

Case Study 20: The Need for Storm Recovery Plans, Cape Lookout National Seashore, North Carolina

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Overwash during Hurricane Irene impacted infrastructure on Long Point. Image credit: Rebecca Beavers, NPS.

Goals

Cape Lookout National Seashore is regularly impacted by hurricanes and other storms. To improve park management, the park needed to develop a post-storm recovery plan to ensure wise fiscal decisions and management of public expectations for what facilities and services can be restored following these major events.

Challenges and Needs

In August 2011 Cape Lookout National Seashore was impacted by Hurricane Irene. The Long Point area of the park is a major hub of visitor and park operations on North Core Banks, one of three major islands in the park. Long Point serves as the primary access point for visitors arriving on the passenger/vehicle ferry to North Core Banks and for park operation vessels. Facilities at this site include 10 rustic rental cabins (20 rental units) for visitors, and additional buildings used for park operations including resource management, research, and law enforcement.

When Hurricane Irene made landfall at Cape Lookout National Seashore, storm waves and overwash flattened large dunes and damaged park facilities, particularly the harbor and infrastructure (e.g., septic tanks) at Long Point.

The current park planning documents provide no guidance on how post-storm recovery should be handled beyond an Incident Response and Recovery Framework. The National Park Service (NPS) response to prior storms has been to rebuild in-kind. In the hectic weeks following Hurricane Irene, as the park worked to restore the park in time for the peak visitor season, the park decided to dredge the shoaled-in harbor and to rebuild the visitor and operational facilities at Long Point.

This event has underscored the need for storm recovery planning and the associated public dialogue to manage expectations about the resource impacts, costs, and recovery time for park facilities. It is critical that this planning and dialogue occur well ahead of storm events to avoid decisions being made in the “reaction-mode” that occurs after storm events. Furthermore, the plans will allow

for careful consideration of the fiscal impacts of rebuilding facilities in high risk areas. Increased storm intensity and frequency related to climate change are expected to heighten the urgency of these issues.

Responsive Actions

The park has identified several specific goals for the near future:

- Public dialogue on the future of these types of facilities and access to the park
- Further NPS guidance and policies related to storm damage and rebuilding in high-risk areas
- Development of post-storm recovery plans in order to avoid reactionary decision making
- Managing the public's high expectations for the park to rebuild facilities

This case study is an example of the following adaptation strategies:

- Making infrastructure resistant or resilient to climate change
- Managed retreat of built infrastructure
- Developing/implementing an adaptation plan

For more information:

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