![Department of Environmental Protection logo] DEPARTMENT OF **ENVIRONMENTAL PROTECTION** MONTGOMERY COUNTY • MARYLAND

Structural Maintenance for
Stormwater Ponds

What are wet and dry ponds?

A pond is a type of stormwater management facility designed to collect rainwater and pollutants and prevent downstream flooding. Wet ponds always have a pool of water. Dry ponds only have water after a storm event. Most ponds located throughout Montgomery County are stormwater management ponds, even ones that are community amenities. Ponds can have many different designs, including ponds with concrete channels, dry ponds with sand filters on the pond bottom, and ponds that provided wetland habitat around the edges.

How do ponds work?

Ponds have an embankment (called a dam) to hold back water that is entering the pond. Most dams are earthen (not concrete) and are grass covered. All stormwater ponds also have a control structure that releases water at a much slower rate than the stormwater entering the pond. While water remains in the pond, pollutants have time to settle at the bottom.
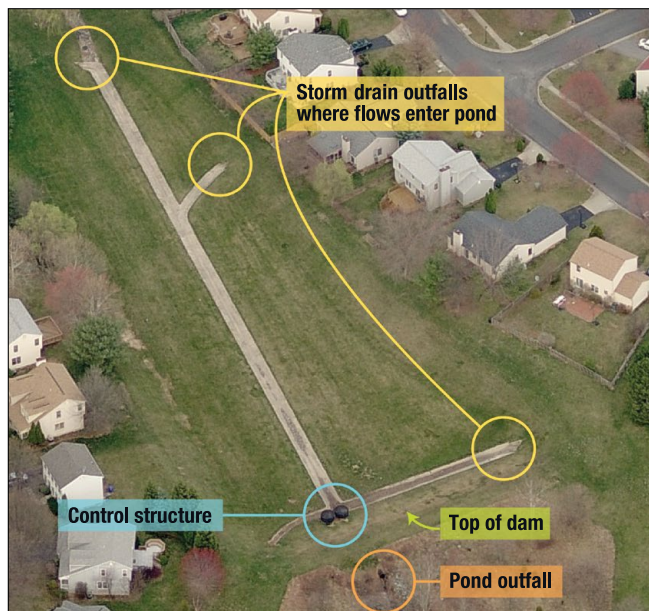
Why are ponds important?

- Remove pollutants
- Improve health of streams and rivers
- Help to make our waters fishable and swimmable
- Improve the quality of the Chesapeake Bay
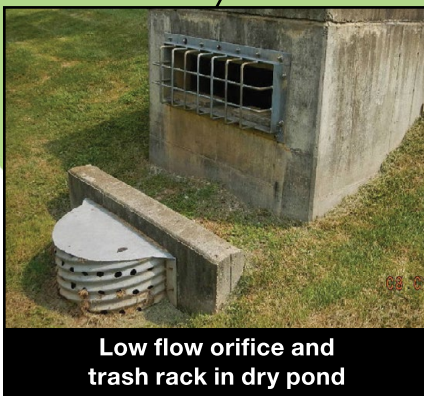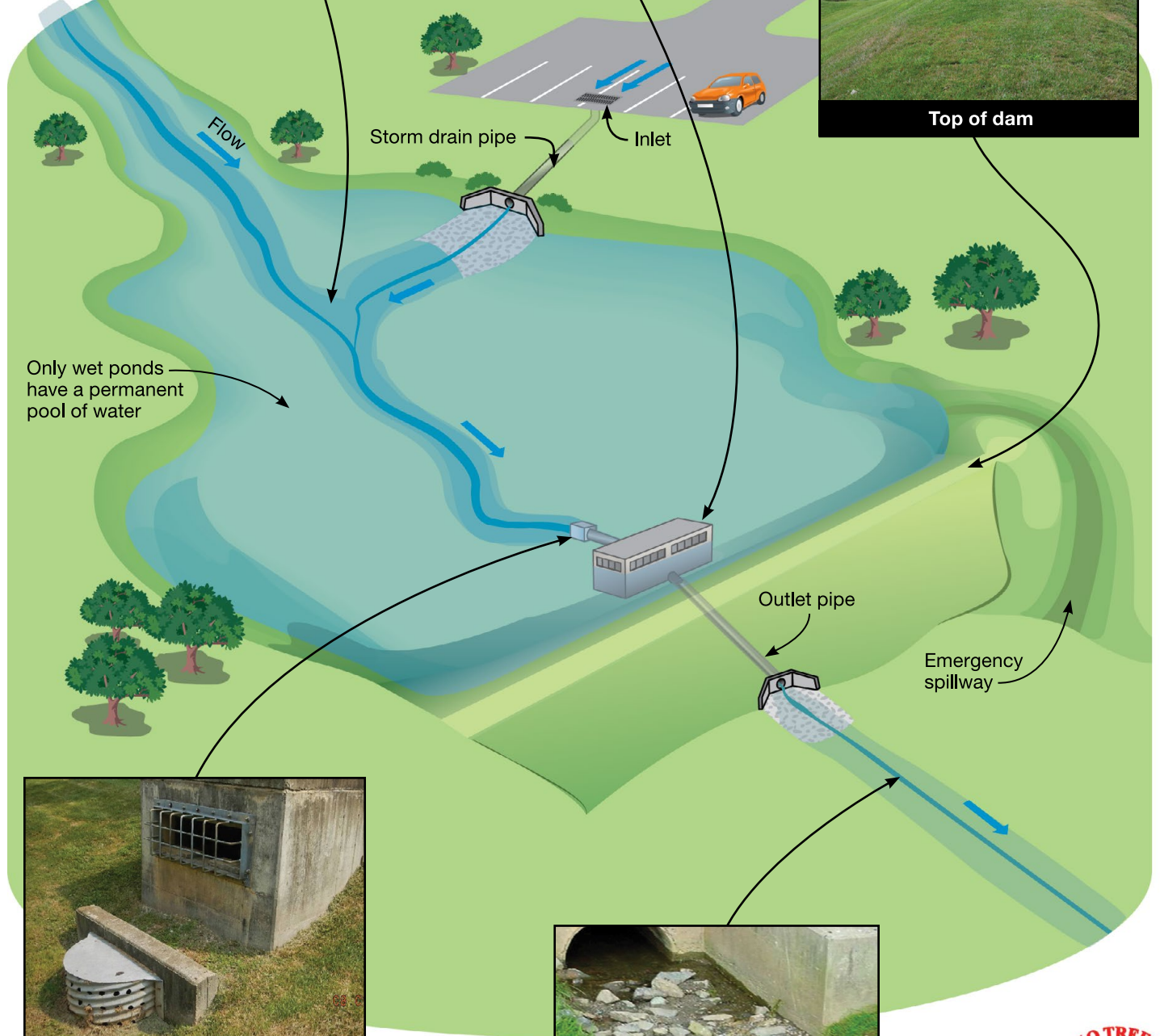
Dry pond

Wet pond

Why is it important to keep your pond maintained?

Unmaintained ponds may:

- Not remove pollutants as intended, sending polluted water to streams and rivers
- Become filled with sediment and debris, so water cannot be stored in the facility, which may lead to downstream flooding and erosion
- Cost more to fix problems if left unchecked
- Cause flooding and safety concerns for nearby residents if the dam breeches

As rainwater flows over hard surfaces and lawns it picks up pollutants such as sediment, trash, pesticides from lawns, nutrients from fertilizer or pet waste, and oil and grease from cars. Ponds can remove much of this pollution.

Storm drain outfalls where flows enter pond

Control structure

Top of dam

Pond outfall

Dry pond with concrete channel

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Low flow channel in dry pond

Control structure

Top of dam

Storm drain pipe

Inlet

Flow

Only wet ponds have a permanent pool of water

Outlet pipe

Emergency spillway

Low flow orifice and trash rack in dry pond

Outflow

NO TREES ON DAMS

Maintenance 101

Structural maintenance must be performed by contractors who have been approved by the Department of Environmental Protection (DEP). No one should remove control structure manholes or enter the control structure without proper training, certification, and permits for confined space entry. Entering the water or any confined spaces without these requirements is a violation of State law and could be dangerous or deadly.

Structural Maintenance Issues

Damaged fence or missing pond safety sign

Dry pond holding water longer than 72 hours

Shoreline erosion on the dam embankment

Cracks or damage to the concrete control structure

Damaged or clogged inlet and outlet channels, pipes, and trash racks

Damaged or corroded trash racks

Accumulation of sediment and debris within the ponds

Leaking control structures and pipe joints

Serious Failures — *Immediate attention required!**

Cracks or sink holes on the dam embankment

Beaver lodges in the wet pool blocking outlet pipes

Damaged or broken control structure

Animal burrows in the dam embankment

Slope failure on the dam embankment

Missing manhole covers on the control structure

*Notify DEP as soon as you notice the following issues to avoid safety concerns and expensive repairs.

Preventive Maintenance Techniques

Performing *preventive maintenance* regularly will prevent long-term damage and help avoid potential violations. These actions will keep your facility looking good and working correctly, which will save you money in the long term. The preventive maintenance actions can be thought of as similar to preventive car maintenance (like changing the oil in your car every 3 months). See the Non-Structural Maintenance Fact Sheet for Ponds for more information.

Structural maintenance is work done on the components of the pond that allow it to control rainwater and remove pollutants. The structural maintenance problems listed on page 3 are things you should be looking out for. When they happen, call DEP for help (like calling your mechanic when the engine light comes on).

Frequently

- Mow surrounding grass and remove trash and debris (please see the Non-Structural Maintenance Fact Sheet for Ponds for additional guidance)

As needed

- Inspect the pond before and after every major storm event and contact DEP if you are concerned
- Know the pollutant sources on your property and try to eliminate them at the source
- Educate kids about safety around ponds
- Inform contractors working on property of the location of the pond to prevent accidental damage

Who is responsible for the maintenance?

As the property owner, YOU are responsible for all maintenance unless your pond has been transferred to the DEP Stormwater Facility Maintenance Program. If you would like more information about transferring your pond into this program, please visit **montgomerycountymd.gov/stormwater.**

A DEP-approved contractor must perform structural maintenance. For a list of approved contractors, please visit montgomerycountymd.gov/stormwater.

How will I know what maintenance is required?

DEP performs inspections of all ponds in Montgomery County every 3 years. If DEP finds maintenance issues during its inspection, you will receive a notice of violation with a work order showing a list of items that need to be performed to restore your facility to proper working condition. You will have 60 days from the date of the notice to make the noted repairs. A civil citation may be issued if you have not complied with the maintenance requirements.

DEP will work with you if you have questions about how to maintain your pond. You are not expected to identify all the structural repairs that may be needed on your facility. However, if you notice any of the issues or failures listed on page 3, please contact DEP for guidance.

NEED HELP OR HAVE QUESTIONS?

DEP can answer your questions and provide additional guidance about maintaining your stormwater pond.

Email us at **AskDEP@montgomerycountymd.gov,** call the Montgomery County Customer Service Center at **3-1-1,** or visit our website: **montgomerycountymd.gov/stormwater.**

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