

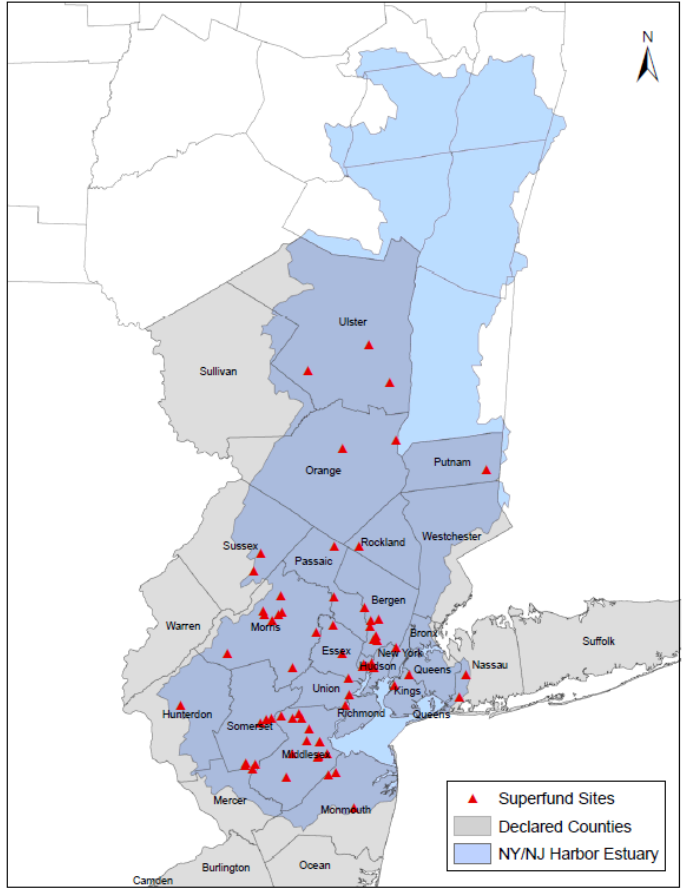


Impact of Sandy on Superfund Sites in the NY-NJ Harbor Estuary

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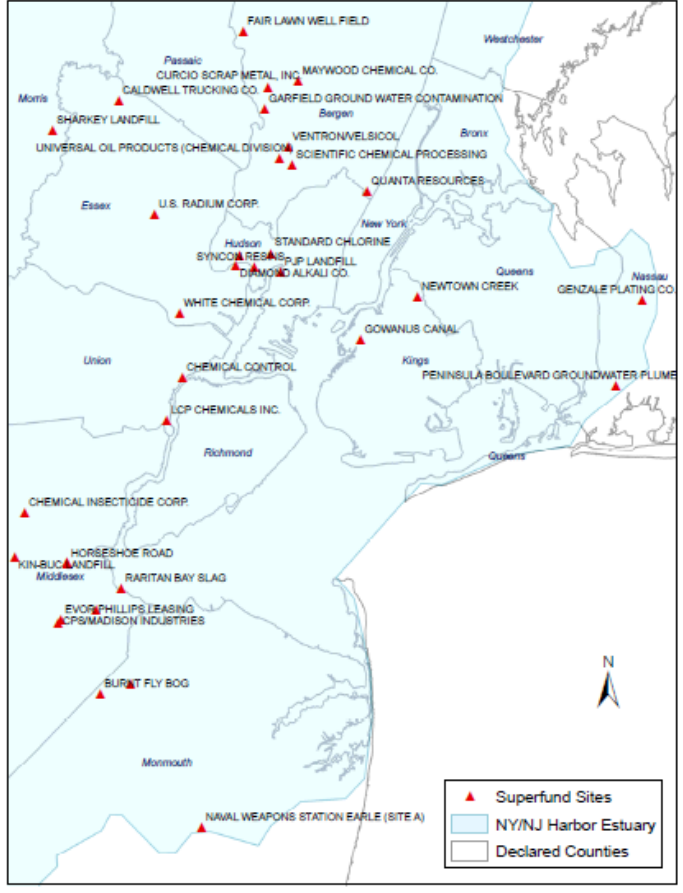


NPL Sites in NY/NJ Harbor Estuary
Potentially Impacted by Hurricane Sandy



EPA US EPA Region 2
Map Created 12/5/2012

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Impact of Sandy on Superfund Sites in the NY-NJ Harbor Estuary

- In advance of Hurricane Sandy, EPA secured contaminated sites in the federal Superfund program in New Jersey and New York to protect against potential damage.
- Since the storm, EPA has assessed all sites in declared counties.
 - 142 long-term remedial sites in the area have been assessed (114 in NJ; 28 in NY)
 - 8 additional remedial sites were assessed when Orange, Putnam, Sullivan and Ulster counties in NY were declared



Impact of Sandy on Superfund Sites in the NY-NJ Harbor Estuary

- EPA does not believe that any sites were impacted in ways that would pose a threat to nearby communities.
- However, we have collected additional follow-up samples at:
 - Newtown Creek site on the border of Queens and Brooklyn, NY
 - Gowanus Canal site in Brooklyn, NY
 - Passaic River site in Newark, NJ
 - Raritan Bay Slag site in Laurence Harbor/Sayreville, NJ



Newtown Creek: Brooklyn/Queens, NY

- Newtown Creek is contaminated from more than 150 years of pollution from refineries, petrochemical plants, fertilizer and glue factories, sawmills, and lumber and coal yards. The site was placed on the Superfund list in September 2010.
- On November 9, 2012, EPA took two samples in the Newtown Creek area. Samples were taken from the basement of a building on Eagle Street that had been flooded as well as directly from the creek. Levels of bacteria were high. While this type of bacteria becomes inactive over time, these findings reinforce the need for people to protect themselves when cleaning up flood waters that contain sewage and therefore contain bacteria. Additional chemicals that were tested were below levels of concern or not detected.
- For more details, visit:
<http://www.epa.gov/region02/superfund/npl/newtowncreek/>



Gowanus Canal: Brooklyn, NY

- The Gowanus Canal is contaminated from many years of industrial discharges, spills, storm water runoff and combined sewer overflows. The site was added to the Superfund list in March 2010. In response to Hurricane Sandy, EPA immediately conducted a visual inspection of the length of the canal and the surrounding area and did not observe sediment on the streets.
- On October 31, 2012, EPA took four samples in the Gowanus Canal area. Samples were taken from the ground floors of two buildings that had been flooded as well as directly from the canal. One of the buildings is located at the head of the canal, and the other near the 3rd street turning basin. Levels of bacteria were elevated, as would be expected with water carrying sewage, therefore precautions should be taken when cleaning flood waters. Additional chemicals that were tested were below levels of concern or not detected.
- For more details, visit: <http://www.epa.gov/region2/superfund/npl/gowanus/>



Berry's Creek Study Area: Bergen County, NJ

- The Berry's Creek Study Area (BCSA) is contaminated from many years of chemical processing waste and numerous other industrial and non-point source inputs. The site is a study area of the Ventron/Velsicol Superfund site which was added to the Superfund list in September 1984.
- Prior to Sandy, several marsh sediment pilot studies commenced. While there was a great deal of flooding in the area, the test plots were virtually undisturbed, indicating a stable sediment environment.
- For more details, visit <http://www.epa.gov/region2/superfund/npl/berryscreek/index.html>



Berry's Creek Study Area: Bergen County, NJ





Horseshoe Road/Atlantic Resources : Sayreville, NJ

- The Horseshoe Road Site (HRD) and the adjacent Atlantic Resources Corporation Site (ARC) are both located on the south shore of the Raritan River in Sayreville, Middlesex County, New Jersey. Both sites were contaminated by poor handling of waste material from industrial facilities starting in the 1950s and going through the mid 1980s. Contamination from both facilities impacted site soils and have entered the adjacent marsh and Raritan River. The HRD site was added to the Superfund list in September 1995 and the ARC site was added in September 2002.
- There was no onsite work at the time of Hurricane Sandy. However, EPA visited the site on two occasions shortly thereafter to ensure that soil clean-up work and wetland restoration completed in 2009 was not damaged, and to survey site impacts. Fortunately, none of the previous work was damaged and none of the impacts appear to pose a threat to human health or the environment.



Atlantic Resources/Horseshoe Road: Sayreville, NJ

- EPA is currently working on a survey of sediments in the marsh and river to determine if any of the design conditions for the upcoming sediment clean-up have been altered significantly.
- For more details, visit:
<http://www.epa.gov/region2/superfund/npl/horseshoe/>
<http://www.epa.gov/region2/superfund/npl/atlanticresources/>



Passaic River: Newark, NJ

- The Passaic River has a long history of industrialization, which has resulted in degraded water quality, sediment contamination, loss of wetlands and abandoned or underutilized properties along the shore. The lower Passaic River is considered part of the Diamond Alkali Superfund site, which is a source of dioxin contamination to the river.
- Residences and commercial buildings near the Passaic River were impacted by flood waters during Hurricane Sandy. EPA obtained one sample from the Passaic River and three samples of flood water from three residences adjacent to the river, in the Ironbound section of Newark, NJ.



Passaic River: Newark, NJ

- Levels of bacteria were high, as expected. Additional chemicals that were tested were either not detected, or were below levels of concern, with the exception of arsenic, iron, and lead. Arsenic and iron slightly exceeded drinking water standards, while concentrations of lead were about 20 times higher than the drinking water standard.
- Drinking water standards are established to protect people drinking two liters of water daily for 70 years. Because people were not drinking the floodwater, and had minimal contact with it for only a limited time, EPA does not consider these levels to be cause for concern.
- Concentrations of chemicals in the Passaic River were all below drinking water standards.
- For more details, visit:
<http://www.epa.gov/region2/superfund/npl/diamondalkali/>



Raritan Bay Slag: Old Bridge/Sayreville, NJ

- The Raritan Bay Slag Site is located on a beach in the Laurence Harbor section of Old Bridge, in the adjacent Margaret's Creek marsh area, and in a nearby area of Sayreville, New Jersey. The site is contaminated with lead slag, a byproduct of metal smelting. This lead slag was used to construct a seawall and a jetty along the southern shore of the Raritan Bay in Old Bridge and Sayreville.
- EPA took four samples at the site on November 3, 2012 in the Laurence Harbor Section. Two of the four samples were taken from the public playground area, and the other two were taken from the restricted beach area previously enclosed by the fence.
- Results showed that lead in three of the four samples meets the standard set to protect people while recreating. Lead in one sample taken in the restricted area of the beach was above the recreational limit.



Raritan Bay Slag Sampling: Old Bridge/Sayreville, NJ

- EPA will take additional samples (this week), with a cost of ~\$750K, to get a more detailed picture of how the material may have shifted.
- EPA also plans to replace the fence and re-install signage around the site.
- For more details, visit:
<http://www.epa.gov/region02/superfund/npl/raritanbayslag/>



Raritan Bay Slag Sampling: Old Bridge/Sayreville, NJ





Additional information

The screenshot shows the EPA website interface. At the top, there is a navigation bar with the EPA logo and the text 'United States Environmental Protection Agency'. To the right of the logo are links for 'Mobile', 'Español', '中文 - 繁體版', '中文 - 简体版', 'Tiếng Việt', and '한국어'. Below this is an 'Advanced Search' section with a search box and a 'SEARCH' button. A secondary navigation bar contains 'LEARN THE ISSUES', 'SCIENCE & TECHNOLOGY', 'LAWS & REGULATIONS', and 'ABOUT EPA'. The main content area features a large image of a flooded residential street with the heading 'Recovery After Sandy'. Below the image is a text block: 'What you can do to protect health and the environment after severe weather and flooding.' followed by two links: '> Hurricane Sandy Response and Recovery' and '> More on Sandy recovery from USA.gov'. Below the image are four small numbered thumbnails (1, 2, 3, 4). To the left of the main content is a 'General Info By State' section with a color-coded map of the United States and links for 'General Info | MATS | TRI by State'. Below the map are links for 'PACIFIC ISLANDS', 'PR', and 'INDIAN TRIBES'. To the right of the map is a 'Popular Topics' section with a list of links: Acid rain, Air cleaners, Air ducts, Air pollution, Asbestos, Bed bugs, Carbon monoxide, CFL cleanup, Climate change, Compost, Data, Drinking water, eCycling, Emissions calculator, Hurricane Sandy, Hydraulic, Fracturing, Indoor air, Internships, Lead, Mercury, Mold, Ozone, Pesticides, Radiation, Radon, Recycling, Refrigerants, Risk info, Science, Students, Superfund, TRI, Wastes, Water cycle, Water pollution, and Watersense. Below this list is a 'More Topics' button. To the right of the popular topics is a section for 'Administrator Lisa P. Jackson' with a photo and links for 'Biography', 'Schedule', 'Twitter', and 'Facebook'. Below this is a text block: 'Building strong state and tribal partnerships and assuring the safety of chemicals are among Administrator Jackson's priorities. Learn more about all seven priorities for EPA's future.' Below this is a section for 'New in Greenversations:' with links for 'The Energy Star Current', 'The Value of Checklists', and 'All blogs'. At the bottom of the page are sections for 'News & Announcements' and 'Environment As You See It'. On the far left, there are two sections: 'I am a...' with links for 'concerned citizen' and 'student, educator', and 'More resources...' with links for 'Federal Register' and 'Frequent Questions'.

<http://epa.gov/>