

Tidelands, Water and Beaches: Regulations & Rebuilding



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A stylized map of South Carolina showing its extensive network of rivers, creeks, and coastal waters in light blue against a tan background.

Calling the Coast Home

Course Series:

Living with Water

The Land Water Connection

Tidelands, Waters and Beach; Regulations and Rebuilding
Coastal Lifestyle for Clean Water

Instructors:

South Carolina Sea Grant Consortium, Clemson University, ACE Basin
National Estuarine Research Reserve, South Carolina Department of Natural
Resources, North-Inlet Winyah Bay National Estuarine Research Reserve,
University of South Carolina, Coastal Waccamaw Stormwater Education
Consortium, Coastal Carolina University, South Carolina Department of
Health and Environmental Control





South Carolina Coastal Information Network

<https://www.sccoastalinfo.org/>





GOALS AND OBJECTIVES

Increase Knowledge of SC's
Coastal Program

Understanding why the
program exists

Enhance your knowledge of
the coastal resources and
their importance

SC DHEC Office of Ocean and Coastal Resource Management (OCRM)

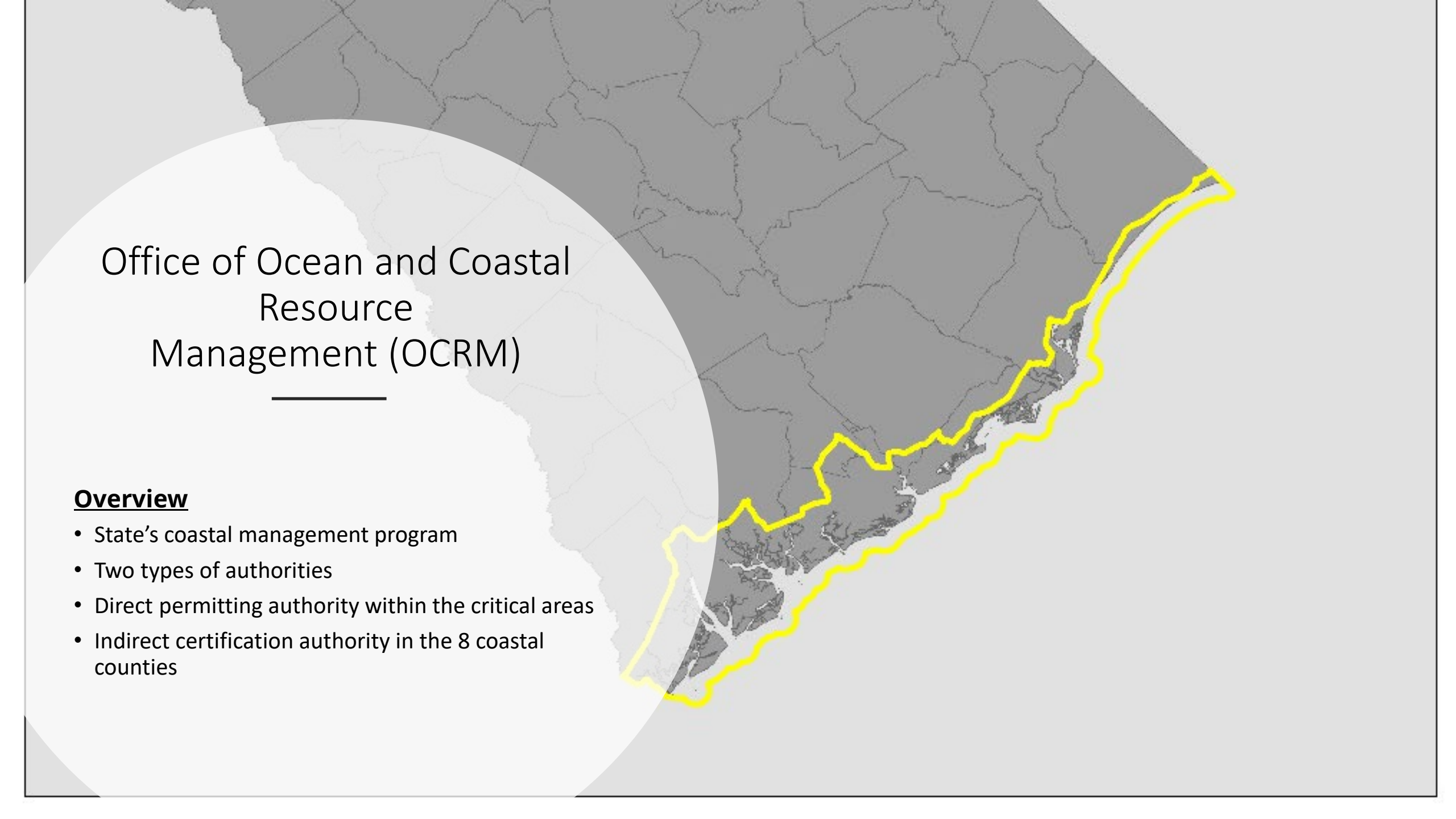
History

Federal: Coastal Zone Management Act (1972) established guidelines for state Coastal Management Programs.

State: SC Coastal Tidelands and Wetlands Act was passed in 1977; amended in 1988.

Goal: Protect the quality of the coastal environment and to promote the economic and social improvement of the coastal zone and of all the people of the State

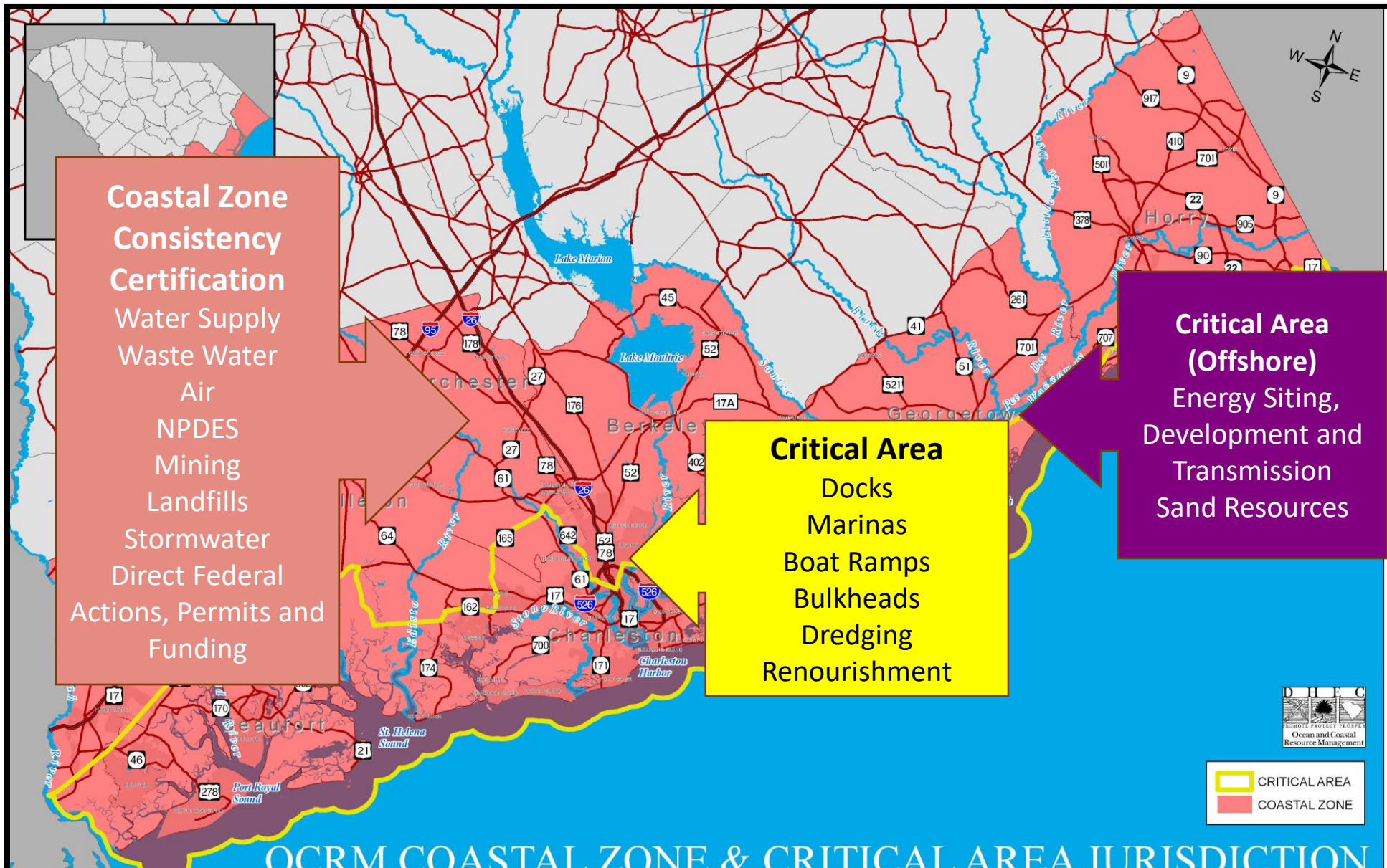


A map of Maryland is shown in the background. The coastal counties are highlighted with a thick yellow border. The text 'Office of Ocean and Coastal Resource Management (OCRM)' is overlaid on a white circular area on the left side of the map.

Office of Ocean and Coastal Resource Management (OCRM)

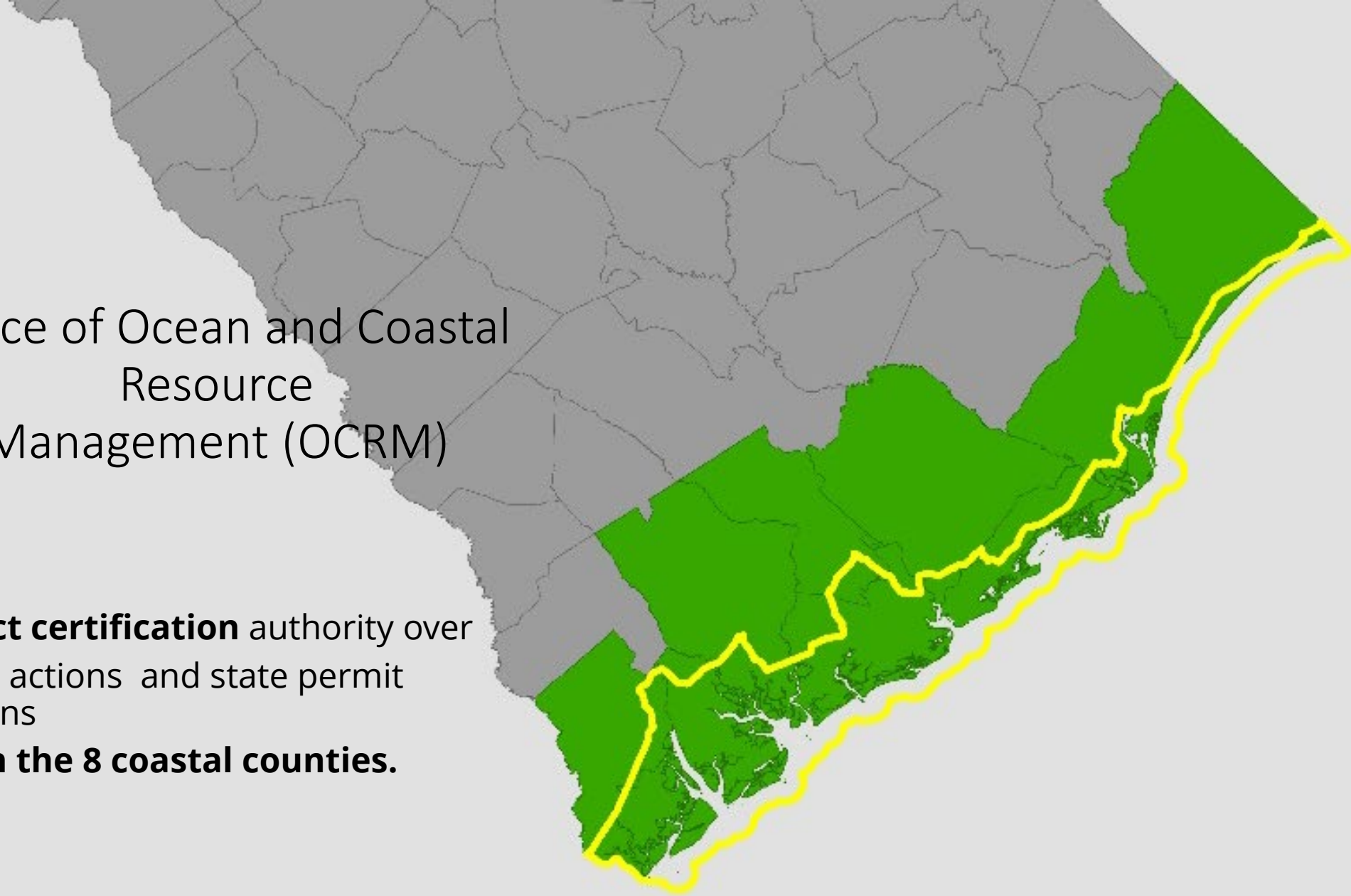
Overview

- State's coastal management program
- Two types of authorities
- Direct permitting authority within the critical areas
- Indirect certification authority in the 8 coastal counties



Office of Ocean and Coastal
Resource
Management (OCRM)

Indirect certification authority over
federal actions and state permit
decisions
within the 8 coastal counties.



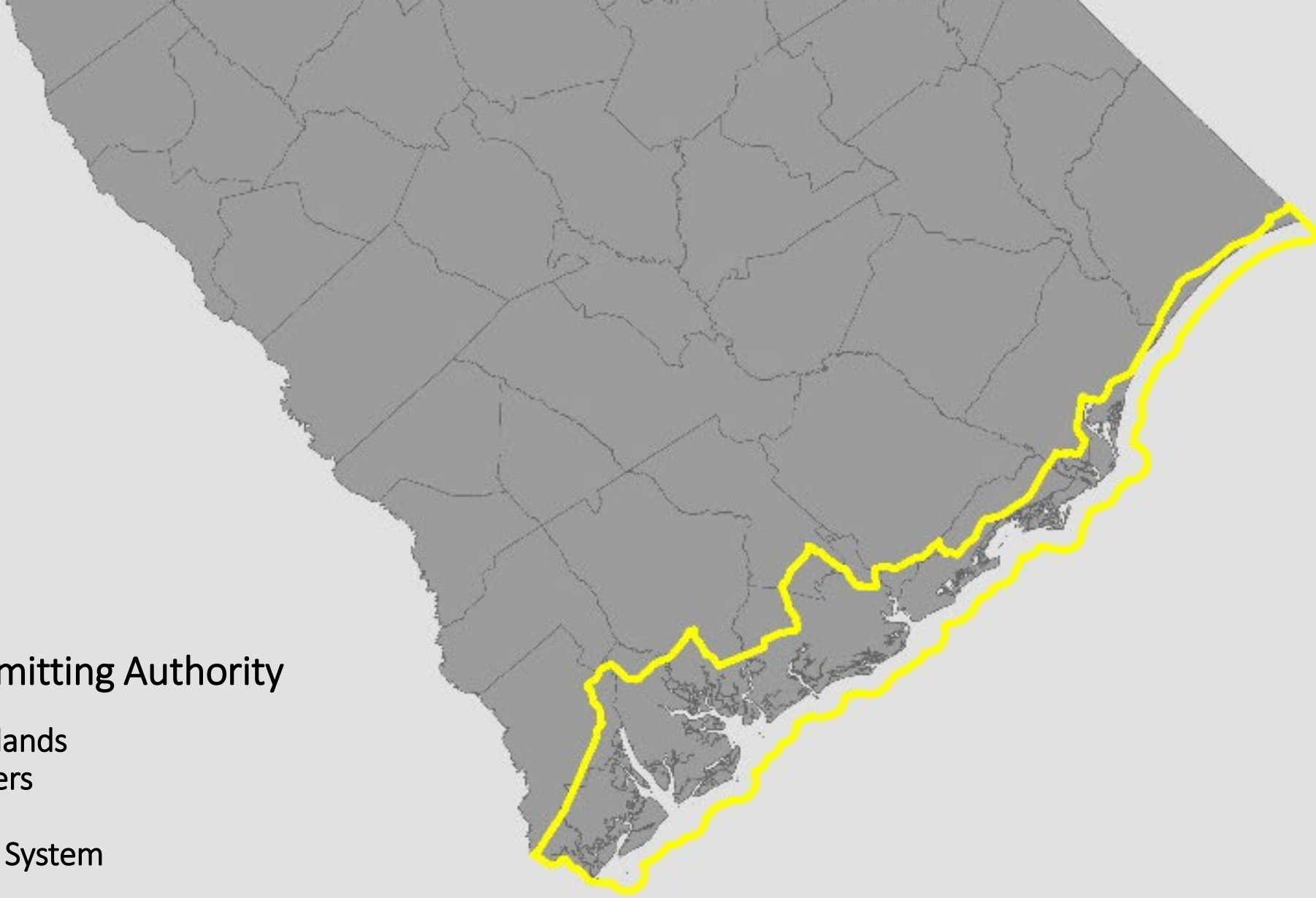
Direct Permitting Authority

Coastal Tidelands

Coastal Waters

Beaches

Beach/Dune System



Coastal Waters



Coastal Tidelands



Beaches



Beach/Dune System



Purpose of coastal regulations





CRITICAL AREA PERMITTING

Coastal Tidelands

Coastal Waters

Beaches

Beach/Dune System

Dock Permitting

Waterfront definition

Dock alignment

Dock size tied to creek size

Dock length

Community Docks and Marinas

Commercial/Industrial Docks and Wharfs



Dock Drawing

RECEIVED
JUL 28 2005
DHEC-OCRM
CHARLESTON OFFICE

STREET NAME

NEIGHBOR 1

NEIGHBOR 2

ANY BODY

DIST

MHW

CRITICAL LINE

EXTENDED PROPERTY LINE
OR DOCK CORRIDOR

EXTENDED PROPERTY LINE
OR DOCK CORRIDOR

DOCK CONSISTS OF:
4'xXXX' WALKWAY
X'xX' COVERED PIERHEAD
RAMP TO A X'xX' FLOAT
& X'xX' 4 POLE BOATLIFT

GRASSLINE

MLW

EBB

FLOOD

CHANNELWARD
DIST
WATERBODY

APPLICANT: ANY BODY
STREET ADDRESS
SUBDIVISION
MUNICIPALITY
COUNTY
TMS#
WATERBODY


PRIVATE
RECREATIONAL DOCK

DATE: ANYDAY
SCALE: 1" = 000'

000 0 000

SURVEYOR'S
SEAL

OCRM DOCK



Barge Moving Equipment



Bulkheads and Revetments



Public Riverfront Walkway



Dredging Activities

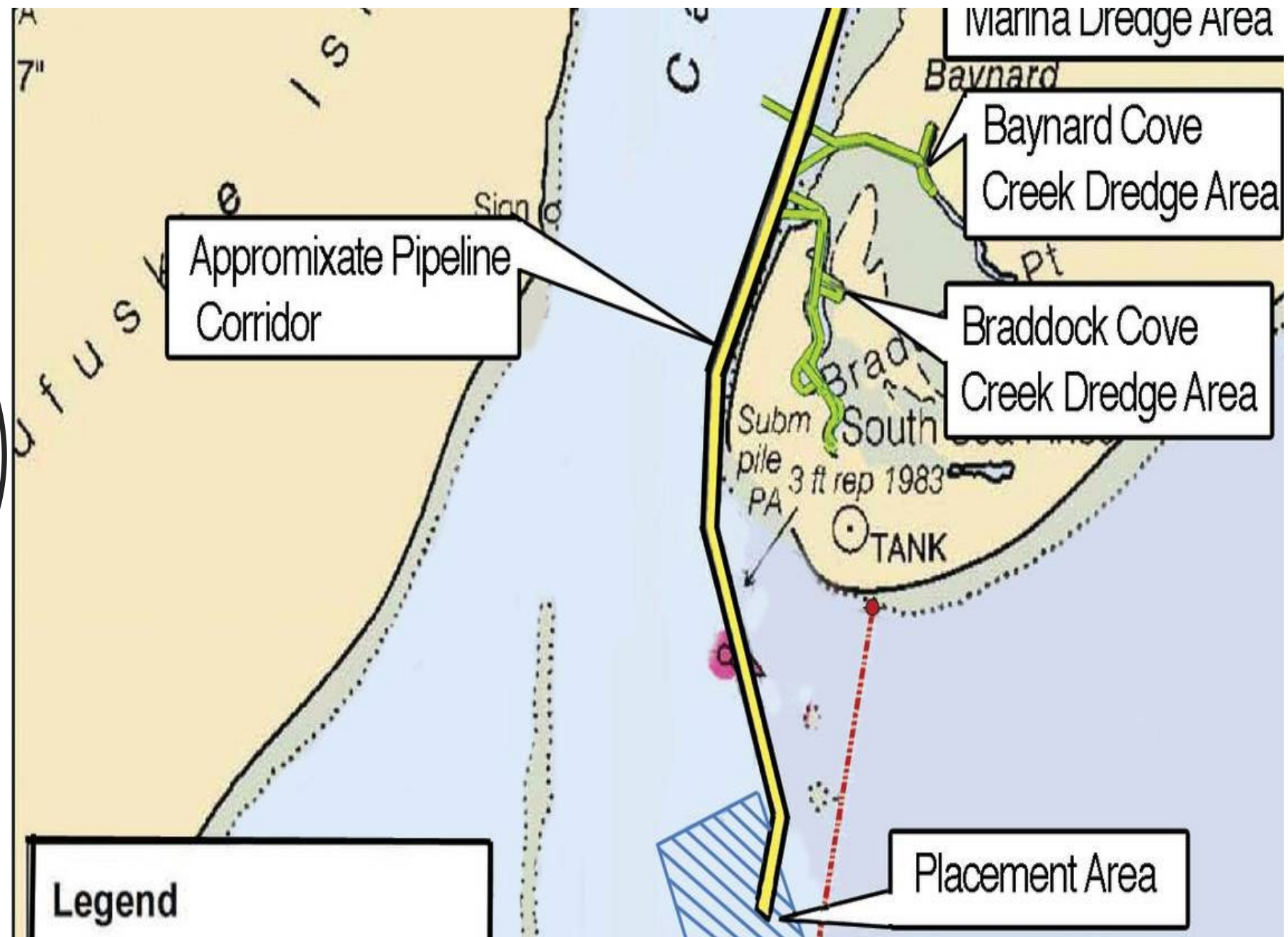
Comm/Industrial
approaches & channels

Public and Private
Marinas slips and
basins

Disposal of dredged
material



Hilton Head Project

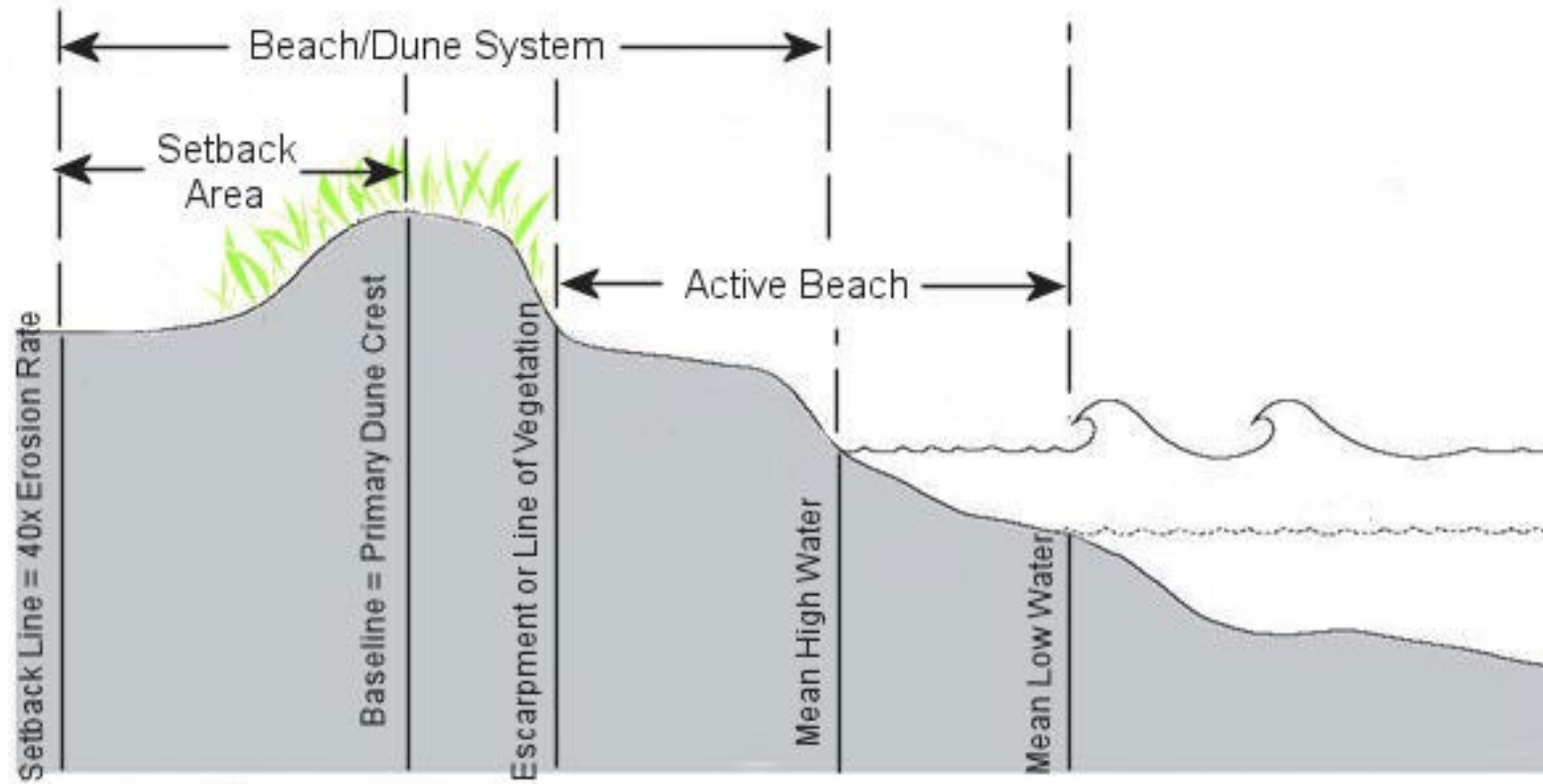


Construction in Progress

SHEP Project

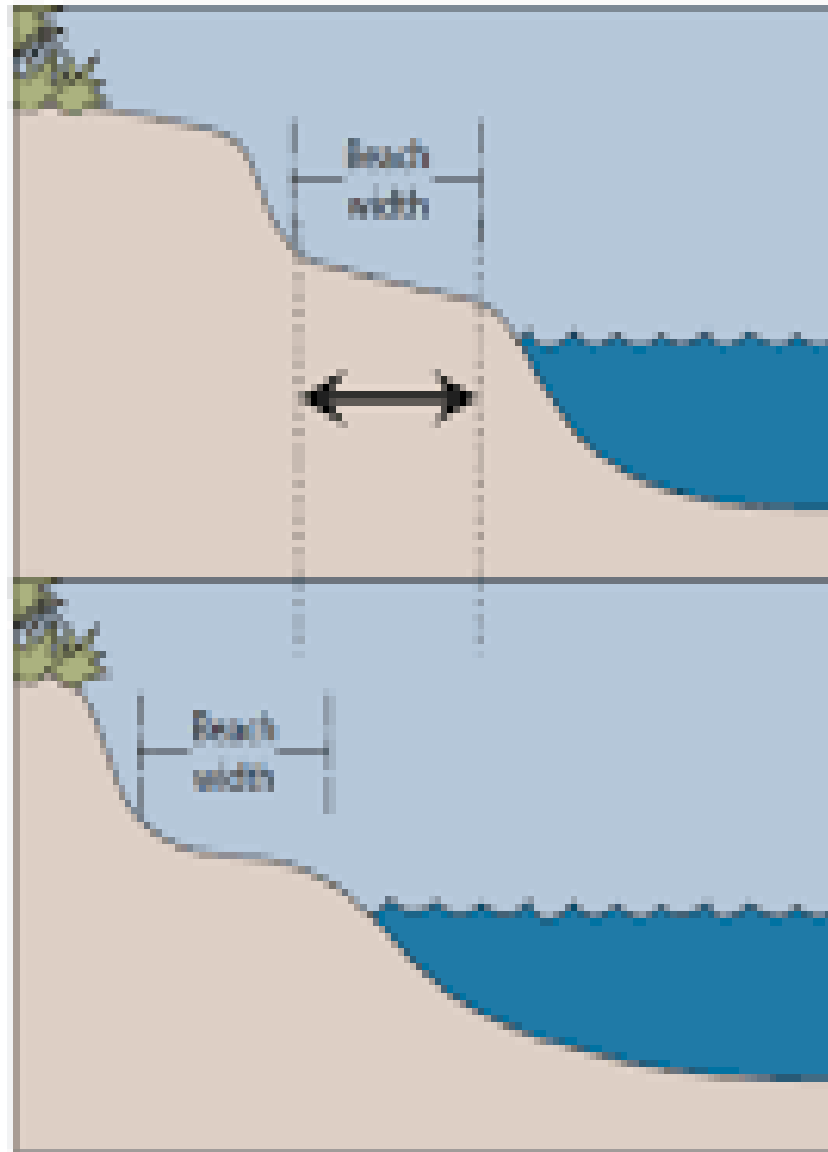


SC's Beach terms

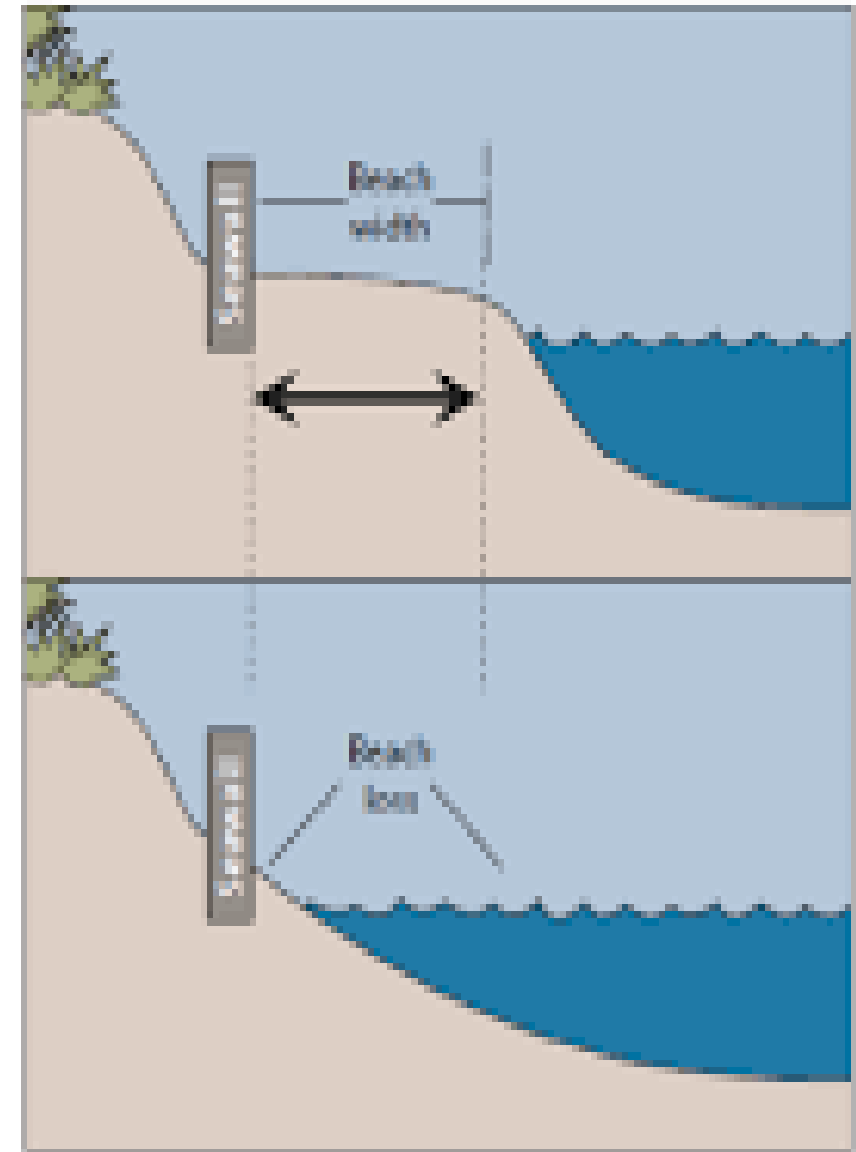


Effects of
hard
structures on
beachfront

Normal Beach Retreat



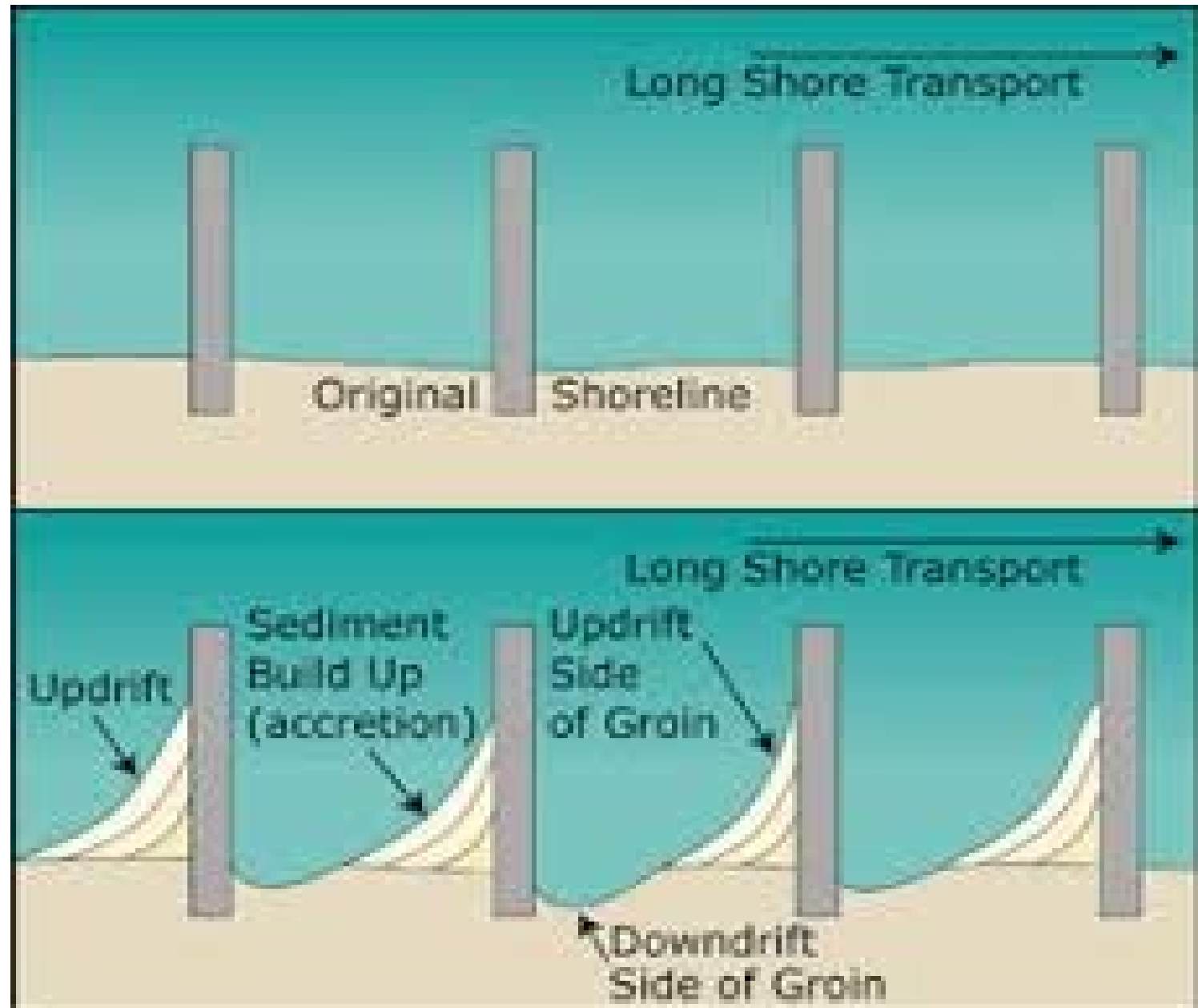
Blocked Beach Retreat



Jetties at an
inlet



Effects of
Groins on
beachfront



Groin



Groin Field



Groin at Inlet
end of
barrier Island



Folly Beach
Lighthouse
in surf



Seawall



Downdrift
effects of
seawall



Rock Rip Rap
Revetment
with Seawall



Dynamic
nature of our
beaches



Experimental
efforts along
the
beachfront



How does SC manage the beachfront?

Jurisdictional lines enable OCRM to implement laws and regulations that protect coastal resources and guide development away from dynamic shorelines.

There are two lines of beachfront jurisdiction:

Baseline is the **more seaward line**

Setback Line is the **more landward line**

Why does OCRM update these lines?

Required by South Carolina law

Every 7 to 10 years

Previous Reviews

1990-1991

1999-2001

2008-2010

2016-2018

Average long-term shoreline change rate (aka the “long-term erosion rate”)

Beach Jurisdictional Lines



Baselines Set by Beach Zones

At a glance:

There are three beach zones:

Unstabilized inlet zone

Stabilized inlet zone

Standard zone

Baseline - Standard and Stabilized Inlet Zones

The baseline is set at the crest of the primary oceanfront sand dune.

The Primary Oceanfront Sand Dune is defined as a dune that is 3' high and 500 ' long.



Light House

Baseline - Unstabilized Inlet Zone

The baseline is most landward shoreline in the past 40 years.



Setback Line



Setback Area



What can happen in Setback Area

New Habitable Structures allowed – 5000 sq ft limit of heated space

Existing Habitable Structure as of Act 634 of 1988 – can be rebuilt

- Additions made not to exceed 5000 sq ft of heated space

- Not located on Primary Oceanfront Sand Dune

- No part of building is seaward of the Baseline

What does the Baseline Mean for Property Owners

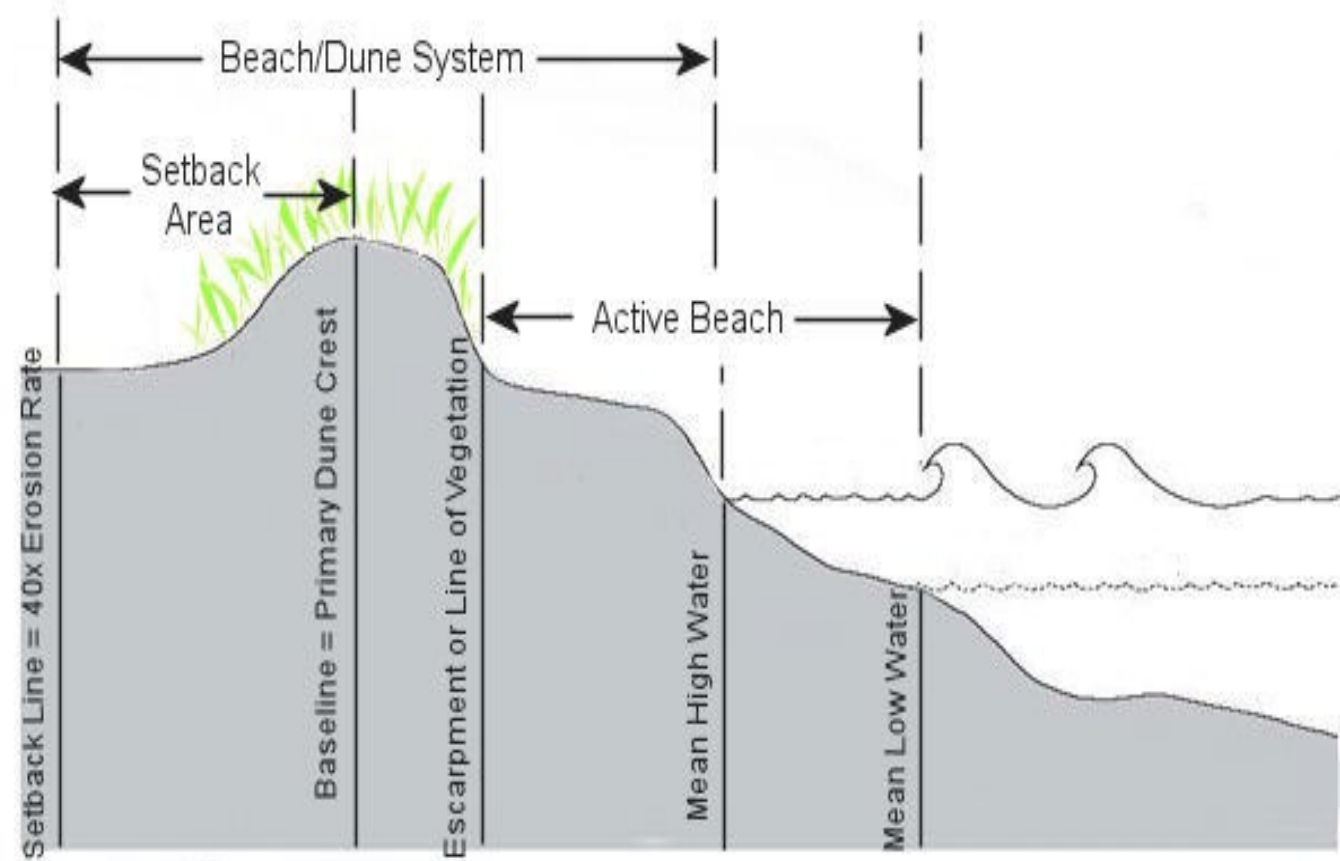
Subject to review & permitting requirements

5000 sq. ft. heated space

Subject to removal



Disclosure Requirement



Significant Beachfront Management Changes

Act 197 - No seaward movement of the baseline after December 31, 2017

Act 173 – Effective May 3, 2018

Act 173 established the baseline location as the **most seaward** location of either the baseline established during the 2008-2012 establishment cycle, or the baseline proposed by DHEC on October 6, 2017.

Similarly, Act 173 established the setback line location as the **most seaward** location of either the setback line established during the 2008-2012 establishment cycle, or the setback line proposed by DHEC on October 6, 2017.

Act 173 also provided guidance to DHEC for the implementation of future line review processes, which will be initiated on or after January 1, 2024.

Beach Renourishment



Major Beach/Inlet Project Considerations



- Sediment compatibility
 - Grain size, color, quality
- Selection of offshore borrow areas
- Pre- and post-project monitoring
 - Beach and borrow area topography/bathymetry
 - Compaction
 - Escarpments
- T&E Species: Dredging & sand placement windows: typically November 1 – April 30

OCRM Beachfront Data Viewers

- Beachfront Jurisdictional Lines

<https://gis.dhec.sc.gov/shoreline/>

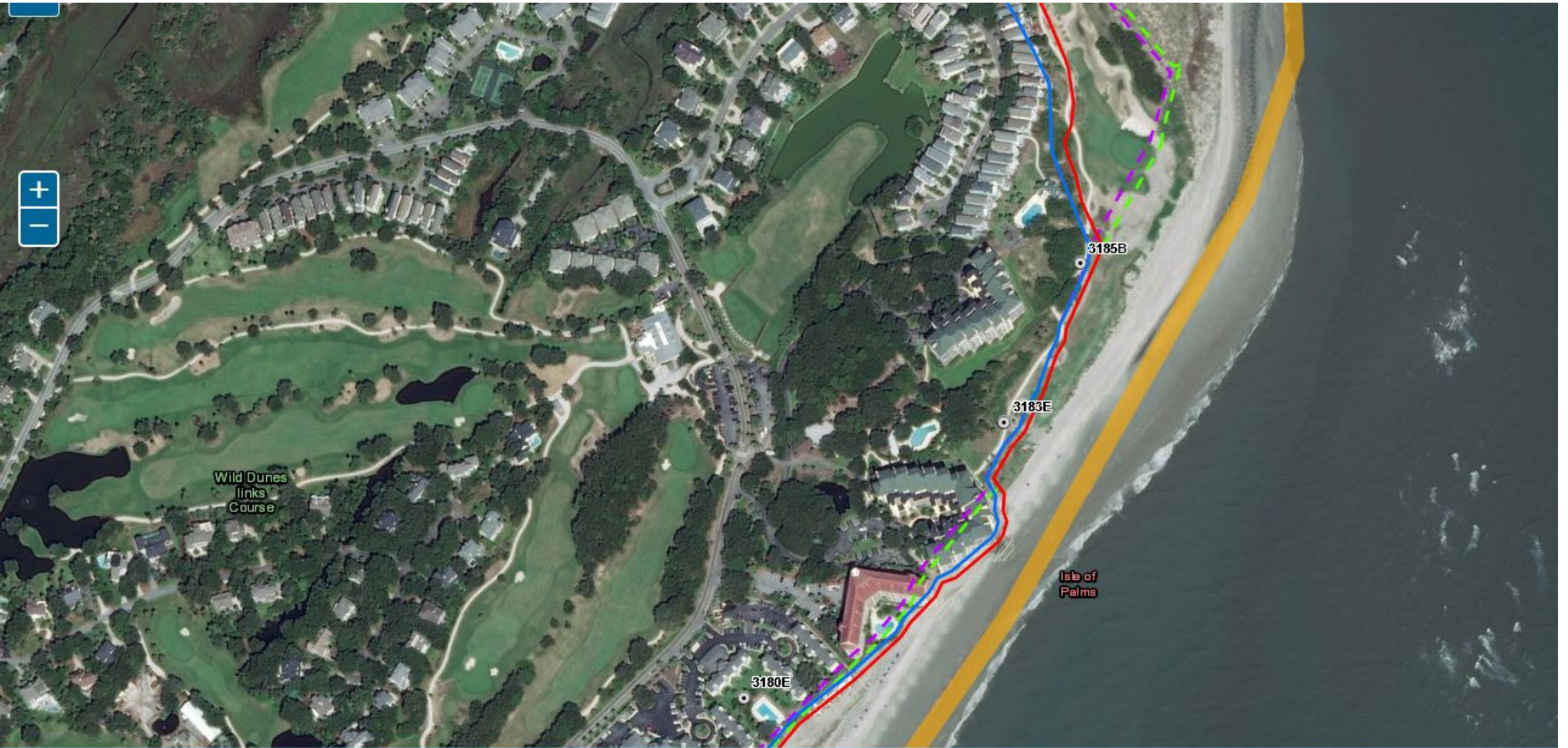
- Beach Topographic Survey Profile Data (B.E.R.M. Explorer)

<https://gis.dhec.sc.gov/bermexplorer/>

- Beach Renourishment Projects

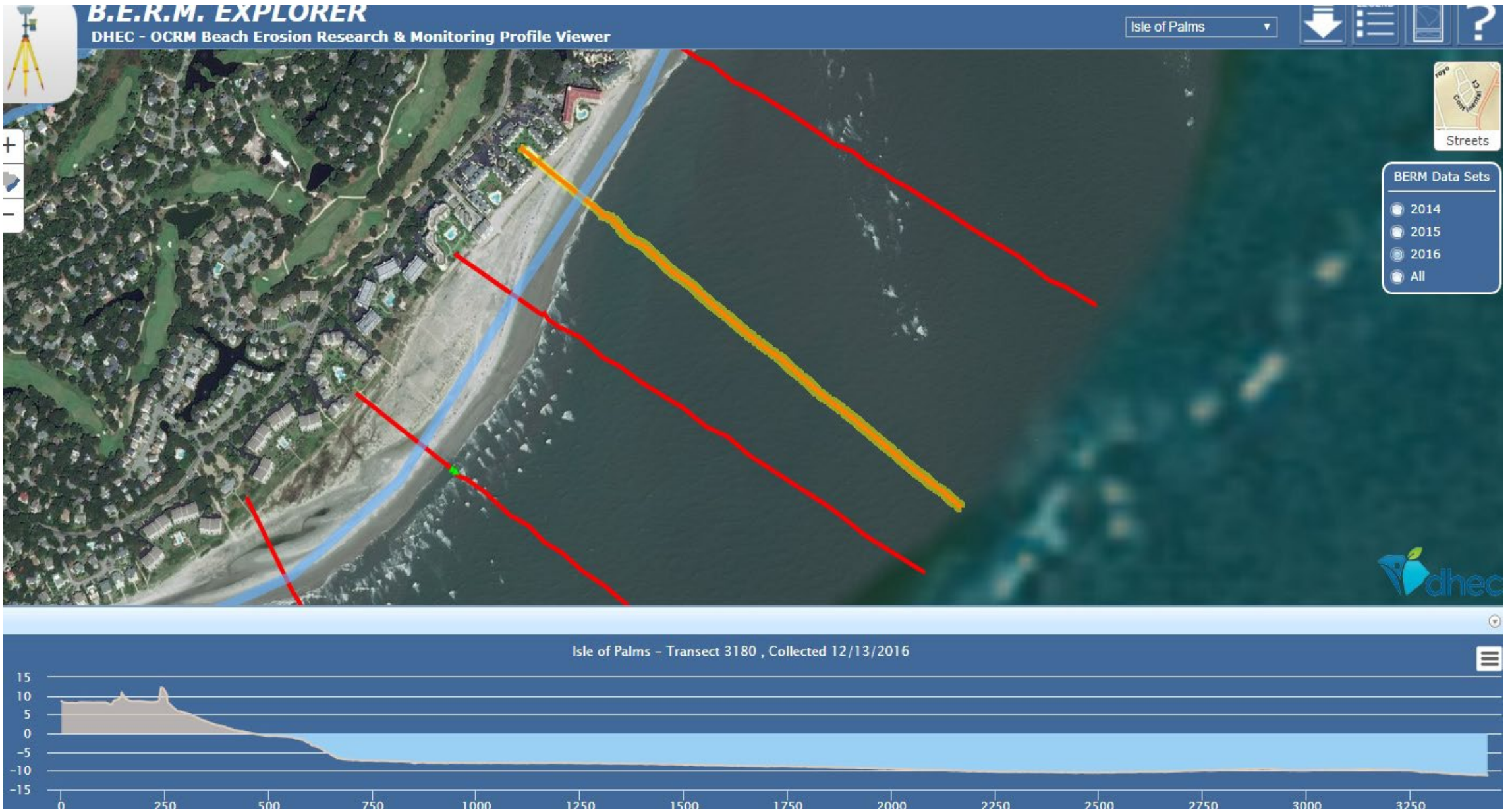
<https://gis.dhec.sc.gov/renourishment/>

Beachfront Jurisdictional Lines



— Proposed Base Line — Proposed Set Back Line — Current Base Line — Current Set Back Line Stabilized Inlet Zone Standard Zone Unstabilized Inlet Zone Beach Monument

B.E.R.M. Explorer



Beach Renourishment Projects



Other Useful Coastal Products

<https://www.scdhec.gov/environment/your-water-coast/ocean-coastal-management/products-and-services>

<https://mycoast.org/sc>

<https://gis.dhec.sc.gov/beachaccess/>



Contact Us

- SCDHEC Ocean and Coastal Resource Management
- 1362 McMillan Avenue, Suite 400
- Charleston, SC 29405
- (843) 953-0200

For more information and course materials



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Information Network

<https://www.sccoastalinfo.org/>

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Please let us know how we can improve this course and the series.

Calling the Coast Home

Course Series:

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Regulations and Rebuilding

Coastal Lifestyle for Clean Water



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