



Rule of thumb

The best maintenance is usually preventative, and most problems with storm water control structures can be avoided with one simple step: Clear trash, leaves and other debris away from storm water structures. Debris leads to clogging, which makes control structures less effective at limiting flooding and erosion.

RETENTION BASIN MAINTENANCE

- Regularly inspect retention basins for trash and debris, bank erosion, clogged pipes or other damage.
- Remove and properly dispose of any trash or debris that accumulates in the basin.
- Use pesticides and fertilizers sparingly on your yard and landscaping. Excess chemicals can harm aquatic life and cause unhealthy overgrowth of algae.
- Allow native vegetation to grow up around the edge of the basin to help slow the flow of storm water and prevent erosion.
- Do not plant trees along the edge of the pond, as their roots can damage the pond's banks.
- Pick up after pets to prevent the waste from being washed into the pond.
- Call a professional to clean out underground or enclosed structures.

Important notice

While retention basins are important tools for managing storm water, they can be dangerous during a heavy rainstorm. Never allow children to play near these storm water structures, as there is a risk of injury or drowning.

Also, watch out for toxic blue-green algae, or cyanobacteria, a rare type of algae bloom that can harm pets and aquatic life and cause serious illness in humans. Be on the alert for the following:

- ▶ Algae that looks like green paint floating on the surface of the water
- ▶ Large numbers of dead fish or other aquatic creatures in and around the pond
- ▶ Signs of poisoning in pets that have been in or near the water

Learn more

Visit SD1.org for more information about what SD1 is doing to manage storm water, improve water quality and protect your community from storm water damage.

Get help

If significant erosion, sediment accumulation, algae overgrowth or other damage is evident in the pond, contact SD1 at 859-578-7450 or info@sd1.org to have the pond inspected. SD1 staff may be able to help determine the cause of the problem and the individual or entity responsible for the maintenance.

For more information about properly maintaining storm water control structures on private property, call a local engineer or landscape architect.



Maintaining Retention Basins

Storm water, SD1 & you

As our communities grow, our neighborhoods include an increasing number of buildings, roads and parking lots. This growth is important for our local economy, but the additional hard, impervious surfaces prohibit rain and snow melt from soaking into the ground. This creates storm water runoff, which can lead to erosion and flooding that may damage homes and landscaping, make travel difficult and affect recreation and wildlife habitats.

To control storm water runoff, Sanitation District No. 1 (SD1) maintains an expansive system of storm sewer pipes and other structures, but it is only one piece of the storm water puzzle – cities, counties and individual property owners also play an important role.



Your role

When new homes, businesses and neighborhoods are built, developers often install control structures at individual project sites to manage runoff. These storm water control structures sometimes interconnect with neighboring property or with infrastructure under SD1's control, but responsibility for structures on private property often lies with property owners, homeowner associations or property management companies.

It is essential that private property owners properly maintain storm water control structures on their property to ensure the entire system runs smoothly.

Private property owners also should be careful when adding new structures, like a shed, or making major landscaping changes to their property. If a change reroutes storm water and has a negative impact on properties downstream, the matter could become a legal issue among neighbors.

Good neighbors

While individual property owners are required to maintain some storm water control structures, they also can take voluntary steps to help the whole community. Even if a structure is publicly owned, citizens can protect their community from flooding and other problems by simply clearing away nearby debris as they see it. It's one small, preventative step that can do a lot of good.

Infrastructure 101

The most common storm water structures private property owners may interact with are drainage inlets and outlets, catch basins, detention and retention basins and swales. In addition to limiting flooding and erosion by slowing down water movement, many of these structures also help filter the water before it reaches streams and lakes.

Retention basins

Retention basins are man-made ponds designed to collect, hold and filter storm water runoff from impervious surfaces. Also known as "wet ponds," they hold a permanent pool of water that can provide habitat appropriate for fish and other aquatic life. When it rains, runoff from the surrounding land and other storm water structures (e.g., pipes, inlets and swales) drains into the pond. As the water level rises, excess water is slowly released through a pipe or overflow structure.

