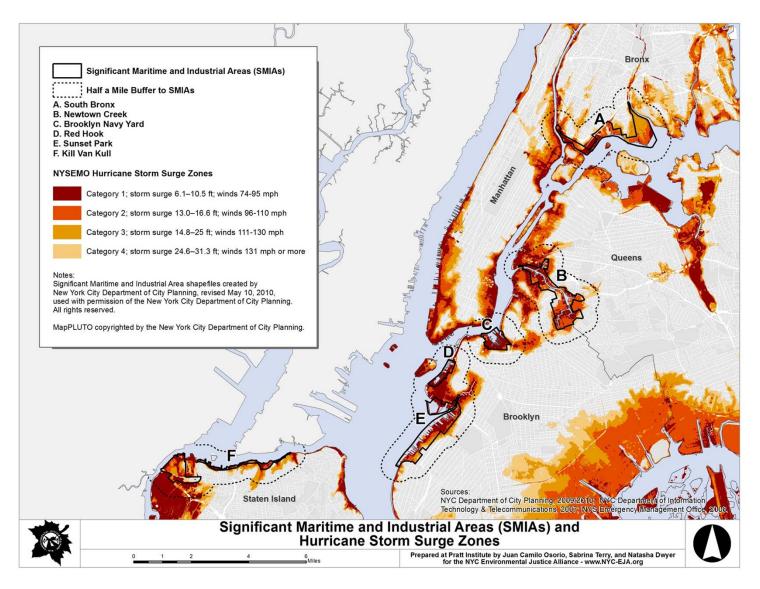
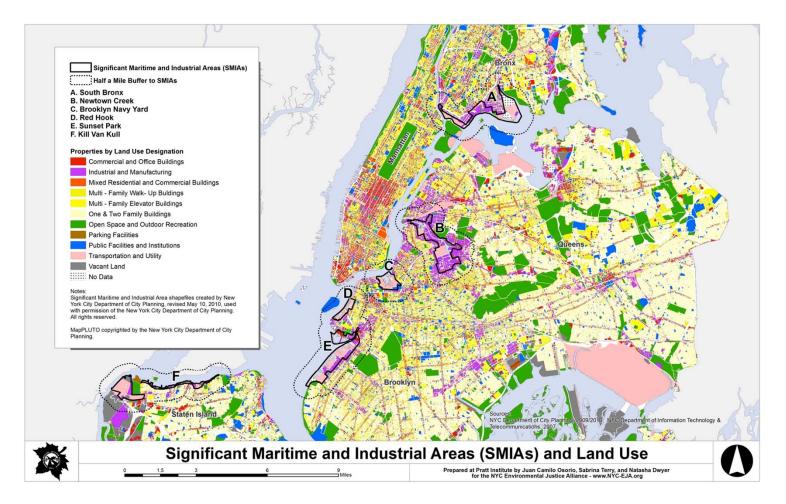


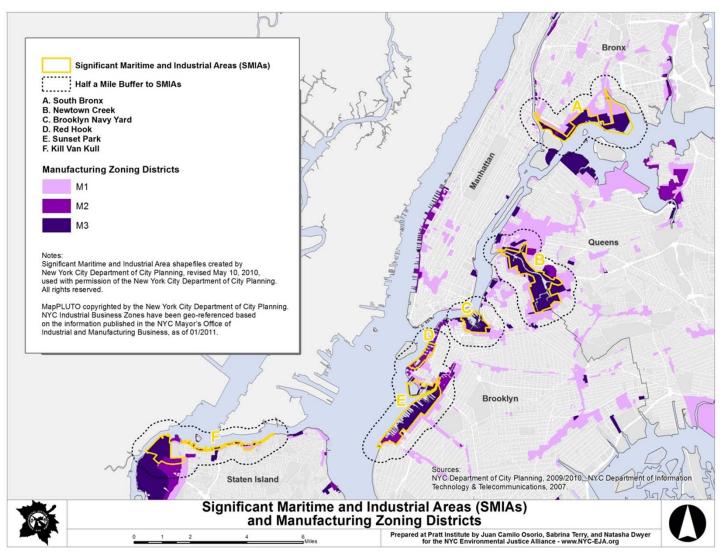
Founded in 1991, the New York City Environmental Justice Alliance (NYC-EJA) is a non-profit city-wide membership network linking grassroots organizations from low-income neighborhoods and communities of color in their struggle for environmental justice. Through these efforts, member organizations coalesce around specific common issues that threaten the ability of low-income communities of color to thrive, where the impact of climate change and mitigation measures is central to our agenda.



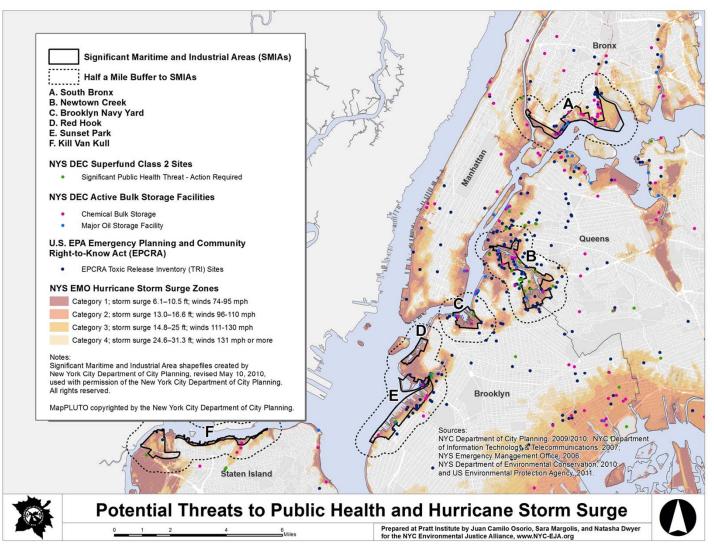
The six Significant Maritime and Industrial Areas (SMIAs) are zones designated under the WRP in order to encourage the protection and siting of industrial and maritime uses along the waterfront. There are only six SMIA's in the City – the South Bronx, Sunset Park, Red Hook, Newtown Creek, Brooklyn Navy Yard & North Shore of Staten Island – all located in predominantly low-income, communities of color. NYC-EJA discovered the six SMIA's are all in storm surge zones, and that the City of New York had not analyzed the cumulative contamination exposure risks associated with clusters of heavy industrial use.



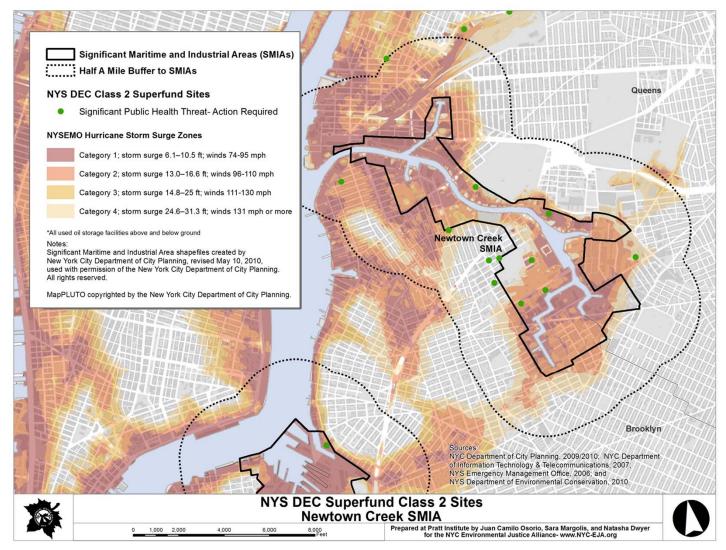
This land use map shows that industrial and manufacturing uses are concentrated in the SMIAs. In addition to the SMIAs themselves (outlined in solid black), NYC-EJA defined a half-a-mile buffer to the SMIAs (outlined in a dashed line) to determine the communities located in close proximity. Half-a-mile is the distance often used to study environmental impact under NY's environmental regulatory framework. The six SMIAs are mostly purple, accounting for "industrial and manufacturing" uses, but these areas are surrounded by shades of yellow denoting the presence of residential uses. Note that this map does not take into account non-conforming uses where former manufacturing buildings are being used for residential use, as is the case in Greenpoint or Williamsburg.



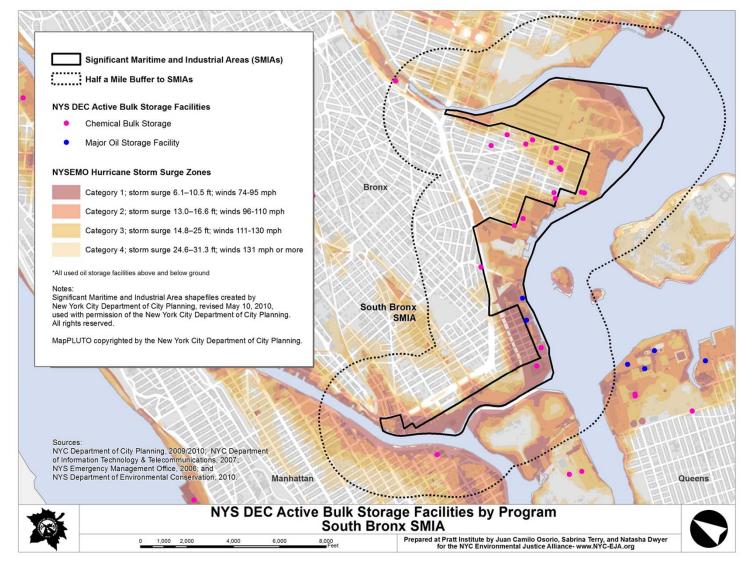
This is a map that shows the location of manufacturing zoning districts in shades of purple and the SMIAs in yellow. As this map shows, the majority of the SMIAs are zoned M2 and M3 for heavy manufacturing. The type of uses that are allowed as of right in M-3 zones permit the presence of hazardous substances and toxic chemicals -- like those allowed by land use group 18 that involve considerable danger of fire, explosion, hazards to public health and safety, among other toxics. While the WRP only applies to new development in the SMIAs, it represents an opportunity to promote sustainable industrial waterfront policies in New York City.



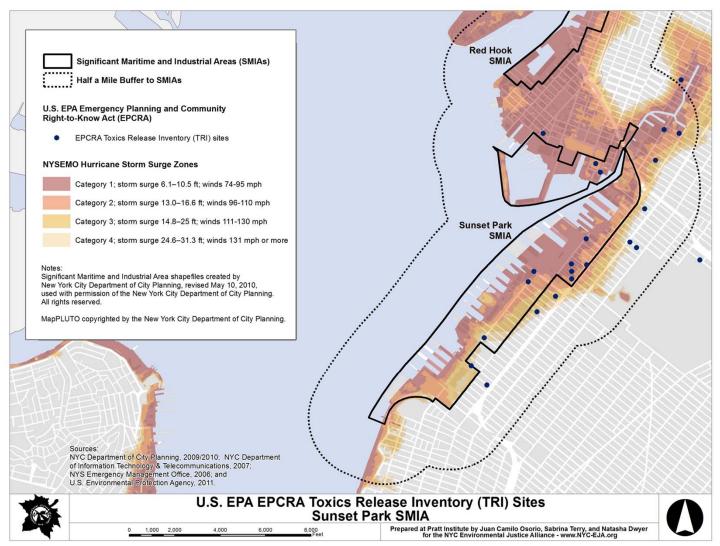
The SMIAs and their surroundings are highly vulnerable to hurricane storm surge. This map shows the SMIA boundaries, storm surge zones (as defined by the NYS Emergency Management Office), and 3 examples of the types of facilities handling hazardous substances or toxic chemicals in these areas that could represent a threat in the event of hurricane storm surge.



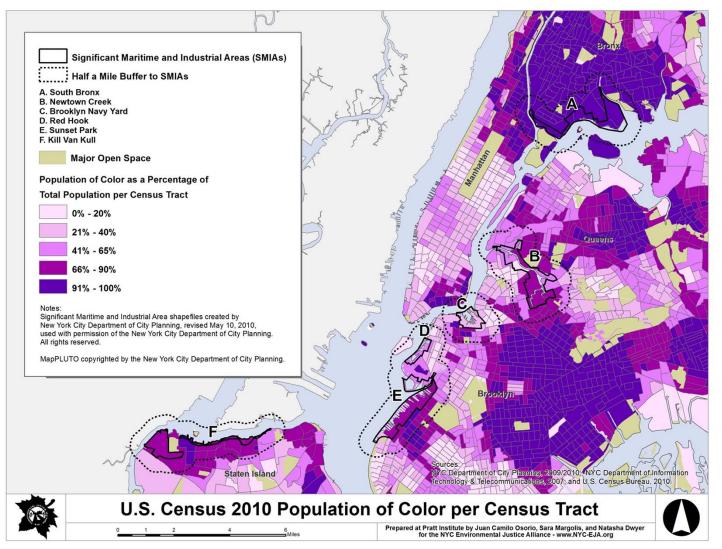
This map shows the location of NY State DEC regulated Class 2 Superfund Sites – sites determined to pose significant threat to public health or the environment & requiring immediate action – in the Newtown Creek SMIA. Of the total **43** sites in NYC, **8** of them (or **19%)** are both vulnerable to storm surge and located within half a mile of the Newtown Creek SMIA. Among the types of business included in this category, we found a **metal fabricator** where the presence of **trichloroethylene** has been documented. This is a special health hazard substance considered to be a **carcinogen** that needs to be handled with extreme caution, because there may be no safe level of exposure.



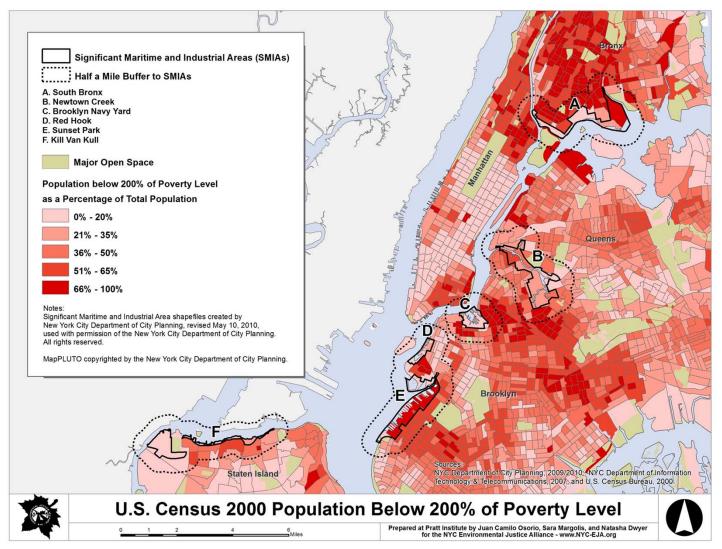
This is map shows the location of NY State DEC regulated active chemical bulk and major oil storage facilities in the South Bronx SMIA. These facilities store hazardous substances or have the capacity to store 400,000 gallons of oil. Of the **171** facilities in NYC, **18** of them or **11%** are both vulnerable to storm surge and located within half a mile of the South Bronx SMIA. Among the types of businesses included in this category, we found a **petroleum bulk station and terminal** where the presence of **naphthalene** has been documented. This is another special health hazard substance considered to be a **carcinogen** that can be absorbed through the skin damaging vision, kidneys and the liver.



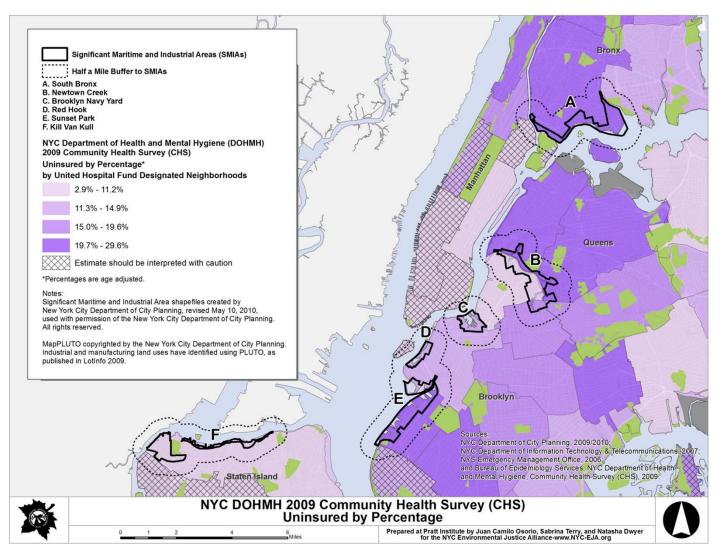
Finally, this map shows the location of facilities reporting chemicals in the Toxics Release Inventory under the US EPA Emergency Planning and Community Right-to-Know Act. Of the **234** TRI Reporters in NYC, **17** of them **or 7%** are both vulnerable to storm surge and located within half a mile of the Sunset Park SMIA. Among the types of businesses included in this category, we found a **fossil fuel electric power generator** where the presence of **n-hexane** has been documented. This is another special health hazard substance that can cause reproductive damage where high exposures can lead to unconsciousness and death. In addition this is a flammable liquid and dangerous fire hazard.



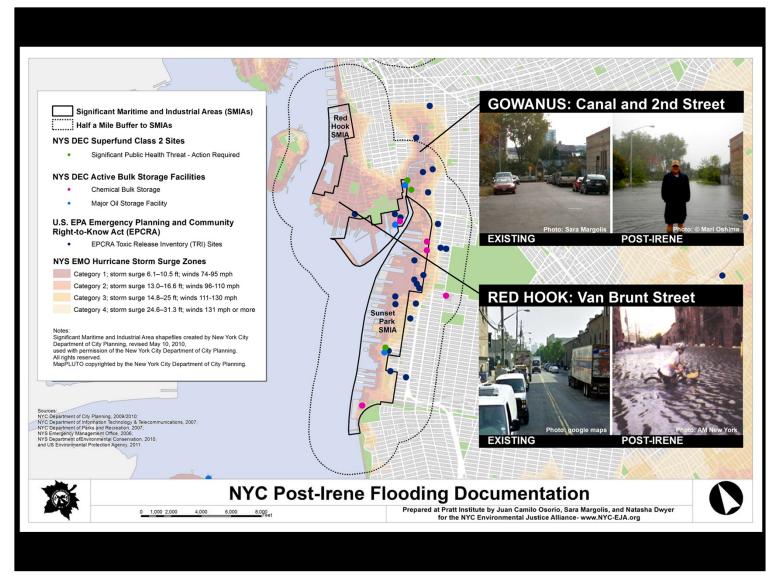
This map shows the percentage of population of color by census tract. Census tracts in dark purple denote areas where more than **66%** of the community is population of color. As you can see, the majority of the areas around the SMIAs represent populations of color. In fact, of the total **5.5 million people of color** in NYC, **2.8 million** live in census tracts that are vulnerable to hurricane storm surge and approximately **430,000** live in census tracts that are both vulnerable to storm surge and fall within a half-mile of the SMIAs.



The following map shows the percentage of low-income population by census tract. Census tracts with dark red denote areas where more than 66% of the community is considered to be low-income population. In fact, of the total **3 million low-income population** in NYC, **1.6 million** live in census tracts that are vulnerable to hurricane storm surge, and **283,000** live in census tracts that are both vulnerable to storm surge and fall within a half-mile of the SMIAs.



Finally, map that presents data from the NYC Department of Health and Mental Hygiene to show that the areas we have been pointing out also present some of the highest levels of uninsured population—which denote limited access to private health insurance in the event of a toxic exposure.



The following pictures show you the level of flooding that took place in Red Hook and Gowanus after Hurricane Irene. NYC-EJA has been documenting vulnerability to hurricane storm surge, but we also need to address the risk of flooding, strong winds, and sea-level-rise. These before-and-after pictures were taken in areas within the half-a-mile buffer to the SMIAs—imagine the threats to public health if the hazardous substances and toxic chemicals described in the presentation break out and are released with this level of flooding. In fact, we have no way of knowing whether - or not - the New Yorkers shown is these pictures were actually exposed to toxic substances in these flood waters.



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