



Stormwater Retention Ponds (Lakes) and Our Watersheds

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www.Brevstorm.org

www.LagoonLoyal.com



Clean Water Act & NPDES



National Pollutant Discharge Elimination System (NPDES)

This permit program addresses water pollution by regulating point sources that discharge pollutants to waters of the US. It was created in 1972 under the Clean Water Act. The program is authorized to state governments by EPA to perform many permitting, administrative, and enforcement aspects of the program.

Our Waterways

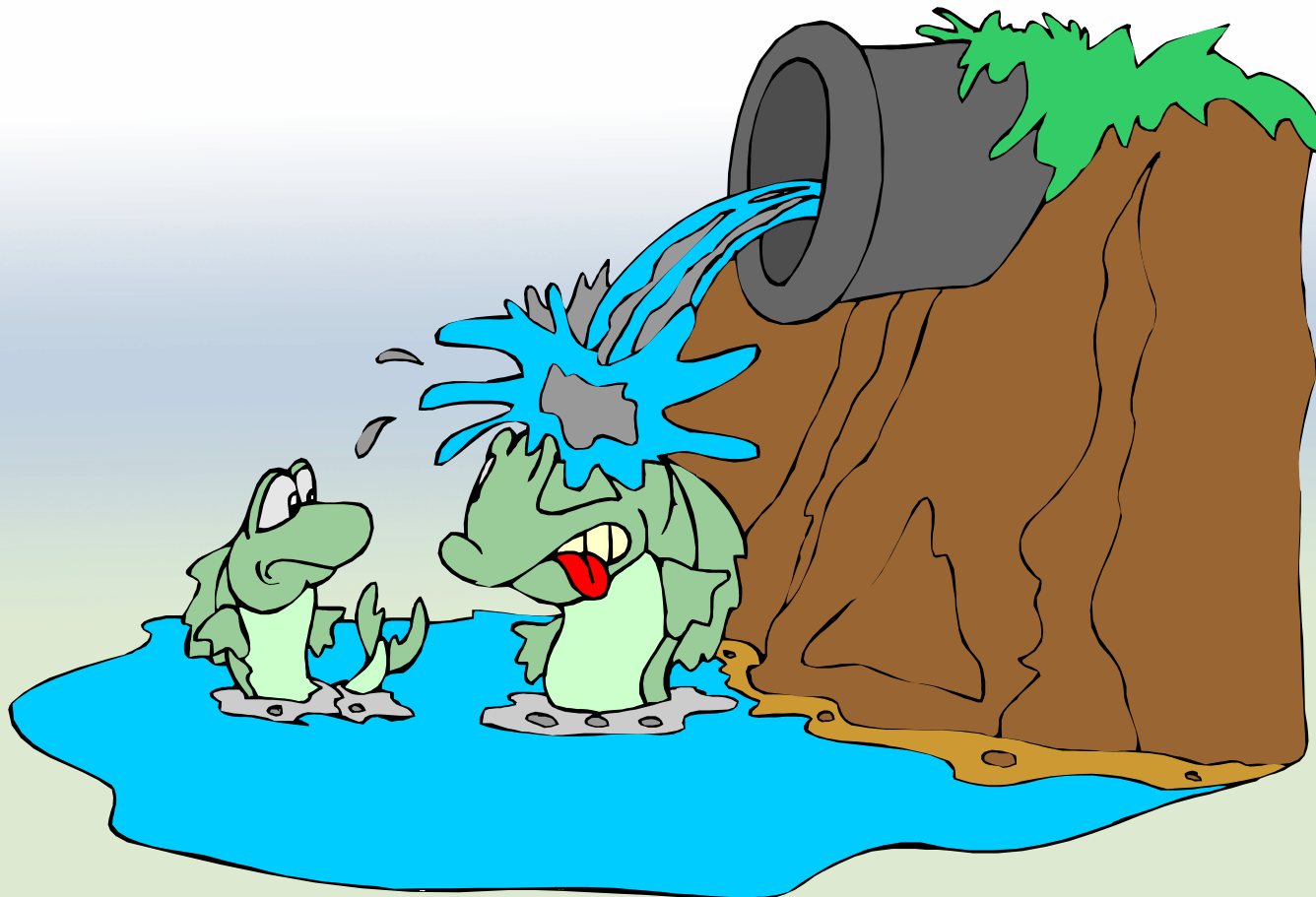


- Watersheds:
 - St. Johns River
 - Mosquito Lagoon
 - Indian River Lagoon System
- IRL Tributaries:
 - Addison Creek
 - Sykes Creek
 - Horse Creek
 - Eau Gallie River
 - Crane Creek
 - Turkey Creek
 - Goat Creek
 - Sebastian River

Stormwater Runoff



Storm water runoff goes mostly untreated to our waterbodies!



Stormwater Pond



- When stormwater ponds are well designed and maintained, they can be moderately to highly effective in reducing stormwater pollutants in waterways.
- 40% TN Absorption.
- 54,773 Lbs/yr.
- 65% TP Absorption.
- 6,593 Lbs/yr.
- Flood Prevention.



The Issue



Several residents have complained about land erosion caused by the water in their ponds.

Solution 1 – Periodic dredging could restore the area, but it is expensive and intrusive.

Solution 2 – Buffer zones of 15' from bodies of water which are in compliance with County's ordinance.

Benefits of buffer zones – Reduce erosion as plants with bigger roots stabilize the soil. There are many design options to choose from. Increase biodiversity thus increasing aesthetics of the yard. Increase property values.

Common myths: Plants are weeds, snake and alligator could hide in them.



The Plan

A Concomitant Grant

1. Stormwater – This would be a VECDD (VECA kept in the loop) sponsored project. This project would create a planted littoral/buffer zone along a section (TBD) of the Suceda Park lake.

2. Education – This is a County sponsored project.

- **Involves education of VECDD residents about the Best Management Practices of lakes/retention ponds via presentations and paraphernalia.**
- **Provide project site's educational signage.**
- **Will encourage residents to visit the area.**
- **Measure residents gained knowledge with pre/post surveys.**



Time Line



Pre Survey	Facebook	Instagram	Websites	Results Tabulation	
Construction	Land Preparation	Signage	Plants		
Outreach	Presentations	Pamphlet Distribution	Electronic Media		
Construction Completion	Number of Visits				
Post Survey	Facebook	Instagram	Websites	Results Tabulation	
Final Report					

The Plan



Cost to be determined.

Grant will cover 50% of the cost.





Thank You!!!

Questions???

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