

LITTORAL ZONES

What is a littoral zone?

Why is a littoral zone so important?

I was told my pond needs a littoral shelf planting area, what does that mean?

How do I build a littoral planting shelf?

What if I just want to put some plants around my pond bank to improve bank stabilization, aesthetics and water quality?

Can I remove the plants in my pond?

Can I change the plants that grow in my pond?

Do littoral shelf planting areas require maintenance?

Do you have any examples of planted littoral zones?

What is a littoral zone?

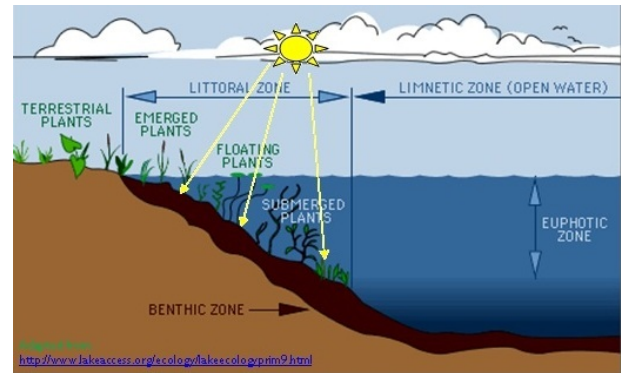
A [littoral zone](#) [\[Insert link to Guidebooks page here\]](#) is the near shore area from the high water line to where the sunlight penetrates to the sediments in a waterbody. This zone may or may not contain plant life but it is the optimal region for aquatic plants to grow. Littoral zones are present in both fresh and saltwater environments.

Why is a littoral zone so important?

Your stormwater pond acts as a sink which captures the stormwater runoff from your surrounding area, along with many of the pollutants like excess nutrients found in fertilizers. Aquatic plants in the littoral zone can improve water quality by removing excess nutrients and pollution from stormwater runoff that can enter your pond. This can help improve water clarity and prevent algal blooms. Plants also stabilize the banks to prevent erosion and provide habitat for wildlife such as fish, amphibians, birds, and terrestrial species.

I was told my pond needs a littoral shelf planting area, what does that mean?

A [littoral shelf planting area \(LSPA\)](#) is the sloped lake bank planted with aquatic vegetation within the littoral zone. [Collier County Land Development Code Section 3.05.10](#) requires that all newly excavated stormwater management ponds must have a Littoral Shelf Planting Area. The photos below show examples of a recently planted littoral shelf.



How do I build a littoral planting shelf?

Check with your lake management company, landscaper or developer. Chances are they have experience with installing littoral plant shelves. Trying to construct a littoral planting shelf on your own may prove quite challenging. If you are a **contractor**, you can follow these [Design Guidelines for County required Littoral Shelf Planting Area \(LSPA\)](#).

What if I just want to put some plants around my pond bank to improve bank stabilization,

Do-It-Yourselfers can utilize these [General Guidelines for Planting a Littoral Zone](#), but keep in mind that each pond is unique and a good design depends on bank slope, water level fluctuations, exposure to sun and existing water quality. If you live in a community with an HOA (homeowners association), it is advised that you obtain permission from the board and make it a community effort.

Can I remove the plants in my pond?

Exotic vegetation can and should be removed from retention ponds on a regular basis. [Chapter 5B-64.011](#) of the Florida Administrative Code outlines the prohibited exotic plants. The attached [exotic](#) list provides links to the plants listed in Chapter 5B-64.011. If you currently have a stormwater management pond with a required LSPA, then the native vegetation cannot be removed without a modification to the existing permit(s). To determine permit status or modify an existing permit please contact the Environmental Permitting staff at [239-252-2400](tel:239-252-2400).

Can I change the plants that grow in my pond?

Plantings in an LSPA were specifically installed in accordance with permit construction plan specifications. Deviating from the approved plans would require a modification of existing permit(s). To determine permit status or modify an existing permit please contact the Environmental Permitting staff at [239-252-2400](tel:239-252-2400).

Do littoral shelf planting areas require maintenance?

In many cases minimizing maintenance is the best way to manage a littoral planting area. Healthy littoral zones can reduce the need for chemical treatment, but just like any landscaping, some type of ongoing maintenance will be required. For example, additional plantings may be required if the installed vegetation doesn't thrive or grow to the 80% cover expectation within 2 years of LSPA installation. The good news about maintenance is that mowing, irrigating, and fertilizing are not expected to be done within 10' of the water. This area is considered the "low maintenance zone" and should be treated in accordance with the Fertilizer Ordinance (www.dontoverfeed.com). [Learn more about LSPA maintenance](#).

Updated October 19, 2021