



Beachfront Jurisdictional Line Review

October 2017



Overview

- **Staff Presentation**

- About Beachfront Jurisdictional Lines
- Answers to Frequently Asked Questions
- Overview of the Process and Methodology
- How You Can Participate
- Quick Summary of Facts

- **Public Hearing**

- Public comments entered into the record

What are the beachfront jurisdictional lines?

Jurisdictional lines enable DHEC 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** is the **more landward line**
- You can view the proposed lines in your area at www.scdhec.gov/beachfrontlines



Landward

Setback
Line

Baseline

Dunes

Seaward

Ocean

Why is DHEC updating the lines?

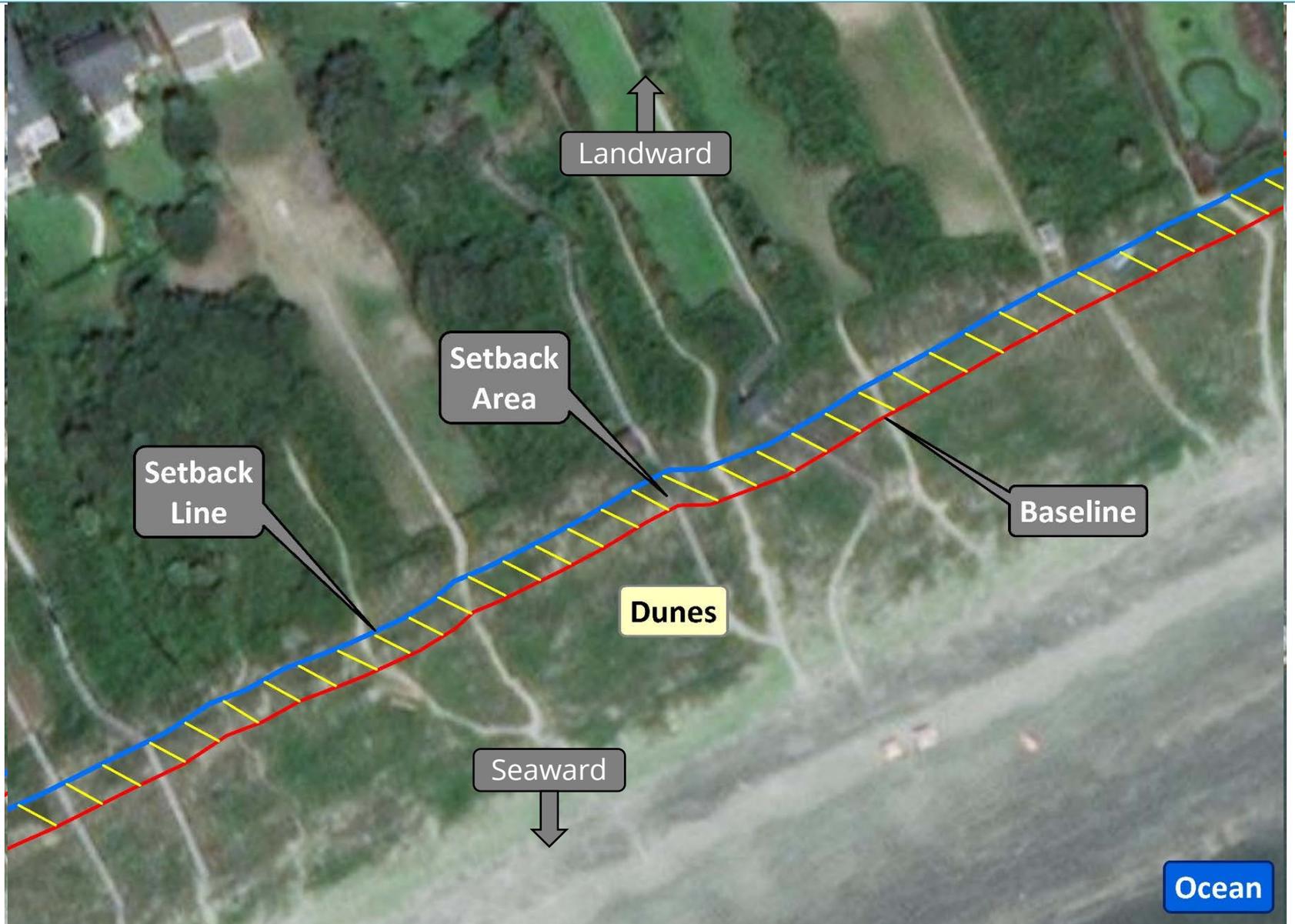
It's required by law:

- **South Carolina law requires** DHEC to establish and review the positions of the setback lines and baselines **every 7 to 10 years**.
- The last review was conducted in 2008-2010.
- The law also requires DHEC to review the **average long-term shoreline change rate** (aka the “long-term erosion rate”) for all oceanfront land that is or potentially could be developed during this time.

Why update the lines now?

There is a legislative deadline:

- In June 2016 legislation went into effect that prohibits the seaward movement of the jurisdictional baseline from its position on December 31, 2017.
 - In order to allow any seaward movement of the lines in this revision, **DHEC must complete the process prior to this December 31 legislative deadline.**
- DHEC planning to meet the target deadline.
 - **If the revision process were to be delayed, all existing lines would have to stay in place, including in those areas** where the state's beachfront jurisdiction is **proposed to move seaward.**



What do the proposed **setback** lines mean for **homes**?

The setback area is **NOT** a “no-build” zone:

- **Existing homes may remain.**
- **Homes damaged beyond repair may be reconstructed** up to the total square footage of the original structure.
- **New homes may be constructed up to 5,000 square feet** of heated space within the setback area.
- **Construction and repair activities require notification to DHEC.**

What do the proposed setback lines mean for pools?

The setback area is **NOT** a “no-build” zone:

- Existing pools may remain.
- Pools damaged or destroyed may be rebuilt to pre-existing dimensions with DHEC authorization.
- New pools are not permitted unless they are located behind an existing functional erosion control structure, such as a seawall or revetment, and receive prior written approval from DHEC.



What do the proposed **baselines** mean for **homes**?

Key facts:

- **Existing homes that are partially or fully seaward of the baseline may remain.**
- **Homes may be repaired to pre-existing square and linear footage.**
- **New construction and reconstruction of homes damaged beyond repair may be allowed up to 5000 square feet through a special permit if certain criteria are met.**

What do the proposed **baselines** mean for **pools**?

Key facts:

- **Existing pools may remain.**
- **Pools damaged or destroyed may be reconstructed**, upon obtaining a permit, **if they are located behind an existing functional erosion control structure.**
- **No new pools can be permitted.**

Special Permits: Construction seaward of the baseline

Key facts:

- A special permit is an individual critical area permit which is given additional consideration because it is seaward of the baseline.
- **Between 1990 and present day, there have been 72 special permit requests.**
- **The Department has issued 71 special permits.**

Baselines Set by Beach Zones

At a glance:

- There are three beach zones:
 - **Unstabilized inlet zone**
 - **Stabilized inlet zone**
 - **Standard zone**

UNSTABILIZED INLET ZONE
Capers Inlet

**Inlets that have NOT
been stabilized by
jetties, terminal
groins, or other
structures**



An aerial photograph of Sullivan's Island, South Carolina, showing a residential area with numerous houses and a marina with many boat slips. The island is surrounded by dark water, and a sandy beach is visible along the coast. The text "STABILIZED INLET ZONE" is overlaid on the left side of the image.

STABILIZED INLET ZONE
*Charleston Harbor side
of Sullivan's Island*

**Inlets which have
been stabilized by
jetties, terminal
groins, or other
structures**

An aerial photograph showing a stretch of coastline. On the left is a dense forest of green trees. A road with several parking lots runs parallel to the beach. The beach is a wide strip of light-colored sand. To the right of the beach is the ocean, with a long pier extending into the water. The water is a deep green color.

STANDARD ZONE
Myrtle Beach State Park

A segment of shoreline which is subject to essentially the same set of coastal processes, has a fairly constant range of profiles and sediment characteristics, and is not directly influenced by tidal inlets or associated inlet shoals

How is the **baseline** set in an **Unstabilized Inlet Zone**?

- The baseline is set at the **most landward point of erosion at any time in the past 40 years.**
- **Modern and historic shorelines were used to determine** the most landward point of erosion in the past 40 years.



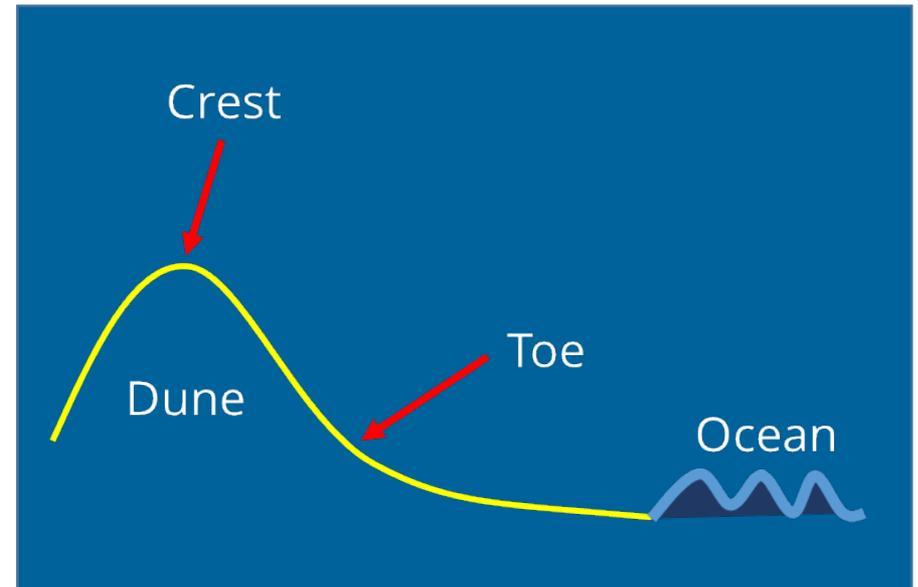
How is the **baseline** set in an **Unstabilized Inlet Zone**?

- **Modern vegetation lines were collected** with a Trimble GeoXT GPS unit.
- **Field data collection of shoreline positions and data analysis spanned over a year, and included pre- and post-Matthew shoreline data.**
- **The entire coast was reviewed post-Hurricane Matthew.**
- In some areas, post-Matthew shorelines were the most landward point of erosion in the past 40 years.
- **No post-Irma data was included.**



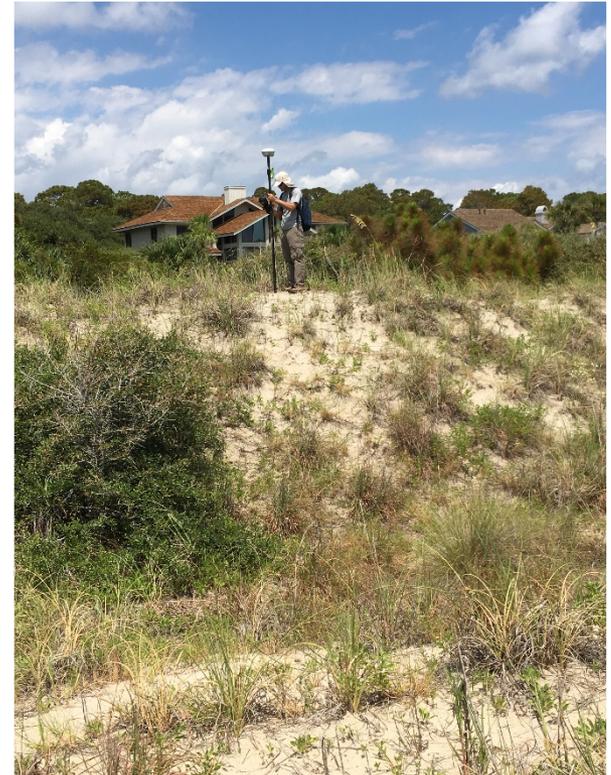
How is the **baseline** set in **Standard and Stabilized Inlet Zones**?

- The baseline is set at **the crest of the primary oceanfront sand dune.**
- The **primary dune** is defined as a dune with a **minimum height of 3 feet** (measured from the crest to toe) **and 500 feet of continuous length.**



How is the **baseline** set in **Standard** and **Stabilized Inlet Zones**?

- **Points were collected at the seaward toe and crest of each dune.**



How is the **baseline** set in **Standard and Stabilized Inlet Zones**?



- **Field data were collected** by agency experts **using a Trimble R6 RTK GPS unit** and the **South Carolina Real Time Network.**



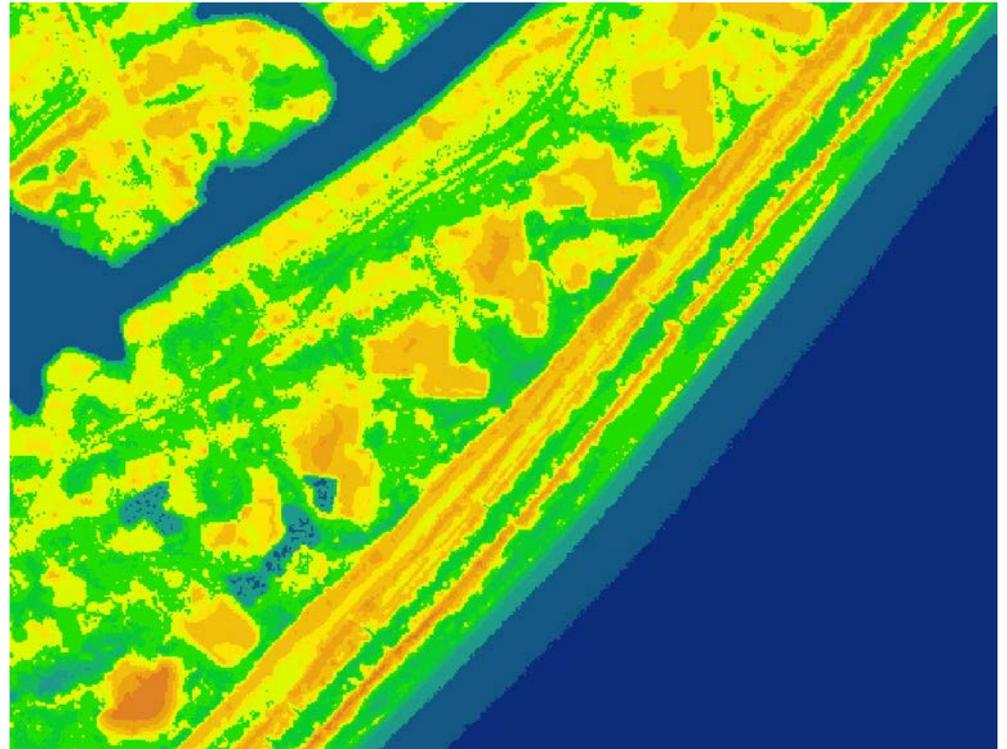
South Carolina Department of Health and Environmental Control
Healthy People. **Healthy Communities.**



- Field data were collected every 300 - 400 feet along the oceanfront dune and every 600 - 1,000 feet along more landward dunes.

How is the **baseline** set in **Standard and Stabilized Inlet Zones**?

- **LiDAR** is a remote sensing data collection method that **uses an airborne system to generate high-resolution elevation data.**
- This elevation data was used in conjunction with field data to **determine the location of the primary dune.**



How is the **setback** line created?

At a glance:

- The setback line is **established at a distance from the baseline which is 40 times the average annual shoreline change rate** (aka the “long-term erosion rate”).
- **The setback line is a minimum of 20 feet landward of the baseline.**

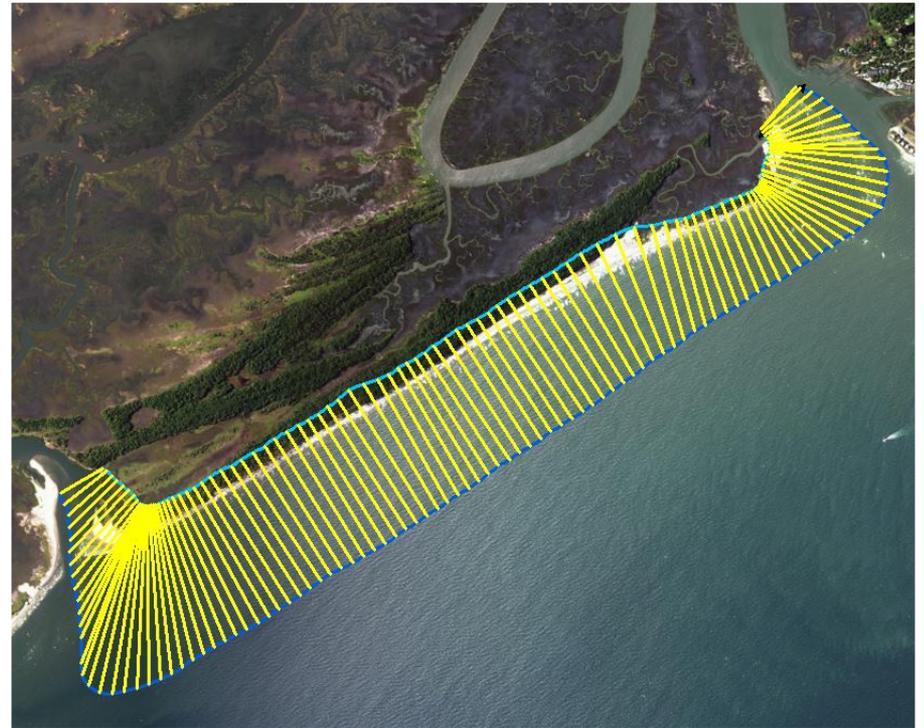
How is the **shoreline change analysis** performed?

- **Analysis examined modern and historic wet/dry shorelines, which capture the high tide mark on the beachfront.**
- **The source and accuracy of each shoreline was reviewed.**
- **Data ranges covered 164 years, from 1851 to 2015.**
- **No Post-Matthew or Post-Irma data were included.**



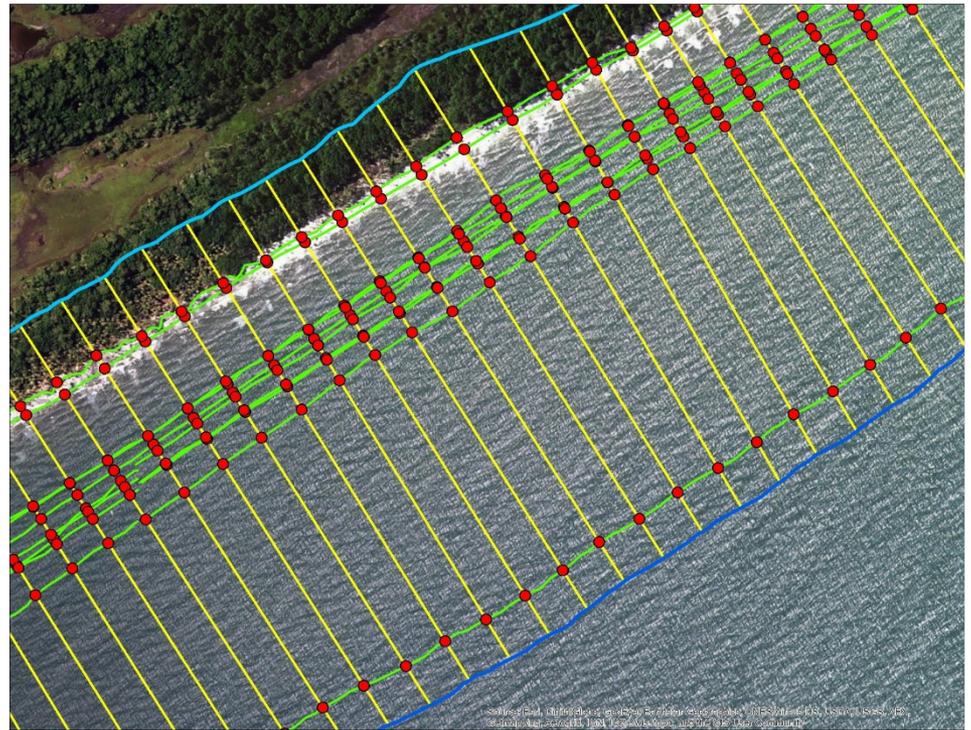
How is the **shoreline change analysis** performed?

- Analysis is performed using a shoreline change tool called **AMBUR**.
- This tool analyzes the wet/dry shorelines and **produces average annual shoreline change rates**.
- The tool **draws a line every 200 feet** across the shorelines.



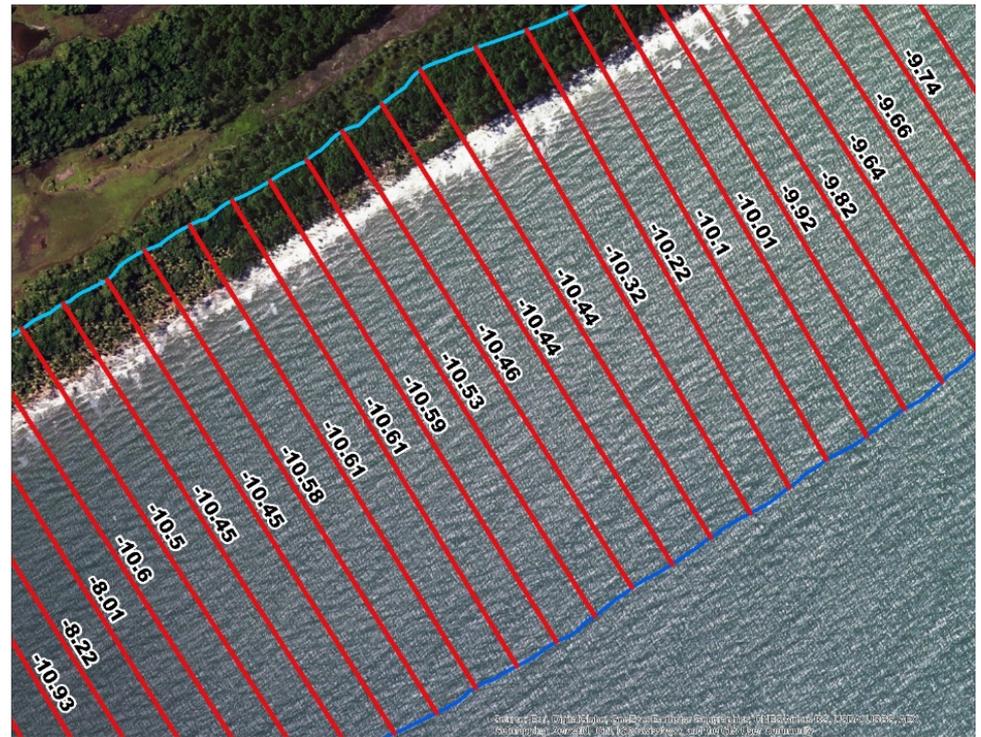
How is the **shoreline change analysis** performed?

- **The tool captures the intersection points between the lines and wet/dry shorelines.**



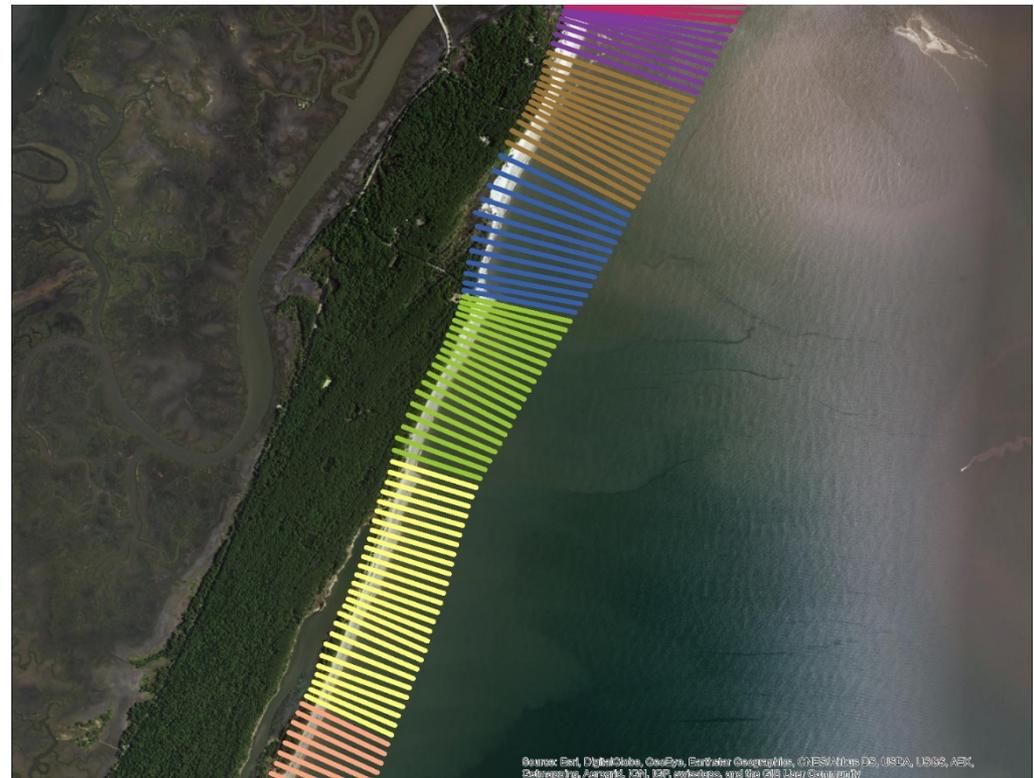
How is the **shoreline change analysis** performed?

- An annual shoreline change rate is produced for each line.



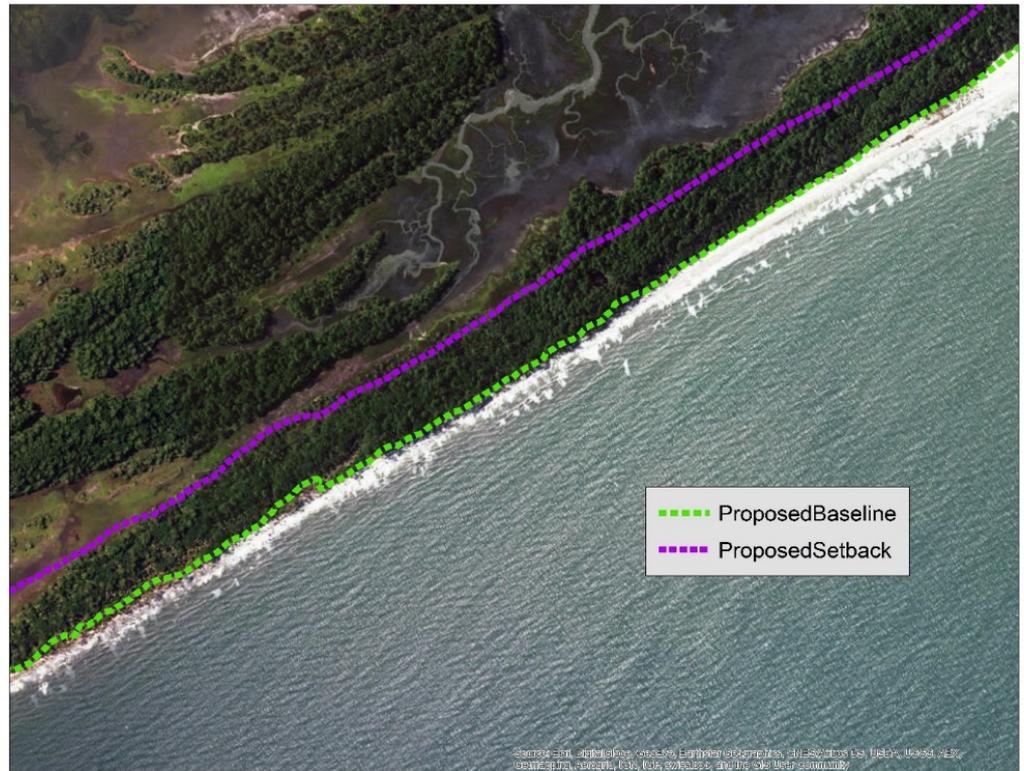
How is the **shoreline change analysis** performed?

- A **spatial statistical tool groups the lines together** based on similar shoreline change rates.
- The **rate values within each group are averaged to obtain the average annual shoreline change rate** for each area.



How is the shoreline change analysis performed?

- The **average annual shoreline change rate** is then multiplied by 40 to generate the distance from the baseline.
- This distance **establishes the setback line.**
- The setback line is a **minimum of 20 feet landward of the baseline.**





We Want to Hear from You

- If you don't want to speak tonight, you also can **submit your comments to us either online or in writing by November 6:**
 - Submit online at gis.dhec.sc.gov/shoreline
 - Mail to DHEC-OCRM, Attn: Barbara Neale, 1362 McMillan Avenue, Suite 400 Charleston, SC 29405
- You can find more info and view the proposed lines in your area at www.scdhec.gov/beachfrontlines
- You **also can call (843) 953-0200 to make an appointment to discuss potential impacts to your property** or view lines in-person at one of DHEC's Office of Coastal Resource Management locations.



We Want to Hear from You

- **If you are a property owner who disagrees with the proposed beachfront jurisdictional lines:**
 - **You can notify DHEC through the public comment process**, which runs through November 6, 2017.
 - Final lines will be available on December 8, 2017.
 - It is the Department's position that you **have up to one year to request a review of the lines by DHEC's governing board.**
 - The property owner **may appeal that board decision** to the S.C. Administrative Law Court.

Summary

Key facts:

- **There is a legislative deadline** to complete the process by December 31, 2017, in order to allow any seaward movement of the lines in this revision.
- The **proposed setback areas DO NOT create a “no-build” zone.**
- It is DHEC’s position that **property owners have up to one year to request a review** of the lines by DHEC’s governing board; the property owner may appeal that board decision to the S.C. Administrative Law Court.



Contact Us

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