



HURRICANE SANDY

IN NEW JERSEY
AND NEW YORK

8 References

- AECOM. 2013. *The Impact of Climate Change and Population Growth on the National Flood Insurance Program Through 2100*, Prepared for the Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, Arlington, VA. June 2013. Available at: http://www.aecom.com/deployedfiles/Internet/News/Sustainability/FEMA%20Climate%20Change%20Report/Climate_Change_Report_AECOM_2013-06-11.pdf.
- ASCE (American Society of Civil Engineers). 2005a. *Flood Resistant Design and Construction*, ASCE/SEI 24-05. Reston, VA.
- ASCE. 2005b. *Minimum Design Loads for Buildings and Other Structures*, ASCE/SEI Standard 7-05. Reston, VA.
- ASCE. 2010. *Minimum Design Loads for Buildings and Other Structures*, ASCE/SEI Standard 7-10. Reston, VA.
- Bres, Dana. 2012. *Trip Report – New York City Multifamily Housing Assessment*. Office of Policy Development and Research, U.S. Department of Housing and Urban Development. December 19, 2012.
- CDC (Centers for Disease Control and Prevention). 2013. “Deaths Associated with Hurricane Sandy – October–November 2012,” *Morbidity and Mortality Weekly Report*, Vol. 62, No. 20, May 13, 2013, pp. 393–397.
- Cooperman, A.I. and H. E. Rosendal, “Great Atlantic Coast Storm, 1962, March 5-9,” *Mariners Weather Log*, vol. 6, No. 3, May 1962, pp. 79-85.

- Delaware Geological Survey. 1992. *Summary Report the Storm of January 4, 1992*. Open File Report No. 36. June 1992.
- Dornhelm, R. 1995. "The Coney Island Public Beach and Boardwalk Improvement of 1923." *Shore & Beach*. Vol. 63, No. 1, January 1995.
- EQECAT. 2012. "Post-Landfall Loss Estimates for Superstorm Sandy." November 1, 2012, accessed March 2013. <http://www.eqecat.com/catwatch/post-landfall-loss-estimates-superstorm-sandy-released-2012-11-01>.
- FEMA (Federal Emergency Management Agency). 1992. *Building Performance Assessment Team, Field Trip and Assessment within the States of Maryland and Delaware in Response to a Nor'easter Coastal Storm on January 4, 1992*. Final Report. Washington, D.C., March 4, 1992.
- FEMA. 1996. *Corrosion Protection for Metal Connectors in Coastal Areas for Structures Located in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program*. NFIP Technical Bulletin 8, August 1996.
- FEMA. 1998. *Use of Flood Insurance Study (FIS) Data as Available Data*. Floodplain Management Bulletin 1-98. January 1998. Available at: http://www.fema.gov/media-library-data/20130726-1546-20490-0560/fmbulletin_1_98.pdf.
- FEMA. 2001. *Ensuring that Structures Built on Fill In or Near Special Flood Hazard Areas are Reasonably Safe From Flooding*. NFIP Technical Bulletin 10-01 (FIA-TB-10), April 2001.
- FEMA. 2005. *Integrating Historic Property and Cultural Resource Considerations into Hazard Mitigation Planning: State and Local Mitigation Planning How-To Guide*, FEMA 386-6. Mitigation Planning How-To #6. Washington, D.C., May 2005. Available at: <http://www.fema.gov/media-library/assets/documents/4317?id=1892>.
- FEMA. 2007a. *Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update, Final Draft*. Washington, D.C., February 2007. Available at: <http://www.fema.gov/library/viewRecord.do?id=2458>.
- FEMA. 2007b. *Design Guide for Improving Critical Facility Safety from Flooding and High Winds: Providing Protection to People and Buildings*, FEMA 543. Washington, D.C., January 2007. Available at: <http://www.fema.gov/library/viewRecord.do?id=2441>.
- FEMA. 2007c. *Design Guide for Improving Hospital Safety in Earthquakes, Floods, and Winds*, FEMA 577. Washington, D.C., June 2007. Available at: <http://www.fema.gov/library/viewRecord.do?id=2739>.
- FEMA. 2007d. *Guidelines and Specifications for Flood Hazard Mapping Partners, Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update*, February 2007.
- FEMA. 2008a. *Design and Construction Guidance for Breakaway Walls Below Elevated Buildings Located in Coastal High Hazard Areas in accordance with the National Flood Insurance Program*, NFIP Technical Bulletin 9, August 2008.
- FEMA 2008b. *Flood Damage-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas*, NFIP Technical Bulletin 2, July 31, 2008.
- FEMA. 2008c. *Free-of-Obstruction Requirements for Buildings Located in Coastal High Hazard Areas in accordance with the National Flood Insurance Program*, NFIP Technical Bulletin 5, August 2008.

- FEMA. 2008d. *Openings in Foundation Walls and Walls of Enclosures Below Elevated Buildings in Special Flood Hazard Areas in accordance with the National Flood Insurance Program*, NFIP Technical Bulletin 1, August 2008.
- FEMA. 2008e. *Substantial Improvement/Substantial Damage Desk Reference*, FEMA P-758. Washington, D.C., May 2010. Available at: <http://www.fema.gov/media-library/assets/documents/18562?id=4160>.
- FEMA. 2009. *Recommended Residential Construction for the Gulf Coast: Building on Strong and Safe Foundations*, FEMA 550. Second Edition. Washington, D.C., November 2009. Available at: <http://www.fema.gov/library/viewRecord.do?id=1853>.
- FEMA. 2010a. *Design Guide for Improving School Safety in Earthquakes, Floods, and High Winds*, FEMA P-424. Washington, D.C., December 2010. Available at: <http://www.fema.gov/media-library/assets/documents/5264>.
- FEMA. 2010b. *Elevator Installation for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program*, Technical Bulletin 4, November 2010.
- FEMA. 2010c. *Highlights of ASCE 24 Flood Resistant Design and Construction*. Washington, D.C., November 30, 2010. Available at: <http://www.fema.gov/library/viewRecord.do?id=3515>.
- FEMA. 2010d. *Home Builder's Guide to Coastal Construction*. FEMA P-499. Washington, D.C., December 2010. Available at: <http://www.fema.gov/media-library/assets/documents/6131?id=2138>.
- FEMA. 2011a. *Coastal Construction Manual: Principles and Practices of Planning, Siting, Designing, Constructing, and Maintaining Residential Buildings in Coastal Areas*, FEMA P-55, Fourth Edition. Washington, D.C., August 2011. Available at: <http://www.fema.gov/library/viewRecord.do?id=1671>.
- FEMA. 2011b. *National Disaster Recovery Framework, Strengthening Disaster Recovery for the Nation*. Washington, D.C., September 2011. Available at: <http://www.fema.gov/media-library/assets/documents/24647?fromSearch=fromsearch&id=5124>.
- FEMA. 2013a. *Community Status Book Report, New Jersey Communities Participating in the National Flood Program*. October 10, 2013, accessed October 15, 2013. <http://www.fema.gov/cis/NJ.pdf>.
- FEMA. 2013b. *Community Status Book Report, New York Communities Participating in the National Flood Program*. October 10, 2013, accessed March 15, 2013. <http://www.fema.gov/cis/NY.pdf>.
- FEMA. 2013c. *Flood Insurance Manual, effective October 1, 2013*. Washington, D.C., revised October 2013. National Flood Insurance Program. 2012.
- FEMA. 2013d. *Floodproofing Non-Residential Buildings*, FEMA P-936. Washington, D.C., July 2013.
- FEMA. 2013e. *Hurricane Sandy in New Jersey and New York: Building Performance Observations, Recommendations, and Technical Guidance*, Mitigation Assessment Team Report, FEMA P-942. Washington, D.C., November 2013.
- Hurricane Sandy Recovery Advisory No. 1, *Improving Connections in Elevated Coastal Residential Buildings*.
 - Hurricane Sandy Recovery Advisory No. 2, *Reducing Flood Effects in Critical Facilities*.

- Hurricane Sandy Recovery Advisory No. 3, *Restoring Mechanical, Electrical, and Plumbing Systems in Non-Substantially Damaged Residential Building*.
 - Hurricane Sandy Recovery Advisory No. 4, *Reducing Interruptions to Mid- and High-Rise Buildings During Floods*.
 - Hurricane Sandy Recovery Advisory No. 5, *Designing for Flood Levels Above the BFE After Hurricane Sandy*.
 - Hurricane Sandy Recovery Advisory No. 6, *Protecting Building Fuel Systems from Flood Damage*.
 - Hurricane Sandy Recovery Advisory No. 7, *Reducing Flood Risk and Flood Insurance Premiums for Existing Residential Buildings in Zone A*.
 - Hurricane Sandy Recovery Fact Sheet No. 1, *Cleaning Flooded Buildings*.
 - Hurricane Sandy Recovery Fact Sheet No. 2, *Foundation Requirements and Recommendations for Elevated Homes*.
- FEMA. 2013f. *Including Building Codes in the National Flood Insurance Program*, October 2013.
- FGI (Facilities Guidelines Institute). 2010. *Guidelines for Design and Construction of Health Care Facilities*, 2010 edition. Dallas, TX.
- Foderaro, Lisa W. “A promise unfulfilled at an art deco bathhouse in the Rockaways,” *New York Times*, August 21, 2012. Available at: http://www.nytimes.com/2012/08/22/nyregion/jacob-riis-bathhouse-envisioned-as-park-centerpiece-looks-abandoned.html?_r=0.
- Graybow, Martha and Martinne Geller. 2012. “New York commuters walk, bike, and fume amid post-Sandy snarls.” *Reuters*, Oct 31, 2012. Available at: <http://www.reuters.com/article/2012/10/31/us-storm-sandy-commuters-idUSBRE89UIPQ20121031>.
- HUD (U.S. Department of Housing and Urban Development). 2013. *New York Recovers. Hurricane Sandy Federal Recovery Support Strategy*. Version One, June 2013.
- Hurricane Sandy Rebuilding Task Force. 2013. *Hurricane Sandy Rebuilding Strategy, Stronger Communities, A Resilient Region*, August 2013. Available at: <http://recoverydiva.files.wordpress.com/2013/08/hsrebuildingstrategy-19aug13.pdf>.
- ICC (International Code Council) and FEMA. 2008. *Reducing Flood Losses Through the International Codes: Meeting the Requirements of the National Flood Insurance Program*. Third edition.
- ICC. 2009a. *International Building Code*, 2009 edition. Washington, D.C.
- ICC. 2009b. *International Residential Building Code*, 2009 edition. Washington, D.C.
- ICC. 2012a. *International Building Code*, 2012 edition. Washington, D.C.
- ICC. 2012b. *International Residential Building Code*, 2012 edition. Washington, D.C.
- JEMB Realty. 2013. *75 Broad St.*, JEMB Realty Web site, accessed February 8, 2013. <http://www.jembrealty.net>.
- Lackawanna Coalition. 2013. *Latest: Near Full Service March 24*, Lackawanna Coalition Web site, accessed March 7, 2013. http://www.lackawannacoalition.net/index.php?option=com_content&view=article&id=145:recovery-from-storm-slow&catid=1:main-news.

- McDonald, Terrence T. 2012. "Hudson County hospitals nearly all operational after Sandy." *The Jersey Journal*. November 2, 2012. Available at: http://www.nj.com/hudson/index.ssf/2012/11/hudson_county_hospitals_nearly.html.
- MTA (Metropolitan Transit Authority). 2013. *Restoring South Ferry Station*, MTA.info Web site, accessed October 1, 2013. <http://web.mta.info/nyct/service/RestoringSouthFerryStation.htm>.
- National Weather Service. 1991. "The Halloween Nor'easter of 1991: East Coast of the United States: Maine to Florida and Puerto Rico." *Natural Disaster Survey Report*, National Oceanic and Atmospheric Administration, Silver Spring, Maryland, 61p.
- New Jersey Administrative Code. Available at: <http://www.state.nj.us/oal/rules/accessp>.
- New Jersey Uniform Construction Code. Available at: <http://www.state.nj.us/dca/divisions/codes/codreg/ucc.html>.
- New York City. 2013a. *Hurricane Sandy After Action Report and Recommendations to Mayor Michael R. Bloomberg*. May 2013. Available at: http://www.nyc.gov/html/recovery/downloads/pdf/sandy_aar_5.2.13.pdf.
- New York City. 2013b. *plaNYC, A Stronger More Resilient New York*, report of the NYC Special Initiative for Rebuilding and Resiliency. June 11, 2013, accessed on September 17, 2013. <http://www.nyc.gov/html/sirr/html/report/report.shtml>.
- New York City. 2013c. *Summary Analysis: Sandy Impact on Buildings, Confidential Draft*. NYC Special Initiative for Rebuilding and Resiliency. March 14, 2013.
- New York City Construction Codes. Available at: <http://publiccodes.cyberregs.com/st/ny/ci-nyc/YC-P-2008-000006.htm>.
- New York City Landmarks Preservation Commission. 1977. "South Street Seaport Historic District Designation Report," 1977. Available at: http://www.nyc.gov/html/lpc/downloads/pdf/reports/SOUTH_STREET_SEAPORT_HISTORIC_DISTRICT.pdf.
- New York City Landmarks Preservation Commission. 1993. "Ellis Island Historic District" November 16, 1993. Available at: http://www.nyc.gov/html/lpc/downloads/pdf/reports/ELLIS_ISLAND_-_HISTORIC_DISTRICT.pdf.
- New York Codes, Rules and Regulations. Available at: <http://www.dos.ny.gov/info/nycrr.html>.
- New York Songlines. 2013. *New York Songlines: Broad Street*. New York Songlines Web site, accessed February 8, 2013. <http://www.nysonglines.com/broad.htm>.
- NFPA (National Fire Protection Association). 2005. *Standard for Health Care Facilities*, NFPA 99, Quincy, MA.
- NFPA. 2010. *Standard for Emergency and Standby Power Systems*, NFPA 110, Quincy, MA.
- NFPA. 2012. *Life Safety Code*, NFPA 101, Quincy, MA.
- NHC (National Hurricane Center). 2013a. *Tropical Cyclone Climatology*, National Hurricane Center Web site. Miami, FL. Last modified May 31, 2013. <http://www.nhc.noaa.gov/climo>.

- NHC. 2013b. *Tropical Cyclone Report, Hurricane Sandy (AL182012) 22 – 29 October 2012*, Prepared by Eric S. Blake, Todd B. Kimberlain, Robert J. Berg, John P. Cangialosi and John L. Beven II, National Hurricane Center. February 12, 2013. Available at: http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf.
- NJDEP (New Jersey Department of Environmental Protection). 2013. New Jersey Department of Environmental Protection Historic Preservation Office Web site, accessed March 2013. <http://www.nj.gov/dep/hpo>.
- NOAA (National Oceanic and Atmospheric Administration). 2012. *October 29, 2012 – Hurricane Sandy*. National Weather Service, Newport/Morehead City, NC Event Summaries/Case Studies. Available at: <http://www.erh.noaa.gov/mhx/EventReviews/20121029/20121029.php>.
- NOAA. 2013a. *Hurricane/Post-Tropical Cyclone Sandy, October 22-29, 2012*, National Weather Service, Service Assessment, published May 2013. Available at: <http://www.nws.noaa.gov/os/assessments/pdfs/Sandy13.pdf>.
- NOAA. 2013b. *Post Tropical Cyclone SANDY*. National Weather Service, National Hurricane Center, updated in October 2012. Available at: http://www.nhc.noaa.gov/archive/2012/SANDY_graphics.shtml.
- NPS (National Park Service). 1975a. Jacob Riis Park Historic District (Gateway NRA), National Register of Historic Places Nomination, September 31, 1975, accessed February 13, 2013. <http://pdfhost.focus.nps.gov/docs/NRHP/Text/81000081.pdf>.
- NPS. 1975b. Ocean Grove Camp Meeting Historic District National Register of Historic Places Nomination, June 4, 1975, accessed February 13, 2013. <http://pdfhost.focus.nps.gov/docs/NRHP/Text/76001170.pdf>.
- NPS. 1980. Statue of Liberty National Monument, National Register of Historic Places Nomination Form, August 9, 1980, accessed February 13, 2013. <http://pdfhost.focus.nps.gov/docs/NRHP/Text/66000058.pdf>.
- NPS. 1993. Monmouth Boat Club National Register of Historic Places Nomination, May 21, 1993, accessed February 13, 2013. <http://pdfhost.focus.nps.gov/docs/NRHP/Text/94000857.pdf>.
- NPS. 2005a. Bay Head Historic District National Register of Historic Places Nomination, November 18, 2005, accessed February 13, 2013. <http://pdfhost.focus.nps.gov/docs/NRHP/Text/05001566.pdf>.
- NPS. 2005b. Erie-Lackawanna Railroad Terminal at Hoboken National Register of Historic Places Nomination, rev February 17, 2005, accessed February 13, 2013. <http://pdfhost.focus.nps.gov/docs/NRHP/Text/73001102.pdf>.
- NPS. 2013a. National Park Service Web site, Ellis Island, Frequently Asked Questions, accessed October 2013. <http://www.nps.gov/elis/faqs.htm>.
- NPS. 2013b. National Park Service Web site, Statue of Liberty, Liberty Island Chronology, accessed October 2013. <http://www.nps.gov/stli/historyculture/liberty-island-a-chronology.htm>.
- NYC DOB (New York City Department of Buildings). 2011. *2011 Construction Codes Revision Handbook*. Version 1.1. July 2011. Available at: http://www.nyc.gov/html/dob/downloads/pdf/coderevisions_handbook2011.pdf.

- NYS OPRHP (New York State Office of Parks, Recreation & Historic Preservation). 2009. New York State Office of Parks, Recreation & Historic Preservation, State Historic Preservation Office Web site, accessed March 2013. <http://nysparks.com/shpo>.
- O'Brien, M.P. and Johnson, J.W. 1963. The March 1962 storm on the Atlantic coast of the U.S.: Proceedings 8th Coastal Engineering Conference, p. 555–562.
- Passaic River Basin Flood Advisory Commission, 2011. *Report to the Governor: Recommendations of the Passaic River Basin Flood Advisory Commission*, January 2011. Available at: <http://www.nj.gov/dep/passaicriver/docs/passaic-report201101.pdf>.
- PATH (Port Authority Trans-Hudson Corporation). 2013. Port Authority of New York & New Jersey Web site, accessed April 2013. <http://www.panynj.gov/path/about-path.html>.
- Richard Stockton College. 2012. *Beach-Dune Performance Assessment of New Jersey Beach Profile Network (NJBPN) Sites at Northern Ocean County, New Jersey After Hurricane Sandy Related to FEMA Disaster DR-NJ 4086*. Coastal Research Center, November 28, 2012. Available at: <http://intraweb.stockton.edu/eyos/page.cfm?siteID=149&pageID=160>.
- Smith, Gerald. 2013. “Verizon Outages Strand Lower Manhattan Businesses 4 Months After Sandy.” *The Huffington Post*. February, 28, 2013. http://www.huffingtonpost.com/2013/02/28/verizon-sandy-new-york_n_2782664.html.
- USACE (U.S. Army Corps of Engineers). 2011. *Sea Level Change Considerations for Civil Works Programs*. Circular No. EC-1165-2-212. Washington, D.C. October 1, 2011. Available at: <http://planning.usace.army.mil/toolbox/library/ECs/EC11652212Nov2011.pdf>.
- Weisenthal, Joe. 2012. “Bloomberg: everyone living in NYC ‘Zone A’ must evacuate.” *Business Insider*, October 28, 2012. Available at: <http://www.businessinsider.com/hurricane-sandy-zone-a-evacuation-schools-closed-monday-2012-10#ixzz2NKZHClIs>.
- Wood, F. 1976. *The Strategic Role of Perigean Spring Tides in Nautical History and North American Coastal Flooding, 1 635-1976*. U.S. Department of Commerce, National Oceanic and Atmospheric Administration.
- Zhang, K.; Douglas, B.C., and Leatherman, S.P., 2001. Beach Erosion Potential for Severe Nor'easters. *Journal of Coastal Research*, 17(2), 309-321. West Palm Beach, FL, ISSN 0749-0208.