

Stormwater FAQs

What is a watershed?

Basically, a watershed is an area of land that drains water, sediment, and dissolved materials to a common receiving body or outlet.

Along with surface water runoff, a watershed also includes interactions with subsurface water. Watersheds can vary from the largest river basins to just acres or less in size.

What is stormwater runoff?

Stormwater runoff is rainwater that does not evaporate or soak into the ground; instead it flows over rooftops, compacted soil, and paved areas.

Where does stormwater go after it hits the ground?

Stormwater runoff is collected by the City's Municipal Separate Storm Sewer System (MS4) comprised of swales, lakes and ponds, drains and pipes, and canals for drainage to reduce the risk of flooding. During a storm in Palm Bay, stormwater runoff can carry pollution to our waterways by way of our storm sewer system. It is important to note that the stormwater runoff does not go to a treatment facility to be cleaned of pollutants.

How do swales function?

Swales are designed to be a channel for major rainstorms to drain runoff away and prevent flooding. For minor storms, swales are designed to hold rainwater for up to 72 hours before percolating into our groundwater system and evaporating into the atmosphere. By delaying the flow of stormwater, it allows some pollutants to settle.

Who's responsible for the care and maintenance of swales?

The property owner is responsible for the every day care and maintenance of the swales located within the easements around their property. The City of Palm Bay is responsible for the care and maintenance of swales on City owned property.

What is the difference between proper and improper drainage?

Depending on the type of drainage system, one should see water draining within 72 hours. If water is retained in the swale longer than 72 hours after the last rainfall, it could indicate a problem with drainage in your immediate neighborhood. Contact the Palm Bay Public Works Customer Service office and notify them of this issue.

Certain types of stormwater management systems such as a wet detention system or pond are designed to contain stormwater runoff and the water may never drain out completely.

What's the best way to care for my pond?

The best way to care for your pond is to clear or clean inflow/outflow structures, remove nuisance and excess vegetation, repair eroded slopes, clean up trash and yard waste in your yard and gutters and around storm drains. The use of shoreline vegetation can reduce erosion and trap pollutants in stormwater runoff before the runoff reaches the water in the pond.

Avoid fertilizing within 3-10 feet of the shoreline to reduce the chance of it being carried into the pond.

Where does stormwater go after it drains into the swales and ponds?

Some of the water evaporates into the atmosphere, some percolates into the ground, and some flows into a series of ditches and canals that lead directly to the Indian River Lagoon.

Is the stormwater clean when it enters the Lagoon?

No. In Palm Bay, as in most cities across the country, stormwater runoff is NOT treated before it is released into our waterways.

A large portion of the trash and garbage that is left out on our streets, chemicals from agriculture, industry, and households, sediments from construction sites, and petroleum products end up in the Indian River Lagoon after it rains.

What can I personally do to help keep our stormwater runoff from polluting our waterways?

Since 70% or more of the pollution carried by runoff is “Non-Point-Source” that is produced by people everywhere just going about their daily activities, simple changes in behavior can do a lot to clean up our stormwater system:

- Use fertilizers and pesticides according to the directions on the label,
- Dispose of animal waste properly
- Dispose of trash and garbage in receptacles and recycle or compost
- Wash cars on the lawn instead of contributing nutrient-rich wash water to the stormwater system
- Use native Florida plants in landscaping
- Set up a rain barrel to capture runoff from your roof
- Report erosion and sediment runoff from construction sites and illegal dumping and discharging to the Palm Bay Public Works.

What other opportunities are there if I want to get even more involved?

- Invite speakers from the Palm Bay Public Works Department to your organization to give informative stormwater presentations
- Consider the responsibility of “adopting” a road or drain. These programs are open to individuals as well as organizations
- Contact the City of Palm Bay Public Works Department for information on projects such as inlet marking, neighborhood cleanup “blitzes,” etc;
- Get in touch with organizations such as Keep Brevard Beautiful and the Marine Resources Council for their “Indian River Lagoon Watch” volunteer programs

Who do I call if I see someone polluting our stormwater by dumping garbage or other harmful contaminants?

Call the police or sheriff’s department and they will investigate your complaint. You may also call the Public Works Department and Code Enforcement.

Where can I go for more information on stormwater management?

Visit the following websites:

- [Environmental Protection Agency](#)
- [Florida Department of Environmental Protection](#)
- [St. Johns River Water Management District](#)