

Wetland Conservation Act (WCA) Topic of the Week

Stormwater Ponds and WCA

March 1, 2021

WCA topics of the week are a series of informal fact sheets that provide practical information on WCA program implementation in a question and answer format. They are intended to better clarify and summarize certain aspects of WCA implementation and should be considered as supplemental to WCA statutes, rules and any associated BWSR guidance and policy. Information in these fact sheets are subject to change over time.

Question: What is a stormwater pond?

Answer: An artificial pond or catch basin designed to collect water that runs over impermeable surfaces such as parking lots, roads, and buildings. It is managed for specific purposes such as preventing flooding and water quality protection. Stormwater ponds are also referred to as wet retention basins implying a relatively permanent pool of standing water. This contrasts with dry retention basins (temporary water pool after storm event) and infiltration basins (designed to direct stormwater to groundwater through permeable soils).

Question: Are stormwater ponds wetlands?

Answer: Dry retention and infiltration basins typically do not have sufficient hydrology (depth and duration of saturation/inundation) to be wetlands if properly designed and managed. However, many stormwater ponds meet the definition of a wetland because they have wetland hydrology, hydric soils, and support or are capable of supporting hydrophytic vegetation.

Question: Does WCA regulate stormwater ponds that are wetlands?

Answer: Yes, if the stormwater pond was created in a wetland. If a stormwater pond was created in upland, then the resulting wetland is considered “incidental” and does not fall under the scope of WCA regulations.

Question: How do you determine if a stormwater pond was created in wetland or upland?

Answer: Usually you can tell by looking at the web soil survey to see if the underlying soils were hydric and indicative of wetland (see appendix example). In highly urbanized settings the soils information may be inconclusive because of historical disturbance dating back prior to soils mapping. In those instances, using aerial photos and other clues such as topographic position in the landscape can help make the determination.

Question: What does WCA allow with regard to maintaining or manipulating stormwater ponds that were created in wetlands?

Answer: Maintenance activities such as sediment removal, culvert repairs, etc. are generally compliant with WCA regulatory provisions. Although recommended, municipalities are not required to obtain approval for these common maintenance activities in WCA wetlands. Modifications to stormwater wetlands that involve filling, draining, or excavation (beyond sediment removal) within the boundaries of the wetland generally would require WCA approval and may necessitate a wetland replacement plan approval.

Question: Does WCA allow new stormwater ponds in wetlands?

Answer: Stormwater ponds proposed in wetlands that involve filling, draining, or excavation in the semi-permanently and permanently flooded areas of type 3/4/5 wetlands almost always require the approval of a WCA replacement plan. A replacement plan may not be required if stormwater is simply routed to a wetland without filling, draining, excavating. However, sediment-laden stormwater may result in incremental filling of the wetland over time, which is considered an impact. Pre-treated stormwater that first runs into a forebay or primary cell before flowing into the wetland can avoid incremental filling and impact over time and thus would typically not require the approval of a wetland replacement plan.

Question: Since stormwater ponds provide some of the same functions as wetlands (floodwater attenuation, downstream water quality protection, etc.), why doesn't WCA allow them to be constructed in wetlands without replacement?

Answer: WCA seeks to protect and enhance multiple wetland functions including those related to wildlife/fisheries habitat and aesthetic/recreational aspects. Maximizing flood storage and water quality functions for a particular basin often compromises these other functions that wetlands naturally provide. Therefore, WCA regulations apply to wetlands when they are used for stormwater storage and treatment.

Appendix- Examples of Stormwater Ponds Created in Wetlands and Uplands

