

Borough of Little Ferry

Superstorm Sandy

Public Presentation – Monday,
November 19, 2012 at 7 PM

Please read – this presentation best viewed in PowerPoint

- This was the public presentation at the Mayor & Council meeting on Monday, Nov. 19.

This has been tweaked to incorporate items discussed during the meeting or to provide clarification.

Please click through the slides as they are not set to automatically go to the next one

Slide #?? is animated; if you do not have PowerPoint on your computer you can download the free viewer here:

<http://www.microsoft.com/en-us/download/details.aspx?id=13>

We posted a PDF knowing not everyone has PowerPoint. Please download the free viewer for best viewing results

Superstorm Sandy Preparation

Oct. 22 – Oct 28

- DPW begins cleaning out problem catch basins
- DPW lowers Willow Lake to allow it to hold more water
- DPW inspects all pump stations to ensure their operation
- DPW inspects all generators to ensure their operation
- DPW stages various vehicles around the Borough for access in the event of flooding
- Additional backup generators secured (if needed)
- Sandbags distributed

Superstorm Sandy – The Berm

- What is a BERM? From Wikipedia:
- Berms are also used to control erosion and sedimentation by reducing the rate of surface runoff. The berms either reduce the velocity of the water, or direct water to areas that are not susceptible to erosion, thereby reducing the adverse effects of running water on exposed topsoil.

The Berm

- “Owned” by The Meadowlands Conservation Trust
- Approximately 5 to 6 feet high
- Maintained by private company as contracted by the Trust
- Damaged last year by Hurricane Irene – repaired
- Repaired a few days after Superstorm Sandy
- Six breaches occurred from the tidal flood waters

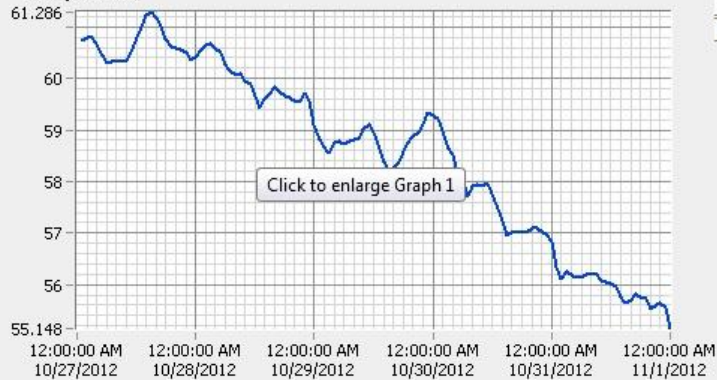
Superstorm Sandy – Data Part I

- The following slide demonstrates the data from the Meadowlands Environmental Research Institute (MERI)
- Data taken from the Barge Marina in Carlstadt
- Data highlights –
 - Tidal water reached 8 feet 6 inches
 - Twice as much salinity (salt) as normal

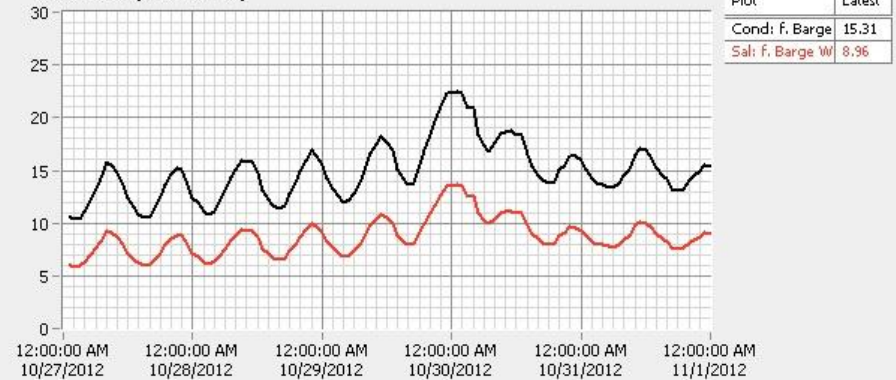
Barge Marina Water Parameters Oct. 27th. – Oct. 31st.

f. Barge Water Quality: Barge Water Quality

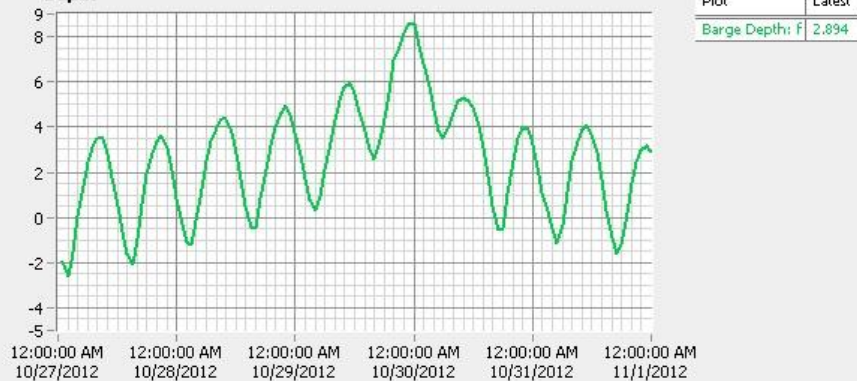
Temperature



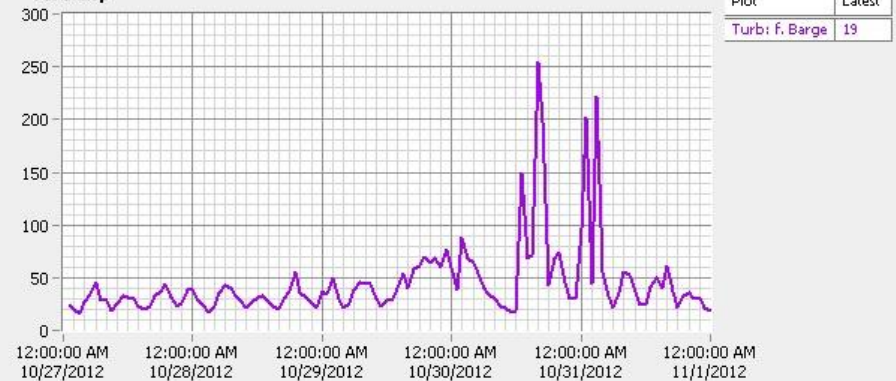
Conductivity and Salinity



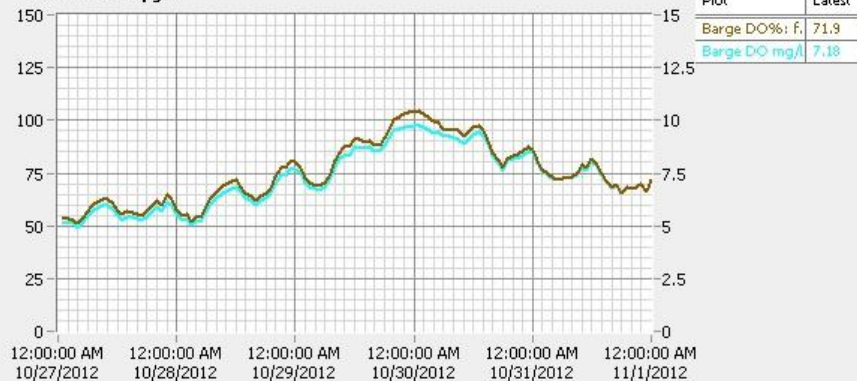
Depth



Turbidity



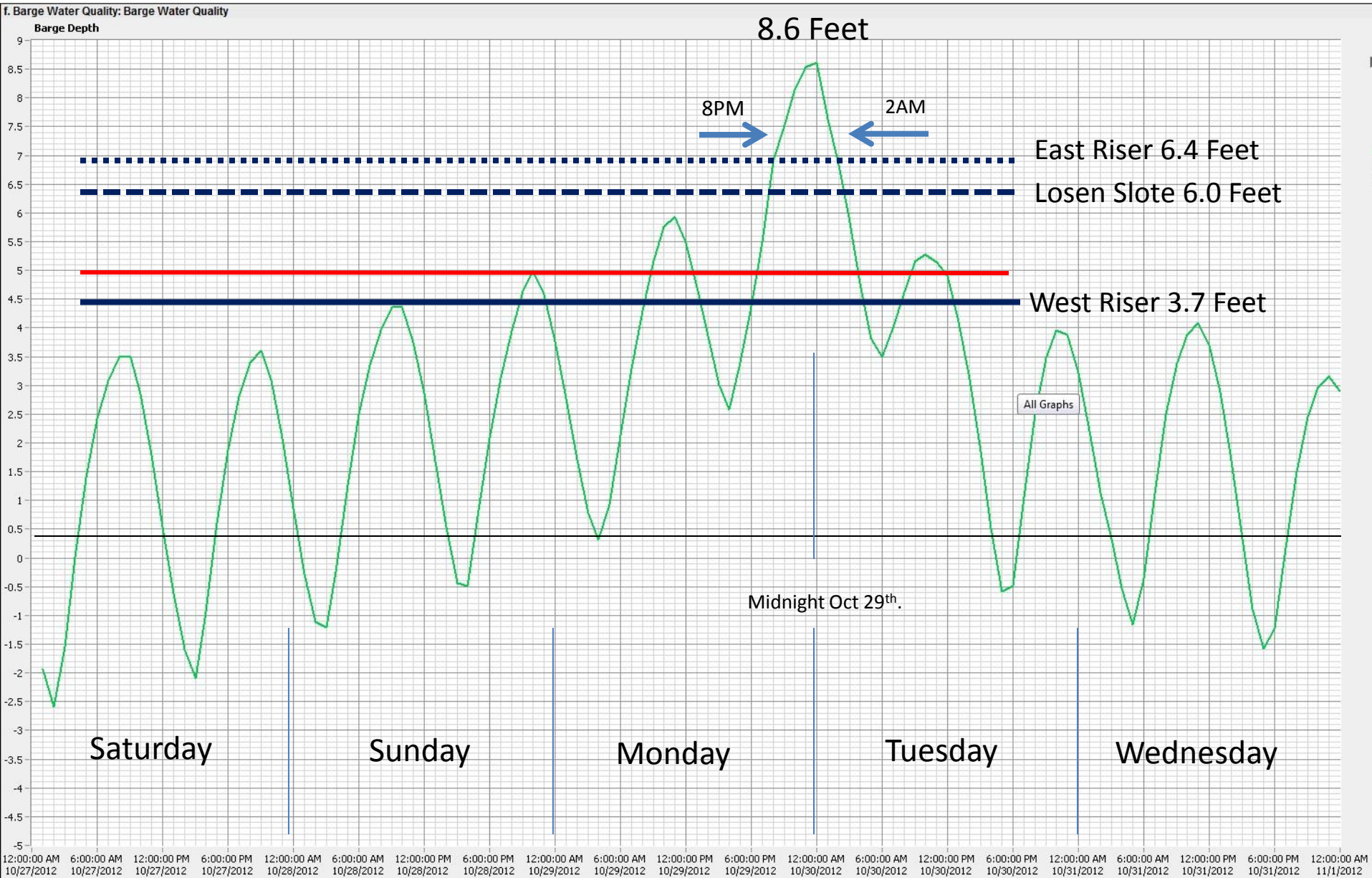
Dissolved Oxygen



Superstorm Sandy – Data Part II

- Next slide shows water levels
- The red line is the Berm
- Note the times at the peak. This demonstrates that there was 7 feet of tidal water entering Little Ferry and surrounding towns from 8 PM on the 29th to 2 AM on the 30th
- The wind was keeping the water in during this time

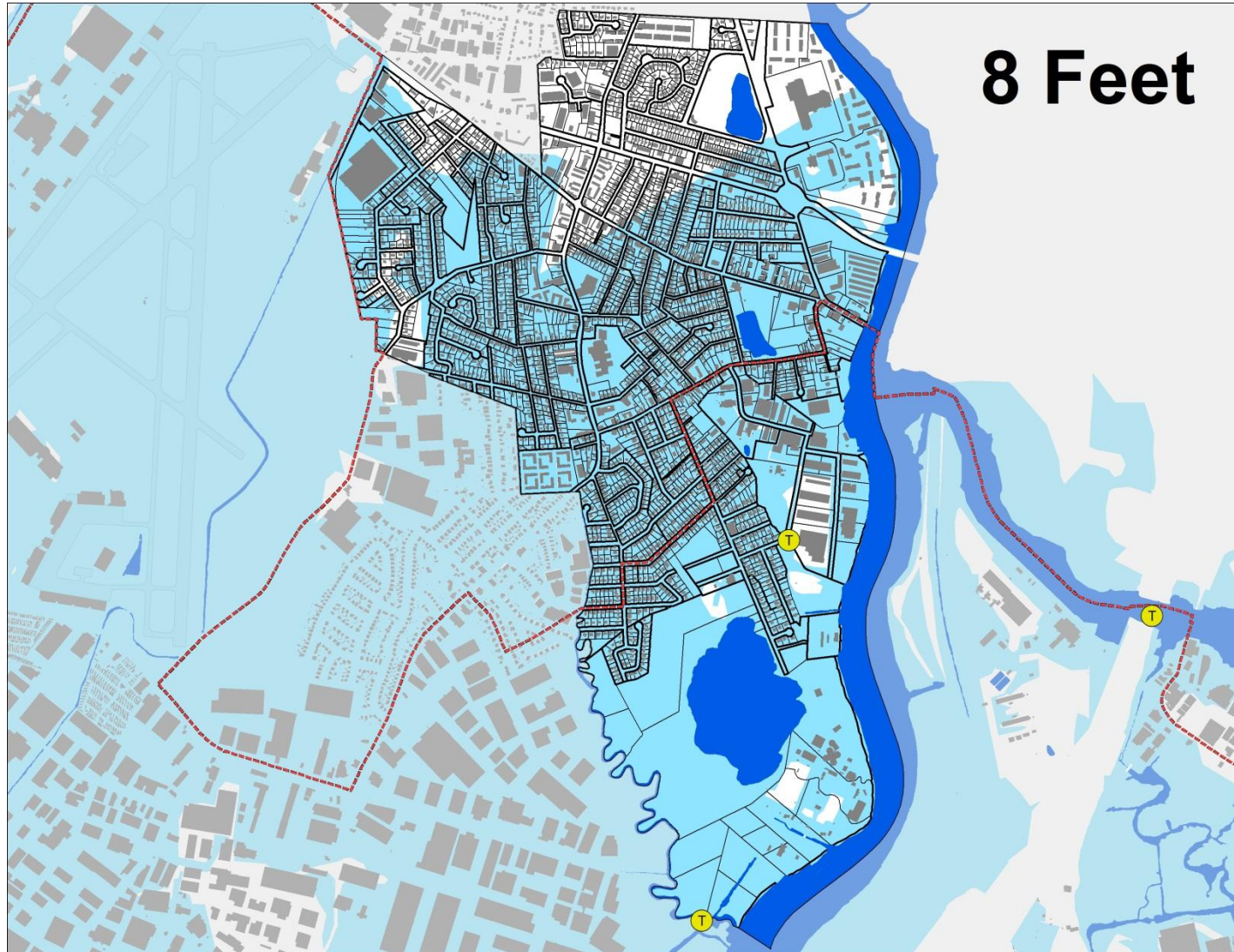
Barge Marina Water Level Oct. 27 - Oct. 31



Tidal Flood Waters – A Generalization

- The next slide is an approximation on what occurs during “X” amount of feet of tidal water
- The **yellow T** is tide gates
- The **solid red coloring** is areas that the tide gates are protecting – no flooding is occurring
- **Light blue coloring** are areas that would experience flooding at that water height
- The slide starts at 2 feet and ends at 8 feet of tidal flooding
- The slide is animated so please ensure animation is permitted in PowerPoint – click through to see the animation

Little Ferry



Superstorm Sandy – Summary of Tidal Flood Waters

- MERI had tidal waters at a height of 8 feet 6 inches
- Borough Engineer found average tidal water elevations at 8.65 feet
- Same elevation also found in Hackensack
- Water went over any existing Berm or tide gate; both have maximum height of six feet
- Water went over the NJ Turnpike – 10 to 20 feet high in spots
- There simply was too much water that was too high for existing infrastructure to handle

Willow Lake Park Area

- Why did it take Main and the surrounding streets so long to drain?
- These streets drain to Willow Lake. Since the Lake was filled with water – there was no place for the water to go. The tide was kept in due to the high winds so the pumps could not pump out any water. There are two pumps and one pump took on water and stopped working.
- Once the water started to recede, other Fire Departments assisted us in pumping out the Lake. Additionally, we secure five pumps, with hoses six inches wide and utilized those to help pump out the Lake

Superstorm Sandy – Immediate Response

- Rescues occurring all night long on October 29
- Emergency Command Center created by County and National Guard at Vo-Tech in Teterboro
- Rescues commenced at 8 AM on Tuesday, October 30 by National Guard
- Used “deuce and a half” vehicles and boats
- Helicopter rescue (one or two)
- Other municipalities assisted in rescue (Little Falls, Wayne, Franklin Lakes, etc)
- Approximately 820 evacuations combined in Little Ferry & Moonachie
- NO FATALITIES

Superstorm Sandy –

Borough pre-storm public information efforts

- Reverse 9-1-1 call on Sunday morning, the 28th advising of sandbags, evacuation planning and emergency shelter
- Same information posted to Facebook and website
- Information posted to Facebook and website on the evening of the 28th
- Monday, the 29th – Facebook and website post about PSE&G, weather

Reverse 9-1-1

- The Borough utilizes the County's Swiftreach Network system
- This is a different provider than last year – that is why some people received a call while others did not
- Working on obtaining why not everyone is in the company's database
- Posted to Facebook and website where to register online for Swiftreach (October 29th)

Borough Public Information and Outreach

- Reverse 9-1-1 calls
 - October 28 at 11:57 AM
 - October 29 at 11:39 AM
 - October 29 at 6:51 PM
 - October 29 at 10:09 PM
 - November 2 at 6:50 PM
 - November 5 at 5:44 PM
 - November 9 at 8:33 PM
 - November 19 at 4:00 PM

Borough Public Information and Outreach Part II

- Facebook and website posts
 - All Reverse 9-1-1 call information posted online
 - Q&A posted November 5
 - November 7 additional information posted for local businesses
 - November 13 miscellaneous information

Borough Public Information and Outreach Part III

- Building Department teamed with National Guard vehicles to answer questions – they were driving around for 2 days
- Borough created informational handout passed out by FEMA, Building Dept. staff w/National Guard, at shelter...similar information based upon online posts
- Building Department out from 9 AM – 4 PM on Saturday, November 3 to answer questions
- Mayor met with individuals; during driving inspections --- handout out informational flyer

Personal recovery efforts

- Temporary housing shelter led by Bergen County OEM
 - Local evacuations shelters flooded – both schools and Church
- Local efforts include:
 - Food and cleaning material distribution at St. Margaret's Church
 - Coordination with the Volunteer Center of Bergen County
 - Work with PSE&G once substantial power is returned to the region to restore power to pockets that hadn't received it yet
 - Rumor that was heard - boil water advisory -There was no boil water advisory at any time during the Storm

Personal recovery efforts – Part II

- Waiving of building permit fees – both State and local
- Get a permit – it is a record to protect you that work was done
- Permits can be obtained after work is complete
- Tax deadline extended until November 30
- St. Margaret's food pantry will be open once a week
- Review of public and quasi-public spaces for debris removal in compliance with DEP regulation
- Fire Department pumped out basements
- CERT coordinating with Church

Borough property lost/damaged

- 6 police cars
- 2 Fire Chief vehicles
- 1 DPW truck
- Goose poop machine
- Senior Bus (senior services currently suspended)
- Various fencing, small equipment, etc
- 2 ambulances
- Other items to be added as equipment is reviewed

Borough cleanup efforts - removal of debris

- Started Thursday after the storm
- Three companies involved at any one time – four total were used
- Will continue until November 30 as that is when FEMA is saying reimbursement is going to end
- Determined not to utilize containers this time due to the large amount of debris – just wouldn't fit and create a hazard
- Only storm related debris will be picked up
- Recycling commences November 21
- How is debris removed ?
 - Borough is broken down into 3 sections where haulers are instructed to go

Property values

- State is currently working on a mechanism to address large scale re-assessment of damaged property due to municipalities by the end of this week
- We know nothing more about this – conference call with Governor's office earlier today they had no new information to share
- From speaking to tax assessors around the State – initial drop in sale prices but return to pre-storm pricing in three to six months (yes this is hard to believe)

Municipal Taxes – How will the storm impact taxes

- Cleanup costs are estimated to be no more than \$3.50 a month over a five year period in your municipal tax bill – this is based upon FEMA and insurance reimbursements and is only an estimate
- Again - this is a high end estimate dependent on final FEMA and insurance reimbursements
- The Borough does not set the school tax rate

Planning efforts

- Mailing to residents by end of year with information on how to register with Swiftreach and Nixle; general storm update
- AM Radio? How can Borough utilize this to notify residents?
- Work with Meadowlands Conservation Trust to raise the berms
- Work with Governor's Office to raise the berms – weekly conference calls with his Office
- Long range planning of additional tide gate(s)
- Work with Federal government on early warning system – we have been told that the National Oceanic and Atmospheric Administration (NOAA) sensors failed due to the strength of the storm
 - Wave of 32 feet hit Sandy Hook

Closing remarks

Thank you volunteers, staff and other
governments that provided
assistance