MAINE AUDUBON

Committee on Environment & Natural Resources
% Legislative Information Office
100 State House Station
Augusta, ME 04333

March 18, 2024

RE: LD 2266, An Act Regarding Offshore Wind Terminals Located in Coastal Sand Dune Systems

Dear Sen. Brenner, Rep. Gramlich, and Members of the ENR Committee:

My name is Francesca "Ches" Gundrum and I am Maine Audubon's Director of Advocacy. Maine Audubon is a wildlife conservation non-profit – we fulfill our mission to "conserve Maine's wildlife and wildlife habitat" by engaging people of all ages in nature through a science-based approach to education, conservation, and advocacy. On behalf of Maine Audubon and our 30,000 members, supporters, and volunteers, thank you for the opportunity to submit testimony neither for nor against LD 2266, *An Act Regarding Offshore Wind Terminals Located in Coastal Sand Dune Systems.*

Maine Audubon has been fighting to protect Maine's wildlife and wildlife habitat for nearly two centuries, and climate change may be our most difficult battle yet. The impacts are being measured in every corner of Maine, affecting our wildlife, our habitats, and our lives. In order for Maine to meet our ambitious and necessary greenhouse gas emission reduction targets, we must significantly increase renewable energy development. **Floating offshore wind presents our state with an incredible opportunity to harness vast amounts of clean energy locally, and, as our wildlife biologists can attest, with fewer environmental impacts than other sources of energy.**

But as with any kind of land use change, new renewable energy development could displace wildlife habitat and otherwise unduly impact Maine's natural resources. We must be aware of the potential environmental impacts of development in order to mitigate or avoid them. We are now aware of a clear and direct impact of the potential development of an offshore wind port on Sears Island in Searsport: a coastal sand dune system on the western side of the island, in the middle of a Transportation parcel owned by the Department of Transportation (DOT). There are two sand dunes located on the portion of Sears Island owned by the DOT. One is a small dune that formed behind a jetty after it was built in the 1980s (see attached Map #1 from the Maine Geological Survey) and the other is on the north end of the island near the causeway (see attached Map #2 from the Maine Geological Survey). The dune by the jetty would be directly impacted by the development of an offshore wind port.

Coastal sand dunes are one of the rarest habitats in Maine, making up just about 2% of the state's coastline. Sand dunes, along with beaches and salt marshes, provide invaluable ecosystem services and economic benefits. Coastal sand dunes protect buildings and infrastructure from waves and flooding. Closest to Maine Audubon's mission, sand dunes contain critical wildlife habitat. Coastal sand dune systems elsewhere on the Maine coast protect Endangered Least Terns and Piping Plovers that rely on this habitat to nest and rear their young. Maine Audubon has been a strong and vocal defender of Maine's coastal sand dune rules since their establishment, and this situation represents the only potential state-sanctioned destruction of a coastal sand dune system in our current organizational memory.

The state has made it clear with LD 2266 that avoiding and minimizing impacts to this dune system is not an option.. Given the significance and rarity of beach and dune systems in the state, the protections afforded to these systems under the Natural Resources Protection Act (NRPA), and Maine Audubon's long history of defending the sand dune rules, we cannot support the original bill. If an exemption is granted, then full compensation should be required.

There are several changes we would like to see added before the committee considers the bill. First, we strongly support including a specific description of the location of the identified dune to ensure this exemption cannot be applied to any other sand dune system in the state. Second, we suggest including some or all of the following options to compensate for the loss of this rare system. These include:

1) **Permanently protect the other coastal sand dune system at the northwest end of the island that is within the Transportation parcel.**

Direct the DOT to transfer a portion of their parcel to the adjacent conservation land. This will help protect a nearby dune system; help allow for active movement of the sand beach, frontal dune, and back dune as the system changes over time; and help provide an upland buffer to the site that can add to the public enjoyment of Sears Island (see attached Map #3 from Maine Audubon). Additionally, the state should pursue permanent protection of the remaining undeveloped lands should the potential development of an offshore wind port on Sears Island advance.

2) **Enhance other beach/dune systems in the midcoast region.**

Working with federal regulators, advocating for any uncontaminated dredging material from the region to be deposited onto nearby beaches should be pursued by the state. This will help nourish midcoast beaches and build stronger dune systems – enhancing protection from storms and potentially providing quality habitat for wildlife.

3) **Identify opportunities to fund the protection, enhancement, and restoration of beaches and sand dunes.**

Sand dunes, along with beaches and salt marshes, provide invaluable ecosystem services and economic benefits. Coastal beaches and sand dunes protect buildings and infrastructure from waves and flooding and contain habitat for migratory shorebirds and endangered and threatened species. Establishing and seeding a Coastal Sand Dune Restoration and Protection Fund, modeled after the Lake Water Quality and Restoration Fund, would help kickstart a novel opportunity to increase technical assistance, research, and public education opportunities for coastal restoration and resilience projects targeting the enhancement of this unique protected natural resource.

Additionally, we suggest exploring ways to prioritize Community Resilience Partnership applications that preserve coastal sand dune systems and nature-based protections for coastlines.

4) **Bolstering sand dune rules education opportunities.**

Based on data collected from 1948-2011 at more than 3,000 weather stations, it is estimated that Maine will see a 74% increase in the frequency of extreme storm events and a 23% increase in size in the largest annual storms. Recent winter storms have only highlighted further the importance of better protecting Maine's coastal sand dune systems. Given new laws which allow for additional flexibility within the NRPA to address recent storm damage (LD 2030), update an out-of-date reference in DEP's Chapter 355 – Coastal Sand Dune Rules to a series of 2001 aerial photographs of sand dunes and replace it with a reference to the most recent 2023 Coastal Sand Dune Maps produced by the Maine Geological Survey (LD 2168), and the recent allowance of biodegradable stabilization materials in dune restoration projects (LD 478), there is a real need for education and outreach associated with sand dune rules. Coastal landowners need better information about the potential threats from these storms and how best to prepare for and clean up after storms – including why they are becoming more frequent and severe, and what types of actions and natural materials can be used to minimize damage. Municipal officials also need information and training on how to abide by the sand dune rules along changing coastlines, and how best to help landowners. An education fund to assist both audiences would be highly beneficial. At a minimum, direct outreach to coastal communities and updating publicly available existing sand dune rules guidelines should be pursued – including nature-based solutions to coastal sand dune enhancement and restoration.

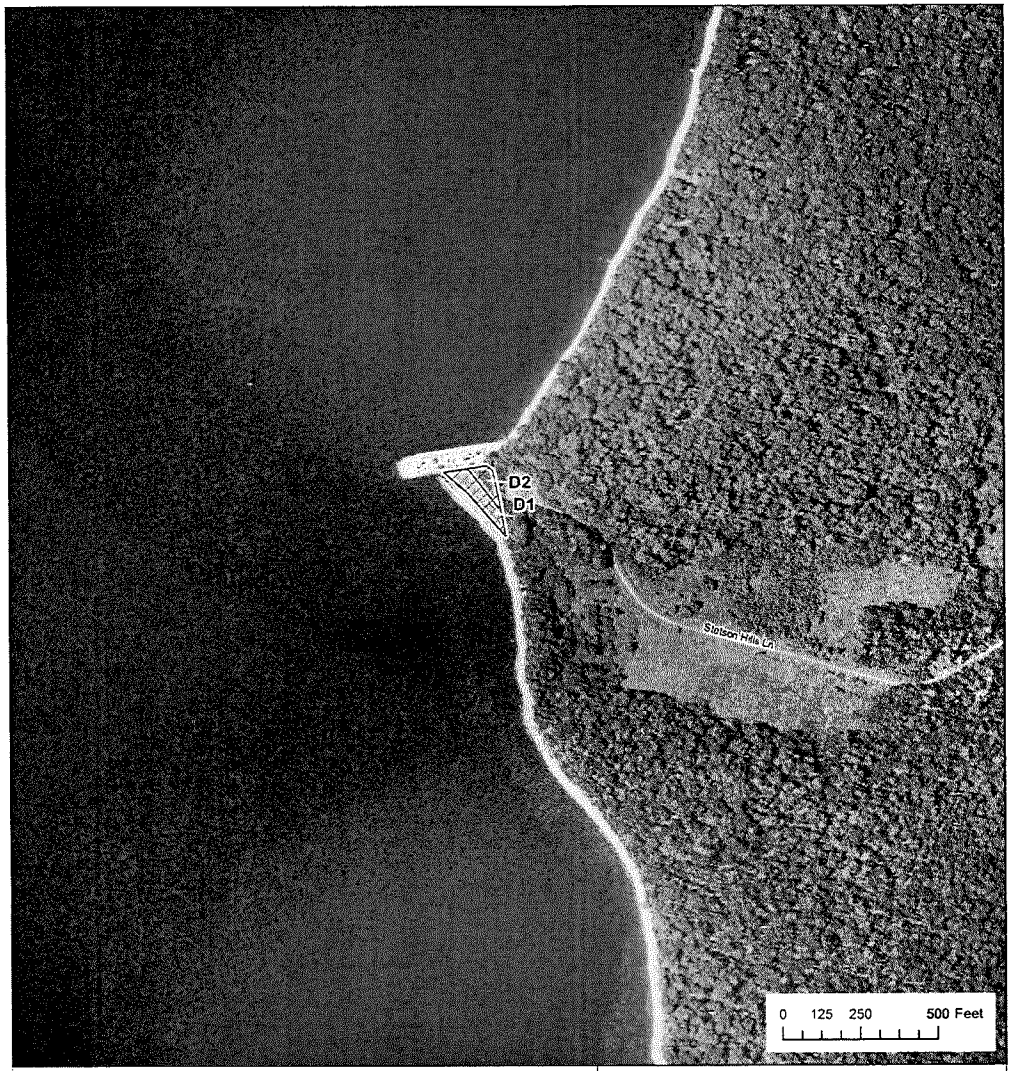
There are many things we can do to better support coastal sand dune systems on Sears Island and along the Maine coast, as we have suggested above. However, we would like to make it clear that compensation included in an amended bill would be specific to this dune system alone, and would be in addition to future mitigation and compensation that may occur as part of future permitting processes on either Sears Island or Mack Point, the other potential location suggested for an offshore wind port in Searsport.

In line with our principles to promote vital renewable energy infrastructure while minimizing the impacts to our natural resources, we look forward to the inclusion of these commitments in a proposed amendment. However, wherever this Committee falls on this bill, it is clear that this is absolutely not the way we prefer to proceed with the potential development of an offshore wind port on Sears Island or any other site in Maine. We continue to expect and insist that the environmental impacts of all available port sites will be subject to a strict alternatives analysis in connection with the required state and federal permitting processes and that there will be ample opportunities for all interested parties to weigh in on the advantages and disadvantages of different sites. The permitting processes also represents the very best way to ensure that the adverse impacts to wildlife habitat and the overall environment are avoided to the maximum extent possible, minimized where not avoidable, and that mitigation and compensation are provided to offset any significant but unavoidable impacts.

We welcome opportunities to engage with the sponsor, state agencies, and stakeholders to help broaden the bill as drafted to adequately address proportional compensation measures. Thank you for your consideration.

Sincerely,

Francesca "Ches" Gundrum | Director of Advocacy



Maine Geological Survey

Address: 93 State House Station, Augusta, Maine 04333
Telephone: 207-287-2801 **E-mail:** mgs@maine.gov
Home page: www.maine.gov/dacf/mgs/

Coastal Sand Dune Geology

Jetty Road, Searsport, Maine

by Peter A. Slovinsky and Stephen M. Dickson

Open-File Map No. 23-289
2023

MAPPING MAINE'S DYNAMIC DUNES

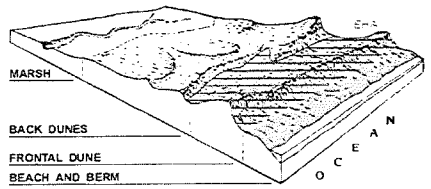
"Coastal sand dune systems" are sand and gravel deposits within a marine beach system, including, but not limited to, beach berms, frontal dunes, dune ridges, back dunes and other sand and gravel areas deposited by wave or wind action. Coastal sand dune systems may extend into coastal wetlands. Coastal sand dune systems include dunes that may have been artificially created, dunes that may have been altered by development activity, and dunes supported by sand fencing or stabilization structures. Coastal sand dune systems naturally migrate landward through the process of overwash. For the purposes of this definition, a small windblown accumulation of sand within a street is not considered a dune. Maine's coastal beaches and dunes are constantly changing. Erosion or accretion can reshape the beach and dunes over time so remapping is needed for resource protection and coastal development. This map series updates and supersedes the previous Coastal Sand Dune Geology Maps of 2011 (Slovinsky and Dickson, 2011) and the Beach and Dune Geology Aerial Photo series maps (Dickson, 2001). The extent of coastal sand dunes were mapped using available aerial orthoimagery, lidar (light detection and ranging) topographic data, permit reviews, and field evaluations. Erosion Hazard Area boundaries were mapped according to the existing definition using historical shoreline change data, geomorphology, FEMA flood maps, and field evidence of storm washover in dunes.

COASTAL SAND DUNE RULES

The Maine Natural Resources Protection Act (NRPA: Title 38 Section 480-D) requires that new coastal development will not unreasonably (1) interfere with the natural supply or movement of sand or gravel within or to the sand dune system; (2) increase the erosion hazard to the sand dune system; (3) cause or increase the flooding of the dunes or adjacent properties; (4) interfere with the natural flow of any surface or subsurface waters; (5) inhibit the natural transfer of soil from the terrestrial to marine or freshwater environments; (6) harm any significant wildlife habitat, threatened or endangered plant habitat, travel corridor, freshwater, estuarine or marine life; or (7) interfere with existing scenic, aesthetic, recreational, or navigational uses.

Permits are usually required for building projects located in Maine's coastal sand dune system. The Coastal Sand Dune Rules, Chapter 355, of the Maine Department of Environmental Protection clarify the criteria for obtaining a permit under NRPA (in regard to coastal sand dune systems). The rules outline classes of projects which are exempt from the requirement of obtaining a permit. For all other projects, the rules outline standards which must be met to satisfy the statutory criteria. The rules are based on the location of the project within the sand dune system.

EXPLANATION OF MAP UNITS



D1 Frontal dune. The frontal dune is the area consisting of the most seaward ridge of sand and gravel and includes former frontal dune areas modified by development. Where the dune has been altered from a natural condition, the dune position may be inferred from the present beach profile, dune positions along the shore, and regional trends in dune width. The frontal dune may or may not be vegetated with dune vegetation and may consist in part or in whole of artificial fill. In areas where smaller ridges of sand are forming in front of an established dune ridge, the frontal dune may include more than one ridge. The frontal dune includes former frontal dune areas modified by development. Where the dune has been modified by structures, the dune position may be inferred from the present beach profile, dune positions along the shore, and regional trends in dune width.

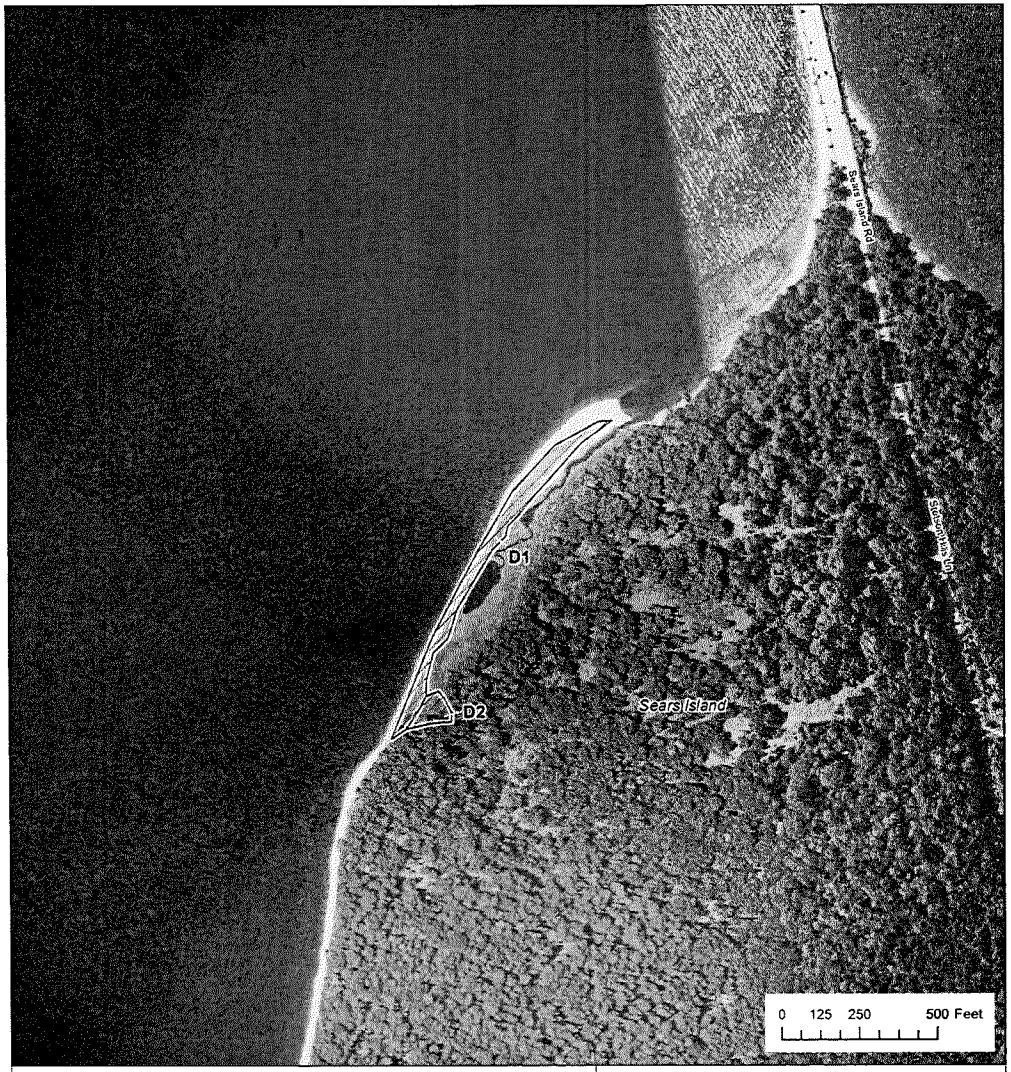
D2 Back dunes. Back dunes consist of sand dunes and eolian sand flats that lie landward of the frontal dune or a low energy beach. Back dunes include those areas containing artificial fill over back dune sands or over wetlands adjacent to the coastal sand dune system.

Erosion hazard area (EHA). Any portion of the coastal sand dune system that can reasonably be expected to become part of a coastal wetland in the next 100 years due to cumulative and collective changes in the shoreline from: (1) historical long-term erosion; (2) short-term erosion resulting from a 100-year storm; or (3) flooding in a 100-year storm after a two-foot rise in sea level, or any portion of the coastal sand dune system that is mapped as an AO flood zone by the effective FEMA Flood Insurance Rate Map, which is presumed to be located in an Erosion Hazard Area unless the applicant demonstrates based upon site-specific information, as determined by the department, that a coastal wetland will not result from either (1), (2), or (3) occurring on an applicant's lot given the expectation that an AO-Zone, particularly if located immediately behind a frontal dune, is likely to become a V-Zone after 2 feet of sea level rise in 100 years (Ch. 355, Section 3.P.).

Additional Sources of Information

Contact the Maine Department of Environmental Protection, Bureau of Land and Water Quality, 17 State House Station, Augusta, ME 04333 for information regarding the Coastal Sand Dune Rules and the Natural Resources Protection Act.

Mapping of Maine's sand dune system is performed by the Maine Geological Survey with partial funding from the Maine Coastal Program/Maine Department of Marine Resources under the Coastal Zone Management Act of 1972 as amended, through the Office for Coastal Management/National Oceanic and Atmospheric Administration.



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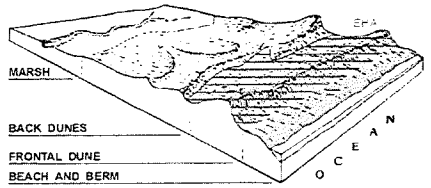

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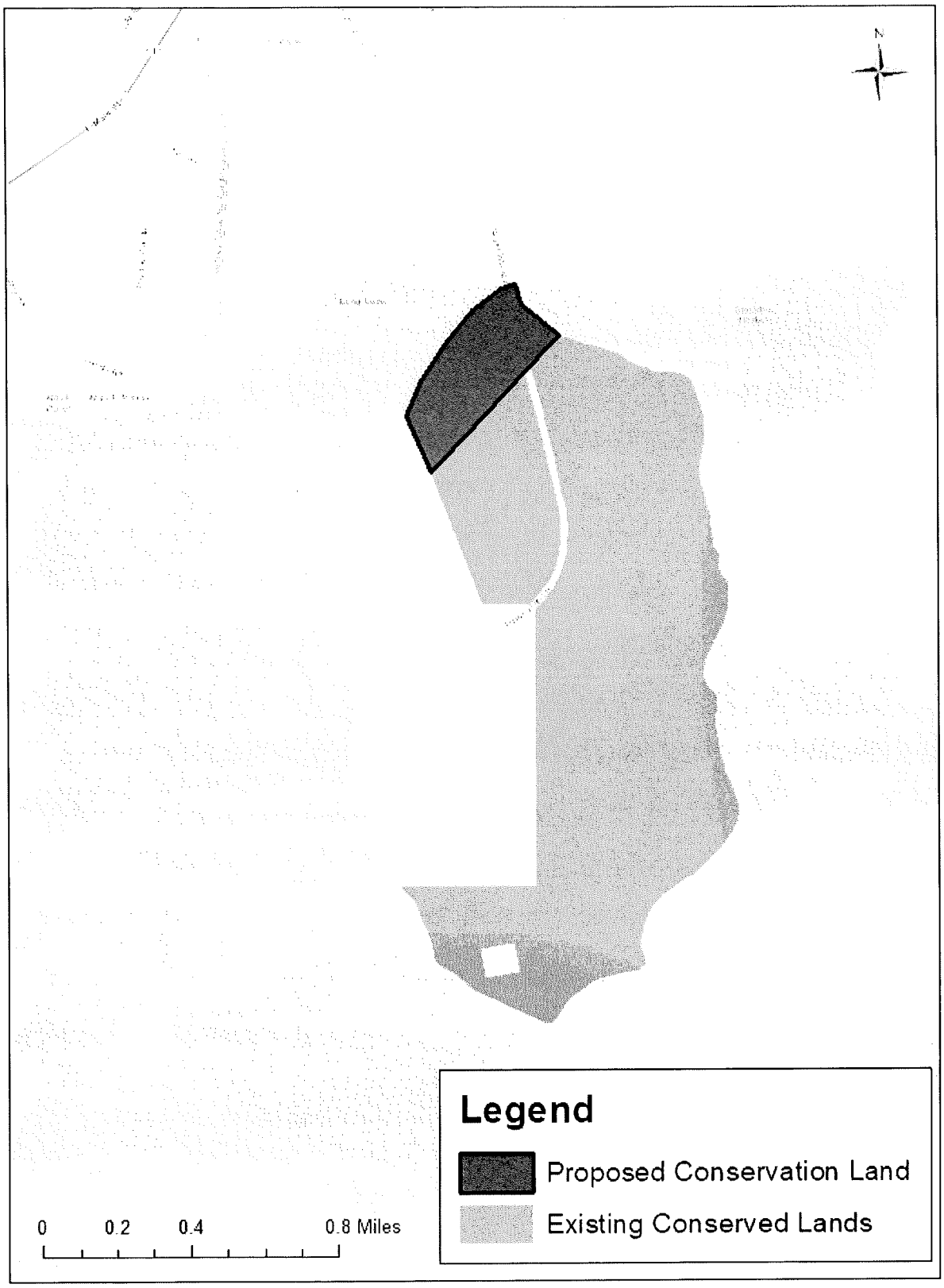
Coastal Sand Dune Geology

Sears Island Northwest, Searsport, Maine

by Peter A. Slovinsky and Stephen M. Dickson

Open-File Map No. 23-290
2023

Sears Island - Proposed Conservation Parcel



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