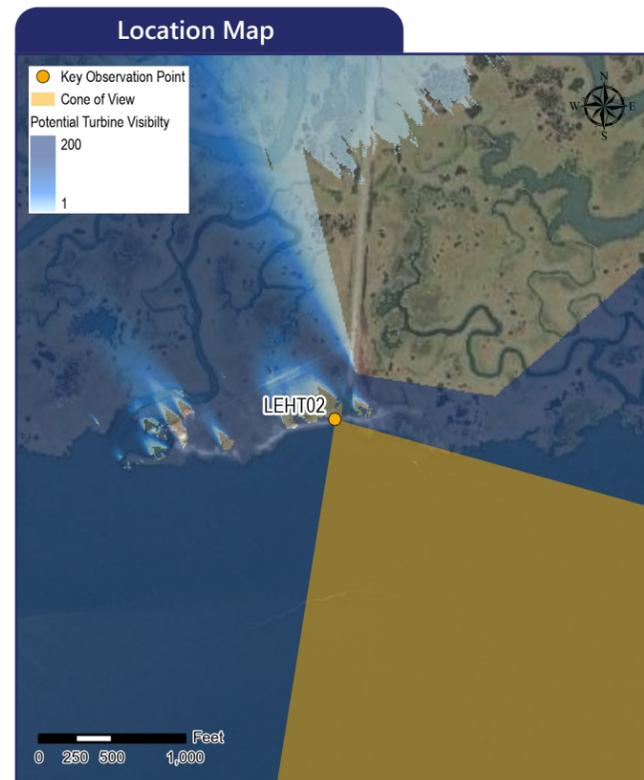
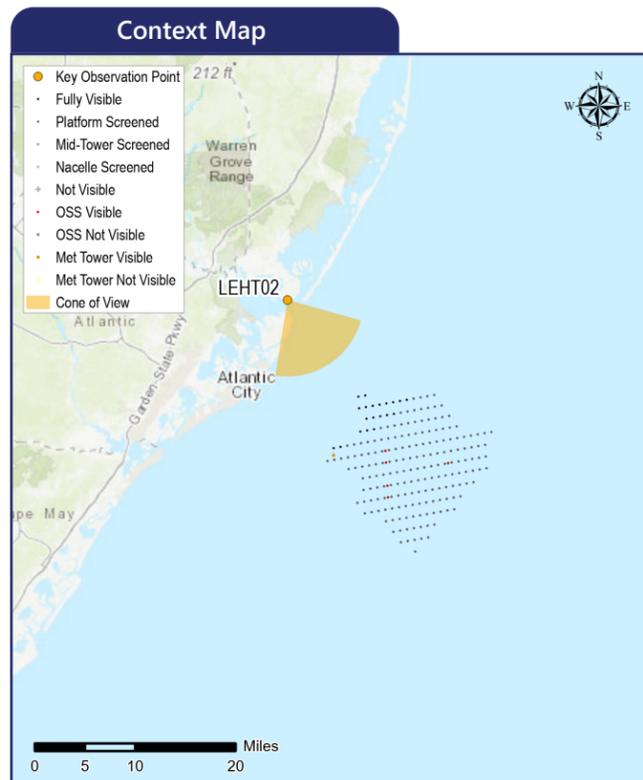


# LEHT02 Great Bay Boulevard WMA/Rutgers Field Station

Little Egg Harbor Township, Ocean County, New Jersey



The image above is a +/- 124° panorama photograph from the Great Bay Boulevard Wildlife Management Area (WMA)/Rutgers Field Station, panning clockwise from east-southeast (left) to southwest (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).



## Simulation Information

Coordinates: 39.50913°N, 74.32038°W  
 Character Area: Dredged Lagoon, Salt Marsh, Landscape (LCA)  
 User Group: Residents/Tourists, Fishermen  
 Direction of View: Southeast  
 Distance to Nearest Visible Turbine: 11.91 miles  
 Visually Sensitive Resource: Great Bay Boulevard Wildlife Management Area, Little Egg Harbor US Life Saving Station #23

## Environmental Information

Date Taken: 09/22/2020  
 Time: 8:32 AM  
 Temperature: 59°F  
 Humidity: 49%  
 Visibility: 10 miles  
 Wind Direction: North-northwest  
 Wind Speed: 12 mph  
 Conditions Observed: Fair

## Photograph Information

Camera: Canon EOS 5D Mark IV  
 Resolution: 30.4 Megapixels  
 Focal Length: 50mm  
 Camera Height: 10.00 feet AMSL

## Notes

Printed at 100%, the photosimulations are 15 inches wide by 10 inches high. At this size, the photosimulation(s) should be viewed from a distance of 21 inches.

## Simulated Photograph(s)

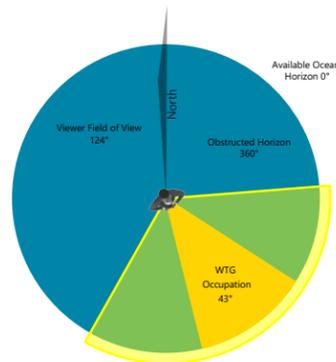


Photograph D9A6653



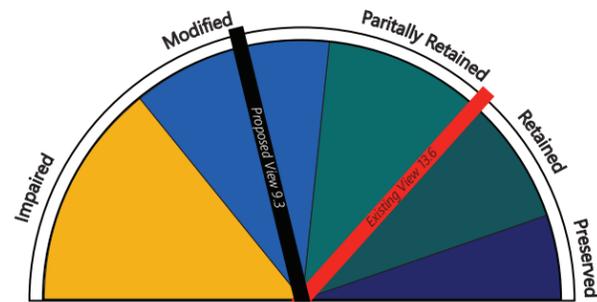
Photograph D9A6659

## Field of View



## Visual Impact Rating

### Impact Rating Summary



**-4.3. Significant**

## Visual Threshold Level (VTL)

**6** An object/phenomenon with strong visual contrasts that is so large that it occupies most of the visual field, and views of it cannot be avoided except by turning one's head more than 45 degrees from a direct view of the object. The object/phenomenon is the major focus of visual attention, and its large apparent size is a major factor in its view dominance. In addition to size, contrasts in form, line, color, and texture, bright light sources and moving objects associated with the study subject may contribute substantially to drawing viewer attention. The visual prominence of the study subject detracts noticeably from views of other landscape/seascape elements (Sullivan et al., 2013).

## Principles of Composition and Factors Affecting Visual Impact Summary

Design Elements	Description
Focal Point	Salt Marsh grasses on the left side of the view stretch out and point to a span of landform on the horizon.
Order	This view has a natural layering of shoreline in the foreground, water in the mid-ground, punctuated by the horizon line and open sky above.
Visual Clutter	None observed by the rating panel.
Movement	Boats on water, wildlife, waves likely to be the main source of movement.
Duration & Frequency of View	Long-Term and Occasional (potentially repeated)
Atmospheric Conditions	Moisture in the air could impact visibility.
Lighting Direction	Backlit & Side-Lit
Scenic or Recreational Value	Great Bay WMA, Little Egg Harbor Life Saving Station #23

## Compatibility and Contrast Rating Average

Great Bay Boulevard WMA/Rutgers Field Station			
Resource	Compatibility	Scale	Spatial Dominance
Water Resources	2.9	3.0	2.9
Landform	2.3	2.3	2.5
Vegetation	1.8	1.9	1.9
Land Use	2.0	2.0	1.8
User Activity	2.5	2.3	2.5

1 – Compatible  
 2 – Somewhat Compatible  
 3 – Not Compatible  
 1 – Minimal  
 2 – Moderate  
 3 – Severe  
 1 – Subordinate  
 2 – Co-Dominant  
 3 – Dominant

## Existing Conditions

Scenic Quality: Retained  
 Rating Panel Score Average: 13.6  
 Rating Panel Score Range: 11.7 - 16.0

This view is from the Rutgers University Marine Field Station (RUMFS) at the Great Bay Boulevard Wildlife Management Area (WMA) in Little Egg Harbor Township, New Jersey. The RUMFS complex was built in 1937 as a lifeboat station operated by the U.S. Coast Guard. Rutgers University established the Marine Field Station at this location in 1972. The WMA is a 5,346-acre state owned property located on the 4-mile-long peninsula that separates Great Bay and Little Egg Harbor at the mouth of the Mullica River where it meets the Little Egg Inlet to the Atlantic Ocean. It is a popular area for birding in all seasons and is also used by hunters and kayakers. The Boulevard is a narrow two-lane road that traverses this spit of land, offering vistas over the salt marsh on both sides of the road. Narrow, sandy beaches at the end of the peninsula provide additional opportunities for birding, beach combing and nature study.

The view to the southeast from this location looks off across a large bay that is fringed by stands of marsh grass at the shoreline that interweaves the water and land features and adds interest to the view. Low vegetated dunes and narrow bands of sand on the opposite side of the bay define the majority of the horizon line. The high-rise buildings of Atlantic City are also visible across the bay in the distance, but outside the selected field of view. The angle of the sun darkens the view, with the foreground grass appearing black and the water of the bay blue gray with dark ripples. The sky transitions from rosy pink on the left to rich blue on the right and is uninterrupted by overhead obstructions. Other than the distant buildings of Atlantic City, the only visible man-made features are some small buoys in the bay.

Rating panel members indicated that the existing view is dominated by the open water of the bay. Although this KOP would likely be used for bird watching within the WMA, the horizon line holds the viewer's attention. The distant landforms frame the edges of the view along the horizon where the water meets the sky. The lack of developed features and the broad expanse of open water and sky gives this view a serene, unspoiled character. Rating panel scores for the existing conditions photographs ranged from 11.7 to 16.0 (average score = 13.6). This score for this KOP indicates that view from this KOP is partially retained.

## Proposed Conditions

Scenic Quality: Modified  
 Rating Panel Score Average: 9.3  
 Rating Panel Score Range: 6.7 - 12.0  
 Impact Magnitude: 4.3 (Significant)

Viewshed analysis suggests that Project visibility could be widely available from the bay and adjacent open marsh. However, nearby areas with even modest woody vegetation will generally be well screened.

With the proposed Project in place, the view is dominated by a large and highly visible array of WTGs that extend across a large portion of the view to the southeast from this location. At this location only 48 degrees of relatively unobstructed ocean horizon is available with 312 degrees of the visible horizon obstructed by distant barrier islands or shrub/scrub vegetation of the WMA. The Project occupies approximately 43 degrees of the view (see Field of View Image, left). WTG visibility is enhanced by the relative proximity of the WTGs (11.9 miles) and their back-lighting by the early morning sun, which makes the WTGs appear dark against the sky. Rating panel members had a variable range of reactions to the impact resulting from the Project WTGs, with the VIA scores ranging from 6.7 to 12.0 (average score = 9.3). These scores indicate an average reduction of 4.3 points in comparison to the existing view suggesting the view becomes modified and significant visual impacts would occur as a result of the Projects. Individual rating panel members indicated reductions that ranged from 1.4 to 7.0 and stated that the presence of the WTGs will change the experience for visitors to the WMA. Although viewer attention may still be focused on viewing wildlife in the foreground, the WTGs introduce new man-made forms into this formerly wild setting. Due to their relative proximity to the viewer, the WTGs appear large and become focal points of view. The movement of the rotor blades will also attract viewer attention. Although the visibility and visual dominance of the WTGs is likely to be reduced under more hazy sky conditions, and later in the day when lighting conditions reduce back-lighting and contrast with the sky. One member noted that the presence of the WTGs on the horizon serves to visually connect the distant landforms on the horizon and enclose the view. WTGs on the left and right sides of the array have less color contrast with the sky, while those in the center appear stacked on top of each other, which increases their visual mass.

Panel members assigned the Project visibility an average VTL of 6 from this KOP. Considering the scale, compatibility, and spatial dominance factors that influenced this VTL score, panel ratings indicated that the WTGs present severe scale contrast with water resources and viewer activity. They also indicated that the WTGs are not compatible with the water resources and the viewer activity. Additionally, the WTGs were considered dominant over the water resources, viewer activity, and landform present in the view.

# LEHT02 Great Bay Boulevard WMA - Rutgers Field Station

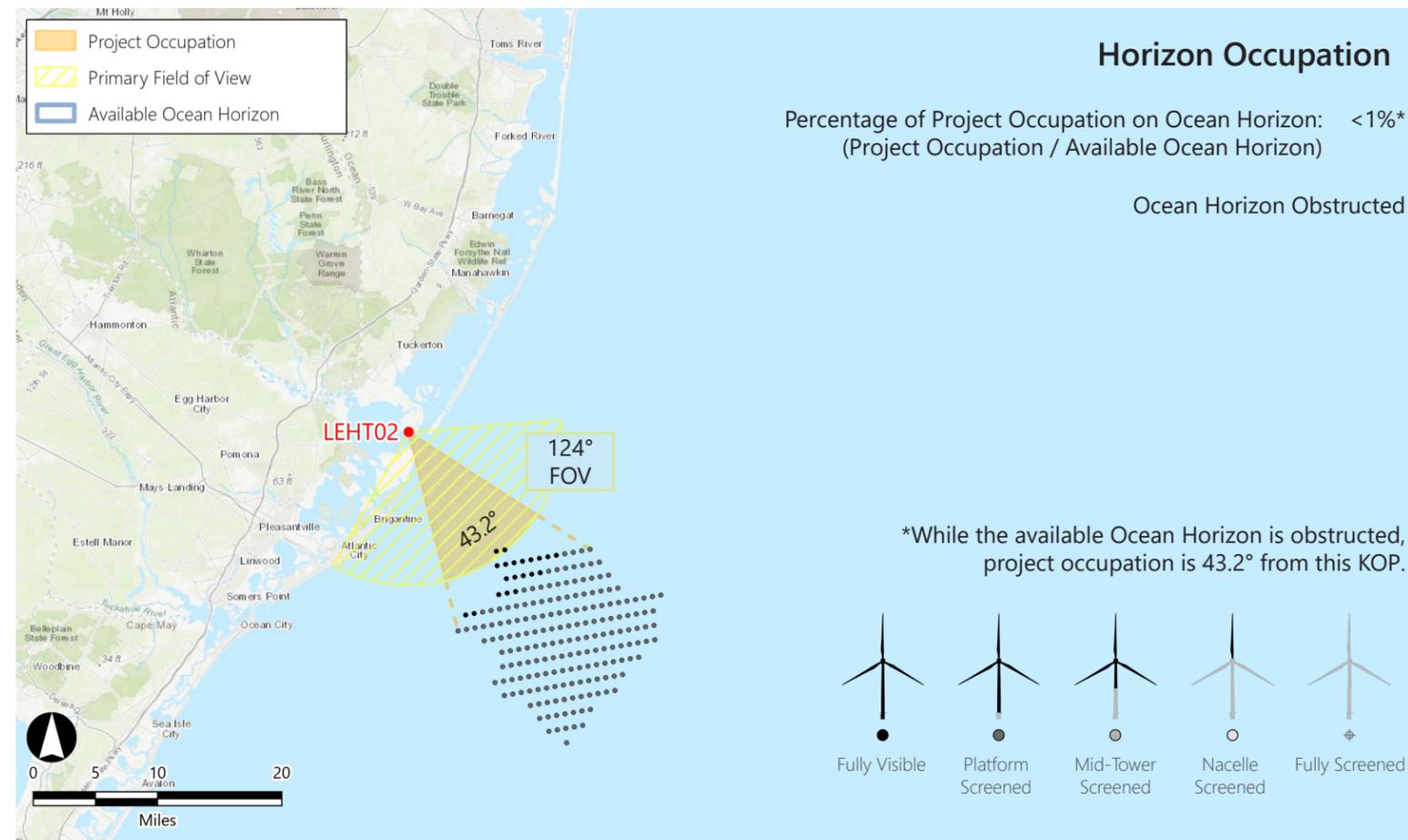
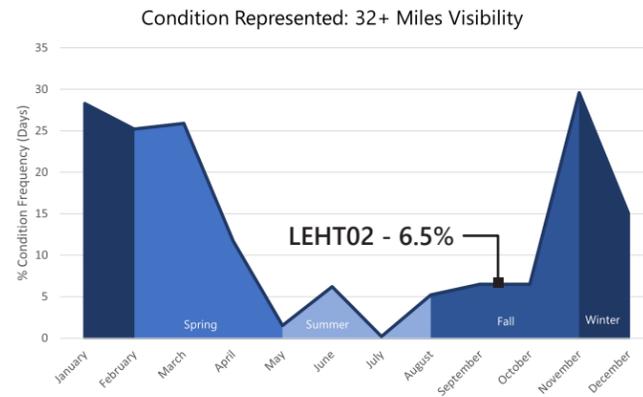
Little Egg Harbor Township, Ocean County, New Jersey

## KOP Information

Primary Field of View: Southeast  
 Distance to Closest WTG: 11.91 miles  
 Camera Height: 10.00 ft  
 User Groups: Residents, Tourists, Fishermen

## Atmospheric Perspective

The effect the atmosphere has on the appearance of an object as viewed from a distance.



## WTG Color Contrast

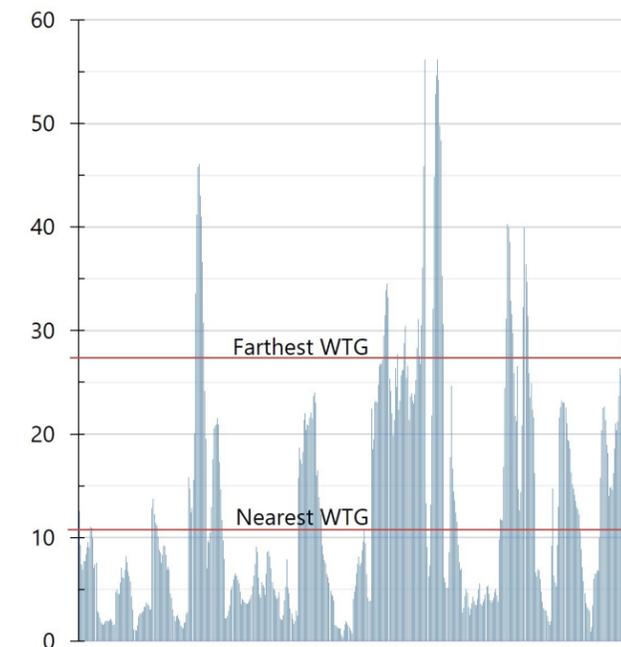
Color Contrast Rating: 3.18  
 Turbine (Dark Grey) / Background (Light Grey)

Lighting Condition: Back lit  
 Season: Fall  
 Sky Condition: Fair  
 Atmospheric Condition: > 10 Miles

## SIMILAR VIEWING PARAMETERS:

KOP BC02 Illustrates the project from 9.03 miles in the side lit condition. This provides an indication of how the turbines may appear from this KOP during midday conditions.

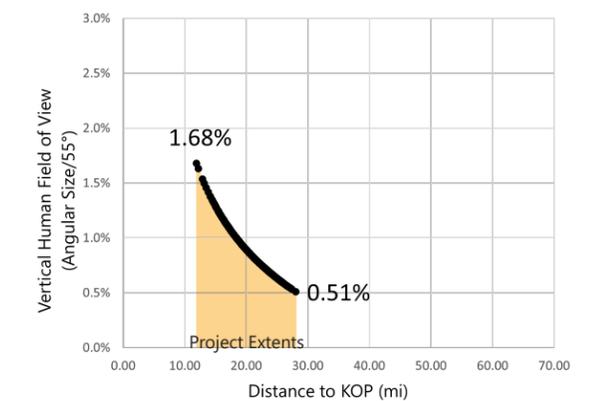
September, 2019 - Hourly Visibility Distance



## Vertical Occupation

Diagram showing a human silhouette with a 55° Field of View (FOV). Project Occupation is 0.92°.

Percentage of Human FOV: 1.68% (0.92° / 55°)  
 (Considering the nearest visible turbine)



Existing Conditions



Printed at 100% the resulting photosimulation size is 15 inches wide by 10 inches high. At this size and focal length, the photosimulation should be viewed from a distance of 21 inches.



This scale is designed to insure the photosimulation images are printed at the intended size.

Photosimulation



**Atlantic Shores Offshore Wind Project**

Outer Continental Shelf - New Jersey

Key Observation Point: LEHT02 - Great Bay Boulevard WMA/Rutgers Field Station

Attachment E: Photosimulations; Page 86 of 159

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Photosimulation



**Atlantic Shores Offshore Wind Project**

Outer Continental Shelf - New Jersey

Key Observation Point: LEHT02 - Great Bay Boulevard WMA/Rutgers Field Station

Attachment E: Photosimulations, Page 88 of 159

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