Philadelphia District Response to Hurricane Sandy

LTC Chris Becking
16 May 2013
Hurricane Sandy

Sandy made landfall about 8 p.m. Mon., Oct. 29, striking near Atlantic City, with 80 mph winds
Passaic Valley Sewerage Commission, Newark NJ
Dewatering Mission
Passaic Valley Sewerage Commission
Dewatering & Technical Assistance Project

- Before
Passaic Valley Sewerage Commission
Dewatering & Technical Assistance Project

- Sandy Impact - 12 ft NAVD 88 Tidal Surge
Passaic Valley Sewerage Commission, Newark NJ  
Dewatering Mission

Today's Picture
Shown is part of the PVSC and USACE-CDM approximately 70 MGD in portable pumps capacity currently on site. Not shown are the 2 – 10”, 1- 8”, 4 addition 6”, 1- 4”, 4-3” and 22 – 2” pumps. PVSC is treating sewerage as we dewater basins. This limits the number of basins that can be off line.
Passaic Valley Sewerage Commission, Newark NJ
Dewatering Mission

Date 1600 11/12/12

Today’s Picture
Foreground is discharge from our 10” diesel submersible pump dewatering Final Clarifier 10 into Clarifier 7. In the background, PVSC personnel clean debris from final clarifier 9.
Passaic Valley Sewerage Commission
Dewatering & Technical Assistance Project

- Corps Impacts
  - provided technical guidance on order of recovery actions
  - construction oversight of overall recovery actions
  - construction oversight of large-scale pumping operations
  - disaster guidance on FEMA reimbursement requirements

- Specific Key Actions
  - provided technical guidance on order of recovery actions
  - construction oversight of overall recovery actions
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  - disaster guidance on FEMA reimbursement requirements
Mantoloking Breach Repair Project

- Before
Mantoloking Breach Repair Project
Mantoloking Breach Repair Project

- Sandy Impact
Mantoloking Breach Repair Project
Mantoloking Breach Repair Project

Mantoloking Breach X-Section

Dune elevation: 16 ft. NAVD88
Dune side slopes: 3H:1V
Berm: 8 ft. NAVD88

1. Fill in core
2. Slope berm to match existing

Extend to "pile" line
Mantoloking Breach Repair Project
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Mantoloking Breach Repair Project

- Corps Impacts – 72 hr timeline, Assessment to Construction shown

Specific Key Actions

- Tasked By NJ through FEMA 11/1
- Infrastructure Assessment Team Formed & on site 11/2
- Coordination with NJDOT
- Plan of Action Scope of work completed contract signed 11/4
- Contractor Corps on Site 11/5 Trucks rolling 0700 11/6
Coastal Protection Performance & Future Repair Project

Harvey Cedars Post Sandy

Surf City Post Sandy

Holgate south of Federal Project
Coastal Protection Performance & Future Repair Project

- Sandy Impact

AC Post Sandy

Brant Beach Post Sandy
Coastal Protection Performance & Future Repair Project

Specific Key Actions

- Tasker from FEMA 11/6 Contracts 11/6 trucks hit the ground.
- Communication between team and Contracting
- Filed supervision and coordination with office PM’s
- Execution
Coastal Protection Performance & Future Repair Project

- Sandy Emergency Repairs
Coastal Protection Performance & Future Repair Project

- Sandy Emergency Repairs
Ft. Monmouth Temporary Housing Project

- Building 365 Renovation

Project Schedule and Time Line

- 12 Nov - FEMA Issued Task
- 16 Nov - Evaluation -8 Bldgs + Fam Hsng
- 19 Nov - FEMA Task Building 365 Ren
- 21 Nov - Prepared Building 365 SOW
- 24/25 Nov - Contractor Walk Thru
- 27 Nov - Contract Award
- 15 Dec - Completion (20 Days)
- 20 Dec - Building Habitation by Hurricane Evacuees
Ft. Monmouth Temporary Housing Project

Key Features of Renovation

- Activate/test/repair/replace utility and life safety systems
- Convert 6 units into handicap accessible units
- Convert 30 one bedroom units into 15 three bedroom suites
- Replace all kitchens
- Replace all finishes and appliances
Ft. Monmouth Temporary Housing Project

Features of Completed Renovation
- New floor, wall, and ceiling finishes
- Renovated and converted handicap bathrooms
- New kitchens
- Renovated laundry room
- Upgraded life safety systems
Hoboken Ferry Terminal & Power Delivery Project

Before
Hoboken Ferry Terminal & Power Delivery Project

Sandy Impacts
DoD Efforts to Restore Terminal
Hoboken Ferry Terminal & Power Delivery Project

- Corps Impacts – Terminal Operational by 0500 Monday, 5 Nov
What Next?
Repair and Restoration of Existing Coastal Protection Systems
Construction of New Coastal Protection Systems

www.nap.usace.army.mil
North Atlantic Coast Comprehensive Study

Goals

1. **Provide Risk Reduction Framework**—Reduce risk to which **vulnerable coastal populations** are subject.

2. **Promote Coastal Resilient Communities** – Ensure a **sustainable and robust coastal landscape system**, considering **future sea level rise and climate change scenarios**, to reduce risk to vulnerable population, property, ecosystems, and infrastructure.

*Consistent with USACE-NOAA Rebuilding Principles*