

## What is a Storm Drain System?



Keep storm drain inlets or pipes on your property free of trash and debris to prevent them from becoming clogged.

A storm drain system is designed to collect and convey stormwater runoff. The system includes a combination of inlets, channels, and underground pipes that collect runoff and discharge to our local creeks. When rainwater flows over hard surfaces and landscaping, it can collect materials such as trash, debris, and sediment. Storm drain systems must be kept clear of these materials and kept in good condition to prevent localized flooding and damage to property.

This maintenance guide provides property owners with information about responsibilities and suggested procedures for maintaining storm drain systems. Information provided in this guide is most applicable to storm drains with large pipes, ditches or channels, and inlets. However, simplified routine inspection and maintenance procedures are also applicable to smaller landscape drainage systems.

### Who Owns and Maintains the Storm Drain System?

Storm drains in Vista consists of both publicly-owned (City of Vista) and privately-owned systems. Storm drains owned by the City of Vista are typically located in City-owned areas, such as under public streets, in parks, or on other public facilities, and are maintained by the City. Storm drains on private property are typically owned and maintained by that property owner.

#### **How to Determine Ownership**

- 1. To find the storm drain system on your property, follow the path that rainwater flows through your property and look for where water enters a drain inlet or pipe.
- 2. "Stormwater Atlas Maps" are available through the City of Vista (cityofvista.com) and may help identify the storm drain system in your neighborhood or property.
- 3. Review title report and subdivision map provided to you when you purchased the property.
- 4. If you have completed steps 1 to 3 and are still unable to determine ownership, please email waterquality@cityofvista.com if you have any questions.



VISTA MUNICIPAL CODE CHAPTER 13.18.100 (Maintenance Requirements) requires that private storm drain systems be maintained to ensure the continued functionality of those systems.

## **Overview of Maintenance Procedures**

The following maintenance procedures are recommended to ensure functionality of a private storm drain system. However, the City of Vista is not responsible for maintaining, repairing, or inspecting private storm drain systems. The information contained in this guide should not be relied upon in lieu of a private property owner independently ascertaining the nature and requirements of the private storm drain system for which they are responsible for, or in lieu of that owner taking all necessary and appropriate actions to repair and maintain that system.

Please note that properties developed later than the mid-2000's often have engineered vegetated swales, basins, or landscaping on them to remove pollutants from stormwater runoff. These facilities may require specific maintenance activities, so please contact the City of Vista if you have any questions.

#### **Safety**

Storm drain systems typically consist of underground pipes and structures, which can present multiple hazards to your personal safety. Do not enter underground structures such as pipes and basins. Consider hiring a sewer-cleaning contractor to perform all inspection, cleaning, and/or repair to meet Occupational Safety and Health Administration (OSHA) requirements.

#### **Routine Inspections**

Regularly inspect all private inlets, channels, and outlets on your property for trash and debris. Remove all trash and debris to prevent clogging of the storm drain system. Dispose of materials as solid waste. If trash and debris is regularly observed, consider increasing the frequency of inspections and cleaning.

During rain events, visually check to ensure that water is flowing unobstructed. If you see ponding or an inlet not being able to "keep up" with the rain, you may have an obstruction downstream.



Inspect underground pipes. Conduct repairs (if necessary) and remove sediment and trash that may have collected inside.

#### **Specialized Contractor Inspections**

Inspect any underground pipelines and structures with specialized camera equipment and have the Contractor provide you a copy of the video. It is recommended that your contractor have a National Association of Sewer Service Companies (NASSCO) Certification.

It is good practice to perform specialized contractor inspections on a yearly basis during the early months of summer. This will allow sufficient time to clean and/or make repairs prior to the upcoming rainy season.

Have the contractor review the video with you and identify areas where defects are observed, such as the following:



Cracked or broken pipes can cause sinkholes on your property; repair or replace damaged stormwater pipes.

- A. Sediment, trash, or debris more than 20% of the pipe diameter
- B. Rust or corrosion
- C. Cracks, broken, and/or missing pieces of pipe
- D. Holes any in structure or pipe
- E. Visible reinforcing steel
- EDents or breaks that close more than 20% of the pipe diameter

Based on these observations, the defect(s) may be addressed through specialized cleaning or may require specialized repair.

If specialized cleaning is pursued (a combination of flushing, jetting, and vacuuming to remove the sediment, trash, and/or debris), do not allow your Contractor to "push" the sediment, trash, and debris downstream of your property. If you observe your Contractor performing this, instruct them to stop immediately and notify the City's stormwater quality hotline at 760.643.2804. Your Contractor should be collecting and removing the sediment, trash, and debris.

If specialized repairs are necessary, your Contractor should provide recommended repair options. In general, repair or replacement can either be done by open excavation (dig and replace) or by installing a new structural lining inside the existing pipe. If portions or all of the pipe need to be replaced using open excavation, a grading permit may need to be obtained from the City.

If your repair requires any excavation, call 811 and notify DigAlert a minimum of two working days, not including the date of notification, and request that the approximate location of buried utilities be marked so that you don't unintentionally dig into a separate underground utility line.

If the area of repair connects directly to a City-owned storm drain or requires work in the public right-of-way or street, the Contractor will need to obtain an encroachment permit from the City.



# STORMWATER PROTECTION PROGRAM

For information, please call 760.643.2804.

cityofvista.com/stormwater

200 Civic Center Drive Vista, CA 92084

