaurant & Food Service	Oakmont Deli Sandwich
272	19672 STEVENS CREEK BLVD	Restaurant & Food Service	Olarn Thai Cuisine
273	20800 HOMESTEAD ROAD 29F	Restaurant & Food Service	Olive Branch Personal Chef Service
274	19648 STEVENS CREEK BLVD	Restaurant & Food Service	One Pot
275	19419 STEVENS CREEK BLVD STE 100	Restaurant & Food Service	Oren's Hummus
276	20630 VALLEY GREEN DR	Restaurant & Food Service	Outback Steakhouse
277	21000 STEVENS CREEK BLVD STE 300	Restaurant & Food Service	Panda Express
278	20807 STEVENS CREEK BLVD	Restaurant & Food Service	Panera Bread
279	19469 STEVENS CREEK BLVD	Restaurant & Food Service	Panino Giusto
280	20735 STEVENS CREEK BLVD	Restaurant & Food Service	Paris Baguette
281	10030 S DE ANZA BLVD	Restaurant & Food Service	Park Place
282	21619 STEVENS CREEK BLVD	Restaurant & Food Service	Paul and Eddies Bar
283	10251 S DE ANZA BLVD	Restaurant & Food Service	Peacock Indian Cuisine & Bakery
284	20807 STEVENS CREEK BLVD STE 200	Restaurant & Food Service	Peet's Coffee & Tea
285	22350 HOMESTEAD RD	Restaurant & Food Service	Peet's Coffee & Tea
286	21265 STEVENS CREEK BLVD STE 314	Restaurant & Food Service	Phillip Bill LLC DBA Togo's Sandwiches
287	20686 STEVENS CREEK BLVD	Restaurant & Food Service	Philz Coffee
288	19439 STEVENS CREEK BLVD	Restaurant & Food Service	Philz Coffee

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	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
289	10118 BANDLEY DR STE H	Restaurant & Food Service	Pho Minh
290	19409 STEVENS CREEK BLVD	Restaurant & Food Service	Pieology Pizzeria
291	20770 STEVENS CREEK BLVD	Restaurant & Food Service	Pizza Hut
292	20530 STEVENS CREEK BLVD	Restaurant & Food Service	Pizza My Heart
293	10815 N WOLFE RD	Restaurant & Food Service	Poke Works
294	19929 STEVENS CREEK BLVD	Restaurant & Food Service	Pokeholics
295	10869 N WOLFE RD	Restaurant & Food Service	Pokeworks
296	10495 S DE ANZA BLVD	Restaurant & Food Service	Power Pot
297	19409 STEVENS CREEK BLVD STE 130	Restaurant & Food Service	Pressed Juicery
298	10889 S BLANEY AVE	Restaurant & Food Service	QQ Noodle
299	10123 N WOLFE RD STE 2119	Restaurant & Food Service	Quickly
300	10887 N WOLFE RD	Restaurant & Food Service	Quickly
301	21265 STEVENS CREEK BLVD STE 210	Restaurant & Food Service	Quickly
302	19541 RICHWOOD DR	Restaurant & Food Service	Ramen Mania
303	10074 E ESTATES DR	Restaurant & Food Service	Red Hot Wok
304	10074 E ESTATES DR	Restaurant & Food Service	Redi Pan Inc
305	10525 S DE ANZA BLVD STE 130	Restaurant & Food Service	Rio Adobe
306	19110 STEVENS CREEK BLVD STE A	Restaurant & Food Service	Roasted Coffee Bean
307	19389 STEVENS CREEK BLVD	Restaurant & Food Service	Rootstock Wine Bar
308	19650 STEVENS CREEK BLVD	Restaurant & Food Service	Rori Rice
309	10477 S DE ANZA BLVD	Restaurant & Food Service	Royal Food Restaurant, Inc.
310	20688 STEVENS CREEK BLVD	Restaurant & Food Service	Rubio's
311	10963 N WOLFE RD	Restaurant & Food Service	S&Y T Studio
312	10525 S DE ANZA BLVD STE 100	Restaurant & Food Service	Sage Management Group
313	10340 STERN AVE	Restaurant & Food Service	Saint Bar, The
314	19505 STEVENS CREEK BLVD	Restaurant & Food Service	Sancha Bar Cupertino
315	20007 STEVENS CREEK BLVD	Restaurant & Food Service	Shan Restaurant
316	10877 N WOLFE RD	Restaurant & Food Service	Shanghai Family Restaurant
317	20956 HOMESTEAD RD STE A2	Restaurant & Food Service	Shanghai Garden Restaurant
318	10122 BANDLEY DR	Restaurant & Food Service	Sheng Kee Bakery
319	10961 N WOLFE RD	Restaurant & Food Service	Sheng Kee Bakery
320	10033 SAICH WAY	Restaurant & Food Service	Sizzling Lunch

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	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
321	19541 RICHWOOD DR	Restaurant & Food Service	Sizzling Pot King
322	10825 N WOLFE RD	Restaurant & Food Service	Southland Flavor Cafe
323	10118 BANDLEY DR STE A	Restaurant & Food Service	Spicy Station
324	20080 STEVENS CREEK BLVD #104	Restaurant & Food Service	Stak Partners LLC DBA El Greco Grill
325	22390 HOMESTEAD RD	Restaurant & Food Service	Starbucks
326	21731 STEVENS CREEKBLVD	Restaurant & Food Service	Starbucks
327	20520 STEVENS CREEK BLVD STE A	Restaurant & Food Service	Starbucks
328	11111 N WOLFE RD	Restaurant & Food Service	Starbucks
329	19900 VALLCO PKWY	Restaurant & Food Service	Startup Cafe (Apple, Inc)
330	10088 N WOLFE RD STE 130	Restaurant & Food Service	Steins Beer Garden
331	10088 N WOLFE RD STE 100	Restaurant & Food Service	Stouts Burgers & Beers
332	19110 STEVENS CREEK BLVD STE B	Restaurant & Food Service	Subway
333	20916 HOMESTEAD RD STE E	Restaurant & Food Service	Subway
334	22352 HOMESTEAD RD	Restaurant & Food Service	Subway
335	21682 STEVENS CREEK BLVD	Restaurant & Food Service	Subway
336	19998 HOMESTEAD RD STE C	Restaurant & Food Service	Subway
337	19540 VALLCO PKWY STE 160	Restaurant & Food Service	Sul and Beans/Somisomi Cupertino
338	19620 STEVENS CREEK BLVD STE 180	Restaurant & Food Service	Super Cue Cafe
339	19068 STEVENS CREEK BLVD	Restaurant & Food Service	Sushi Hana Express
340	10211 S DE ANZA BLVD	Restaurant & Food Service	Sushi Kuni Cup, Inc.
341	10815 N WOLFE RD #101B	Restaurant & Food Service	Sweethoney Dessert
342	21710 STEVENS CREEK BLVD STE 200	Restaurant & Food Service	Swurlz Yogurt Shop
343	10710 S DE ANZA BLVD	Restaurant & Food Service	Taco Bell
344	20956 HOMESTEAD RD STE A1	Restaurant & Food Service	Taiwan Porridge Kingdom
345	20916 HOMESTEAD RD STE A	Restaurant & Food Service	Taste Good Cupertino
346	20956 HOMESTEAD RD STE G	Restaurant & Food Service	Tastier Panburger
347	10123 N WOLFE RD STE 2001	Restaurant & Food Service	Tatami Buffet
348	19449 STEVENS CREEK BLVD STE 120	Restaurant & Food Service	Tea Chansii
349	20916 HOMESTEAD RD STE F	Restaurant & Food Service	Tea Era Café
350	21670 STEVENS CREEK BLVD	Restaurant & Food Service	Thai Bangkok Cuisine
351	20916 HOMESTEAD RD STE A	Restaurant & Food Service	Thai Delight
352	21267 STEVENS CREEK BLVD STE 340	Restaurant & Food Service	Thai Square

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	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
353	20371 STEVENS CREEK BLVD	Restaurant & Food Service	TLT & Grill
354	10971 N WOLFE RD	Restaurant & Food Service	Tofu Plus
355	21267 STEVENS CREEK BLVD STE 314	Restaurant & Food Service	Togo's
356	10869 N WOLFE RD	Restaurant & Food Service	Tong Dumpling
357	10123 N WOLFE RD STE FC-1	Restaurant & Food Service	Topoli Enterprises Inc.
358	10787 S BLANEY AVE	Restaurant & Food Service	TP Tea
359	19959 STEVENS CREEK BLVD	Restaurant & Food Service	T-Pumps
360	19650 STEVENS CREEK BLVD	Restaurant & Food Service	T-Swirl Crepe
361	860 S BLANEY AVE	Restaurant & Food Service	Unique
362	10789 S BLANEY AVE	Restaurant & Food Service	Uzumakiya
363	10061 N BLANEY AVE	Restaurant & Food Service	Vacant (Convience Store)
364	10123 N WOLFE RD STE FC7	Restaurant & Food Service	Veggie Land
365	20010 STEVENS CREEK BLVD	Restaurant & Food Service	Village Falafel
366	21265 STEVENS CREEK BLVD 201	Restaurant & Food Service	Vitaligent East Bay Llc Dba
367	19058 STEVENS CREEK BLVD	Restaurant & Food Service	Viva Thai Bistro
368	19620 STEVENS CREEK BLVD STE 190	Restaurant & Food Service	Wingstop Restaurant
369	10619 S DE ANZA BLVD	Restaurant & Food Service	Xiang Xiang Noodle
370	10235 S DE ANZA BLVD	Restaurant & Food Service	XLB Kitchen
371	10831 N WOLFE RD	Restaurant & Food Service	Yang Bbq
372	10235 S DE ANZA BLVD	Restaurant & Food Service	Yard
373	20682 HOMESTEAD RD	Restaurant & Food Service	Yayoi
374	19620 STEVENS CREEK BLVD STE 290	Restaurant & Food Service	Yeh's Kitchen LLC (Pending)
375	10660 S DE ANZA BLVD	Restaurant & Food Service	Yiassoo
376	19700 STEVENS CREEK	Restaurant & Food Service	Yogurtland
377	20916 HOMESTEAD RD STE E	Restaurant & Food Service	Yoosone Inc
378	10700 S DE ANZA BLVD	Restaurant & Food Service	Yoshida Restaurant
379	19825 STEVENS CREEK BLVD	Restaurant & Food Service	Yoshinoya Restaurant
380	10281 S DE ANZA BLVD	Retail- Shopping Centers	Allario Center- Common Area
381	20400 STEVENS CREEK BLVD	Retail- Shopping Centers	Biltmore North
382	20735 STEVENS CREEK BLVD	Retail- Shopping Centers	Bottegas Shopping Center- Common Area
383	20610 STEVENS CREEK BLVD	Retail- Shopping Centers	Crossroads Center (Byer)- Common Area
384	20510 STEVENS CREEK BLVD	Retail- Shopping Centers	Crossroads Center (Mardesich)- Common Area

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C.4.b.ii(2)(d) POTENTIAL FACILITIES LIST (Total Facility Business Inspection Plan)

	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
385	10805 N WOLFE RD	Retail- Shopping Centers	Cupertino Village- Common Area
386	1601 S DE ANZA BLVD	Retail- Shopping Centers	Dollinger Plaza
387	20676 HOMESTEAD RD	Retail- Shopping Centers	Homestead Square- Common Area
388	19070 STEVENS CREEK BLVD	Retail- Shopping Centers	Loree Shopping Center- Common Area
389	19349 STEVENS CREEK BLVD	Retail- Shopping Centers	Main Street Cupertino- Common Area
390	10122 BANDLEY DR	Retail- Shopping Centers	Marina Plaza- Common Area
391	19758 STEVENS CREEK BLVD	Retail- Shopping Centers	Marketplace Shopping Center- Common Area
392	19620 STEVENS CREEK BLVD	Retail- Shopping Centers	Marketplace Shopping Center- Common Area
393	10385 N DE ANZA BLVD	Retail- Shopping Centers	McClellan Square- Common Area
394	10493 S DE ANZA BLVD	Retail- Shopping Centers	McClellan Square- Common Area
395	19505 STEVENS CREEK BLVD	Retail- Shopping Centers	Metropolitan (Mixed Use)- Common Area
396	19800 VALLCO PARKWAY	Retail- Shopping Centers	Nineteen-800 (Mixed Use)- Common Area
397	19940 HOMESTEAD RD	Retail- Shopping Centers	Oakmont Center- Common Area
398	21267 STEVENS CREEK BLVD	Retail- Shopping Centers	Oaks Shopping Center- Common Area
399	20051 BOLLINGER RD	Retail- Shopping Centers	Pacific Rim Plaza- Common Area
400	19625 STEVENS CREEK BLVD	Retail- Shopping Centers	Portal Plaza- Common Area
401	10073 SAICH WAY	Retail- Shopping Centers	Saich Station- Common Area
402	20803 STEVENS CREEK BLVD	Retail- Shopping Centers	Saich Station- Common Area
403	10171 S DE ANZA BLVD	Retail- Shopping Centers	Shopping Center
404	20080 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center (Biltmore N Retail)- Common Area
405	20490 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center (Cali Mill Park)- Common Area
406	20488 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center (Mixed Use)- Common Area
407	20956 HOMESTEAD RD	Retail- Shopping Centers	Shopping Center- Common Area
408	20916 HOMESTEAD RD	Retail- Shopping Centers	Shopping Center- Common Area
409	20600 VALLEY GREEN DR	Retail- Shopping Centers	Shopping Center- Common Area
410	10065 E ESTATES DR	Retail- Shopping Centers	Shopping Center- Common Area
411	10071 E ESTATES DR	Retail- Shopping Centers	Shopping Center- Common Area
412	10211 S DE ANZA BLVD	Retail- Shopping Centers	Shopping Center- Common Area
413	10133 S DE ANZA BLVD	Retail- Shopping Centers	Shopping Center- Common Area
414	10991 N DE ANZA BLVD	Retail- Shopping Centers	Shopping Center- Common Area
415	10620 S DE ANZA BLVD	Retail- Shopping Centers	Shopping Center- Common Area
416	21749 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center- Common Area

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	BUSINESS LOCATION	LICENSE TYPE	BUSINESS NAME
417	21000 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center- Common Area
418	20807 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center- Common Area
419	20311 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center- Common Area
420	20009 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center- Common Area
421	19110 STEVENS CREEK BLVD	Retail- Shopping Centers	Shopping Center- Common Area
422	1655 S DE ANZA BLVD	Retail- Shopping Centers	Shopping Center- Common Area
423	7335 BOLLINGER RD	Retail- Shopping Centers	Shopping Center- Common Area
424	10745 S DE ANZA BLVD	Retail- Shopping Centers	Shopping Center- Common Area
425	10555 S DE ANZA BLVD	Retail- Shopping Centers	Shopping Center- Common Area
426	20352 HOMESTEAD RD	Retail- Shopping Centers	Shopping Center- Common Area
427	20990 HOMESTEAD RD	Retail- Shopping Centers	Shopping Center- Common Area
428	19998 HOMESTEAD RD	Retail- Shopping Centers	Shopping Center- Common Area
429	20385 STEVENS CREEK BLVD	Retail- Shopping Centers	St. Joseph's Plaza- Common Area
430	21678 STEVENS CREEK BLVD	Retail- Shopping Centers	Stanley Square- Common Area
431	10629 S FOOTHILL BLVD	Retail- Shopping Centers	Stevens Creek Market Center- Common Area
432	19969 STEVENS CREEK BLVD	Retail- Shopping Centers	Travigne Plaza (Mixed Use)- Common Area
433	10123 N WOLFE RD	Retail- Shopping Centers	Vallco Shopping Center- Common Area
434	10900 N BLANEY AVE	Service Center	PG&E

Section 5 – Provision C.5 Illicit Discharge Detection and Elimination

Program Highlights and Evaluation
Highlight/summarize activities for reporting year:

Provide background information, highlights, trends, etc.

Summary:

Internal Staff Training/Outside Agency Coordination

On January 16, 2019, the Environmental Programs Manager, Program Specialist, and IND/IDDE Inspector conducted training with all of the Service Center maintenance staff who are assigned to on-call/after-hours emergency response which may be dispatched to a spill or discharge incident. Training topics covered were: overview of the MRP and the City's responsibilities, review of the IDDE ERP, MS4 map access and how to read it, arrival and assessment protocol, hazardous/non-hazardous incidents, notification flow chart, and documentation for additional follow up. An inventory of pollutant discharge response materials and equipment was also conducted.

On June 20, 2019, the Environmental Programs Specialist conducted the Annual Service Center Stormwater Pollution Training/Awareness Presentation to all Service Center staff (see Section C.2 for training topics). As all City employees are reporters/responders to actual or threatened discharges, basic response, notification, and triage protocol was discussed.

The City does not own or operate the sanitary sewer system serving the community. The Cupertino Sanitary District (Mark Thomas & Associates) is regulated under a separate stormwater permit. On January 7, 2019, the Program Specialist and IND/IDDE Inspector met with the Cupertino Sanitary District to discuss clarification of roles and responsibilities; notification and routing SSO (sanitary sewer overflow) incidents; food service business FOG (fats, oils, grease) inspections and enforcement referrals; construction/development plan review; and special projects of note. One primary goal of the meeting was to ensure that should sanitary overflows occur, the Sanitary District and the City are working in concert to provide mutual aid and assistance in effectively resolving and documenting discharge incidents.

Illegal Dumping

Illegal dumping continues to be a recurring challenge. The City classifies illegal dumping of all materials an IDDE actual discharge. A majority of the materials dumped are bulky household materials such as furniture and appliances which while not a direct threat to enter the MS4, could be comingled with other substances such as paint, cleaners, and automotive fluids. The IND/IDDE Inspector responds to these incidents and conducts an investigation in an effort to locate the responsible, which includes leaving door hangers which advise of the incident and include a resource to have these types of materials removed by the City's Franchised waste hauler. The dumping locations are random and have proven a challenge to address through digital or police surveillance.

C.5.c.iii ►Complaint and Spill Response Phone Number

Summary of any changes made during FY 18-19.

No change.

C.5.d.iii.(1), (2), (3) ►Spill and Discharge Complaint Tracking

Spill and Discharge Complaint Tracking (fill out the following table or include an attachment of the following information)

	Number
Discharges reported (C.5.d.iii.(1))	80
Discharges reaching storm drains and/or receiving waters (C.5.d.iii.(2))	13
Discharges resolved in a timely manner (C.5.d.iii.(3))	77

Comments:

The City has one IND/IDDE inspector who acts as the primary investigator for reports of threatened or actual stormwater pollution discharges. This inspector has worked for the City for 45 years and has a vast knowledge of the MS4 and outfall locations within the creeks. He has been the City's IND/IDDE inspector for over 11 years and is a tremendous resource to both City staff and the community with the efficiency in which he identifies and resolves discharge incidents. The Program Manager, Specialist, and Community Coordinator are also trained and equipped to respond and manage spills and discharges in the absence of the inspector. Reports of discharges, both actual and threatened are typically responded to within the City's goal of less than 24 hours; however, if a report is received during business hours, the IND/IDDE inspector is immediately dispatched to investigate.

IDDE investigations are begun through various channels: community reported, inspector initiated, interdepartmental referral, and outside agency referrals. Of the 80 total discharges investigated, 42 (53%) were community reported, 10 (13%) were inspector initiated, 20 (25%) were interdepartmental referral, and 7 (9%) were other agency referrals. This data shows that 38% of all IDDEs investigated in FY 18-19 were through proactive City investigation or other City staff observing noncompliant conditions that warranted follow up by the investigator. This reflects effective intra-agency communication and awareness of the importance for stormwater pollution prevention by City staff.

As compliance and enforcement tools, the City has established a site re-inspection fee of $275 (per inspection) and administrative citations ($100, $200, and $500 per violation). Cupertino places and emphasis on education and development of effective site management with our residents and business community; however, there is need to impose fees and fines for non-compliance and/or egregious conditions. In FY 18-19 three re-inspection fees covering three different properties were assessed totaling $1650. In FY 18-19, six administrative citations were issued for six separate non-compliant properties totaling $1600.

The City documents all calls for service requiring a response to investigate any report of a threatened or actual discharge. Of the data compiled in FY 18-19, there were five reports of discharges (threatened or actual) that were determined to be unsubstantiated upon the inspector's investigation.

When a discharge is reported or observed, the inspector's first objective is to prevent and/or limit the discharge from reaching the storm drain system and/or receiving water. In FY 18-19, of all the discharges investigated, 67 (84%) were contained to the surface area and did not enter the storm drain system (either private or the MS4). Of the 13 discharges that did reach the storm drain, 1 (10%) was the result of broken water lines on either private land or were public utility lines within the right-of-way. Water line failure discharges are a challenge to prevent since they are subsurface accidental failures of infrastructure that is controlled by another NPDES permitted party (the water utility company*). The IND/IDDE Inspector responds to these incidents and ensures BMPs are installed and mitigation/clean-up is completed in a timely manner.

*Section 402 of the Clean Water Act requires that a discharge of any pollutant or combination of pollutants to surface waters that are deemed waters of the United States be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. To provide coverage to discharges by water purveyors to waters of the United States in compliance with Clean Water Act section 402, the State Water Board adopted the Statewide General NPDES Permit for Drinking Water System Discharges to Waters of the United States on November 18, 2014.

During this reporting period there were three discharges that exceeded the 10 businesses day compliance period. Summaries of these incidents are as follows:

1. Cupertino Village: Previous violation on 4/16/19 during routine inspection. During a plan review, city staff noticed that the same inlet had illegal dumping again of used cooking oil. A NOV was issued, however the inlet was not cleaned. Staff then issued an administrative citation resulting in compliance. Compliance was achieved within 12 business days.
2. Allario Shopping Center: Uncontained trash from overloaded waste bins, discharge of used cooking oil from tallow bins, improper exterior storage of materials, and loose litter throughout the property. All violations in the rear of the shopping center and along pedestrian areas. $550 in re-inspection fees were issued due to non-compliance by the prescribed compliance date. An inlet baed full trash capture device was required to be installed on the property as a condition of development for a building permit that was issued to one of the tenant businesses contributing to the uncontained trash and litter. Compliance was achieved within 11 business days.
3. PG&E Service Center: Sediment tracking from PG&E vehicles entering and existing their service center. This location was being used as a staging area for the PG&E Vegetation Management Unit that was deployed after the Camp Fire in northern California. Vehicles and heavy equipment was being deployed daily from this site to perform vegetation clearing in Santa Clara and San Mateo counties. The vehicles and equipment was being staged overnight on unpaved areas and there were ineffective BMPs to contain sediment track out and run-off from stockpiled materials. There was significant time spent working with different levels of PG&E management to resolve these violations. The City issued one administrative citation in the amount of $200 and imposed $825 in re-inspection fees in an effort to gain compliance. The site was checked several times per week throughout the rain season to ensure there was sustained compliance. No additional violations were observed by the IND/IDDE inspector. Compliance was achieved within 11 business days.

C.5.e.iii.(2) ►Control of Mobile Sources

(a) Provide changes to your agency's minimum standards and BMPs for each of the various types of mobile businesses since the 2017 Annual Report (C.5.e.iii.(2)(a)))

The City of Cupertino follows the minimum standards and BMPs described in the "Mobile Businesses – Best Management Practices" brochure developed by the SCVURPPP IND/IDDE AHTG in May 2012 for the following mobile business categories: automobile washers/detailers, power

washers, carpet cleaners, steam cleaners, pet care services. There have been no changes to the BMPs since the 2017 Annual Report. The City did not develop additional BMPs for the mobile business types above.
(b) Provide changes to your agency's enforcement strategy for mobile businesses (C.5.e.iii.(2)(b)
In FY18/19 SCVURPPP's countywide enforcement strategy was updated to include tracking mobile business enforcement actions from SCVURPPP agencies in a table available on the SCVURPPP members only website. The tracking table is periodically updated. The City of Cupertino's stormwater inspectors find mobile businesses improperly discharging water to the street, gutter, storm drain, etc. by being proactive and observant during routine field work as well as through complaint investigations. 38% of all IDDEs investigated in FY 18-19 were through proactive City investigation or other City staff observing noncompliant conditions that warranted follow up by the investigator. This reflects effective intra-agency communication and awareness of the importance for stormwater pollution prevention by City staff. In FY 18-19 SCVURPPP's countywide enforcement strategy was updated to include tracking mobile business enforcement actions from SCVURPPP agencies in a table available on the SCVURPPP "members only" website. The tracking table is periodically updated.
(c) Provide minimum standards and BMPs developed for additional types of mobile businesses addressed since 2017 Annual Report (C.5.e.iii.(2)(c)
SCVURPPP has not developed minimum standards and BMPs for additional types of mobile business than those described in (a) above.

(d) Provide a list and summary of the specific outreach events and education conducted to each type of mobile business operating within your jurisdiction during the Permit term (C.5.e.iii.(2)(d):
The City's Environmental Programs Division (Stormwater Program) hosts tabling events and several community festivals and celebrations. Staff use an interactive "Enviroscape" model and discuss various stormwater pollution topics which include mobile businesses at these events. The City has a weekly farmers market held in Creekside Park. The vendors do not meet the criteria of mobile businesses, however, there are similarities. The IND/IDDE Inspector conducts monthly inspections of this event in both an outreach and enforcement capacity. To date, there have only been minor deficiencies such as small amounts of loose litter and produce scraps that fall to the ground and are not immediately removed by the vendors. The inspector educates the vendors and site managers of what is expected insofar as good housekeeping during the event and not only when the event concludes for the day. In addition to these actions, please refer to the C.5 Illicit Discharge Detection and Elimination section of countywide program's FY 18-19 Annual Report for description of activities at the countywide or regional level.
(e) Discuss inspections conducted at mobile businesses and/or job sites (C.5.e.iii.(2)(e)
The IND/IDDE inspector is observant of mobile businesses in his travels around the community. Any mobile business activity seen is observed and if there are any activities resulting in potential or actual discharges, they are addressed. In FY 18-19, there was one mobile vendor (carpet cleaning service) that was observed by a City code enforcement officer discharging potable hose water from the truck mounted equipment. The officer stopped the activity prior to the discharge reaching an inlet and called the IND/IDDE inspector for assistance. The mobile business owner was issued an administrative citation of $100 for the illegal discharge.
(f) List below or attach the list of mobile businesses operating within your agency's jurisdiction (C.5.e.iii.(2)(f))
In 2014 the Program compiled an inventory of mobile businesses located in Santa Clara County. The inventory was developed by reviewing business licenses, yellow page searches and online business searches. The inventory includes automotive washing, steam cleaning, power washing, pet care services and carpet cleaning mobile businesses. The inventory is periodically updated with mobile businesses stormwater inspectors observe during routine field activities, including responding to illicit discharges. The inventory is made available to all Co-permittees on the SCVURPPP "members only" webpage. The inventory is included in the Program's FY 18-19 Annual Report. The inventory currently has over 190 mobile businesses.
(g) Discuss enforcement actions taken against mobile businesses during the Permit term (C.5.e.iii.(2)(g))
Enforcement actions are typically taken in response to a complaint or illicit discharge through our IDDE Program. Enforcement actions are tracked in the city's spill and discharge complaint tracking system required by MRP C.5.d.ii. In FY 18-19 there was one enforcement action taken for mobile businesses (see above).

C.5.f.iii ►MS4 Map Availability

Discuss how you make your MS4 map available to the public and how you publicize the availability of the MS4 map.
The MS4 map continues to be posted on the City's website on both the Stormwater Pollution Prevention Page https://www.cupertino.org/our-city/departments/environment-sustainability/water/stormwater-pollution-prevention and the Green Development page

www.cupertino.org/greendev. In addition, the map was provided to San Jose Water Company (electronically), California Water Service, Cupertino Sanitary District, and Santa Clara County Fire Department (hardcopies) so in the event of a discharge, those agencies can deploy BMPs and prevention downstream of any spills before Cupertino City staff can arrive and make a determination of the flow path. A hardcopy of the map is also retained in the Environmental Programs Division office and assigned vehicle.

Section 6 – Provision C.6 Construction Site Controls

C.6.e.iii.(3)(a), (b), (c), (d) ►Site/Inspection Totals

Number of active Hillside Sites (sites disturbing < 1 acre of soil requiring storm water runoff quality inspection) (C.6.e.iii.3.a)	**Number of High Priority Sites (sites disturbing < 1 acre of soil requiring storm water runoff quality inspection)** (C.6.e.iii. 3.c)	**Number of sites disturbing ≥ 1 acre of soil** (C.6.e.iii.3.b)	**Total number of storm water runoff quality inspections conducted (include only Hillside Sites, High Priority Sites and sites disturbing 1 acre or more)** (C.6.e.iii. 3.d)
1	1	4	27

Comments:

Prior to September 1st, 2018, the City Engineer sent a reminder letter to all site developers and/or owners disturbing one acre or more of soil, hillside projects, and high priority sites to prepare for the upcoming wet season. Prior to the beginning of the wet season (October 1, 2018), the Public Works Engineering Inspector conducted inspections at each site and verified that appropriate and effective BMPs had been implemented. The City's Public Works Engineering Inspector is a Qualified SWPPP Practitioner (QSP), a Certified Erosion, Sediment, and Stormwater Inspector (CESSWI), and a Certified Public Infrastructure Inspector (CPII).

In FY 18-19, all regulated project construction sites were inspected monthly or until construction was completed. Monthly inspections were documented and saved in the City's C.6 database. When potential/actual discharge violations are observed, the Engineering Inspector requires immediate correction and monitors compliance. The City's IND/IDDE inspector also conducts periodic inspections of these site perimeters and if deficiencies are identified, the inspector will address the issue(s) and coordinate further site oversight with the Engineering Inspector.

Provide the number of inspections that are conducted at sites not within the above categories as part of your agency's inspection program and a general description of those sites, if available or applicable.

In addition to sites exceeding one acre, the Engineering Inspector conducted 80 additional inspections at high priority construction sites. The sites consist of three adjacent single-family parcels (approximately one-third to one-half acre each), two new apartment complexes (approximately 20 units), and new construction of a bank on an approximately one-quarter acre parcel.

C.6.e.iii.(3)(e) ►Construction Related Storm Water Enforcement Actions

	Enforcement Action (as listed in ERP)[1]	Number Enforcement Actions Issued
Level 1[2]	Verbal Warning	6
Level 2	Written Notice	1
Level 3	Pre-Citation Letter and/or Administrative Citation Fines	0
Level 4	Stop Work Order	0
Level 5	Referral to City Attorney	0
Level 6	Referral to Santa Clara County District Attorney/Regional Water Board	0
Level 7	City Remediation of a Nuisance	0
Total		**7**

C.6.e.iii.(3)(f), ►Illicit Discharges

	Number
Number of illicit discharges, actual and those inferred through evidence at hillside sites, high priority sites and sites that disturb 1 acre or more of land (C.6.e.iii. 3.f)	0

[1]Agencies should list the specific enforcement actions as defined in their ERPs.
[2]For example, Enforcement Level 1 may be Verbal Warning.

C.6.e.iii.(3)(g) ► Corrective Actions

Indicate your reporting methodology below.

☐	Permittee reports multiple discrete potential and actual discharges at a site as one enforcement action.
X	Permittee reports the total number of discrete potential and actual discharges on each site.

	Number
Enforcement actions or discrete potential and actual discharges fully corrected within 10 business days after violations are discovered or otherwise considered corrected in a timely period (C.6.e.iii. .3.g)	14

Comments:

Enforcement for potential and/or actual discharges identified during site inspections are investigated and resolved consistent with the Construction Site Control ERP. In FY 18-19, the following violations were identified and resolved by the City's inspector:

- Erosion Control = 6
- Sediment Control = 6
- Good Site Management = 2

When an actual or potential discharge is observed by the inspector, the construction site project manager is typically given 48 hours to correct the violation. If rainfall is imminent, the responsible person is required to correct the violation immediately. Of the 14 total potential and/or actual discharges that were identified, all 14 were corrected within 10 business days.

C.6.e.iii.(4) ►Evaluation of Inspection Data

Describe your evaluation of the tracking data and data summaries and provide information on the evaluation results (e.g., data trends, typical BMP performance issues, comparisons to previous years, etc.).

Description:

A comparison table is provided below that illustrates inspection findings over four years of MRP 2.0 implementation:

	Erosion Control	Run-on & Runoff	Sediment Control	Active Treatment	Good Site Management	Non-Stormwater Management	Total # of Corrections
FY 18-19	6	0	6	0	2	0	14
FY 17-18	3	1	7	0	8	0	19

FY 16-17	4	5	6	0	7	0	22
FY 15-16	3	4	7	0	5	0	19
Type Totals	16	10	26	0	22	0	74

The number of site deficiencies identified during inspections the past four years has remained fairly consistent. Sediment control continues to be the most frequent discharge identified by the inspector.

C.6.e.iii.(4) ►Evaluation of Inspection Program Effectiveness

Describe what appear to be your program's strengths and weaknesses, and identify needed improvements, including education and outreach.

Description:

The Environmental Programs Specialist participates in SCVURPPP's Construction AHTG and several other inspectors (Engineering Inspector, IND/IDDE Inspector, Public Works Sidewalk Inspector, and two Building Inspectors) attended the SCVURPPP annual construction site inspection workshops held in March 2019.

The City has one Public Works Engineering Inspector to oversee construction sites determined by the City to be a potential threat to water quality. He conducts inspections with multiple site visits per month at C.3 regulated project sites, hillside sites, high priority sites, and sites disturbing one acre or more of land which must comply with the State's General Construction permit. He enters his inspections and any site where a deficiency is identified in the City's C.6 database. Cupertino's Public Works Engineering Inspector is a Certified Erosion, Sediment and Storm Water Inspector (CESSWI) and a Qualified SWPPP Practitioner (QSP). He also conducts the O & M inspections for all permanently installed C3 treatments, controls and systems on private property in Cupertino.

The City has several building inspectors who conduct site inspections on both residential and non-residential building project work sites. Many of these sites are for new houses, remodels, or are significant site improvements that have activities which could have conditions which contribute to stormwater pollution. Inspectors are provided both in-house staff training (See Section C.4) and regional SCVURPPP training to become trained on stormwater pollution awareness and the process of how to refer actual or threatened discharges they may encounter to appropriate staff for further investigation and resolution.

The Engineering Inspector's evaluation of the construction inspection program is that the ever-increasing construction and development community awareness the past several years has had a positive effect in reducing the number of actual and threatened discharges. As stormwater pollution impacts and proper BMP management have been widely publicized, the inspector has observed a decrease in non-compliance and less resistance in cases where enforcement is required to effect change.

Refer to the C.6 Construction Site Control section of the Program's FY 18-19 Annual Report for a description of activities at the Program or regional level.

C.6.f.iii ►Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance
SCVURPPP Construction Stormwater Inspector Training	March 5, 2019 March 7, 2019	Managing PCBs in building demolition, a site-specific case study, sediment track-out control technologies, BMP considerations for concave construction sites	6

Section 7 – Provision C.7. Public Information and Outreach

C.7.b.i.1 ►Outreach Campaign

Summarize outreach campaign. Include details such as messages, creative developed, and outreach media used. The detailed outreach campaign report may be included as an attachment. If outreach campaign is being done by participation in a countywide or regional program, refer to the separate countywide or regional Annual Report.

Summary:

The following separate reports developed by SCVURPPP summarize countywide efforts conducted during FY 18-19:

- FY 18-19 Watershed Watch Campaign Annual Campaign Report
- FY 18-19 Watershed Watch Partner Report
- FY 18-19 Watershed Watch Web Statistics Report

These reports are included within the C.7 Public Information and Outreach section of the SCVURPPP FY 18-19 Annual Report.

City of Cupertino Campaigns are as follows:

- **Clean Water and Storm Protection Fee Outreach:** In preparation for the ballot measure to add a Clean Water and Storm Protection fee to property tax bills in Cupertino, Cupertino staff presented to 14 different community groups, established an informative web page, arranged for 4 articles in City publications and promoted the issue through social media during the spring and early summer of 2019. The ballot measure passed in July 2019.
- **GreenBiz Program:** Through the City's GreenBiz program, 2 new businesses were certified and 21 businesses were re-certified through this important program. Cupertino assists, recognizes, and rewards organizations that commit to adopting policies and implementing practices that protect the local environment and public health. GreenBiz Cupertino scaffolds the statewide Bay Area Green Business Program to offer free support to interested small/mid-size businesses, non-profit organizations and schools to navigate this rigorous certification process. Our team works with these business owners on energy and water conservation, minimizing material use and disposal, preventing pollution, and cost reduction though environmentally preferable practices.
- **Enviroscape:** The City utilizes its Enviroscape to educate children and adults about watershed and protecting the waterways from urban runoff pollution. The City's Environmental Programs Division, Grassroots Ecology (formerly Acterra), the City's Creek Education Program and other interested organizations, use this demonstration tool at events, festivals, creekside events, and in classrooms. The Enviroscape is a great hands-on model to educate Cupertino residents of all age groups.
- **Zero Litter Initiative (ZLI):** During FY 18-19, as a participant of the Santa Clara Valley Zero Litter Initiative (ZLI) the City continued implementing a right size/right service (RS2) campaign to address litter from overflowing trash and recycling containers in situations where such containers are shared by businesses or tenants in multi-family housing. ZLI participants shared learnings and materials from RS2 campaigns and developed a dumpster image for use in collateral that shows best management practices as well as other outreach pieces to support the campaign.

• **ReThink Disposable:** Cupertino partnered with Clean Water Fund to help food service businesses replace disposable products and reduce litter and waste from their establishments as part of their ReThink Disposable program. Four food service businesses in Cupertino began participating in this program in FY15-16. During FY16-17 Clean Water Fund won a contract to expand the program Countywide and Cupertino continued to assist that effort locally in FY18-19.

C.7.c. Stormwater Pollution Prevention Education

No change.

C.7.d ►Public Outreach and Citizen Involvement Events

Describe general approach to event selection. Provide a list of outreach materials and giveaways distributed.
Use the following table for reporting and evaluating public outreach events.

Event Details	Description (messages, audience)	Evaluation of Effectiveness
Provide event name, date, and location. Indicate if event is local, countywide or regional. Indicate if event is public outreach or citizen involvement.	**Identify type of event (e.g., school fair, creek clean-up, storm drain stenciling, farmers market etc.), type of audience (school children, gardeners, homeowners etc.) and outreach messages (e.g., Enviroscape presentation, pesticides, stormwater awareness) .**	**Provide general staff feedback on the event (e.g., success at reaching a broad spectrum of the community, well attended, good opportunity to talk to gardeners etc.). Provide other details such as:** • **Success at reaching a broad spectrum of the community** • **Number of participants compared to previous years.** • **Post-event effectiveness assessment/evaluation results** • **Quantity/volume of materials cleaned up, and comparisons to previous efforts**
Name: Silicon Valley Fall Festival Date: 9/15/2018 Location: Memorial Park-Cupertino Region: Local Type: Public Outreach	Audience: Families with children Outreach Message: Stormwater pollution prevention, less-toxic pest control, water quality, recycling	General Feedback: This event is always very well attended by both Cupertino and non-Cupertino residents. Played trash sorting game and Environmental Jeopardy. Due to space constraints, no Enviroscape was used this year. Many adults asked questions about pest management and drought information. Estimated Overall Attendance: 8,000 - 10,000 Visitors at Booth: 200 Number of Giveaways/Brochures: The total number of brochures given away is unknown because we recommend residents to look for materials on the City website.
Name: Coastal Cleanup Day Date: 9/15/2018	Type of Event: Creek cleanup Audience: Cupertino residents of all ages	General Feedback: This event is an excellent opportunity to inform residents about local programs and services as well as raising

Location: Calabazas Creek at Creekside Park Region: Local Type: Citizen Involvement	Outreach Message: Stormwater pollution prevention, stormwater awareness.	awareness about how much litter can be found in local creeks. Number of Volunteers: 101 Pounds of Litter Removed: 200 lbs.
Name: Garden Insect & Pesticide Alternatives Location: McClellan Ranch Preserve & City Hall Plaza Date(s): 10/20/2018 and 4/13/2019 Region: Local Type: Public Outreach	The City's naturalist set up a hands-on inspection display table at Santa Clara Valley Audubon Society's Wildlife & Harvest Day and at Cupertino's Earth Day to familiarize children and adults with common garden insects and spiders, learn about beneficial aspects, and to introduce alternative pest controls.	General Feedback: This program was effective in engaging participants at events into discussion about insects and spiders, the benefits of some of these organisms in the garden and alternatives to pesticides for dealing with pests. Overall Attendance: 500+
Name: World Water Monitoring Day Date: 3/30/19 Location: Blackberry Farm, Cupertino Region: Local Type: Citizen Involvement	Type of Event: Community Event Audience: Cupertino residents of all ages and other Santa Clara County residents Outreach Message: Stormwater pollution prevention, stormwater awareness,	General Feedback: City staff began the event with an Enviroscape presentation for participants. Grassroots Ecology then extended the education through various water stations where participants could identify creek insects, use kits to collect data such as temperature, pH levels, dissolved oxygen, and turbidity Overall Attendance: 19 people (adults and children).
Name: Earth Day & Arbor Day Date: 4/13/2019 Location: Cupertino City Hall Region: Local Type: Public Outreach	Type of Event: Community Earth Day event Audience: Cupertino residents of all ages Message: Stormwater pollution prevention, stormwater awareness, Less-toxic pest control, proper disposal of HHW, solid waste resource reduction and recycling, City services.	General Feedback: All Cupertino Environmental Staff attended this event. Many parents and children stopped by the Environmental Programs Division booth to watch the Enviroscape demonstration, play the water pollution bean bag game, and to collect flyers. This event is an excellent opportunity to engage and educate people of all ages. Estimated Overall Attendance: 8,000-10,000 Visitors at Booth: 300 Number of Giveaways/Brochures: The City encourages residents interested in flyers or brochures to collect them online to save paper.
Name: National River Cleanup Day Date: 5/19/2019	Type of Event: Creek cleanup Audience: Cupertino residents of all ages Outreach Message: Stormwater pollution prevention, stormwater awareness.	General Feedback: Participants become aware of how much litter can be found in local creeks and this event is an excellent

Location: Calabazas Creek at Creekside Park, Cupertino and various locations throughout the County Region: Local and Countywide Type: Citizen Involvement	Description: The Creek Connections Action Group coordinated the National Rivers Cleanup Day on May 19, 2019. The Program provided funding for National Rivers Clean-up Day advertising.	opportunity to inform residents on local free programs and services. Number of Volunteers: 52 Litter removed: 334 lbs.
Name: Public Works Day Date: 5/23/2019 Location: Cupertino Service Center Region: Local Type: Public Outreach	Type of Event: community event Audience: Cupertino employees & City Council Outreach Message: Stormwater pollution, waste sorting, City programs	General Feedback: City staff educated City Council and other City division staff on stormwater pollution prevention, waste sorting, and other City programs/services. Attendees played a trash sorting game with staff and asked questions about the displayed Enviroscape and demonstration waste carts. Estimated Overall Attendance: 200 Number of people who played: 30
Name: Habitat Restoration Project Dates: Throughout the year Location: McClellan Ranch Preserve and Blackberry Farm in Cupertino Region: Local Type: Citizen involvement	Volunteers pull invasive plants, mulch, collect native plant seeds, and plant native plants during the winter planting season. The goal is to improve habitats for local wildlife.	General Feedback: Volunteers help to improve habitats for wildlife by removing invasive plants and planting native plants. Participants learn about the value of native plants - both the City's open spaces and in their own backyards. Overall Attendance: 48 events with 447 youth (college age or younger) and 210 adult participants.
Name: De Anza & Foothill College Fieldtrips Dates: Throughout the year Location: McClellan Ranch Preserve and Blackberry Farm in Cupertino Region: Local Type: Citizen Involvement	Presentations were given to students regarding Stevens Creek Watershed. Discussion of the effects of non-permeable surfaces, non-point source pollution, and storm water discharge into creek was included as part of general discussion of watershed concepts and students are given hands-on opportunities to do water quality monitoring.	General Feedback: Teachers find this fieldwork a valuable addition to classroom curriculum. Overall Attendance: 18 fieldtrips, 444 participants
Name: Bug Club (Macroinvertebrate Study) Date(s): Once a month Location: McClellan Ranch Preserve Junior Museum, several locations along Stevens Creek	Eleventh year of an ongoing study of the macroinvertebrates (bugs) that live at the bottom of Stevens Creek.	General Feedback: Provides environmental education and an opportunity for community volunteers to be involved in citizen science. Overall Attendance: estimated 5-8 regular

Region: Local Type: Citizen Involvement		volunteer meets twice a month. Approximately half of the participants are youth.
Name: Water Quality Monitoring with Grassroots Ecology (formerly Acterra Stewardship) Date(s): Monthly Events Location: McClellan Ranch Preserve and several other sites along Stevens Creek in Cupertino, Sunnyvale and Mountain View Region: Local Type: Citizen Involvement	Volunteers conduct monthly monitoring of water chemistry.	General Feedback: Provides environmental education and an opportunity for community volunteers to be involved in citizen science through creek stewardship. Overall Attendance in FY17-18: 12 events total,401 youth (college age or younger) 39 adult participants.
Name: 2018 Kids 'N Fun Festival Date: August 11, 2018 Location: Cupertino Memorial Park 10185 N Stelling Rd, Cupertino Region: Countywide Type: Public Outreach Cupertino Staff volunteered at the stormwater pollution prevention booth.	Audience: Families with children Message: Stormwater pollution prevention, less-toxic pest control, litter prevention, and mercury in fish consumption advisory.	General Feedback: The beanbag game was very popular at this event. The "Guide to Eating Fish and Shellfish from San Francisco Bay" in English and Chinese language were also very popular. Estimated Overall Event Attendance: 10,000 Number of Brochures/Flyers Distributed: 247 Number of Giveaways Distributed: 242 Number of Watershed Watch Discount Cards Distributed: 108 Number of kids and adults that played the bean bag game: 324
Name: Arbor Day/Earth Day Celebration Date: April 25, 2019 Location: Central Park Pavilion, 909 Kiely Blvd., Santa Clara Region: Local event targeting City of Santa Clara Elementary schools Type: Public Outreach Cupertino staff assisted at this event.	Audience: Families with children Messages: Stormwater pollution prevention, less-toxic pest control, litter prevention, and proper disposal of HHW	General Feedback: This event is for elementary school children and their teachers. The bean bag game was very popular with the kids. Estimated Overall Event Attendance: 770 Number of Brochures/Flyers Distributed: 378 Number of Giveaways Distributed: 337 Number of Watershed Watch Discount Cards Distributed: 105 Number of kids that played the bean bag game: 275
Name: Watershed Watch "half-off" two-hour Car Wash Event Date: June 26, 2019 Location: Robertsville Classic Car Wash	Audience: Car wash customers Messages: Stormwater pollution prevention and proper car washing.	General Feedback: The event is an annual Watershed Watch event and offers an opportunity to reach car wash customers. Estimated Overall Event Attendance: 50-75

5005 Almaden Expressway, San Jose Region: Countywide Type: Public Outreach Cupertino staff assisted at this event.		Number of Brochures/Flyers Distributed: 10 Number of Watershed Watch Discount Cards Distributed: 30

C.7.e. ►Watershed Stewardship Collaborative Efforts

Summarize watershed stewardship collaborative efforts and/or refer to a regional report that provides details. Describe the level of effort and support given (e.g., funding only, active participation etc.). State efforts undertaken and the results of these efforts. If this activity is done regionally refer to a regional report.

Evaluate effectiveness by describing the following:

- Efforts undertaken
- Major accomplishments

Summary:

During FY 18-19, the Program actively supported the Santa Clara Basin Watershed Initiative, including the Land Use Subgroup, and the Santa Clara Valley Zero Litter Initiative. Information on these efforts is included within the C.7 Public Information and Outreach section of the Program's FY 18-19 Annual Report.

C.7.f. ►School-Age Children Outreach

Summarize school-age children outreach programs implemented. A detailed report may be included as an attachment.

Use the following table for reporting school-age children outreach efforts.

Program Details	Focus & Short Description	Number of Students/Teachers reached	Evaluation of Effectiveness
Provide the following information: Name Grade or level (elementary/ middle/ high)	Brief description, messages, methods of outreach used.	Provide number or participants	Provide agency staff feedback. Report any other evaluation methods used (quiz, teacher feedback etc.). Attach evaluation summary if applicable.
Name: Teen Leadership Academy Grade: High School Date: 7/19/18 Location: McClellan Ranch Preserve	Teen education about Environmental Programs as part of a larger summer program to raise awareness of City operations. Outreach Message: Presentation on how City programs support environmental goals and protection requirements.	11 high school students	Environmental Programs and Sustainability Division staff presented about waste reduction, landfill diversion, and greenhouse gas reduction goals for the City. That was followed by a group exercise designed to get the students thinking about how to communicate the goals and attendant strategies to the public.

Nature Camp, Nature Play, and Summer Fun camps Grade Level: children 5-10 years old Dates: June, July, August 2018 Location: McClellan Ranch Preserve	Participants in five week-long sessions of Nature Camp and four week-long sessions of Summer Science take part in presentations and activities related to water quality and watershed health.	In 2018: 150 students and 20 staff	General Feedback: General Feedback: Camp goers enjoyed hands-on activities, nature activities, and storytelling.
Name: Grassroots Ecology Youth Stewards & Nature Walk & Talks for the Community Grade: High School Location: McClellan Ranch Preserve	The Grassroots Ecology Youth Stewards are teens who met most Friday afternoons with a focus on environmental education and stewardship.	Total Students: 240 (77 individual attendees)	General Feedback: The teens are quite enthusiastic at having the opportunity to make a real contribution to improving habitat and greatly enjoy working with other teens.
Name: Cupertino 3rd Grade Education & Field Trip Program Grade Level: 3rd grade	The 3rd Grade Education and Field Trip Program is very popular with the Cupertino School District and its teachers. Started in 1995, it continues to be refined to update and incorporate new messages. A half hour review of general water and habitat pollution prevention and creek concepts precede the actual creek walk. Cupertino's docents observe what each teacher has spent time in the classroom reviewing to prepare the students for the field trip.	Total Students:1756 Total Parents: 272 Total Teachers: 73 Total Overall: 2101	General Feedback: The 3rd Grade Education and Field Trip Program continues to be popular among students, educators and parents.

Section 9 – Provision C.9 Pesticides Toxicity Controls

C.9.a. ►Implement IPM Policy or Ordinance

Is your municipality implementing its IPM Policy/Ordinance and Standard Operating Procedures?	X	**Yes**		**No**
If no, explain:				

Report implementation of IPM BMPs by showing trends in quantities and types of pesticides used, and **suggest reasons for increases in use of pesticides** that threaten water quality, specifically organophosphates, pyrethroids, carbamates fipronil, indoxacarb, diuron, and diamides. A separate report can be attached as evidence of your implementation.

Trends in Quantities and Types of Pesticide Active Ingredients Used[1]

Pesticide Category and Specific Pesticide Active Ingredient Used	**Amount**[2]					
	FY 15-16	**FY 16-17**	**FY 17-18**	**FY 18-19**	**FY 19-20**	**FY 20-21**
Organophosphates						
Active Ingredient Chlorpyrifos	0	0	0	0		
Active Ingredient Diazinon	0	0	0	0		
Active Ingredient Malathion	0	0	0	0		
Pyrethroids (see footnote #2 for list of active ingredients)						
Active Ingredient Type X	0	0	0	0		
Active Ingredient Type Y	0	0	0	0		
Carbamates						
Active Ingredient Carbaryl	0	0	0	0		
Active Ingredient Aldicarb	0	0	0	0		
Fipronil	0	0	0	0		
Pesticide Category and Specific Pesticide Active Ingredient Used	**Amount**					
	FY 15-16	**FY 16-17**	**FY 17-18**	**FY 18-19**	**FY 19-20**	**FY 20-21**

[1]Includes all municipal structural and landscape pesticide usage by employees and contractors.
[2]Weight or volume of the active ingredient, using same units for the product each year. Please specify units used. The active ingredients in any pesticide are listed on the label. The list of active ingredients that need to be reported in the pyrethroids class includes: metofluthrin, bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambdacyhalothrin, and permethrin.

Indoxacarb	Reporting not required in FY 15-16	0	0	0		
Diuron	Reporting not required in FY 15-16	0	0	0		
Diamides	Reporting not required in FY 15-16	0	0	0		
Active Ingredient Chlorantraniliprole		0	0	0		
Active Ingredient Cyantraniliprole		0	0	0		

Reasons for increases in use of pesticides that threaten water quality: N/A

IPM Tactics and Strategies Used:

- At McClellan Ranch Preserve volunteers with the Habitat Restoration Project pull invasive plants, mulch, collect native plant seeds, and plant native plants during the winter planting season under the guidance of Grassroots Ecology.
- Roadsides with heavy vegetation that needs to be controlled are flail-mowed.
- Non-chemical Gophinator and Macabee gropher traps were used at Blackberry Farm to control gophers, serviced by Public Works staff. Carbon monoxide-based "BurrowX" was also used to control ground squirrels, moles, and ground squirrels.
- Road medians throughout the city continue to be re-landscaped using drought tolerant plants and mulch to reduce water runoff and weeds.
- Newly drafted Cupertino Parks Master Plan includes Goal 1.B: "Implement or support work by others to remove invasive species, address bank erosion, enhance habitat value, and improve water quality and flood capacity to enhance the ecological function along Regnart, Calabazas, Heney, Stevens, Permanente and Saratoga Creeks, Junipero Serra Channel, and open space parcels." Goal 7.B.xii states "Continue to reduce the use of toxics and hazardous chemicals through Cupertino's Integrated Pest Management program."
- See Attachment C9-1 on page 9-7 and 9-8 of this section to see the City of Cupertino's six year summary of all pesticides use on City property.

C.9.b ►Train Municipal Employees

Enter the number of employees that applied or used pesticides (including herbicides) within the scope of their duties this reporting year.	30
Enter the number of these employees who received training on your IPM policy and IPM standard operating procedures within this reporting year.	30
Enter the percentage of municipal employees who apply pesticides who have received training in the IPM policy and IPM standard operating procedures within this reporting year.	100%

Type of Training:

Annual City and Contractor IPM Training

June 4, 2019 – The Annual City and Contractor IPM Training meeting was held at City Hall. All pesticide applicator supervisors and contractors attended, and the City's Naturalist and Park Improvement Manager also participated in the discussion. Topics covered included:

- Use of glyphosate and the recent court cases. Glyphosate is considered by staff to be very effective and requires less substance to be applied than other types of herbicides. The wet winter did result in more weeds in FY18-19 which resulted in increased use.
- The surfactant in Round-Up is prohibited for use near waterways so it is never used by staff near our creeks. If there was a severe problem with an invasive species such as Tree of Heaven plant, the "cut and dab" application method could be allowed, but that was not needed in FY18-19. The golf course has very sandy soil and requires minimal weed control as a result.
- The golf course contractor continues to try safer fungicides on the golf course turf and reports they are effective.
- Discussion of whether use of products not labeled for pest control is allowed (e.g. vinegar). There are legal restrictions, but there are options to propose use of something to the Department of Agriculture.
- Goals in the new Parks Master Plan include turf reduction, low water usage, emphasis on IPM and planting more native plants as well as enabling pollinator corridors, including medians.
- Control of rodents in buildings and alternatives if anti-coagulant prohibition laws pass.

In addition to regular staff meetings where IPM methodology is conveyed, and ongoing instruction about updating practices for how to use the least amount of product possible to address pest issues, City of Cupertino staff attended the following trainings where IPM methods were addressed:

- The contracted applicator for Blackberry Farm Golf Course attended "Turf Grass IPM" at the Sports Spring Symposium at Yocha Dehe Golf Club in March, 2019 and "IPM Fungicides and Alternatives" class at the GCSAA Conference on IPM in San Diego in February 2019.
- Cupertino Grounds Division Staff attended the following trainings:

  9/11/18 – Ground squirrel and gopher management workshop, Santa Clara county division of agriculture & UCCE Santa Clara county

  Attendees: 15 (incl. Grounds Supervisor)

  9/19/18 – Tree Symposium 2018, Target specialty Products

  Attendees: 15 Maintenance workers and the Grounds Supervisor

  1/10/2019 Western Tree Failure annual meeting

  Attendees: 7 Maintenance workers and one Supervisor

  1/22/2019 Pesticide safety training on site. Training provided by Wilbur Ellis Co.

Attendees: 35 Maintenance Workers and the Grounds and Trees Supervisors.
3/19/19 – Univar Customer Appreciation Day, Univar
Attendees: 1
3/21/19 – Morgan Hill seminar, PAPA
Attendees: 10 Maintenance Workers and the Grounds and Trees Supervisors
3/21/2019 MSA meeting pesticide IPM update
Attendees: one Maintenance Worker
4/29/2019 – 5/2/2019 ISA Conference in Waikiki
Attendees: one Supervisor and one Lead Maintenance Worker
4/30/19 – CAPCA Ed San Jose, CAPCA
Attendees: 6 (Incl. Grounds Supervisor)
5/15/19 – San Jose Seminar, PAPA
Attendees: 7 (Incl. Grounds Supervisor)
6/12/19 – Concord Seminar, PAPA
Attendees: 1
10/1/19 – QAL & QAC State Licensing Prep Course, Target specialty Products
Attendees: 1

IPM Topics Covered: IPM with an organic approach, the influence of turf management on turf diseases, organic weed management, organic and green solutions to ground squirrel problems, alternative herbicides. organic and OMRI pesticides, ground squirrel control: organic options and new technologies, owls as biocontrol for gophers, creating an IPM plan, how to build a post-emergent program without Glyphosate, organic weed control.

City staff provides ongoing communication throughout the year about updating practices to use the least amount of product possible to control issues.

In addition to safety training, IPM methodology is communicated to pest management staff in regular meetings with their supervisors.

C.9.c ►Require Contractors to Implement IPM

Did your municipality contract with any pesticide service provider in the reporting year, for either landscaping or structural pest control?	X	**Yes**		**No**
If yes, did your municipality evaluate the contractor's list of pesticides and amounts of active ingredients used?	X	**Yes**		**No,**

If your municipality contracted with any pesticide service provider, briefly describe how contractor compliance with IPM Policy/Ordinance and SOPs was monitored.

Summary:

The City of Cupertino employs two contractors (one for buildings and facilities and one for the golf course) who have worked for the City for more than ten years. Each contractor reports to one assigned City staff supervisor from whom they are required to obtain staff approval before applying any pesticides and with whom they have regular in-person contact. Monthly pesticide usage reports for any product applied inside or outside of City buildings are reviewed by City Environmental Division staff to provide an additional level of insurance that IPM application restrictions are continually being implemented. Contractors are contacted if the monthly report indicates that they might not be incorporating IPM techniques to the extent possible.

Each year in June the contractors attend a City staff roundtable/training meeting to discuss the successes and challenges of IPM measures they used during the current fiscal year and new methods or training that will be pursued in the upcoming fiscal year. Contractors are required to follow applicable City of Cupertino pest-specific IPM plans and report on and submit documentation describing the IPM techniques that were implemented. City supervisors check with contractors to confirm the use of IPM methods, such as monitoring for pests, taking measures to exclude specific pests without using pesticides and using other non-chemical methods.

The City of Cupertino's IPM Policy and contract specifications require that contractors follow IPM techniques and use pesticides only as a last resort to protect the health and safety of the community.

Additionally, contractors are not allowed to use pesticides of concern.

If your agency did not evaluate the contractor's list of pesticides and amounts of active ingredients used, provide an explanation. N/A

C.9.d ►Interface with County Agricultural Commissioners

Did your municipality communicate with the County Agricultural Commissioner to: (a) get input and assistance on urban pest management practices and use of pesticides or (b) inform them of water quality issues related to pesticides,	X	Yes		No

If yes, summarize the communication. If no, explain. See Section 9 of the SCVURPPP FY 18-19 Annual Report for summary of communication with the Santa Clara County Agricultural Commissioner.				
Did your municipality report any observed or citizen-reported violations of pesticide regulations (e.g., illegal handling and applications of pesticides) associated with stormwater management, particularly the California Department of Pesticide Regulation (DPR) surface water protection regulations for outdoor, nonagricultural use of pyrethroid pesticides by any person performing pest control for hire.		**Yes**	X	**No**
If yes, provide a summary of improper pesticide usage reported to the County Agricultural Commissioner and follow-up actions taken to correct any violations. A separate report can be attached as your summary. N/A				

C.9.e.ii (1) ►Public Outreach: Point of Purchase

Provide a summary of public outreach at point of purchase, and any measurable awareness and behavior changes resulting from outreach (here or in a separate report); **OR** reference a report of a regional effort for public outreach in which your agency participates.

Summary:

The following separate reports developed by SCVURPPP and BASMAA summarize point of purchase outreach efforts conducted during FY 18-19:

- FY 18-19 Store Employee Training Report (SCVURPPP)
- FY 18-19 Store Employee Training Evaluation Summary (SCVURPPP)
- FY 18-19 Store Employee Training Status Table (SCVURPPP)
- FY 18-19 List of Stores in the IPM Store Partnership Program (SCVURPPP)
- FY 18-19 BASMAA "Our Water, Our World" (OWOW) Report (BASMAA)

C.9.e.ii (2) ►Public Outreach: Pest Control Contracting Outreach

Provide a summary of outreach to residents who use or contract for structural pest control and landscape professionals); **AND/OR** reference a report of a regional effort for outreach to residents who hire pest control and landscape professionals in which your agency participates.

Summary:

See Section 7 and Section 9 of the Program's FY 18-19 Annual Report for a summary of outreach to residents and businesses that use or hire structural pest control and landscape professionals. In addition, see the following separate report, included within Section 7 of the Program's FY 18-19 Annual Report.

- FY 18-19 Watershed Watch Campaign Final Report

C.9.e.ii.(3) ►Public Outreach: Pest Control Operators

Provide a summary of public outreach to pest control operators and landscapers and reduced pesticide use (here or in a separate report); **AND/OR** reference a report of a regional effort for outreach to pest control operators and landscapers in which your agency participates.

Summary:

See the C.9 Pesticides Toxicity Control section of Program's FY 18-19 Annual Report for a summary of our participation in and contributions towards countywide and regional public outreach to pest control operators and landscapers to reduce pesticide use.

C.9.f ►Track and Participate in Relevant Regulatory Processes

Summarize participation efforts, information submitted, and how regulatory actions were affected; **AND/OR** reference a regional report that summarizes regional participation efforts, information submitted, and how regulatory actions were affected.

Summary:

During FY 18-19, we participated in regulatory processes related to pesticides through contributions to the Program, BASMAA and CASQA. For additional information, see the Regional Report submitted by BASMAA on behalf of all MRP Permittees.

C.9.g. ► Evaluate Implementation of Pesticide Source Control Actions

(For FY 18-19 Annual Report only) Submit an evaluation that assesses; 1) the effectiveness of IPM efforts required in Provisions C.9.a-e and g, 2) a discussion of any improvements made in the past five years; 3) any changes in water quality regarding pesticide toxicity in urban creeks; and 4) a brief description of one or more pesticide-related area(s) the Permittee will focus on enhancing during the subsequent permit term.

Summary:

See Section C.9 Pesticides Toxicity Control of SCVURPPP's FY 18-19 Annual Report for a report that includes the following:

- An evaluation of the effectiveness of source control measures implemented;
- Changes in water quality regarding pesticide toxicity in urban creeks;
- Improvements made to Cupertino's IPM Program in the past five years; and
- Pesticide-related area(s) that Cupertino will focus on enhancing during the next permit term.

Cupertino Yearly Comparison Summary of Pesticides Used on City property (in pounds unless otherwise noted):

Active Ingredient	Target Pest	Application Location	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
Acetamiprid	Aphids	Parks	0	0	0	0	0	528.6 fl oz
Acibenzolar-S-Methyl	Pink Snow Mold	Golf	0	0	0	0	0	0.566 fl oz
Alkylphenol Ethoxylate	Aphid	Trees	0	0	0	1.996 oz	480 fl oz	660.7 oz
Ammonium Nitrate	Weeds	Grounds	0	0	0	0.3996 oz	0	0
Azoxystrobin	Fungus	Vegetation	0	0	1.125	.0048 lbs 0.074 oz	0.074 fl oz	24 fl oz
Difethialone*	Rats	Facilities	0.025	0.007	0.0005	0.0005	0.0003875*	.0002813*
Dinotefuran	Aphids	Median	0	0	1	51.45	12.7	1.6
Flutolanil****	Greens	Golf	4.2	0	0	0	0	0
Glyphosate (Roundup)***	Weeds	Various	186.576	396.8	52.67 gallons	73.55 gallons	23.36 gallons	24.37 gallons
Iprodione	Greens	Golf	9.06	2.5	5	0	0.583 gals 1.53 lbs	1.165 gal
Iron Hedta	Weeds	Parks	3.84	11.16	29.784	71.10 lbs 8.52 gal	23.34 fl oz	0
Isoxaben*****	Weeds	Medians	0.75	0	18.56	26.86 lbs	18.375	13.45
Halosulfuron (Methyl-5-3-chloro-1-methyl-1-H-pyrazole-4-carboxylate)	Nutsedge Weeds	Median	0	0.446	1.721 grams	0	0	0
Napthaleneacetic Acid	Weeds		0	0	0.628	0	0	0
Oryzalin (Surflan)*****	Weeds	Medians	60	160.5	0.558	19.6 lbs 2.348 gal	181 fl oz	245.2 fl oz
PCNB	Fungus	Golf	3	7.5	46	13.86 lbs	0	0
Pendimethalin	Weeds	Parks	116	272	200	4.6	1.6	11.2
Penoxsulam	Weeds	Golf	0.04	0.06	0.06	0	0.442 fl oz	1.178 fl oz
Polyalkyleneoxide	Surfactant	10362 Bret	0	0	0.5	0	0	0

Potassium Phosphite**	Fungus	Golf	0	0	0	0	13.17 fl oz	0
Pyraclostrobin	Fungus	Golf	0	0	0	0	0	9.79 fl oz
Tebuconazole	Fungus	Parks	0	0	0.017	0	0	0
Thiophanate-Methyl	Fire Blight	Pear Trees	0	0	0	0	3.075	0.625 gal
Triclopyr	Weeds	Facilities	0	6.95	14.73	26.92 lbs 412.88 oz	529.24 fl oz	879.48 fl oz

Trends in Quantities and Types of Pesticides Used

*Use of rodenticide was halted at the Senior Center in 2017-18. Difethialone is used with a risk mitigation measure of putting baits into tamper resistant boxes to prevent poisoning of non-targeted animals (e.g. dogs). It is used in tiny quantities and is placed in a bait station and on a concrete block to elevate it from rain and water.

** Pear trees were suffering from Fire Blight and efforts to trim affected areas were not sufficient to cure and prevent spread. Reliant Systemic containing
Potassium Phosphite was applied directly to trunk of tree under low pressure where it was absorbed into the xylem. Only a few trees were treated and it was applied in dry weather for quick absorption.

*** Roundup is popular because the chemical breaks down fast, but the surfactant used is toxic to aquatic wildlife, so staff does not use Roundup near the creeks. "Cut and Dab" on cut stems can be used judiciously with Roundup but no spraying near the creeks.

****The City does not use organophosphates, pyrethroids, or carbaryl pesticides and discontinued the use of fipronil in FY 2010-2011. However Flutolanil (Prostar) (Not on SF List) was used in FY 13-14 at the rate of 2.2 ounces per thousand square feet for the cure of Waitea Brown Ring Patch. Flutolanil had been used in the past, and at that time it was on the SF list of approved pesticides. Two applications were made on the golf course before realizing that the chemical is not on the SF list.

*****The Grounds Maintenance Department uses isoxaben and oryzalin as pre-emergents. The City's Pest Control Advisor selected pre-emergents to keep the weeds from germinating instead of spraying glyphosate (post-emergent) in larger quantities to kill the weeds after they emerge. The two active ingredients, particularly when combined, cover a very broad spectrum of weeds therefore requiring a smaller amount of glyphosate than would otherwise be needed. To reduce pesticide use due to over watering, the City installed drip systems throughout all City property.

Section 10 - Provision C.10 Trash Load Reduction

C.10.a.i ► Trash Load Reduction Summary

For population-based Permittees, provide the overall trash reduction percentage achieved to-date within the jurisdictional area of your municipality that generates problematic trash levels (i.e., Very High, High or Moderate trash generation). Base the reduction percentage on the information presented in C.10.b i-iv and C.10.e.i-ii. Provide a discussion of the calculation used to produce the reduction percentage

Trash Load Reductions	
Percent Trash Reduction in All Trash Management Areas (TMAs) due to **Trash Full Capture Systems** (as reported C.10.b.i)	25.0%
Percent Trash Reduction in all TMAs due to **Control Measures Other than Trash Full Capture Systems** (as reported in C.10.b.ii)[1]	64.9%
Percent Trash Reduction due to **Jurisdictional-wide Source Control Actions** (as reported in C.10.b.iv)	0.0%
SubTotal for Above Actions	**89.9%**
Trash Offsets (Optional)	
Offset Associated with Additional Creek and Shoreline Cleanups (as reported in C.10.e.i)	0.5%
Offset Associated with Direct Trash Discharges (as reported in C.10.e.ii)	0.0%
Total (Jurisdictional-wide) % Trash Load Reduction through FY 2018-19	**90.4%**

Discussion of Trash Load Reduction Calculation and Attainment of the 80% Mandatory Deadline:

The City attained and reported 94.1% trash load reduction (including trash offsets) in its FY 17-18 Annual Report. During FY 18-19, the City continued to implement a robust trash control measure program, including the installation of an additional 189 adjustable retractable curb screens that helped the City maintain its trash load reduction above the mandatory 80% trash load reduction requirement included in the MRP. The total (jurisdiction-wide) percent trash load reduction in FY 18-19 is 90.4% (including trash offsets).

The most recent version of the City's Baseline Trash Generation Map can be downloaded at http://scvurppp.org/trash-maps/.

[1] See Appendix 10-1 for changes between 2009 and FY 18-19 in trash generation by TMA as a result of Full Capture Systems and Other Measures.

C.10.a.iii ► Mandatory Trash Full Capture Systems

Provide the following:

1) Total number and types of full capture systems (publicly and privately-owned) installed prior to FY 18-19, during FY 18-19, and to-date, including inlet-based and large flow-through or end-of-pipe systems, and qualifying low impact development (LID) required by permit provision C.3.
2) Total land area (acres) treated by full capture systems for population-based Permittees and total number of systems for non-population based Permittees compared to the total required by the permit.

Type of System	# of Systems	Areas Treated (Acres)
Installed in FY 18-19		
Private full capture	7 Properties	17.2
Installed Prior to FY 18-19		
Connector Pipe Screens (Public)	141	198.9
Total for all Systems Installed To-date	**148**	**216.1**
Treatment Acreage Required by Permit (Population-based Permittees)		**64**
Total # of Systems Required by Permit (Non-population-based Permittees)		**N/A**

C.10.b.i ► Trash Reduction - Full Capture Systems

Provide the following:

1) Jurisdictional-wide trash reduction in FY 18-19 attributable to trash full capture systems implemented in each TMA;
2) The total number of full capture systems installed to-date in your jurisdiction;
3) The percentage of systems in FY 18-19 that exhibited significant plugged/blinded screens or were >50% full when inspected or maintained;
4) A narrative summary of any maintenance issues and the corrective actions taken to avoid future full capture system performance issues; and
5) A certification that each full capture system is operated and maintained to meet the full capture system requirements in the permit.

TMA	Jurisdiction-wide Reduction (%)	Total # of Full Capture Systems	% of Systems Exhibiting Plugged/Blinded Screens or >50% full in FY 18-19	Summary of Maintenance Issues and Corrective Actions
1	11.4%	156	0%	All of the City's full capture devices are connector pipe screens. Each device is removed, inspected, cleaned and the inlet vacuumed twice per year beginning in July to prepare for the rainy season and again post rainy season. Vacuum truck maintenance crews met with Engineering, Environmental and GIS staff several times in FY 15-16 to develop a tracking method for connector pipe screen blockage of 50% or more. To date, including FY 18-19, maintenance crews have not observed blockage to that extent. Additionally, during an unusually heavy and prolonged rainy season in FY 18-19, there were no drainage inlets in Cupertino that were significantly blocked. With these results, the City is not planning to change its full capture system maintenance procedures. If any devices are found to be > 50% blocked at the time of inspection and cleaning, the cleaning frequency will be increased to ensure maximum efficiency.
2	9.7%			
3	1.1%			
4	2.4%			
5	0.3%			
7	0.0%			
8	0.0%			
9**	0.0%			
Total	**25.0%**			

Certification Statement:

The City of Cupertino certifies that a full capture system maintenance and operation program is consistently being implemented to maintain all its full capture devices (connector pipe screens) in a manner that meets the full capture system requirements included in the Permit.

*TMA 6 is entirely comprised of non-jurisdictional (i.e., K-12 public schools, colleges or universities) and therefore is not reported.
**TMA 9 is comprised entirely of low trash generating areas.

C.10.b.ii ► Trash Reduction – Other Trash Management Actions (PART A)

Provide a summary of trash control actions other than full capture systems or jurisdictional source controls that were implemented within each TMA, including the types of actions, levels and areal extent of implementation, and whether actions are new, including initiation date.

TMA	Summary of Trash Control Actions Other than Full Capture Systems
TMA 1	Enforcement: One administrative citation in the amount of $100 was issued and one re-inspection fee in the amount of $275 was assessed for follow up to ensure compliance. This information is also reported in Sections C.4 and C.5 of this report. See description of re-inspection fee process under row for TMA 1, 2, 3, 4, 5, and 8. City installed 1 adjustable, retractable curb inlet screen in this TMA.
TMA 2	As standard conditions of approval (COAs) for new and redeveloped commercial and residential properties, the City required the following in this TMA: • installation on private property of 19 inlet based full trash capture devices (and ongoing maintenance for each) on one private commercial site which treats a combined 5.31 acres in a high trash generation area; • One waste trio receptacle set (trash/recycling/compost) was installed on one site adjacent to the public right-of-way for pedestrian and community use. Trios are required to be maintained by the property owner in perpetuity under staff's authority to enforce the City's Litter Prevention Ordinance. Enforcement: One administrative citation in the amount of $1000 was issued and one re-inspection fee of $275 was assessed for follow up to ensure compliance. Due to poor site performance at the location (large retail shopping center) the past two years, the City required the property owner to install inlet based full trash capture devices for the site which was completed in January 2019. The treatment included the installation of 30 inlet devices treating 3.07 acres of the property. Due to site construction nuances, one storm drain trunk line was unable to be treated, however, this line is treated upstream with LID bioretention and there are no catch basins between the bioretention area, and the storm drain line leaving the property for connection with the MS4. The site will continue to be regularly inspected through the IND program and targeted random site checks. This information is also reported in Sections C.4 and C.5 of this report. See description of re-inspection fee process under row for TMA 1, 2, 3, 4, 5, and 8. City installed 22 adjustable, retractable curb inlet screens in this TMA.
TMA 3	Enforcement: Four administrative citations in the amount of $600 were issued and seven re-inspection fees in the amount of $3,575 were assessed for follow up to ensure compliance. This information is also reported in Sections C.4 and C.5 of this report. See description of re-inspection fee process under row for TMA 1, 2, 3, 4, 5, and 8.
TMA 4	As standard conditions of approval (COAs) for new and redeveloped commercial and residential properties, the City required the following in this TMA: • Installation on private property of 24 inlet based full trash capture devices (and ongoing maintenance for each) on five separate private commercial sites which treats a combined 10.05 acres in a medium trash generation area;

	• Three waste trio receptacle sets (trash/recycling/compost) were installed on three sites adjacent to the public right-of-way for pedestrian and community use. Trios are required to be maintained by the property owner in perpetuity under staff's authority to enforce the City's Litter Prevention Ordinance. Enforcement: Two re-inspection fees in the amount of $825 were assessed for follow up required after warnings were issued for violations observed. This information is also reported in Sections C.4 and C.5 of this report. See description of re-inspection fee process under row for TMA 1, 2, 3, 4, 5, and 8. City installed 13 adjustable, retractable curb inlet screens in this TMA.
TMA 5	TMA 5 contains one of the City's two trash hot spot areas. In addition to the MRP required hot spot assessments and cleanups, staff conducts extra trash cleanups in this area each year. In FY 18-19, four additional trash cleanups were conducted and a total of 3.7 cubic yards of litter and trash were removed. The area staff cleans during these extra trash cleanups exceeds the area defined in the MRP as a designated hot spot area. City installed 9 adjustable, retractable curb inlet screens in this TMA.
TMA 7	This TMA consists of city parks, schools, and churches. It is partially treated by full capture devices within neighboring TMAs. City parks continue to be maintained multiple times per week by maintenance crews. Two volunteer creek cleanup events for National River Cleanup Day and Coastal Cleanup Day were held at this hot spot in addition to the required hot spot assessment and trash cleanups. In FY 18-19, Approximately 300.5 gallons of litter and trash were removed from TMA 7 as a result of additional volunteer cleanup events.
TMA 8	With the exception of approximately 12.49 acres of multi-family residential property, this TMA is a C.3. regulated project wherein all drain inlets that connect to the City's storm drain system are treated with full capture and LID. Per Cupertino municipal code, section 9.18.115, All Regulated Projects must install full trash capture devices to collect litter and debris from their project site, prior to connecting to the City's storm drain collection system. The project which comprises most of this TMA is a new corporate campus. With the exception of the visitor center this campus is not open to the general public.
TMA 9	TMA 9 is primarily comprised of residential properties and as such, is a low trash generation area. This area does however contain two public golf courses along a riparian area which are inspected annually as part of the IND program. Enforcement: One re-inspection fee in the amount of $275 was assessed for follow up required after a warning was issued for violations observed during an IND inspection at one of the golf courses. This information is also reported in Section C.4 of this report. See description of re-inspection fee process under row for TMA 1, 2, 3, 4, 5, and 8. City installed 144 adjustable, retractable curb inlet screens in this TMA.
TMAs 1, 2, 3, 4, 5, 7, and 8	**Anti-littering enforcement**: Litter Prevention municipal code Section 9.18.215 requires private commercial property owners to maintain a litter-free site, including parking lots and sidewalks at the perimeter of their property. City staff enforce compliance during IND inspections and in response to reports from the public and agency staff through the IDDE program. Re-inspection fees may be assessed for each staff visit to verify compliance after the initial inspection. An annual courtesy letter is mailed to property owners and site operators informing them their commercial site will be inspected at some point within the year and any deficiencies that cannot be resolved while the inspector is on site will result in a $275 reinspection fee (per inspection) to cover the

	cost of the inspector's time and to incentivize active site management for trash and other pollutant discharges (actual or potential) and appropriate and effective implementation of BMPs.
TMAs 5 and 7	**On-land Cleanup:** Additional cleanups were conducted at the City's two hot spots. The hotspot on Calabazas Creek is cleaned during the required assessment and then twice more during popular volunteer events in May and September. Stevens Creek was being cleaned by staff monthly until FY 17-18, when trash and litter reduction had been noticeably reduced and bi-monthly cleanups were deemed sufficient. In FY 18-19, the number of additional cleanups was reduced due to three other MRP/Program requirements needing significant staff time to complete: 1) development of the GSI Plan, 2) development and implementation of the PCB demolition program, and 3) enhanced OVTAs on properties greater than 10,000 square feet.
TMAs 1, 2, 3, 4, 5, 7, and 8	**Other Types of Actions:** The Environmental Programs Division (Stormwater Program) reviews residential and non-residential development and construction projects at the time of permit submittal. Through this process the City requires full trash capture systems on properties that connect to the City's storm drain system at all commercial and multi-family project sites. Maintenance of the devices is re-checked during IND and IDDE inspections. In FY 18-19 a total of 6 reviewed projects were completed in TMAs 2 and 4 resulting in 43 inlet based full trash capture devices being installed.
TMAs 1, 2, 3, 4, 5, and 7	**Improved Trash Bin/Container Management:** The City mandates commercial and multi-family residential redevelopment project owners to permanently install and maintain outdoor public waste/recycling/compost "trios" to provide convenient disposal for pedestrians. Trios are required to be installed on private property adjacent to the public sidewalk to provide convenient opportunities for pedestrians walking with food packaging/beverage containers to dispose of their trash. In FY 18-19, four trios were installed in TMAs 2 and 4.
TMAs 1, 2, 3, 4, 5, and 7	**Street Sweeping:** Street sweeping was conducted weekly in all retail and commercial areas (high and medium trash generation areas).
TMAs 2, 4, 5 and 9	**Partial Capture Devices:** 189 adjustable, retractable curb inlet screens were installed in FY 18-19.
TMAs 1, 2, 3, 4, 5 and 7	**Uncovered Loads**: Through an exclusive garbage and recycle hauling agreement initiated in FY 10-11, contractor's loads must be covered and hauler will be penalized for loose litter. Truck drivers must report overfilled bins and uncontained trash to city staff for enforcement.
All TMAs	**Storm Drain Inlet Cleaning:** All inlets are cleaned at least annually.

C.10.b.ii ► Trash Reduction – Other Trash Management Actions (PART B)

Provide the following:

1) A summary of the on-land visual assessments in each TMA (or control measure area), including the street miles or acres available for assessment (i.e., those associated with VH, H, or M trash generation areas not treated by full capture systems), the street miles or acres assessed, the % of available street miles or acres assessed, and the average number of assessments conducted per site within the TMA; and
2) Percent jurisdictional-wide trash reduction in FY 18-19 attributable to trash management actions other than full capture systems implemented in each TMA; OR
3) Indicate that no on-land visual assessments were performed.

If no on-land visual assessments were performed, check here **and state why:**	X	**Explanation:** No OVTAs were conducted in TMA #9 in FY 18-19 because the entire TMA is a low trash generation area and therefore no additional/enhanced other control measures are planned.

TMA ID* or (*as applicable*) Control Measure Area	**Total Street Miles[2] Available for Assessment**	**Summary of On-land Visual Assessments[3]**			**Jurisdictional-wide Reduction (%)**
		Street Miles Assessed	**% of Available Street Miles Assessed**	**Avg. # of Assessments Conducted at Each Site[4],[5]**	
1	1.62	0.69	42.2%	5.3	20.7%
2	0.49	0.09	18.6%	6.0	5.7%
3	0.65	0.12	18.8%	6.0	5.6%
4	4.02	1.81	45.0%	6.7	12.2%
5	1.47	0.62	42.4%	6.0	4.5%
7	4.54	1.25	27.5%	6.2	7.7%
8	2.07	0.52	25.1%	6.0	8.5%
9**	0.00	NA	NA	NA	NA
	Total	**5.1**	**-**	**-**	**64.9%**

*TMA 6 is entirely comprised of non-jurisdictional (i.e., K-12 public schools, colleges or universities) and therefore is not reported.
**TMA 9 is comprised entirely of low trash generating areas.

[2] Street miles are defined as the street lengths and do not include curbs associated with medians.
[3] Assessments conducted between July 2017 and July 2019 are assumed to be representative of trash levels in FY 18-19 and were therefore used to calculate the jurisdictional-wide reductions reported in this section.
[4] Each assessment site is roughly 1,000 feet in length.
[5] Based on analyses conducted as part of the BASMAA Tracking California's Trash project (BASMAA 2017) funded by the State Water Resources Control Board, the optimal number of assessment events to detect an improvement from baseline trash levels at a site is between 4 and 6 per site.

C.10.b.iv ► Trash Reduction – Source Controls

Provide a description of each jurisdictional-wide trash source control action implemented to-date. For each control action, identify the trash reduction evaluation method(s) used to demonstrate on-going reductions, summarize the results of the evaluation(s), and estimate the associated reduction of trash within your jurisdictional area. Note: There is a maximum of 10% total credit for source controls.

Source Control Action	Summary Description & Dominant Trash Sources and Types Targeted	Evaluation/Enforcement Method(s)	Summary of Evaluation/Enforcement Results To-date	% Reduction
Single Use Bag Ordinance	City of Cupertino banned free distribution of plastic shopping bags (Oct 1, 2013).	The City's enforcement is accomplished annual through IND inspections, reports from the public and reports from agency staff who are trained to watch for violations. No violations were reported or observed for the single-use bag ordinance.	According to the BASMAA "San Francisco Bay Area Stormwater Trash Generation Rates" report finalized on June 20, 2014, single use carryout bags contribute about 8% of the total litter loading to local receiving waters by municipal stormwater. Results from the SCVURPPP Study which characterized trash in full capture systems pre- and post-ordinance in the Santa Clara Valley indicate that 72% fewer single-use bags are observed in stormwater since ordinances have gone into effect. Based on the results of the SCVURPPP study, the City estimates an approximate 72% reduction in the number of single-use bags in stormwater, which equates to a 5.8% (i.e., 72% x 8%) reduction of trash discharged from the City's stormwater conveyance system.	5.8% City is not claiming this credit
Expanded Polystyrene Food Service Ware Ordinance	City of Cupertino banned commercial use and distribution of Styrofoam™ food and beverage ware (July 1, 2014).	The City's enforcement is accomplished through annual IND inspections, reports from the public, and reports from agency staff who are trained to watch for violations.	According to the BASMAA "San Francisco Bay Area Stormwater Trash Generation Rates" report finalized on June 20, 2014, expanded polystyrene food service ware contributes about 6% of the total litter loading to local receiving waters by municipal stormwater.	4.4% City is not claiming this credit

C.10.b.iv ► Trash Reduction – Source Controls

Provide a description of each jurisdictional-wide trash source control action implemented to-date. For each control action, identify the trash reduction evaluation method(s) used to demonstrate on-going reductions, summarize the results of the evaluation(s), and estimate the associated reduction of trash within your jurisdictional area. Note: There is a maximum of 10% total credit for source controls.

			Results from the SCVURPPP Study (FY 15-16 countywide study), which characterized trash in full capture systems pre- and post-ordinance in the Santa Clara Valley, indicate that 74% less expanded polystyrene food service ware is observed in stormwater since ordinances have gone into effect. Based on the results of the SCVURPPP study, the City estimates an approximate 74% reduction in the volume of polystyrene food service ware in stormwater, which equates to a 4.4% (i.e., 74% x 6%) reduction of trash discharged from the City's stormwater conveyance system.	

C.10.b.v ► Trash Reduction – Receiving Water Monitoring

Report on the progress of developing and testing your agency's trash receiving water monitoring program.

In FY 18-19, the City continued implementing the BASMAA Regional Receiving Water Trash Monitoring Program Plan that was approved by the Water Board's Executive Officer. Implementation included preparing for and conducting qualitative assessments and quantitative monitoring in receiving water locations within the City of Cupertino. Implementation occurred through both the City's own efforts and participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). Consistent with MRP requirements, a preliminary report describing data results and findings to-date was submitted to the Water Board via BASMAA on July 1, 2019 on behalf of all Permittees. The final report for the development and testing of the Bay Area trash receiving water monitoring program will be submitted by BASMAA by July 1, 2020, consistent with the MRP requirements, following peer review.

In addition to implementing the BASMAA Monitoring Plan, the City coordinated (via SCVURPPP) on the Statewide Trash Monitoring Methods Project, which is funded by the California Ocean Protection Council and State Water Board and administered via the Southern California Coastal Water Research Project (SCCWRP) and San Francisco Bay Estuary Institute (SFEI).

Additional information on accomplishments in FY 18-19 can be found in the Receiving Water Trash Monitoring Program Progress Report included in the SCVURPPP FY 18-19 Annual Report.

C.10.c ► Trash Hot Spot Cleanups

Provide the FY 18-19 cleanup date and volume of trash removed during each MRP-required Trash Hot Spot cleanup during each fiscal year listed. Indicate whether the site was a new site in FY 18-19.

Trash Hot Spot	New Site in FY 18-19 (Y/N)	FY 18-19 Cleanup Date(s)	Volume of Trash Removed (cubic yards)				
			FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
CUO01	N	9/15/2018	0.1	0.3	0.6	1.1	5.7
CUO02	N	9/9/2018	0.3	0.1	0.1	0.02	0.8

C.10.d ►Long-Term Trash Load Reduction Plan

Provide descriptions of significant revisions made to your Long-term Trash Load Reduction Plan submitted to the Water Board in February 2014. Describe significant changes made to primary or secondary trash management areas (TMA), baseline trash generation maps, control measures, or time schedules identified in your plan. Indicate whether your baseline trash generation map was revised and if so what information was collected to support the revision. If your baseline trash generation map was revised, attach it to your Annual Report.

Description of Significant Revision	Associated TMA
No new significant changes have been made to the City's Long Term Trash Load Reduction Plan. The City's baseline trash generation map has not been revised. The City has been waiting for the results of the curb screen inlet study to decide which trash capture devices make the most sense to install in remaining untreated areas. Since the City is over 90% reduction, staff are taking extra time to thoughtfully consider options and determine the final actions that will take the City to no visual impact.	**All TMAs**

C.10.e. ► Trash Reduction Offsets (Optional)

Provide a summary description of each offset program implemented, the volume of trash removed, and the offset claimed in FY 18-19. Also, for additional creek and shoreline cleanups, describe the number and frequency of cleanups conducted, and the locations and cleanup dates. For direct discharge control programs approved by the Water Board Executive Officer, also describe the results of the assessments conducted in receiving waters to demonstrate the effectiveness of the control program. Include an Appendix that provides the calculations and data used to determine the trash reduction offset.

Offset Program	Summary Description of Actions and Assessment Results	Volume of Trash (CY) Removed/Controlled in FY 18-19	Offset (% Jurisdiction-wide Reduction)
Additional Creek and Shoreline Cleanups (Max 10% Offset)	The City cleans one of its hotspots, on Calabazas Creek, two additional times per year during volunteer events, and additional times per year (roughly bi-monthly) at its hotspot on Stevens Creek. In FY 18-19 staff conducted four additional cleanings. Prior to FY 17-18, City staff had cleaned the hotspot on Stevens Creek every month to monitor litter from graffiti activity in tunnels upstream of the site. The site had improved to where bi-monthly cleanups were sufficient.	3.7	0.5%
Direct Trash Discharge Controls (Max 15% Offset)	NA	**NA**	**NA**

Appendix 10-1. Baseline trash generation and areas addressed by full capture systems and other control measures in Fiscal Year 18-19.[6]

TMA	2009 Baseline Trash Generation (Acres)					Trash Generation (Acres) in FY 18-19 After Accounting for Full Capture Systems					Jurisdiction-wide Reduction via Full Capture Systems (%)	Trash Generation (Acres) in FY 18-19 After Accounting for Full Capture Systems and Other Control Measures					Jurisdiction-wide Reduction via Other Control Measures (%)	Jurisdiction-wide Reduction via Full Capture AND Other Control Measures (%)
	L	M	H	VH	Total	L	M	H	VH	Total		L	M	H	VH	Total		
1	15	66	155	0	236	78	59	98	0	236	11.4%	203	33	0	0	236	20.7%	32.1%
2	3	0	81	0	84	53	0	32	0	84	9.7%	74	11	0	0	84	5.7%	15.4%
3	56	45	32	0	133	63	44	27	0	133	1.1%	96	38	0	0	133	5.6%	6.6%
4	9	322	3	0	334	56	277	1	0	334	2.4%	307	25	2	0	334	12.2%	14.7%
5	78	92	3	0	173	82	89	2	0	173	0.3%	167	6	0	0	173	4.5%	4.8%
7	48	186	0	0	234	49	185	0	0	234	0.0%	204	30	0	0	234	7.7%	7.7%
8	3	228	0	0	231	3	228	0	0	231	0.0%	176	55	0	0	231	8.5%	8.5%
9	5,225	0	0	0	5,225	5,225	0	0	0	5,225	0.0%	5,225	0	0	0	5,225	0.0%	0.0%
Totals	**5,437**	**939**	**274**	**0**	**6,651**	**5,609**	**882**	**161**	**0**	**6,651**	**25.0%**	**6,452**	**198**	**2**	**0**	**6,651**	**64.9%**	**89.9%**

Note: "NA" indicates that the TMA has no moderate, high or very high trash generating areas (i.e., all low trash generation and/or non-jurisdictional) and therefore no additional trash control measures are needed.

[6] Due to rounding, total acres and percentages presented in this table may be slightly different than the sum of the acres/percentages in the corresponding rows/columns (e.g., differ by 1 acre or 0.1%).

Section 11 - Provision C.11 Mercury Controls

C.11.a ► Implement Control Measures to Achieve Mercury Load Reductions
C.11.b ► Assess Mercury Load Reductions from Stormwater

Summary:

The City's waste and recycling collection agreement includes a provision for a door-to-door collection program of household hazardous waste (HHW) for all Cupertino households (including multi-family units). In January 2019, the City was notified by the third-party vendor who provided this service (Waste Management Inc.) that they were unable to secure a permit to continue the program beginning January 1, 2019 and would no longer be providing that service to Cupertino residents. During the first six months of FY 2018-2019, a total of 3 pounds of mercury devices, 460 pounds of florescent tubes and compact fluorescent bulbs, and 573 pounds of batteries were collected through this popular door-to-door program. As a contingency and because the door-to-door program did not accept all types of HHW, the City has maintained an annual contractual partnership with the Santa Clara County Household Hazardous Waste Program. By continuing this relationship with the County, it provided a relatively seamless transition for our community to safely dispose of their HHW which may otherwise result in illegally dumped toxic waste thereby posing a significant threat to stormwater runoff. In FY 18-19, the County's HHW Program served a total of 35,452 Santa Clara County residents and collected a total of 2,646,571 pounds of hazardous waste which was managed safely and legally. In addition, the County's CESQG program served 302 small business drop-off's including local governments and community donation centers such as Goodwill Industries and the Salvation Army. The CESQG program brochure is also mailed out with the annual IND letters and distributed as needed during the IND inspections. These brochures are provided to identify a resource for mercury containing universal waste disposal options that small business owners may not know is available to them at a very low cost.

Mercury containing products collected through the County's HHW collection program in FY 18-19 included:

- Total fluorescent lamps collected – 83,215 pounds
- Total household batteries collected – 150,497 pounds
- Elemental Mercury - 50 pounds (includes thermostats, thermometers and other products)

In addition to the now discontinued door-to-door HHW collection program and the City-County HHW partnership, Recology, the City's franchised waste hauler also offers residents options to dispose of mercury containing products. Cupertino residents are encouraged to place household batteries and CFLs in a clear, sealed plastic bag on top of their curbside recycling containers for pickup on their regularly scheduled waste and recycling collection day. In addition, the City and Recology also annually host quarterly free Universal waste drop-off events at De Anza College in Cupertino to encourage residents to drop-off mercury containing used fluorescent bulbs, U-Waste and E-Waste for recycling.

Mercury containing products collected at these City events include:

- Total fluorescent lamps collected: 1,573 pounds
- Total household batteries collected: 5,074 pounds
- Total e-Waste collected: 49,432 pounds

See the Program's FY 2018-19 Annual Report for updated information on:

- Documentation of mercury control measures implemented in our agency's jurisdictional area for which load reductions will be reported and the associated management areas;
- A description of how the BASMAA Interim Accounting Methodology[1] was used to calculate the mercury load reduced by each control measure implemented in our agency's jurisdictional area and the calculation results (i.e., the estimated mercury load reduced by each control measure);
- Supporting data and information necessary to substantiate the load reduction estimates; and
- For Executive Officer approval, any refinements, if necessary, to the measurement and estimation methodologies to assess mercury load reductions in the subsequent permit.

C.11.c ► Plan and Implement Green Infrastructure to Reduce Mercury Loads

See the Program's FY 2018-19 Annual Report for information on the quantitative relationship between green infrastructure implementation and mercury load reductions, including all data used and a full description of models and model inputs relied on to establish this relationship.

C.11.e ► Implement a Risk Reduction Program

A summary of Program and regional accomplishments for this sub-provision are included in the Program's FY 2018-19 Annual Report.

[1]BASMAA 2017. Interim Accounting Methodology for TMDL Loads Reduced, Version 1.0. Prepared for BASMAA by Geosyntec Consultants and EOA, Inc., September 19, 2016.

Section 12 - Provision C.12 PCBs Controls

C.12.a ► Implement Control Measures to Achieve PCBs Load Reductions
C.12.b ► Assess PCBs Load Reductions from Stormwater

See the Program's FY 2018-19 Annual Report for:

- Documentation of PCBs control measures implemented in our agency's jurisdictional area for which load reductions will be reported and the associated management areas;
- A description of how the BASMAA Interim Accounting Methodology[1] was used to calculate the PCBs load reduced by each control measure implemented in our agency's jurisdictional area and the calculation results (i.e., the estimated PCBs load reduced by each control measure);
- Supporting data and information necessary to substantiate the load reduction estimates; and
- For Executive Officer approval, any refinements, if necessary, to the measurement and estimation methodologies to assess PCBs load reductions in the subsequent permit.
- Any alternative method submitted (different from the default population-based method) and supporting information to derive Permittee-specific shares of load reduction value associated with implementation of Provision C.12.f. (Manage PCB-Containing Materials and Wastes during Building Demolition Activities).

C.12.c ► Plan and Implement Green Infrastructure to Reduce PCBs Loads

See the Program's FY 2018-19 Annual Report for, as part of reporting for C.12.b.iii(2), an estimate of the amount of PCBs load reductions resulting from green infrastructure implementation during the term of the Permit, including all data used and a full description of models and model inputs relied on to generate the estimate.

[1]BASMAA 2017. Interim Accounting Methodology for TMDL Loads Reduced, Version 1.1. Prepared for BASMAA by Geosyntec Consultants and EOA, Inc., September 19, 2017.

C.12.f. ► Manage PCB-Containing Materials During Building Demolition

On July 1, 2019, was your agency ready to implement a method for identifying applicable structures (buildings built or remodeled between 1950 and 1980, except that single family residential and wood-framed buildings are exempt) that apply for a demolition permit?	X	**Yes**		**No**
On July 1, 2019, was your agency ready to implement a method to manage PCBs during demolition of applicable structures?	X	**Yes**		**No**
Does your agency have a data-gathering method in place to inform reporting on the effectiveness of your agency's program to manage PCBs during demolition of applicable structures (e.g., the number of applicable structures, and the amount and concentration of PCBs in priority building materials in applicable structures)?	X	**Yes**		**No**

C.12.h ►Implement a Risk Reduction Program

A summary of Program and regional accomplishments for this sub-provision are included in the Program's FY 2018-19 Annual Report.

The City was an early adopter of an executive management policy establishing authority to require the BASMAA PCB Screening and Assessment protocol. The policy was adopted on January 24, 2019 and in advance of the policy implementation, notices were prominently displayed in the City Hall lobby and in several places in the Building Department lobby. Between January 24, 2019 and July 1, 2019 when the PCB policy was required to be implemented, demolition permits for 20 structures were issued (19 exempt single-family homes) and one large commercial shopping center and associated parking garages. The shopping center ownership group conducted the required PCB assessment as required and the early implementation of this program provided the ability to not miss an opportunity for demolition of a covered building which was found to have the presence of some materials exceeding the 50 ppm threshold. The property owner is expected to abate and dispose of these materials pursuant to all State and Federal laws.

Section 13 - Provision C.13 Copper Controls

C.13.a.iii.(3) ►Manage Waste Generated from Cleaning and Treating of Copper Architectural Features

Provide summaries of permitting and enforcement activities to manage waste generated from cleaning and treating of copper architectural features, including copper roofs, during construction and post-construction.

Summary:

The City has a municipal code prohibition of copper roofing related materials and ornamental copper for exterior use where oxidation and runoff may occur. New construction and remodeling plan review staff in the Planning, Building, Public Works Development, and Environmental Programs Divisions are all trained in the municipal code prohibition of architectural copper applications. The City developed standard Conditions of Approval (COA) specifically prohibiting the installation and use of copper roofs, gutters, downspouts, and other architectural features. Project applicants are provided with the COA and must sign their acknowledgement of the copper restrictions. These requirements pertain to both residential and non-residential projects being reviewed. In cases where copper was installed prior to municipal code or MRP regulation, the City works with the property owner to remove or replace the copper with an alternative material. If that cannot be accomplished, the City requires the copper to be properly coated and sealed to ensure the copper is appropriately weatherized to prohibit discharging during rain events. Installation of drainage from copper materials to a stormwater treatment facility such as an infiltration device/structure is also considered as a potential method of mitigation.

For situations where there is a discharge from cleaning or treating copper architectural features, the City's IND/IDDE Inspector will investigate the discharge in accordance with the IND/IDDE ERP. In FY 18-19 there were no such discharges reported.

C.13.b.iii.(3) ►Manage Discharges from Pools, Spas, and Fountains that Contain Copper-Based Chemicals

Provide summaries of any enforcement activities related to copper-containing discharges from pools, spas, and fountains.

Summary:

Pool, spa, and fountain discharge outreach materials are provided to the community through our partnership in the SCVURPPP My Watershed Watch program and by City staff at various community events. Literature and discussion are directed toward identifying the sources of copper runoff and discharges (e.g. pool, spa, fountain, car washing) encouraging copper containing water discharges to landscaped areas with sufficient capacity to absorb all released water, taking care to prevent overflow. For instances where there is a pool or spa that needs to be drained, residents are instructed if the property lacks landscaped areas or the landscaping is of insufficient size, they are instructed to contact the Cupertino Sanitary District to obtain permission to discharge the water to the sanitary system clean out.

In FY 18-19, there was one reported IDDE discharges of pool, spa, and fountain water as follows:

•Single-family residential property owner discharged "green" pool water from the rear yard via a hose to the gutter during the weekend. The reporting person did not contact the City when the incident was occurring, rather they waited until Monday. The inspector investigated and contacted the homeowner to educate them of the discharge violation and issued a verbal warning as there was no evidence of the discharge reaching a storm drain inlet.

C.13.c.iii ►Industrial Sources Copper Reduction Results

Based upon inspection activities conducted under Provision C.4, highlight copper reduction results achieved among the facilities identified as potential users or sources of copper, facilities inspected, and BMPs addressed.

Summary:

The City of Cupertino does not currently have industries such as electroplating, semiconductor manufacturing, or metal finishing which all possess the potential for copper related discharges through their operations. There are however, other sources such as automotive repair, maintenance (car wash), or garden center/golf course facilities that conduct repairs or sell/use products that are potential sources of copper pollution. In FY 18-19, a total of 17 of these facilities that have the potential for a presence of copper effluent/discharges were inspected through the IND program as follows:

- 2 golf courses (ponds, water features, pesticide use)
- 1 cemetery (ponds, water features)
- 1 utility (PG&E) service yard
- 4 gasoline station car washes (brake dust contaminated wash water)
- 9 automotive repair facilities (brake parts/dust, switches, lighting)

Of the 17 facilities inspected, there were two threatened copper discharges found during the inspections as follows:

- Auto repair business was found with miscellaneous old automotive parts left/stored in exterior areas. It was not raining and the parts were removed upon the owner being issued a correction notice and provided education about BMPs for equipment storage (move inside, cover and install barriers around any nearby storm drain inlets).
- The PG&E service yard was found to have uncovered metal recycling storage bins and had an outside storage rack with exposed copper rods. Upon being issued a correction notice, PG&E staff corrected both violations by tarping the metal recycling bins and removing the copper rods and moving them to a covered exterior storage shed. The site manager was provided with CASQA Handbook BMPs for various exterior storage and run-off related issues on the site. In both cases, there were no storm drain inlets in the vicinity of the potential discharge areas, however, care was given by the inspectors to explain dry weather inattention to storage tracks via sediment and become mobilized during wet weather.

Both sites will be inspected in FY 19-20 through the IND program to ensure continued compliance.

In addition to inspecting these types of facilities which are prone to having copper generating processes, all businesses when inspected through the IND program have roof downspout discharge areas inspected for any copper depositions that would indicate rain, dense water vapor (fog)

or HVAC condensate are discharging copper leachate from roof top equipment. Of all facilities inspected through the IND/IDDE program in FY18-19, there were no copper discharges identified from roof top equipment.

Section 15 -Provision C.15 Exempted and Conditionally Exempted Discharges

C.15.b.vi.(2) ► Irrigation Water, Landscape Irrigation, and Lawn or Garden Watering

Provide implementation summaries of the required BMPs to promote measures that minimize runoff and pollutant loading from excess irrigation. Generally the categories are:

- Promote conservation programs
- Promote outreach for less toxic pest control and landscape management
- Promote use of drought tolerant and native vegetation
- Promote outreach messages to encourage appropriate watering/irrigation practices
- Implement Illicit Discharge Enforcement Response Plan for ongoing, large volume landscape irrigation runoff.

Summary:

Promotion of conservation programs

The City continues its partnership with Grassroots Ecology (Acterra) and the City's Naturalist to promote several volunteer-based conservation programs such as the Habitat Restoration Project, Garden and Pesticide Alternatives, Helping Hands Cleanup, and more. Volunteers spend their time at two City facilities along Stevens Creek (Blackberry Farm Recreational Area and McClellan Ranch Preserve) removing invasive vegetation and re-planting native plants. Volunteers add mulch to the landscape to prevent pests and invasive weeds. Native plant seeds are collected during these events for later use. The goal of these projects is to improve the habitats for local wildlife and conserve native vegetation. These events are promoted online at www.grassrootsecology.org/volunteer

Promotion of outreach for less toxic pest control and landscape management

Cupertino is one of many Santa Clara County jurisdictions that participates and promotes the My Watershed Watch educational campaign. The purpose of My Watershed Watch is to create public awareness on water pollution prevention by informing the public how typical everyday activities can lead to water pollution and what can be done to prevent it. Cupertino promotes many of My Watershed Watch outreach materials such as Less-Toxic Pest Control for Multi-Unit Properties, Trash Resources & Pathways to Urban Creeks, 10 Most Wanted Bugs and many other less-toxic pest control related materials during events and in displays at the Senior Center, City Hall, and Quinlan Community Center.

Each year at the City's annual IPM meeting, the City Arborist, the Public Works Grounds Supervisor, Parks Supervisor, and the City's facilities pest control contractor and golf course superintendent contractor sign and agree to follow the City's Integrated Pest Management Policy. The annual meeting is also a round table discussion of practices that worked over the past year and new IPM methods that they'd like to try in the upcoming year. This commitment to use natural pest control methods, pesticides only as a last resort, and least-toxic pest control available, serves as the basis of the City's IPM policy. City Public Works staff and the two contractors also participate in several pest control trainings held by the County, the City, and other organizations.

Composting

Between March and October, the City provides free compost to residents on Friday and Saturday mornings. Cupertino residents are offered OMRI certified compost for their home gardening use. Compost helps reduce the amount of chemical pesticides needed for residential landscaping and maintains moisture leading to less watering and potentially, less run off from overwatering. Residents also have the opportunity to attend free home composting workshops hosted by the County. After attending a workshop, Cupertino residents qualify for a free home composting bin from the City to create their own compost generated from yard trimmings and food scraps.

Promotion of drought tolerant and native vegetation

Cupertino encourages its residents to plant drought tolerant vegetation by promoting the Santa Clara Valley Water District's (SCVWD) Landscape Rebate Program on the City website and at local events. The City contributes an additional $1.00 per square foot to the Water District's rebate for Cupertino residents who replace their lawn with approved drought tolerant plants listed in SCVWD's Plant List.

Turf replacement and demonstration garden

In FY 16-17, the City replaced 19,808 square feet of turf (11,855 SF) and ivy (7,953 SF) in the Civic Center Plaza with drought tolerant, native plant demonstration gardens bordered by pervious pathways, significantly reducing water use, irrigation overspray, and runoff. In FY 17-18, the project continued and seating was installed under the tree canopies. Completing the project is interactive educational signage installed in FY 18-19 which contains information on low water use landscaping, consequences of run-off, and IPM messaging.

South Bay Green Gardens website

The City continues to support and be an active participant in the development of the South Bay Green Gardens website (formerly Bay Area Eco Gardens). This website promotes, sustainable, low impact landscaping and is a comprehensive resource for residents, businesses, and professional landscapers. Water quality and integrated pest management BMPs are promoted as a preferred alternative to conventional landscaping practices.

Promotion of outreach messages to encourage appropriate watering/irrigation practices

The City does not permit landscape irrigation runoff. One particular piece of outreach material used by City staff for information on best practices for water is the Bay-Friendly Landscape Guidelines. This publication is also distributed to local businesses that may have over-watered their landscaping. Outreach materials for residents are distributed at local events, on display in City Hall, and located online at www.cupertino.org. The City continued to promote the SCVWD's Green Gardener classes in fall of 2018.

Enforcement Response Plan for irrigation runoff and planned fire safety test discharges

The City does not permit non-stormwater discharges to enter the storm drain system, including large volume landscape irrigation runoff. The municipal code regulates landscape irrigation runoff and enforcement is conducted through the City's IDDE program. Discharging high volume landscape irrigation runoff is a violation for the water discharge, but also includes scouring and sediment that transport nutrients and other POCs found in roadways and other hardscaped areas to the storm drain system. IDDE inspectors pursue resolution of the discharge with the property owners and property managers in both residential and commercial settings consistent with the IND/IDDE Enforcement Response Plan. These discharges are tracked in the IDDE database. In addition to the discharge violation for irrigation runoff, property owners/managers are also educated on water conservation best practices. An educational door hanger is used for incidents of smaller, residential landscape overspray

where water is observed in the gutter, but the specific source of the discharge is not able to be positively identified for direct follow up. Door hangers are left by the IND/IDDE inspector at residences in the vicinity of the wet gutter.

The City partners with the Santa Clara County Fire Department to prevent planned fire sprinkler testing flows from getting into the storm drainage system where large volume water discharges are necessary to meet Fire and Building Code requirements. The City requires fire protection testing contractors to complete a report to the City in advance of the discharge to ensure BMPs are implemented and the water from the flow test is either captured or directed to landscaping. Under no circumstances are contractors permitted to discharge water to the storm drain or any hardscape surfaces. The coordination between the fire department, City, and contractor for these activities is being examined in FY 19-20 to ensure there is effective communication between all parties. The City's IDDE inspector is present with the Fire Marshal during the test to verify BMPs, and ensure the capture of discharged water or diversion of the flow to landscape is performed. This approach also provides an opportunity for the IDDE inspector to educate the fire protection contractor industry about capturing this water for higher uses, such as construction site dust control and about discharge prohibitions region wide.

Vehicle washing

The City continues to provide the brochure "Clean Cars and Clean Streets" at various outreach events. The brochure recommends car washing at a commercial car wash and provides pollution prevention practices for car washing at home. The Watershed Watch campaign has again this year, partnered with commercial car wash chains in Santa Clara County to offer discounted car wash packages. The City actively offers these discount cards at outreach events.