



DATE: June 8, 2020

AGENDA ITEM #4

**TO:** Environmental Commission  
**FROM:** Emiko Ancheta, Staff Liaison  
**SUBJECT:** Environmental Commission Work Plan

**RECOMMENDATION:**

Review and take action, as appropriate, on the 2020/21 Environmental Commission Work Plan

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**BACKGROUND**

The Environmental Commission met in a Joint Meeting with the City Council on May 5, 2020 to review the Commission's 2019/20 Accomplishments and Draft 2020/21 Target areas and discussed issues and projects for the upcoming year. Based on this discussion, the targets were finalized, and the 2020/21 Work Plan was developed. The Targets and Work Plan are intended to focus the Commission's agenda items and will serve as a roadmap for projects and actions, as appropriate, during the 2020/21 year.

**DISCUSSION**

Environmental Commission Targets and resulting Work Plan for 2020/21 are:

1. Climate Action Plan
2. Water Conservation and Stormwater Management
3. Solid Waste Diversion
4. Community Outreach and Education

The Commission will review the targets, projects, and status updates at each of its monthly meetings and act appropriately.

**ATTACHMENT:**

- A. 2020/21 Targets and Work Plan
- B. 2019 Program Summary for the Santa Clara Valley Urban Runoff Pollution Prevention Program

## ENVIRONMENTAL COMMISSION

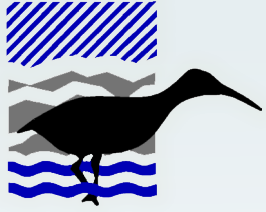
## 2020/21 Targets &amp; Work Plan

June 8, 2020

Targets	Projects	Assignments	Target Date	City Priority related to	Status
Climate Action Plan	Building and Electric Vehicle Reach Codes	<ul style="list-style-type: none"> <li>Subcommittee -Don Weiden, Laura Tekler and Lei Yuan</li> </ul>	July 2020	CAP Goals	<ul style="list-style-type: none"> <li>On November 19, 2019, City Council directed the EC and City staff to pursue an All-Electric Reach Code Ordinance and conduct outreach</li> <li>Reach Code community webinar was held April 29, 2020</li> <li>EC Subcommittee and staff to revise ordinance, review outreach feedback and discuss recommendation</li> </ul>
	Update of City's CAP	<ul style="list-style-type: none"> <li>Subcommittee to work with staff and Subconsultant</li> </ul>	Monthly	CAP Goals	<ul style="list-style-type: none"> <li>Budget for consultant confirmed and staff will discuss next steps with City management team</li> <li>EC to work with staff and consultant to update the City's Climate Action Plan</li> <li>RFP is targeted for Summer 2020</li> </ul>
Water Conservation & Stormwater Management	Green Infrastructure Plan	<ul style="list-style-type: none"> <li>Assist staff with Plan implementation</li> </ul>	Monthly	Storm Water Regional Discharge Permit	<ul style="list-style-type: none"> <li>Plan was approved by City Council on July 9, 2019</li> <li>Staff is developing an update to the Integrated Pesticide Management policy</li> </ul>

Solid Waste Diversion	Recycling and Composting Waste from Commercial Districts	<ul style="list-style-type: none"> <li>Subcommittee to work with City Staff on program development</li> </ul>	Fall 2020	Solid Waste Disposal	<ul style="list-style-type: none"> <li>Staff to report on the Amended and Restated Collection Service Agreement between the City of Los Altos and MTWS that was executed on April 23, 2020</li> </ul>
	Prepare Ordinance on limiting single use plastics	<ul style="list-style-type: none"> <li>Subcommittee to work with Staff and Subconsultant</li> </ul>	Monthly	Recycling	<ul style="list-style-type: none"> <li>Per Council direction staff is modifying the model ordinance developed by Santa Clara County Recycling and conducting internal review with a goal to present ordinance to Council in Dec. 2020</li> <li>Draft ordinance to be presented to EC in August 2020</li> </ul>
Community Outreach & Education	Develop environmental education program in collaboration with the Los Altos History Museum or other community organization	<ul style="list-style-type: none"> <li>Environmental Education Fund held by LACF</li> <li>David Klein</li> </ul>	Winter 2020 / Spring 2021	Public outreach and education	<ul style="list-style-type: none"> <li>All City events cancelled/postponed for 2020 due to COVID-19</li> </ul>
	Update environmental measures on the City web site		Ongoing	Public outreach and education	<ul style="list-style-type: none"> <li>The City's new Public Information's Officer, Sonia Lee will work together with staff and Subcommittee on updating the City's website, including the Environmental Resources Dashboard</li> <li>Reach Code information page created and linked to EC webpage on April 2020</li> </ul>
	Continue gas-powered leaf blower (GPLB) ban outreach and education	<ul style="list-style-type: none"> <li>Laura Teksler</li> </ul>	Ongoing	Public outreach and education	<ul style="list-style-type: none"> <li>Linda Ziff gave an update on her team's efforts to educate about the GPLB at the March 9, 2020 EC meeting</li> </ul>

	Continue anti-idling outreach and education	<ul style="list-style-type: none"> <li>• Don Weiden</li> </ul>	Ongoing	Public outreach and education	<ul style="list-style-type: none"> <li>• The EC has been supporting the efforts of Greentown Los Altos</li> </ul>
	Continue to support SVCEA community outreach and education		Ongoing	Public outreach and education	<ul style="list-style-type: none"> <li>• Reach Code webinar was held April 29, 2020</li> </ul>
	Assist staff with various outreach and education efforts	<ul style="list-style-type: none"> <li>• Climate Action Plan</li> <li>• Water Conservation</li> <li>• Storm Water Management</li> <li>• Solid Waste Diversion</li> <li>• Urban Forest / Trees</li> <li>• Lehigh and Stevens Creek Quarry</li> <li>• Santa Clara County Healthy Cities</li> </ul>		Public outreach and education	



# Santa Clara Valley Urban Runoff Pollution Prevention Program

*30 years of managing stormwater and protecting local waterways*



## 2019 PROGRAM SUMMARY



# Santa Clara Valley Urban Runoff Pollution Prevention Program

## 2019 PROGRAM SUMMARY

### Management Committee

#### Member Agency

Cupertino  
 Los Altos  
 Los Altos Hills  
 Milpitas  
 Mountain View  
 Palo Alto  
 San Jose  
 Santa Clara  
 Sunnyvale  
 Santa Clara County  
 Valley Water (SCVWD)  
 West Valley Communities (Campbell,  
 Los Gatos, Monte Sereno, Saratoga)

#### Voting Representative

Ursula Syrova  
 Andrea Trese  
 Nicole Bowersox  
 Elaine Marshall  
 Carrie Sandahl  
 Karin North  
 Sharon Newton, MC Vice-Chair  
 Rinta Perkins  
 Melody Tovar, Budget Committee Chair  
 Vanessa Marcadejas  
 Kirsten Struve, MC Chair  
 Sheila Tucker



Sunnyvale



West Valley  
Clean Water Authority



CITY OF  
**PALO  
ALTO**



Valley Water

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Prepared for the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) by EOA, Inc. May 2020.

For additional information, visit the Program's website at [www.SCVURPPP.org](http://www.SCVURPPP.org) or contact the Program office at 1-866-WATERSHED.

**Cover:** Storm Clouds Over the Santa Clara Valley (Shutterstock)  
**Inside top:** Alviso Marina, Photo by Casey Horner  
**Inside bottom:** Water quality monitoring, Photo by Program staff

# Program Overview

## Stormwater Pollution Management Protects our Creeks and Bay

Rain that falls onto urban areas flows into local creeks and waterways through storm drain systems. This water is collectively known as “stormwater” or “urban runoff,” and it carries pollutants that are on streets, sidewalks, parking lots, roofs and automobiles to local waterways, and eventually to larger waterbodies, such as San Francisco Bay. We manage stormwater to protect aquatic habitat, public health and recreation, and other beneficial uses of the local creeks, lakes, wetlands and Bay.

Since 1990, the State of California has issued stormwater pollution management requirements via National Pollutant Discharge Elimination System (NPDES) permits to SF Bay Area cities, counties and flood control districts. Among other efforts, these public agencies must manage key pollutants (e.g. trash, mercury, polychlorinated biphenyls or PCBs), implement urban runoff controls for land development and redevelopment projects, and monitor water quality. The SF Bay Area NPDES Municipal Regional Permit (“Stormwater Permit”) includes requirements for controlling pollutants from municipal operations, land development and construction, and commercial and industrial business activities; controlling specific pollutants of concern; and water quality monitoring. SCVURPPP and its member agencies work together to meet and exceed these requirements to protect local waterways.



▲ One of several municipal agency staff trainings on stormwater pollution controls.

This report covers activities and products completed in calendar year 2019 and cites data collected throughout fiscal year 2018-2019. SCVURPPP and its agencies have met challenging stormwater management requirements in the Stormwater Permit in 2019, including:

- Successful reduction of trash from stormwater by more than 80%
- Completion of Green Stormwater Infrastructure Plans by all Santa Clara Valley municipalities
- Achievement of mercury, PCBs and copper stormwater reduction goals
- Control of pesticide toxicity by training member agency staff and landscaping professionals on Integrated Pest Management practices
- Widespread promotion of pollution-prevention messages through public education and outreach activities
- Comprehensive monitoring of water quality across Santa Clara Valley creeks and rivers



▲ SCVURPPP Watershed Watch Instagram story post



## - SCVURPPP Mission Statement -

*To assist in the protection of beneficial uses of receiving waters by preventing pollutants generated from activities in urban areas from entering runoff to the maximum extent practicable.*

### 30 Years of Pollution Prevention

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP or Program) is a nationally-acclaimed stormwater management association of 15 public agencies in Santa Clara, including the cities of **Campbell, Cupertino, Los Altos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San José, Santa Clara, Saratoga, and Sunnyvale**, the towns of **Los Altos Hills and Los Gatos**, the **County of Santa Clara**, and **Valley Water** (Santa Clara Valley Water District). Since SCVURPPP's establishment in 1990, the Program and its member agencies have implemented pollution prevention, source control, monitoring, and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality in San Francisco Bay and Santa Clara Valley creeks and rivers.

Over the past three decades, Santa Clara County has grown from 1.5 to 1.9 million people. More than half of the County's residents speak a language other than English at home, and over 90% of residents can access the internet from their home (US Census). SCVURPPP provides free multi-lingual outreach materials for residents and businesses; promotes creek-friendly behaviors at public events; offers free resources and information via online social media platforms; and helps develop and facilitate pollution reduction programs for member agencies. As stormwater management practices have evolved over the years, SCVURPPP's message has broadened to stress not only pollution prevention but protection of stormwater as a valuable resource.



▲ **Scene from an anti-litter animation developed by SCVURPPP Watershed Watch Campaign. "From your streets, to our creeks, and ultimately to the Bay: it all comes back to you. Put your litter where it belongs, to keep our waters litter-free!" This message was shared in English and Spanish on television, Facebook, Instagram, and digital/online platforms in 2019.**

SCVURPPP is organized and implemented through a Memorandum of Agreement (MOA), first signed in 1990 by its member agencies. The Program's Management Committee consists of one designated representative and one alternate from each member agency. The committee meets monthly to discuss and make decisions regarding Program business. EOA, Inc. provides program management services, and the City of Sunnyvale is the Program's fiscal agent. Valley Water and City of San Jose staff serve as the Management Committee's Chair and Vice Chair respectively.

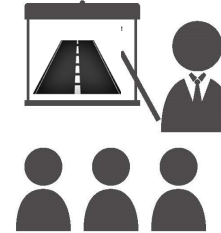
# Municipal Operations

SCVURPPP member agencies operate and maintain the public streets and stormwater conveyance system to intercept pollutants and reduce the impacts of stormwater on local waterways and San Francisco Bay. Member agencies use Best Management Practices (BMPs) to control and reduce non-stormwater and polluted stormwater discharges to storm drains during the operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure.

Municipal operations resources and workshop presentations are available on the Program's website at [www.SCVURPPP.org/other](http://www.SCVURPPP.org/other).



## Accomplishments in 2019



**>40 municipal staff trained on rural road maintenance**



**>204,000 miles of streets swept**



**>44,000 tons of trash and debris removed through street sweeping**

◀ *Removal of trash, sediment and associated pollutants from a storm drain using a vacuum-assisted truck. Storm drain maintenance is an important municipal activity for protecting local waterways from pollution and reducing the potential for flooding.*



▲ *Street sweeping helps remove trash, sediment and other pollutants from streets.*

## Reducing Pollutants through Street Sweeping

Sweeping keeps our streets clean and removes important pollutants like trash, zinc, copper, mercury, and PCBs that can harm local waterways. Effective street sweeping can remove large quantities of debris, sediment, and pollutants associated with sediments from entering storm drains. SCVURPPP member agencies perform street sweeping activities as part of their routine municipal maintenance activities.

To learn more about pollutants removed by street sweeping, see the PCBs & Mercury and Copper Controls sections (pages 19 and 21).



▲ *Member agency staff work together to maintain the storm drain system.*

## Training Member Agency Staff

SCVURPPP provides informational material and training on a variety of municipal maintenance activities including:

- Street and road repair and maintenance
- Sidewalk/Plaza maintenance and pavement washing
- Bridge and structure maintenance and graffiti removal
- Rural public works construction and maintenance
- Stormwater pump station operation and maintenance
- Corporation yard operation and maintenance

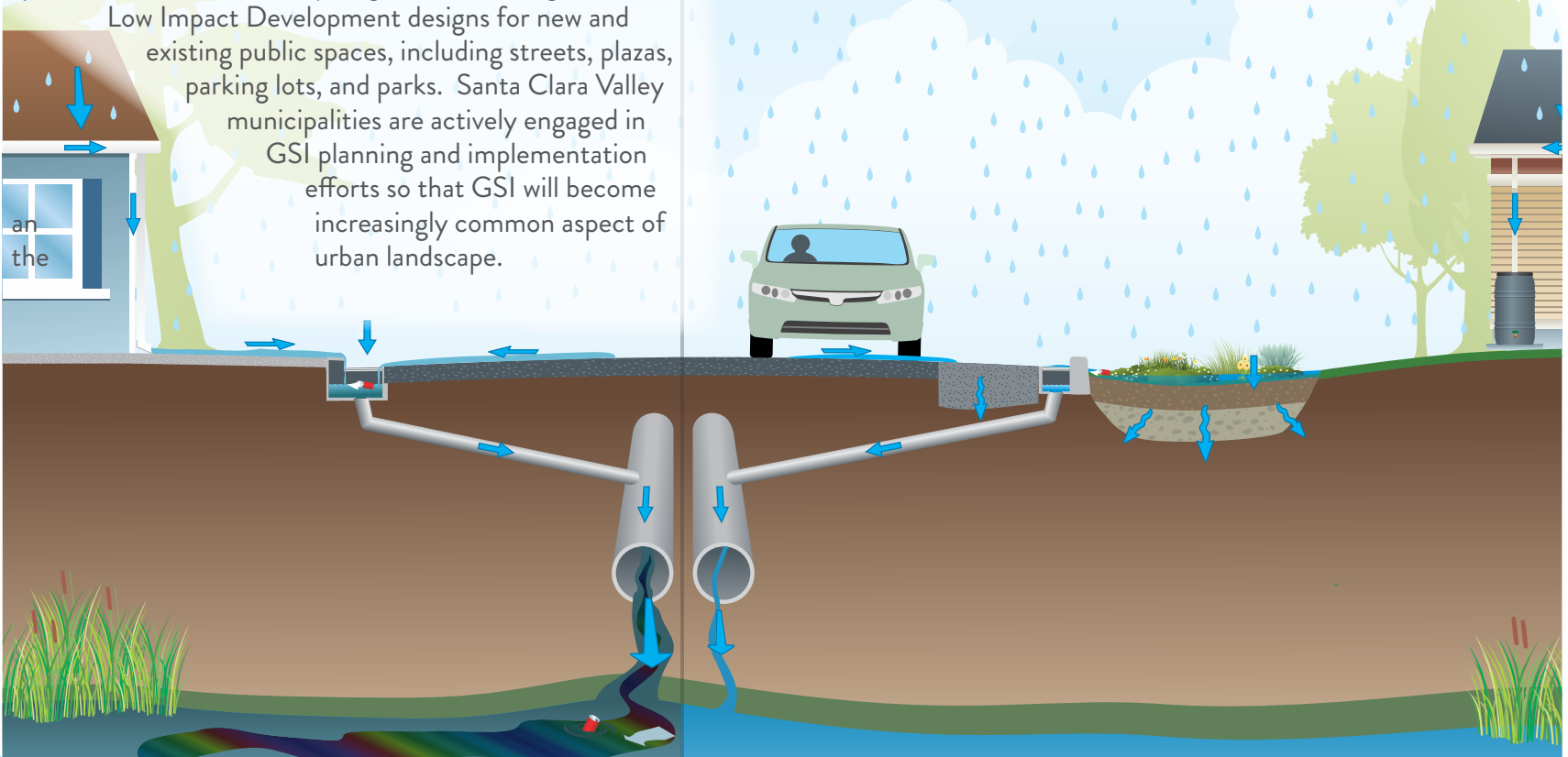
BMPs developed by SCVURPPP are incorporated into municipalities' Standard Operating Procedures (SOPs) and contracts, as needed. Training provided by SCVURPPP helps municipal agency staff implement proper SOPs and BMPs. In 2019, SCVURPPP provided rural roads stormwater BMP training. Member agency staff learned about erosion prevention, sediment control, and general BMPs for municipal operations and maintenance of rural roads.

# New Development and Redevelopment

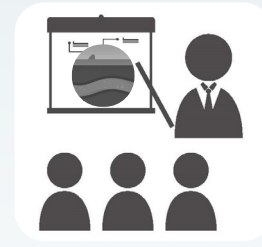
Urban development traditionally involves replacing natural landscapes with solid pavements and storm drain systems – allowing polluted rainwater to flow directly into local streams. Green Stormwater Infrastructure (GSI), however, uses plants and soils to retain and treat stormwater for healthier environments. The benefits of GSI include: improved water quality; reduced local flooding; more natural, healthier creek flows; increased stored water supply; wildlife habitat; and more attractive streetscapes. 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, resulting in improved human health.

With so many benefits, these projects are a priority for State and local water quality agencies and programs, including SCVURPPP. The regulatory vision is for Bay Area cities and counties to move from traditional (gray) stormwater conveyance systems to GSI (green) systems over time. Municipal agencies are using GSI and

Low Impact Development designs for new and existing public spaces, including streets, plazas, parking lots, and parks. Santa Clara Valley municipalities are actively engaged in GSI planning and implementation efforts so that GSI will become increasingly common aspect of urban landscape.



## Accomplishments in 2019



**114 municipal staff trained on stormwater treatment measure inspections**



**2012-2019:  
>1000 GSI projects installed in Santa Clara Valley**



▲ *This GSI project captures and treats stormwater from a public street.*

## Integrating GSI into Municipal Projects

In 2019, all SCVURPPP member agencies successfully developed and submitted **GSI Plans** to the Regional Water Quality Control Board. The GSI Plans describe how municipalities will integrate GSI features into their storm drain infrastructure on public and private lands over the next several decades. SCVURPPP created a GSI Plan Template to help member agencies develop their local Plans. SCVURPPP staff also completed guidance memoranda describing implementation and funding mechanisms for designing, constructing, and maintaining GSI projects.

Also in 2019, SCVURPPP staff completed a **GSI Handbook**, which is a comprehensive guidance manual on implementing GSI projects in public streets, parking lots, and parks. The GSI Handbook includes two parts: Part 1 provides general guidelines and guidance on selection, integration, prioritization, siting, and maintenance of GSI applications; and Part 2 provides typical details and specifications that can be customized for construction plans.

The GSI Handbook is available at [www.SCVURPPP.org/swrp/gsi](http://www.SCVURPPP.org/swrp/gsi).



▲ *Member agency staff at the annual SCVURPPP GSI workshop.*

## Training Member Agency Staff on GSI

SCVURPPP staff coordinate an annual workshop for member agency staff on GSI planning and implementation. In 2019, this workshop trained municipal staff on conducting GSI installation and O&M inspections. Member agency staff shared their experience in implementing local inspection programs.

## Countywide Stormwater Resource Planning

In 2019, SCVURPPP and Valley Water completed a 2-year project to develop a **Stormwater Resource Plan (SWRP)** for the Santa Clara Basin. The SWRP integrates with Valley Water's One Water Plan and supports SCVURPPP member agency GSI Plans by identifying and prioritizing multi-benefit GSI projects eligible for future State implementation grant funds. These SWRP development efforts were funded by a Proposition 1 grant administered by the State Water Resources Control Board.

## Recognizing Innovative GSI Designs

SCVURPPP acknowledges GSI innovation in the Santa Clara Valley. In 2019, the Program honored the **Westfield Valley Fair Mall Rainwater Harvesting Cistern project** located in the Cities of San Jose and Santa Clara. This project collects and stores runoff to be used for the mall's cooling tower.

# Industrial & Commercial Site Controls

Contaminated wash waters, wastes, leaks, spills, and polluted runoff from commercial and industrial sites can harm the water quality of local streams and San Francisco Bay. Runoff from roads and parking surfaces, buildings, exposed materials, vehicles, and equipment picks up pollutants, such as oil, grease, sediment, cleaning compounds, pesticides, paint, and litter.

To better manage stormwater from these sites, SCVURPPP member agencies work to educate business owners, inspect businesses and industrial sites, and respond to non-stormwater discharges discovered during inspections. Municipal agencies implement industrial and commercial site inspection and control programs at all sites that pose a risk of polluting stormwater runoff.

Elements of these programs include:

- Identifying and prioritizing businesses to inspect
- Educating business staff and owners on stormwater Best Management Practices (BMPs)
- Conducting follow-up and enforcement actions

SCVURPPP staff assist member agencies by developing information on BMPs and training member agency staff.

Resources developed by SCVURPPP are available at [www.SCVURPPP.org/other](http://www.SCVURPPP.org/other) and [www.MyWatershedWatch.org/resources/for-businesses](http://www.MyWatershedWatch.org/resources/for-businesses).

▼ *Example of a good BMP: covered dumpster enclosure*



## Accomplishments in 2019



**120 municipal staff trained in industrial and commercial inspections**



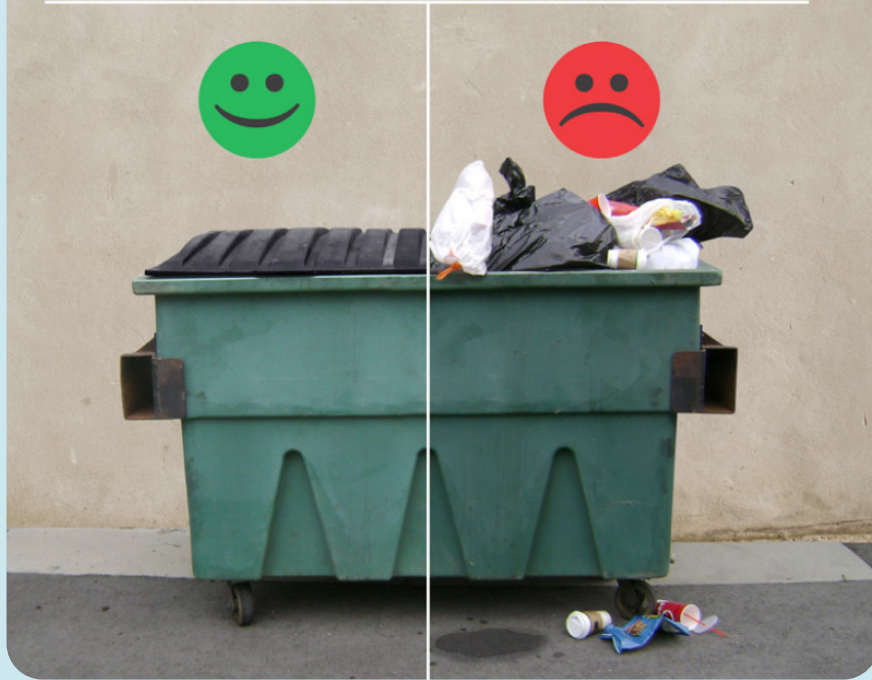
**> 6,500 stormwater inspections at industrial & commercial sites**

## Protecting Stormwater through Business Inspections

Improperly managed commercial and industrial sites can significantly impact the water quality of local streams. Restaurant managers must properly dispose of grease and other waste items and keep outside areas clean. Vehicle service facility managers must keep wash waters and chemicals from reaching streets and gutters. Fortunately, there are stormwater-friendly ways to conduct many activities – whether manufacturing materials or storing wastes.

SCVURPPP member agencies conduct inspections at priority businesses to protect stormwater quality. In 2019, member agencies conducted inspections at automotive repair shops, restaurants, garden centers, retail stores, research facilities, machine shops, salvage yards, and manufacturing facilities. Enforcement actions are taken on businesses with violations.

# CLOSE THE LID ON LITTER



▲ *Fact sheets and outreach imagery assist with implementation of proper BMPs*

## Guiding Successful Implementation

SCVURPPP staff train member agency inspectors on business outreach strategies and materials.

Guidance provided by SCVURPPP in 2019 included:

- **Outreach Materials** - Stormwater BMP brochures for businesses are available in several languages on the SCVURPPP Watershed Watch website: [www.MyWatershedWatch.org/resources/for-businesses](http://www.MyWatershedWatch.org/resources/for-businesses). SCVURPPP continues to update these materials and develop new outreach material as needed. Examples of materials developed are shown on the right.
- **Inspector Trainings** - SCVURPPP staff conducted an annual training for over 45 member agency staff to assist in conducting effective inspections at businesses. The 2019 workshop included three case studies of challenging situations and actions taken. Code enforcement officer and inspector safety was also discussed.
- **Inspection Coordination Meetings** - SCVURPPP staff facilitate periodic meetings for staff from multiple member agencies to provide updates on regulatory compliance, discuss guidance materials, and share information.



## Preventing Storm Drain Pollution Outdoor Storage and Spill Response at Your Business

### Storm Drains and the San Francisco Bay

When wash waters, leaked waste, and spills enter the street and storm drain inlets, they flow untreated through the storm drain system to our local waterways, the San Francisco Bay (Bay), and eventually the ocean. These pollutants can be toxic to fish, wildlife, and people. Federal, state, and local regulations prohibit discharge of anything but rain water into the storm drain.

Help protect the Bay and local creeks by following the guidelines below.

#### Good Housekeeping

- Train employees on Best Management Practices (BMPs) for material storage, spill prevention and response.
- **Never** dump oils, chemicals, mop water or other fluids into a storm drain, gutter, street, drainage ditch, creek, or any surface leading to a storm drain.
- Regularly inspect containers/equipment for wear/leaks. Replace as needed.
- Regularly inspect outdoor areas for leaks, chemical/oil spills and loose litter. Clean up spills and leaks immediately. Sweep regularly to prevent debris and other materials from entering storm drain inlets.
- Store all materials inside, if possible.

#### Outdoor Materials Management

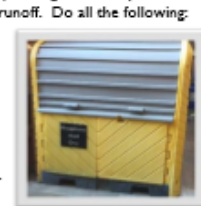
- If materials must be stored outdoors, then keep storage areas tidy.
- Enclose items to prevent contact with rainfall/runoff. Do all the following:
  - Cover (e.g. by a tarp, roof or in a fully enclosed container).
  - Elevate (e.g. on a shelf or on pallets).
  - Use secondary containment (e.g. berms, spill containment pallets, double-walled containers, sheds, etc.) for equipment and fluid storage containers (e.g. barrels, carboys, etc.) that may leak.
- Keep all lids/caps closed when not in use.
- Store materials as far as possible from storm drain inlets.
- Exercise care and planning when transferring liquids and powders to minimize spill potential.
- Schedule regular trash/recycling and hazardous waste hauler pick-ups as needed.
- Keep spill cleanup materials labelled and in easily accessible areas.



Only rain down the storm drain.



Do not let containers leak.



Secondary containment.



Outdoor materials stored on pallets and covered.

#### Cleaning Methods

- Clean outdoor areas and spills with "dry" cleaning methods such as sweeping, vacuuming, dry-mopping, and drying with absorbents or rags/towels (See Spill Response section).
- If water must be used, then use berms or other protective barriers to isolate polluted areas from storm drain inlets. Block off or seal storm drain inlets to prevent potential discharge. Collect and dispose of water in a lawful manner (See Waste Disposal section).
- Collect & dispose of non-hazardous wash waters in mop utility sink, toilet or sanitary sewer cleanout.
- Never wash equipment or materials to gutter, storm drain, street or creek.

For more information about stormwater pollution prevention



1-866-WATERSHED  
[www.MyWatershedWatch.org](http://www.MyWatershedWatch.org)



## NEW IN 2019:

### FACT SHEETS

Machine Shop BMPs  
Spill Response and Outdoor Storage

### FACT SHEET TRANSLATIONS

Machine Shop BMPs  
(Vietnamese)  
Storm Drain Pollution booklet  
(Spanish and Vietnamese)

# Illicit Discharge Detection and Elimination

In general, only rainwater is allowed to flow into storm drains. To complement inspections and other pollutant control efforts, municipal agencies implement illicit discharge control programs to detect and eliminate sources of illicit discharges into storm drains. The programs include the following elements:

- Active surveillance
- Spills and complaint response
- Enforcement
- Educating residents and businesses

In 2019, SCVURPPP staff continued to provide guidance on tracking illicit discharges and coordinated education/outreach material development. Information for who to contact when reporting illicit discharges was updated and posted at [www.SCVURPPP.org/report-a-spill](http://www.SCVURPPP.org/report-a-spill).

▼ *Illicit discharge flowing into storm drain*



## Accomplishments in 2019



**Member agencies responded to >1,000 reports of discharges**



**100 spills reported through the 24/7 inter-agency hotline**

## Guiding Successful Implementation

SCVURPPP staff develop and conduct annual illicit discharge trainings for member agency staff and coordinate periodic meetings to share best practices and discuss challenges. Guidance provided by SCVURPPP staff in 2019 included:

- **Member Agency Trainings** - SCVURPPP staff conducted an annual training on illicit discharge detection and elimination program effectiveness.
- **Inspector Coordination Meetings** - SCVURPPP staff facilitate periodic meetings for member agency staff to share information and provide updates on regulatory compliance and guidance materials. 2019 meetings focused on business inspections and illicit discharge controls.
- **Outreach Materials** - SCVURPPP continues to develop and update stormwater BMP brochures for residents and businesses. These materials are available on the SCVURPPP Watershed Watch website: [www. MyWatershedWatch.org/resources](http://www.MyWatershedWatch.org/resources).





## Getting to Know Your Watershed - Municipal Storm Drain Maps

Residents can learn about Santa Clara Valley watersheds and view a variety of watershed-based maps at:

- **SCVURPPP Watershed Watch** - [www.MyWatershedWatch.org/about-watersheds](http://www.MyWatershedWatch.org/about-watersheds)
- **Oakland Museum Creek Maps** - [Explore.MuseumCA.org/creeks/crkmap](http://Explore.MuseumCA.org/creeks/crkmap)
- **Valley Water Watershed Information** - [www.ValleyWater.org/learning-center/watersheds-of-santa-clara-valley](http://www.ValleyWater.org/learning-center/watersheds-of-santa-clara-valley)

These websites include interactive creek and storm drain maps that help people understand their connection to storm drains, creeks, and San Francisco Bay. Building this understanding can help community members make eco-conscious choices in their everyday lives. Together, member agency staff and residents can help make our waterways thriving ecosystems that support wildlife, fish, and other natural resources.



## Tracking Illicit Dumping/Discharges

Member agency field staff, including inspectors, and the general public can report illicit dumping incidents or spills to SCVURPPP member agencies. In 2019, **SCVURPPP member agencies responded to over 1,000 reports of illicit discharges.** Most of these reported discharges were threatened or potential discharges (82%), while the remaining reported discharges actually reached storm drains and/or local waterways. Almost all potential and actual discharges were resolved in a timely manner, and the remaining discharges were fully resolved after member agencies employed escalating enforcement actions (such as administrative citations and fines).

## Reducing the Impacts of Mobile Businesses

Mobile businesses such as pet groomers, surface cleaners, and carpet cleaners have become an increasing part of modern life. To ensure that these businesses are included in pollution prevention considerations, SCVURPPP staff has helped guide its member agencies in identifying mobile businesses with the potential to impact stormwater quality. Currently, 190 mobile businesses have been identified as operating in Santa Clara County. In 2019, member agencies issued 21 enforcement actions to prevent and correct illicit discharge issues from mobile businesses.

## To Report Hazardous Spills To Creeks Call 1-888-510-5151 (Valley Water)

This number is available 24/7 and leads to the Valley Water Pollution Hotline. As part of an Emergency Response Program, Valley Water staff contact the appropriate agency to respond to the spill. Approximately 100 incidents are reported per year through this inter-agency system.

## To Report Spills To/Near a Storm Drain Call the Appropriate Agency

The illicit discharge contact information for each SCVURPPP member agency is provided in this table. Common examples of illicit discharges include pesticides, washwaters, sewage, automotive fluids, paint, construction materials and wastes, sediment and/or silt, and food wastes.

Agency	Phone
Campbell, Los Gatos, Monte Sereno, Saratoga	(408) 354-5385
Cupertino	(408) 777-3354
Los Altos	(650) 947-2770
Los Altos Hills	(650) 941-7222
Milpitas	(408) 586-3365
Mountain View	(650) 903-6378
Palo Alto	(650) 329-2413
San Jose	(408) 945-3000
Santa Clara	(408) 615-5580
Sunnyvale	(408) 730-7260
Unincorporated Santa Clara County	(408) 918-3400

**Only Rain  
Down the Storm Drain**

# Construction Site Controls

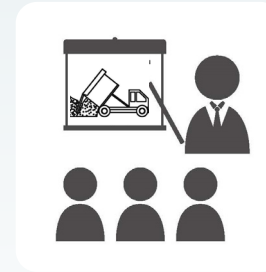
Contaminated wash waters, wastes, leaks, spills, and polluted runoff from construction sites can harm local streams and San Francisco Bay. Water that flows over roads and surfaces, exposed dirt, exposed raw and waste materials, vehicles, and equipment also picks up pollutants, such as oil, grease, sediment and litter, which can impact stormwater quality.

To reduce the potential stormwater impacts from construction sites, municipal agencies in Santa Clara Valley work to educate construction site owners and contractors, and inspect construction sites to make sure proper pollutant control practices are being used. SCVURPPP member agencies conduct year-round construction site inspection and control programs to ensure that controls are in place. For those sites where improvements are needed, construction site inspectors implement follow-up actions, such as enforcement of local ordinances that prohibit the discharge of pollutants to municipal storm drain systems. The primary elements of construction site control programs implemented in Santa Clara Valley include:

- Identifying and tracking construction sites needing inspection
- Conducting stormwater management inspections
- Following-up at sites with issues
- Educating member agency staff, construction contractors, and site owners on stormwater Best Management Practices (BMPs)

Resources on construction site management are available in several languages at [www.SCVURPPP.org/construction-site-control](http://www.SCVURPPP.org/construction-site-control).

## Accomplishments in 2019



**120 municipal staff trained in inspections**



**>4,100 stormwater inspections at construction sites**

▼ *Municipal staff inspect a sloped construction site for proper erosion control and sediment management.*





California Stormwater Quality Association

About Events Resources Membership News & Library

BMP Handbooks

- Construction
  - Public Documents
- Industrial & Commercial
- Municipal
- New Development & Redevelopment

California LID / GI

Effectiveness Assessment

Funding Resources

Position Papers

QISP Qualification



Construction

The Construction BMP Online Handbook is a information you need to stay in compliance w general permit, with detailed monitoring guide Template. The printed 2003 version of the Co when the handbook became an online subscri Construction BMP Online Handbook assures (January 2015).

SWPPP Template Information

▲ The CASQA Construction BMP Handbook/Portal is available to SCVURPPP members. This handbook helps users select and implement construction BMPs.

Guiding Successful Implementation

In 2019, SCVURPPP staff coordinated a set of construction site training workshops for 120 member agency staff. These workshops included a regulatory refresher of stormwater inspection requirements and construction site BMPs. Case studies of different construction scenarios were presented. In addition, the workshop discussed the new control program for managing PCBs during building demolition (See Page 19 for details).

▼ Example BMP for a clean site entrance: Long, sturdy rumble plates to shake dirt off of large vehicle wheels, placed over gravel to keep dirt from leaving the site.



▲ Example BMP for good site management: covered stockpile, weighted down and surrounded by a berm to keep debris from blowing.

Guiding Inspections and Enforcement

In 2019, member agencies conducted over 4,100 construction site stormwater inspections. Almost 900 enforcement actions were taken in order to correct issues of potential or actual discharges. Almost all issues were corrected in a timely manner (usually within 10 business days) after violations were discovered.

Most construction site violations involved erosion control, sediment control, and site management. Outreach materials and escalating levels of enforcement (e.g. a verbal warning, followed by a citation or fine if the issue was not fixed) helped ensure that construction sites are not polluting public streets and waterways.

# Public Information and Outreach

**Y**ou are the solution to water pollution! SCVURPPP encourages watershed protection through community events, advertising, and educational programs. These public information and outreach activities are carried out under the umbrella of SCVURPPP's Watershed Watch Campaign ([www.MyWatershedWatch.org](http://www.MyWatershedWatch.org)). This multi-year, multi-faceted outreach campaign raises awareness about protecting watersheds and preventing stormwater pollution.

## Watershed Watchers Program at Don Edwards Wildlife Refuge

SCVURPPP continued to fund the Watershed Watchers Program at the Don Edwards San Francisco Bay National Wildlife Refuge Environmental Education Center. The Watershed Watchers Program conducts many activities that build watershed awareness and encourage pollution prevention habits. These include marsh walks, gardening events, bird watching, and wildlife observation. Over 5,000 children and adults participated in these activities.

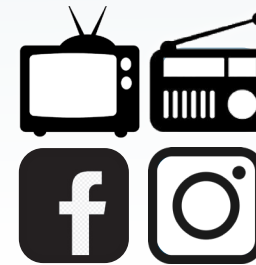
▼ *Cub Scout on a guided hike at the Don Edwards National Wildlife Refuge.*



## Accomplishments in 2019



**>20,400 people reached through public events and programs**



**>13.3 million impressions from media advertising**

## Outreach at Public Events

Public events are an opportunity for staff to engage the community in learning behaviors that protect stormwater quality and local waterways. In 2019, SCVURPPP and member agency staff attended 10 community events throughout the county. Over 1,400 people played a bean bag toss game that teaches the difference between the storm drain and the sanitary sewer, and helps people identify the correct way to dispose of items such as plastic bags, paint, candy wrappers, pesticides, and batteries. Over 2,100 educational materials were distributed at outreach events.

## Teaching Students About Stormwater

Each year, SCVURPPP sponsors lively educational assemblies by the musical group ZunZun at local elementary schools. These bilingual musical assemblies teach elementary school students and their teachers about watersheds and stormwater pollution prevention. Afterwards, some students conduct a week long litter cleanup activity for a chance to win Watershed Watch backpacks. ZunZun led a total of 50 interactive assemblies at 25 elementary schools and two community events in 2019, reaching nearly 14,000 students, teachers, and event attendees across Santa Clara Valley.

## Media Advertising

The **Watershed Watch Campaign** continued media advertising to promote messages on less-toxic pest management, green streets, litter prevention, the Santa Clara Valley Green Gardener program, car washing, and proper disposal of household hazardous waste. This past fiscal year, media advertising resulted in over 13.3 million impressions (estimated exposure to advertisements). In 2019, \$96,000 was spent on advertisements, with \$173,100 in added value (e.g., free advertising, promotional events) provided by media partners. Over the past six fiscal years, added value from media partners often matched if not exceeded the paid media advertising budget.

- ▶ *Watershed Watch booth at discount car wash event. In 2019, radio stations such as KFOX aired radio advertisements to promote Watershed Watch Campaign messages, activities, and events.*



## Strengthening Partnerships with Businesses

The SCVURPPP Watershed Watch program continued its successful partnerships with local businesses in 2019. Three new partnerships were developed: EarthBaby Compostable Diaper Service, Montague Premier Car Wash, and Vikhar Valero drive-through car wash. Media and community partners provided discounts on products and services, free media advertising, etc. with an added value of over \$200,000 in 2019. For example, Classic Car Wash provided 275 discounted car washes to drivers with Watershed Watch discount cards (\$1,100 value). The Watershed Watch discount card is free and available to the public at community events and online at [www.MyWatershedWatch.org/partners-discounts/discounts](http://www.MyWatershedWatch.org/partners-discounts/discounts).

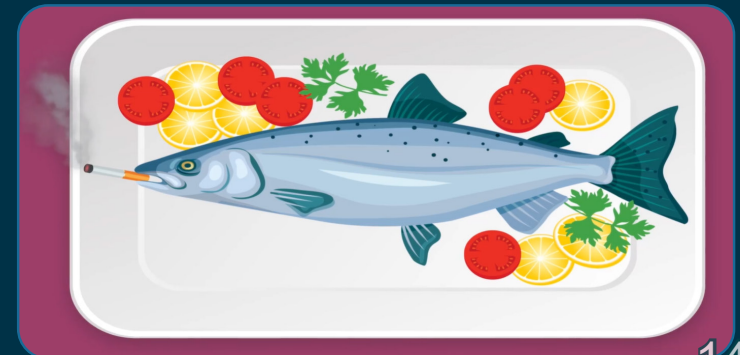
- ▶ *Anti-litter bus shelter advertisement, developed through the City of San Jose's partnership with the San Jose Sharks hockey team. Bus shelter advertisements were placed in areas with moderate to high trash generation.*



## Increasing Our Online Presence

The **Watershed Watch website** received over 61,000 total visits in 2019, compared to 52,600 visits in 2018. Mobile device access has increased from approximately 6,000 mobile visits/year in 2014 to 28,500 mobile visits/year since 2017. This jump may be related to increased advertising on mobile platforms and presence on mobile-friendly social media sites such as Facebook and Instagram.

- ▶ *Scene from "Smoked Salmon" animated PSA, reminding the public to dispose of trash and cigarettes properly. ([Instagram.com/p/BzbRXK\\_HOj5](https://www.instagram.com/p/BzbRXK_HOj5))*



# Pesticides Toxicity Controls

Pesticides used in landscaped areas and around buildings are often toxic to fish and other aquatic life. Many creeks in the San Francisco Bay Area are considered “impaired” due to pesticides that reach these waterways via stormwater.

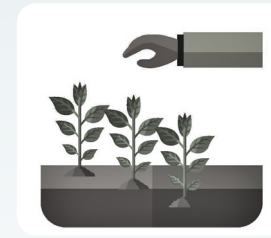
To protect local creeks and San Francisco Bay, SCVURPPP member agencies implement Integrated Pest Management (IPM) techniques to minimize pesticide use on municipal properties and public lands. Agencies also conduct outreach to educate residents and businesses about the water quality impacts of pesticides on water quality, and provide information on eco-friendly pest management methods. Water quality monitoring conducted by SCVURPPP also helps detect pesticide-related toxicity in local creeks.

More information on these efforts can be found at [www.SCVURPPP.org/pesticides](http://www.SCVURPPP.org/pesticides).

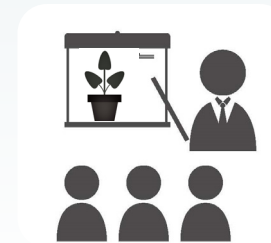
▼ *Sustainable landscape maintenance can reduce the need for toxic pesticides.*



## Accomplishments in 2019



**21 landscapers completed the Santa Clara Valley Green Gardener training**



**390 member agency staff trained in Integrated Pest Management (IPM)**

## Promoting Less-Toxic Pest Control

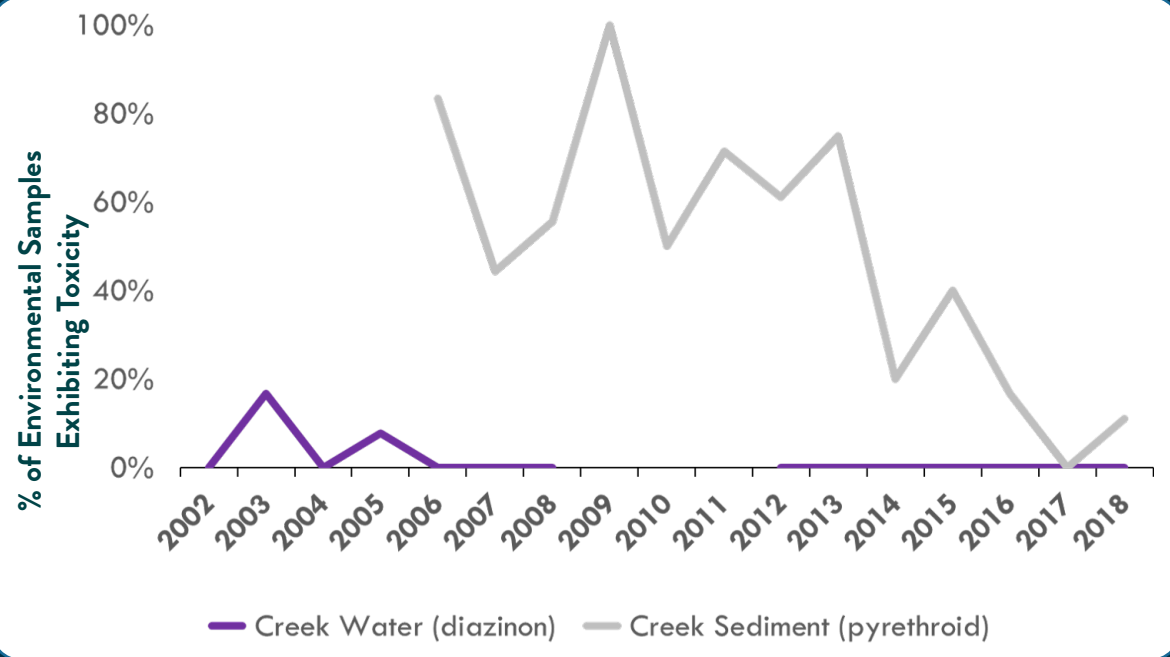
Through educational programs for member agency staff and the public, SCVURPPP continues to focus on reducing the impacts of pesticides on local waterways. In 2019, these programs included:

- **Pesticide Outreach to Retail Stores** - “Our Water Our World” is a regional effort to help customers find and select less-toxic pest control products. SCVURPPP continued to maintain less-toxic pest control factsheets and product shelf tags at retail stores in Santa Clara Valley. In 2019, 20 nurseries and hardware stores participated.
- **Promoting Integrated Pest Management** - The Program continued to make less-toxic pest control information available online at [www.MyWatershedWatch.org/residents/less-toxic-gardening](http://www.MyWatershedWatch.org/residents/less-toxic-gardening). Resources and IPM messages were promoted with multi-lingual radio and TV advertisements, and through social media platforms.
- **Training Member Agency Staff** - 390 staff from SCVURPPP member agencies were trained in IPM practices in 2019.
- **Green Gardener Trainings** - SCVURPPP continued to host the Santa Clara Valley Green Gardener training program. In 2019, 21 landscape professionals learned about sustainable landscaping techniques, which reduce the need for toxic pesticides.



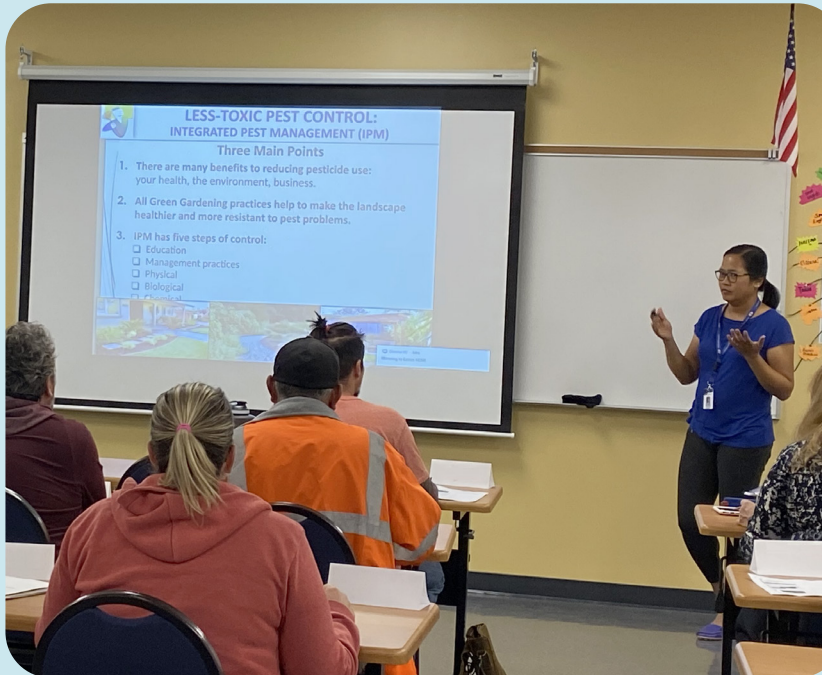
# Monitoring Creeks for Pesticides and Toxicity

Bay Area rivers and creeks are harmed by pesticides, even when pesticides are applied according to regulations. In 2019, SCVURPPP continued to monitor creek water and sediment for pesticides and signs of pesticide-related toxicity. Diazinon is one type of pesticide that is toxic to certain insects in local creeks. Residential uses of pesticides containing water-soluble diazinon were banned in 2004, which corresponds to a drop in water toxicity observed in local creeks. However, shortly after the ban, there was an increase in the use of pyrethroid pesticides, alternatives to diazinon, and sediment toxicity related to pyrethroids. This highlights one of the challenges of reducing pesticides in stormwater and local waterways. Newly developed pesticides may have toxic chemicals that are not yet understood or regulated. Public use of new pesticides can impact aquatic ecosystems.



▲ **Pesticide-related water and sediment toxicity observed in Santa Clara Valley urban creeks from 2002 to 2018.** Water toxicity is measured in the laboratory using an aquatic organism sensitive to the pesticide diazinon. Sediment toxicity is measured using an organism sensitive to pyrethroid pesticides.

▼ **Santa Clara Valley Green Gardener training class in 2019**



## Pesticide Source Control Effectiveness Evaluation

In 2019, SCVURPPP staff assessed the effectiveness of pesticide source control measures implemented between 2013 and 2018. Highlights of the assessment include:

- All member agencies have adopted IPM policies/ordinances and procedures.
- All member agency staff that apply pesticides routinely receive IPM training.
- Member agency staff and contractors have either discontinued or significantly reduced their use of pesticides that pose water quality concerns.
- From 2013 to 2018, SCVURPPP sponsored 55 IPM trainings at local nurseries and hardware stores and trained 488 employees. During the same time period, 108 individuals completed the Basic Santa Clara Valley Green Gardener Training.
- Over 77% of regulated development projects in Santa Clara Valley adopted beneficial landscaping methods that minimize pesticides, fertilizers, irrigation, and runoff.
- SCVURPPP monitoring data indicate that the pesticide diazinon is no longer a concern to Santa Clara Valley urban creeks. Other types of pesticides (e.g., pyrethroids, fipronil, and neonicotinoids), however, have gained market share during the past decade and pose a potential threat to stormwater quality.

# Trash Load Reduction

Reducing the amount of trash in local creeks, rivers and San Francisco Bay remains a high priority for municipal agencies in the Santa Clara Valley. In 2019, all SCVURPPP member agencies exceeded the 80% trash reduction goal established in the Stormwater Permit. This goal was achieved by continued implementation of a variety of stormwater trash prevention and management actions, including:

- **Implementing local ordinances that limit the distribution of single-use grocery bags and single-use carryout foodware**
- **Conducting street sweeping and on-land cleanups**
- **Capturing trash using devices installed in the storm drain system**
- **Removing trash from creeks and shorelines**

To support municipal agencies in these efforts, SCVURPPP staff conducted on-land trash assessments, studied innovative trash control strategies, and continued webinars on trash controls via the Zero Litter Initiative (ZLI). These efforts help member agencies reach mandated trash reduction goals by using multiple control approaches and assessment techniques. More information on trash control strategies in the Santa Clara Valley can be found at [www.SCVURPPP.org/trash](http://www.SCVURPPP.org/trash).

▼ *Creek and shoreline cleanups are one of several ways to control trash.*



## From the Creeks to the Source: 5 Key Trash Control Measures

**Creek and Shoreline Cleanups** - Local agencies and volunteers help remove trash from creeks and shorelines. In calendar year 2019, >1,000 National River Cleanup Day volunteers removed 46,600 lbs of trash from 63 miles of Santa Clara Valley creeks. Over 2,200 Coastal Cleanup Day volunteers removed >57,700 lbs of trash from 58 miles of creeks/shorelines.

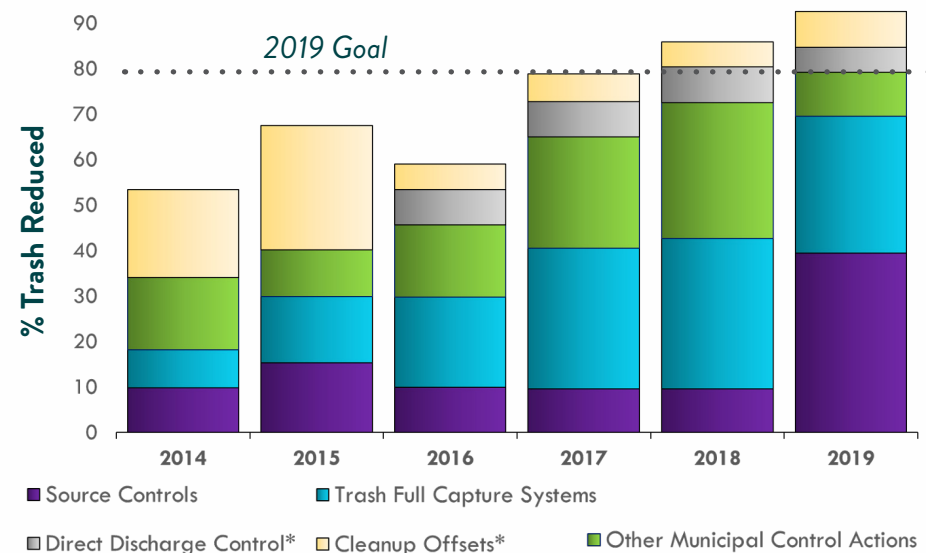
**Direct Discharge Controls** - Member agencies continue to address homelessness and related litter issues in and around local creeks. San Jose's direct discharge program removed over 140,000 gallons of trash.

**On-Land Trash Controls** - Actions such as street sweeping, trash bin management, litter prevention, and business improvement plans help reduce trash on streets and sidewalks. SCVURPPP staff assess trash levels on streets and sidewalks to help evaluate the effectiveness of these actions. In 2019, SCVURPPP staff conducted over 1,000 visual assessments.

**Underground Trash Capture Systems** - Member agencies have installed underground systems that screen trash (>5mm) from stormwater. SCVURPPP staff provide assistance by mapping and calculating trash reductions. More capture systems are planned in the future.

**Source Controls** - Local ordinances on single-use plastic grocery bags and single-use carryout foodware have helped reduce these items in stormwater and creeks throughout Santa Clara Valley.

▼ **Overall stormwater trash reductions in Santa Clara Valley by year**



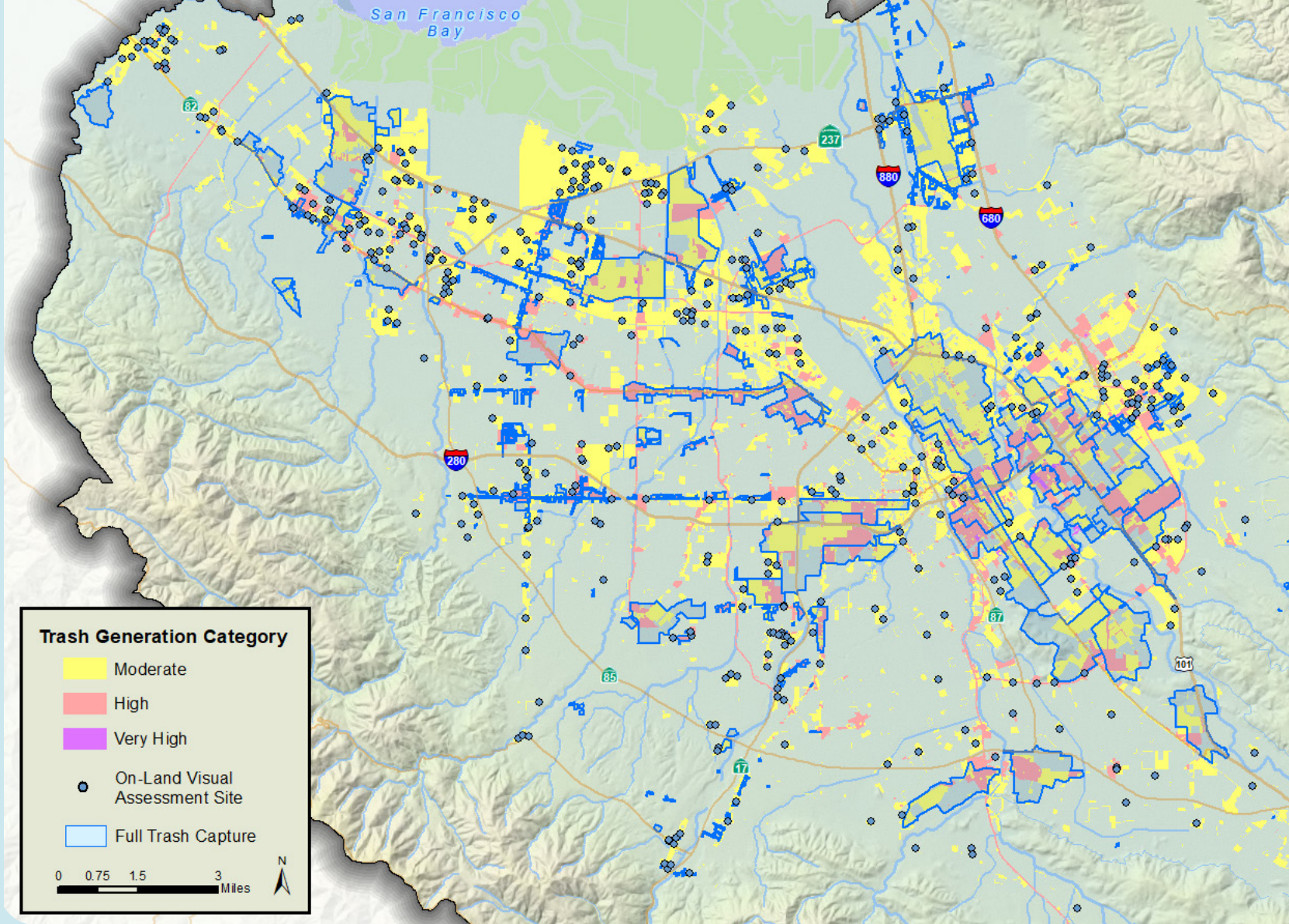


## Accomplishments during 2012-2019:

**>1,300 trash capture devices reduced trash from 12,000 acres of land**

► **Baseline trash generation throughout Santa Clara Valley, and location of Full Trash Capture treatment areas and 2019 On-Land Visual Assessment sites**

Trash capture devices are typically installed in areas with moderate to very high trash levels. These devices help keep trash from reaching local creeks and waterways. Visual assessments help track the progress of trash control efforts throughout Santa Clara Valley.



## Monitoring Trash in Streams and Shorelines

In 2019, SCVURPPP continued to actively participate in the Bay Area Stormwater Management Agencies Association (BASMAA) regional project to develop and test trash monitoring methods in creeks and shorelines. Monitoring began in October 2017 and will continue into 2020. Qualitative (visual) and quantitative approaches are being evaluated. In 2019, SCVURPPP staff conducted visual assessments at 30 sites and member agency staff conducted quantitative assessments at an additional 32 sites in Santa Clara Valley creeks. A report documenting the project results and conclusions will be finalized in June 2020. For more information, see [www.SCVURPPP.org](http://www.SCVURPPP.org).



▲ Creek in Santa Clara Valley

**P**olychlorinated biphenyls (PCBs) and mercury are high priority pollutants that pose a public health risk, especially to those eating certain types of fish from San Francisco Bay. Also known as “legacy pollutants,” PCBs were once commonly used in electrical equipment, industrial applications, building materials, and household items. Mercury sources include legacy mining operations, various urban sources, and atmospheric deposition. To make fish safer to eat and protect human health, pollutant sources need to be identified and controlled.

SCVURPPP member agencies are required to reduce the amount of PCBs and mercury entering San Francisco Bay via stormwater. Key pollutant control measures that SCVURPPP staff and local public agencies are implementing include:

- Identifying and referring PCBs and mercury source properties
- Implementing Green Stormwater Infrastructure (GSI)
- Managing PCBs-containing materials during building demolition
- Developing public outreach and education materials on the health risks of consuming certain types of Bay fish

More information on the PCBs and mercury control program in the Santa Clara Valley can be found at [www.SCVURPPP.org/PCBs-Hg](http://www.SCVURPPP.org/PCBs-Hg).

- ▼ *Staff clean storm drain inlet with vector (suction) equipment to control sediments and associated pollutants.*



## Managing PCBs in Building Materials, Storm Drains and Roadway Infrastructure

PCBs were used in many building materials, including insulation, adhesives, and caulking, with the highest concentrations found in buildings built between 1950 and 1980. To minimize the impacts to stormwater and waterways, PCBs in building materials must be managed during the demolition of priority buildings. To assist in developing local management programs, SCVURPPP and member agency staff participated in a multi-year regional project that provided protocols, guidance, and training materials to municipalities throughout the region. The new building demolition management programs began in July 2019.

PCBs may have also been used in caulk and sealants applied to storm drain and roadway infrastructure from 1950-80. In 2017, SCVURPPP began participating in a regional project to investigate the possible presence of PCBs in this infrastructure. Over 50 caulk and sealant samples were collected across different types of infrastructure in the Bay Area. These samples were tested for PCBs and the results indicated that PCBs may have been used in some types of applications. Final project results are available through the [Bay Area Stormwater Management Agencies Association](#).

## Reducing the Health Risk of Consuming SF Bay Fish

SCVURPPP continued to educate local residents and anglers on the risks of eating certain types of Bay fish. The Watershed Watch campaign promotes the California Department of Public Health's multi-lingual "Guide to Eating Fish and Shellfish from San Francisco Bay" brochures across Santa Clara Valley. These brochures were made available in several places: on the Watershed Watch website, at four local fishing supply stores, at four outreach events, and in educational programs at the Don Edwards San Francisco Bay National Wildlife Refuge. Additionally, Watershed Watch advertising included messages on safe fish consumption. In 2019, 840 brochures were distributed, and media advertising delivered 844,875 gross impressions.

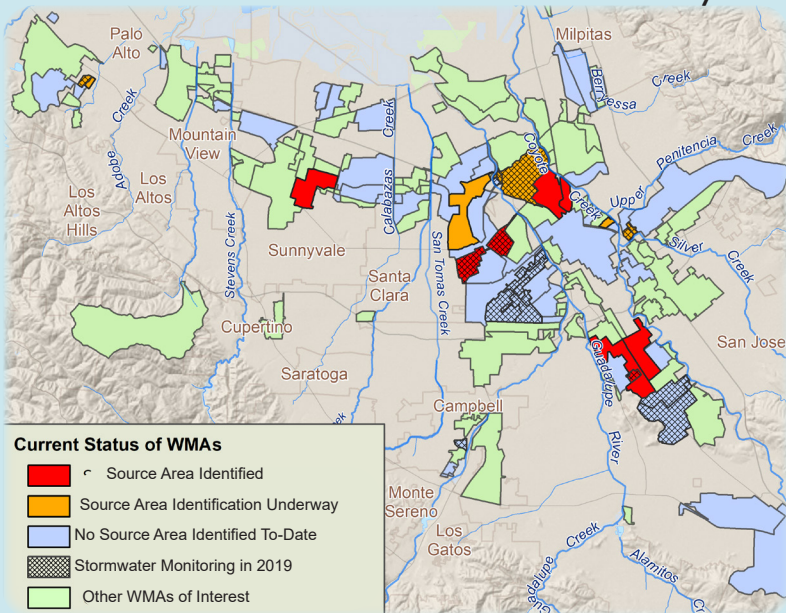
## Intercepting Pollutants with Green Stormwater Infrastructure (GSI)

Green Stormwater Infrastructure (GSI) uses natural filtration through vegetation and soils to remove pollution from urban runoff. In the Santa Clara Valley, stormwater from over 550 acres of older (pre-1980s) industrial areas and 850 acres of other types of urban land is now filtered through GSI facilities. These facilities have helped SCVURPPP member agencies reduce both PCBs and mercury in stormwater flowing to local creeks and San Francisco Bay.

## Investigating PCBs and Mercury Sources

SCVURPPP staff sample stormwater runoff and street dirt to locate watershed areas that may have sources of PCBs or mercury. To identify specific source areas within these "Watershed Management Areas" (WMAs), more focused investigations are conducted based on this initial data. Through these investigations, historical and current land uses are evaluated, and sediment and stormwater samples are collected next to, or downstream of, land areas of interest. Since 2012, SCVURPPP has collected more than 70 stormwater samples and nearly 400 soil/sediment samples to assist member agencies in identifying PCBs source areas. Source area investigations have resulted in the identification of 12 PCBs source areas, three of which were referred to the SF Bay Regional Water Quality Control Board for abatement.

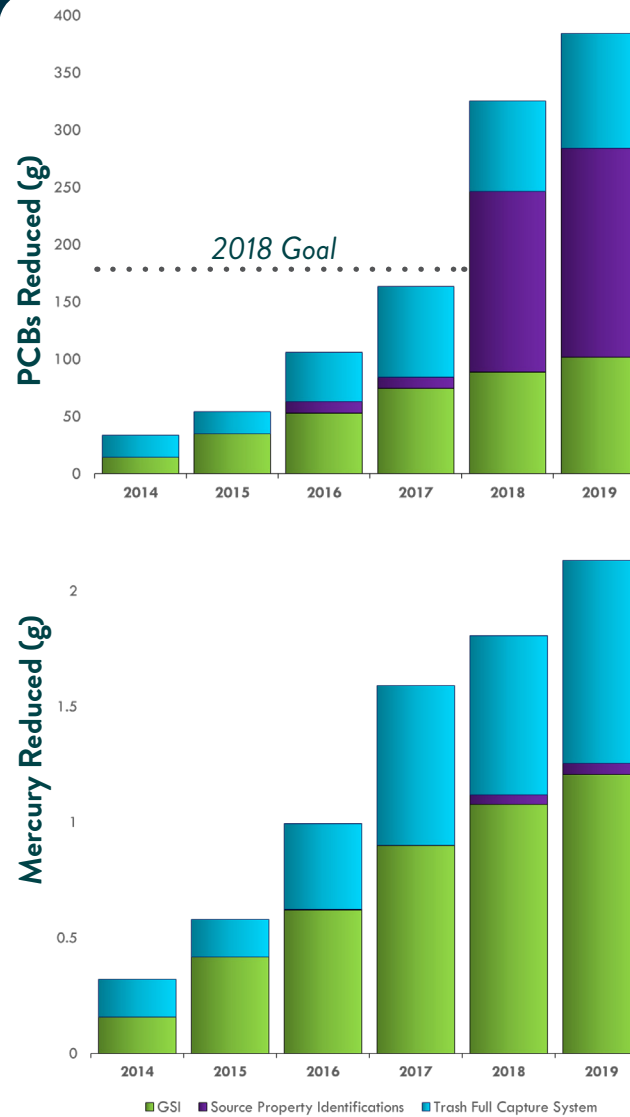
### ▼ WMAs in Santa Clara County



## Demonstrating Progress Towards Pollutant Reduction Goals

◀ 2014-2019: Santa Clara County municipal agencies demonstrate progress towards meeting PCBs and mercury reduction requirements under the Stormwater Permit.

SCVURPPP member agencies are required to demonstrate progress towards PCBs and mercury reduction requirements. In 2019, SCVURPPP staff continued to help track control measure implementation and report the associated PCBs and mercury reductions. An estimated 0.4 kg of PCBs and 2.1 kg of mercury were reduced across the Santa Clara Valley in 2019. The 2018 goal for PCBs was again exceeded in 2019.



GSI installations were responsible for the largest portion of the mercury reductions (57%), while source property identifications and referrals provided the largest portion of the PCBs reductions (47%). Large-scale trash full capture devices were also responsible for a significant portion of the PCB and mercury reductions reported by SCVURPPP member agencies.

## Other Stormwater Treatment Systems

PCBs and mercury attach to sediments in the environment. Trash capture systems and other municipal activities that remove sediment can also help reduce these pollutants in stormwater. SCVURPPP agencies have installed over 1,300 stormwater treatment systems to intercept trash. In 2019, trash full capture systems were responsible for 25% of the PCBs reductions and 40% of the mercury reductions (See above figure).

# Copper Controls

Copper is toxic to fish and other aquatic life, even in very small amounts. Everyday sources include copper-based chemicals for pools/spas/fountains, copper roofs and building features, certain pesticides, and copper-based brake pad dust from vehicles. To protect local creeks and San Francisco Bay, SCVURPPP member agencies take actions such as:

- Managing waste from cleaning and treating copper building features;
- Controlling discharges from pools, spas and fountains that contain copper-based chemicals;
- Inspecting industrial and commercial sites for proper copper controls;
- Partnering with manufacturers to lower/eliminate copper content in products such as brake pads; and
- Educating inspectors and site managers on Best Management Practices (BMPs) to keep copper from polluting our waterways.

SCVURPPP staff continued to assist member agencies in 2019 by providing guidance on control measure tracking and reporting and education/outreach materials specific to copper.

For additional background information and resources on copper controls, see [www.SCVURPPP.org/copper](http://www.SCVURPPP.org/copper).

▼ *Runoff from copper roofs and other architectural features can impact stormwater quality when not properly managed.*



## Accomplishments in 2019



**120 inspectors  
trained on copper  
control BMPs**

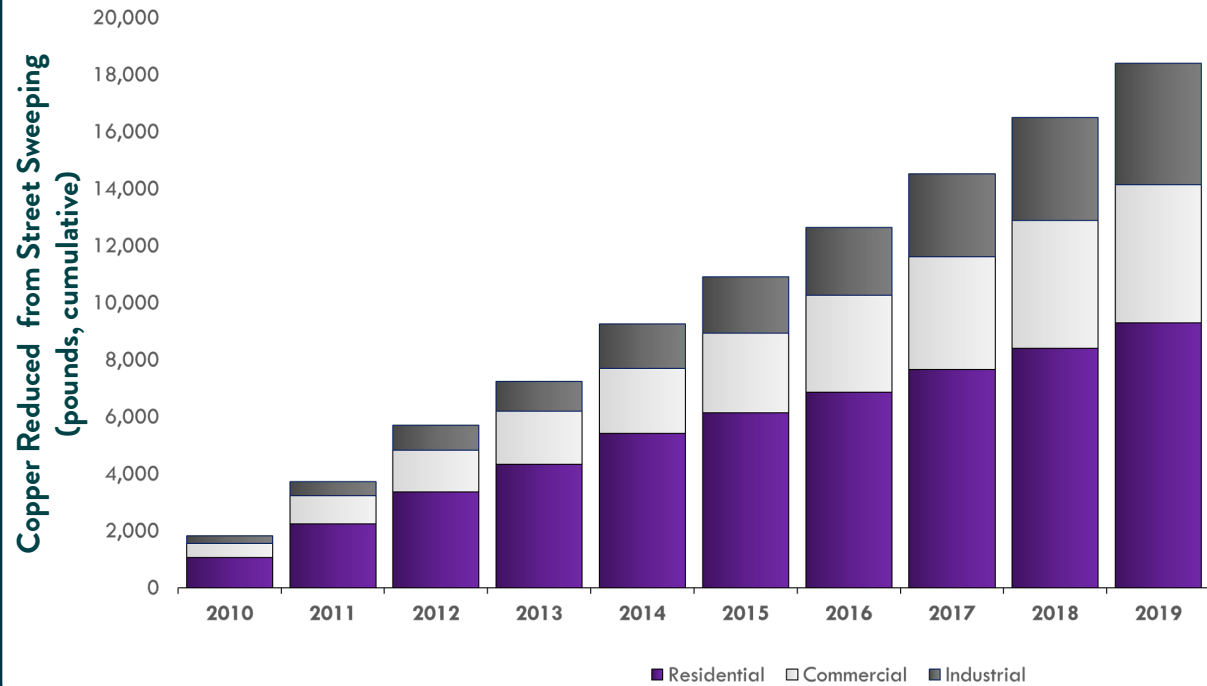
### Training Member Agency Staff

At the SCVURPPP construction site stormwater inspection workshop, member agency staff were trained on Best Management Practices (BMPs) related to copper control on behalf of SCVURPPP member agencies. For more information about this workshop, see Construction (Page 12).

# Estimating Copper Reductions from Street Sweeping

► **Cumulative copper reductions from street sweeping activities in different land use areas across Santa Clara Valley from FY 2010-FY 2019.** Reductions are estimated based on several factors, as described in the Program's Annual Report.

In 2019, SCVURPPP member agencies swept 204,200 miles of paved streets, keeping approximately 44,000 tons of material from entering the storm drain system. Copper attached to this material was also removed via sweeping. SCVURPPP staff estimate that over 18,000 pounds of copper has been removed by member agency street sweepers over the past decade. Street sweeping also removes metals associated with street dirt such as nickel and zinc. In this way, routine street maintenance prevents a variety of pollutants from entering local creeks and San Francisco Bay.



## Outreach to Residents and Contractors

SCVURPPP has developed and provides several resources for residents, building developers, and member agency staff on stormwater copper controls. Materials are available at [www.MyWatershedWatch.org](http://www.MyWatershedWatch.org).

- **Residential Copper** - Copper-based chemicals are added to pools and spas as algacides. Brochures are available that describe BMPs for draining pool or spa water, as well as washing vehicles, properly.
- **Copper Architectural Features** - Copper roofs and building features can impact stormwater quality. The Program's Requirements for Copper Roofs and Other Architectural Copper fact sheet describes BMPs for proper disposal of copper-containing washwater. Additionally, the Program developed guidance to assist member agencies with managing copper in wastewater and architectural features. Example copper ordinances and template Conditions of Approval for member agencies are included in the guidance.



▲ *Street sweeping helps remove sediment, litter and associated pollutants, including copper.*

For over two decades, SCVURPPP has implemented a comprehensive surface water quality monitoring program in Santa Clara Valley. In 2019, SCVURPPP completed its eighth year of monitoring as part of the Bay Area Regional Monitoring Coalition (RMC), a regional collaboration among stormwater programs that focuses on collecting high-quality data on the chemical, physical and biological condition of local creeks. SCVURPPP also continued to participate in the San Francisco Bay Regional Monitoring Program (RMP), a program that has monitored contaminants in San Francisco Bay for over 25 years. Both the RMC and RMP help SCVURPPP member agencies implement effective stormwater pollution management programs by tracking the status and trends of the health of local creeks and Bay.

## Assessing Local Creek Health

SCVURPPP collects important data on creek health indicators, including biological community indicators, physical habitat, nutrients, temperature, bacteria, pesticides, and toxicity. These indicators help member agencies understand creek health and assist in identifying important factors that “stress” these ecosystems.

In 2019, SCVURPPP staff analyzed eight years of data to provide an overall assessment of creek health in the Santa Clara Valley. The map on page 24 shows the health of Santa Clara Valley creeks, which have been significantly impacted by the last 80 years of urbanization. With GSI implementation, creek health is expected to improve. For more information on creek health indicators and the eight-year report, see [www.SCVURPPP.org/monitoring/local-creek-health](http://www.SCVURPPP.org/monitoring/local-creek-health).

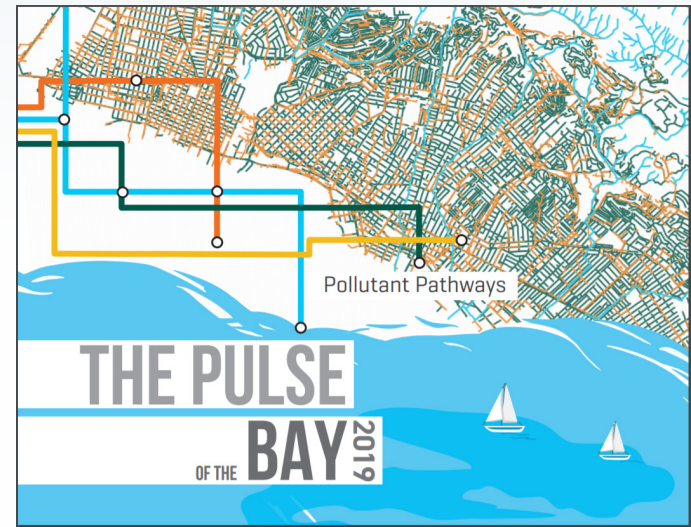
## Identifying Sources of Impacts to Creeks

SCVURPPP staff evaluate physical habitat and water chemistry data to identify potential sources of “stress” to Santa Clara Valley creeks. These analyses help identify and prioritize likely causes of reduced creek health and inform management decisions. At a macroscale, stressors impacting creek health include the degree of urban land use in the watershed and habitat degradation within the creek corridor. Efforts are in place to address these key concerns. For instance, GSI projects help mitigate urbanization impacts, which may help improve creek habitats over time.

In addition to evaluating stress to broad creek systems, SCVURPPP staff also conduct studies at specific creek segments to identify sources of localized stress. Information on all studies to identify stressors and sources can be found at [www.SCVURPPP.org/monitoring/sources-of-impacts-to-creeks](http://www.SCVURPPP.org/monitoring/sources-of-impacts-to-creeks).

## Actively Participating in San Francisco Bay Monitoring

The San Francisco Bay Regional Monitoring Program (RMP) is the most comprehensive contaminant monitoring program on the west coast, and one of the premier estuary monitoring programs in the world. SCVURPPP member agencies contribute financially to the RMP, and both Program and member agency staff actively help guide the RMP by participating on its Steering and Technical Review Committees. Additional information on the RMP, including monitoring data and information, can be found at [www.sfei.org/programs/sf-bay-regional-monitoring-program](http://www.sfei.org/programs/sf-bay-regional-monitoring-program).



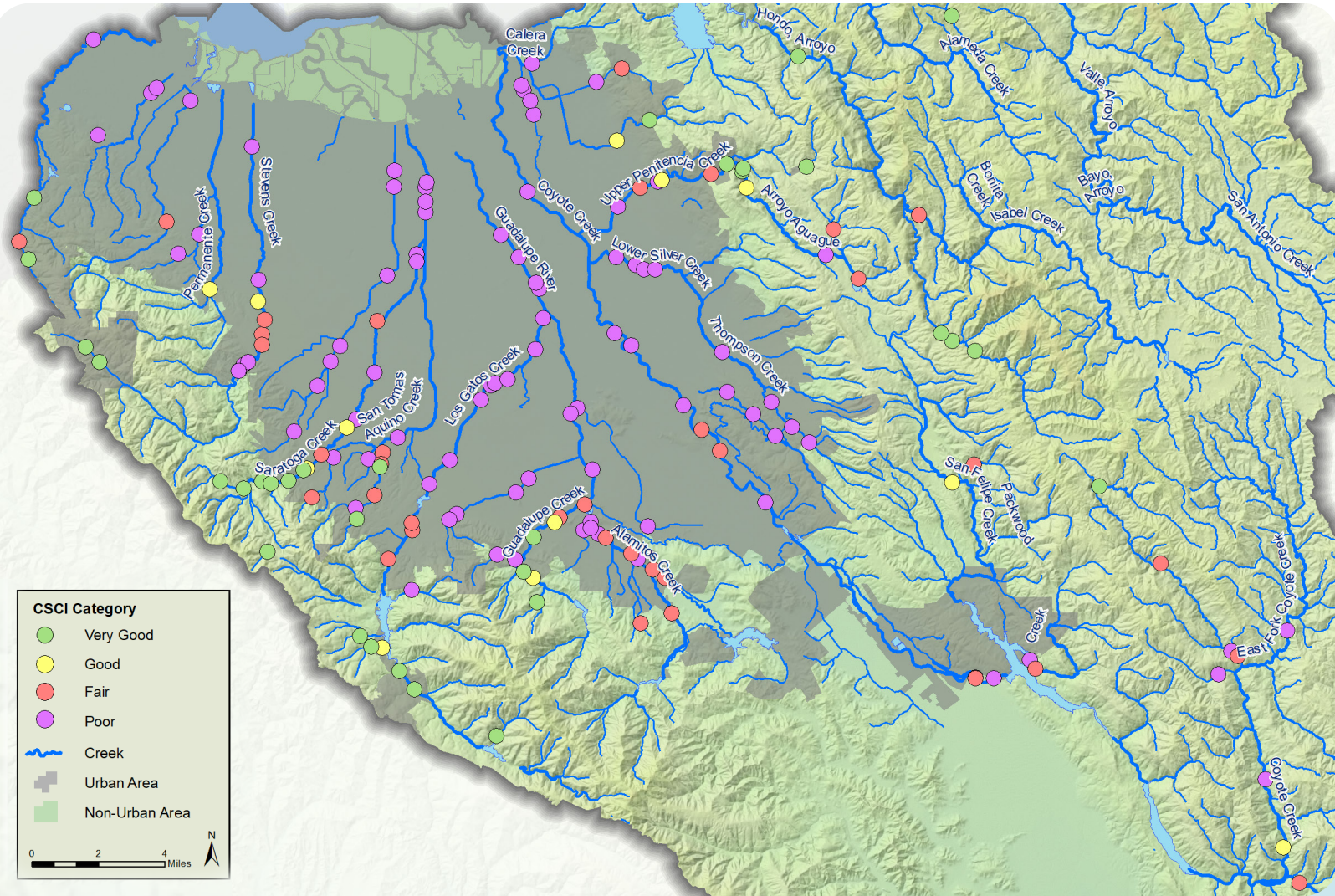
In 2019, SCVURPPP conducted the following site-specific studies:

- **Coyote Creek Toxicity Study** - This study began in 2017, with the goal of identifying the extent and magnitude of toxicity observed in creek sediments and the possible sources. Based on the results of the study, sediment toxicity appears to be declining, possibly due to an overall decreased usage of certain pesticides (see pages 15-16).
- **Lower Silver-Thompson Creek Nutrients Study** - Nutrients play a key role in ecosystems, but high levels of nitrogen and/or phosphorous can cause algal blooms, low dissolved oxygen, and fish deaths. Initial monitoring studies have found elevated levels of nitrogen in Lower Silver-Thompson Creek. SCVURPPP staff study a segment of this creek to see if nutrient-related impacts are present, and to identify the sources of the elevated nutrients. Field sampling is being conducted in 2019-2020 and findings will be reported in Spring 2021.

# In Progress: Data Exploration Tool

SCVURPPP and member agency staff understand that without adequate interpretation and presentation, monitoring data can be challenging to digest and act upon. To improve stakeholder access to water quality and creek health information, SCVURPPP staff are developing an online data exploration tool. Users will be able to view multi-year water quality monitoring results across different spatial scales via interactive maps and charts. Raw data will also be searchable and downloadable.

More information about the data exploration tool is at [www.SCVURPPP.org/monitoring/water-quality-monitoring-data](http://www.SCVURPPP.org/monitoring/water-quality-monitoring-data).



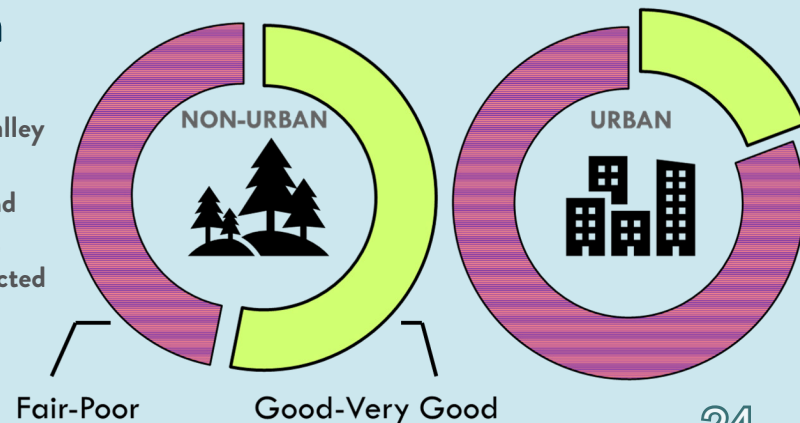
▲ Stream health of Santa Clara Valley sites sampled during 2012-2019, based on California Stream Condition Index (CSCI) scores.

## Evaluating Long-Term Trends in Creek Monitoring Data

SCVURPPP has monitored water quality for over two decades. Although monitoring was not initially designed to evaluate long-term trends, the extent of data collected in Santa Clara Valley creeks during this timeframe may reveal whether water quality and creek health are changing over time.

In 2019, SCVURPPP staff began evaluating the long-term dataset, which includes data on pesticides, toxicity, bacteria, chlorine, temperature, dissolved oxygen, and biological conditions. Findings are included in the Program's Integrated Monitoring Report (IMR), which can be found at [www.SCVURPPP.org/monitoring](http://www.SCVURPPP.org/monitoring).

► Santa Clara Valley creek health in non-urban (left) and urban (right) areas, based on data collected during 2012-2019.



In 2019, SCVURPPP and its member agencies successfully implemented innovative stormwater control strategies, protecting stormwater quality in the Santa Clara Valley. In 2020, SCVURPPP plans to continue to implement controls consistent with the current regional Stormwater Permit (MRP 2.0). Key 2020 actions for each Program Element are summarized below.

## Municipal Operations

- Implement pollutant controls at municipal facilities and during municipal activities.
- Guide and train member agency staff on BMPs.

## New and Redevelopment Controls

- Require stormwater treatment systems, including GSI, on applicable new and redevelopment projects.
- Inspect treatment systems to ensure proper O&M.
- Continue to implement municipal GSI Plans, and train member agency staff on GSI planning and implementation.
- Coordinate with relevant State and local transportation and environmental agencies.

## Commercial & Industrial Site Controls

- Inspect applicable commercial and industrial facilities for stormwater issues, and follow up on issues identified.
- Train member agency staff on BMPs.
- Update public education and outreach materials for commercial & industrial site operators.

Additionally, a new regional Stormwater Permit is currently under development (MRP 3.0), with a tentative reissuance date of 2021. SCVURPPP and member agency staff will continue to participate in the stakeholder process for the Permit reissuance that is currently underway.

## Illicit Discharge Detection and Elimination

- Implement spill and dumping response protocols and storm drain system screening programs.
- Follow up on spill/dumping cases.
- Train member agency inspectors on identifying and responding to illicit discharges.
- Update public education and outreach materials on preventing illicit discharges.

## Construction Site Controls

- Inspect construction sites for stormwater-related issues, and follow up on issues requiring corrective actions.
- Train construction site inspectors on BMPs and protocols.
- Update public education and outreach materials on effective stormwater management at construction sites.

## Public Outreach & Education

- Ensure storm drain inlet markings are on storm drains.
- Continue to implement the SCVURPPP Watershed Watch Campaign.
- Coordinate Green Gardener training, ZunZun school assemblies, outreach events, and less-toxic pest control outreach.
- Support the City of San José partnerships with the San José Earthquakes and Sharks on litter reduction outreach.





## Pesticide Toxicity Controls

- Implement Integrated Pest Management (IPM) policies/ordinances and train applicable municipal staff.
- Conduct the "Our Water Our World" Store Partnership project, promoting less-toxic pest control at hardware stores.
- Track U.S. EPA and California Department of Pesticide Regulation actions and encourage inclusion of water quality concerns during the pesticide evaluation processes.

## Trash Reduction

- Maintain achievement of the 80% trash reduction goal.
- Continue to implement existing source control actions, including single use grocery bag and expanded polystyrene foodware ordinances.
- Maintain trash full capture systems.
- Remove trash from applicable trash hot spots in creeks and on shorelines.
- Conduct On-land Visual Assessments to track trash control measure effectiveness.

## PCB & Mercury Controls

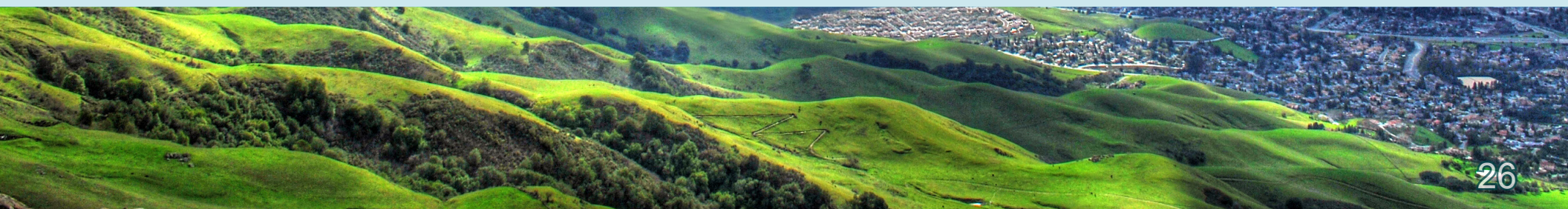
- Implement PCB and mercury control measures to maintain achievement of pollutant reduction goals.
- Continue to implement the PCB-related building demolition control program.
- Identify additional PCB source areas and refer to the Water Board sites contributing PCBs to stormwater.
- Continue to implement a risk reduction program for residents consuming Bay fish.

## Copper Controls

- Require the use of appropriate BMPs to manage copper in stormwater.
- Train industrial and commercial site inspectors on copper BMPs.

## Water Quality Monitoring

- Continue to implement the SCVURPPP Watershed Monitoring and Assessment Program, including the monitoring of local waterways.
- Participate in the SF Bay Regional Water Quality Monitoring Program (RMP).
- On the SCVURPPP website, launch a new online data exploration tool for visualizing local water quality data.





**Santa Clara Valley Urban Runoff  
Pollution Prevention Program**

[www.SCVURPPP.org](http://www.SCVURPPP.org)