

A Tale of Three Storms



One man's journey in finding a practical guide to prepare for Nature's unexpected (expected) fury.

No Name Storm of 1991- "The Perfect Storm" Fire Island NS



A. Formation and effects of the storm

1. Three storm systems colliding in perfect harmony with one another.
2. Center of storm remained out in the Atlantic, but the impacts to the coast were incredible.
3. Epic tides, storm surge, heavy rains, and ground saturation created massive flooding in areas, leaving no place for water to recede.
4. The damage to natural and cultural resources of the park extensive.

B. Learning from a previously unfathomable event

1. 1991 vs. Present.
2. Superintendent immediately directed us to compile a plan to restore the park.
3. Park repaired back to where it was. (A mistake?).
4. This storm would be a significant learning experience for my later years in the Park Service and my dealing with other natural disasters I was to be faced with.

The Katrina and Rita Experience

Jean Lafitte NP and New Orleans Jazz



A. The devastation and aftermath a year later

1. Park sites were permanently closed or barely open.
2. No plan in place to rebuild/restore.
3. Morale of staff very low.
4. 75% of staff living in FEMA trailers.
5. Visitation extremely low.
6. City and Park Service at odds over those tourists who did come.
7. City and surrounding areas still heavily damaged and political corruption rampant.
8. Other historic and cultural sites in the area damaged or destroyed.



Katrina (Continued)



B. Creating a plan (lesson learned from 1991)

1. Addressing the needs of the staff.
2. Assessment of damage.
3. Identify resources at hand.
4. Realistic estimate of cost to restore.
5. Identify outside resources (contractors, materials, etc.) needed.
6. Timeline for completion.
7. Outline for sustainable design.

C. Partner with the City and tourism industry leaders

1. Understanding concerns of all parties.
2. Formulate a strategy that benefits everyone.

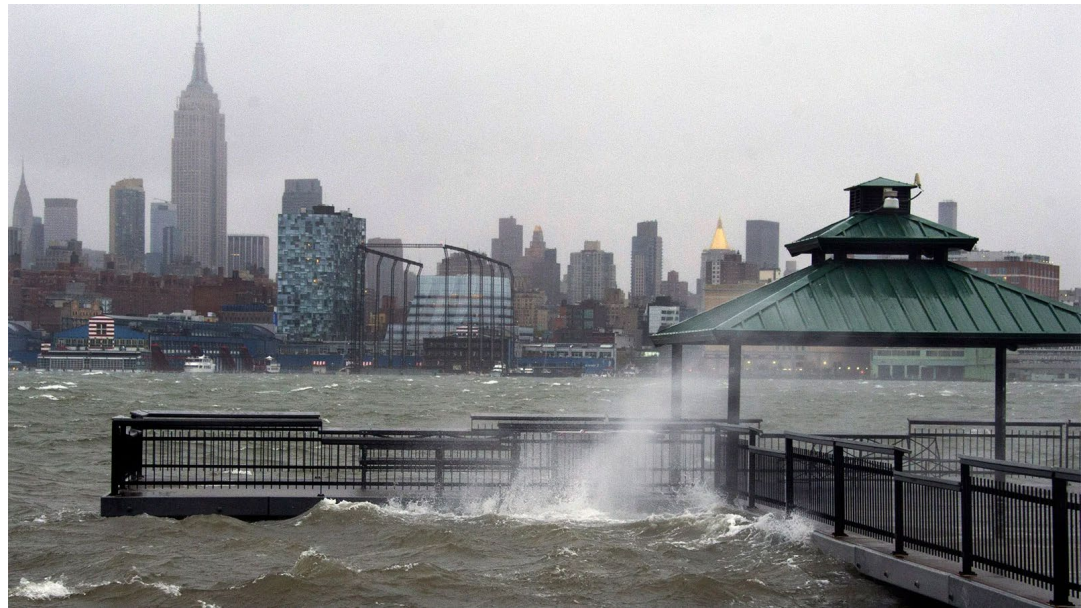
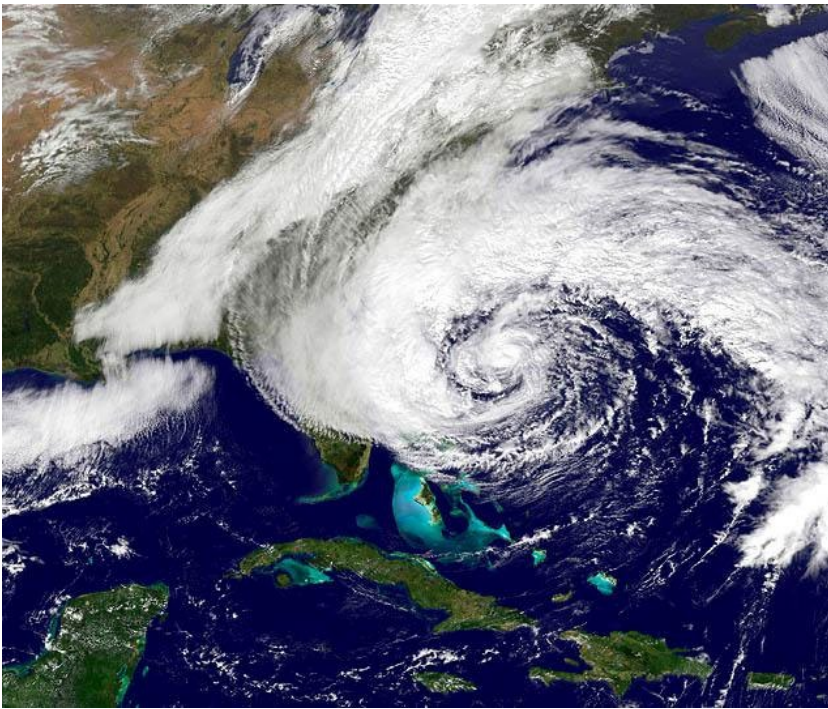
D. Recognizing when Mother Nature can help

1. Barataria Preserve Example

Superstorm Sandy – Statue of Liberty and Ellis Island



- A. Preparing a park for a potential natural disaster that had never before happened
1. Decision-making on projects based on experience and statistical data.
 2. Planning for the unthinkable.
 - a. Creating a storm plan.
 - b. Re-imagining exhibits and use of artifacts.
 - c. Building up resources to combat storm effects and address the restoration process.
 - d. Building partnerships.



B. The Storm (history does repeat itself)

1. Once again, three storm systems collide in harmony, and aim at New York Harbor.
2. Preparing in advance.
 - a. Move any collections that could be in harm's way to a more secure location.
 - b. Batten and sandbag doors and windows.
 - c. Shut down unnecessary equipment and utilities and secure.
 - d. Close sites early to allow staff to take care of their families and homes.



Sandy (Continued)

3. The Aftermath.

- a. The destruction of all infrastructure on both islands.
- b. Loss of all offices and extensive park files on both islands.
- c. Damaged or destroyed walkways and exhibits.
- d. Loss of Concessioner equipment, supplies, and merchandise.
- e. Loss of both docks on Liberty Island.
- f. Destruction of housing on Liberty Island.
- g. Loss of majority of tools and groundskeeping equipment.
- h. Loss of brochures and other visitor guide materials.



Sandy (Continued)

4. Implementing the Plan.

a. Take care of staff.

1. Have call-in system for staff .
2. Reach out to all staff members on their respective circumstances and assist when possible.
3. Identify key personnel needed to work on rebuilding.
4. Relocate other staff to other sites, if possible (partnerships).

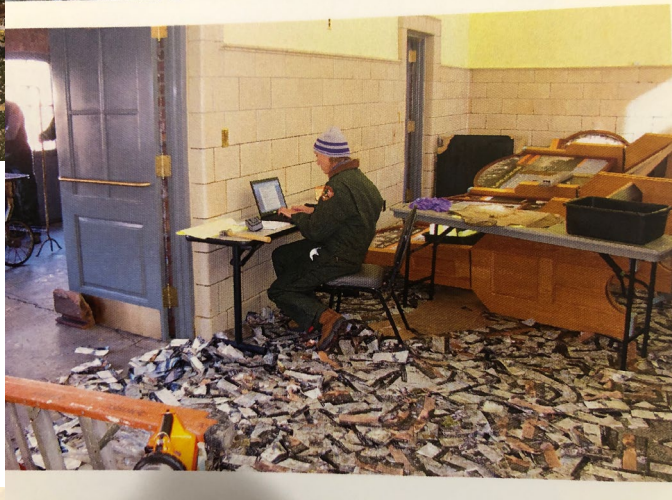
b. Incident Command Team.

c. Back-up systems to preserve buildings and collections, and aid in reconstruction efforts.

d. Contractors in place to immediately begin reconstruction.

e. Arrange storage facilities for artifacts in harm's way.

f. Build back sustainably.



Lessons Learned the hard way!

1. Have a comprehensive storm plan for preparation, assessment, restoration and reopening.
1. Include a media plan.
2. Know your resources.
3. Know your vulnerabilities.
4. Be an amateur meteorologist.
5. Nature can also be a friend.
6. Design sustainably for what's to come.
7. Build local partnerships with municipalities and private organizations (there is safety in numbers).
8. Take care of your most important resource.....your staff.





Thank you for your time and for your stewardship of our historical treasures

