

# Draft Changes to the Estuarine Shoreline Stabilization General Permit Rules

Bonnie Bendell

May 17, 2007

# Rule Changes

- Reduce the distance waterward in which bulkheads encroach into public trust waters
- Move structure locations further landward of marsh vegetation to allow for marsh migration and minimize construction impacts
- Promote the benefits of rock structures

15A NCAC 07H .1400 –  
General Permit for Construction of  
Wooden Groins in Estuarine and  
Public Trust Waters and Ocean  
Hazard Areas

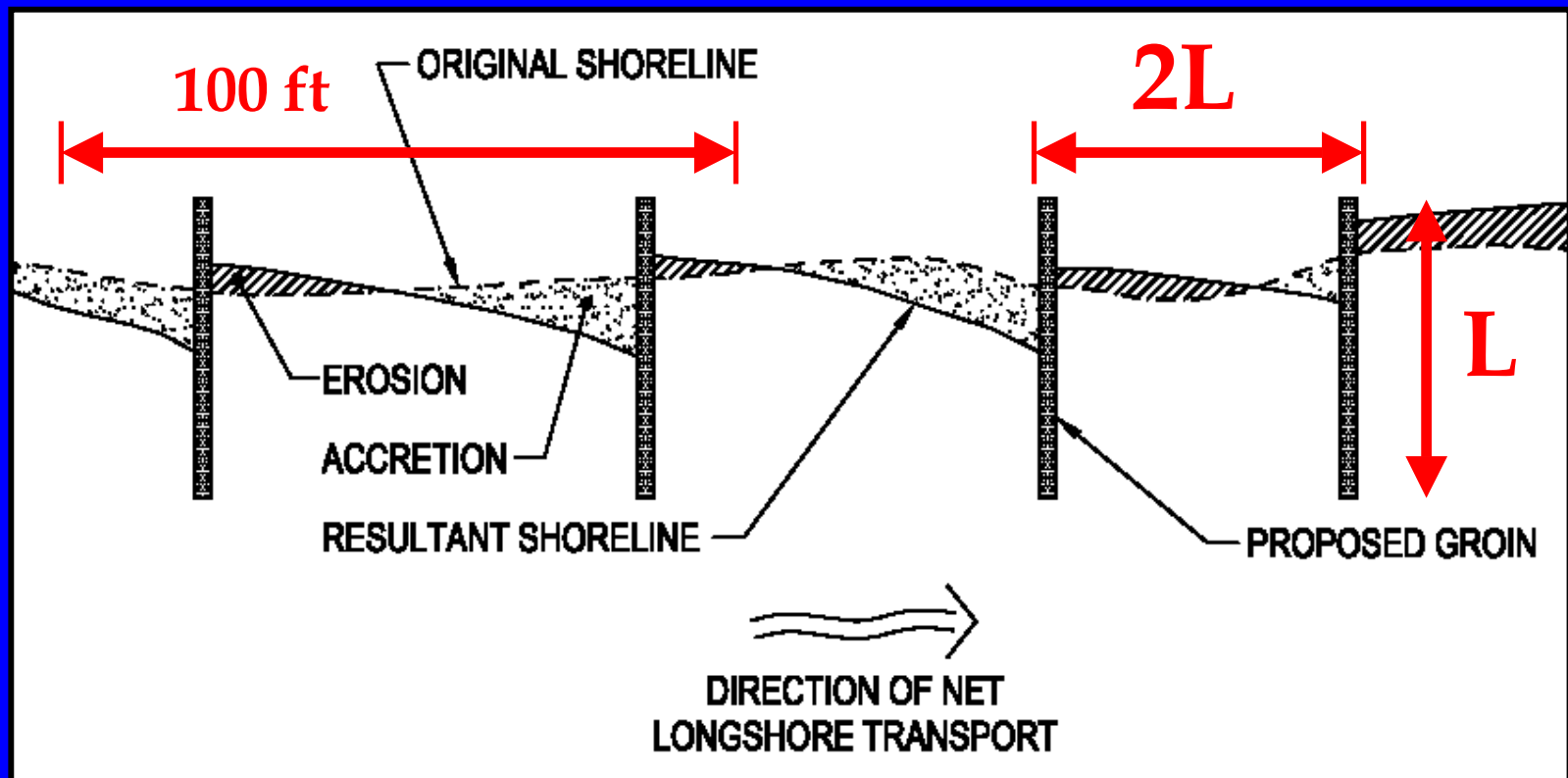
# Wording Changes

- Allow different types of groins to be built - besides wooden

# Groin Spacing

Current – 2 Groins Per 100 Linear Feet of Shoreline

Proposed – Spacing equal to 2 times the design length unless to prevent sedimentation or accretion in particular areas (basins, boat ramps/lifts, channels, etc)



15A NCAC 07H .2100 –  
General Permit for Construction of  
Marsh Enhancement Breakwaters  
for Shoreline Protection in  
Estuarine and Public Trust Waters  
and Ocean Hazard Areas

# Wording Change

- Allow on shorelines that aren't eroding

15A NCAC 07H .2400 –  
General Permit for Placement of  
Riprap for Wetland Protection in  
Estuarine and Public Trust Waters

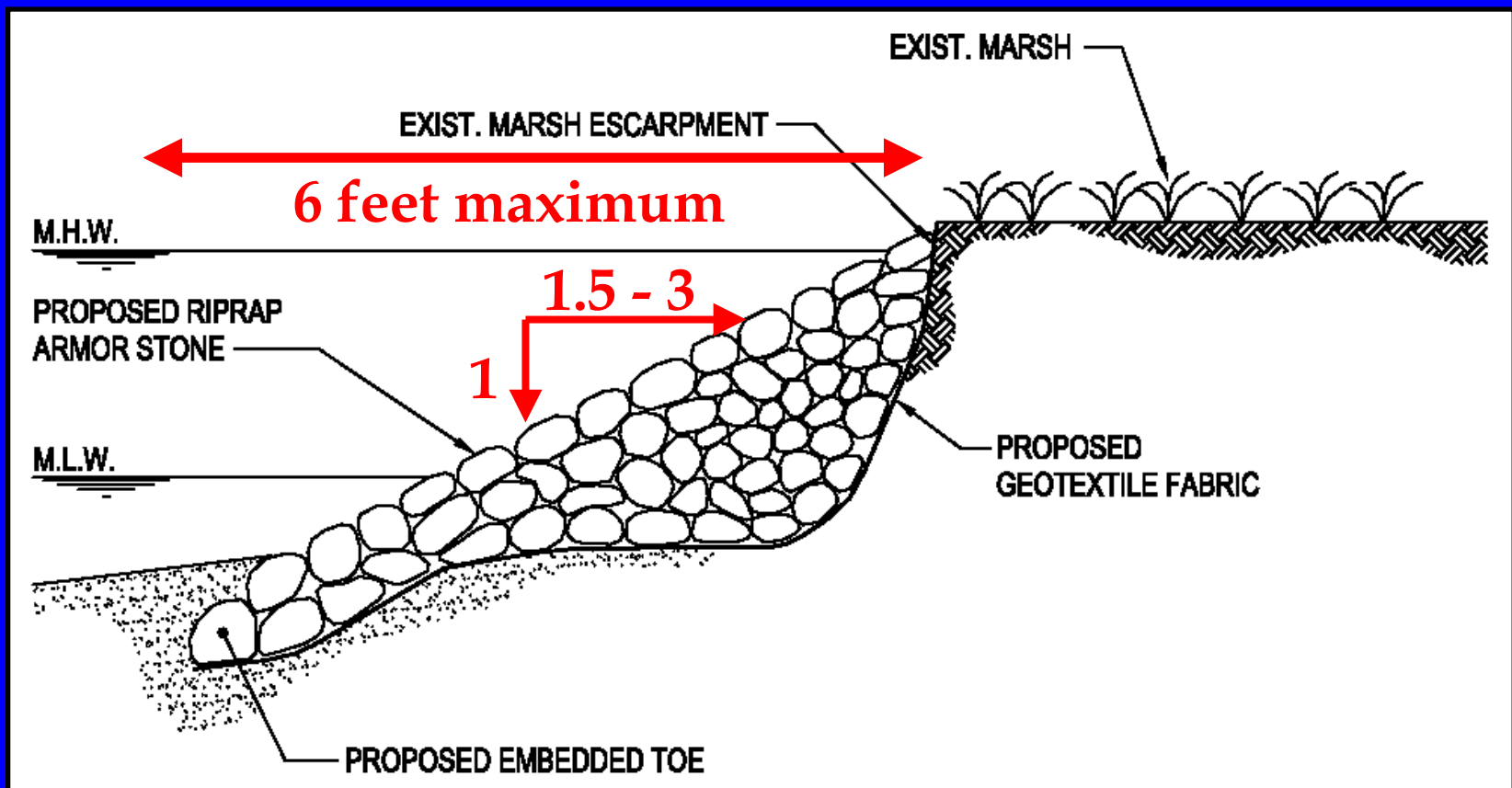
# Wording Changes

Current – No slope requirements

5 feet max waterward of escarpment

Proposed – Slope 1V:1.5H to 1V:3H

6 feet Max waterward of escarpment



15A NCAC 07H .1100 –  
General Permit for Construction of  
Bulkheads and the Placement of  
Riprap for Shoreline Protection in  
Estuarine and Public Trust Waters  
and Ocean Hazard Areas

# Shorelines without Coastal Wetlands

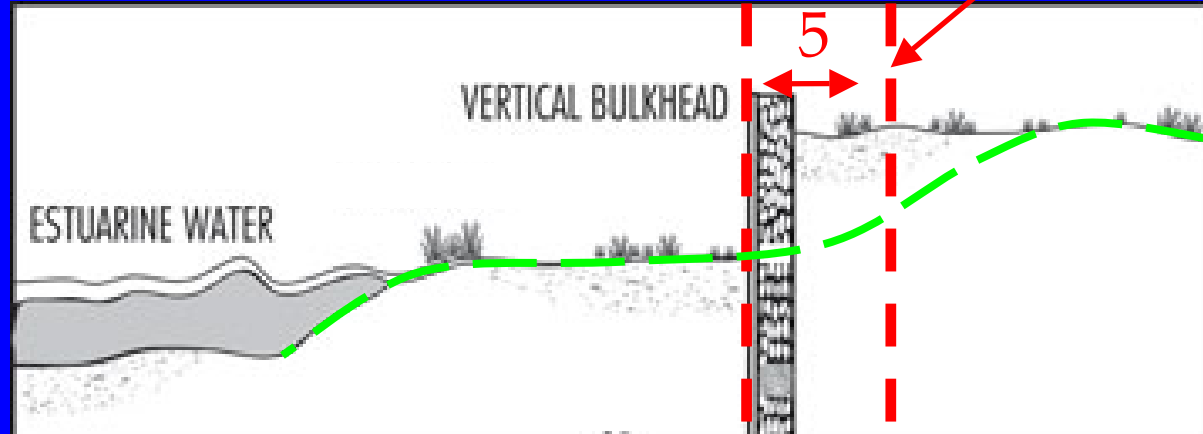
## Current Bulkhead Placement

NHW/NWL

### Bulkhead

Avg of 2 feet

Max of 5 feet



## Proposed Bulkhead Placement

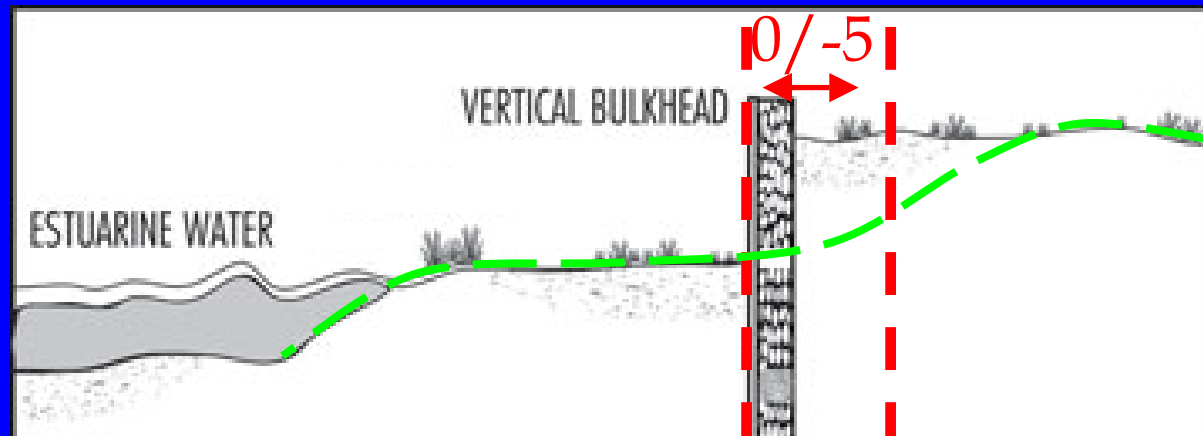
### Bulkhead

At NHW/NWL

-OR-

5 feet landward or

NHW/NWL



# Shorelines without Coastal Wetlands

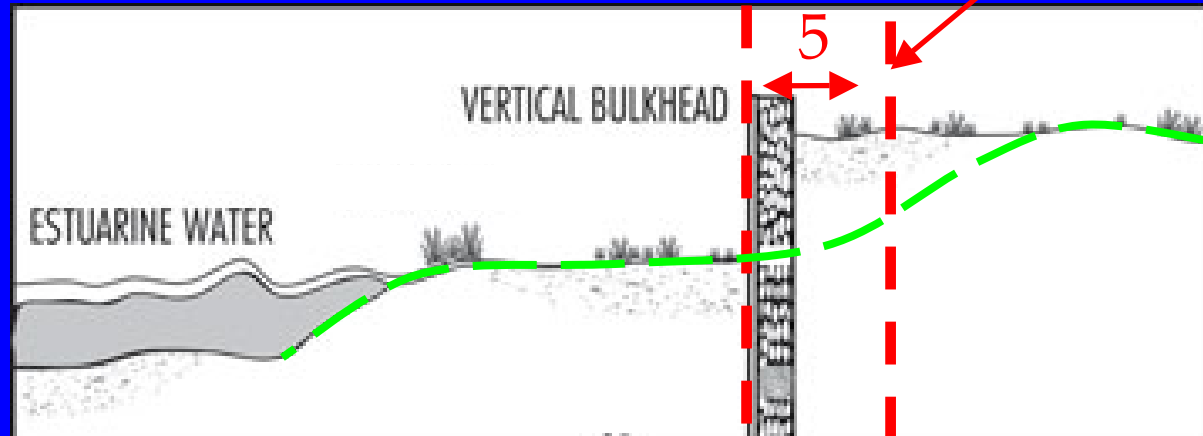
## Current Bulkhead Replacement

NHL/NWL

### Bulkhead

Avg of 2 feet

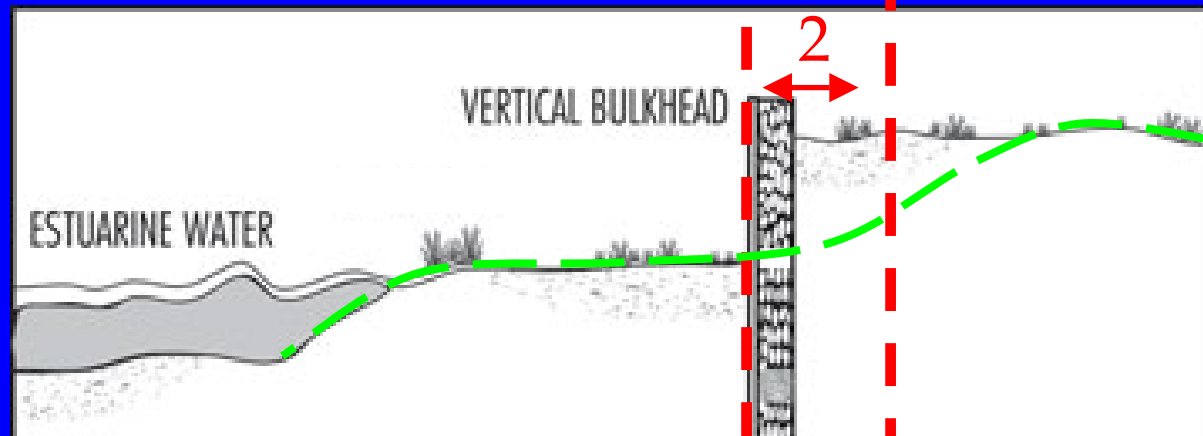
Max of 5 feet



## Proposed Bulkhead Replacement

### Replacing Bulkhead

Max of 2 feet



# Shorelines without Coastal Wetlands

## Current Revetment Placement

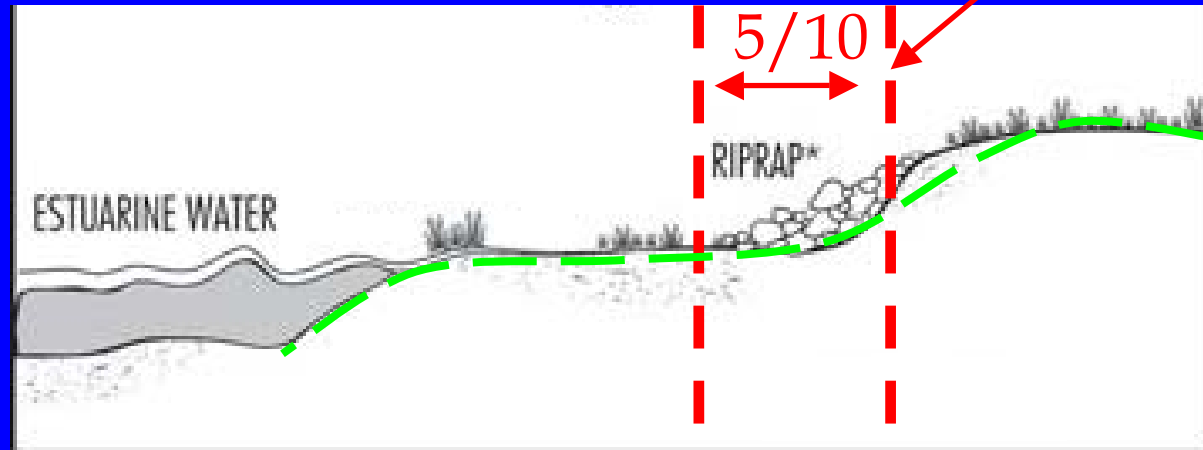
NHL/NWL

Revetment

Max 5 feet

Revetment with Existing Bulkhead

Max 10 feet



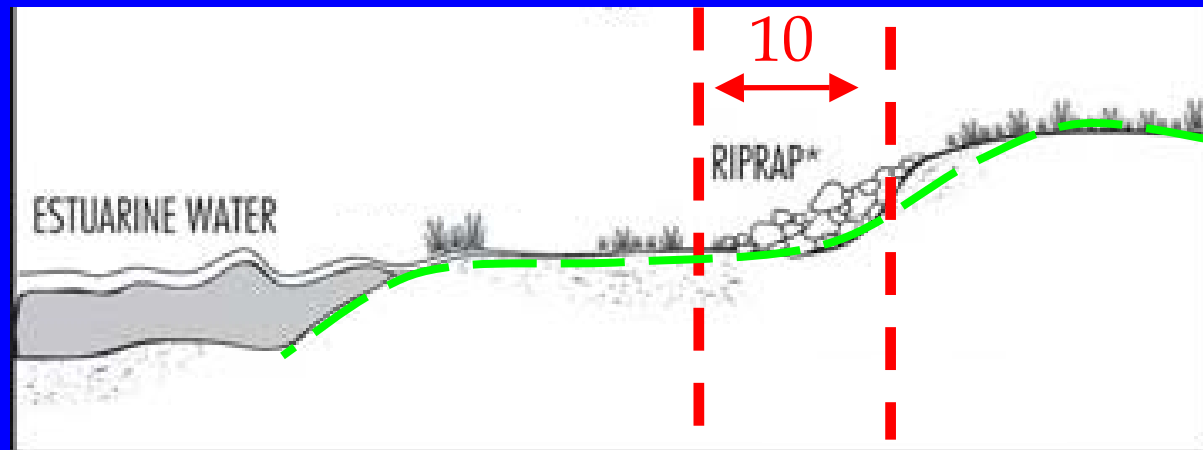
## Proposed Revetment Placement

Revetment

Max 10 feet

Revetment with Existing Bulkhead

Max 10 feet



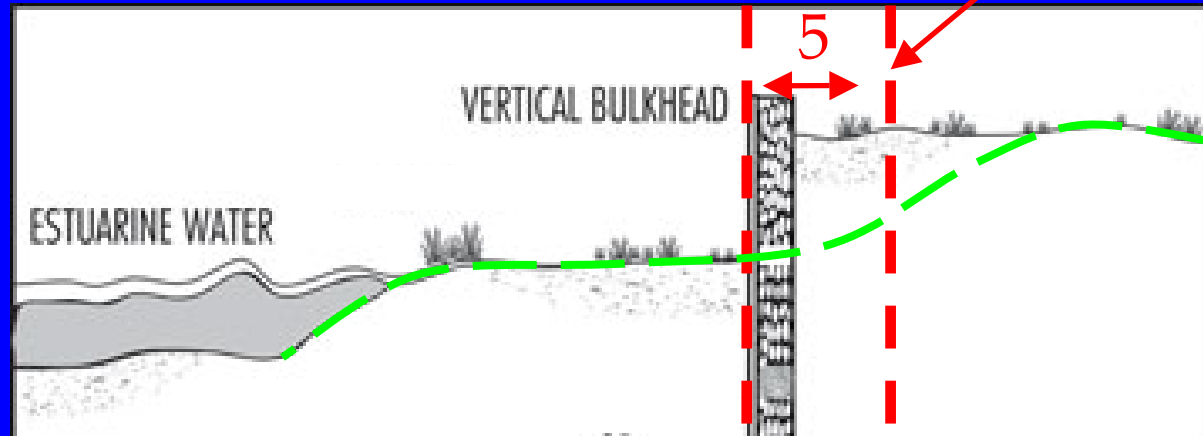
# Manmade Shorelines without Wetlands

## Bulkheads and Revetments

### Bulkhead/Riprap

Avg of 5 feet

Max of 10 feet

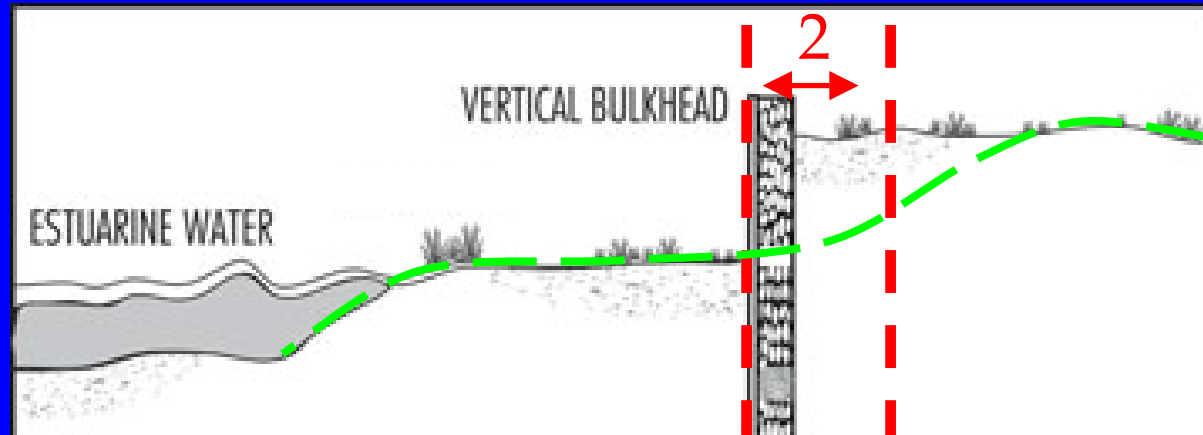


## Bulkheads and Revetments

### Bulkhead/Riprap

Avg of 2 feet

Max of 5 feet

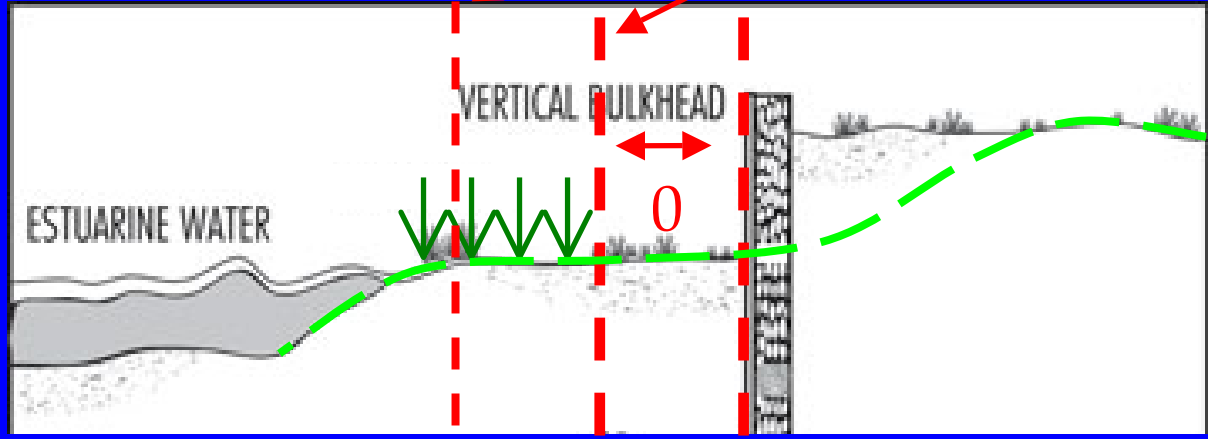


# Shorelines with Coastal Wetlands

## Current Bulkhead Placement

NHL/NWL  
Edge of Veg

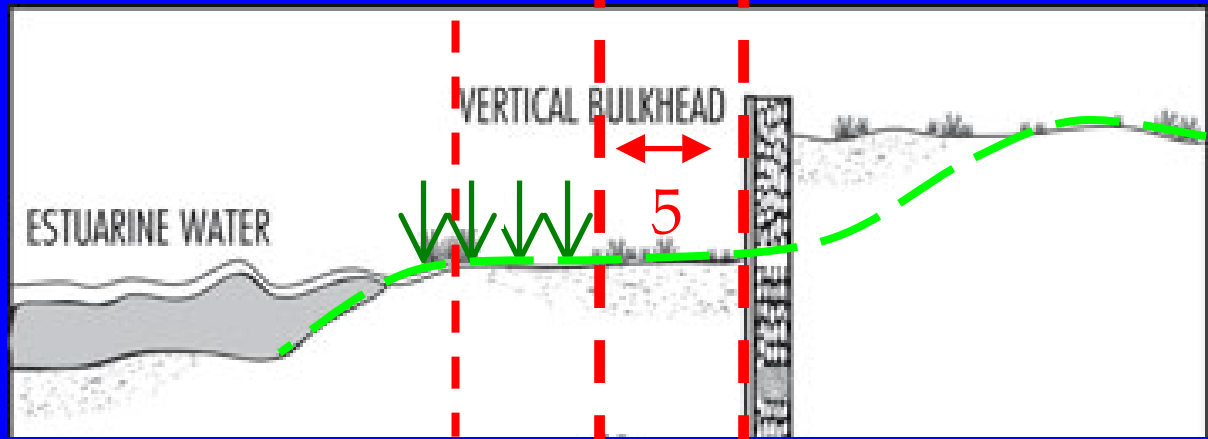
Bulkhead  
At landward edge of coastal wetlands veg



## Proposed Bulkhead Placement

Bkhd Location

Bulkhead  
5 feet landward of coastal wetlands veg

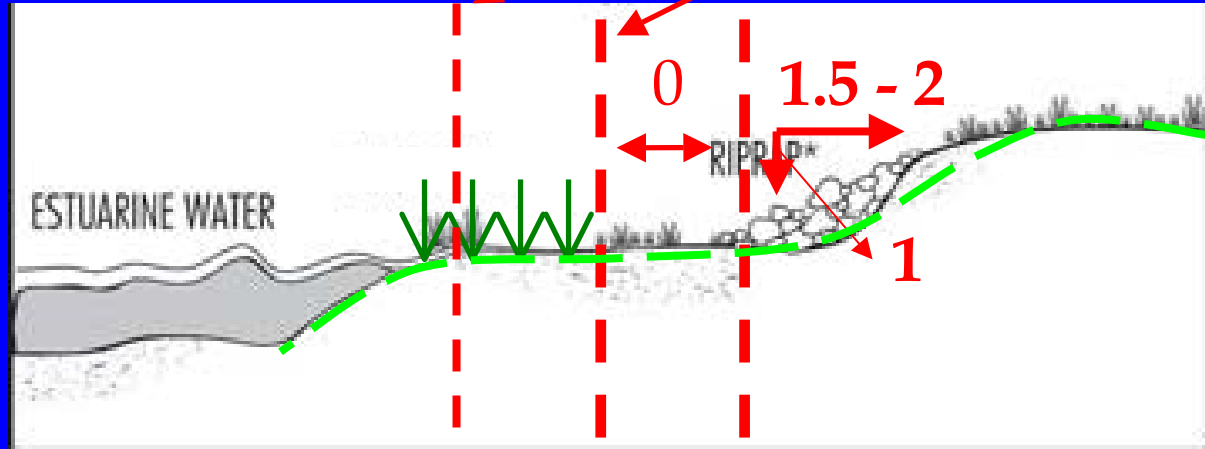


# Shorelines with Coastal Wetlands

## Current Revetment Placement

### Revetment

At landward edge of coastal wetlands veg



## Proposed Revetment Placement

### Revetment

5 feet landward of coastal wetlands veg

