



**Meeting Notes from the
Beachfront Jurisdictional Line Stakeholder Workgroup
November 7, 2018**

The Beachfront Jurisdictional Line Stakeholder Workgroup met on Wednesday, November 7, 2018, in S.C. DHEC OCRM's 3rd Floor Conference Room, Charleston, SC.

WELCOME, REVIEW WORKGROUP CHARGE:

At 10:00 a.m. S.C. DHEC OCRM Chief Elizabeth von Kolnitz welcomed the workgroup and provided a reminder of the charge to provide recommendations for definitions of primary dune and extraordinary erosion, with consensus recommendations being the goal. Ms. von Kolnitz highlighted that the focus of today's meeting, as well as next week's meeting, will continue to be on the definition of a primary dune. The Workgroup will then transition to the definition of extraordinary erosion. Ms. von Kolnitz stated that DHEC OCRM staff will be seeking input on what additional background information the Workgroup needs for future meetings and encouraged full member participation in this process. Ms. von Kolnitz also reminded the Workgroup that the final outcome will be a report summarizing consensus recommendations and differing opinions.

INTRODUCTIONS, SUMMARY OF LAST MEETING:

Lawra Boyce and Kristy Ellenberg as the Workgroup Facilitators (Facilitators) asked the Workgroup members to introduce themselves since there are some new attendees that were unable to make the first meeting.

The following members were in attendance:

Josh Eagle
Michael Katuna
Bill Eiser
Ryan Fabbri
April Donnelly
Jane Darby
Tim Kana
Rocky Browder
Nick Kremydas
Emily Cedzo
Blanche Brown
Jean Ellis
Ray Chandler

The Facilitators acknowledged the additional members of the public in attendance (Sandy Stone, Island Realty; Linda Tucker, SC Beach Advocates) and then reiterated the Workgroup Values as discussed during Meeting 1. The Facilitators reminded the Workgroup of South Carolina's policy to protect, preserve, restore and enhance the beach/dune system and noted that addressing these four elements leads to the highest and best uses of the coastal resources. A new data spreadsheet compiled by Dr. Jean Ellis and provided to the

Workgroup was addressed by the Facilitators, who requested that the members include this information as part of their resource binders.

DUNE DEFINITION SUMMARY SPREADSHEET:

Dr. Jean Ellis explained to the Workgroup that, to organize the characteristics of each states' dune definitions, she compiled a summary table. Dr. Ellis further explained that this table contains only aspects of the dune definitions and none of her own opinions. Using the table, Dr. Ellis made the following observations:

- of the listed states, only South Carolina has a length requirement as part of the dune definition;
- South Carolina does not include vegetation language in the dune definition, unlike other states;
- Georgia differentiates between a stable sand dune and a regular sand dune;
- some states define sediment origin (i.e. aeolian, renourishment) as part of the dune definition.

Ensuing Workgroup discussion regarding specifics of a primary dune definition included: the origin of the height and length requirements in the current definition; the importance of scientific reasoning when defining a primary dune; potential inclusion of an elevation parameter as part of the definition; the purpose of defining the primary dune as it relates to defining the jurisdictional lines; and the possibility of using a set of metrics in which a certain threshold of qualities must be met to qualify as a primary dune.

An inquiry was made to DHEC OCRM staff about the existence of a list/chart of staff concerns with the current definition. Ms. von Kolnitz reminded the Workgroup about some of the issues that were addressed by Jessica Boynton, S.C. DHEC OCRM Shoreline Specialist, as part of her presentation during Meeting 1. A specific example offered by Ms. Boynton during that presentation was the subjectivity in applying a 3 ft. height and 500 ft. length requirement in certain real-world scenarios, such as breaks in the dune. To expand on Ms. von Kolnitz's statement, Ms. Boynton then explained that during the last line review process, the public expressed many concerns to staff regarding the time frames for public review. Ms. Boynton reminded the Workgroup that the time frames for the last review were compressed based on legislation and that hopefully moving forward, public review time frames will be longer. Additionally, Ms. Boynton explained that the public asked staff a lot of questions about when data was collected (before or after recent storm events) and how data was collected (accounting for breaks in dunes) during the last line review process.

PRIMARY DUNE CHARACTERISTICS - SMALL WORKGROUP ACTIVITY:

The Workgroup was divided into 4 smaller groups of 3-4 members. Each smaller group was provided beachfront photographs that showed various stages of vegetation growth and asked to discuss how vegetation factors into a primary dune definition. The members were also instructed to discuss all other previously identified dune characteristics amongst their respective smaller groups and to formulate and write down language for consideration in the definition of a primary dune.

PRIMARY DUNE CHARACTERISTICS - CONTINUED FACILITATED WORKGROUP DISCUSSION:

After the small workgroup activity, the Facilitators reminded the Workgroup of the DHEC OCRM policy to *protect* life and property, *preservation* of dry sand beaches, *enhancing* the well-being of SC citizens and visitors, and *restoring* habitats. The primary dune definitions and language as proposed by each of the smaller groups are as follows:

- Group 1:
Continuous or nearly continuous stabilized mound located landward of the beach with a relatively steep seaward slope that is typically not eroded or overtopped during astronomical tides unaffected by storm surge, but that may be subject to erosion or overtopping due to storm surge and waves during major coastal storms.
 - During workgroup discussion of this definition, it was noted that some of this language has similarities to the FEMA definition and that such similarities may be a beneficial linkage.

- Group 2:
Criteria 1: Determine the high water mark and the dune line to then establish a dry sand beach interval of some specific minimum width,
Criteria 2: Vegetation which must have dry sand to survive, constant overtopping will not allow dry sand vegetation growth,
Criteria 3: Other specific dune profile dimensions and criteria.

- Group 3:
Point 1- There needs to be a height metric but not sure what it would be. Height was historically measured from crest to landward toe. No level/scarped areas.
Point 2- Continuity could possibly be determined by using LiDAR data to obtain dune ridge heights and averaging those positions to establish a line, even if not exactly 500' long.
Point 3- Age - how long before you can add man-made dunes into the equation?
 - The Facilitators noted that a previously discussed idea was to determine a definition that has exceptions. Those exceptions could be defined by this Workgroup.
 - During Workgroup discussion, it was noted that the definition should be concise for the sake of legislation.

- Group 4:
Mound of unconsolidated sand emplaced either naturally or mechanically that is located roughly shore parallel and is the most seaward feature; Dune is mostly covered by indigenous stabilizing vegetation that promotes dune growth.
 - Subsequent Workgroup discussion used terms such as "resiliency" and "recovery".

INFORMATIVE SESSION:

A presentation entitled *Drone Imagery and LiDAR Site Examples* was given by Matt Slagel, S.C. DHEC OCRM Beachfront Project Manager. This slide presentation included recent drone imagery, the most recently available LiDAR imagery, and LiDAR imagery which included both the 2008-2010 and the proposed 2017 jurisdictional baselines for each of 4 example sites.

- Mr. Slagel noted that different coastal states have different dune definitions, but they also have different methods for establishing beachfront jurisdiction. Mr. Slagel recognized a previous request to provide the Workgroup with a breakdown of how other southeastern states establish their respective beachfront jurisdictions, and he stated that DHEC OCRM continues to work on fulfilling that request.
- Mr. Slagel highlighted how LiDAR data can be used to determine the presence or absence of dunes along the beach, and he emphasized that field verification of LiDAR data is important because ocean shorelines are so dynamic.

APPLICATION OF DUNE CHARACTERISTICS – SUMMARY:

The common themes and/or essential elements regarding the definition of a primary dune (with some overlap) as offered by the Workgroup were:

Location –

- Dry sand beach is required for dune maintenance
 - Measurement from the high water line and elevation criteria
- Some public perception may be that the primary dune should be the dune closest to the ocean; however, the most seaward dune may not be the dune feature that provides adequate protection.
- Stability/longevity - how long has a dune feature persisted in a certain location?

Vegetation –

- The term “native” is preferable to “indigenous”.
- Capability of dune feature to support plantings of native vegetation or support native growth; certain vegetation is better at stabilizing a dune while other vegetation is better at growing a dune; ensure undesirable vegetation such as beach vitex and phragmites are not used.
- Should there be a time element associated with the stabilizing capability of vegetation?

Shape/Structure –

- Is there an optimal height to base width ratio? Volumetric measurements above certain storm water levels, following existing FEMA requirements?
- Should minimum thresholds for height or base width be determined? Minimum toe-to-toe measurement?
- Quantitative criteria should result in at least minimally adequate storm protection.
- Continuity vs. Length? Potential for a transition zone or smoothing of the line when jumping from one dune crest to another. Continuity or length should also address exceptions for beach access (i.e. walkovers, safety, and maintenance).

Ideas for formatting a primary dune definition were also discussed and included thoughts such as: A definition with exceptions may better address the variable beach characteristics on South Carolina’s coast; A closer alignment with the FEMA definition may be beneficial; The simplicity of the definition is important; and a volumetric/scientific approach may be the best way to define a primary dune.

NEXT STEPS:

“Marina” –

1. How do you assess beachfront areas that do not have conditions that will meet the definition?

Requested additional information and next steps:

- a) Ms. Boynton asked the Workgroup to further think through the meaning of “continuous” and noted that depending on how “continuous” is defined, it may be an implementation challenge for DHEC OCRM staff.
- b) DHEC OCRM to compile a spreadsheet of how other southeastern coastal states establish beachfront jurisdiction.
- c) DHEC OCRM to determine approximately how many permits or other authorizations have been issued within the beachfront jurisdiction in 2018 so far, as requested.
- d) DHEC OCRM staff will use the common themes from the Workgroup to draft a rough definition of a primary dune prior to the next meeting.

Ms. von Kolnitz stated that any additional information requests from the Workgroup should be submitted as soon as possible due to the limited time before the next meeting.

The Meeting was adjourned at 2:00 p.m. by Ms. von Kolnitz.