

CITY OF SAFETY HARBOR DRAINAGE INFRASTRUCTURE INSPECTION FOR HUNTINGTON TRAILS HOME OWNER'S ASSOCIATION

INSPECTION SUMMARY

Date of Inspection: November 15, 2024

Date: December 4, 2024

Re: Assessment of Huntington Trails Drainage Infrastructure

City Inspection Staff:

Charles Ahrens - Assistant Public Works Director, City of Safety Harbor Public Works:

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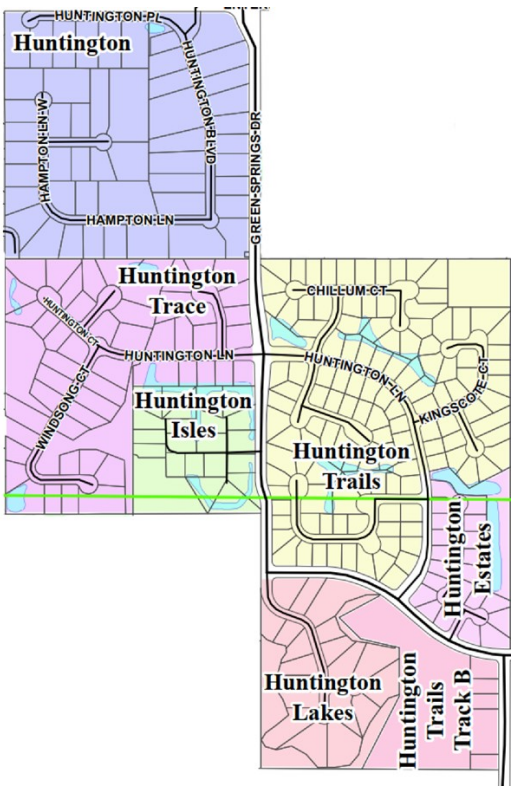
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Location:



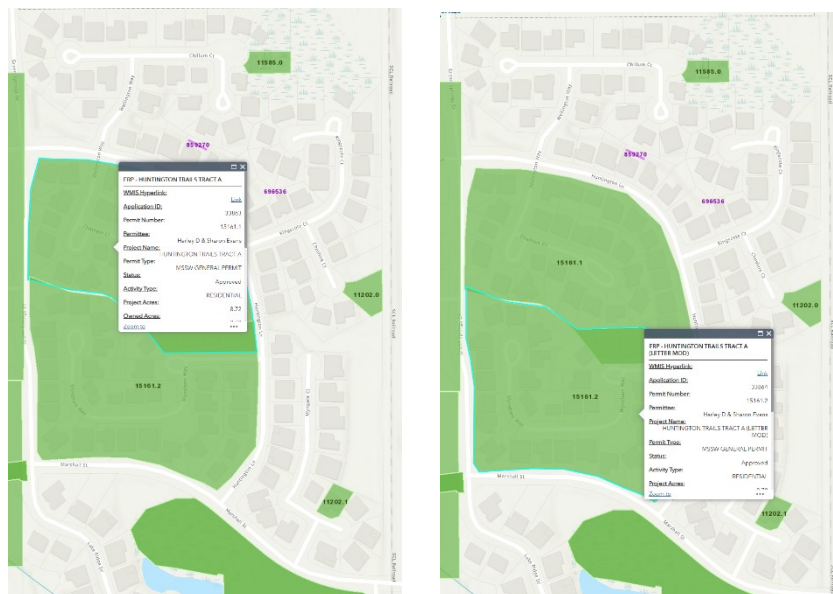
Overview:

In August of 2024, City Staff offered to inspect and review Huntington Trails subdivision ponds and drainage infrastructure on behalf of the Huntington Trails HOA. This area has been impacted by street and pond flooding from heavy summer rains and multiple tropical weather systems (hurricanes) that cause roadways to become impassible. It is important to note that the roadways and infrastructure within Huntington Trails is privately owned and maintained either by the individual homeowners or by the HOA. Improper and irregular maintenance, illicit connections, improper use of fertilizers, and other private property maintenance issues can be contributing to the overall health and function of the neighborhood ponds, wetland, and piped conveyance systems. Public Works staff are providing the inspection results to the HOA for distribution to the residents. Education regarding property maintenance, proper fertilizing techniques, correct drainage installation, and needed remediation activities will improve the overall health of the stormwater drainage systems and any waterbodies downstream.

Huntington Trails subdivision does not have any portion of the creek network flowing directly through the neighborhood. However, the drainage from this neighborhood does connect to adjacent wetlands and eventually flows into Mullet Creek and Old Tampa Bay. Mullet Creek (Fresh Water portion) is listed by FDEP (Florida Department of Environmental Protection) as an impaired water body; impaired for nutrients (total phosphorus, biology, and bacteria). The primary sources of nutrient pollution are fertilizers, pet waste, discharge of detergents or chemically treated water, and contaminated stormwater runoff. Nutrient pollution can cause algae blooms in ponds, wetlands, and the creek. The inspection results show areas of illicit connections as well as illegal dumping that can be point source nutrient pollution.

Huntington Trails does have permits and conservation easements on file with the Southwest Florida Water Management District (SWFWMD). These can be viewed through SWFWMD’s general permit web viewer.

<https://swfwmd.maps.arcgis.com/apps/webappviewer/index.html?id=016f248767ca40b4b67b790a5b7c9437>



The inspection took place with the permission of the HOA President and within the streets, stormwater structures, ponds, and wetlands associated with Huntington Trails.

Discussion Items:

The importance of maintaining the overall health of the neighborhood ponds and removing obstructions, removing sediment and debris, stopping illegal dumping, and removing illicit connections is emphasized in the inspection report. The inspection highlights debris in stormwater structures, sediment build-up, vegetation, and illicit connections.

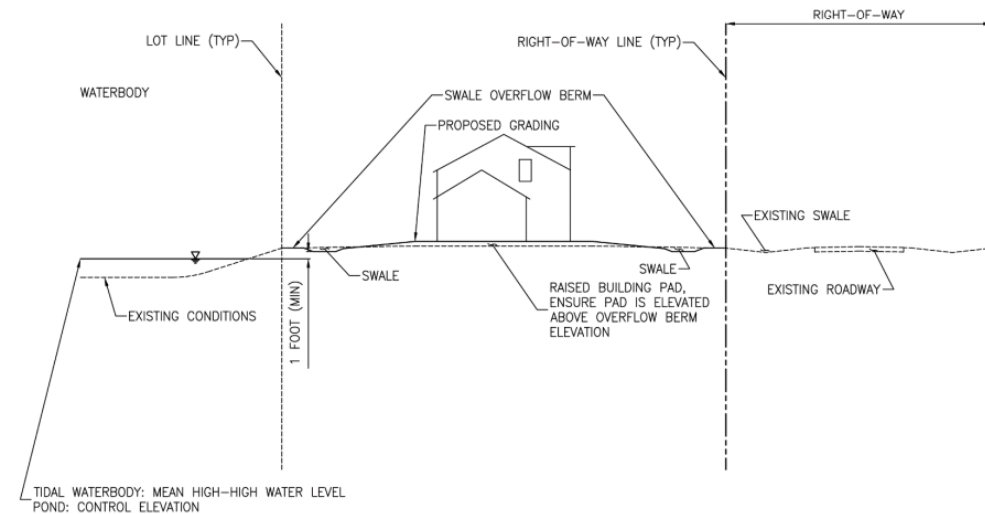
Dumping or blowing of leaves and other vegetation into stormwater inlets or ponds can cause decomposition and sediment build-up within the pipes, ponds, and wetland. As water flows, this sediment moves downstream and deposits in areas such as wetlands and creeks. As per City of Safety Harbor Code of Ordinances Sec. 24.69(b) any discharge to the storm water system containing any sewage, industrial waste, chlorinated or contaminated pool water, yard waste, grass clippings, or other waste materials, or containing any materials in violation of federal, state, county, municipal, or other laws, rules, regulations, orders of permits, is prohibited.

Pipe connections extending from private single family home parcels to ponds were found during the inspection. These pipe connects will need to be disconnected and removed. As per City of Safety Harbor Code of Ordinances Sec. 24.70(a) any discharge to the stormwater system that is not composed entirely of stormwater is prohibited. Roof drains, downspouts, and pool drains cannot direct discharge into the ponds.

Pond banks must be maintained, and this includes creating a fertilizer free zone around the waterbody. Not properly maintaining pond banks can lead to erosion of private property, sediment transfer, invasive vegetative growth, and algae blooms. Installation of fill, modification of a pond bank, or installation of a retaining wall without proper permitting can cause capacity issues as well as unintentionally, negatively affecting other areas of the pond. As per Land Development Code Section 59.00 (A) the fill, excavation, or alteration of the natural grade of land, or the construction or removal of a retaining wall shall require a permit issued through the Engineering Department. A retaining wall shall mean a structure constructed or designed to hold back or support an earthen bank.

Side yard and rear yard swales (if applicable), as well as any sloped yard grades, on single-family home properties should also be maintained regularly. This ensures that stormwater drains away from the exterior walls of a home. As per City Code of Ordinances 5.26(2) all premises with the exception of approved retention areas and reservoirs shall be graded and maintained to prevent erosion of soil and to prevent the accumulation of stagnant water thereon, or within any structure located thereon.

Example: General Lot Grading Profile



Disclaimer:

The City cannot provide engineering design nor means and methods for repair, rehabilitation, or remediation of Huntington Trails HOA property or any private property. This report was prepared as an educational resource for the residents and HOA. Please consult with a licensed contractor and/or licensed professional engineer registered in the State of FL for any site-specific projects that may be required. Contact the City, SWFWMD (Southwest Florida Water Management District), and FDEP (Florida Department of Environmental Protection) for any required permits.

City Code Requirements:

City Land Development Code, Article X - Development Standards, Section 158.00 – Drainage and utility easements

E) Ground elevations or grades shall not be modified within a drainage easement so as to materially alter an approved drainage plan or existing drainage patterns.

F) Permanent structures or other items causing a physical obstruction to the function of a drainage easement or structure are prohibited inside a drainage or utility easement.

G) Temporary structures, including fences, may be permitted in a drainage or utility easement with the consent of the Public Works Director or his designee provided the property owner signs and records an affidavit assuming full liability for all costs associated with the repair or replacement of the temporary structure should the City damage or remove it. The Public Works Director shall consider the impact the temporary structure will have on gaining access, drainage flow, and any known objections from outside utility companies or other affected party.

H) Landscaping within a utility easement shall be limited to turf, mulch, or other ground cover and small accent trees and shrubs no taller than 24 inches.

(I) Landscaping within a drainage easement shall be limited to turf, ground cover and shrubs no taller than 24 inches unless a swale is present in which case no shrubs or other plantings are permitted.

City Code of Ordinances, Chapter 5, Article III, Sec. 5.14 Storm Drainage

(a) General. Drainage of roofs and paved areas, yards and courts and other open areas on the premises shall not be discharged in a manner that adversely impacts neighboring property.

City Land Development Code Article X – Development Standards, Sec 161.02 Ownership and Maintenance

(B) Privately-owned ponds, vaults, inlet structures, outlet structures, discharge pipes, channels or any feature associated with the stormwater treatment or attenuation required and permitted by SWFWMD, whether or not such facilities are located within an easement, are not the responsibility of the City and shall be maintained by the holder of the SWFWMD Permit in whose name the permit was issued or to whom it may legally be subsequently conveyed.

City Code of Ordinances, Chapter 24, Article VII, Sec. 24.69 Illicit Discharges

(b) Any discharge to the storm water system containing any sewage, industrial waste, chlorinated or contaminated pool water, yard waste, grass clippings, or other waste materials, or containing any materials in violation of federal, state, county, municipal, or other laws, rules, regulations, orders of permits, is prohibited.

City Code of Ordinances, Chapter 24, Article VII, Sec. 24.70 Spills and Dumping

(a) Except as set forth under section 24.69(c) or as in accordance with a valid NPDES permit, any discharge to the stormwater system that is not composed entirely of stormwater is prohibited.

(b) Any discharge to the stormwater system containing any sewage, industrial waste or other waste materials, or containing any materials in violation of federal, state, county, municipal, or other laws, rules, regulations, orders or permits, is prohibited.

(c) As soon as any person has knowledge of any discharge to the stormwater system in violation of this article, such person shall immediately notify the city manager or his/her designee, and if such person is directly or indirectly responsible for such discharge, then such person shall also take immediate action to ensure the containment and cleanup of such discharge and shall confirm such telephone notification in writing to the city manager or his/her designee within three (3) calendar days.

(d) The city manager or his/her designee may issue an order to any person to immediately cease any discharge, or connection to the stormwater system, determined by the city manager or his/her designee to be in violation of any connection to the stormwater system, determined by the city manager

or his/her designee to be in violation of any provision of this article, or in violation of any regulation or permit issued hereunder.

City Code of Ordinances, Chapter 24, Article VII, Sec. 24.71 Inspections and Monitoring

(a) Whenever necessary to make an inspection to enforce any of the provisions of this article, or regulation or permit issued hereunder, or whenever an authorized official has reasonable cause to believe there exists any condition constituting a violation of any of the provisions of this section, or regulation or permit issued hereunder, any authorized official may enter any property, building or facility at any reasonable time to inspect the same or to perform any duty related to enforcement of the provisions of this article or any regulations or permits issued hereunder; provided that if such property, building or facility is occupied, such authorized official shall first present proper credentials and request permission to enter, and if such property, building or facility is unoccupied, such authorized official shall make reasonable effort to locate the owner or other person having charge or control of the property, building or facility, and shall request permission to enter. Any request for permission to enter made hereunder shall state that the owner or person in control has the right to refuse entry, and that in such event that entry is refused, the authorized official may enter to make inspection only upon issuance of a search warrant by a duly authorized magistrate. If the owner or person in control refuses permission to enter after such request has been made, the authorized official is hereby authorized to seek assistance from any court of competent jurisdiction in obtaining entry. Routine or area-wide inspections shall be based upon such reasonable selection processes as may be necessary to carry out the purposes of this article, including, but not limited to, random sampling in areas with evidence of stormwater contamination, nonstormwater discharges, or similar factors.

(b) Any authorized official may establish on any property such devices as are necessary to conduct sampling or metering of discharges to the stormwater system. During any inspections made to enforce the provisions of this article, or regulations or permits issued hereunder, any authorized official may take any samples deemed necessary.

(c) The city manager or his/her designee may require any person engaging in any activity or owning any property, building or facility (including, but not limited to, a site of industrial activity) to undertake such reasonable monitoring of any discharge(s) to the stormwater system and to furnish periodic reports.

City Code of Ordinances, Chapter 24, Article VII, Sec. 24.72 Penalties

Failure to comply with the requirements of this article or any permit or approval granted or authorized hereunder shall constitute a violation of this article. Violations of the provisions of this article shall be punished in accordance with section 1.12 of this Code.

City Land Development Code, Article IV – Special Regulations, Sec. 59.00 Excavation and Fill

(A) The fill, excavation, or alteration of the natural grade of land, or the construction or removal of a retaining wall shall require a permit issued through the Engineering Department. A retaining wall shall mean a structure constructed or designed to hold back or support an earthen bank.

(E) The encroachment upon any associated wetlands shall require compliance with the wetlands protection provisions of this Code as set forth in Section 53.00.

City Code of Ordinances, Chapter 5, Article IV, Sec. 5.26 Care of Premises

(2) Grading and drainage. All premises with the exception of approved retention areas and reservoirs shall be graded and maintained to prevent erosion of soil and to prevent the accumulation of stagnant water thereon, or within any structure located thereon.

State Statute Requirements:

Florida Statute Sec. 704.06, Real and Personal Property; Conservation Easements

If maintenance needs to occur within a conservation easement, refer to Section 704.06, Florida Statutes, as a number of activities may be prohibited or limited within the conservation easement. Removal of sediment would require permitting or exemptions from state agencies. Prohibited activities:

- Construction or placing of buildings, roads, signs, billboards or other advertising, utilities, or other structures on or above the ground.
- Dumping or placing of soil or other substance or material as landfill or dumping or placing of trash, waste, or unsightly or offensive materials.
- Removal or destruction of trees, shrubs, or other vegetation.
- Excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface.
- Surface use except for purposes that permit the land or water area to remain predominantly in its natural condition.
- Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation.
- Acts or uses detrimental to such retention of land or water areas.
- Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance.

Fertilizer Use:

Fertilizer Bans

Fertilizers contribute to the declining health of a surface water body and are the leading cause of algae blooms. As per Pinellas County Code of Ordinances Sec. 58-475(a) No applicator shall apply fertilizers containing nitrogen and/or phosphorous to turf and/or landscape plants during the restricted season from June 1 through September 30. As per Pinellas County Code of Ordinances Sec. 58-475(b) No applicator shall apply fertilizers containing nitrogen and/or phosphorus to turf and/or landscape plants during a period for which the National Weather Service has issued any of the following advisories for any portion of Pinellas County: a severe thunderstorm warning or watch, flood warning or watch, tropical storm warning or watch, hurricane warning or watch, or if rain greater than or equal to two inches in a 24-hour period is forecasted.

Fertilizer Free Zones

As per Pinellas County Code of Ordinances Sec. 58-478, Fertilizer shall not be applied within ten feet from the top of bank of any surface water, landward edge of the top of a seawall, designated wetland or wetland as defined by the Florida Department of Environmental Protection (Chapter 62-340, Florida Administrative Code, as it may be amended or superseded).



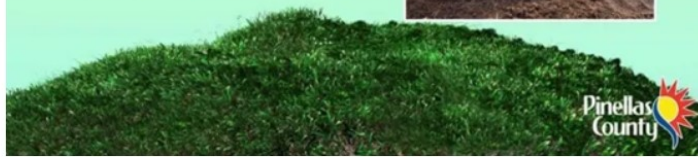
Go Fertilizer Free!

Skip the fertilizer*

from June 1 to September 30.

* Pinellas County's fertilizer ordinance

The sale and use of lawn and landscape fertilizers containing nitrogen or phosphorous is prohibited in Pinellas County from **June 1 - September 30**.



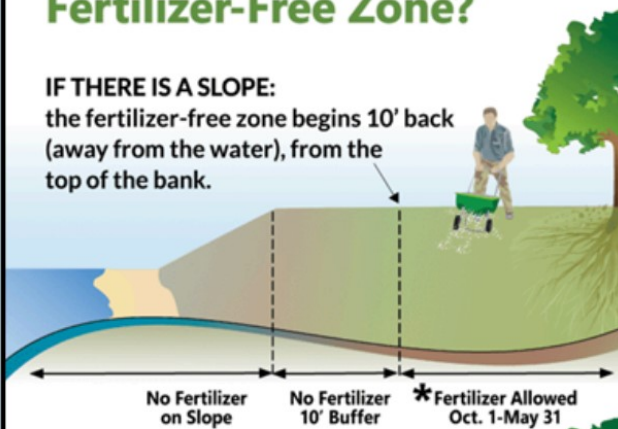
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What is a Fertilizer-Free Zone?

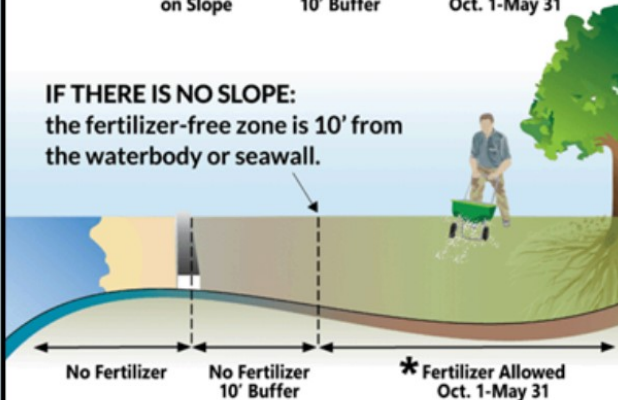
IF THERE IS A SLOPE:

the fertilizer-free zone begins 10' back (away from the water), from the top of the bank.



IF THERE IS NO SLOPE:

the fertilizer-free zone is 10' from the waterbody or seawall.



* In areas where fertilizer is allowed, never apply more than 1 lb. of nitrogen in granular form, or no more than 1/2 lb. of nitrogen in liquid form, per 1,000 sq. ft.

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Effects of Fertilizer Use

Fertilizers contribute to the declining health of a surface water body and are the leading cause of algae blooms



Contact Us:
City of Safety Harbor
Public Works Department
727-724-1550

Pond Maintenance:

Ponds are very complex stormwater collection and treatment systems. Pond health and pond capacity is easily disturbed by lack of maintenance, pollution, and erosion.

What is a Stormwater Pond?

A **stormwater pond** is a **constructed facility** that is designed to improve water quality, provide flood protection. Although these ponds can look like a natural lake, a stormwater pond is an engineered structure that must be maintained by the community to ensure proper function.

04 Cleaner water leaves the stormwater pond and eventually makes its way to a drainage canal.

03 Plants and bacteria help to **remove some pollutants**.

02 Solids in the water settle to the bottom of the pond as sediment.

01 The stormwater pond collects surface water runoff from rooftops, lands and roads.

Catchbasin

Common Pollutants in Stormwater



Fertilizer



Oil



Animal Waste



Salt or cat litter



Garbage and Yard Waste



Pesticides

Basic Maintenance Activities

Ponds are not dumping grounds for trash and other undesirable material. They are living treatments systems that behave much like natural land and lake ecosystems. Poorly maintained stormwater facilities can result in increased pollution loads entering surface waters in the County, causing reduced water quality. Poor maintenance can also contribute to flooding.

The following activities can be used to keep your pond in good operating condition and in compliance with the applicable rules and criteria:

- The pond berms should be free of erosion, stabilized with grass and regularly mowed.
- The pond should be free of debris such as trash and leaves.
- Erosion of soil should not occur at the pipes entering the pond or the outfall structure.
- Prohibit excessive accumulation of petroleum hydrocarbons (evident by oily sheen on surface or gas/solvent odors). Remove and properly dispose of the material if present and investigate the site to find and eliminate the source.
- Prohibit woody vegetation (shrubs and trees) in the pond unless they were planted as part of the original landscape design. Remove the material including the stumps and roots and repair the ground surface.



- Designed littoral shelves (planted aquatic vegetation) should be maintained and free of exotic vegetation.
- Invasive plants (vegetation other than designed planted areas) should be removed to maintain open water on wet ponds and mowed grass areas in dry ponds.
- Control structures and related orifices, weirs, pipes and grates should be free of debris and in good repair.
- Excessive build up of sediments, sand bars and muck deposits reduce the required treatment volume of the pond and should be cleaned to original specifications.
- Underdrains and exfiltration systems should be routinely checked to ensure they are clear of buildup and maintained.
- Offensive odors and fish kills are indications of excessive build up of organic material and nutrients which should be removed and properly disposed of.

It is important to maintain a pond to the specific stormwater criteria under which it was constructed by referring to the original approved plans. If you do not have plans, you may be able to obtain copies from the appropriate water

Poorly maintained stormwater facilities can result in increased pollution loads entering surface waters in the County causing reduced water quality.

management district or consult with a professional engineer to establish the conditions to restore and maintain the pond. For most ponds, a simple inspection can often indicate areas where basic restoration and/or maintenance are required.

Safety Harbor Public Works appreciates your cooperation in protecting local water resources by maintaining your stormwater pond to the standards and criteria it was designed to meet. Certain maintenance activities, such as removal of excess sediment or aquatic vegetation, may require best management practices be used to prevent turbidity and other pollutants from discharging off site. For other components of pond maintenance it is recommended that you consult with a design professional before proceeding with maintenance and to develop a routine maintenance plan.



Dry pond before maintenance



Dry pond after maintenance



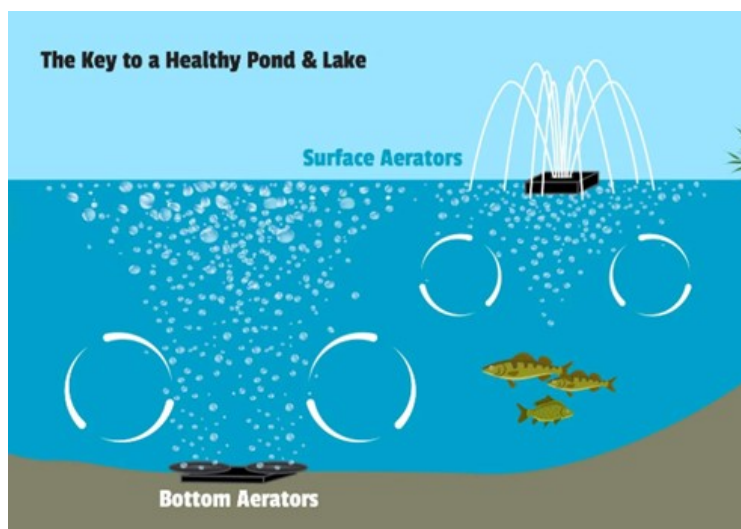
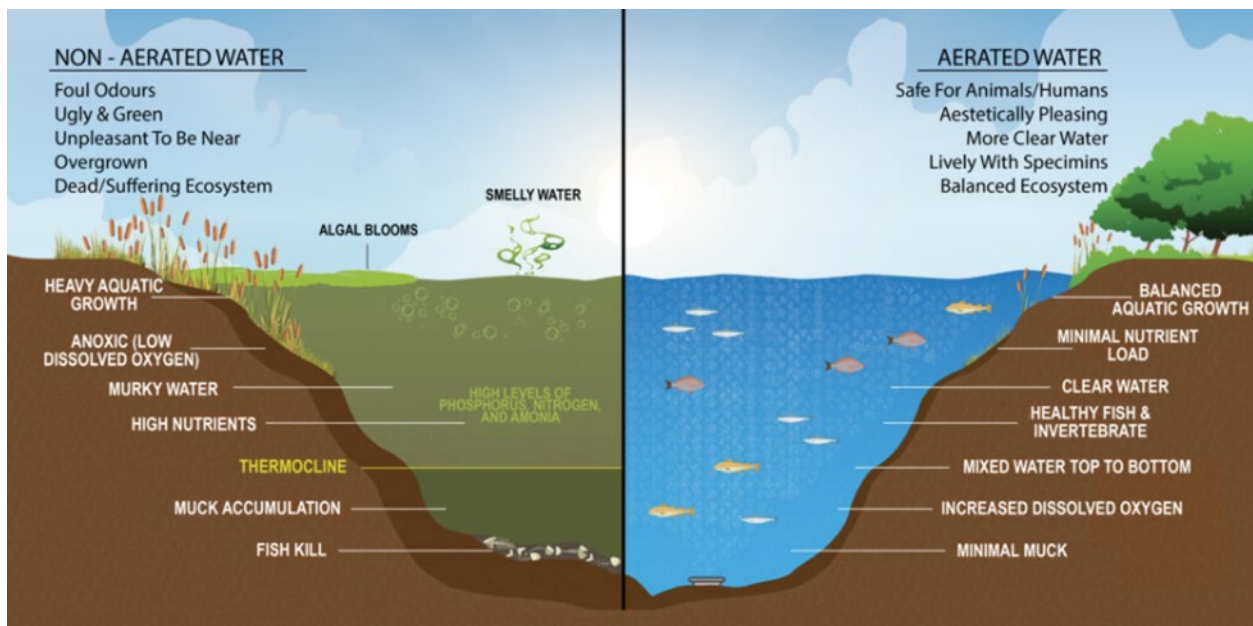
Storm pond before maintenance



Storm pond after maintenance

Pond Water Quality:

Pond water quality can be improved by numerous maintenance options. One option, is to regularly dredge sediment to ensure capacity and removal of harmful accumulation of debris. Another option is to ensure a regular treatment program to prohibit the growth of invasive aquatic plants. Finally, pond aeration can reduce the amount of pond algae by mixing and pushing algae out and limiting exposure to valuable sunlight. Higher dissolved oxygen levels reduce the likelihood that harmful blue-green algae will be able to take hold. Pond aeration also helps reduce phosphorus levels in ponds. Once phosphorus is introduced into a pond, it is hard to remove and creates a welcoming environment for algae growth. Aeration promotes an oxidation reaction that binds phosphorous with iron which then falls to the bottom sediment and is unavailable for use for plant and algae growth if pond oxygenation is maintained. Aeration can also help break down unwanted bacteria and reduce mosquito breeding.



Prohibited Drainage Connections (Illicit Discharges):

What Is A Prohibited Connection?

A prohibited connection is any direct or indirect connection to the storm drainage system that results in a water quality violation. This includes connections from roof drains, water softeners, kitchen drains, bathroom drains, dishwashers and chlorinated pool water that could result in a violation of water quality standards.

Pool Discharges

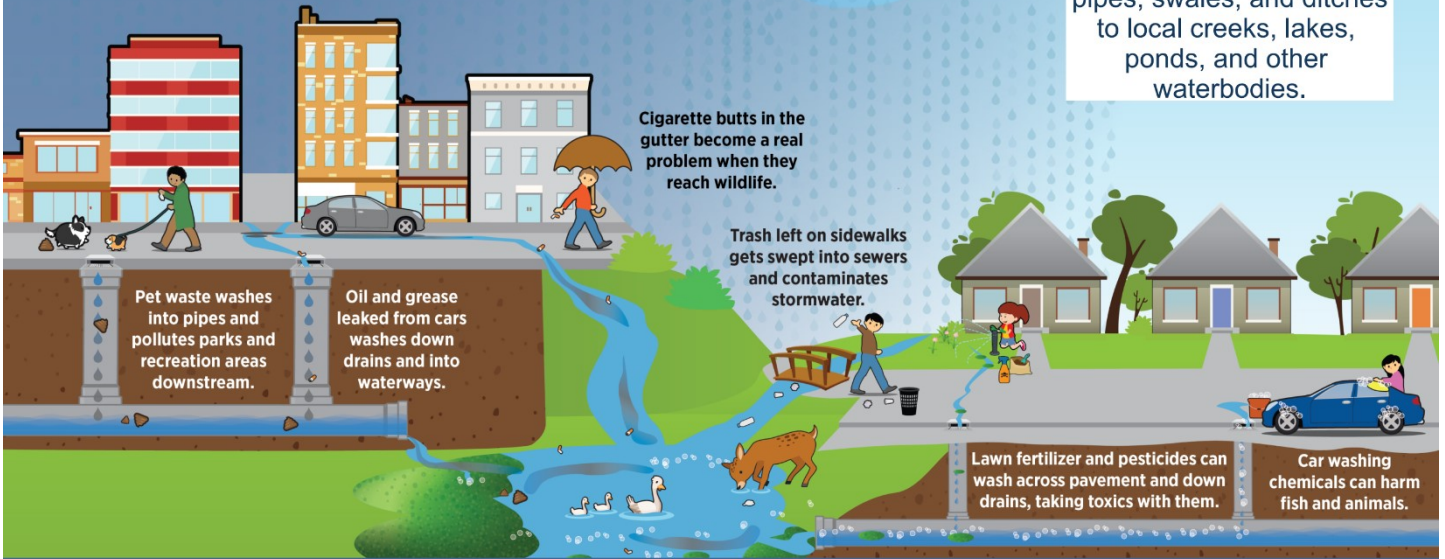
- Before draining your pool, allow the water to stand for at least 48 hours to dissipate chlorine levels to 0.01 mg/L or less.
 - Be aware of any additional chemicals that you may have added and adhere to the 48-hour stand time before discharging.
 - Be sure that the pH of the water discharging is between 6.5 and 8.5 and that the water is clear and free of solids.
 - After allowing the chlorine levels to dissipate, or by de-chlorinating with tablets, direct the discharge over a vegetated surface so that some level of filtration can occur. The County recommends a 12-foot vegetated buffer between the end of the pipe and County right-of-way.
 - Do not discharge over an area that was recently treated with herbicides or pesticides.

Roof Drains

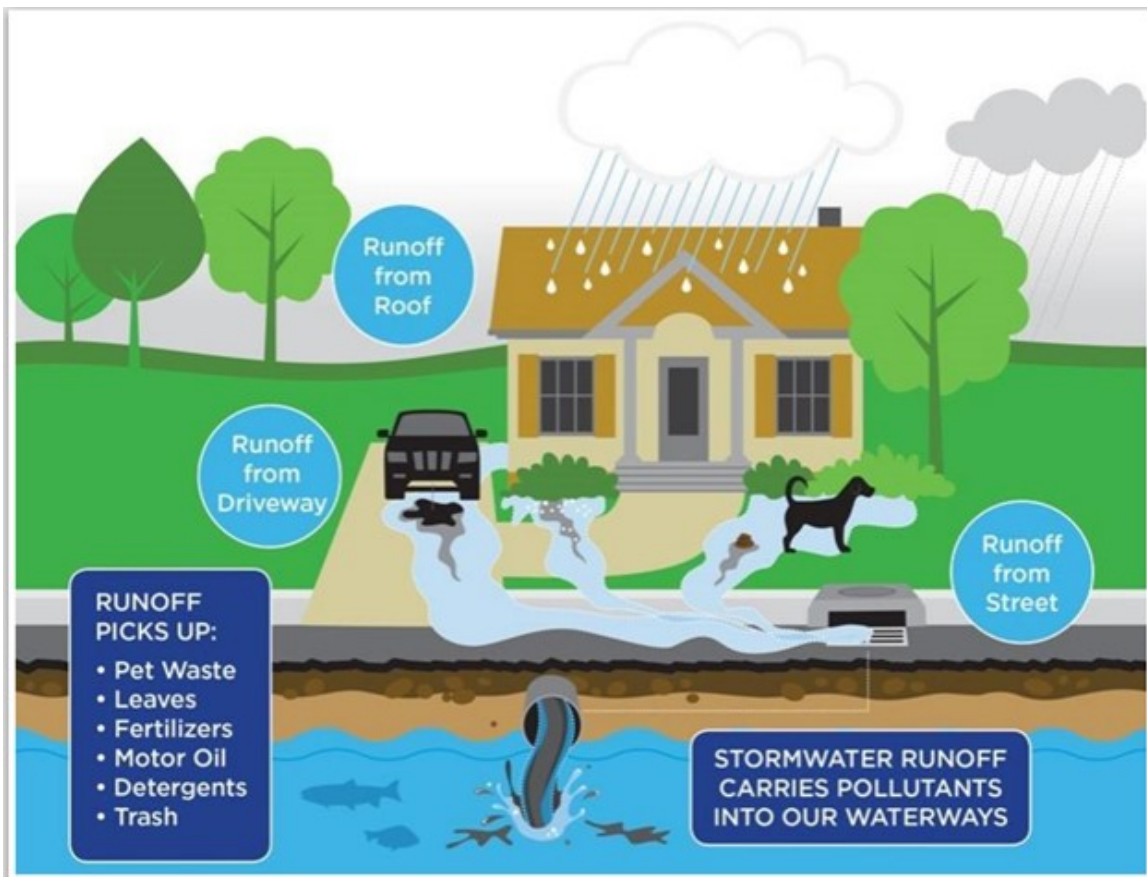
- Runoff from roof drains should be routed over vegetated areas to allow for ground infiltration before entering the storm drainage system.
- Stormwater that collects and drains from the roof has the ability to pick up chemicals from roofing materials, along with nutrients and bacteria from bird waste, that negatively impact surface waters.
- Recommend a 10-12-foot vegetated buffer between point of discharge and right-of-way, sidewalk, curb, or waterway.

Stormwater: Where It Flows, Everything Goes

When it rains or water hits hard surfaces, it takes anything on that surface with it through drains, pipes, swales, and ditches to local creeks, lakes, ponds, and other waterbodies.

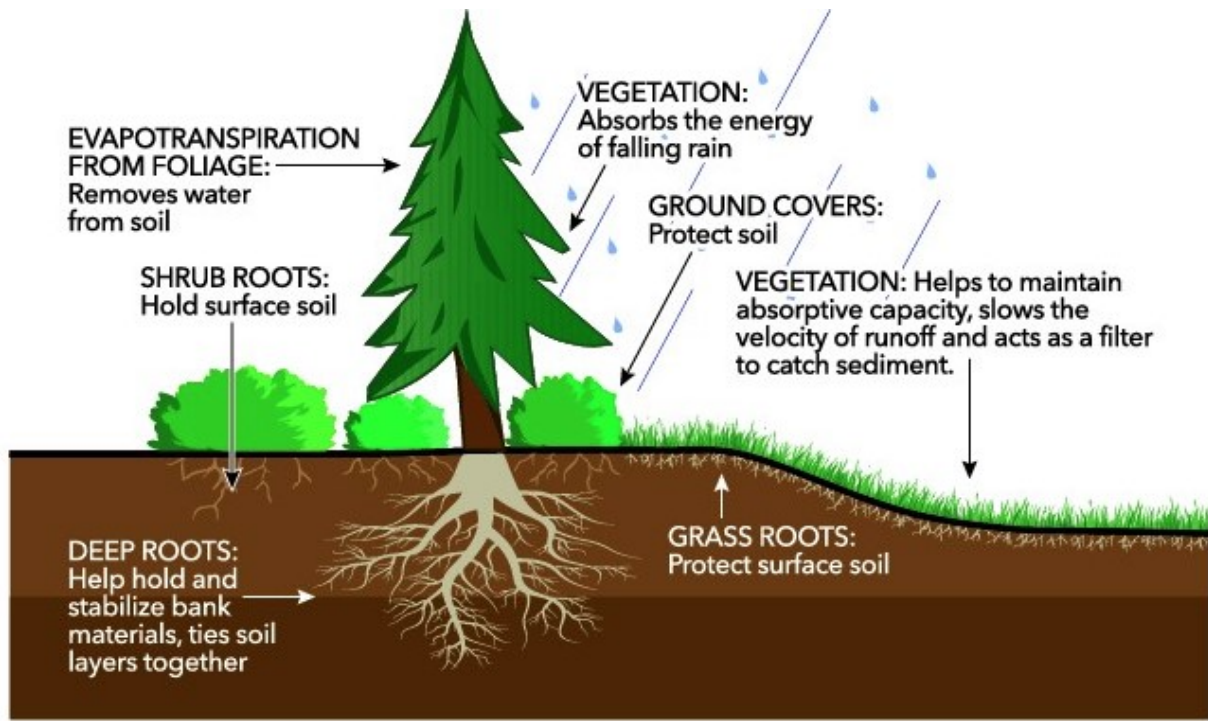


Where Stormwater Flows, Everything Goes



Erosion Control:

Preventing erosion from private properties is essential in maintaining a fully functional stormwater system. Erosion can cause sediment to build up in ponds, pipes, structures, creeks, and eventually the receiving waterbody. The sediment build up can choke wildlife and natural aquatic plants thereby creating an unbalanced or impaired waterbody. Sediment can also be a leading cause of flooding.



EFFECTS OF VEGETATION IN MINIMIZING EROSION

Maintenance Suggestions:

**Private Properties should consult an engineer, contractor or established permit for specific requirements.*

Below is an example of a maintenance program.

Activity	Schedule/Frequency
Inspect pond area for oil sheens or trash	Monthly
Inspect exterior of catch basins	Monthly and after storm events
Inspect pond area, sidewalls, and shoreline for erosion, settlement, rodent damage, and insects	Quarterly
Inspect fences, gates and locks	Quarterly
Inspect bioswales for vegetation cover and bare areas	Quarterly
Inspect ditches, check dams, and all visible pipes and culverts for trash, obstructions and other problems	Quarterly and after storm events
Inspect inlets and outlets for trash, obstructions, and vegetation	Quarterly, and after storm events
Inspect trash racks, debris barriers, and energy dissipaters	Quarterly and after storm events
Inspect water levels in the pond	After storm events
Inspect pond area for undesirable or poisonous vegetation and noxious weeds	Semi-annually, during growing season
Pond area sediment accumulation (pond bottom)	Annually
Inspect interior of catch basins for debris and sediment	Annually
Inspect spillway for vegetation overgrowth and ease of heavy equipment access	Annually
Inspect inside type 2 catch basins, including flow restrictor/orifice plate	Annually
Inspect access ramps for ease of heavy equipment access	Annually

	Checked? (Y/N)	Maintenance Needed? (Y/N)	Maintenance Completed/ Observations & Remarks
Type 2 catch basins			
Remove trash blocking grates or inlets; replace if broken.			
Remove lid and check for sediment accumulation. Remove trash. Remove sediment if more than 1/3 full.			
Check integrity of ladder rungs, cleanout gate, and orifice plate. If bent or obstructed, take appropriate action.			

	Checked? (Y/N)	Maintenance Needed? (Y/N)	Maintenance Completed/ Observations & Remarks
Have cracks in wall or bottom repaired as necessary.			
Conveyances			
Check for undercutting, scouring, and slumping. If found, repair or maintain.			
Remove all trash and loose sediment. Remove sediment if it will impede water flow or clog downstream structures.			
Remove vegetation that impedes water movement. Remove vegetation over 9" in height, and all trees and shrubs.			
Repair check dams as necessary.			
Remove any dumped yard waste.			
In ditches and swales, check for integrity of grass, check dams, inlets, and outlets. Remove shrubs and trees.			
Components of the pond			
Inlets and outlets: remove vegetation and debris. Fix erosion and scouring. Fix cause of sediment found below outlet.			
Remove vegetation and debris from trash rack .			
Add rock to energy dissipater if missing.			
If necessary, repair rock on spillway . Remove trees, shrubs, and vegetation over 4". If piping or erosion is visible, consult engineer.			
Pond			
Check for slumping or sloughing of walls . If over 4" of slumping, consult with an engineer. Fix any erosion or scouring. If leaks, piping, or soft spots are found, consult with an engineer.			

	Checked? (Y/N)	Maintenance Needed? (Y/N)	Maintenance Completed/ Observations & Remarks
If liner visible on bottom, check for holes or replace.			
Clean any oil sheen from water with oil-absorbent pads or vacor truck			
Check sediment depth near inlet. If more than one foot exists, or there is build up near inlet, the pond needs to be cleaned.			
Vegetation			
On the pond walls , mow grass to 4 – 9". Remove clippings. Reseed bare areas.			
On pond surface , emergent vegetation over 50% of the area indicates sediment removal needed.			
On pond bottom , remove tree seedlings.			
Around the pond, remove trees and shrubs that shade sidewall grass or that might have problem roots near pipes and structures.			
Remove invasive and poisonous plants.			
Remove algae if over 10% of surface.			
Access and Safety			
Check integrity of access ramp ; ensure stable and clear for heavy equipment.			
Check integrity and operation of all fences, gates, and locks . Repair as needed for ease of access.			
Remove rodents and insects if evidence found.			
Remove vegetation on fences.			

APPENDIX A

Educational Pamphlets





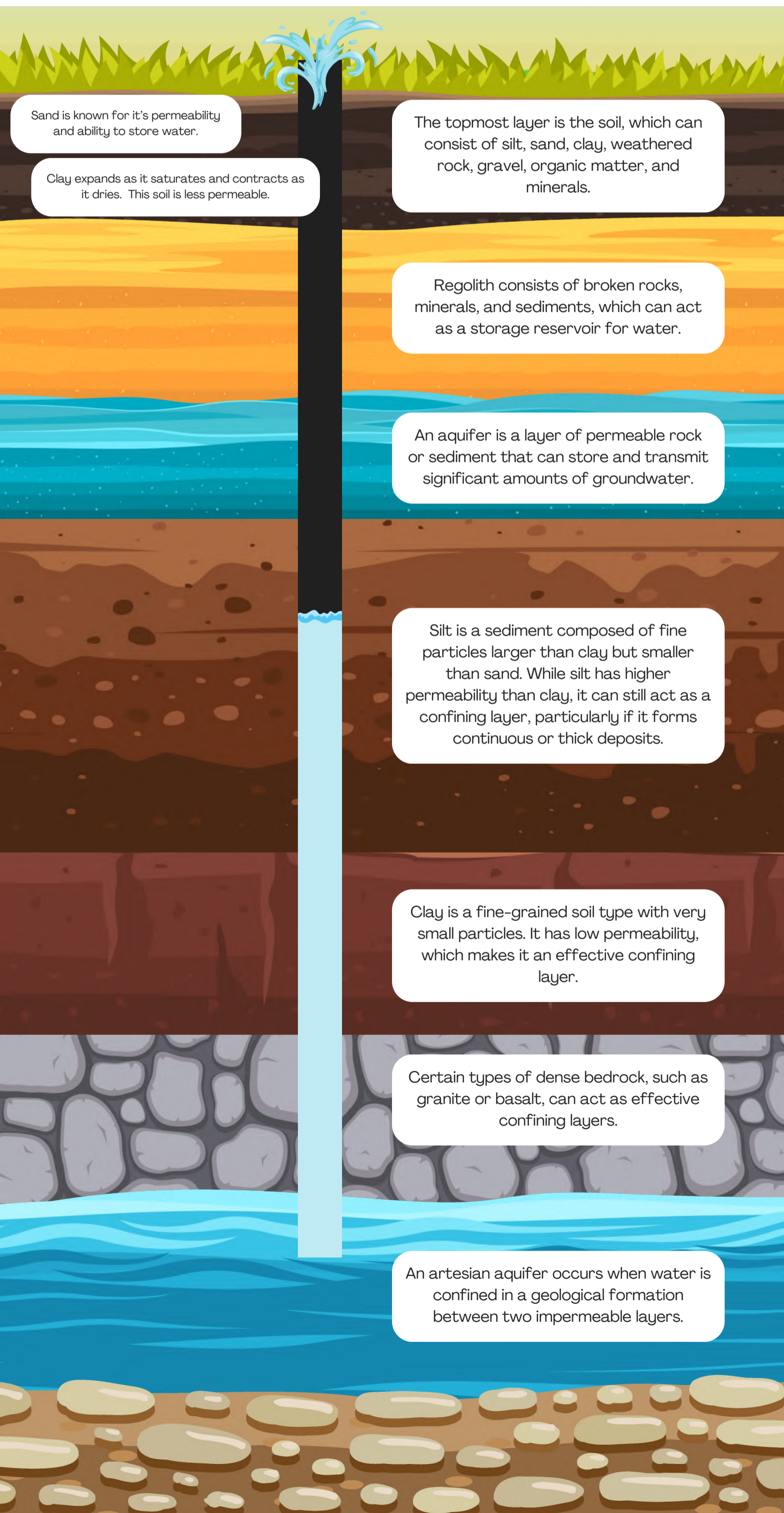
UNDERSTANDING GROUNDWATER

Groundwater refers to the water that exists beneath the Earth's surface in underground aquifers between sand, rock, soil, and gravel layers. It is one of the Earth's most important natural resources and plays a vital role in supporting various ecosystems.

The water table is located just above the aquifer, and it describes the layer between saturated and unsaturated soil. Here's an easy way to visualize this. If you've ever dug a hole at the beach, you may have noticed how water will continuously fill the hole at a certain depth. The point at which water begins to fill the hole is the water table height.

Property sites that have clay soils can encounter problems with lingering and seeping surface water. A surface drainage system can be added to alleviate standing water or seepage. Some of these improvements could include shallow swales, French drains, trench drains, yard drains, dry wells, and water-loving plants with established roots that are known to soak up excess groundwater.

Consult an engineer, landscape architect, or licensed contractor. The City does not endorse, engineer, nor recommend solutions. Consult with a licensed/registered Contractor.



What is Stormwater?

Stormwater runoff occurs when precipitation from rain flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

Why is there a concern about Stormwater quality?

Stormwater can pick up debris, chemicals, dirt and other pollutants and flow into a storm sewer system that discharges to local waterbodies. The City is mandated to annually report to the Florida Department of Environmental Protection on Stormwater protection, treatment, and water quality.

What does lawn care and pet waste have to do with Stormwater pollution?

Excess fertilizers and pesticides applied to lawns and gardens wash off, are carried through the storm sewer system, and pollute the waterbodies. Yard clippings (grass, brush, etc.) and leaves can wash into storm drains and can choke, suffocate, or disable aquatic life. Be sure to cover piles of dirt or mulch being used in landscaping projects. Do not over fertilize or use pesticides during a forecasted rain event. Leaving pet waste on the ground increase public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies. Pinellas County does have a Fertilizer Ordinance that bans the sale and use of certain fertilizers from June 1st – September 30th.

I am a commercial property owner and only have concrete sidewalks and an asphalt parking lot; do any of the Stormwater issues really affect me?

Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and enter local waterbodies. Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains. Cover grease storage and dumpsters and keep them clean to avoid leaks. Do not wash off floors or decks, kitchen equipment, or dump mop buckets or other chemicals onto paved surfaces as this contaminates water is washed into the storm sewer system and enters local waterbodies.

How can washing my car affect Stormwater runoff?

Washing your car on an impervious surface (i.e. concrete and asphalt) can send detergents and other contaminants through the storm sewer system. Use a commercial car wash as their water is drained to a waste water treatment facility, or wash your car on your yard so the water percolates into the ground.

Why can't I drain my pool into the street?

The chemicals in chlorinated and saltwater pools can kill fish and pollute the water. Drain treated pool water onto a grassy or planted area where the water can be absorbed by the soil and dechlorinate the water. Any pool care company can test and neutralize the pool water.

What is an illicit discharge and what are the consequences?

An illicit discharge is the discharge of pollutants or non-storm water materials into a storm sewer system via overland flow, direct dumping, or illicit connections. This means that pollutants of any kind, including leaves, grass clippings, tree trimmings and other yard waste may not be blown or swept to the street, gutter or storm drain. There are exceptions, such as water used for firefighting. City of Safety Harbor Code of Ordinances, **Chapter 24, Article VII, Section 24.69, 24.70 & 24.72 and Chapter I, Section 1.12** provides for definitions of illicit discharge and states fines may be incurred up to \$500 per day. The City also falls under Pinellas County Stormwater Regulation. Pinellas County's Stormwater ordinance, **Article VI, Chapter 58**, is intended to protect water quality and natural habitats. Under the County's ordinance, violators may be fined up to \$10,000 per day, and payment for cleanup costs may be required.

Who can I call to report an illicit discharge?

Contact City of Safety Harbor Code Enforcement at **727.724.1555**. You may also call Pinellas County's Watershed Management automated stormwater watch line at **727.464.5060**.

Where can I find more information?

Information can be found at the following websites:

[City of Safety Harbor - Stormwater Information](#)

[Pinellas County - Watershed](#)

[Pinellas County - Fertilizer FAQs](#)

[FDEP - Stormwater](#)

[EPA - NPDES Information](#)

[Tampa Bay Estuary](#)

[SWFWMD](#)

[Florida Friendly Landscaping](#)

[Bay Soundings](#)

Always Remember..... **When it Rains, It Drains.**

FLORIDA'S COASTAL WETLANDS:

Ecosystem Importance and Plant Guide

WETLANDS ARE PROTECTED

Florida wetlands, including mangrove wetlands, are protected at the Federal, State, and Local Levels.

But why?

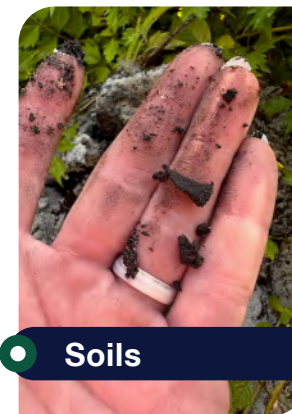
MANGROVE WETLANDS PROVIDE:

- Essential fish nursery habitat, which is critical for recreational and commercial fishing.
- Soil stabilization, mangroves are so good at this that they can (and do) create land.
- Habitat for threatened and endangered species.
- Wind speed reduction, which comes in critical play during hurricane-force winds.
- Filtration and removal of pollutants.
- Carbon sequestration.

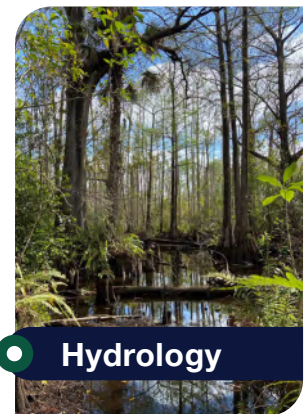
DETERMINING THE WETLAND LINE – WHERE IS IT?

“ Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. ”

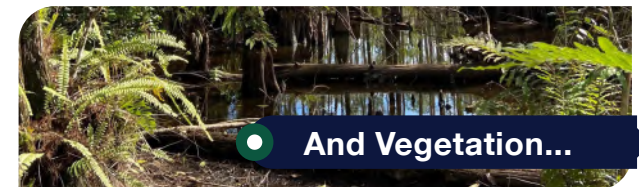
THREE FACTORS GO INTO DRAWING THE LIMITS OF THE WETLANDS. THEY INCLUDE:



● Soils



● Hydrology



● And Vegetation...

WHAT'S IN YOUR BACKYARD?

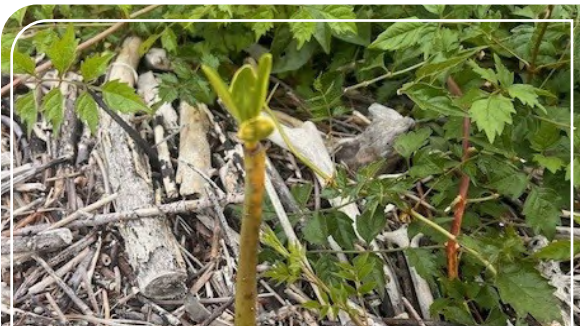
Plant species can be fun to identify! Here are the following wetland species you may be able to spot:



Silverhead (*Blutaparon vermiculare*)



Seaside brookweed (*Samolus valerandi* subsp. *parviflorus*)



Red mangrove (*Rhizophora mangle*)

MORE WETLAND PLANTS!



Herb-of-grace (*Bacopa monnieri*)



Carolina willow (*Salix caroliniana*)

Invasive species highlight: Brazilian pepper tree (*Schinus terebinthifolia*)



This species is not native to Florida and is considered very invasive! It often hides with the mangroves but don't be fooled – you can see its distinct leaf pattern and know it's not a friend!

USEFUL RESOURCES



Want to learn more about wetlands? The following resources will make you better acquainted with Florida's essential ecosystems and permitting involved to alter them.

PERMITTING REGULATIONS

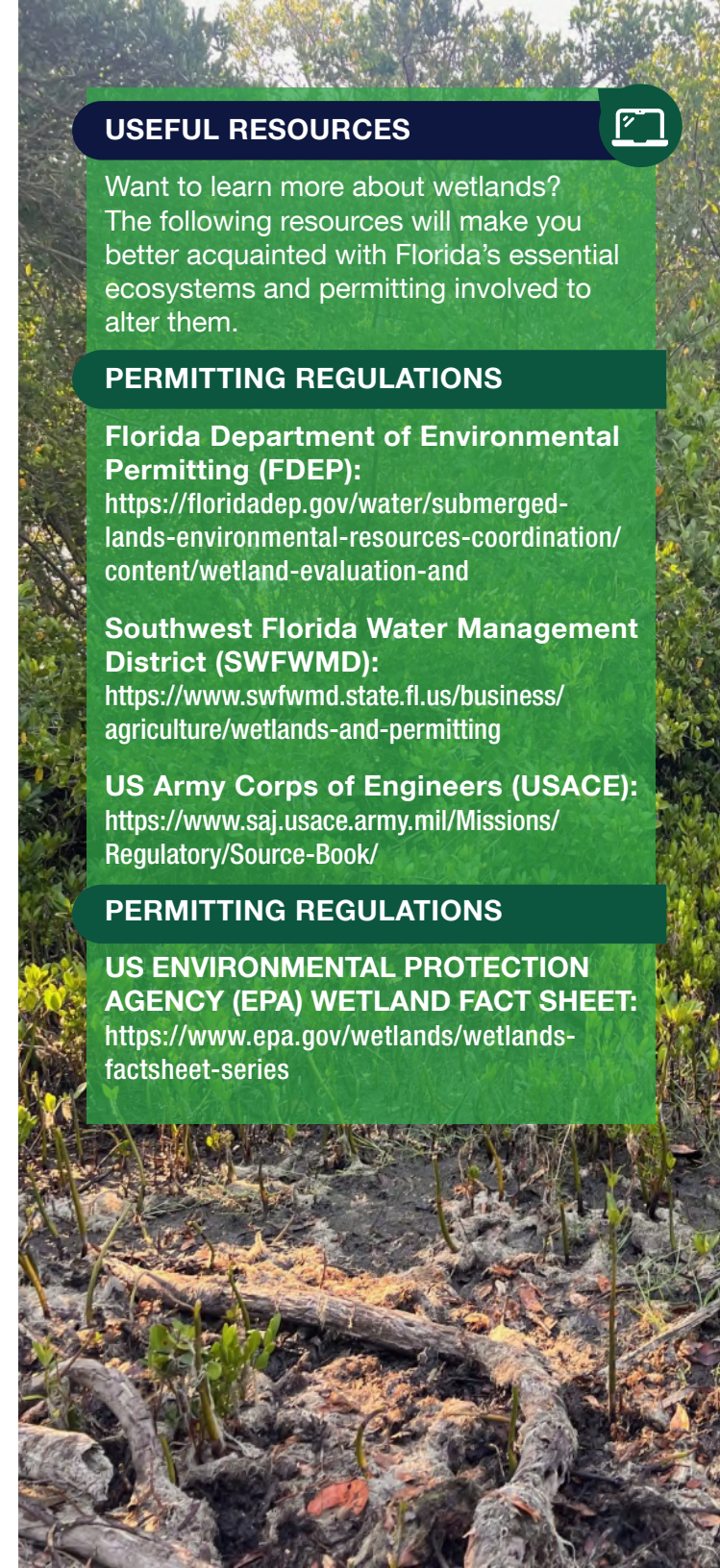
Florida Department of Environmental Permitting (FDEP):
<https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/wetland-evaluation-and>

Southwest Florida Water Management District (SWFWMD):
<https://www.swfwmd.state.fl.us/business/agriculture/wetlands-and-permitting>

US Army Corps of Engineers (USACE):
<https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/>

PERMITTING REGULATIONS

US ENVIRONMENTAL PROTECTION AGENCY (EPA) WETLAND FACT SHEET:
<https://www.epa.gov/wetlands/wetlands-factsheet-series>



Keeping Your Landscaping Neat and Green

Provided by the City of Safety Harbor Public Works Department

Irrigation is not allowed daily for established landscaping.

- Southwest Florida Water Management District has returned to year-round water conservation measures. As per City Code of Ordinances Sec. 24.40, these restrictions also apply to the City of Safety Harbor. Lawn watering days and times are as follows:
- If your address (house number) ends in...
 - Even addresses may water on Thursday and/or Sunday
 - Odd addresses may water on Wednesday and/or Saturday
 - Locations without a discernable address, such as rights-of-way and common areas inside a subdivision, may water on Tuesday and/or Friday
 - Hand watering and micro-irrigation of plants (other than lawns) can be done on any day and any time.

Properties under two acres in size may only water before 8 a.m. or after 6 p.m.
Properties two acres or larger may only water before 10 a.m. or after 4 p.m.



Irrigation for new landscaping and lawns.

- New lawns have a 60-day establishment period.
 - On days 1-30, they may be watered any day of the week.
 - During days 31-60, they may be watered three days per week. Even-numbered addresses may water only on Tuesday, Thursday and Sunday. Odd-numbered addresses may be watered only on Monday, Wednesday and Saturday.



Water Conservation Tips

- Hand watering and micro-irrigation of plants (other than lawns) can be done on any day at any time, if needed.
- Water only when plants or lawns start to wilt.
- Use soil moisture sensors and rain sensors with irrigation systems to automatically gauge water needs.
- If mowing is necessary, increase mowing height to the highest setting to reduce stress on lawns. The lower the cut, the less drought resistant the lawn will be over time.
- Make sure irrigation systems are operating at peak performance by checking and clearing filters in the system.
- Clean and properly direct sprinkler heads.
- Do not use fertilizer during dry conditions because it increases a lawn's thirst for water.
- Remove weeds to lessen competition for available water.
- Use mulch to keep moisture near roots of plants.



Mowing, Leaf Collection, Pet Waste, and Fertilizers

- Excess fertilizers and pesticides applied to lawns and gardens wash off, are carried through the storm sewer system, and pollute waterbodies causing algae blooms. Do not over fertilize or use pesticides during a forecasted rain event. A fertilizer buffer is in place adjacent to all waterbodies.
- Yard clippings (grass, brush, etc.) and leaves can wash into storm drains and can choke, suffocate, or disable aquatic life. Bag yard clippings and leaves for disposal on your garbage day.
- Be sure to cover piles of dirt or mulch being used in landscaping projects to prevent erosion.
- Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into storm drains and eventually into local waterbodies.

Tree Trimming and Pruning

- In 2015, the City Commission adopted a tree ordinance (Article X of the City of Safety Harbor Comprehensive Zoning and Land Development Code) including:
 - a protected tree list.
 - minimum tree planting requirements.
 - regulations for tree removal and replacement.
 - pruning standards.
 - procedures for enforcement of the tree ordinance.

Contact the City's Arborist for additional tree information.
(727) 724-1555 ex.1303





LANDSCAPING INSTALLATION

Land Development Code, Sec. 158.00,

(H) Landscaping within a utility easement shall be limited to turf, mulch, or other ground cover and small accent trees and shrubs no taller than 24 inches.

(I) Landscaping within a drainage easement shall be limited to turf, ground cover and shrubs no taller than 24 inches unless a swale is present in which case no shrubs or other plantings are permitted.

Code of Ordinances, Sec. 20.21,

(a) Permits for paving, grading, or use of any portion of a public right-of-way or easement for any purpose may be granted by the city, when, in their discretion, the safety and convenience of the city can be protected. The city may impose any such conditions upon said permit which are deemed necessary to protect the safety and convenience of the city.



Contact for permits or
details:

**City of Safety Harbor
Public Works**



727-724-1550



HOW TO IDENTIFY AN **ILLICIT CONNECTION**

Look for pipes that protrude from the front or back of a property that is discharging directly into the right-of-way or storm drainage system.

What is the quality of the water coming from the pipe? Is it discolored or does it have an oily sheen? Is there an odor coming from the point of discharge? If so, this may be a sign of an illicit connection to the County storm drainage system.

HOW TO IDENTIFY **ILLEGAL DUMPING**

Residue around and on top of a storm drain inlet cover or grate may indicate that an illegal dumping has occurred.

IT'S THE LAW

Pinellas County law prohibits the dumping of any waste, including chemicals, oil, sewage, trash and yard waste, into the County storm drainage system.

For more information on what you can do to keep our waterways clean or to report a prohibited connection, call the Environmental Management Hotline at (727) 464-4425 or email us at watershed@pinellascounty.org



PINELLAS COUNTY ENVIRONMENTAL MANAGEMENT

22211 U.S. Hwy. 19 N., Bldg. 10
Clearwater, Florida 33765
(727) 464-4425

www.pinellascounty.org/watershed

Pinellas County complies with the Americans with Disabilities Act. To obtain accessible formats of this document, please call (727) 464-4062 (V/TDD). Funding provided by the Pinellas County Public Works Department. 500 copies were printed at a cost of \$68.00 or \$0.13 each.

WHAT IS A PROHIBITED CONNECTION?

A prohibited connection is any direct or indirect connection to the storm drainage system that results in a water quality violation. This includes connections from roof drains, water softeners, kitchen drains, bathroom drains, dishwashers and chlorinated pool water that could result in a violation of water quality standards.

*Specifics are covered in the **Pinellas County Code of Ordinances**, Article VI, Stormwater and Surface Water Pollution, Section 58.*



POOL DISCHARGES

- ▶ Before draining your pool, allow the water to stand for at least 48 hours to dissipate chlorine levels to 0.01 mg/L or less.
- ▶ Be aware of any additional chemicals that you may have added, and adhere to the 48-hour stand time before discharging.
- ▶ Be sure that the pH of the water discharging is between 6.5 and 8.5 and that the water is clear and free of solids.
- ▶ Direct the discharge over a vegetated surface so that some level of filtration can occur. The County recommends a 12-foot vegetated buffer between the end of the pipe and County right-of-way.
- ▶ Do not discharge over an area that was recently treated with herbicides or pesticides.

ROOF DRAINS

- ▶ Runoff from roof drains should be routed over vegetated areas to allow for ground infiltration before entering the storm drainage system.

- ▶ Stormwater that collects and drains from the roof has the ability to pick up chemicals from roofing materials, along with nutrients and bacteria from bird waste, that negatively impact surface waters.
- ▶ The County recommends a 12-foot vegetated buffer between point of discharge and County right-of-way.

CLEAN WATER ONLY

- ▶ Per Florida Building Code, household wastewater of any type must be discharged to the sanitary system. This includes water from **sinks, tubs, toilets, water softeners, dishwashers, washing machines and floor drains**.
- ▶ Household wastewater that does not contain human waste is referred to as **grey water**. This type of wastewater may still contain soaps, oil and organic matter, which will impact waterbodies if not treated before discharge.

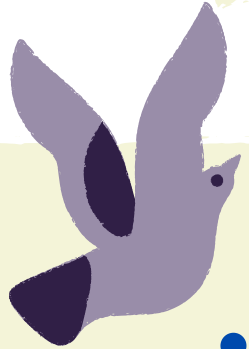
POND MAINTENANCE

POND PROBLEMS

- Algae Blooms
- Fish Kills
- Odor
- Invasive Plants
- Grass to Water Line
- No Buffer Zone
- Feeding Wildlife
- Limited Capacity

POND SOLUTIONS

- Use Florida-Friendly Landscaping
- Plant buffer zone
- Pick-up trash and yard waste
- Keep inflow/outflow structures debris free
- Skip Fertilizer
- Aquascape with native plants
- Pick-up pet waste
- Remove sediment
- Complete regular inspections



How To Operate & Maintain Your



Stormwater Management System

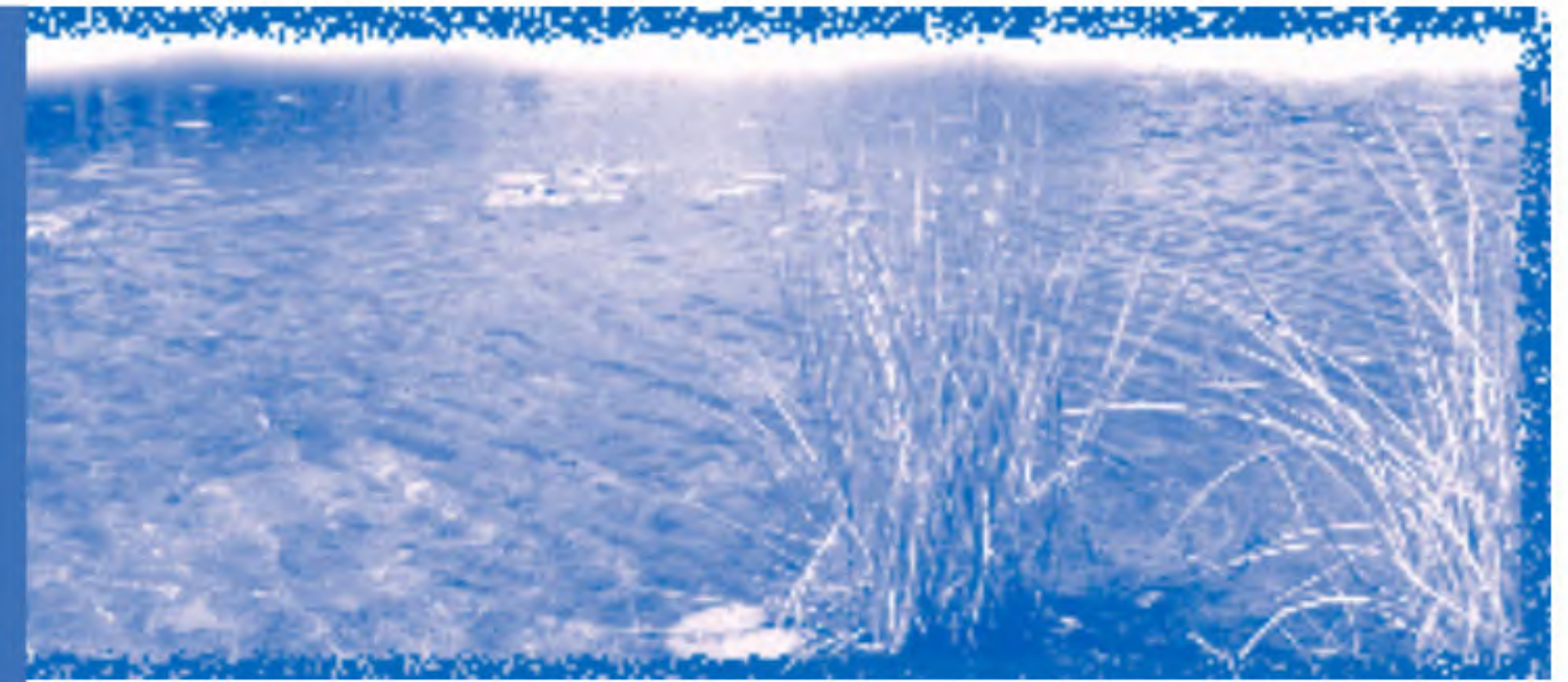


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Stormwater Management System: It's Your Responsibility

Surface water management facilities, such as ponds, ditches and swales, are constructed to trap and filter out pollutants in stormwater runoff from roads, parking lots, buildings and lawns. Discharge of untreated water to natural lakes, creeks, and rivers is harmful to natural vegetation and wildlife; this destroys one of the very things we like best about Florida — our enjoyment of the abundant clean water for recreation and aesthetic enjoyment.

The purpose of this informational pamphlet is to provide the entity/permittee responsible for the operation and maintenance of the Stormwater Management System (SWMS) with guidelines for establishing a program of routine maintenance procedures, which should minimize problems and maximize the appearance and performance of a SWMS.

Typically, site developers are responsible for operation and maintenance until construction is complete, then they are required by permit condition to transfer this responsibility to a homeowners', condominium owners', or property owners' association. After an association is legally established and construction of the surface water management system is completed, the association will assume responsibility. The operation and maintenance entity for shopping centers, individual stores and offices typically is the landowner or a management company hired by the landowner.

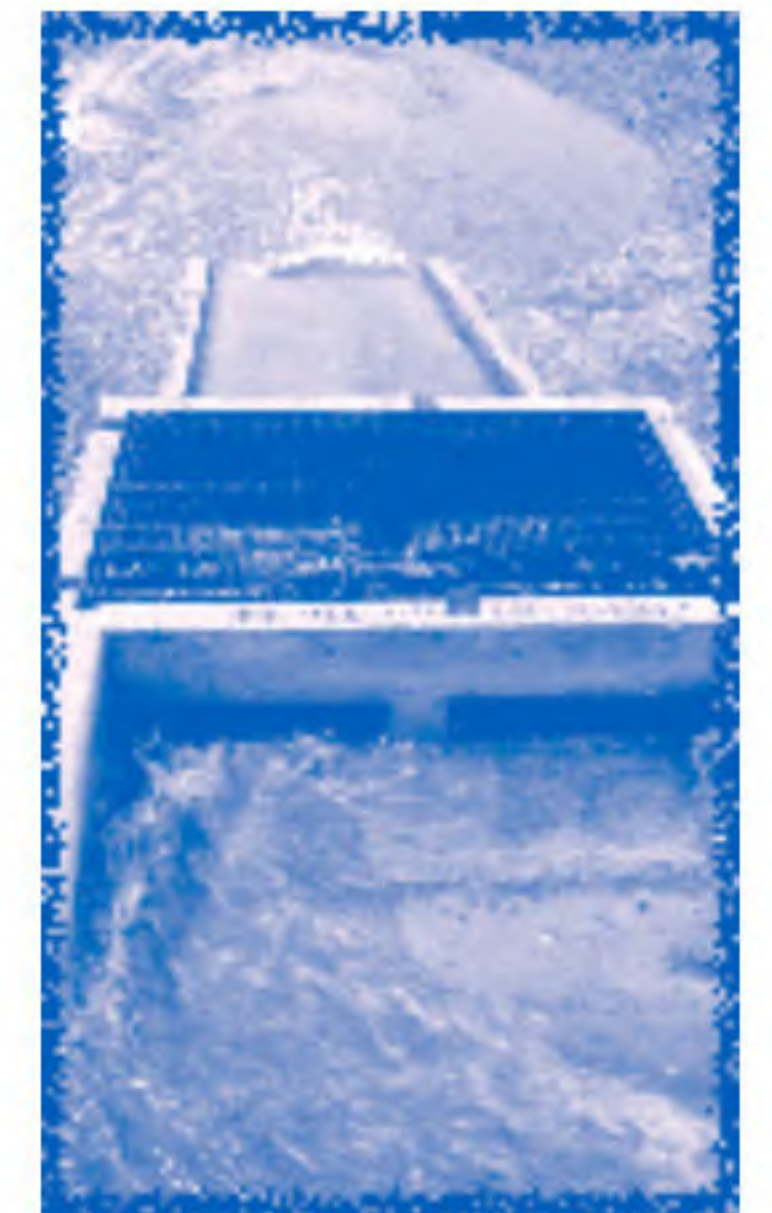


Your SWMS...

Your (SWMS) is designed and constructed to comply with certain environmental protection criteria. Stormwater ponds and their associated surface water management facilities are designed to capture and remove pollutants from specific volumes of stormwater runoff through processes such as percolation, filtering and/or detention. As long as they are constructed properly and maintained in an effective state, water quality standards are presumed to be met.

Stormwater management systems should be inspected on a routine basis to ensure that they are functioning properly. Inspections should be scheduled on a monthly or quarterly basis and following any major rain event. More frequent inspections may be necessary during the rainy season. Keeping detailed notes on maintenance activities will help when providing a report to the Southwest Florida Water Management District (District) at the time of your 18- or 24-month inspection. Environmental Resource Permit (ERP) or your Management and Storage of Surface Waters (MSSW) permit includes a condition that specifies how often the inspection reports are due.

It would be wise to designate one individual as the person responsible for overseeing operation and maintenance activities, monitoring and reporting. This will allow that individual to become well acquainted with the SWMS. Provide this person with a copy of the permit and District-approved construction drawings should questions or issues develop.



General Maintenance

1. All stormwater pipes, inlets, catch basins, manholes, flumes, pond inflow and outfall structures (including oil skimmers), and discharge pipes should be inspected on a regular basis (monthly or quarterly) and after major rainfalls. They should be maintained by removing built-up debris and vegetation and repairing deteriorating structures.
2. Chemicals, oils, greases or similar wastes are NOT to be disposed of directly to the stormwater facility or through storm sewers. Treatment ponds are designed to treat normal road, parking lot, roof and yard runoff only. Some chemicals may interfere with a treatment pond's functions or kill vegetation and wildlife. Dispose of these potentially dangerous materials properly by taking them to recycling facilities or to collection locations sponsored by many local governments.

Also, do not dispose of grass clippings in a SWMS. Grass clippings pose problems by smothering desirable vegetation, clogging outfall structures and, when they decompose, may cause unsightly algae blooms that can kill fish.
3. Accumulated pond sediments may contain heavy metals such as lead, cadmium and mercury, as well as other potentially hazardous materials. Therefore, sediments removed from storm sewers, inlets, pipes and ponds should be disposed of at an approved facility (check with your county Solid Waste Department or the Florida Department of Environmental Protection for disposal facilities approved to accept treatment pond sediment).
4. During any repair or maintenance activity, use care to avoid causing erosion or siltation to adjacent or off-site areas.
5. Remember, alterations (filling, enlarging, etc.) of any part of the stormwater facility is not permitted without prior approval from all applicable governing agencies.

continued on page 4

General Maintenance *continued from page 3*

6. The approved Operation and Maintenance Permit and as-built drawings are available at your local District service office. Refer to those plans and permits or additional restrictions, instructions and conditions.
7. It is usually more cost-effective to monitor and perform routine maintenance on a SWMS, rather than let it fail and have to reconstruct the entire system.
8. Mosquito growth can be minimized in a SWMS by the following measures:
 - Do not dump grass clippings or other organic debris into a SWMS — decaying grass clippings and other decomposing vegetation create ideal conditions for breeding mosquitoes.
 - Clean out any obstructions that get into the system. Debris can obstruct flow and harbor mosquito eggs and larvae.
 - Remove water lettuce and water hyacinth, which nourish and shelter mosquito larvae.
 - Stock ponds with predatory “mosquito fish” – Gambusia minnows, which may be collected from other ponds and ditches and introduced into your SWMS. Remember, the introduction of grass carp into your SWMS will require District approval.



Ditches & Swales

(AKA Percolation Ponds)

Some Environmental Resource Permits and (Management and Storage of Surface Water Permits) require that the vegetation in some ditches be protected to offset wetland impacts permitted during construction or for water quality treatment. The permit or approved construction should clearly identify which ditch vegetation must be preserved. If you're unsure, contact your local District service office.

If vegetation is not required to be protected, ditches and swales should be periodically mowed and cleaned of accumulated refuse. During the mowing operations, ditches and swales should be inspected for bare spots, damage or erosion. Bare areas should be sodded or seeded to replace the grass cover. In the case of erosion, replace the missing soils and bring the area back to grade.

Some ditches are designed to store runoff for short periods of time utilizing ditch blocks or raised inlets. These ditch blocks or inlets should not be removed or altered.

If you are unable to identify what type of treatment method serves your development, contact your District service office. Addresses are on the back of this pamphlet.



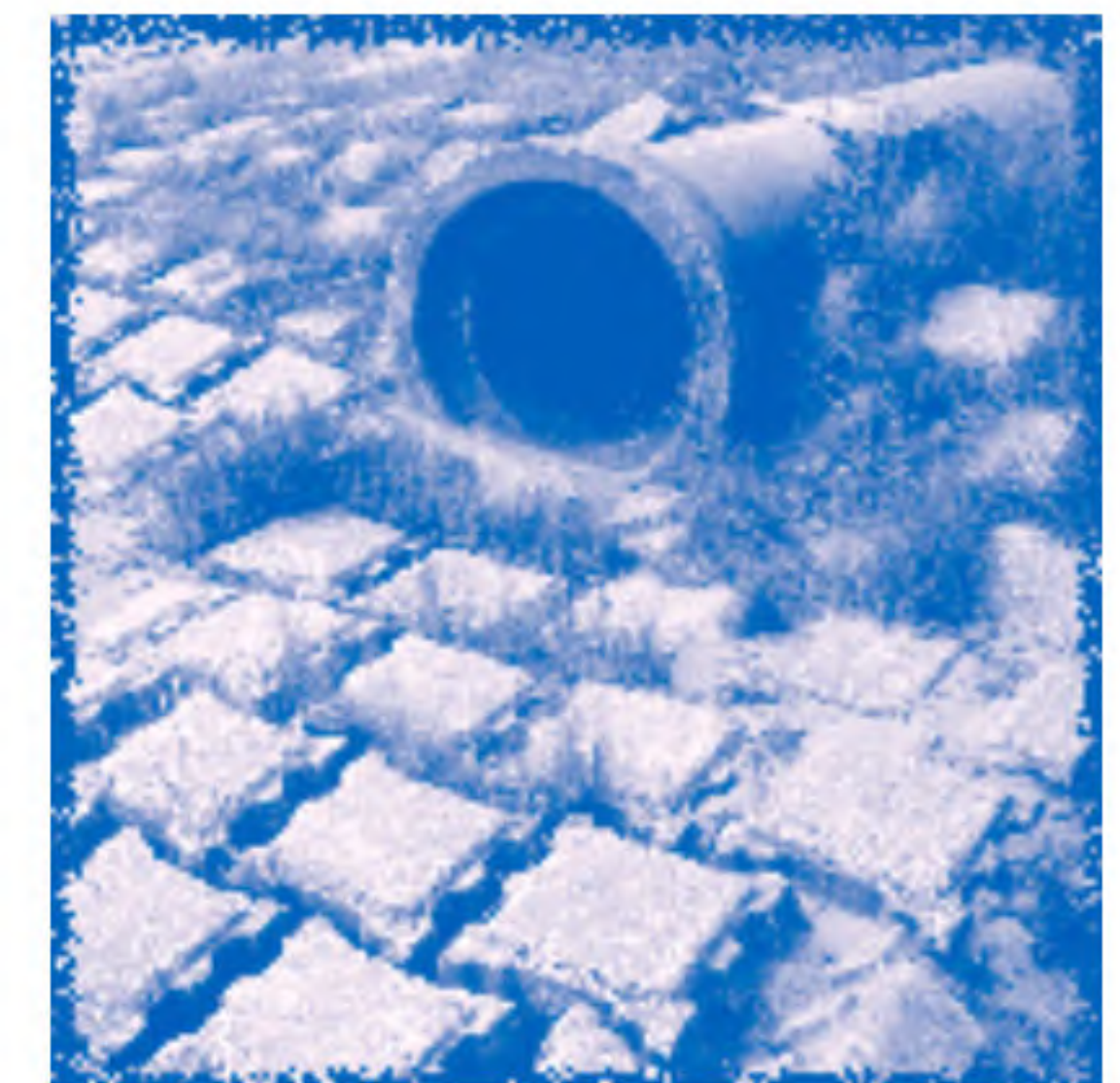
Dry Retention Ponds

(AKA Percolation Ponds)

How to recognize: Dry retention ponds are designed to be dry, except for 72 hours following a rain event, or a series of rain events if they occur frequently. They are sodded or grassed, with a concrete overflow structure that has a grated top and sometimes a rectangular weir cut in the side of the concrete structure.

How they work: A portion of the site's storm water percolates through the topsoil. The pollutants settle out and are trapped on the pond's bottom. Exposure to sun and oxygen helps break down the greases and oils.

Why they fail: Accumulated sediments with silts, oils and greases eventually seal off the porous bottom sands, resulting in little or no percolation through the filtering sands. Untreated water may discharge through the overflow structure if this occurs.

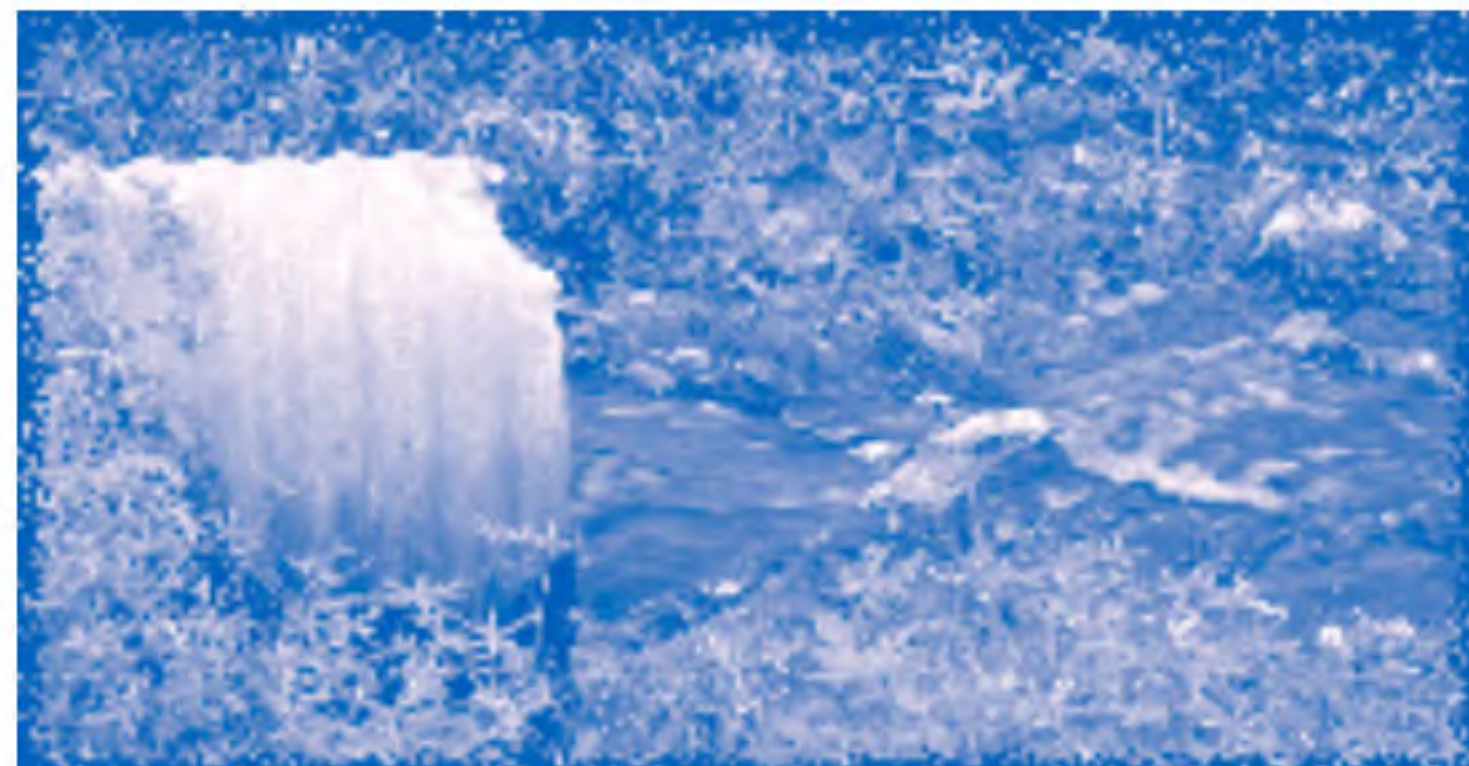


Dry Retention Ponds

(AKA Percolation Ponds)

MAINTENANCE SUGGESTIONS

1. On a monthly or quarterly basis, and following a storm event, the entity responsible for maintenance should make an inspection of the pond and its outfall structure to ensure that the system is operating properly. If standing water persists longer than 72 hours after a normal summer rain event, or if wetland vegetation such as cattails grow in the pond, the stormwater facility may be in need of repair. Repairs may be as simple as scarifying or raking the pond bottom, or may consist of removing the bottom sediment (approximately the top foot of soil) and replacing the soil with clean sand. For more information, contact your local District service office.
2. Mow frequently enough to prevent thatch buildup. Pick up grass clippings after cutting. Limit fertilizer use around the pond, and do not fertilize grass in the pond area.
3. Resod any areas (sides or bottom) where grass or sod has been removed or eroded.
4. Keep the outfall structure clear of debris and vegetation.



Effluent Filtration

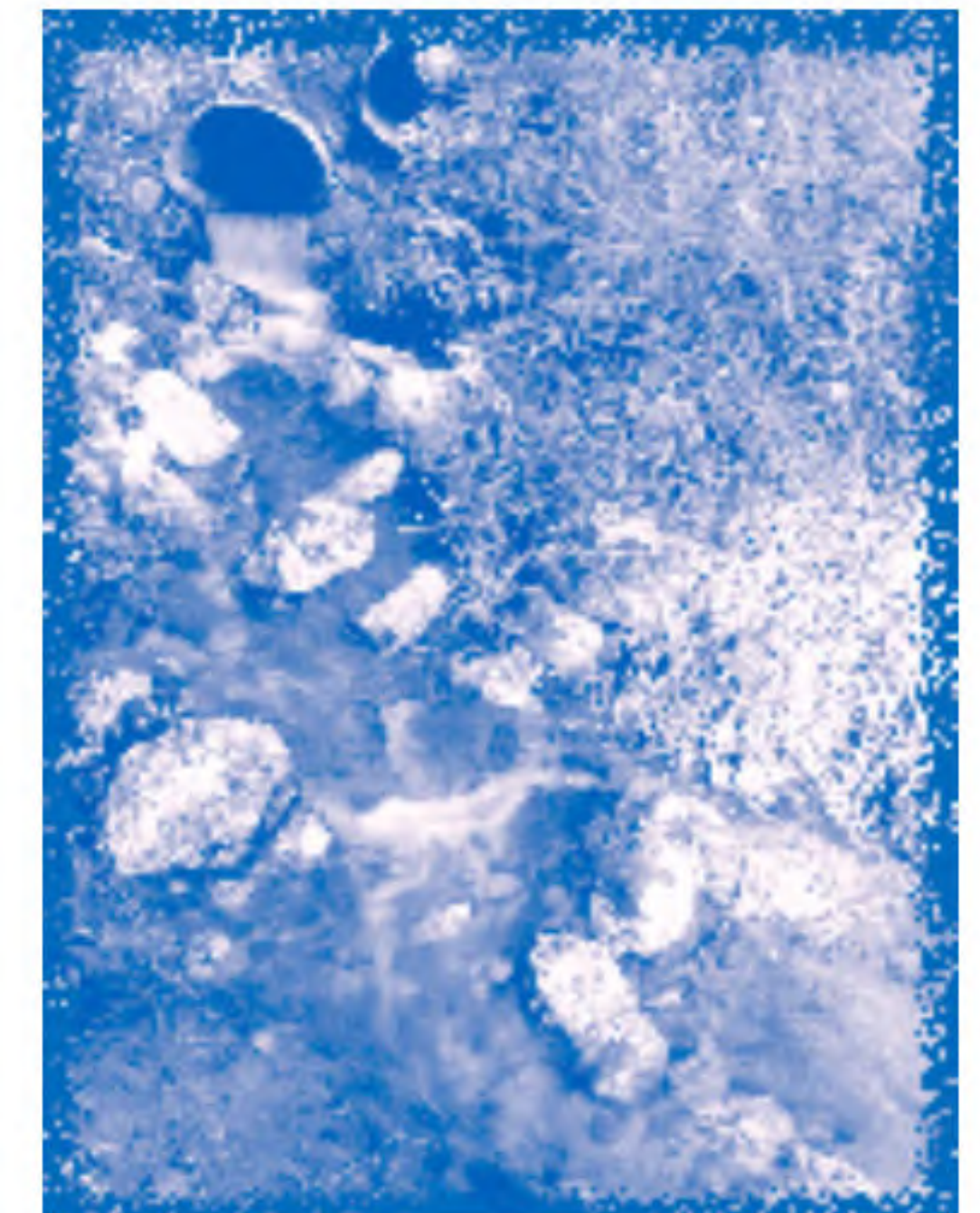
Side-drain Filtration or Underdrain Filtration

How to recognize: These ponds may either be dry or wet, but rely on a filtration system made of perforated pipe laid in a bed of filter media, such as sand, to remove pollutants. "Cleanouts," or vertical pipes with caps screwed on top, are connected to the buried pipes and extend up to the pond surface or bank. It is essential that the cap is always kept secured on the cleanout so that untreated water is not discharged through the cleanout.

How they work: A portion of the site's storm water percolates through the filter media into the perforated pipe and out through the control structure. Pollutants settle out or are trapped in the filter media. In addition, exposure to sun and oxygen helps break down the greases and oils.

Why they fail: The filter bed may become clogged with accumulated sediment, oils and greases, resulting in little or no percolation through the filtering sands. Untreated water may discharge through the overflow structure if this occurs.

For maintenance suggestions see page 9



Effluent Filtration

Side-drain Filtration or Underdrain Filtration

MAINTENANCE SUGGESTIONS

In general, if approximately 36 hours after a rain event you notice that water discharges over the top of the concrete control structure, rather than through the perforated pipe, it may be a signal that the pond is not functioning properly.

1. On a monthly or quarterly basis, and following a storm event, inspect the pond and its outfall structure to ensure that the system is operating properly.

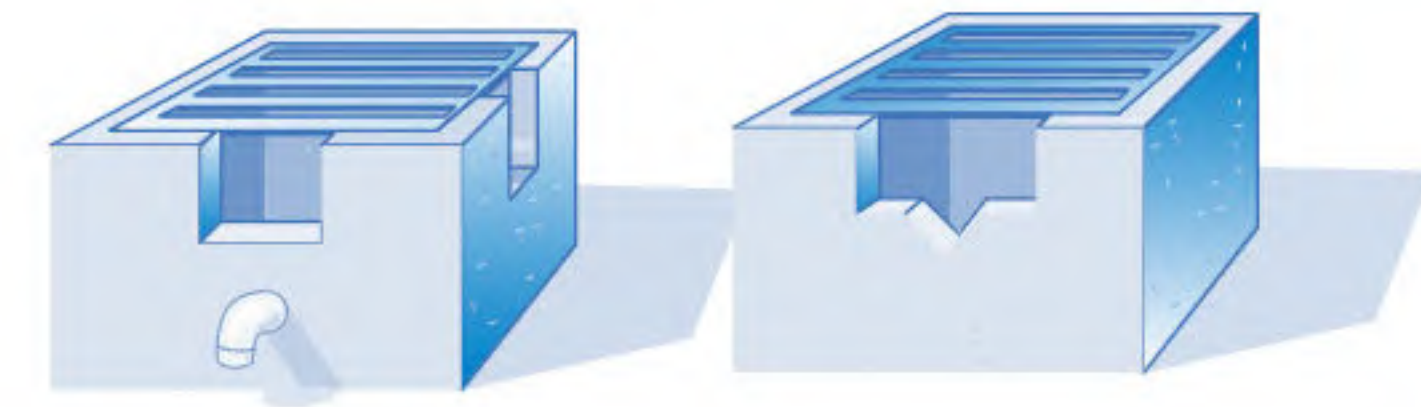
Repairs may be as simple as scarifying or raking the filter sand, forcing water through the cleanout to cleanse the perforated pipe, or as involved as replacing the filter media. Check construction plans or contact the District for more information if any questions arise.

2. Mow frequently enough to prevent thatch buildup. Pick up grass clippings after cutting. Limit fertilizer use around the pond, and do not fertilize grass in the pond area.
3. Resod any areas where grass has been removed or eroded. Do not sod over the filter media. Place stone or gravel over the filter media for stabilization, if necessary.
4. Keep the outfall structure clear of debris and vegetation.



Wet Detention Ponds

How to recognize: Look at the outfall structure. If it looks similar to the ones below and about a third of the pond is shallow or covered with vegetation (or recruiting vegetation if the pond is newly constructed), there's a good chance the facility is a wet detention pond.



How they work: Wet detention ponds are designed to detain storm water for several days while pollutant-laden sediments settle to the pond bottom. Additionally, sunlight and oxygen break down greases and oils. Vegetation in the shallow littoral zone (the shallow zone created near the pond outfall structure that designed to be vegetated) helps treat water through nutrient and heavy metal uptake.

Why they fail: After some years of use, wet detention ponds may fail. The control structure may become clogged with vegetation and sediment. Vegetation and sediment may accumulate in the pond, reducing the pond's ability to store storm water.

For maintenance suggestions see page 11

Wet Detention Ponds

MAINTENANCE SUGGESTIONS

1. All sodded side slopes and berms should be maintained by the procedure outlined for ditches and swales. Inflow structures should be maintained by the procedures outlined in this brochure under "General Maintenance."
2. Maintain, rather than remove, wetland vegetation that becomes established in the littoral zone. Do not cut, mow, use herbicide or grass carp to remove any of the vegetation in the littoral zone without prior approval from the District. Refer to the conditions of the permit and construction notes for any further instructions.
3. On a monthly or quarterly basis, and after severe rainfall events, check the area in front of the outfall control structure for built-up sediments, vegetation, trash and debris that impair the operation of the structure. Remove sediment, vegetation, trash and debris to an approved disposal site.
4. When littoral zone vegetation and sediment accumulate to such an extent that water depth decreases, the littoral zone may need to be regraded and revegetated. When it appears that a pond has reached this state, it is best to contact a District representative prior to large-scale maintenance.

When wet detention pond littoral zones are intentionally planted for aesthetic purposes, or to offset wetlands' impacts, removal of weedy or exotic vegetation may be required and accompanied by replanting of desirable vegetation. Check with your local District service office to determine specific requirements.



Southwest Florida Water Management District Service Offices

BROOKSVILLE (headquarters)
2379 Broad Street
Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476

TAMPA
7601 U.S. Hwy. 301 N.
Tampa, Florida 33637-6759
(813) 985-7481 or 1-800-836-0797

BARTOW
170 Century Blvd.
Bartow, Florida 33830-7700
(863) 534-1448 or 1-800-492-7862

SARASOTA
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or 1-800-320-3503



APPENDIX B

Inspection



Huntington Trails HOA Inspection Data

ID	Note
1	Dredge and maintain design depth.
2	Typical of all structures, debris inside of drainage structures, perform routine cleaning/maintenance.
3	Potential illicit discharge into pond behind 1018 Chillum Ct. Build-up of debris in outfall.
4	Erosion at north bank behind 1016 Chillum Ct.
5	Black pipe penetrating through wall; potential illicit discharge (pool drain) behind 1206 Huntington Ln.
6	Bank/wall repair completed; work may impact pond design. Confirm permitting.
7	Debris in storm structures.
8	No outfall observed, potentially covered by sediment. Complete dredging to maintain pond design depth. Find outfall structure, impacts to the outfall would significantly impact drainage upstream. Remove vegetation growth in pond.
9	Water ponding in gutter. Clear debris and repair gutters as needed to ensure positive flow.
10	Mitered End not connected at outfall. Remove vegetation; dredge pond to design depth.
11	Clear debris from wetlands to ensure flow.
12	Outfall full submerged, clear blockages.
13	Dredge and maintain design depth.
14	Dredge and maintain design depth.
15	Dredge and maintain design depth.
16	Unknown if rock stabilization was permitted or impacting pond capacity.



Inspection Photos:

*Refer to inspection map for associated location and inspection notes.

Location ID 1



Location ID 2



Location ID 3



Location ID 4



Location ID 5



Location ID 6



Location ID 7



Location ID 8



Location ID 9



Location ID 10



Location ID 11



Location ID 12



Location ID 13



Location ID 14



Location ID 15



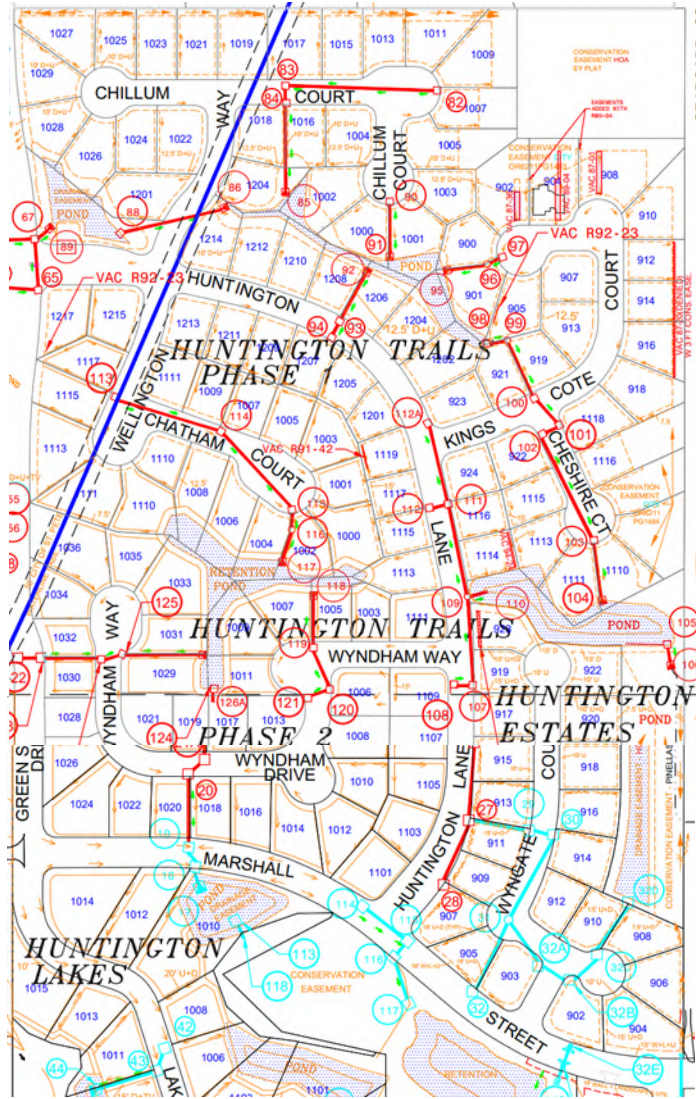
Location ID 16



APPENDIX C

Plat and Atlas Information

Stormwater Structures



Plat information

- Phase 1 Platted in 1985, Phase 2 Platted in 1986.
 - Streets – Dedicated as Private
 - Tract 1 & Tract 2 – Dedicated to the HOA
 - Other Easements – Dedicated to the Public.
- Deed of Conveyance in 1986
 - Conservation Easement over Lots 52, 53, 54, 55, 42, 43, 44 – Dedicated to the City to ensure existing natural conditions aren't disturbed and prohibiting construction, excavation, tree removal per State Law. This easement does not pertain to "Tract 1" and "Tract 2".

NOTE:
Any disturbance (clearing, development activity, etc.) by individual lot owners is prohibited within areas identified as "CONSERVATION EASEMENT". Maintenance within those areas in addition to areas designated as TRACT "1" and TRACT "2" shall be the responsibility of the HOMEOWNER'S ASSOCIATION OR ASSIGNS.

CHILLUM COURT, WELLINGTON WAY, KINGSCOTE COURT, CHATHAM COURT, CHESHIRE COURT AND HUNTINGTON LANE designated as private roads or streets hereon are specifically set aside for the use by the property owners only and in no way constitute a dedication to the general public or to the City of Safety Harbor, it being specifically understood that no obligation is imposed upon the City, for maintenance or improvement of said private roads or streets.

DEDICATION

The undersigned hereby certify that they are the Owners of the hereon described property and that besides the other interests identified hereon, there are no other outstanding interests in said property, which property is hereby platted as "HUNTINGTON TRAILS" and that they dedicate all easements and GREEN SPRINGS DRIVE, MARSHALL STREET and the 9TH AVENUE as shown on this Plat to the public in general.

AS TO REMAINDER

DEDICATION: As Owner of Lot 42
The undersigned hereby certify that they are the Owners of said lot and that besides the other interests identified hereon, there are no other outstanding interests in said property, which property is hereby platted as "HUNTINGTON TRAILS PHASE 2" and that they dedicate all easements and GREEN SPRINGS DRIVE, MARSHALL STREET AND 9TH AVENUE as shown on this Plat to the public in general.