#### Oct 2012 Sandy







# South Shore of Staten Island, New York

# **Winter 2024**



# **Project Area Facts**

- Flood-prone, high risk, low-lying
- Low-capacity storm sewers
- Nearly 7,300 structures
- Over 30,000 people
- Critical infrastructure:
- Oakwood Wastewater Treatment Plant
- Staten Island Hospital
- Fire/police stations
- Schools/senior centers

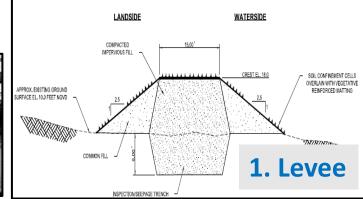
#### **Hurricane Sandy Facts**

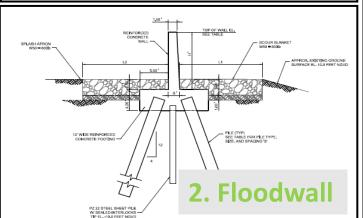
- Water levels peaked at +12.5 ft NAVD
- Flooding depths over 10 ft.
- 4 ft higher than prior record
- 23 total Staten Island deaths
- 43 total in New York City
- 80% structures damaged in project area
- Over \$1B in Sandy damages

# Dec '92 Nor'easter LANDSIDE WATERSIDE



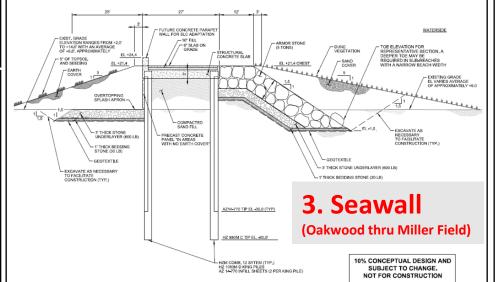


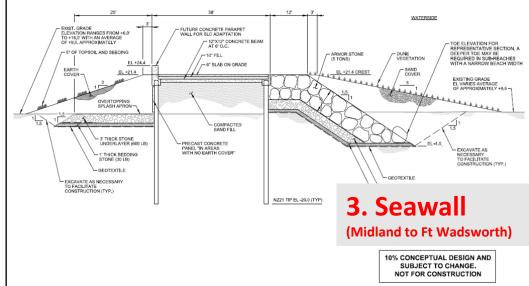






# **Typical Project Cross-Sections**





Tide Gate

### **Project Renderings (Before & After)**



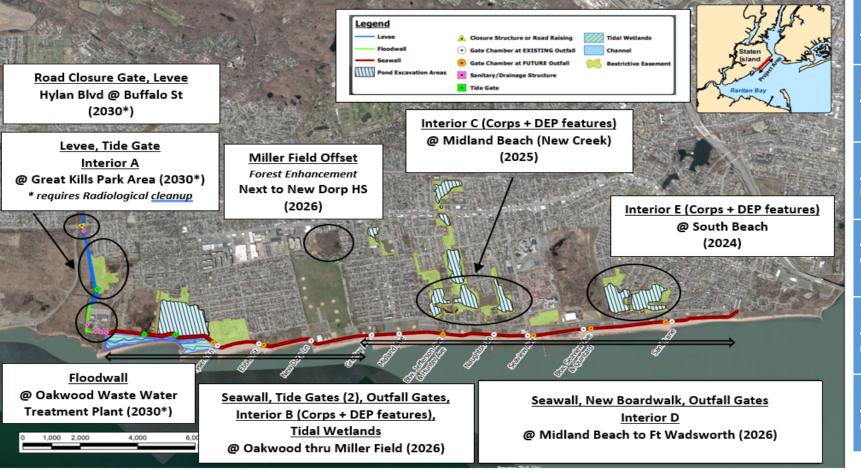




Staten-Island/

- ✓ ASA(CW) approval of Feasibility Report, EIS, ROD, Director's Report (Dec 2016).
- ✓ Project Partnership Agreement executed (Feb 2019); Corps, NYS (Sponsor), NYC (party)
- Project originally cost-shared at 65% Fed, 35% Non-Fed (70% NYS, 30% NYC); however, WRDA 2022 amends cost-sharing, with original estimate (\$615M) cost-shared 65% Fed, 35% non-Fed, and all costs ABOVE PPA estimate to now be cost-shared 90% Fed, 10% Non-Fed
- ✓ Validation Report completed Jan 2024 to document required project design refinements, updated total project cost, economics & environmental impact assessment; Final Chief's Report signed Feb 2024
- ✓ PPA Amendment to be executed in 2024, to incorporate Chief's Report, updated costs, cost-sharing
- ✓ HTRW removal at Great Kills Park reach (levee area) is required by non-Federal parties
- ✓ Project Operation & Maintenance is a Sponsor (NYS) 100% responsibility & cost
- ✓ Project is designed to be adapted in future to address potential sea level rise, if required
- ✓ **Significant coordination underway**: Corps, NYS, Governor, NYC, Mayor, City Parks, City DEP, City DOT, Borough President, National Park Service, FEMA, various Congressional and local interests
- All construction contract designs are currently underway

# **Anticipated Construction Contract Breakouts**



### **Estimated Total Project Cost (updated)**

Federal cost-share \$1.944 Billion

Non-Federal cost-share \$387 Million

Annual Operation & \$2 Million

Maintenance Costs (Non-Fed)

# **Estimated Construction START Schedules**

Interior E, with DEP features  @ South Beach	Spring 2024  Construction  Contract  Advertisement is currently underway
Interior C, with DEP features  @ New Creek	2025
Miller Field Offset	2026
Seawall, Interior D  Midland to Ft. Wadsworth	2026
Seawall, Interior B, Wetlands Oakwood thru Miller Field	2026
<u>Levee, Interior A</u> @ Great Kills Park Requires HTRW cleanup	2030
Floodwall @ Oakwood WWTP	2030
Road Closure Gate, Levee @ Hylan Blvd	2030