

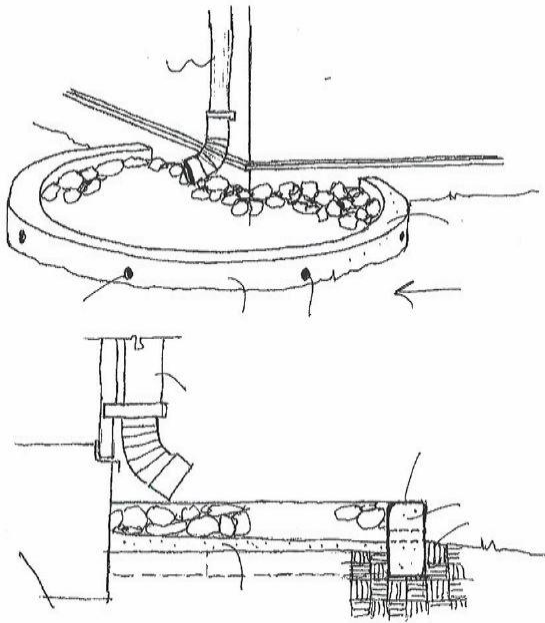
STORMWATER POND SLOPE EROSION

The slopes of the community's stormwater ponds must be maintained with proper vegetation in order to control and prevent *erosion*, or loss of the soil. Erosion of the slopes can be extremely expensive to repair and can sometimes also add unwanted sediment to the water that can negatively affect the water quality in the pond. In addition, eroded banks make it difficult to access and maintain the ponds and unchecked erosion may cause damage to the properties of homeowners next to the affected pond.

The slopes are susceptible to erosion due to

- wave action in the ponds
- the normal fluctuation of the groundwater levels between the rainy and dry seasons
- direct discharge of water from roofs or drains, such as through a roof downspout, a pool overflow pipe, or a water conditioner outflow pipe, that is very concentrated and can carry away soil in its path
- direct discharges from pool drains and water conditioners that contain chemicals such as chlorine or salt that can kill the grass and/or plants that keep the soil in place
- lack of grass and/or plants since vegetation helps keep the soil in place.

Discharges of water from roofs, pools, and water conditioners can significantly damage pond berms and slopes due to the quality of the water and the concentrated flow of water. Residents who have, or plan to create, a concentrated discharge of water must contact the CDD office to discuss ways to reduce the erosion potential. One way to avoid a concentrated discharge is shown in the illustration below:



It is also very important for vegetation to be established and maintained, on both private and CDD properties, within the pond berms and slopes so that bare soil doesn't lead to erosion. Any aquatic plants that the CDD may plant along the pond slopes should be protected to help stabilize the pond slope along and below the grass line and normal water level.

The CDD performs regular inspections of the ponds to assess their conditions and identify any areas that have eroded or show potential for erosion. These areas are then scheduled for appropriate maintenance.

The CDD is implementing a new pond slope maintenance program in 2017 in accordance with guidelines from the University of Florida/IFAS Environmental Horticulture Department's Center for Landscape Conservation and Ecology. The program will use a Moderate to Gentle Slope with a cut bank for the ponds. Turf is planted to the water's edge and a no-mow zone will be established around the perimeter of the ponds. The no-mow strip will be groomed appropriately by the district's landscape maintenance company and will be left taller than a lawn. Homeowners must not mow, nor allow their landscape companies to mow, in the no-mow zone as this interferes with the proper functioning of the system. The following illustration provides more detail:

