

and Bay ...



goes down the storm drain!

Rain or irrigation water can pick up pollutants as it flows over parking lots, roadways, roofs, sidewalks and landscaping. Installing stormwater treatment measures (STMs)— bioretention basins, vegetated swales, tree well filters, and media filtration systems— can help capture pollutants and prevent them from reaching storm drains, local creeks, and the Bay. Property owners, and/or site operators, are required to properly maintain and repair all such systems per **Title 20.95.120 of the San José Municipal Code.**



*Environmental Services*

To find out more about specific stormwater treatment measures on a property, contact:

City of San José Development Services  
**(408) 535-3555**

Or visit:

**City of San José Online Permit Center**  
**at [sjpermits.org](http://sjpermits.org)**

For more information about the City of San José's stormwater programs, visit:

**[www.sjenvironment.org](http://www.sjenvironment.org)**

# Stormwater Treatment Measures



## Operation and Maintenance Requirements



*Environmental Services*

[www.sjenvironment.org/stormwatertreatmentmeasures](http://www.sjenvironment.org/stormwatertreatmentmeasures)

To help protects our creeks



... make sure only rain

### Stormwater Regulations

The San Francisco Bay Municipal Regional Stormwater NPDES Permit (Permit) regulates cities in the Santa Clara Valley to prevent stormwater pollution. The Permit specifically requires development projects of a certain size to incorporate stormwater treatment measures that remove pollutants before they flow into storm drains. City of San José inspectors will examine these systems to ensure Property Owners are properly operating and maintaining them.

Please review the required maintenance procedures in the material provided during your inspection and contact your City inspector at **(408) 945-3000** if you have any questions.

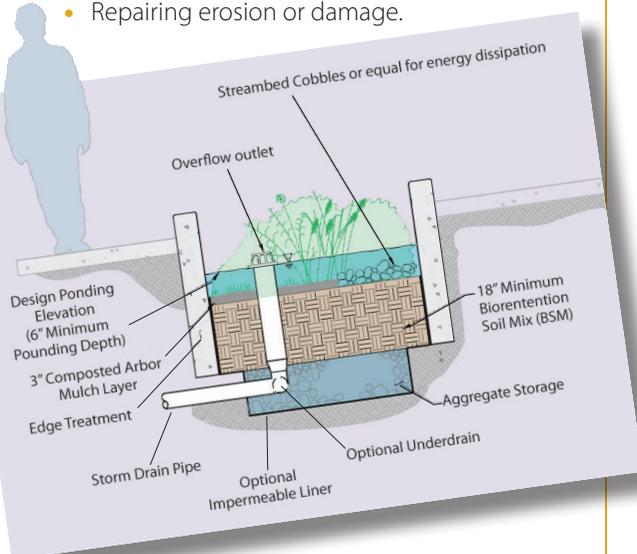
# Operation and Maintenance Requirements

## Maintaining Landscape-Based Treatment Measures

Landscape-based stormwater treatment measures, such as bioretention basins, vegetated swales, infiltration basins, and tree well filters, remove pollutants in stormwater by filtering runoff through vegetation and soil. They must be well-maintained to function properly.

Maintenance activities include but are not limited to:

- Replacing dead/dying vegetation.
- Removing weeds/invasive plants.
- Avoiding use of herbicides, pesticides, or synthetic fertilizers.
- Pruning only as necessary.
- Adding undyed arbor mulch, as necessary.
- Ensuring adequate irrigation.
- Removing sediment, litter, and debris.
- Repairing erosion or damage.



**Above: Cross section of typical bioretention basin**

## Maintaining Mechanical (Vault-Based) Stormwater Treatment Measures



**Above: Mechanical Stormwater Treatment Measure, Manhole Cover**

Mechanical stormwater treatment measures remove pollutants by separating floatable debris and filtering stormwater runoff. Common vault-based systems include media filters and hydrodynamic separators.

Vault-based stormwater treatment measures require regular maintenance by qualified personnel to ensure they function properly. This typically requires setting up a maintenance contract with the manufacturer or another company qualified to inspect and make repairs to the system. Maintenance activities often require the use of vacuum trucks and personnel that have OSHA confined space certification.

### Your Responsibilities:

- Ensure the devices are inspected twice annually, before and after the rainy season.

- Have your vendor perform recommended maintenance activities according to manufacturer's specifications.
- Keep all inspection and maintenance records on site for five years and readily available to City inspectors.

### Responsibilities of Maintenance Personnel:

- Ensure system is functioning properly and adequately maintained.
- Remove sediment, trash and other debris.
- Replace filter media.
- Repair or replace system components.
- Treat for any mosquito larvae, if present.

## Maintaining Permeable Pavement Systems

Permeable pavement systems generally consist of either an asphalt-like or concrete-like material that is highly permeable or a series of permeable interlocking concrete pavement (PICP) pavers that allow water to flow through the joints between them. These systems allow rain water to be filtered and stored in a rock layer before infiltrating into the native soil below. They also support the weight of pedestrians and vehicles.

### Permeable Pavement System Inspection and Maintenance Checklist:

- Vacuum or sweep the surface. Do NOT power wash, as aggregate between pavers may be damaged or removed.

- Replenish aggregate in joints, as needed.
- Replace or repair broken pavers to ensure structural integrity.
- Ensure inlets and outlets are not blocked or clogged.
- Conduct the above maintenance before each rainy season, or sooner if any component becomes damaged.



**Left: Permeable pavement systems are often used instead of concrete or asphalt.**



**Bottom right: Permeable interlocking concrete pavement is arranged in a grid pattern. Joints are filled with aggregate to allow infiltration between the pavers.**