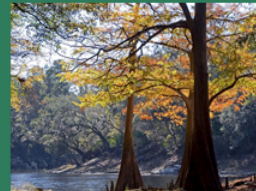




**Florida Department of Environmental Protection**

# **Mangrove Regulations**

**July 16, 2020**

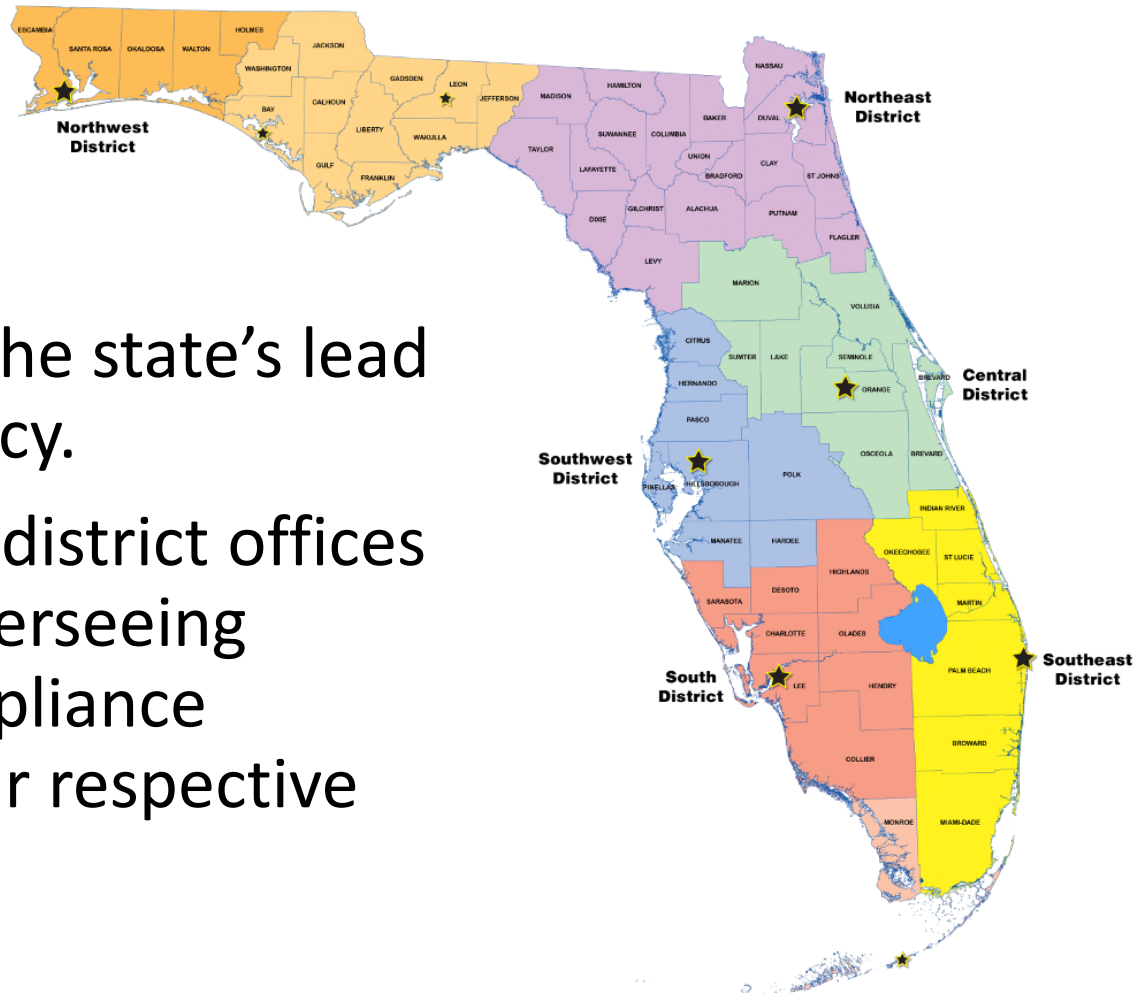




# What is DEP?

The Florida Department of Environmental Protection (DEP) is the state's lead environmental agency.

DEP's six regulatory district offices are charged with overseeing permitting and compliance activities within their respective districts.





# Environmental Resource Permit (ERP) Program

This program regulates activities in, on, or over wetlands or other surface waters as well as activities that alter surface water flow. Often this includes the authorization for use of state-owned submerged lands.

ERP staff also are responsible for the implementation of the Mangrove Trimming and Preservation Act (MPTA)

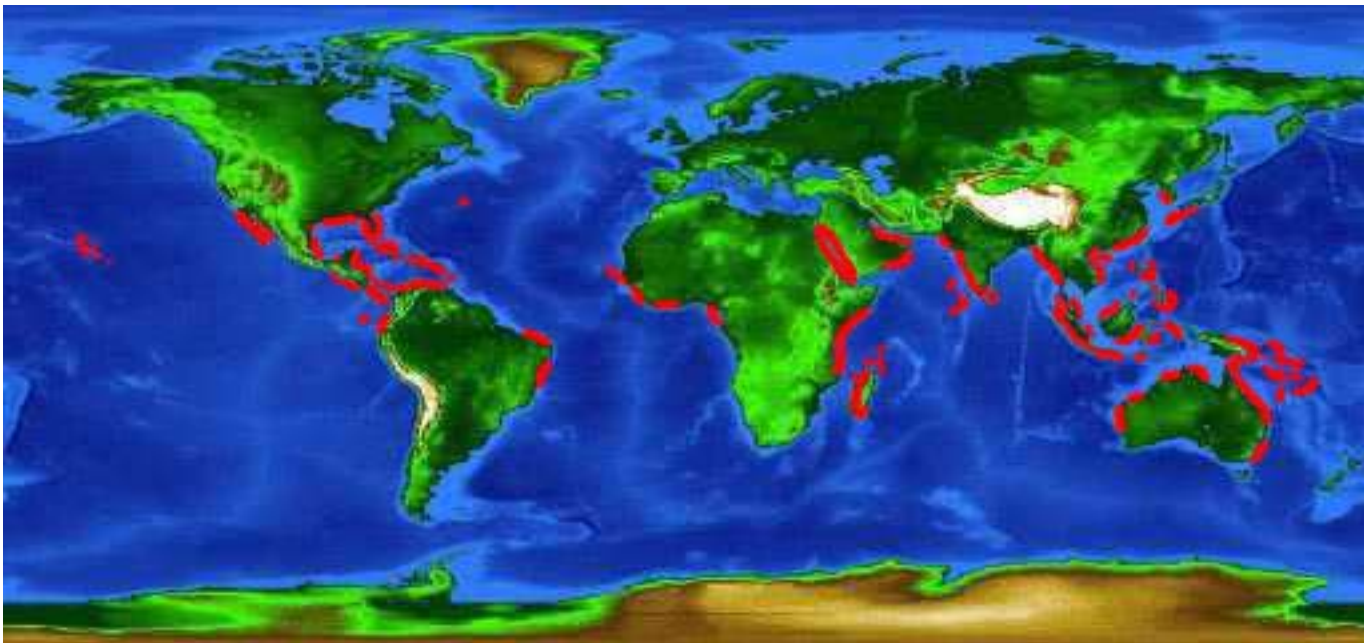


Photograph from FDEP



# Mangroves

- Mangroves can be found growing in intertidal zones in tropical and subtropical areas.
- According to the World Atlas of Mangroves, there are 73 species\* of “true” mangroves.
- 3 **native** mangrove species are found in Florida



Picture from the Florida Museum of Natural History





# *Rhizophora mangle*

## Red Mangrove

- Zonation
  - closest to water
- Leaves
  - ▶ deep green
  - ▶ up to 5"
  - ▶ broad elongate with point
- Red stems
- Aerial roots or prop roots
- Fruits called "propagules"





# *Avicennia germinans*

## Black Mangrove

- Zonation
  - behind reds
- Small, White Flowers
- Dark bark
- Leaves
  - lighter green
  - silver underside
- Pneumatophores  
(aerial roots)
- Seeds







# *Laguncularia racemosa*

## White Mangrove

- Zonation
  - closest to uplands
- Leaves
  - yellow green
  - notch at tip
  - glands at base
- Seeds
- Whitish Bark





# The Importance of Mangroves

**Mangroves provide many benefits to humans and the environment, such as:**

- Providing foundational food chain resources for marine organisms
- Providing physical habitat and nursery grounds for birds, fish, and other animals
- Maintaining and improving the quality of coastal waters
- Preventing coastal erosion
- Protecting homes from severe wind damage

Florida has 400,000-500,000 acres of mangroves!



Photograph from FDEP





# 1996 Mangrove Trimming and Preservation Act (MTPA)

- Florida Statute 403.9321-403.9334
- Legislative Intent:
  - Protect mangroves from unregulated removal and destruction
  - Protect uninhabited mangrove islands and lands set aside for conservation/preservation
  - Provide waterfront property owners their riparian right of view
  - Encourage property owners to plant and maintain mangroves

## 1996 Mangrove Trimming & Preservation Act

**403.9321 Short title.** Sections 403.9321-403.9333, Florida Statutes, may be cited as the "Mangrove Trimming and Preservation Act."

**History.** s. 1, ch. 95-299.

### 403.9322 Legislative findings.

(1) The Legislature finds that there are over 555,000 acres of mangroves now existing in Florida. Of this total, over 80 percent are under some form of government or private ownership or control and are expressly set aside for preservation or conservation purposes.

(2) The Legislature finds that mangroves play an important ecological role as habitat for various species of marine and estuarine vertebrates, invertebrates, and other wildlife, including mammals, birds, and reptiles; as shoreline stabilization and storm protection; and for water quality protection and maintenance and as food-web support. The mangrove forest is a tropical ecosystem that provides nursery support to the sports and commercial fisheries. Through a combination of functions, mangroves contribute to the economies of many coastal counties in the state.

(3) The Legislature finds that many areas of mangroves occur as narrow riparian mangrove fringes that do not provide all the functions of mangrove forests or provide such functions to a lesser degree.

(4) The Legislature finds that scientific studies have shown that mangroves are amenable to standard horticultural treatments and that waterfront property owners can live in harmony with mangroves by incorporating such treatments into their landscaping systems.

(5) The Legislature finds that the trimming of mangroves by professional mangrove trimmers has a significant potential to maintain the beneficial attributes of mangrove resources and that professional mangrove trimmers should be authorized to conduct mangrove trimming, under certain circumstances, without prior government authorization.

**History.** s. 2, ch. 95-299; s. 1, ch. 96-206.

### 403.9323 Legislative intent.

(1) It is the intent of the Legislature to protect and preserve mangrove resources valuable to our environment and economy from unregulated removal, defoliation, and destruction.

(2) It is the intent of the Legislature that no trimming or alteration of mangroves may be permitted on uninhabited islands which are publicly owned or on lands set aside for conservation and preservation, or mitigation, except where necessary to protect the public health, safety, and welfare, or to enhance public use of, or access to, conservation areas in accordance with approved management plans.

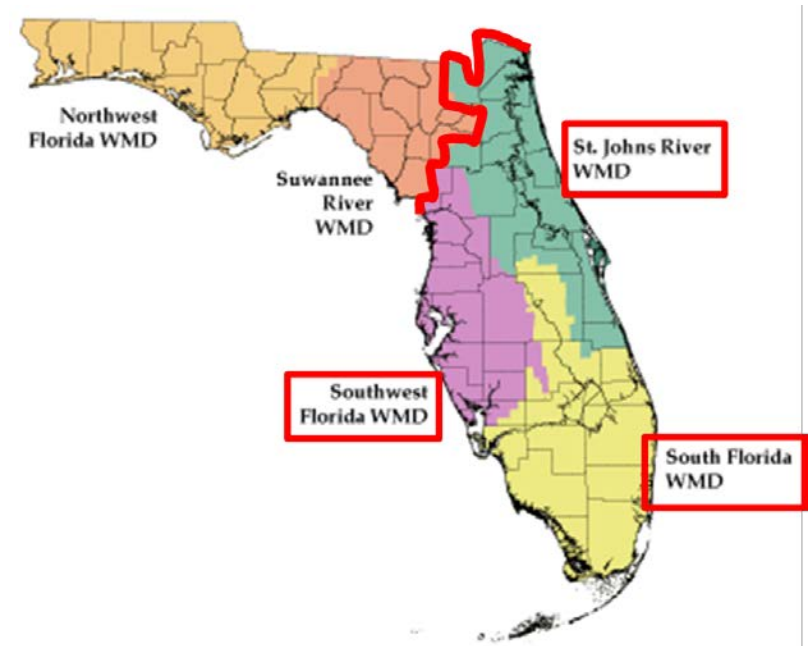
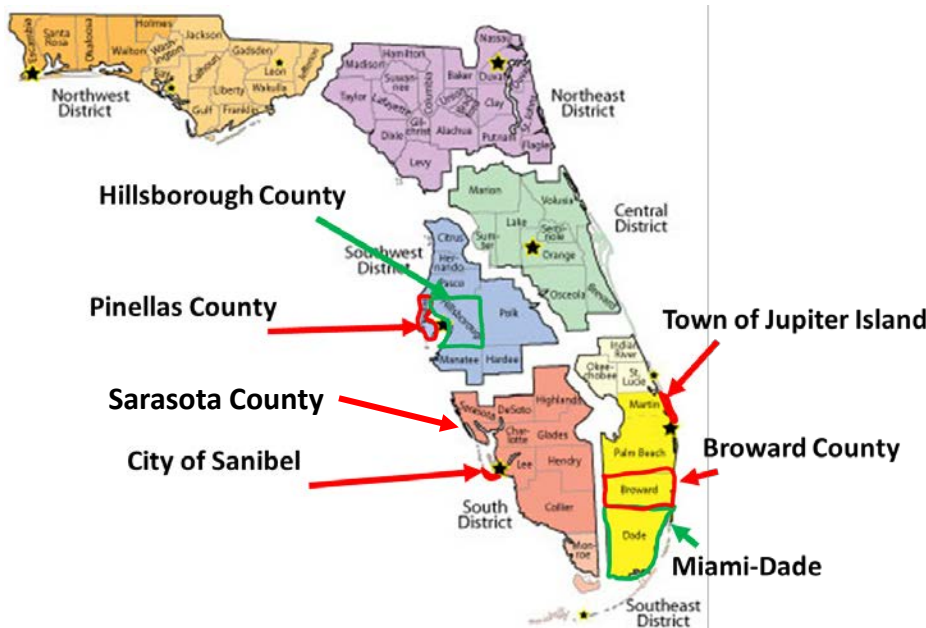
(3) It is the intent of the Legislature to provide waterfront property owners their riparian right of view, and other rights of riparian property ownership as recognized by s. 253.141 and any other provision of law, by allowing mangrove trimming in riparian mangrove fringes without prior government approval when the trimming activities will not result in the removal, defoliation, or destruction of the mangroves.

(4) It is the intent of the Legislature that ss. 403.9321-403.9333 shall be administered so



# Local Delegations

- Local Delegations have the authority to regulate and enforce the MTPA
- The 3 of Florida's 5 water management districts (WMDs) also have delegated authority
  - When a mangrove trimming/alteration activity is proposed in connection with an ERP activity processed by WMD
  - Do not have full delegation, cannot regulate when solely for mangrove trimming





# Important MTPA Terms

- **Mangrove** is any specimen of the species:
  - *Rhizophora mangle* (red mangrove)
  - *Avicennia germinans* (black mangrove)
  - *Languncularia racemosa* (white mangrove)
- The Act protects both **living** and **dead** mangroves
- **Trimming:** To cut mangrove branches, twigs, limbs and foliage
  - Does not mean to remove, defoliate, or destroy the mangroves
- **Alteration:** Anything other than trimming (e.g., defoliation, removal, or destruction)
  - This includes cutting mangrove roots
- **Professional Mangrove Trimmer (PMT):** A person who meets the qualifications set forth in s. 403.9329





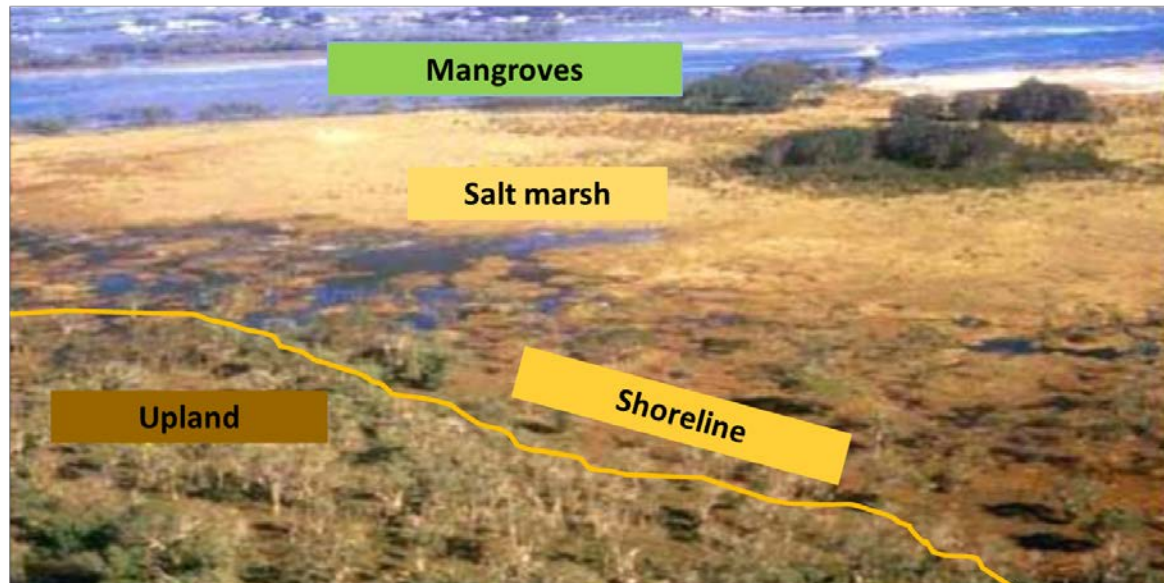


# Important MTPA Terms

- **Professional Mangrove Trimmer (PMT):** A person who meets the qualifications set forth in s. 403.9329

**Shoreline**, while not defined by the Act, is the boundary between uplands and wetlands or other surface waters.

- This is referred to as the wetland delineation line
- In tidal systems, the shoreline can often be located landward of the Mean High Water Line (MHWL)

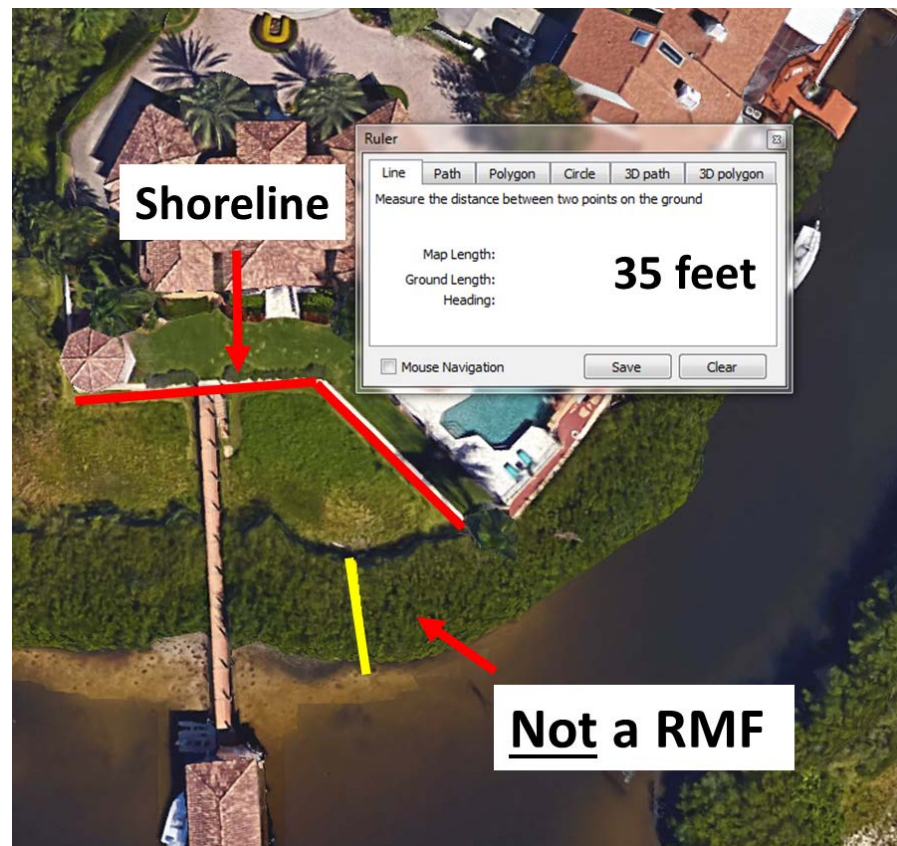




# Riparian Mangrove Fringe

A **Riparian Mangrove Fringe (RMF)** is where mangroves grow along the shoreline and do NOT extend more than 50 feet waterward

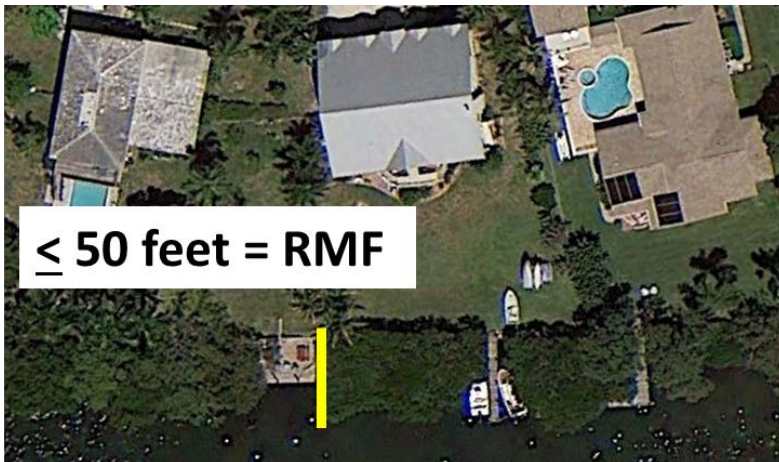
- Measured from the trunk of the most landward mangrove to the trunk of the most waterward mangrove, in a line perpendicular to the shoreline
- Does not include mangroves:
  - On public uninhabited islands,
  - On public lands set aside for conservation or preservation, or
  - On lands that have been set aside as mitigation (unless the associated documents specifically allow trimming)





# MTPA Exemptions

- What is an exemption?
- In most cases, exempt trimming may only occur within a **Riparian Mangrove Fringe (RMF)**
  - What is an RMF?







# Homeowners vs. PMT

## 403.9326(1)(a) F.S.

- Trimming conducted or overseen by homeowner
- Mangroves cannot exceed 10 ft. in pre-trimmed height

## 403.9326(1)(b) F.S.

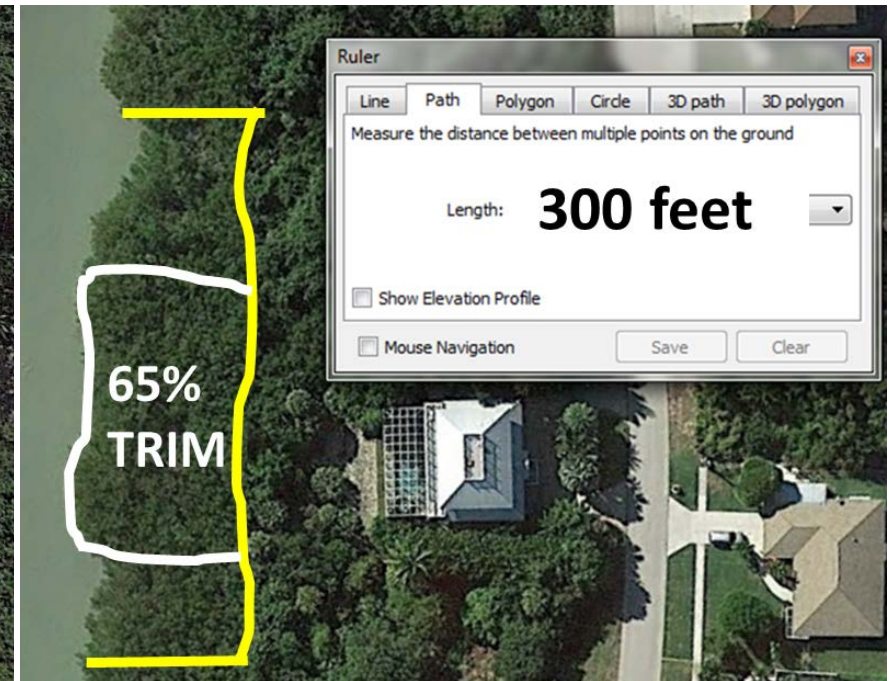
- Must be in a RMF located on lands owned by homeowner conducting trim or contracting with PMT
  - Overall height cannot be trimmed to height <6 ft.
- Trimming must be conducted by PMT
  - Mangroves cannot exceed 24 ft. in pre-trimmed height
  - Mangroves over 16 ft. in pre-trimmed height must be trimmed so that no more than 25% of foliage is removed annually



# MTPA Exemptions

When the shoreline is  $\leq 150$  feet,  
100% of mangroves within the RMF  
may be trimmed

When the shoreline is  $>150$  feet,  
only 65% of the mangroves within  
the RMF may be trimmed





# MTPA Exemptions

- **403.9326(1)(c), F.S.**
  - Trimming in RMF which is designed to reestablish or maintain a previous mangrove configuration
- **403.9326(1)(d), F.S.**
  - Maintenance trimming of mangroves previously trimmed in accordance with a previous authorization
- **403.9326(1)(e), F.S.**
  - Trimming by a state-licensed surveyor in the performance of their duties, if trimming limited to 3 ft. swath in width
- **403.9326(1)(f), F.S.**
  - Trimming by certain government entities working under a contract when trimming is done as governmental function of agency
- **403.9326(1)(g), F.S.**
  - Trimming by certain government entities if work is within or near easement, trimming is limited, and necessary for utility service (utility lines)
- **403.9326(1)(h), F.S.**
  - Trimming by certain government entities if work is on the grounds of a treatment plant and is necessary for utility service (ie. sewage/water lines)





# Alteration Exemption

## 403.9328(5), F.S.

Exempt to trim or alter (if necessary) mangroves if part of an activity that is exempt under **403.813, F.S.** or is permitted under **373.403-468, F.S.**

- No PMT required
- Only within the footprint
- Recommend contacting DEP to verify

### Examples-

- Exempt Docks
- Exempt Seawalls





# General Permits

## What is a General Permit?

- **403.9327** General Permits (GPs) are established for the trimming of mangroves that do not qualify for an exemption
- Notice to use either GP must be provided to the Department
  - <http://www.dep.state.fl.us/water/wetlands/erp/forms.htm>
- Two types of General Permits:
  - GP “for a view”
  - GP “for navigation”





# General Permits

## 403.9327(1)(a): GP to trim “for a view”

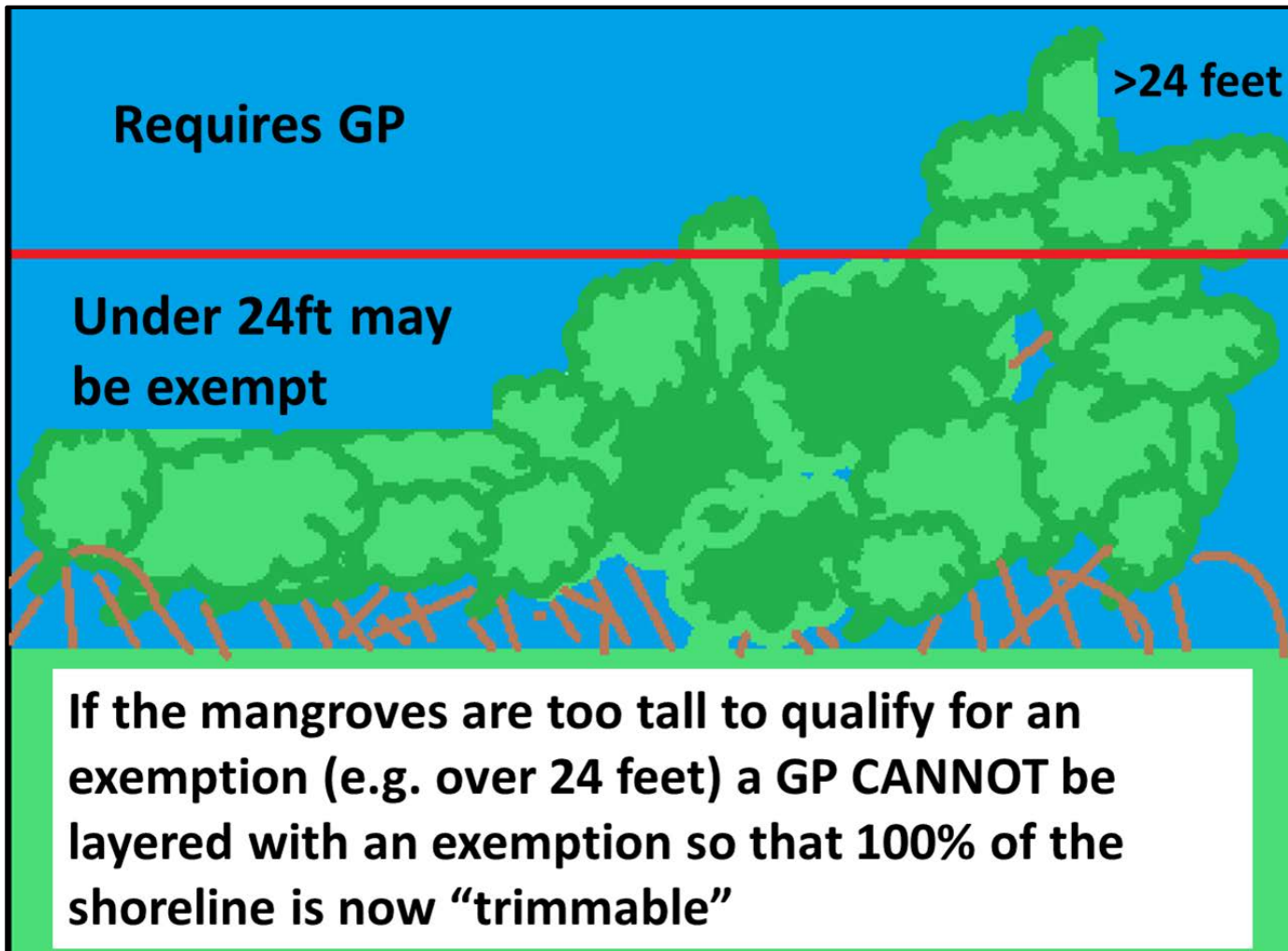


- Trimming must be by a PMT
- Mangroves must begin at the shoreline and extend no more than 500 ft. beyond
- No more than 65% of **applicable** mangroves will be trimmed
- Trimming must be conducted in stages such that  $\leq 25\%$  foliage removal annually
- **No mangroves may be trimmed below 6 ft. in height**





# GP Trimming “for a View”





# General Permits

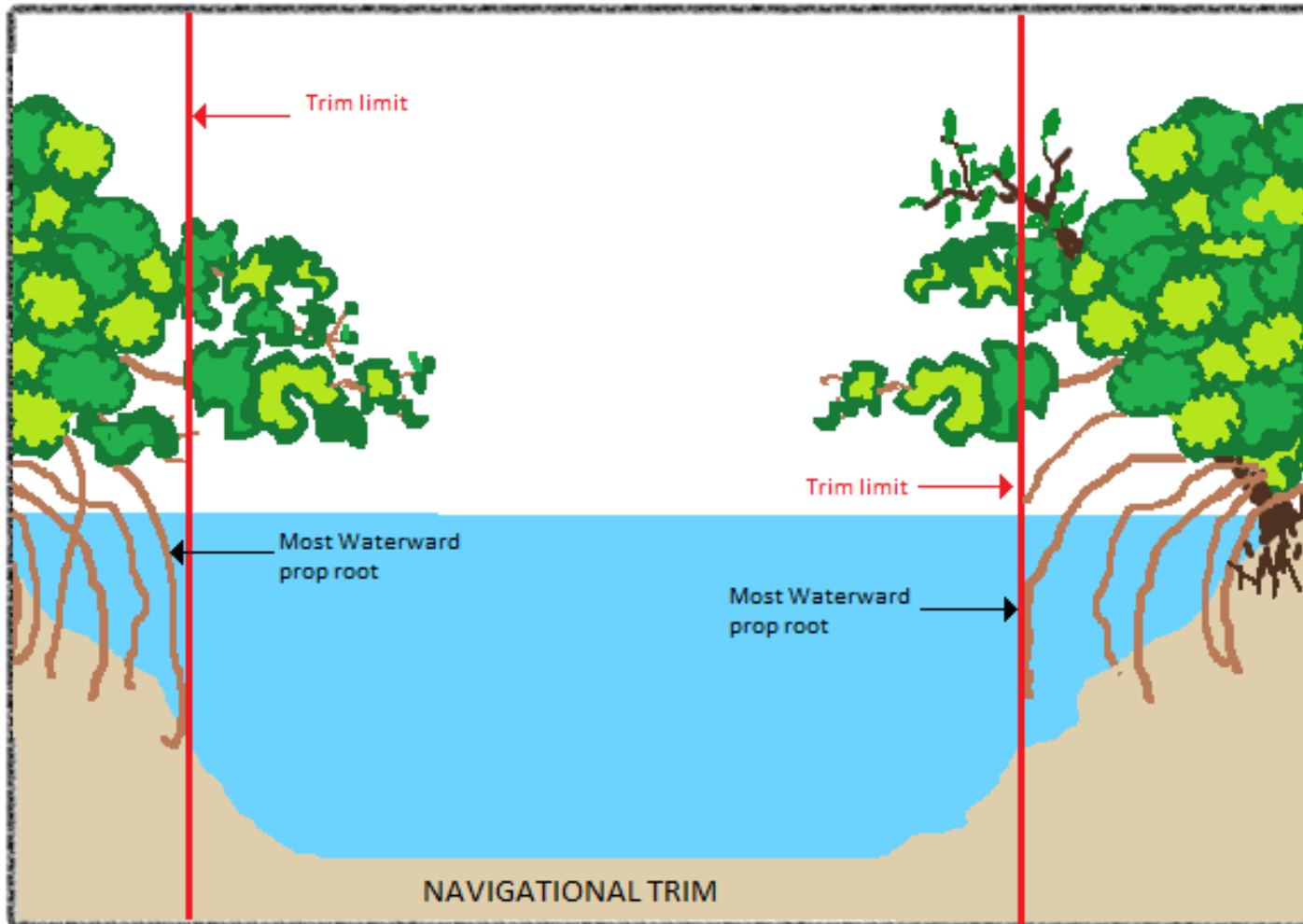
## 403.9327(1)(b): GP to trim “for navigation”

- Trimming must be by a PMT
- Limited to trimming within existing navigation channels
- Restricted to branches or trunks of mangroves that extend into the navigation channel beyond a vertical plane of the most waterward prop root or root system
- Trimming must be conducted in stages  $\leq 25\%$  foliage removal annually





# GP Trimming “for Navigation”







# General Permits

Both trimming GPs are subject to the following provisions:

- Notice to use either GP must be provided to the Department
  - <http://www.dep.state.fl.us/water/wetlands/erp/forms.htm>
- Must be in an area where DEP has not delegated MTPA authority to a local government
- Trimming must supervised or conducted by a PMT
- No herbicide or other chemical can be used for removing leaves
- A GP may be used only **once** on any parcel of property to achieve a mangrove height of no less than 6 feet
- Trimming must be conducted in stages so that no more than 25% of the foliage is removed annually



# Individual Permits

What is an Individual Permit (IP)?

- IPs may be issued for any trimming or alteration (or combined) activities that do not qualify for an exemption or general permit per the MTPA
- IPs are subject to evaluation of public interest and cumulative impact criteria in accordance with 373.414(1) and (8), respectively
- Any adverse environmental impacts must be offset through **mitigation**



# 403.9332, F.S. Mitigation

## What are the forms of mitigation?

### Types of on-site mitigation:

- Creation/Restoration – On-site planting
- Enhancement – Anything that increases functionality of the system
- Preservation – Conservation Easements

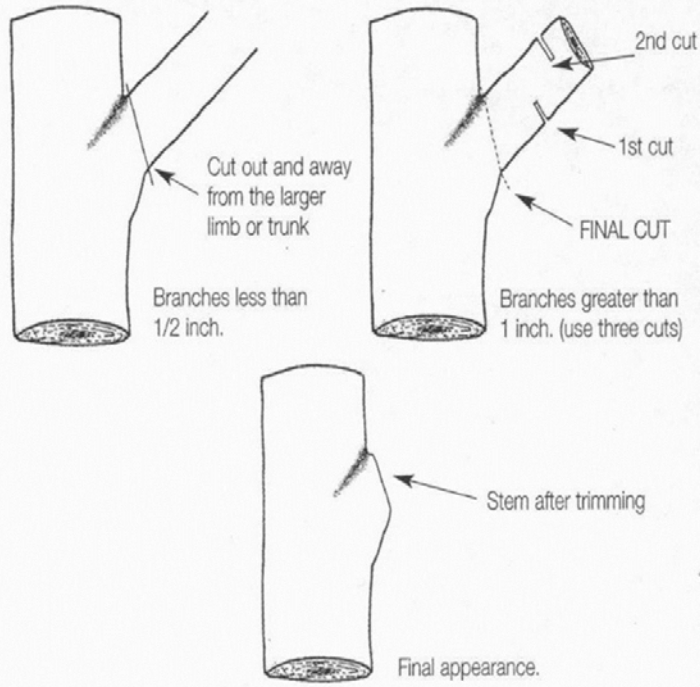
### When on-site mitigation is not practical or successful:

- Purchase of Mitigation Bank Credits



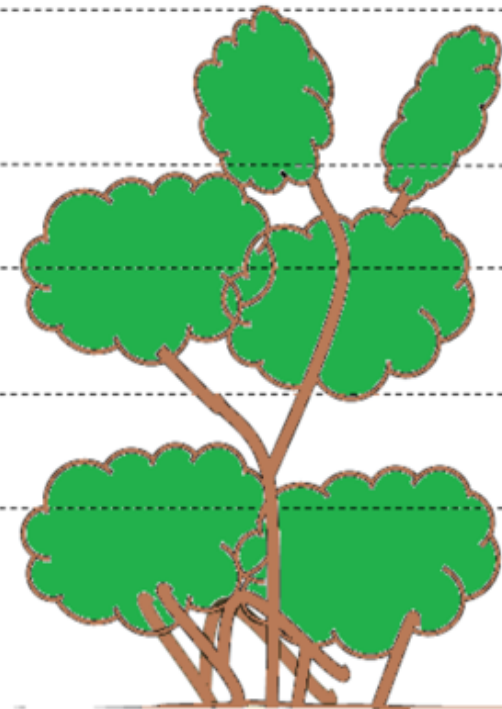
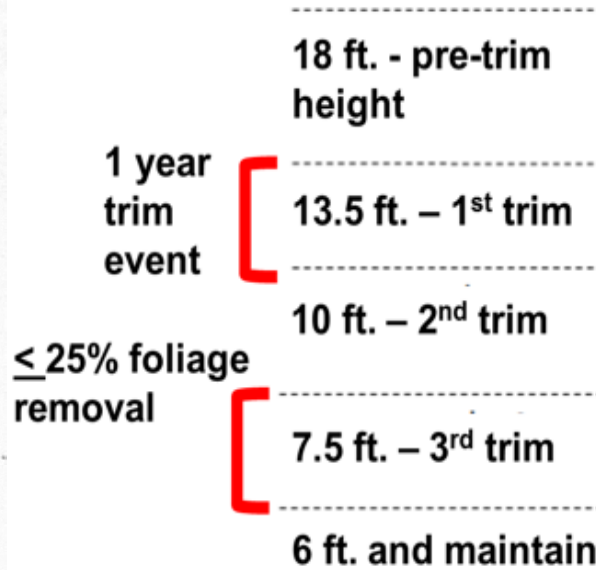


# Proper Trimming



## STAGED TRIMMING EXAMPLE

Each vertical section = 1 growing season



- Research shows mangroves will become stressed and possibly die if more than 25% of their foliage is reduced/lost annually.
- Using a staged trimming process, 18 ft. tall mangroves may take 3-4 years of trimming to be safely reduced to a height of 6 ft.



# Hedge Trimming



Not all mangroves can legally be trimmed down to 6 ft. – there must be sufficient leaf mass left on tree to survive (especially red mangroves)





# Window Trimming







# Improper Trimming and Alteration

**Improper windowing**



**Alteration of mangroves - Undercutting and trimming below 6 ft.**



# Unauthorized Trimming

Unauthorized **trimming** is considered trimming beyond the authorized height or configuration (so long as the mangrove still has sufficient leaf mass to support the life of the tree).



Unauthorized **alteration** is any activity that causes a mangrove to lose most of its leaf mass, causing all or part of the tree to die.







# Unauthorized Trimming

## Trimming debris

- Must be removed
- Must be disposed of in a confined upland location
- If left in wetlands or other surface waters, is considered fill and may be an ERP violation



## Note for Conservation Easements (CEs):

- Trimming is allowed in a CE only if the CE specifically allows it
- Read the CE carefully and contact the issuing agency with questions



# Enforcement

What is Enforcement?

When is mitigation required for Enforcement?







# Enforcement

## For violations:

- “In all cases, the applicant, permittee, landowner, and person performing the trimming are jointly and severally liable...”
  - s. 403.9332(1)(b) of the MTPA 1996
- Be sure to take before and after photos in order to document any and all trimming activities
  - Document pre- and post-trim heights
  - The more photo documentation the better!



**Defoliation, as shown in this photo, is a violation**



# Enforcement

## Restoration or mitigation must occur when:

- 5% or more of trimmed mangroves were trimmed below 6 feet (without authorization), or where 5% or more have been destroyed, defoliated, or removed under either an exemption or GP
- Restoration will first require on-site replanting
  - 80% survival after 1 year
  - Achieve equivalent canopy area to violation within 5 years
- If off-site restoration is needed:
  - Must be conducted in a suitable area
  - Same conditions apply to off-site as on-site
- If all or part of restoration fails:
  - Monetary donation to a restoration project
  - Purchase mitigation bank credits





# Developing a Trimming Plan

- Plan a trim that conserves the mangroves, while giving the property the desired view
  - Elevated homes may not need to trim to 6 feet
- For the 'view GP' decide where you want the view & whether a top trim is needed or if a window trim would be more desirable
  - Can only have 1 GP and are locked in to that configuration
- Once the trees are trimmed, to change the trimming plan will require an Individual Permit, so plan carefully





# Mangrove Regulations Summary

- The **1996 Mangrove Trimming and Preservation Act** (*Florida Statute 403.9321 – 403.9334*) was enacted in order to protect mangroves & mangrove islands, provide a riparian right of view, and encourage mangrove planting & maintenance.
- Delegating Agencies include local governments, three of Florida's five WMDs, and DEP.

## Exemption

- Trimming only in RMF
- Cannot trim to a height of less than 6ft
- Pre-trimmed height of mangroves cannot exceed 10ft (property owner) or 24ft (PMT)

## General Permit

- Two types: View and Navigation
- Trimming must be done by a PMT
- Trimming must be conducted so that no more than 25% tree defoliation yearly
- Cannot trim to a height of less than 6ft

## Individual Permit

- Can allow permittee to completely remove mangroves
- Subject to public interest criteria and evaluation of cumulative impacts
- Must include mitigation





# Comments and Questions?

Thank you!