Hudson Street: Dune Walkway Profile

Site Assessments: February 14, 2024 and July 25, 2024

Structure Conditions and Observations				
	1.00.4			
Road to Beach	480 ft			
Boardwalk Length	420 ft			
End of boardwalk to	60 ft			
beach				
Walkway Width	4.0 ft			
Boardwalk Material	Asphalt apron; pressure treated			
	wood connected by cable			
Attached pathways*	3			
Benches	3			
Additional Features	Birdhouses			
	Stone patio blocks alongside of			
	path with handicap symbol			
*human-made pathways	connected to the municipal walkway			



Ecological Conditions and Observations			
Community Types Present	Rare Species	Other Native Species of Interest	Species of Concern*
Beachgrass grassland Hudsonia maritime shrubland	Wooly beach heather (Hudsonia tomentosa) ^{S2}	Beachgrass (Ammophila breviligulata) Seaside goldenrod (Solidago sempervirens) Beach pea (Lathyrus japonicus) Northern Bayberry (Myrica pennsylvanica) Common milkweed (Asclepias syriaca)	Asiatic bittersweet ^p (Celastrus orbiculatus) Beach rose ^w (Rosa rugosa) Yucca species (likely Yucca filamentosa) Shrub honeysuckle ^p (Lonicera species)
S2 = threatened in NH, P = p	rohibited species in NH, W = NH	invasive watch list	







Landward side (2025)



Seaward side (2025)

Walkway Observations

Entrance:

- The boardwalk was replaced in December 2024.
- Invasive species at the entrance to the Hudson St walkway, including beach rose on the left side of the image, and Asiatic bittersweet climbing the tree in the background (Figure 1).

Landward Side of Dune:

- Areas of dune die-off are vegetated with seaside goldenrod.
- Areas of bare send adjacent to walkway near homes to the south (Figure 2).

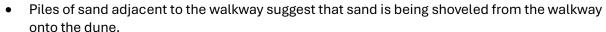




Figure 1: Invasive species at the entrance to the walkway



Dune Crest:

- At the dune crest there are two benches on both sides of the walkway.
- The areas surrounding the benches vary in condition. Some have minimal impact to the dune, and lack of vegetation only in front of the bench while others have more unvegetated areas surrounding them (Figure 3).



Figure 3: Bench placed perpendicular to the boardwalk exhibits surrounding unvegetated areas. Consider repositioning the bench and revegetating.

Potential Action Items

- Install a Mobi Mat or similar ADA-compliant beach access mat at the end of the walkway to improve accessibility.
- Delineate paths from homes to walkway to minimize dune impact.
- Revegetate the bare areas of dune near homes with native sand dune plants.
- Consider removal of invasive species and revegetation with native species.
- Benches placed at an angle (~45°) generally appear to have less impact on the surrounding dune than benches placed perpendicular to the walkway. Consider positioning benches at a 45° angle to the walkway when practicable and revegetating the areas around them, other than directly in front.
- In areas of suspected dune die-off, consider planting a diversity of sand dune species and/or treating the area with a lime and fertilizer (see die-off area planting suggestions).

Additional Information

- This boardwalk was replaced by the town, with approval from the Selectboard, using ARPA funds in December 2024. According to Selectboard member Ravi Ravikumar, "The contractor is required to do the entire job manually, without disturbing the dune grass. Nonnative brush at the entrance of the Hudson boardwalk, the Rosa rugosa, will be cut back 1 ft back on either side of the boardwalk."
- Monitoring of beach erosion and accretion along NH's coast began in 2018 through the NH Volunteer Beach Profile Monitoring Program. A monitoring station (SB02) exists along Hudson Street. If you'd like to explore the NH Volunteer Beach Profile Monitoring data, you can access the interactive data portal and read a summary report specific to Seabrook Beach monitoring stations.

Resources

- GoBotany Native Plant Trust: https://gobotany.nativeplanttrust.org
- MA Office of Coastal Zone Management Tips: Basics of Building Beach Access Structures that Protect Dunes and Banks
- NH Comprehensive Invasive Plant list: https://www.agriculture.nh.gov/publications-forms/documents/nh-invasive-plant-list.pdf
- NH Guide to Upland Invasive Species: https://www.agriculture.nh.gov/publications-forms/documents/upland-invasive-species.pdf
- Planting Guide for Tidal Shoreline Erosion Management in New Hampshire (beach and dune sections): https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/tidal-erosion-planting-guide.pdf
- UNH Extension resources on invasive species: https://extension.unh.edu/natural-resources/forests-trees/invasive-species