

CITY OF DICKSON STORMWATER MANAGEMENT

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STORMWATER MANAGEMENT PROGRAM

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Permanent Stormwater Solutions



A Guide to
Detention Pond
Maintenance



Unlike pollution from industry or sewage treatment facilities, which is caused by a discrete number of sources, stormwater pollution is caused by the daily activities of people everywhere. As rainwater and snowmelt run over streets, lawns, farms and construction sites, pollutants such as fertilizers, soil, pesticides, oil, grease, and pathogens are picked up and carried by the stormwater. Permanent stormwater solutions are structures that are designed into the landscape to catch this runoff, slow the flow of stormwater runoff, and reduce the amount of pollution entering the aquatic ecosystem in order to maintain the integrity of our streams.



What is a Detention Pond?

- A detention pond has two main functions:
 - 1. Controls the release of stormwater
 - 2. Filters stormwater runoff
- Detention ponds are one of many water quality Best Management Practices (BMPs) that developers may choose to install to meet local, state, and federal water quality requirements.

Who is Responsible for Detention Pond Maintenance?

- In most cases, maintenance of a detention pond located on private property is the responsibility of the landowner, not the Town. In residential subdivisions, this is often the HOA.
- Most detention ponds are located in an easement, which is a portion of land that is reserved for a specific use. In this case stormwater runoff. Easements are typically designated on the property plat.





Why is a Detention Pond Important?

- Impervious surfaces, such as roof tops and roads, increase the volume and velocity of stormwater runoff.
- Pollutants, such as sediment, nutrients, pathogens, and oil/grease, frequently pollute waterways as they get picked up and carried in stormwater runoff.
- Excess pollutants, specifically sediment, can harm aquatic species, such as the Flame Chub, an endangered fish species.
- The detention pond's primary purpose is to control the rate of stormwater that is released into waterways, in order to reduce erosion of stream banks.
- The slow release of water in a detention pond promotes sediment removal through gravitational settling before this water discharges into waterways.

Common Issues



Vegetation



Debris and Trash



Damaged Structure



Sediment Build-up

Guidelines for Maintenance

- Excess vegetation lowers the capacity of the detention pond to perform as designed. Excess vegetation should be removed and regular mowing of the pond should be scheduled. Limit the use of fertilizers, herbicides, and pesticides near the pond. Vegetation can be incorparated around the top of the bank as landscaping to increase aesthetic value, but the slopes and bottom of the basin itself should not be landscaped.
- Do routine inspections of the pond and be sure that **debris and trash** are not collecting in the detention pond as that will prevent it from functioning as designed. The pond should drain of water within 24 to 72 hours of rainfall. If this is not happening, inspect the discharge structures for possible causes.
- Bank erosion, broken pipes or other **damaged structural** components hinder the pond's ability to perform properly. Repair or replace as needed. Be sure the inlet and outlet stay clear, soil is not eroding, and that grass remains established.
- Check for **sediment build-up** in the detention pond annually. Remove sediment when the detention pond is 50% full.