Rebuild By Design Meadowlands (RBDM) Flood Protection Design

The Project Team is evaluating the Proposed Project’s Build Alternatives using a concept development and screening process. During the initial screening stages, concepts for each alternative were rated based on factors that included adverse impacts to ongoing remedial actions and the natural environment, with particular emphasis placed on potential impacts on the Berry’s Creek, Ventron/Velsicol, and Scientific Chemical Processing site cleanups. These cleanups involve surface water and sediment remediation that are also known to have impacted areas of Peach Island Creek. Historic fill placement, landfills, gas stations, and other sites with known or suspected contamination were also considered during the concept screening process based on their capacities to impact the Proposed Project.

The presence of hazardous materials within the Meadowlands District can complicate construction of a flood protection project. The construction of structural flood protection and stormwater management features may result in disturbance to contaminated soils, as contamination that originated long ago is still widespread in the region. All contaminated sites must be evaluated against regulatory requirements of the NJDEP Site Remediation and U.S. Environmental Protection Agency (USEPA) Superfund Programs.

Please visit [www.rbd-meadowlands.nj.gov](http://www.rbd-meadowlands.nj.gov) to obtain current Proposed Project information and data, including confirmation of the above meeting dates.
Map showing the locations of almost 2,000 acres of NJDEP-mapped historic fill.

While these locations with hazardous materials present a challenge, they also provide a decision-making framework as the design of structural flood protection and stormwater management features develop. Knowing the locations of hazardous materials helps to inform the design of each flood protection feature. Understanding the mitigation requirements helps to define the construction plan, costs, and schedule. Each project feature can be evaluated on its ability to not only protect residential and commercial properties, but also to protect the environment by avoiding potential impacts that may result from proximity to or disturbance of known contamination areas.

A History of Contamination

For more than 200 years, the Meadowlands District was subject to landfilling, dumping, and both intentional and unintentional releases of hazardous materials. The area is urban and densely developed with land uses ranging from heavy industry, transportation corridors, and residential use to open space, wetlands, and large recreational areas. Many surface waterbodies and parcels of land within the Meadowlands District have confirmed or suspected presence of hazardous materials and other contaminants, such as heavy metals. These sites include the following:

- USEPA Superfund sites
- Historic landfills
- Groundwater Classification Exception Areas
- Known Contaminated Sites
- Other potential Recognized Environmental Conditions, including active underground storage tank remediation sites, automobile filling stations and service stations, and almost 2,000 acres of NJDEP-mapped historic fill

Using existing databases, NJDEP Site Remediation Program Geographic Information Systems data, and reports from specific investigations of contaminated sites within the Project Area, the RBDM Project Team has created an extensive library of information regarding hazardous materials and contamination within the Project Area. To date, the Project Team has compiled approximately 905,000 records of analytical data throughout the Project Area.

Hazardous materials are frequently encountered during construction activities in industrial areas that have been previously disturbed by construction, excavation, filling, and industrial uses. Throughout the design and construction of the Proposed Project, encounters with, or impacts on, hazardous materials will be managed and mitigated in accordance with all appropriate Federal and State regulations.

Get involved!

- If you would like to become a member of the CAG, please contact Alexis Taylor at rbd-meadowlands@dep.nj.gov.
- NJDEP welcomes your participation and input into this process!
- Share information from this newsletter with friends and neighbors.
- Educate your friends and colleagues on the Proposed Project and NEPA process.
- Continue to build interest in the Proposed Project.
- Subscribe to receive email updates on the Proposed Project at: www.rbd-meadowlands.nj.gov

Did you know...

Two USEPA Superfund Sites are within the Project Area. **Scientific Chemical Processing Site** is a former waste processing facility that accepted various wastes for recovery and disposal between 1971 and 1980.

**The Ventrion/Velsicol Site** is a former mercury processing and manufacturing plant that operated between 1927 and 1974. Disposal of approximately 160 tons of process wastes, including mercury, resulted in contamination of soil, sediment, groundwater, and surface water at the site and in nearby Berry’s Creek.