

Sunrise Wind - Appendix I: Seascape, Landscape, and Visual Impacts Assessment

ATTACHMENT I-4

Key Observation Points Information and Assessments

Table I-4.1 Summary of KOP Characteristics and Assessment Parameters (References: Sunrise Wind 2022 and BOEM 2021)

No.	VP ID	KOP Name	Location Town	Location County	Location State	Location Description	Viewer Type	Visually Sensitive Resource	KOP Location Landscape Similarity Zone	Character Unit
New York										
1	LI01	Camp Hero State Park Overlook	East Hampton	Suffolk	NY	Long Island	Resident, Tourist	State Park, State Area of Scenic Significance	Coastal Bluff	LCA/SCA
2.1	LI04	Montauk Point State Park	East Hampton	Suffolk	NY	Long Island	Local Residents, Tourists/ Vacationers, Fishing Community	State Park, Lighthouse, State Scenic Area, State Area of Scenic Significance	Maintained Recreation Area	LCA/SCA
Massachusetts										
2.2	LI04-N	Montauk Point State Park - night	East Hampton	Suffolk	NY	Long Island	Local Residents, Tourists/ Vacationers, Fishing Community	State Park, Lighthouse, State Scenic Area, State Area of Scenic Significance	Maintained Recreation Area	LCA/SCA
3	CI01	Cuttyhunk Island	Gosnold	Dukes	MA	Cuttyhunk Island	Local Residents, Tourists/Vacationers	State Scenic Area	Coastal Scrub/Shrub	LCA/SCA
4	MM01	Gooseberry Island	Westport	Bristol	MA	Gooseberry Island	Local Residents, Tourists/Vacationers	Multiple, Public beach, state reservation, state scenic area	Coastal Scrub/Shrub	LCA/SCA
5	MM04	Nobska Lighthouse	Falmouth	Barnstable	MA	Mainland	Local Residents, Tourists/Vacationers	Nobska Point Lighthouse	Maintained Recreation Area	LCA/SCA
6	MM06	Demarest Lloyd State Park	Dartmouth	Bristol	MA	Mainland	Local Residents, Tourists/Vacationers	Public beach, State Park, State Scenic Area	Shoreline Beach, Coastal Scrub/Shrub	LCA/SCA
7	MM07	Fort Taber District	New Bedford	Bristol	MA	Mainland	Local Residents, Tourists/Vacationers	Lighthouse, public beach	Maintained Recreation Area	LCA/SCA
8	MV02	Philbin Beach	Aquinnah	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	Public beach, State Scenic Area	Shoreline Beach	LCA/SCA
9.1	MV03	Lucy Vincent Beach	Chilmark	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	Public beach, State Scenic Area	Coastal Bluff	LCA/SCA
9.2	MV03-SS	Lucy Vincent Beach-sunset	Chilmark	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	Public beach, State Scenic Area	Coastal Bluff	LCA/SCA
10	MV05	Moshup Beach	Aquinnah	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	Public beaches, State Scenic Areas	Coastal Dunes	LCA/SCA

No.	VP ID	KOP Name	Location Town	Location County	Location State	Location Description	Viewer Type	Visually Sensitive Resource	KOP Location Landscape Similarity Zone	Character Unit
11.1	MV07	Aquinnah Overlook - day	Aquinnah	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	National Natural Landmark, State Scenic Areas, Historic Site, Lighthouse, Public beaches	Coastal Bluff	LCA/SCA
11.2	MV07-SS	Aquinnah Overlook - Sunset	Aquinnah	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	National Natural Landmark, State Scenic Areas, Historic Site, Lighthouse, Public beaches	Coastal Bluff	LCA/SCA
11.3	MV07-NI	Aquinnah Overlook - night	Aquinnah	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	National Natural Landmark, State Scenic Areas, Historic Site, Lighthouse, Public beaches	Coastal Bluff	LCA/SCA
12.1	MV09	Gay Head Lighthouse	Aquinnah	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	National Natural Landmark, State Scenic Areas, Historic Site, Lighthouse, Public beaches	Maintained Recreation Area	LCA/SCA
12.2	MV09-SS	Gay Head Lighthouse - sunset								LCA/SCA
13	MV10	South Beach State Park	Edgartown	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	State Park	Shoreline Beach	SCA
14	MV11	Wasque Point	Edgartown	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	Public beach	Shoreline Beach	SCA
15.1	MV12	Peaked Hill Reservation	Chilmark	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	Tribal Significance	Forest	LCA
15.2	MV12-SS	Peaked Hill-sunset	Chilmark	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	Tribal Significance	Forest	LCA
16	MV13	Edwin D Vanderhoop	Aquinnah	Dukes	MA	Martha's Vineyard	Local Residents, Tourists/Vacationers	National Natural Landmark, State Scenic Areas, Lighthouse	Coastal Bluff	LCA/SCA

No.	VP ID	KOP Name	Location Town	Location County	Location State	Location Description	Viewer Type	Visually Sensitive Resource	KOP Location Landscape Similarity Zone	Character Unit
17.1	NI10	Madaket Beach	Nantucket	Nantucket	MA	Nantucket	Local Residents, Tourists/Vacationers	Public beach, Historic District	Shoreline Beach	LCA/SCA
17.2	NI10-CL	Madaket Beach-clear	Nantucket	Nantucket	MA	Nantucket	Local Residents, Tourists/Vacationers	Public beach, Historic District	Shoreline Beach	LCA/SCA
18	NL01	Nomans Land Island - sunset	Chilmark	Dukes	MA	Nomans Land Island	No Access	National Wildlife Refuge	Coastal Bluff	LCA/SCA
Rhode Island										
19.1	AI01	Brenton Point State Park	Newport	Newport	RI	Aquidneck Island	Local Residents, Tourists/Vacationers, Fishing Community	State Park, State Scenic Area, Historic District, State boat access	Maintained Recreation Area	LCA
19.2	AI01-NI	Brenton Point State Park - night	Newport	Newport	RI	Aquidneck Island	Local Residents, Tourists/Vacationers, Fishing Community	State Park, State Scenic Area, Historic District, State boat access	Maintained Recreation Area	LCA/SCA
20	AI03	Newport Cliff Walk	Newport	Newport	RI	Aquidneck Island	Local Residents, Tourists/Vacationers	National Recreation Trail, State Scenic Area, Historic District	Shoreline Residential, Maintained Recreation Area	LCA/SCA
21	AI05	Sachuest Point National Wildlife Refuge	Middletown	Newport	RI	Aquidneck Island	Local Residents, Tourists/Vacationers	National Wildlife Refuge, Scenic Area	Coastal Scrub/Shrub	LCA/SCA
22	AI06	Sachuest Beach (Second)	Middletown	Newport	RI	Aquidneck Island	Local Residents, Tourists/Vacationers	Scenic Highway, public beach, bird sanctuary	Shoreline Beach	LCA/SCA
23	AI07	Hanging Rock	Middletown	Newport	RI	Aquidneck Island	Local Residents, Tourists/Vacationers	Scenic Highway, public beach, bird sanctuary	Coastal Scrub/Shrub	LCA/SCA
24	AI09	Easton's Beach	Newport	Newport	RI	Aquidneck Island	Local Residents, Tourists/Vacationers	National Recreation Trail, Historic District, public beach	Shoreline Beach	SCA
25	BI02	Great Salt Pond	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	National Wildlife Refuge, boat/fish access, public beach, State Scenic Area, ferry route	Commercial Waterfront	LCA/SCA

No.	VP ID	KOP Name	Location Town	Location County	Location State	Location Description	Viewer Type	Visually Sensitive Resource	KOP Location Landscape Similarity Zone	Character Unit
26.1	BI04	Southeast Lighthouse - day	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	Public beach, State Scenic area, National historic landmark	Maintained Recreation Area, Coastal Bluff	LCA/SCA
26.2	BI04-SR	Southeast Lighthouse - sunrise	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	Public beach, State Scenic area, National historic landmark	Maintained Recreation Area, Coastal Bluff	LCA/SCA
26.3	BI04-NI	Southeast Lighthouse-night	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	Public beach, State Scenic area, National historic landmark	Maintained Recreation Area, Coastal Bluff	LCA/SCA
27	BI06	New Shoreham Beach	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	Boat/fish access, lodges, and cottages	Shoreline Beach	SCA
28	BI08	Fred Benson Beach	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	State scenic areas, public beach, roadway	Shoreline Beach	SCA
29	BI12	Clayhead Trail	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	Trail, roadway	Coastal Bluff	LCA/SCA
30	BI16	Mohegan Bluffs	New Shoreham	Washington	RI	Block Island	Local Residents, Tourists/Vacationers	State Scenic Areas, Public beach, state recreation land, boat/fish access	Shoreline Beach, Coastal Bluff	LCA/SCA
31	C01	Beavertail Lighthouse	Jamestown	Newport	RI	Conanicut Island	Local Residents, Tourists/Vacationers	State park, boat/fish access, Scenic Area, Lighthouse	Maintained Recreation Area	LCA/SCA
32	RI01	Watch Hill Lighthouse	Westerly	Washington	RI	Mainland	Local Residents, Tourists/Vacationers	State Scenic Area, Historic District, Lighthouse	Maintained Recreation Area, Shoreline Residential	LCA/SCA
33	RI02	Weekapaug Breachway	Westerly	Washington	RI	Mainland	Local Residents, Tourists/Vacationers	State Scenic area, State boat/fish access, National Wildlife Refuge, public beach	Shoreline Beach	SCA

No.	VP ID	KOP Name	Location Town	Location County	Location State	Location Description	Viewer Type	Visually Sensitive Resource	KOP Location Landscape Similarity Zone	Character Unit
34	RI03	Point Judith Lighthouse	Narragansett	Washington	RI	Mainland	Local Residents, Tourists/Vacationers	State Scenic Area, Wildlife Management Area, Lighthouse	Maintained Recreation Area	LCA/SCA
35	RI04	South Shore Beach	Little Compton	Newport	RI	Mainland	Local Residents, Tourists/Vacationers	State Scenic area, public beach	Shoreline Beach, Shoreline Residential	LCA/SCA
36	RI06	Trustom Pond NWR	South Kingstown	Washington	RI	Mainland	Local Residents, Tourists/Vacationers	National Wildlife Refuge, public beach, State Scenic Area	Salt Pond/Tidal Marsh	LCA/SCA
37	RI08	Scarborough Beach	Narragansett	Washington	RI	Mainland	Local Residents, Tourists/Vacationers	National Wildlife Refuge, public beach, State lands	Shoreline Beach	SCA
38	RI09	Narragansett Beach	Narragansett	Washington	RI	Mainland	Local Residents, Tourists/Vacationers	National Wildlife Refuge, public beach, State Scenic Area	Shoreline Beach	SCA
39	RI11	Matunuck Beach	South Kingstown	Washington	RI	Mainland	Local Residents, Tourists/Vacationers	National Wildlife Refuge, public beach	Developed Waterfront, Shoreline Beach	LCA/SCA
40	RI12	Ninigret National Wildlife Refuge	Charlestown	Washington	RI	Mainland	Local Residents, Tourists/Vacationers, Fishing community	National Wildlife Refuges, state lands	Shoreline Beach	SCA

Table I-4.2 Summary of KOP Characteristics and Assessment Parameters (References: Sunrise Wind 2022 and BOEM 2021)

No.	VP ID	KOP Name	Distance to nearest Turbine (miles)	Feet/ Percent of Turbine Visible	Blade Orientation View	Horizontal field-of-view occupied (degrees)	Horizontal field-of-view occupied (percent)	Vertical field of view occupied (degrees)	Vertical field of view occupied (percent)	Sensitivity Factor Rating ¹	Magnitude Factor Rating ²	Visibility Threshold	Proposed Action and Alternatives Estimated Impact Level
1	LI01	Camp Hero State Park Overlook	31.2	Full tower and platforms	Front, slightly angled	15	12%	0.27	1.00%	Medium	Small	2	Negligible
2.1	LI04	Montauk Point State Park	30.6	Mid tower	Front, slightly angled	15	16%	0.25	0.90%	Medium	Small	2	Minor
2.2	LI04-N	Montauk Point State Park - night	30.6	Mid tower	Front, slightly angled	15	16%	0.25	0.90%	Medium	Small	3	Minor
3	CI01	Cuttyhunk Island	25.8	Full tower	Front	44	33%	0.39	1.50%	Medium	Medium	4	Moderate
4	MM01	Gooseberry Island	30.7	Mid tower	Front	40	43%	0.22	0.40%	Medium	Small	2	Minor
5	MM04	Nobska Lighthouse	34.7	Limited mid tower	Angled	29	7%	0.01	0.02%	Medium	Small	1	Negligible
6	MM06	Demarest Lloyd State Park	33.1	Limited mid tower	Front	37	100%	0.15	0.30%	Medium	Small	2	Negligible
7	MM07	Fort Taber District	37.8	Above Hub	Front	32	100%	0.09	0.20%	Medium	Small	1	Negligible
8	MV02	Philbin Beach	21.0	Tower /no platform	Angled	46	34%	0.41	0.70%	Medium	Medium	4	Moderate
9.1	MV03	Lucy Vincent Beach	22.0	Tower /no platform	Angled	39	16%	0.38	0.70%	Medium	Medium	4	Moderate
9.2	MV03-SS	Lucy Vincent Beach-sunset	22.0	Tower /no platform	Angled	39	16%	0.38	0.70%	Medium	Medium	5	Moderate

No.	VP ID	KOP Name	Distance to nearest Turbine (miles)	Feet/ Percent of Turbine Visible	Blade Orientation View	Horizontal field-of-view occupied (degrees)	Horizontal field-of-view occupied (percent)	Vertical field of view occupied (degrees)	Vertical field of view occupied (percent)	Sensitivity Factor Rating ¹	Magnitude Factor Rating ²	Visibility Threshold	Proposed Action and Alternatives Estimated Impact Level
10	MV05	Moshup Beach	21.2	Tower /no platform	Angled	46	35%	0.43	0.80%	High	Large	5	Major
11.1	MV07	Aquinnah Overlook - day	21.5	Full tower and platforms	Slightly angled	46	36%	0.47	0.90%	High	Large	5	Moderate
11.2	MV07-SS	Aquinnah Overlook - Sunset	21.5	Full tower and platforms	Slightly angled	46	36%	0.47	0.90%	High	Large	5	Major
11.3	MV07-NI	Aquinnah Overlook - night	21.5	Full tower and platforms	Slightly angled	46	36%	0.47	0.90%	High	Large	5	Moderate
12.1	MV09	Gay Head Lighthouse	21.6	Full tower and platforms	Slightly angled	46	36%	0.47	0.90%	Medium	Medium	3	Moderate
12.2	MV09-SS	Gay Head Lighthouse - sunset		Full tower and platforms	Slightly angled	46	36%	0.47	0.90%	High	Large	5	Major
13	MV10	South Beach State Park	27.1	Mid tower	Angled	27	18%	0.26	0.50%	Medium	Medium	3	Minor
14	MV11	Wasque Point	29.4	Mid tower	Angled	20	14%	0.24	0.40%	Medium	Small	3	Minor
15.1	MV12	Peaked Hill Reservation	22.9	Full Tower and platform	Slightly Angled	39	29%	0.46	0.80%	Medium	Small	3	Moderate
15.2	MV12-SS	Peaked Hill-sunset	22.9	Full Tower	Slightly Angled	39	29%	0.46	0.80%	Medium	Medium	4	Moderate

No.	VP ID	KOP Name	Distance to nearest Turbine (miles)	Feet/ Percent of Turbine Visible	Blade Orientation View	Horizontal field-of-view occupied (degrees)	Horizontal field-of-view occupied (percent)	Vertical field of view occupied (degrees)	Vertical field of view occupied (percent)	Sensitivity Factor Rating ¹	Magnitude Factor Rating ²	Visibility Threshold	Proposed Action and Alternatives Estimated Impact Level
				and platform									
16	MV13	Edwin D Vanderhoop	21.5	Full Tower and platform	Slightly Angled	46	49%	0.47	0.90%	Medium	Medium	4	Moderate
17.1	NI10	Madaket Beach	37	Above Hub	Angled	10	6%	0.10	0.20%	Medium	Small	1	Negligible
17.2	NI10-CL	Madaket Beach-clear	37	Above Hub	Angled	10	6%	0.10	0.20%	Medium	Small	1	Negligible
18	NL01	Nomans Land Island - sunset	15.6	Full Tower and platform	Slightly Angled	55	29%	0.66	1.20%	Medium	Medium	4	Moderate
19.1	AI01	Brenton Point State Park	28.9	Mid tower	Slightly Angled	36	29%	0.27	0.50%	Medium	Small	1	Negligible
19.2	AI01-NI	Brenton Point State Park - night	28.9	Mid tower	Slightly Angled	36	29%	0.27	0.50%	Medium	Small	2	Minor
20	AI03	Newport Cliff Walk	28.6	Mid tower	Slightly Angled	37	27%	0.23	0.40%	Medium	Small	2	Minor
21	AI05	Sachuest Point National Wildlife Refuge	29.8	Mid tower	Slightly Angled	38%	31%	0.23	0.40%	Medium	Small	2	Minor
22	AI06	Sachuest Beach (Second)	30.9	Mid tower	Slightly Angled	37	37%	0.20	0.40%	Medium	Small	1	Negligible
23	AI07	Hanging Rock	31.1	Mid tower	Slightly Angled	36	39%	0.21	0.40%	Medium	Small	2	Negligible

No.	VP ID	KOP Name	Distance to nearest Turbine (miles)	Feet/ Percent of Turbine Visible	Blade Orientation View	Horizontal field-of-view occupied (degrees)	Horizontal field-of-view occupied (percent)	Vertical field of view occupied (degrees)	Vertical field of view occupied (percent)	Sensitivity Factor Rating ¹	Magnitude Factor Rating ²	Visibility Threshold	Proposed Action and Alternatives Estimated Impact Level
24	AI09	Easton's Beach	30.9	Mid tower	Slightly Angled	36	55%	0.21	0.40%	Medium	Small	1	Negligible
25	BI02	Great Salt Pond	20.1	Full tower and platform	Angled	29	0%	0.44	0.80%	Medium	Small	1	Negligible
26.1	BI04	Southeast Lighthouse - day	16.9	Full tower and platform	Angled	30	15%	0.61	1.10%	Medium	Medium	4	Moderate
26.2	BI04-SR	Southeast Lighthouse - sunrise	16.9	Full tower and platform	Angled	30	15%	0.61	1.10%	High	Large	6	Major
26.3	BI04-NI	Southeast Lighthouse - night	16.9	Full tower and platform	Angled	30	15%	0.61	1.10%	Medium	Medium	4	Moderate
27	BI06	New Shoreham Beach	17.8	Full tower and platform	Angled	28	19%	0.52	0.90%	Medium	Medium	4	Moderate
28	BI08	Fred Benson Beach	19.0	Full tower, minimal platform	Angled	31	26%	0.53	1.00%	Medium	Small	3	Minor
29	BI12	Clayhead Trail	19.5	Full tower and platform	Angled	32	23%	0.5	0.90%	Medium	Medium	4	Moderate
30	BI16	Mohegan Bluffs	17.2	Full tower	Angled	30	18%	0.56	1.00%	Medium	Medium	4	Moderate

No.	VP ID	KOP Name	Distance to nearest Turbine (miles)	Feet/ Percent of Turbine Visible	Blade Orientation View	Horizontal field-of-view occupied (degrees)	Horizontal field-of-view occupied (percent)	Vertical field of view occupied (degrees)	Vertical field of view occupied (percent)	Sensitivity Factor Rating ¹	Magnitude Factor Rating ²	Visibility Threshold	Proposed Action and Alternatives Estimated Impact Level
				and platform									
31	C01	Beavertail Lighthouse	29.5	Mid tower	Slightly Angled	35	30%	0.24	0.40%	Medium	Small	1	Negligible
32	RI01	Watch Hill Lighthouse	36.0	Minimal mid tower, above hub	Angled	13	0%	0.05	0.90%	Medium	Small	1	Negligible
33	RI02	Weekapaug Breachway	33.0	Mid tower	Angled	17	6%	0.16	0.30%	Medium	Small	1	Negligible
34	RI03	Point Judith Lighthouse	25.7	Full tower	Slightly Angled	35	20%	0.29	0.50%	Medium	Medium	4	Moderate
35	RI04	South Shore Beach	31.6	Mid tower	Front	39	52%	18	0.30%	Medium	Small	2	Minor
36	RI06	Trustom Pond NWR	29.0	Mid tower	Slightly angled	27	26%	0.2	0.40%	Medium	Small	1	Negligible
37	RI08	Scarborough Beach	27.1	Mid tower	Slightly angled	34	29%	0.27	0.50%	Medium	Small	2	Minor
38	RI09	Narragansett Beach	29.7	Mid tower	Slightly angled	33	34%	0.22	0.40%	Medium	Small	1	Negligible
39	RI11	Matunuck Beach	28.0	Mid tower	Slightly angled	31	25%	0.27	0.50%	Medium	Small	3	Minor
40	RI12	Ninigret National Wildlife Refuge	30.5	Mid tower	Angled	21	0%	0.13	0.20%	Medium	Small	1	Negligible

¹ Per BOEM 2021, sensitivity factors consider susceptibility to change, and value and user sensitivity, see Table 1-4.3.

² Per BOEM 2021, magnitude factors consider size, scale, geographic extent, and duration/reversibility, see Table 1-4.3.

Table I-4.3 Summary of VIA KOP Assessment Parameters

	Moderate/Negligible Impact	Moderate Impact	Major Impact
Sensitivity Factor	Rating - landscape susceptibility to change - low with most capacity, high with least capacity		
Susceptibility to Change	Low	Medium	High
Shoreline/Landform	Highly complex shoreline or landform.	Coastline or landform of moderate complexity	Simple/Straight Shoreline
Ocean View/Vistas	Little or no view of the ocean or little or no vista.	Moderate views of the ocean or vista.	Panoramic/expansive views of the ocean, greater than 180-degree vista.
Distinctiveness/Focal Points	Focal points or features in the viewshed that are either natural or man-made and are Absent or very common, of little or no significance, and do not contribute to the character of the seascape or may detract from it.	Focal points or features in the viewshed that are either natural or man-made and are: Somewhat commonly found, of local importance/value, or make a minor contribution to the character of the seascape.	Features/focal points are very unusual, unique or very rare, of national or statewide importance/value, or are key character defining features or very distinctive.
Natural/Development Patterns	Few or absence of natural areas. Heavily developed areas. Man-made structures very dominant in the view.	Moderately sized natural area of regional significance. May include beach and dunes. Moderate scale buildings and infrastructure visible but not dominant in the view.	Remote or isolated natural area of national/statewide significance. Man-made structures or features inconspicuous or absent. Can contain high quality-built environment, include historic properties or districts on the NRHP.

Table I-4.3 Summary of VIA KOP Assessment Parameters (continued)

	Minor/Negligible Impact	Moderate Impact	Major Impact
	Rating - user sensitivity - low least sensitive to high most sensitive		
Value/User Sensitivity	Low	Medium	High
Scenic Resource Value	No formal recognition or designation as a scenic resource. No public amenity or recreational resource.	Site with local or regional recognition/ownership. Such as local park, central downtown, community resource venue, local historic site, local conservation land.	Site with national recognition / ownership: e.g., National Park, National Wildlife Refuge. Sites on the NHRP that derive significance from landscape setting.
Primary Use/Use Level	Very low resident, visitor and/or recreational usage. Heavy commercial or industrial use.	Moderate resident, visitor and/or recreational usage or some commercial usage.	Very high resident, visitor and/or recreational usage.
Visitor Expectations	Crowded with people, noisy, busy with continuous distractions, many lights.	Other people are noticeably present, some noise, distractions are present.	Minimal presence of other people or infrastructure, very quiet, little distraction, night sky visible.
Value of Ocean View	No ocean view due to site location or intervening structures or vegetation.	Users are in the vicinity of the beachfront, but the ocean view may be an enhancement but not essential to the activity. May include shoppers, amusement park goers, golfers	Uses are dependent on ocean or strongly enhanced by water view. May include beachcombing, bird watching, boating, surfing, swimming, sightseeing.
Duration of View	At viewpoint for a few seconds. May include brief glimpse of the viewpoint from car or boat.	At viewpoint for 30 minutes to 2 hours. May include fishing, restaurant dining, boardwalk activities, walking, or biking.	At viewpoint for >4 hours. May include beach going, recreational fishing.

Table I-4.3 Summary of VIA KOP Assessment Parameters (continued)

	Minor/Negligible Impact	Moderate Impact	Major Impact
Magnitude Factor	Rating - size/scale - small least impact to large most impact		
Rating	Small	Medium	Large
Distance to Nearest Turbine	25+ miles from observer	Over 15 to 25 miles from observer	0 to 15 miles from observer
Turbine Extent Viewable	None or just tip of blades	Mid-tower hub/nacelle viewable	Full Turbine
Visibility Threshold	Visibility Rating 1-2	Visibility Rating 3-4	Visibility Rating 5-6
Geographic Extent	Rating - geographic extent small least impact to large greatest impact		
Rating	Small	Medium	Large
Vertical Scale	Closest turbines appear to be less than 1/4 inch above the horizon.	Closest turbines appear to be approximately 1/4 inch but less than 1/2 inch above the horizon.	Closest turbines appear to be 1/2 of an inch or greater above the horizon.
Horizontal Scale	Visible turbines are seen over less than 10% of the available ocean horizon.	Visible turbines are seen over 10% to <50% of the available ocean horizon.	Visible turbines are seen over greater than 50% of the available ocean horizon.
Duration/Reversibility	Rating - duration/reversibility - good least impact to poor greatest impact		
Rating	Good	Fair	Poor
Duration	Short-duration - less than 5 years	Long term - 5 to 30 years	Permanent
Reversibility	Fully reversible	Partially reversible	Non- reversible

References:

BOEM 2021-032 Assessment of Seascape, Landscape, and Visual Impacts of Offshore Wind Energy Developments on the Outer Continental Shelf of the United States.

Sullivan, et al. 2013 Offshore Wind Turbine Visibility and Visual Impact Threshold Distances.

Cape Cod Commission. 2012 Technical Bulletin #12-001 Visual Impact Assessment Methodology for Offshore Development.

TJD&A 2021 Ocean Wind Visual Impact Assessment COP Appendix L.

Visibility Threshold Rating Description

Source: Sullivan, et al. 2013. Offshore Wind Turbine Visibility and Visual Impact Threshold Distances.

Visibility level 1. Visible only after extended, close viewing; otherwise invisible. An object/phenomenon that is near the extreme limit of visibility. It could not be seen by a person who was unaware of it in advance and looking for it. Even under those circumstances, the object can be seen only after looking at it closely for an extended period.

Visibility level 2. Visible when scanning in the general direction of the study subject; otherwise likely to be missed by casual observers. An object/phenomenon that is very small and/or faint, but when the observer is scanning the horizon or looking more closely at an area, can be detected without extended viewing. It could sometimes be noticed by casual observers; however, most people would not notice it without some active looking.

Visibility level 3. Visible after a brief glance in the general direction of the study subject and unlikely to be missed by casual observers. An object/phenomenon that can be easily detected after a brief look and would be visible to most casual observers, but without sufficient size or contrast to compete with major landscape/seascape elements.

Visibility level 4. Plainly visible, so could not be missed by casual observers, but does not strongly attract visual attention or dominate the view because of its apparent size, for views in the general direction of the study subject. An object/phenomenon that is obvious and with sufficient size or contrast to compete with other landscape/seascape elements, but with insufficient visual contrast to strongly attract visual attention and insufficient size to occupy most of an observer's visual field.

Visibility level 5. Strongly attracts the visual attention of views in the general direction of the study subject. Attention may be drawn by the strong contrast in form, line, color, or texture, luminance, or motion. An object/phenomenon that is not large but contrasts with the surrounding landscape elements so strongly that it is a major focus of visual attention, drawing viewer attention immediately and tending to hold that attention. In addition to strong contrasts in form, line, color, and texture, bright light sources ~such as lighting and reflections! and moving objects associated with the study subject may contribute substantially to drawing viewer attention. The visual prominence of the study subject interferes noticeably with views of nearby landscape/seascape elements.

Visibility level 6. Dominates the view because the study subject fills most of the visual field for views in its general direction. Strong contrasts in form, line, color, texture, luminance, or motion may contribute to view dominance. 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° 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.