

GDI **PLANNING FOR A SUSTAINABLE FUTURE** **SHOREUP COMMITTEE**

Great Diamond Island is already feeling the effects of rising seas, stronger storms, and changing climate conditions impacting our piers, shorelines, and interior lands—making it essential that we plan ahead. This effort creates a practical resilience plan for the island—grounded in understanding our community, identifying our vulnerabilities, and turning that knowledge into clear, prioritized actions. This work moves forward with the full support of the City of Portland.



Building the right team

for GDI by partnering with FB Environmental to build a comprehensive resilience plan

for Great Diamond. FBE is no stranger to this work; they've developed plans for Chebeague, and Peaks Island, are collaborators with the Maine Islands Project, and are working with the City of Portland and other coastal communities on resilience planning.

Their experience across the islands and region makes them an ideal partner for Great Diamond—where shared knowledge, resources, and lessons learned strengthen island capacity and help property owners avoid unnecessary costs across Casco Bay.

Keep scrolling to see what sparked this effort and explore key takeaways from the 2025 August GDI Community Resilience Workshop.

GDI OVERVIEW (400 ACRES)

TOTAL PRIVATE PROPERTIES: 187

TOTAL WATERFRONT PROPERTIES: 70

★ **SAND DUNE EROSION HAZARD**
Identified as an Erosion Hazard Area under
Maine DEP Coastal Dune Systems
(Chapter 355, Section 3.P)

★ **UTILITIES**
Portland Water District and
communication services



● **TREATED DC OBD (OVERBOARD) DISCHARGE**

BARGE LANDING

DC OBD FIELDS AND TANKS

FIRE & RESCUE

● **DC PIER**

ISLAND RIGHT OF WAY

● **ICE POND CAUSEWAY**

● **GDI COMPOSTING**

DC COMMUNITY COTTAGE COMMUNITY

PROPERTY B

● **NANCY LANE CAUSEWAY**

● **STATE PIER**

● **LITTLE DIAMOND LAND BRIDGE**

PROPERTY A

LITTLE DIAMOND

PEAKS

COW ISLAND

Casco Bay

Diamond Cove

GREAT DIAMOND VULNERABILITIES

identified and ranked* in the 2025 Resilience Workshop [Link to FBE WORKSHOP RECAP](#)

SOCIOECONOMIC RISKS

- land loss to sea level rise — 5
- property value loss/affordability — 5

COASTAL EROSION RISKS

- the west shore — 2
- Cove Side Drive — 4
- end-effect erosion from rip rap — 4
- Echo Point — 5
- Moon Garden — 5
- Seaview Road — 5
- Seal Cove Lane — 5

CLIMATE RISKS

- wildfire: DC and Property B — 1
- increased severe weather events: rain/wind and storm surge — 2

INFRASTRUCTURE RISKS

- Nancy Lane causeway — 1
- Lamson Cove dune system — 1
- GDI state pier — 1
- DC pier — 2
- barge landing — 2
- DC overboard discharge system — 3
- Little Diamond land bridge — 4
- septic and salt water intrusion — 5
- water utilities (island-wide) — 5
- CMP grid (3 phase) — 5
- DC ice pond causeway/flood plane — 5

*IDENTIFIED RISKS RANKED BY PARTICIPANTS
→ 1 = HIGHEST, 5 LOWEST



Not sure where these GDI sites are?
Keep scrolling to see each island location.



The Town of Chebeague received a Coastal Community/Shore and Harbor Planning Grant from the Maine Coastal Program to support resilience planning for Casco Bay islands, including fully funded community workshops, such as this one facilitated by FBE.

WHAT THE WORKSHOP IDENTIFIED AND RANKED AS 1*

INFRASTRUCTURE RISKS

- Nancy Lane causeway **A**
- Lamson Cove dune system **B**
- GDI state pier **C**

CLIMATE RISKS

- wildfire: DC and Property B **D**



Tap to learn more about the Lamson Cove dune system

*Scale of 1–5, where 5 is the lowest priority

WHAT THE WORKSHOP IDENTIFIED
AND **RANKED AS 2***

COASTAL EROSION RISKS

the west shore **A**

INFRASTRUCTURE RISKS

DC pier **B**

barge landing **C**

CLIMATE RISKS

increase in severe
weather events from rain,
wind, and storm surge



*Scale of 1–5, where 5 is the lowest priority

WHAT THE WORKSHOP IDENTIFIED
AND **RANKED AS 3***

INFRASTRUCTURE RISKS
overboard discharge system **A**



*Scale of 1–5, where 5 is the lowest priority

WHAT THE WORKSHOP IDENTIFIED AND RANKED AS 4*

COASTAL EROSION RISKS

- rip rap end-effect erosion **A**
- Cove Side Drive **B**

INFRASTRUCTURE RISKS

- Little Diamond land bridge **C**



*Scale of 1–5, where 5 is the lowest priority

WHY THIS ALL MATTERS?

“**THE COST OF INACTION** is far greater!
Every \$1 invested in resilience can
prevent about \$13 in future damage.

—U.S. Chamber of Commerce

SEAS ARE RISING —State guidance recommends coastal communities plan now for Maine's 2050 projected sea-level rise to reduce future damage and infrastructure costs.*

COLLABORATION SAVES MONEY! The State must be strategic with limited resources—regional cooperation helps make the most of available funding.*

GDI IS PLANNING NOW! —As our neighbors advance their resilience plans, this team recognizes that collaboration is more effective than an isolationist approach. We are collaborating regionally and with the City to stay competitive for resources, capacity, and funding—helping ensure these efforts support areas where planning and partnerships are already underway.”

*May 2025 Final Report: A Plan for Infrastructure Resilience.
Maine Infrastructure Rebuilding and Resilience Commission

Interested in learning
more? Connect with [Bill Taylor](#)
about the GDI resilience plan.



If not now, when?
If not us, who?