



Meeting Notes from the Beachfront Jurisdictional Line Stakeholder Workgroup January 11, 2019

The Beachfront Jurisdictional Line Stakeholder Workgroup met on Friday, January 11, 2019, 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 members and reviewed the agenda items. Ms. von Kolnitz stated that the purpose of this meeting is to reach a consensus on the primary dune definition. Additionally, Ms. von Kolnitz noted the three dune scenarios that will be further discussed during this meeting.

The following members were in attendance:

Ray Chandler
Ryan Fabbri
Emily Cedzo
Rocky Browder
April Donnelly
Michael Katuna
Bill Eiser
Tim Kana
Jane Darby
Nick Kremydas

Additional members of the public in attendance were Sandy Stone, Island Realty and Nicole Elko, South Carolina Beach Advocates (SCBA). Lawra Boyce and Kristy Ellenberg were the Workgroup Facilitators (Facilitators).

UPDATES TO 'PRIMARY DUNE' DRAFT RECOMMENDATIONS – GROUP DISCUSSION

Ms. von Kolnitz presented the updated draft primary dune definition which incorporated the recommended language changes resulting from the December 5, 2018 Workgroup meeting. This definition is as follows:

For the purposes of establishing the beachfront jurisdictional baseline within the standard zone and stabilized inlet zone, primary oceanfront sand dunes constitute the most seaward dune ridge adjacent to the Atlantic Ocean which is

- nearly continuous for 500 linear feet;
- exhibits the presence of stable, native vegetation; and
- has a dune height of 3 feet as measured from the seaward toe to the crest of the dune.

The primary oceanfront sand dune is typically not scarped, eroded or overtopped by the highest predicted astronomical tides but may be inundated by storm surge which normally accompanies major coastal storm events.

Emergency berms that have been created as temporary barriers do not constitute a primary oceanfront sand dune unless the berm is situated along the historical footprint of the natural dunes system, and exhibits the characteristics of the defined primary oceanfront sand dune.

Nearly continuous sand dunes are defined as generally undissected dune ridges, but may exhibit minimal breaks as a result of the presence of pedestrian or emergency vehicle access points.

Ms. von Kolnitz noted that the Final Report resulting from this Workgroup will capture the December 5, 2018 non-consensus discussion regarding the removal of vegetation requirements and increasing the dune height requirement. She also highlighted the removal of the longevity requirements from the emergency berm section of the definition. The Workgroup noted during the December 5, 2018 meeting that if a stable vegetation qualifier is not included as a primary dune characteristic, then inclusion of a time factor should be considered when determining whether an emergency berm qualifies as a primary dune. Since a vegetation qualifier is included as a primary dune characteristic, the time requirement in reference to an emergency berm was removed.

Workgroup discussion about the draft recommendation as presented:

- Regarding a member's suggestion that the vegetation characteristic read as "*may* exhibit the presence of stable, native vegetation; and..."
 - 'may' is unclear/vague
 - Instead use 'typically', 'generally', 'normally', or 'likely'
 - Workgroup consensus reached on using 'typically'
- Regarding a member's suggestion that the dune height characteristic read as "*maintains a minimum* dune height of 3 feet as measured from the seaward toe to the crest of the dune."
 - Ms. von Kolnitz reminded the Workgroup of some field conditions encountered by Department staff during the last jurisdictional line review process.
 - Workgroup consensus reached to leave qualifier at 3 feet, not including the *minimum* terminology.
- Regarding nearly continuous sand dunes
 - Suggestion was made to use 'such as' when referencing the type of breaks (i.e. "may exhibit minimal breaks *such as* pedestrian or emergency vehicle access").
 - Should consideration be given to language that incorporates natural breaks? Workgroup consensus is no. Using 'such as' allows for flexibility.

- Regarding a member’s suggestion to incorporate the following language into the primary dune definition: “For those communities that have an existing beach preservation plan with a pending OCRM permit, has funds to complete the project, the baseline shall be placed at the crest of the dune to be constructed within the permit period as shown in the permit engineering documentation.”
 - ‘Pending’ terminology is a concern. Should at least be ‘issued’.
 - What about the period of time for a beach to reach equilibrium? A designed dune on paper vs. the actual dune on the ground are different.
 - Consideration of future projects in this context is speculative; any number of issues could change the outcome.
 - Does this language address emergency berms or a larger renourishment project?
 - Ms. von Kolnitz asked the Workgroup if this language is more about setting a baseline rather than defining a primary dune.
 - Matt Slagel, DHEC OCRM Beachfront Project Manager, noted that not all renourishment projects have a designed primary dune. Additionally, some renourishment projects require a DHEC OCRM Critical Area Permit. Others, if a federal U.S. Army Corps of Engineers project, require a DHEC OCRM Coastal Zone Consistency Certification.
 - Language of this nature would need to be more fully developed and examined (i.e. how much of the beach is being renourished, what kind of specifications) but may provide incentive to communities for committing to beach renourishment projects.
 - Could this renourishment topic be involved during the setting of the baseline when a storm hits but there is an issued permit for renourishment?
 - Would the project be designed to include vegetation, sand fencing, a primary dune, etc.?
 - The members are interested in continuing to discuss this topic and areas where a permit for a renourishment project has been issued but the project has not yet been completed – additional information is needed.

INFORMATIVE SESSION: SCENARIO #2

A presentation entitled *Dune Scenarios* was given by Matt Slagel. Mr. Slagel outlined Dune Scenario #1 as when there is a primary dune present which meets the definition, and is less than 200-300 ft. from the vegetation/MHHW line. The DHEC OCRM action in Scenario #1 would be to follow the primary dune definition to set the baseline. Slides were presented that illustrated Scenario #1 using 2016/2017 LiDAR Imagery.

Mr. Slagel then outlined Dune Scenario #2 as when there is a primary dune present, which meets the definition, but is more than 200-300 ft. landward from the vegetation/MHHW line. The DHEC

OCRM action options for setting the baseline under Scenario #2, as previously suggested by the Workgroup, may include:

- following the primary dune definition;
- using a buffer distance from a location;
- utilizing contours;
- a buffer and contour combination;
- or other options as recommended by the Workgroup.

Slides were presented that illustrated Scenario #2 using LiDAR 2016/2017 Imagery for 5 different sites. Several considerations and questions were posed to the Workgroup for further thought:

- Is the distance important? If yes, why?
- What is the objective of the distance?
- Do we ignore a primary dune that is further landward? If yes, why?
- Process needs to work in standard AND stabilized inlet zone.
- Can a single contour value be identified coastwide?
- Implementation time considerations for DHEC staff.

As a result of inquiries made by Workgroup members during this presentation, Mr. Slagel informed the Workgroup that the 200-300 ft. distance value was derived from previous Workgroup discussion and that this process does not explicitly take sea level rise into consideration, but that it is captured in the 7-10 year line revision cycles and through the calculation of long-term erosion rates.

SMALL WORKGROUP DIALOGUE AND FACILITATED WORKGROUP DISCUSSION: SCENARIO #2

The Workgroup was divided into 3 smaller groups of 3-4 members. Each smaller group was asked to review the action options and consider the questions presented for Scenario #2. The Workgroup was informed that as part of this session DHEC OCRM is looking for input on the action options, which options are better than others and why, and any other concerns or ideas/suggestions the Workgroup may be able to provide.

After the small workgroup dialogue, the Facilitators opened discussion on the topic to the Workgroup. The following is the information provided as part of the report-out for each of the small workgroups:

➤ Group 1

- Primary Dune Definition
 - Equal application of a statewide definition can be difficult when based on the dynamic dune systems of a diverse coastline (i.e. presence/absence of barrier islands, differences in tidal ranges).

- Local governments should have a larger role in defining development since each beach community is different and dunes and vegetation can change rapidly.
 - There are pros and cons to a statewide definition.
- Buffers
 - Create a more consistent line.
 - A single buffer could not be applied statewide due to coastline variability (i.e. Kiawah vs. Pawleys).
 - Measuring from the vegetation line may prove problematic as vegetation can quickly change.
- Contours
 - May work in standard zones but likely not a good option for stabilized inlet zones.
 - On a low relief island, a specified contour might be significantly inland.
 - Statewide application of a single contour is not likely to work.

Workgroup thoughts and discussion as part of the Group 1 report-out:

- All the action options have pros and cons; there is no perfect solution.
- Regardless of option chosen, there will be some constituents who do not like it.
- This process is trying to take a situation that requires discretion and subjectivity and make it black and white.

➤ Group 2

- Buffers may be a better action option than contours – contour maps can be difficult to use.
- Utilization of a buffer from MHHW would not require field work; however, the update timeframe of 19 years (tidal epoch) for this data set is concerning.
- A vegetation line is easier to select from aerial imagery or in the field than MHHW.
- A 200 ft. buffer from the vegetation line could work (if a naturally occurring primary dune exists further seaward than the vegetation line, then utilize primary dune).
- ‘Vegetation line’ would need to be defined for use in this capacity.

Workgroup thoughts and discussion as part of the Group 2 report-out:

- A member idea was to maintain that there must be a buffer from the vegetation line, but leave it to the local governments to determine the buffer distance through local ordinances.
- The vegetation line is more stable in standard zones than any other features, the next best choice would be the swash line.

➤ Group 3

- In agreement with Group 2 that buffers would work better than contours.

- Echoed the concerns of Group 1 regarding the application of buffer requirements statewide.
- Could also base the buffer on the spring high tide/swash/wrack line, if it is determined that the vegetation line is not preferable.
- If the primary dune is within 200 or 300 feet from the vegetation line or some other measurement line, the primary dune would be used as the baseline position. If there is a primary dune, but it is located more than 200 or 300 feet landward of the vegetation line or other measurement line, and there is a low, wide dune field, the baseline could be set 200 or 300 feet landward of the vegetation line or some other measurement line.

Workgroup thoughts and discussion following the small group report-outs for Scenario #2:

- Regarding action options -
 - Consensus is to lean away from contours in favor of buffers for Scenario #2.
 - The buffer distance was not settled as part of this discussion.
 - What is buffered from (i.e. vegetation line, swash line, MHHW) was not settled as part of this discussion.
 - Vegetation lines are currently used by DHEC OCRM in dock regulations, creating a precedent.

- Regarding public outreach and communication -
 - The messaging to the public about the purpose of the Baseline and Setback lines is/was problematic.
 - Perception is important and during the most recent jurisdictional line revision process, the perception of the process was incorrect.
 - Education and outreach communication efforts are critical in community engagement.
 - Who the messenger is and relaying a consistent message is also crucial. Potential for outlets other than DHEC OCRM to discuss and relay a consistent message regarding the jurisdictional lines.
 - A member suggestion was for DHEC OCRM to have better communication with town administrators during the jurisdictional line review process.

INFORMATIVE SESSION: SCENARIO #3

A presentation entitled *Dune Scenarios* was given by Jessica Boynton, DHEC OCRM Shoreline Management Specialist. Ms. Boynton outlined Dune Scenario #3 as when there is no primary dune and potentially limited to no dunes. The DHEC OCRM action options for setting the baseline under Scenario #3, as previously discussed by the Workgroup, may include:

- Ideal dune analysis, which is a volumetric comparison of a reference profile with a primary dune to an adjacent profile without a primary dune. The adjacent profile has little to no dunes,
- Contours,
- Buffer from a location.

Ms. Boynton presented slides which guided the Workgroup through BERM Explorer tool and how to use a reference profile to calculate a theoretical dune crest for a profile without a primary dune for the Ideal Dune Analysis. Additional slides were presented to illustrate Scenario #3 and used LiDAR 2016/2017 Imagery for 3 different sites. Several considerations and questions were posed to the Workgroup for further thought:

- Will ideal dune analysis work to place the baseline?
- Can a single contour be identified coast-wide?
- Should a vegetation/MHHW buffer be identified?
- What are the implementation issues associated with each option?

SMALL WORKGROUP DIALOGUE AND FACILITATED WORKGROUP DISCUSSION: SCENARIO #3

The smaller groups which discussed Scenario #2 reconvened to discuss Scenario #3 and the associated options and questions outlined by Ms. Boynton.

After the small workgroup dialogue, the Facilitators opened discussion on the topic to the Workgroup. The following is the information provided as part of the report-out for each of the small workgroups:

- Group 2
 - One standard cannot be applied statewide.
 - Development of a formula for OCRM to use to determine the appropriate approach for determining the jurisdictional lines?
 - The statute is silent and does not provide direction in a scenario in which dunes are non-existent or negligible.
 - Ideal dune analysis
 - Is quantifiable, measurable and most defensible option; however, this group would like to see more real-world examples prior to fully endorsing this option for this Scenario.
 - This method is already mentioned in statute regarding armored shorelines – potential to expand DHEC OCRM’s use of this tool.
 - Contours
 - Do not favor contours which are difficult to pick out, are messy and provide a false sense of reality.
 - Buffer

- Using vegetation as a measurement tool only works where a vegetation line is present.

Workgroup thoughts and discussion as part of the Group 2 report-out:

- How to best message to the public about the location of the jurisdictional line in areas with no dunes?

➤ Group 3

- Favors the Ideal Dune Analysis.
- Picking an appropriate Ideal Dune Crest profile is an important first step. Given the systematic variation in the beach profile as you move closer to the inlet, how is the appropriate profile selected in the Ideal Dune method?
 - Suggests either selecting a representative profile or take several profiles and use an average (i.e. for Edisto, use an ideal profile which considers the groin field and is more representative than the profile in the State Park.
 - Care is needed when using this method to ensure comparability.
- Could 2008 line be used as the default?

➤ Group 1

- Reiterated previous points made during the Scenario #2 discussion about increasing the delegation of more beachfront permitting to local governments
- Favors the Ideal Dune Analysis and echoes the statements of Group 3 to average multiple beach profiles.
- Contours are problematic.
- Vegetation lines may not exist.

Workgroup thoughts and discussion following the small group report-outs for Scenario #3:

- How will the baseline be set in areas with ongoing renourishment projects?
- What is the communication/outreach/education strategy? Who is sharing the information? Does DHEC OCRM have partners?
- Local governments/town administrators should be kept involved during the process and local input should be obtained prior to release of revised jurisdictional lines.
- What are the impacts of these decisions on flood insurance policies, etc.?

SUMMARY

The primary dune definition as recommended by the Workgroup has been captured. DHEC OCRM staff will continue to evaluate the Workgroup's suggestions and ideas as they pertain to Scenarios #2 and #3, and issue of renourishment projects. The topic of extraordinary erosion will be addressed by the Workgroup in forthcoming meetings.

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