

FAQ: Fowler's Beach Resilience Project

1. Why is this project needed now?

Long Island is experiencing more frequent and severe storms that are increasing coastal flooding and erosion. Planning for changing conditions now allows the community to prepare for future storms, rather than responding after storm damage occurs. This project is evaluating nature-based solutions that can reduce future storm impacts, help protect community infrastructure, and avoid costly repairs in the long-term.

2. Are there other resilience projects happening on Long?

Yes. The Fowler's Beach project is part of a broader set of resilience efforts on Long Island.

After adopting the 2022 Comprehensive Plan, the Town identified climate-vulnerable areas as priorities for future resilience projects, including sites facing coastal erosion, flooding, sea level rise, and related impacts. Long Island's internal vulnerability assessment also helped lead to Climate Ready Casco Bay, a partnership with the Greater Portland Council of Governments (GPCOG) and the Gulf of Maine Research Institute. The project created an online resource for Long Island and 10 nearby municipalities that brings together existing data, climate assessments, and public input; identifies gaps; supports nature-based coastal protection strategies; and provides a foundation for future regional resilience work.

Mariner's Wharf, the island's only year-round transportation hub and primary entry and exit point for residents, visitors, goods, and emergency services, is one of the Town's highest priorities. With support from federal and state funding, it is undergoing revitalization and resiliency improvements to strengthen this critical infrastructure against future coastal hazards. Ponce's Landing is undergoing a similar rehabilitation project, with updates expected later this fall. Other Community Resilience Team efforts include the recently published Groundwater Sustainability Report and the upcoming Community Wildfire Protection Plan.

This year, the Town also partnered with the Island Institute and Maine DEP OURSHORE Program to complete erosion assessments at Front Beach/VFW, the Harbor de Grace culvert, and an East End property. The report evaluates existing erosion conditions and identifies potential nature-based strategies to reduce future impacts. Implementation will depend on external funding, but the findings provide guidance for these priority sites and other vulnerable areas of the island.

3. Why is this project focused on Fowler's Beach and not another area on the Island?

Fowler's Beach was selected because it's one of Long Island's most vulnerable coastal areas. The 2022 Comprehensive Plan identified Fowler's Beach as a priority for resilience planning due to ongoing dune erosion and increasing flood risks. Community input from the Comprehensive Plan planning process also highlighted the importance of protecting the coastline and improving climate resilience as top priorities.

This project builds on years of documented storm damage and volunteer-led restoration efforts to restore the dune system. Recent grant funding has provided an opportunity to evaluate potential resilience strategies to protect against future storm damage that may require costly repairs.

Fowler's Beach is an important community resource that:

- Protects Jerry Point Road, nearby homes, and emergency access
- Provides valuable coastal habitat
- Offers public beach access and recreation opportunities
- Acts as a natural storm buffer that helps reduce erosion and flooding impacts

By focusing on Fowler's Beach now, LICA and the Town can identify nature-based solutions that improve long-term resilience, protecting both the beach and Jerry Point Road.

4. Who owns Fowler's Beach?

Fowler's Beach is owned by the Long Island Civic Association (LICA) and protected by a conservation easement held by the Oceanside Conservation Trust of Casco Bay. The easement protects the beach's natural features and public access while allowing for the maintenance, but not expansion, of Jerry Point Road. Any restoration or resilience projects affecting the roadway and the beach would be undertaken as a joint project between the Town and LICA, as Jerry Point Road is owned and maintained by the Town.

5. What are nature-based solutions?

Nature-based solutions use natural features and processes to reduce coastal hazards by supporting healthy ecosystems, rather than replacing natural systems. Along the coast, healthy dune systems help buffer storm impacts by trapping sand, reducing erosion, and

absorbing wave energy. Examples of nature-based dune restoration solutions include reducing human interference, stabilizing sand dunes with added sand, planting native vegetation, or adding sand fencing to capture sand. These strategies help protect the coastal communities from storm impacts, while also maintaining the natural appearance of the coast and allowing for adaptation over time.

To learn more about nature-based solutions explore Maine DEP resources:

- [OUR SHORE Guide to Nature-Based Shoreline Stabilization Options in Maine \(PDF\) – DRAFT IN DEVELOPMENT](#)
- [OUR SHORE, Maine DEP](#)
- Case Studies:
- [Blue Hill Case Study.pdf](#)
- [Popham Beach Case Study.pdf](#)
- [Sebago Lake SP Case Study.pdf](#)

6. What are the restoration strategies being considered and why?

Tighe and Bond, the project engineers, determined four potential restoration strategies. Each option offers different levels of protection, cost, maintenance needs, and long-term protection:

- **No action/ natural recovery:** Allow the beach and dunes to recover naturally with no active restoration or construction. This approach is the least costly but provides no additional protection for Jerry Point Road from future flooding or erosion.
- **Natural recovery with a sand fence:** Install sand fencing to trap windblown sand and support natural dune growth, while protecting recovering vegetation by directing access to designated pathways. This is a low-cost nature-based approach that can support dune recovery but provides limited additional protection for Jerry Point Road.
- **Dune nourishment and vegetative stabilization:** Add sand and plant native vegetation to improve dune stability and accelerate natural recovery of the dune system. While this approach provides short-term resiliency benefits, long-term sea level rise impacts would not be addressed. Maintenance and future renourishment efforts would likely be required.
- **Dune restoration and Jerry Point Road improvements:** Restore the dunes through nature-based solutions while also improving the resilience of Jerry Point Road. Potential roadway adaptations include raising the roadway, improving drainage and

stormwater management, and improving parking and access to reduce impacts on sensitive dune systems. This option offers the greatest long-term protection for the beach and roadway but is the most complex and high-cost option.

- **Dune restoration and Jerry Point Road improvements with dune stabilization:**
An option to enhance this strategy would include additional stabilization within the restored dune, providing a more resilient dune structure in areas that have experienced significant erosion. This option would still maintain a natural, vegetated appearance and would provide additional protection for Jerry Point Road but would require further design and ongoing maintenance. The option to add structural support will be determined during the final design.

These four strategies are being considered to identify the most effective, long-term solution to reduce flooding and erosion risks along Fowler's Beach and Jerry Point Road. The goal is to build on previous restoration efforts to protect coastal habitat, emergency service access, nearby homes, and public beach access.

7. What constraints and considerations guided the development of the restoration options?

The restoration options were developed by balancing a wide range of environmental, community, technical, and financial considerations. Throughout the process, we sought solutions that would:

- Preserve and enhance public enjoyment of Fowler's Beach.
- Protect and sustain the natural dune system, recognizing its role as the first line of defense against coastal storms.
- Maintain the existing character and appearance of the beach as much as possible.
- Prioritize nature-based solutions where they are practical and effective, while recognizing that hybrid approaches may provide the greatest resilience.
- Maximize protection for Jerry's Point Road, nearby properties, the beach, and the dune system from future climate hazards, including erosion, flooding, sea level rise, and increasingly severe storms.
- Minimize costs and maximize the long-term value of investments for taxpayers.
- Work within site-specific geological conditions and existing state and federal permitting requirements.
- Base recommendations on scientific data, engineering analyses, field observations, and publicly available environmental information rather than assumptions.

No single option could perfectly satisfy every objective, so each alternative reflects different tradeoffs between resilience, environmental benefits, cost, constructability, and long-term maintenance. The goal was to develop realistic, evidence-based options that help the community make informed decisions about the future of the site.

8. How will community feedback be used in project decision making?

Community feedback will help the Town and LICA determine which strategy best reflects local priorities and goals. Through an upcoming community survey and public workshop, community members will have the opportunity to share their perspectives and ask questions. Community input, along with technical assessment findings, environmental data, and cost considerations, will help identify a strategy that reflects Long Island's values and supports long-term resilience.

9. What factors will be considered when selecting a preferred restoration strategy?

Several factors will be considered when selecting a restoration strategy, including:

- The level of long-term protection provided for Fowler's Beach and Jerry Point Road
- Environmental impacts and the existing conservation easement
- Cost-effectiveness and available funding opportunities
- Long-term maintenance requirements
- Community priorities and feedback gathered through public engagement

10. How is this project being funded?

The technical assessment of restoration strategies was funded through a Maine Department of Environmental Protection (DEP) Sand Dune Restoration and Protection grant. As the project advances, the Town and LICA are pursuing additional funding opportunities, such as a Maine Infrastructure Adaptation Fund (MIAF) grant to support the design and implementation of the preferred restoration strategy.

11. How will the project affect beach access?

One of the project goals is to protect long-term public access to Fowler's Beach by improving the resilience of the beach and dune system. Temporary impacts to beach access may occur during project implementation, depending on the restoration strategy selected.

12. How will the project help protect Jerry Point Road?

The dunes at Fowler's Beach serve as a natural storm buffer that helps protect Jerry Point Road from flooding and erosion. The restoration strategies evaluated by Tighe and Bond are intended to support dune recovery to strengthen this natural protection. Depending on the strategy selected, the project may also include roadway and stormwater drainage improvements to better manage flooding events. Protecting Jerry Point Road is a key objective of the project, as the roadway provides access to nearby homes, emergency services, and Fowler's Beach.

13. How long do we expect Jerry's Point Road to hold?

It is difficult to predict exactly how long the road will remain viable because future storm frequency, storm intensity, sea level rise, and erosion rates are inherently uncertain. Rather than trying to estimate a specific timeline, the project focused on identifying solutions that reduce the risks posed by erosion, coastal flooding, and other climate-related impacts over time.

The recommended approaches were developed using science-based projections of future conditions, including anticipated changes in storms, wave action, precipitation, flooding, and sea level rise. These recommendations are informed by field assessments, publicly available environmental data, engineering analyses, and best practices from similar coastal communities. The goal is to improve the long-term resilience of the roadway while recognizing that ongoing monitoring and adaptation will continue to be important as conditions change.