Converting Dry Ponds to Wet Ponds or Wetlands

What is the difference between a wet pond and a dry pond?

Turtles are common in wet ponds

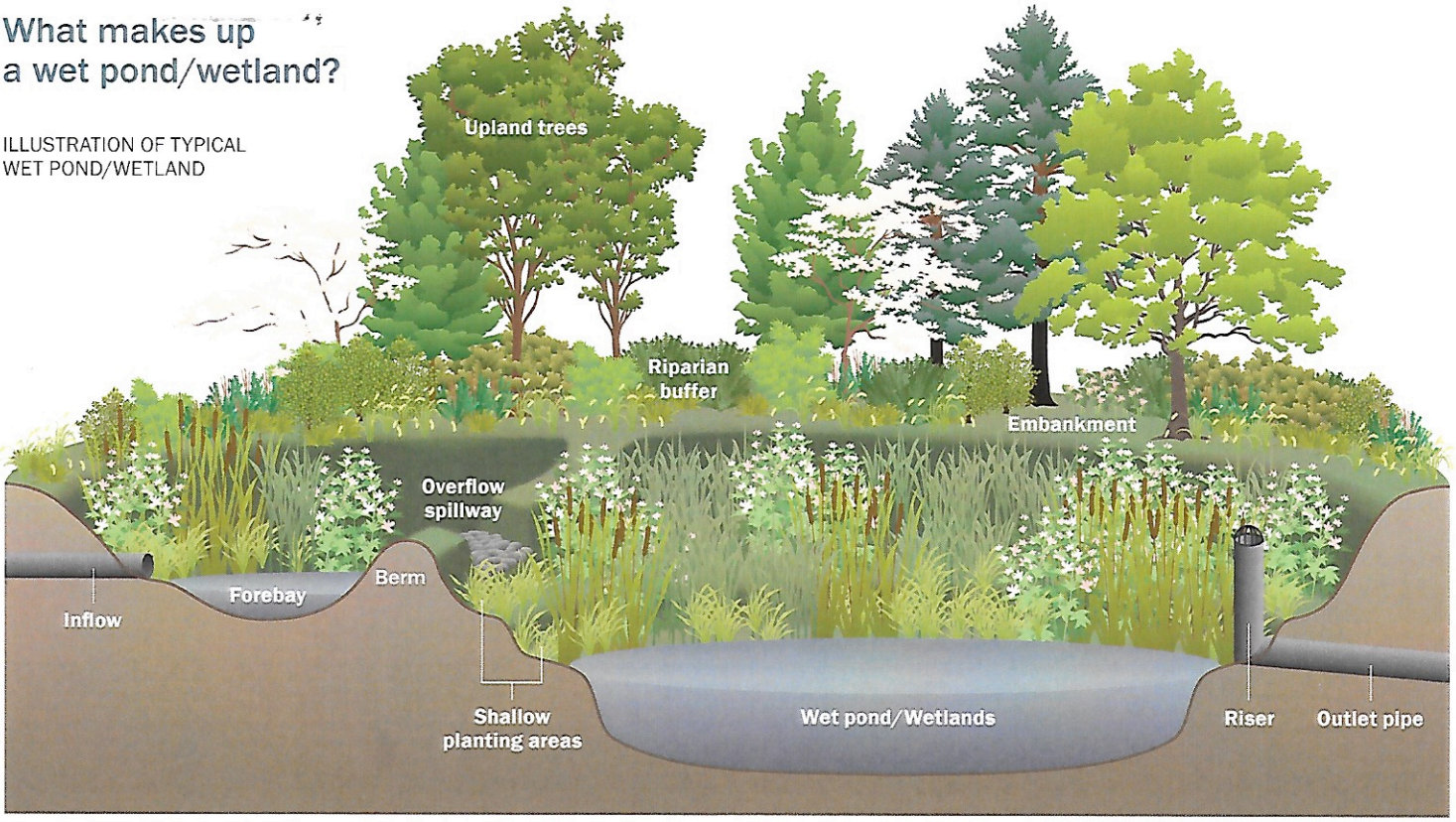
Dry ponds are often low flat areas of turf grass that retain water for a short time in rain events. Wet ponds, in contrast, look more like natural ponds, surrounded by native flowers and grasses that provide habitat for wildlife. Sometimes, a dry pond may be converted to a wet pond or a wetland (also called a shallow marsh). A wetland/shallow marsh functions in a similar manner to a wet pond but the depth of ponded water is less. Typically, these best management practices have a forebay and berm that holds the first flush of water after a storm. The forebay captures heavier sediment and pollutants from water that flows off our streets, driveways, and other paved areas. Often the water then flows slowly through a stone spillway into the larger pond. In shallow areas around the pond edge, native plants support wildlife including ducks, foxes, squirrels, and chipmunks. When the pond fills to its design capacity, the overflow water goes through a structure called a riser to an outfall and into a stream or forested area, while still providing the originally intended amount of flood control.

Why convert?

Stormwater ponds protect our local waterways and the Chesapeake Bay by collecting and storing rainwater, filtering out pollutants, and reducing flood risk. Over the last 40 years, over 1,300 of these ponds have been built across the county. Today, many are in need of repair and replacement, often simply because the structures in the pond are nearing the end of their typical lifespans (30–50 years). The County sees this as an opportunity to optimize pond performance and provide enhanced benefits to the community, improving water quality and meeting permitting conditions, while protecting the Chesapeake Bay.

What makes up a wet pond/wetland?

ILLUSTRATION OF TYPICAL WET POND/WETLAND



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What are the benefits?

Wet ponds and wetlands have many benefits. They store water and allow the pollutants that wash off our streets, driveways, and roofs to settle out instead of entering our waterways. Diverse native populations of plants absorb excess nutrients. Wet ponds also allow water to seep slowly into the ground. This groundwater recharge and the slower water runoff improves the conditions of neighboring streams. Both wet ponds and wetlands can provide habitat for native and migratory wildlife. More plants and trees in our neighborhoods increase shade, carbon sequestration, and biodiversity. In contrast to dry ponds, there is less turf and less mowing. These ponds also provide important habitat for turtles, frogs, butterflies and birds—creating a beautiful scenic amenity filled with the sounds of nature's calls.

FAQs ABOUT WET PONDS

How is the conversion done?

Typically, the County will use public property or an easement to access the site for the pond construction. Occasionally, construction might require temporary access through private property with an agreement from the owner. To create the landforms and structures of the pond, contractors use heavy equipment such as backhoes, concrete trucks, and dump trucks. The typical hours for contractors are weekdays, 7 AM—7 PM. Noise associated with the work is limited to these hours during the construction period.

What about mosquitoes?

Wet ponds host healthy populations of the predators that eat mosquitoes and their larvae, including fish, snakes, frogs, and dragon flies. Therefore, dynamic pond systems are not good breeding sites for mosquitoes, contrary to what many people think. Because wet ponds have sustained water depths, they are less favorable to mosquitoes than your neighborhood's birdbaths, clogged gutters, and old tire swings. For more information go to: http://mda.maryland.gov/plants-pests/Pages/default.aspx

Will trees be replanted?

Construction might mean removing some trees if they are in direct conflict with the proposed work. The designs will focus on replacing landscape trees that may have been lost during construction and reforesting any cleared areas. State law requires the removal of any woody vegetation (shrubs or trees) within 15 feet from the bottom of the pond embankment. Trees or shrubs are not replanted in this zone or on the pond embankment.

What happens to the existing wildlife?

Wildlife may be displaced during construction, but over time the pond should recolonize and become a thriving ecosystem that supports native species.

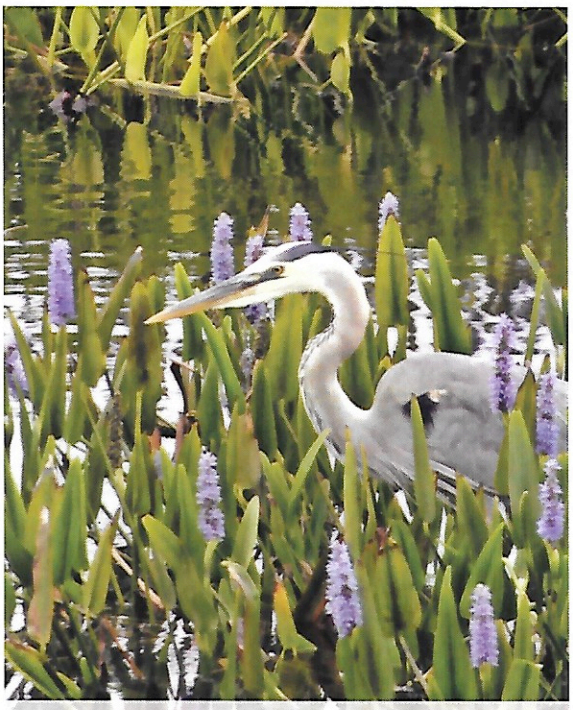
What about invasive species?

The pond will be planted with native species, though occasionally invasive plants will appear after a disturbance. The County does limited monitoring of sites for invasive plant species and maintenance of sites to limit these species. More information about invasive plants is available at the Plant Invaders of the MidAtlantic website: https://www.invasive.org/eastern/midatlantic/

What maintenance is required?

The County does routine maintenance, such as mowing and debris removal, once a year. In the case of a major storm event, debris removal may be performed more often. Structural inspections of the ponds are done once every 3 years. The County does not treat ponds for algae or other aquatic plants such as duckweed or watermeal. The best way to decrease algae in a pond is for the homeowners to limit the use of fertilizer on their lawns.

Dragonflies eat pests like mosquitos



Blue herons are a sign of a healthy pond

Want to learn more?

Visit our website:
https://www.howardcountymd.gov/SWM
or call us: 410.313.6444

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