

Hurricane Sandy Disaster Relief Assistance Grant for Historic Properties

**Action Plan Narrative for the Preservation, Stabilization,
Rehabilitation, and Repair of Historic Properties**



Photo Caption: Monmouth Beach, December 11, 2012

Public Law 113-2

December 20, 2013



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Introduction

On October 29, 2012 Hurricane Sandy made landfall near Brigantine, New Jersey as a Category 2 Post-tropical Cyclone with Hurricane Force. The storm, which had been paralleling the East Coast, turned inland and crossed the midsection of New Jersey before resuming a northeasterly course. The storm surge was as much as 13 feet high and swept entirely across New Jersey's barrier islands. While the most severe storm impact was northeast of the hurricane's eye, storm surge inundated and severely affected regions of the state's shore from Cape May to Raritan Bay, and many areas along the Hudson River causing extensive flooding in urban areas. The storm damaged almost every historic property type in the state.

Hurricane Sandy caused unprecedented damage to New Jersey's housing, business, infrastructure, health and social services, the environment, and historic properties. President Obama's October 30 disaster declaration designated all twenty-one New Jersey counties major disaster areas.

I. Summary of Damage

New Jersey's cultural resources were significantly impacted by Hurricane Sandy in a variety of ways, and across all areas of the state. The Historic Preservation Office (HPO) has relied heavily on both programmatic and anecdotal information to make preliminary assessments of the scope and breadth of damage, which we continue to record as new information is revealed through HPO's various programs. Damage to historic resources ranged from direct losses from the storm – houses swept into the bay, extensive flood damage or wind damage, and in some cases, subsequent loss from fires caused by damaged energy infrastructure – to more indirect damage caused by associated recovery and remediation activities.



Photo Caption: Mantoloking - April 9, 2013

Waves damaged and destroyed houses and left archaeological sites exposed to the elements. High winds caused extensive damage across the state. Many trees planted by the Civilian Conservation Corps were lost; historic landscapes were compromised. Flooding, however, was the most common cause of damage, and a map of the area covered by the storm surge is provided as Attachment 1.

Homeowners throughout New Jersey were significantly affected by Hurricane Sandy. Residences of 59,971 homeowners sustained some amount of physical damage. Of this number, 40,466 homes sustained severe or major damage.

II. Review of Known Impacts

Assessment of both storm damage and the impact of repair and recovery activities on historic properties is ongoing. However, our efforts to assemble information about damage to historic properties began in the immediate aftermath of the storm. The HPO solicited and collected anecdotal information about damage to historic properties owned by individuals, non-profits, and local governments throughout

the state through our website and other electronic media; a spreadsheet listing the reported damage is provided as Attachment 2. Programmatically, as FEMA storm impact data and imagery became available, HPO analyzed cultural resources data in a Geographic Information System (GIS) to assess impacts. Finally, working with FEMA, HPO staff also spent substantial time doing field survey and assessment of above ground resources, primarily in the areas that flooded. Lastly, information about impacts to archaeological sites has been obtained through FEMA's Wet Debris Removal program where there have been extensive efforts to identify and avoid marine/maritime archaeological resources.

a. Details of Damage to Cultural Resources

1. Damage Assessment and Reporting



Photo Caption: Union Beach - December 2, 2012

Within hours of the storm, HPO began receiving reports of damage to cultural resources from constituents, property owners, agency contacts and the media. HPO compiled these reports into a running document to better understand of the types, geographic scope, and likely responses to the wide variety of impacts.

Inundation & Erosion: Most inundation damage was concentrated along the Atlantic coastline; however, the Delaware Bay, Raritan Bay, Barnegat Bay, and Hudson River shores also suffered extensive and catastrophic damage. The level of damage spanned the spectrum from immediately and obviously catastrophic to substantial interior damage which will result in gutting or demolition. The Mantoloking Historic District, an informal shingle-style community on the barrier island, and the Mantoloking Marine Historic District were ravaged by the tidal surge; every building had some type of damage. New inlets opened by the storm (since closed) swept houses into the bay, where they were filmed floating down to the inlet and out to sea by the video cameras under the Route 35 bridge. Tuckerton Seaport was extensively damaged. The CLG Communities of Beach Haven, Middletown, Somers Point and Ocean City are still painstakingly recovering from the flooding.



Photo Caption: Mantoloking - April 9, 2013

The storm surge moved a vast amount of sand. Of concern is the small number of documented archaeological sites associated with Native American settlements within areas that have sustained substantial coastal erosion and are situated in areas subject to high energy storm surge flows. Archaeological sites, such as the prehistoric site at the East Point Lighthouse on the Delaware Bay shore, were exposed after the loss of beach sand, and are in danger of eroding into the bay. The status of other sites, like the Kimble's Beach Site (28-Cm-36), are currently unknown. Some shipwrecks were exposed and/or washed ashore by the storm, and were quickly reburied by the Nor'easter that hit the coast the week after Hurricane Sandy. Other shipwrecks, such as a Civil War era barge, were moved further upstream by the storm surge. The dike that protects the Abel Nicholson house, a National Historic Landmark, was damaged exposing the house to potential future damage.

Wind: Wind damage resulted in both direct and indirect effects to historic properties. While wind damage was more often limited to siding, roofing, windows, chimneys, and landscaping, there were a few losses of historic properties. For example, the hay barn at the National Register listed Vought Farmstead in Hunterdon County was completely destroyed by the wind. There are many reports of indirect wind damage in the form of tree falls. In some cases, these tree falls exacerbated that of the direct wind damage by further impacting roofs and porches, circulation patterns, fencing, etc. In other cases, tree falls were particularly damaging to cemeteries -crushing grave markers and causing disturbance to graves through the uplift of the tree root ball.

Fire damage: Broken gas lines and electrical surges resulted in fires. The Camp Osborne Historic District, a collection of tightly packed cottages at the beach, was destroyed by the storm surge and the following fire, and is no longer eligible for listing on the National Register.



Photo Caption: Brick Township, Camp Osborne Historic District - 2012

2. GIS Analysis

Using HPO's Geographic Information System (GIS)¹ as a preliminary indicator has provided an aggregate context for the disaster, but does not provide detail about individual resource impacts that may be required in order to fully address the needs for recovery. The data used was the most current available, including the most recent version of HPO's Cultural Resources GIS (CRGIS) layers, FEMA disaster data (storm surge, damage points, imagery, etc.), and other environmental layers hosted by the NJ Department of Environmental Protection (NJDEP). At the broadest level, analysis demonstrates that 13,914 individual cultural resources (16% of 87,816 mapped resources statewide) and 213 historic districts (25% of 869 mapped districts statewide)

¹ HPO is in communication with NPS staff regarding the NPS CRGIS Guidelines, and eagerly anticipates release of external data standards from the NPS. HPO currently uses the data standards established by the NJ Department of Environmental Protection

were within or immediately adjacent to the surge zone as depicted in FEMA's storm surge data².

HPO compared the CRGIS data to a FEMA damage analysis dataset³ that evaluated damage on a structure by structure basis. This data does not provide 100% coverage of the affected area, but for the areas represented, reveals that 8,421 architectural resources (10% of the 82,565 damage points statewide) were impacted at varying levels ranging from 'Affected' to 'Destroyed'. While cultural resources represent an average of 10% of the statewide totals in the first three categories (affected, minor, and major), cultural resources took the brunt of the storms destructive impact, representing a full 33% of the statewide total of destroyed resources.

Geographically, Ocean, Hudson and Cape May Counties contain the largest percentages of impacted cultural resources (45%, 28% and 16% respectively) with Monmouth and Atlantic suffering much lower rates of impact (5% and 2% respectively), and remaining counties at 1% or less. The full breakdown by county is provided in Attachment 3.

3. FEMA Windshield Survey

Working closely with FEMA, HPO staff invested significant time since the storm conducting windshield survey in affected areas. The joint HPO/FEMA team performed damage and historic property/no property survey of 93 square miles, compiling over 4,500 images in over 1300 miles of travel across New Jersey. The survey methodology began with background research and review of existing documentation for each municipality to determine known and expected property types. Field visits consisted of a street-by-street windshield survey delineating areas with low potential for historic properties, areas where more information would be required, highlighting locations of significant damage. Post field work included mapping survey routes and photo locations, recording the delineated areas in GIS, and consultation between

² *Final High Resolution Surge Area - Field-Verified February 14, 2013* < http://fema-services2.esri.com/arcgis/rest/services/2012_Sandy/SurgeBoundaries_Final_0214/MapServer/2 >

³ *ImageCat_NLT_damage_analysis: IPDA_point_result_v28_20121204_1630EST* < http://fema-services.esri.com/arcgis/rest/services/2012_Sandy/ImageCat_NLT_damage_analysis/MapServer/0

FEMA and HPO to ratify the survey findings. The resulting datasets will guide continued consultation and future recovery activities by FEMA, HPO and other agencies.



Photo Caption: Mantoloking - April 11, 2013

b. Summary of Impact to Existing HPO Programs and Projects

The storm has had a profound impact on HPO programs and projects. Staff across HPO program areas have assumed a more integral role in New Jersey's disaster recovery. Almost all of the HPO professional staff have been in the field with historic preservation staff at FEMA to conduct joint windshield surveys of some of the hardest hit communities in the surge zone. Staff archaeologists have spent large amounts of time consulting with the Army Corps of Engineers, FEMA, and NJDEP about ways to avoid or minimize potential impacts to submerged resources that may be caused by the removal of debris and sediment deposited by the storm from New Jersey's waterways. HPO has continued to process National Register nominations and

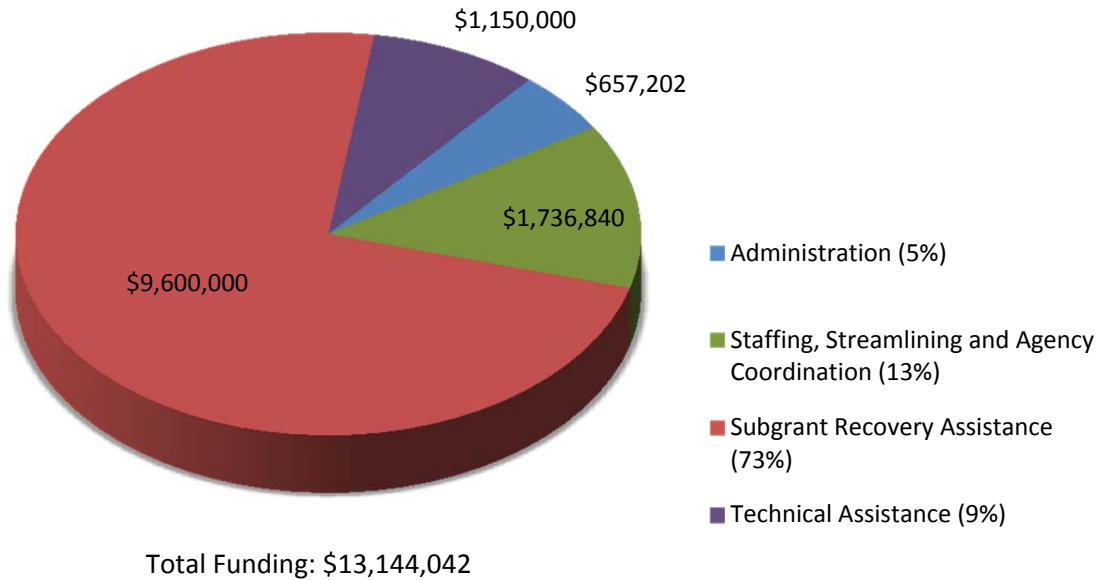
the Certified Local Government program maintains the subgrant process, but both have shifted the focus of their work efforts from program development to providing technical assistance and outreach to those communities who were hardest hit by the storm.

The net result of this workload shift has been a reduction in priority for projects that do not involve Hurricane Sandy recovery. HPO has increased our reliance on FCC's e-106 system to provide wireless carriers with automatic concurrence responses to their requests for Section 106 consultation. HPO has also deferred analysis of and subsequent improvements to the existing workflow of the National Register and Certified Local Government programs. HPO has completed our Comprehensive Statewide Historic Preservation Plan, but efforts to complete the goals of the Plan are moving forward at a slow pace. We have mitigation funding of approximately \$500,000 set aside for a variety of context development and survey and identification efforts; however, the use of those funds is on hold while we focus on Hurricane Sandy recovery. Drew University is ending its Certificate in Historic Preservation Program, leaving a gap in opportunities for Historic Preservation Commission Members in New Jersey to get training. Due to the time HPO must spend on storm recovery, we are currently unable to help fill that training gap.

III. Summary of Program Implementation

HPO will undertake a three pronged approach to use the funds most effectively. In partnership with the NJHT we will implement a substantial grant program to fund repair of storm damage available to public, non-profit, and private owners. We are developing a series of technical assistance initiatives to: guide property owners and managers; resolve confusion about how to repair storm damage to historic properties; and to assist federal agencies in getting the data they need to complete reviews expeditiously. Finally, we will hire staff and procure the equipment necessary to support the grant and technical assistance programs and assist in expediting the federal project reviews necessary to keep the recovery moving.

Historic Preservation Fund Disaster Recovery Program



Funding Summary Chart

a. Subgrant Recovery Assistance

HPO will partner with the New Jersey Historic Trust (NJHT)⁴ to establish a Cultural Resource Recovery Assistance Grant program. A Memorandum of Understanding detailing the partnership between the two departments will be jointly developed and executed. HPO/NJHT intend to use an online grants management solution to streamline the development of application and guidance materials, enable online application submittal, and streamline collaborative application review and award decisions. We will make the application form, ranking criteria available to the NPS for their review and comment before the system goes live.⁵ We anticipate holding at

⁴ The NJHT is a sister agency in the Department of Community Affairs which has been responsible for the state's historic preservation bricks & mortar grants program since 1990.

⁵ The MOU outlining the partnership, subgrant agreement boilerplate, and preservation easement/covenant will also be circulated to the NPS when available.

least two grant rounds. Project signs will be printed by the state and distributed to the grant recipients.

Subgrant Outreach: The HPO has made site visits to impacted municipalities, and contacted local preservation organizations including all the affected Certified Local Governments. Using the damage assessment data and tools referenced above, HPO/NJHT intend to target impacted cultural resource owners and managers, as well as publicize the program with mass email, and website advertisements. We anticipate that our Governor will formally announce the program, which will garner local and regional press coverage. To both publicize the program and answer the anticipated questions about the program, we will hold at least three regional information sessions: one in the north, one in the south, and one in central New Jersey.

Project Review: We will develop scoring criteria including those listed in the program guidance outlined in the Program Approach Statement: historic significance, ability to complete the project promptly and successfully, ability to correct storm damage, degree and nature of damage, and completeness and accuracy of the application. Once the applications are received, grant program staff will review the applications for completeness and rank and score the applications.

Project Monitoring: NJHT will use staff (see below) dedicated to assist and guide grant recipients through their recovery projects to help ensure successful completion and proper reimbursement and enable future covenant monitoring. Field visits by NJHT staff for outreach, construction meetings, final inspections, and covenant-monitoring are anticipated. The NJHT will provide quarterly reports on project progress to the HPO to facilitate timely and accurate reporting to the NPS.

Financial Controls: The NJHT already has a grant manager on staff to ensure that this program complies with the state's and the HPF Grant Manual guidelines. Grantees must submit invoices and proof of payment prior to HPO/NJHT reimbursement. All sub-grant awards will be tracked in the state's Comprehensive Financial System.

Predicted Difficulties: As properties that are eligible for listing are eligible for grants, we expect the evaluation of the eligibility for those properties not already listed or

evaluated prior to grant selection will create a heavy workload early in the grant process. The grant program selection process will be challenging given the range of eligible applicants. New Jersey's public contracts statutes, rules and policies will add to the challenges.

Although the HPO believes that private property owners have the greatest need for funding, this potential applicant group is unfamiliar to the office. HPO has not provided funding to private property owners since the 1980s, and the NJHT has never funded private individuals or business owners, so funding construction projects will require revising existing grant agreement templates. We anticipate substantially more guidance will be needed for many private property owners unfamiliar with grant application processes, the Secretary of the Interior's Standards, significant capital improvement projects, and preservation easement restrictions.

b. Technical Assistance

The unprecedentedly wide extent of storm damage created both shock and confusion about how to proceed with recovery. The confusion has been compounded by FEMA's issuance of higher Advisory Base Flood Elevations for houses shortly after the storm, and changes to the National Flood Insurance Program resulting from the Biggert-Waters Flood Insurance Reform Act of 2012. Flood insurance for all properties—now including historic ones—will rise to market rates. The result of these two changes is that while the National Flood Insurance Program allows historic properties to remain at pre-storm elevations (even if they are substantially damaged), the rapidly rising insurance rates are driving many owners to elevate their historic buildings, sometimes to substantial heights of 8 feet or more above their historic elevation, with impacts on both individual historic properties and districts.

As part of the program of technical assistance, the HPO will develop a suite of tools to assist communities and individual homeowners in understanding the impact of elevation on individual buildings and historic districts and include consideration of site planning issues. These tools will include elevation design guidelines, an effort which will be coordinated with other similar efforts. We also plan to develop visualization tools to help individuals and communities understand what their building(s) and historic districts would look like after elevation, and research into the true cost implications of

elevation decisions on insurance and other economic factors. We plan to fund outreach and workshops on elevation and storm resiliency, working with Preservation New Jersey, which is already in the field with funding from the National Trust for Historic Preservation.

We plan to assist federal and state agencies in expediting reviews through completion of an archaeological data consolidation effort that is already underway, through improvements to make digital project submission more practical, and through the development of a marine archaeological context.

c. Staffing, Streamlining and Agency Coordination

The influx of federal funding for Hurricane Sandy recovery in New Jersey will greatly increase the number of Section 106 consultation requests received annually. While the HPO has worked with FEMA, HUD, the Advisory Council on Historic Preservation, and Federally-recognized Tribes to develop and execute a Programmatic Agreement that streamlines the Section 106 consultation process for Hurricane Sandy projects, the HPO still anticipates that our workload will increase by 130% over the next three years. To address the immediate need for staffing, we are adding four hourly employees to the HPO staff. These hourly employees will meet the Professional Qualification Standards in architectural history, history, and archeology, and will be responsible for completing Section 106 reviews of Hurricane Sandy recovery projects.

Since hourly employees are limited to working 900 hours within a state fiscal year, we are proposing to hire five additional full-time employees either for limited term appointments or on a contract basis through the state's Request for Qualifications process. These additional full time employees will consist of two architectural historians, one archaeologist, one GIS specialist, and one clerical staff. This additional staff will allow current HPO staff to focus on our existing workload while managing the larger studies we will complete with HPF-DR funding.

In order to administer the HPF-DR grant program, the NJHT will need to hire five additional staff. This additional staff will be hired either for limited term appointments either on a contract basis and/or via a temporary staffing solution.

These additional staff will consist of four historic preservation professionals, all of whom will meet or exceed the National Park Service's Professional Qualifications Standards in architectural history, historic architecture, or archaeology, and one clerical staff person.

d. Timeline

| Program Area | Actions |
|--|---|
| December 2013 - January 2014 (Months 1-2) | |
| Administration | <ul style="list-style-type: none"> Finalize action plan and submit to NPS Finalize Grants.gov application and process through DEP Federal Grants process December 31: Submit Interim Progress Report (Action Plan) to NPS |
| Staffing | <ul style="list-style-type: none"> Finalize staffing plan Initiate procurement process for staffing |
| Survey and Assessment | <ul style="list-style-type: none"> Continue compiling FEMA / CDBG damage and application data Continue updating damaged property list |
| Sub-grants | <ul style="list-style-type: none"> Finalize Interagency MOU with NJHT to implement subgrant program Establish sub-grant requirements and determine applicability of state procurement issues and federal reporting for individuals vs. organizations (i.e. prevailing wage, FFATA, etc.) Develop grant application Prepare grants marketing plan Researching Grants Administration software solutions and initiate procurement Prepare public notice announcements and program information documents Schedule and plan public information meetings |
| Technical Assistance Projects | <ul style="list-style-type: none"> Identify Treasury rules and procurement thresholds Finalize technical assistance project list Draft the RFP for design guidelines Initiate IT discussion |
| February 2014 - March 2014 (Months 3-4) | |
| Administration | <ul style="list-style-type: none"> Receive funding from NPS March 31: Submit Interim Progress Report to NPS Finalize public information meeting agenda |
| Staffing | <ul style="list-style-type: none"> Finalize workstations / infrastructure for temporary staffing |

| | |
|--|--|
| Survey and Assessment | <ul style="list-style-type: none"> Develop priority areas for additional survey and damage assessment based on windshield survey and FEMA / CDGB damage and application data |
| Sub-grants | <ul style="list-style-type: none"> Announce Hurricane Sandy Disaster Relief Assistance Grant Program to the public. Finalize Grants Administration software set up Distribute online program guidance documents and application materials via Grants Administration Software Conduct public information meetings |
| Technical Assistance Projects | <ul style="list-style-type: none"> Initiate procurement for design guidelines |
| April 2014 (Month 5) | |
| Administration | <ul style="list-style-type: none"> Set up grant evaluation panel meetings Assess information session needs |
| Staffing | <ul style="list-style-type: none"> Select Staffing Initiate training for temporary staff |
| Survey and Assessment | <ul style="list-style-type: none"> Conduct survey, as needed |
| Sub-grants | <ul style="list-style-type: none"> April 15: 1st Round Application Deadline Initiate 1st Round selection process |
| Technical Assistance Projects | <ul style="list-style-type: none"> Continue project procurement process |
| May 2014 - June 2014 (Month 6-7) | |
| Administration | <ul style="list-style-type: none"> June 31: Submit Interim Progress Report to NPS |
| Staffing | <ul style="list-style-type: none"> Prepare staff for project administration |
| Survey and Assessment | <ul style="list-style-type: none"> Conduct survey, as needed |
| Sub-grants | <ul style="list-style-type: none"> Finalize 1st Round selection. Issue 1st Round Award letters and grant agreement documents June 15 2nd Round Application Deadline Initiate 2nd Round selection process |
| Technical Assistance Projects | <ul style="list-style-type: none"> Identify grant properties to be nominated to the National Register |
| July 2014 - August 2014 (Month 8-9) | |
| Sub-grants | <ul style="list-style-type: none"> Finalize 1st Round grant agreements |

| | |
|---|---|
| | <ul style="list-style-type: none"> • Coordinate Grantee Kick-Off meetings (format/locations TBD) • Begin 1st Round grant management • Finalize 2nd Round selection. • Issue 2nd Round Award letters and grant agreement documents • Evaluate need for 3rd Round |
| Technical Assistance Projects | <ul style="list-style-type: none"> • Select project contractors and finalize project schedules • Assign project managers and establish monitoring program • Identify grant properties to be nominated to the National Register |
| September 2014 - November 2014 (Month 10-11) | |
| Administration | <ul style="list-style-type: none"> • September 30: Submit Interim Progress Report to NPS |
| Sub-grants | <ul style="list-style-type: none"> • Continue 1st Round grant management • Finalize 2st Round grant agreements • Coordinate Grantee Kick-Off meetings (format/locations TBD) • Begin 2nd Round grant management • Prioritize sub-grantee NR Nominations and initiate procurement • Initiate sub-grantee covenant recording |
| Technical Assistance Projects | <ul style="list-style-type: none"> • Continue project management • Identify grant properties to be nominated to the National Register |
| December 2014 (Month 12) | |
| Administration | <ul style="list-style-type: none"> • December 31: Submit Interim Progress Report to NPS |
| Sub-grants | <ul style="list-style-type: none"> • Continue 1st Round grant management • Continue 2nd Round grant management |
| Technical Assistance Projects | <ul style="list-style-type: none"> • Continue project management |

January 2015 - September 2015

- Continue grant management
- Continue and finalize sub-grantee covenant recording
- Continue processing sub-grantee NR nominations
- Continue project management
- Closeout completed projects and issue final payments to contractors

December 2015

- All projects completed

January 2016 - December 2033

- Covenant monitoring

IV. Review Streamlining and Agency Coordination

Coordination with other federal, state and local recovery agencies is central to implementing Section 106 for storm damaged projects. HPO has had close connections with the NJ Office of Emergency Management (NJOEM) and FEMA staff since the storm. HPO has also worked with the Army Corps of Engineers on emergency permitting necessary for dune reconstruction and construction and wet debris/storm sediment removal. HPO has been substantively involved in setting up the Environmental and Historic Preservation reviews for funding through the U.S. Housing and Urban Development (HUD) CDBG-DR program.

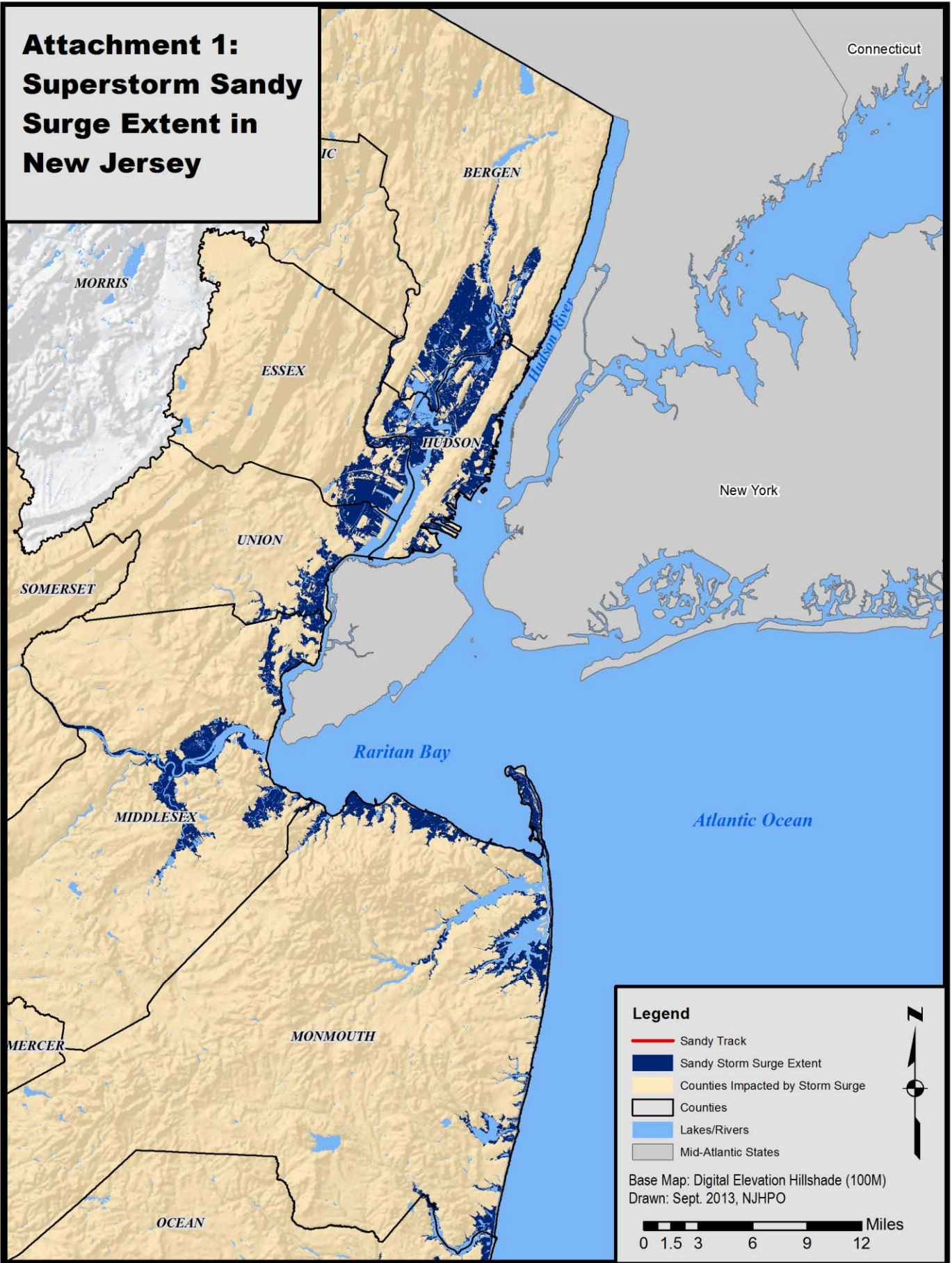
The Advisory Council on Historic Preservation, HPO, HUD, FEMA, and the Native American Tribes have signed on to a Programmatic Agreement (PA) which streamlines the Section 106 review process for storm recovery. The PA and underlying policy and forms are set up to allow the Section 106 review performed for a FEMA funded project to suffice for a HUD funded project and vice versa, reducing duplication of effort.

The joint HPO/FEMA windshield survey was intended to identify areas with potential to contain historic properties, and those with no potential for historic properties. The results are useful in concentrating where survey is necessary, and where no further survey is needed. The results of the survey have been incorporated into the PA; as a result, architectural review is complete for a substantial percentage of storm recovery projects.

Pre-storm, New Jersey's archaeological data was spread out over multiple agencies, with no one set of maps showing all sites or surveyed areas. We are in the process of working with FEMA and Army Corps at the federal level, and the State Museum and the Pinelands Commission at the State level, to combine that data to expedite storm recovery activities.

Attachment 1: Map of Sandy Inundation Areas

Attachment 1: Superstorm Sandy Surge Extent in New Jersey



Attachment 1: Superstorm Sandy Surge Extent in New Jersey



Pennsylvania

Delaware

Delaware Bay

HUNTERDON

SOMERSET

MIDDLESEX

MERCER

MONMOUTH

BURLINGTON

OCEAN

CAMDEN

Barnegat Bay

GLOUCESTER

SALEM

ATLANTIC

Atlantic Ocean

CUMBERLAND

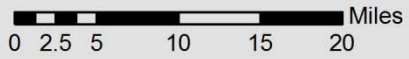
CAPE MAY

Legend

- Sandy Track
- Sandy Storm Surge Extent
- Counties Impacted by Storm Surge
- Counties
- Lakes/Rivers
- Mid-Atlantic States



Base Map: Digital Elevation Hillshade (100M)
Drawn: Sept. 2013, NJHPO



Attachment 2: Reporting of Sandy Related Damage

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|----------|----------------------|---|--|----------------------------------|---|---------------|
| Atlantic | Atlantic City | Boardwalk | | DAMAGE AND INUNDATION, Destroyed | Non-commercial portions of the Boardwalk destroyed | |
| Atlantic | Atlantic City | Scales Grill & Deck | Gardners Basin | DAMAGE AND INUNDATION, Destroyed | total loss | |
| Atlantic | Egg Harbor | Studebaker Showroom | North West Corner Verona and Toulon avenues | UNDAMAGED | no damage from Sandy, however, a temporary construction office on site was damaged (damage unspecified) | 11-27-12 |
| Atlantic | Somers Point | Bay Front Historic Distric | | DAMAGE AND INUNDATION, Major | | |
| Atlantic | Somers Point | Somers Point-Longport Causeway | Route 152? | DAMAGE AND INUNDATION, Major | road washed away | 11-4-12 |
| Bergen | Alpine | Blackledge Kearney house | Alpine Landing | DAMAGE ONLY, Major | extensive damage to the stone walls, near collapse of the house / FROM CLIFFNOTES newsletter: 4ft of water in the building; Second floor and attic stayed dry; temporarily stabilized by parks forces; lots of debris collected between the Kearney house and the pavilion (They had 16 inches of water inundation during Irene, and almost 2 ft during 1991's perfect storm) | 11-14-12 |
| Bergen | Alpine | Fort Lee Historic Park | Palisades Interstate Park • NJ Section | DAMAGE ONLY, Minor | Visitors Center ok, some trees down in the park and on the paths. | 11-14-12 |
| Bergen | Alpine Borough | Blackledge-Kearny House | Alpine Landing | DAMAGE ONLY, Unknown | Extensive damage to stone walls, near collapse of house as of 11-20-12 Front foundation wall collapsed but not at corners; Temporary beam installed 10 ft surge | 11-20-12 |
| Bergen | Edgewater Borough | Ferryboat "Binghamton" | 725 River Road / Hudson Riverbank | UNDAMAGED | damage not due to Hurricane Sandy | 11-8-12 |
| Bergen | Little Ferry Borough | Gethsemane Cemetery | 360-370 Liberty Street | DAMAGE ONLY, Unknown | Four trees came down, one especially large one | |
| Bergen | Maywood | Romeyn-Oldis-Brinkerhoff House [Romine-Van Voorhis House] | 306 Maywood Ave (located adjacent to the Maywood Railroad Station) | DAMAGE ONLY, Minor | A tree fell on the house, but it has been removed. According to Carol the damage does not appear to be too extensive | 11-19-12 |
| Bergen | Maywood Borough | Dutch Stone House | | DAMAGE ONLY, Unknown | House hit by tree | |
| Bergen | Maywood Borough | Maywood Railroad Station | 269 or 271 Maywood Avenue | DAMAGE ONLY, Major | Large tree limb through roof that breached interior ceiling. Museum contents undamaged. Estimated cost \$3200.00 | |
| Bergen | Oradell | Hackensack Waterworks [New Milford Plant of the Hackensack Water Company] | Van Buskirk Island | UNDAMAGED | not flooded - chimney repairs interrupted | 11-8-12 |
| Bergen | Park Ridge Borough | Wortendyke Barn | 13 Pascack Road | DAMAGE ONLY, Unknown | Some damage, unquantified | |
| Bergen | Ridgewood Village | Schoolhouse Museum | 650 E Glen Avenue | DAMAGE ONLY, Unknown | A tree fell on the side of the museum ripping the wires off the side of the building and breaking some of the trim and clapboard. The historic marker sign was dislodged and needs to be reset in cement and we lost the flag pole. My first estimate to remove the tree is \$2700. I am waiting for another estimate and an estimate for the repair. I also need to have an electrician in to repair the split and dislodged wires. I expect it will be at a cost if \$4000+ at the least. | |
| Bergen | River Edge Borough | Steuben House | 1209 Main Street | INUNDATION ONLY, Unknown | 24 inches of water in front rooms on Monday night | |
| Bergen | Rutherford | BPO Elks Building | 48 Ames Avenue | DAMAGE ONLY, Minor | damage to elk statue over roof - estimate \$2800 | 11-7-12 |
| Bergen | Rutherford | Lillian Russell Moore House | 5 Courier Place | UNDAMAGED | | 11-7-12 |
| Bergen | Rutherford | Newick/Tripp House | 77 Woodward Avenue | DAMAGE ONLY, Minor | wind damage to three sections of siding - estimate \$1500 | 11-7-12 |
| Bergen | Rutherford | Rutherford Boat Club / Yacht Club / Chris-Craft / Nereid Boat Club: | 350 Riverside Avenue | DAMAGE AND INUNDATION, Minor | contributing to Rutherford Downtown District; water damage first floor - estimate \$30,000 | 11-7-12 |

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|------------|------------------------|--|--|----------------------------------|---|---------------|
| Bergen | Rutherford | Rutherford Borough Hall | 176 Park Avenue | DAMAGE ONLY, Major | tree struck building - \$30,000 damage - contributing to Rutherford Downtown District | 11-7-12 |
| Bergen | Rutherford | S.Key House/Diffily Funeral Home / Collins House | 41 Ames Aveune | DAMAGE ONLY, Minor | damage to roof - estimate \$5,000 | 11-7-12 |
| Bergen | Rutherford | Varrelmann's Bake Shop | 60 Park Avenue | DAMAGE ONLY, Unknown | broken windows, wind damage / business closed since storm - contributing to Rutherford Downtown District | 11-7-12 |
| Camden | Camden City | USS New Jersey | 62 Battleship Place | DAMAGE ONLY, Unknown | Minor damage to awnings and tents | |
| Cape May | Cape May City | 429 Beach Avenue | Cape May Historic District - Beach Avenue | DAMAGE ONLY, Minor | roof damage | |
| Cape May | Lower Township | Cold Spring Village | | INUNDATION ONLY, Unknown | Flooded | |
| Cape May | Lower Township | Naval Air Station Wildwood | | DAMAGE ONLY, Minor | 15-20 broken windows | |
| Cape May | Ocean City | Ocean City Residential Historic District | | DAMAGE AND INUNDATION, Minor | MK reported 18 inches of flood water in her house | 11-20-12 |
| Cape May | Ocean City | U.S. Life-Saving Station | Fourth Street and Atlantic Avenue | UNDAMAGED | no damage | 11-16-12 |
| Cape May | Wildwood Crest Borough | Caribbean Motel | 5600 Ocean Avenue | DAMAGE ONLY, Affected | Minor roof damage | |
| Cumberland | Commercial Township | Bivalve Oyster Packing Hosues & Docks | Shell Road | INUNDATION ONLY, Unknown | Damage to docks. AJ Meerwald OK | |
| Cumberland | Lawrence Twp | | reports of 4 -12 houses washed into the Delaware Bay | DAMAGE AND INUNDATION, Destroyed | | |
| Essex | Belleville | Reformed Dutch Church of the Second River | 171 Main Street | | Steeple damaged by Sandy winds > Cross that sits on top of spire about 130 feet in air 2-inch iron rod that was vertical is now horizontal | 11-9-12 |
| Essex | Newark City | Newark City Subway | | INUNDATION ONLY, Unknown | Flooding in Newark Penn Station as well as major debris damage between Newark Penn and Branch Brook Stations | |
| Hudson | Bayonne | First Assembly of God Church | 100 East 22nd Street | | Sandy's storm surge washed through the church with such force that water coursing through the crawl spaces beneath the building burst through the first-floor flooring in several areas, Kelly said. The church's first floor was filled with 2 feet of water, oil and kerosene that destroyed walls, carpeting, wiring, computers, the sound system and anything else it reached. | 4-3-13 |
| Hudson | Bayonne | Robbins Reef Light Station | | DAMAGE AND INUNDATION, Minor | Damaged railings, doors and windows, shifted foundation stones | 2/4/13 |
| Hudson | Hoboken City | Erie-Lackawanna Terminal | Hudson Plaza at the Bank of the Hudson River | INUNDATION ONLY, Unknown | | 10/29/12 |
| Hudson | Hoboken City | Erie-Lackawanna Terminal | Hudson Plaza at the Bank of the Hudson River | INUNDATION ONLY, Unknown | | 11-16-12 |
| Hudson | Jersey City | CRRNJ Terminal | Johnston Avenue | INUNDATION ONLY, Unknown | 5 ft of flood water in the building, doors & windows blown off | |
| Hudson | Jersey City | Ellis Island | | DAMAGE AND INUNDATION, Major | FROM SL: Ellis did not do well. The main museum basement is flooded, but worse is the Ferry Building. I got a few pictures from the deputy superintendent - it looks like we never did any work. The exhibit is ruined. I imagine the carpeting in the meeting room is done for. Their new offices, in the building behind the FB, was flooded, as well. Much of the stabilization work on the hospitals is lost, too FROM Janis CALLELA: The Ferry Building, exhibit and the furniture (desks, etc) used for our education programs were damaged. I do not know the extent of the damage. The priority now is getting power and heat into the Statue and the Immigration Museum as both house millions of dollars in exhibits and artifacts. | |

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|-----------|------------------|---|---|----------------------------------|--|---------------|
| Hudson | Jersey City | Greenville Yard Lift Bridge [Greenville Yard Historic District] | Hudson River at Greenville Yards | DAMAGE AND INUNDATION, Destroyed | "irreparably damaged" "Because of the condition of the structure, no commitment to salvage of elements can be made" "demolition work is scheduled for tomorrow (Saturday). " "There will be an attempt to photograph and/or shoot video" | 11-16-12 |
| Hudson | Jersey City | Jersey City Armory | 678 Montgomery Street | DAMAGE ONLY, Minor | Boiler Vent blew off during the storm | 4-24-13 |
| Hudson | Jersey City | Liberty State Park | | DAMAGE AND INUNDATION, Major | | |
| Hudson | Jersey City | Statue of Liberty | | DAMAGE AND INUNDATION, Major | The statue was not damaged by superstorm Sandy, but Liberty Island sustained significant infrastructure damage that will delay the monument's re-opening indefinitely, said Mark Litterst, a Park Service spokesman. 4 ft of floodwater. | |
| Hudson | Kearny Town | NJ Transit's Meadows Maintenance Complex | swampy crook where the Passaic and Hackensack rivers come together | DAMAGE AND INUNDATION, Major | 62 locomotives and 261 rail cars were damaged. That amounts to 24 percent of the fleet...The water was as deep as five feet in some of the complex's maintenance areas, Weinstein said. Out in the yard, it was deep enough to submerge automobiles. Salt water rose above the wheel wells of the locomotives and rail cars, engulfing brakes, electrical systems, heating and air-conditioning units, batteries and traction motors that help power the cars and soaking insulation panels and seat cushions...Should NJ Transit's costs be similar, they would face a repair bill of more than \$32 million. | |
| Hunterdon | Clinton | Clinton Historical Museum | 56 Main Street | DAMAGE ONLY, Minor | The Red Mill Museum Village has significant damage to its Administration Building. A downed tree on the property landed on power lines and pulled away the support structure attaching the lines to the Administration Building. | 11-9-12 |
| Hunterdon | Clinton | Vought Farmstead Hay Barn | | DAMAGE ONLY, Destroyed | totally destroyed | 11-21-12 |
| Hunterdon | Clinton Town | Red Mill | 7 Center Street | DAMAGE ONLY, Unknown | A tree did clip the office and I believe caused some damage to the blacksmiths barn. We were actually lucky that we did not sustain major damage. The Red Mill Museum Village had significant damage to its Administration Building. A downed tree on the property landed on power lines and pulled away the support structure attaching the lines to the Administration Building. An electrical pole and power lines were fixed yesterday afternoon by workers from Georgia Power. Additional repairs and system checks will continue throughout the weekend and early next week. | |
| Hunterdon | Clinton Township | Vought House | Greyrock Road | DAMAGE ONLY, Affected | Barn collapsed. House fine. | |
| Hunterdon | Union Twp | Chew-Turner-Carhart Farm | Van Syckles Corner Road south of Henderson Road | DAMAGE ONLY, Minor | A tree had fallen and damaged the horse barn roof located next to 117 Van Syckles Rd | 3/18/13 |
| Hunterdon | Union Twp | Van Syckle Corner Historic District | Van Syckles Corner and Norton roads _ specifically 117 Van Syckles Rd | DAMAGE ONLY, Minor | A tree had fallen and damaged the horse barn roof located next to 117 Van Syckles Rd | 3/18-13 |
| Mercer | Hopewell | Bergen-Witcher House | 204 Hopewell-Wertsville Road / Sourlands | DAMAGE ONLY, Minor | roof damage - tree fell? | |
| Mercer | Trenton City | Old Barracks | Barrack Street | DAMAGE ONLY, Affected | Minor damage to fencing | |
| Mercer | Trenton City | Roebling Museum | 675 South Clinton | DAMAGE ONLY, Minor | Minor damage to fence and roof, covered by warranty | |
| Mercer | Trenton City | Trenton Central High School | Chambers Street (Between Hamilton and Greenwood Avenue) | | The 80-year-old school has problems with mold and asbestos, a leaking roof worsened by Hurricane Sandy, ventilation problems, floors warped by water damage and classroom ceilings that rain plaster on students and teachers. | 3/5/13 |

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|-----------|-----------------------|--|--|----------------------------------|--|---------------|
| Middlesex | Cranbury Township | Cranbury Historical Society | 4 Park Place East (1834 by Dr. Garret P. Voorhees) | DAMAGE ONLY, Minor | Carriage House behind museum - roof & upper structure damage (http://www.cranburyhistory.org/museum/) | 11-7-12 |
| Middlesex | Edison | Thomas A. Edison Memorial Tower | Christie Street | UNDAMAGED | construction scaffolding survived the storm with no damage. | 11-27-12 |
| Middlesex | New Brunswick City | First Dutch Reformed Church | 160 Neilson Street | DAMAGE ONLY, Minor | One tombstone was destroyed by a falling tree limb. - A storm window on the east elevation of the education building broke. The old lantern above the main entrance of the church lost two glass panes; we are in the process of having new glass panes made. | |
| Middlesex | Piscataway | East Jersey Olde Town Village | 1050 RIVER ROAD | | Our wagonhouse/grainary lost doors on the front and rear, and two of our outbuildings, a corn crib and outhouse were damaged. Massive wind apparently blew the corn crib on its side and unfortunately, the outhouse collapsed under the weight of the corn crib. http://www.co.middlesex.nj.us/culturalheritage/village.asp | 11-16-12 |
| Middlesex | Piscataway | Ivy Hall (Cornelius Low House) | 1225 River Road | UNDAMAGED | | 11-16-12 |
| Middlesex | Sayreville | | | | The total number of uninhabitable houses has risen to 240 in Sayreville. Out of the 240 homes, 39 have destroyed foundations and are, for the most part, unsafe to enter. | 11-15-12 |
| Middlesex | South Amboy City | Morgan Drawbridge on North Jersey Coast Line | mp 3.22 over Cheesequake Creek | DAMAGE ONLY, Unknown | Damage from boats and a trailer that collided into the bridge | |
| Monmouth | Highlands Borough | Romer Lighthouse | Lower New York Bay | DAMAGE AND INUNDATION, Major | for starters: caisson failure, foundation calving, crane collapse, pier foundation cracking, rip rap collapse, 1st & 2nd floor windows and doors washed through, walkway collapse, broken panes in cupola, no safe way to gain access to building; http://www.professionalstaffers.com/RS2/Romer_Shool | 4-30-13 |
| Monmouth | Keansburg | Keansburg Amusement Park | 275 Beachway Avenue | DAMAGE AND INUNDATION, Major | | 11-6-12 |
| Monmouth | Keyport Borough | Keyport Historical Society | | DAMAGE ONLY, Destroyed | Building is a total loss | |
| Monmouth | Lincroft / Middletown | Monmouth Museum | 765 Newman Springs Road | DAMAGE ONLY, Minor | lost more than \$20,000 in admissions, membership and gift shop sales, said museum media contact Julie Fiorino / had to replace a circulating pump on their heating system that burned out because of electrical power surges after the storm | 1/3/13 |
| Monmouth | Long Branch | Takanassee Beach Club [US Lifesaving Station Number 5 and Takanassee Beach Club Historic District] | Between Atlantic Ocean an the East and Lake Takanassee and Ocean Ave on the West and North Lake Dr on the North and South Lake Dr on the South | DAMAGE AND INUNDATION, Destroyed | All that remains of the building is piles of debris ...US Life Saving Station Boathouse designed by Victor Mendleheff and erected in 1903 | 11-13-12 |
| Monmouth | Long Branch City | US Lifesaving Station Number 5 and Takanassee Beach Club Historic District | Boathouse | DAMAGE AND INUNDATION, Destroyed | The boathouse is totally destroyed | |
| Monmouth | Manasquan | Manasquan Life Saving Station | | | | 11-21-12 |
| Monmouth | Middletown | Port Monmouth Community Church - Seaman's Church | 78 Main Street and Lydia Place | DAMAGE AND INUNDATION, Major | water flowed through the church scattering everything; some exterior siding washed off revealing clapboard beneath | 11-1-12 |
| Monmouth | Middletown | Sandy Hook | between Shrewsbury River and Atlantic Ocean | DAMAGE AND INUNDATION, Major | storm surge, piles of sand deposits, Officers Row damaged | 12-4-12 |
| Monmouth | Neptune Township | Ocean Grove Auditorium | | DAMAGE ONLY, Major | A large section of the roof blown off | |
| Monmouth | Red Bank | Monmouth Boat Club | | | as of 11-20-12 flooded with about 6-7 feet of water. First story much loss. | |
| Monmouth | Red Bank | Shrewsbury Ice Boat and Yacht Club | next to the Monmouth Boat Club | | Ice Boat club building flooded, with 3 feet of water. The ramp was torn off the building, and that the floating docks floated away. Some roof shingles were blown off the building | 11-20-12 |

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|----------|--------------------|--|--------------------------------------|----------------------------------|--|---------------|
| Monmouth | Sea Bright | Sea Bright Gas & Oil Company [Dunkin Donuts] | 1002 Ocean Avenue | | likely eligible based on recent EM committee meeting | 11-28-12 |
| Monmouth | Sea Bright | Seabright Beach Club | 999 Ocean Ave | DAMAGE AND INUNDATION, Major | boardwalk wash away, buildings missing | 11-16-12 |
| Monmouth | Sea Girt Borough | Quarters One | | UNDAMAGED | | 11-20-12 |
| Monmouth | Seabright | Chapel Hill Swim Club [Chapel Swim Club] | 1023 Ocean Ave | DAMAGE AND INUNDATION, Destroyed | | 11-29-12 |
| Monmouth | Shrewsbury Borough | Christ Church, Shrewsbury | Broad St & Sycamore Ave | DAMAGE ONLY, Minor | limited damage. One of our eight 1870ish double lancet windows was hit by a flying tree branch that took out about 20 of the diamond quarries in one of the windows. We had completed a full restoration project three years ago. This damage is being assessed but I am optimistic. | |
| Monmouth | Wall | Allaire State Park [Deserted Village of Allaire Historic District] | County Routes 549 and 524 | DAMAGE ONLY, Minor | So the guys are trying to pull the branches down old school (some kind of bean bag weight attached to a rope), which takes forever, but it is what it is. So we can at least deem the village area safe to reopen on Saturday. No trails, no picnic area, no camping. | 11-14-12 |
| Monmouth | Wall | Camp Evans | 2201 Marconi Road | DAMAGE ONLY, Major | Lost hundreds of roof shingles off of the H-buildings, leading to dozens more roof leaks than were previously present. The Marconi buildings and the antenna were undamaged. | 11-20-12 |
| Monmouth | Wall | Camp Evans Historic District (Boundary Increase and Decrease) | Building 9013 | DAMAGE AND INUNDATION, Major | The roof leaks have become serious. The hurricane has torn off sections of the south roofing shingles. A section of the interior ceiling has collapsed. | 4/1/13 |
| Monmouth | Wall Township | Camp Evans | 2201 Marconi Rd | DAMAGE ONLY, Unknown | Roof damage / as of 11-20-12: Sandy blew hundreds of roof shingles off of the H-buildings, leading to dozens more roof leaks than were previously present. Otherwise the Camp Evans complex fared reasonably well. The Marconi buildings and the antenna were undamaged. | 11-20-12 |
| Monmouth | | Monmouth County Historical Society | all buildings administered by County | UNDAMAGED | "substantially ok...while the buildings are ok, their context has been devastated" Gail doesn't consider losing a few shutters or shingles damaged. | 11-29-12 |
| Morris | Denville | Ayres Farm House | | DAMAGE ONLY, Minor | barn door damaged | 11-20-12 |
| Morris | Denville | Ayres/Knuth Farm | 25 Cooper Road | | due to Super Storm damage, awaiting contractor estimates for: sliding Barn door twisted off its trolley; Door repair, Trolley repair, Loose boards, blown of same barn, Glass blown out of windows; Office barn had multiple window panes blown out; Office barn had tow barn door blown off; Tenant House had a glass panes blown out; Farm house has attic leak due to | 12-30-13 |
| Morris | Gladstone | Bamboo Brook (Merchiston Farm) | | DAMAGE ONLY, Minor | | |
| Morris | Morris | Fosterfields | The Willows | | tree landed on kitchen | 11-20-12 |
| Morris | Morris | Fosterfields | Sheep & Hog Pen | | tree damaged fence / minor shingle damage | 11-20-12 |
| Morris | Morris Township | Morris Museum in Morris Township | 6 Normandy Heights | DAMAGE ONLY, Minor | lost almost 10 percent of its operating budget because of Sandy. several large trees on museum grounds fell in the storm and had to be removed, costing the museum thousands of unbudgeted dollars | 1/3/13 |
| Morris | Morris Township | Whippany Farm (Frelinghuysen Arboretum) | 53 East Hanover Avenue | | damage to shutters | 11-19-12 |
| Morris | Morristown Town | Morris County Courthouse | | | copper top of roof blown off | 11-20-12 |
| Morris | Morristown Town | Morris County Historical Society [Acorn Hall] | 68 Morris Avenue | DAMAGE ONLY, Major | Our site is about 6 acres, half is wooded. While Acorn Hall and its Carriage House escaped a great deal of damage during Sandy, our back woodlot was completely destroyed (please see attached photos). | 11-14-12 |
| Morris | Morristown Town | Morristown & Morris Township Library | | DAMAGE ONLY, Minor | copper dop of clock tower blown off | 11-20-12 |

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|--------|--------------------------------|--|---|---------------------------------|--|---------------|
| Morris | Morristown Town | Speedwell Factory | | | wheelhouse damage | 11-20-12 |
| Morris | Morristown Town | Speedwell Vail House | | | damage to shutters | 11-19-12 |
| Morris | Morristown Town | St. Peter's Episcopal Church | | | protective glazing on stained glass windows broke off & basement window blew out | 11-20-12 |
| Morris | Morristown Town | Willow Hall | 330 Speedwell Ave | DAMAGE ONLY, Unknown | Large tree resting on roof FROM 11-20-12: tree down on front façade; greenhouse destroyed; stone wall damage | |
| Morris | Morristown Town | Willow Hall | 330 Speedwell Ave | DAMAGE ONLY, Major | 1) Large tree fell into the building damaging the roof and peak; 2) Greenhouse was demolished and blown away; 3) The stone wall was damaged by wind knocking the large stones out ; 4) About 5 other trees have fallen on the property. | 11-8-12 |
| Morris | Parsippany-Troy Hills | Parsippany Presbyterian Church | | | fences smashed; leaking steeple | 11-20-12 |
| Morris | Parsippany-Troy Hills Township | Craftsman Farms | Route 10 & Manor Lane | DAMAGE ONLY, Affected | A dozen trees down, on atop of the office which will require a new roof. Log House had minor damage, | |
| Morris | Pequannock | First Reformed Church of Pompton Plain | | | cemetery fence damage | 11-20-12 |
| Morris | Rockaway Borough | First Presbyterian Church of Rockaway | | | spires fell off bell tower | 11-20-12 |
| Morris | Rockaway Borough | Mt. Hope Miner's Church | | DAMAGE ONLY, Minor | | |
| Morris | Roxbury | Cary | 208 Emmans Road | DAMAGE ONLY, Minor | damage to brick chimney and to the end of the slate roof, displacing some slates | 11-19-12 |
| Morris | Roxbury | Ledgewood HD | | DAMAGE ONLY, Minor | has trees down (including two at King house), but no identified building damage | 11-19-12 |
| Morris | Speedwell | Historic Speedwell | | DAMAGE ONLY, Minor | | |
| Morris | Washington Twp | Cooper Gristmill | | DAMAGE ONLY, Minor | | |
| Morris | Whippany | Frelinghuysen Aboretum (Whippany Farm) | | DAMAGE ONLY, Minor | | |
| ocean | Barneget | Cedar Bridge Tavern | 200 Old Halfway Road | DAMAGE ONLY, Minor | limited wind damage on roof [http://www.co.ocean.nj.us/CulturalHeritage/Cedarbridge.aspx] | 11-20-12 |
| Ocean | Bay Head Borough | All Saint's Church | 500 Lake Avenue | DAMAGE AND INUNDATION, Affected | The historic wooden church, built by shipbuilders in 1889, was slammed between walls of water from the bay on one side and the ocean on the other. The water crumbled the foundation, Mr. Turton said; there is now a sinkhole in the sanctuary into which the pews are listing at a 30 degree angle. The rectory is uninhabitable; the organ and the church's records | |
| Ocean | Bay Head Borough | Bay Head Yacht Club | 111 Metcalfe Street, Bay Head, NJ 08742 | DAMAGE AND INUNDATION, Major | | 12-3-12 |

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|--------|---|---|--|----------------------------------|--|---------------|
| Ocean | Bay Head Borough & Point Pleasant Borough | Bay Head Historic District | Bound by Delaware Avenue (north), Atlantic Ocean (east), Borough boundary (south) and undefined extent west of Main Avenue | DAMAGE AND INUNDATION, Major | devastated - waiting for report | 11-20-12 |
| Ocean | Beach Haven Borough | Beach Haven Historic District | Atlantic, South Atlantic, Beach, North Beach, Engleside avenues; Amber, Centre, Coral, Pearl, Second and Third streets | DAMAGE AND INUNDATION, Major | Beach Haven Historic District - 30 of 356 buildings substantially damaged / major concern - how to raise the cottage above flood level and keep arch integrity | 11-20-12 |
| ocean | Beach Haven Borough | Bed & Breakfast district | 105 Chatsworth Ave | DAMAGE AND INUNDATION, Affected | According to Property Owner, majorly damaged and needs to be demolished. According to HPC Chair, only 2 ft of water in basement | 9-27-13 |
| ocean | Brick | Beaton Boat Yard | | | surviving cat boats at the Beaton Boat Yard in Brick TWP/Mantoloking. All sustained some damage from Sandy and a couple are undergoing repair | |
| Ocean | Brick Township | Camp Osborne HD | NJ Rt 35 & ocean | DAMAGE AND INUNDATION, Destroyed | Most buildings in the district obliterated / 60 buildings destroyed | |
| Ocean | Dover Township | Saint Elisabeth's Chapel By The Sea | Ortley Beach, Dover Township | DAMAGE ONLY, Unknown | 125 year old church. The church is marked now by nothing but a field of sand and broken pavement. The | |
| ocean | Lakehurst | Hanger One | | UNDAMAGED | | 11-20-12 |
| Ocean | Lakewood Township | Georgian Court | Lakewood Avenue | DAMAGE ONLY, Minor | Damage to monumental fence | |
| Ocean | Lakewood Township | Georgian Court University / Georgian Court (George Jay Gould Estate)(NHL) | Lakewood Avenue | DAMAGE ONLY, Minor | At least one brick and terra cotta pier was destroyed and perhaps two to four others that will need to be repaired or rebuilt. The intervening lengths of wrought iron fence were also damaged | 11-19-12 |
| Ocean | mantaloking | | | | 1/2 of 512 homes will need to be demolished. Only town that still doesn't have residents back | 2/11/13 |
| Ocean | Mantoloking Borough | Mantoloking HD | | DAMAGE AND INUNDATION, Major | devastated (general report) FROM TIM HART: devastated - waiting for report / FROM 11-20 article "Mantoloking lost 150 ft of beach" | |
| Ocean | Mantoloking Borough | Mantoloking Marine HD | | DAMAGE AND INUNDATION, Major | devastated | |
| ocean | Point Pleasant | Johnson Brothers Boat Works | | DAMAGE AND INUNDATION, Major | severe damage Bldg. 12 > built ww2 boats for navy [http://www.nimb.org] | 11-20-12 |
| ocean | Seaside | Funtown rides and arcades | | | damages | 11-20-12 |
| ocean | Seaside | Seaside Bank (1920's) | | | | 11-20-12 |
| ocean | Seaside | Seaside Boardwalk | | | | 11-20-12 |
| ocean | Seaside Heights | Carousel | Casino Pier | UNDAMAGED | The state's top amusement official confirmed that the colorful carousel, which was moved from the island to shore in the 1930s, is "fine," despite the storm having wiped out a quarter of the pier....The carousel is housed on the same pier as the roller coaster that was rendered a twisted metal mass, now an iconic image of the hurricane's wrath. (originally from Burlington | 11-19-12 |
| ocean | Toms River | Ocean County Historical Society Museum | 26 Hadley Avenue | DAMAGE ONLY, Minor | basement flooding and roof damage over the museum's offices. | 1/3/13 |
| Ocean | Tuckerton | Tuckerton Seaport | | DAMAGE AND INUNDATION, Affected | all 13 buildings were inundated but the only damage to historic structures was to the house boats. | 11-19-12 |
| ocean | | Ocean Gate Boardwalk (promenade) | | DAMAGE AND INUNDATION, Major | severely damaged - buckled | 11-20-12 |
| Salem | Pennsville | Three Forts Ferry | along the Delaware River at Fort Mott State Park / Fort Mott Road | | "the pier and docking facilities at Fort Mott sustained significant damage, leaving the ferry unable to dock at the Fort Mott pier." http://www.threeforts.com/dir.html | 4-15-13 |

| County | Muni | Property Name | Property Address | Damage Cat. | Damage Des. | Date Reported |
|--------|-------------------|--------------------------------|---------------------------------|------------------------------|---|---------------|
| Union | Elizabeth | First Presbyterian Church | | | Loss of 35 plus headstones (not covered by FEMA); Some trees down; [minor] damage to the new bell tower; Floor inside damaged by the backfire of the steam pipe system | 3/11/13 |
| Union | Elizabeth City | Old First (First Presbyterian) | Broad Street and Caldwell Place | DAMAGE ONLY, Minor | 15-25 headstones damaged by falling tree limbs | |
| Union | Hillside Township | Evergreen Cemetery | 1137 North Broad Street | DAMAGE ONLY, Minor | \$150,000 estimated from fallen trees and debris. Damage to headstones | |
| Union | Linden | Rosehill Cemetery | | DAMAGE AND INUNDATION, Minor | The oil covered only a small, eastern section of the 1,000-acre cemetery and relatively few graves were affected. Crews are removing a couple inches of topsoil and then resodding. Phillips 66 has been cooperative and responsible. | |

Attachment 3: Damage Comparison Summary

Attachment 3:
FEMA DAMAGE POINTS
NJCRGIS COMPARISON

| | Affected | Minor | Major | Destroyed | Total | |
|------------------|---------------|---------------|--------------|------------|---------------|-------------|
| FEMA Data | 43,230 | 33,753 | 5,065 | 517 | 82,565 | 100% |
| Atlantic | 7385 | 3563 | 112 | 2 | 11,062 | 13% |
| Bergen | 394 | 1024 | 44 | 1 | 1,463 | 2% |
| Burlington | 39 | 8 | 72 | 0 | 119 | 0% |
| Camden | 146 | 2 | 0 | 0 | 148 | 0% |
| Cape May | 5908 | 5025 | 147 | 3 | 11,083 | 13% |
| Cumberland | 90 | 17 | 5 | 0 | 112 | 0% |
| Essex | 19 | 4 | 1 | 0 | 24 | 0% |
| Gloucester | 22 | 1 | 0 | 0 | 23 | 0% |
| Hudson | 1672 | 780 | 1218 | 0 | 3,670 | 4% |
| Middlesex | 355 | 55 | 43 | 2 | 455 | 1% |
| Monmouth | 6351 | 3313 | 2045 | 87 | 11,796 | 14% |
| Ocean | 20456 | 19874 | 1374 | 422 | 42,126 | 51% |
| Passaic | 2 | 0 | 0 | 0 | 2 | 0% |
| Salem | 281 | 71 | 0 | 0 | 352 | 0% |
| Somerset | 20 | 1 | 0 | 0 | 21 | 0% |
| Union | 90 | 15 | 4 | 0 | 109 | 0% |
| NJ CRIGIS | 4,677 | 3,084 | 489 | 171 | 8,421 | 100% |
| Atlantic | 158 | 22 | 1 | 0 | 181 | 2% |
| Bergen | 1 | 0 | 2 | 0 | 3 | 0% |
| Burlington | 9 | 7 | 68 | 0 | 84 | 1% |
| Camden | 85 | 0 | 0 | 0 | 85 | 1% |
| Cape May | 555 | 788 | 20 | 0 | 1363 | 16% |
| Cumberland | 85 | 4 | 1 | 0 | 90 | 1% |
| Essex | 2 | 0 | 0 | 0 | 2 | 0% |
| Gloucester | 0 | 0 | 0 | 0 | 0 | 0% |
| Hudson | 1517 | 548 | 282 | 0 | 2347 | 28% |
| Middlesex | 10 | 1 | 1 | 0 | 12 | 0% |
| Monmouth | 322 | 42 | 27 | 3 | 394 | 5% |
| Ocean | 1860 | 1639 | 84 | 168 | 3751 | 45% |
| Passaic | 0 | 0 | 0 | 0 | 0 | 0% |
| Salem | 69 | 30 | 0 | 0 | 99 | 1% |
| Somerset | 2 | 0 | 0 | 0 | 2 | 0% |
| Union | 2 | 3 | 3 | 0 | 8 | 0% |
| % NJTOTAL | 11% | 9% | 10% | 33% | 10% | |

Counties not represented:
Hunterdon, Mercer, Morris, Sussex, Warren

NJDEP, Historic Preservation Office