# South Wilmington Combined Sewer Separation & Urban Wetland Restoration Project

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# SOUTH WILMINGTON WETLANDS PROJECT City of Wilmington, DE















### **Project Goals**

Mitigate/reduce flooding

Improve water quality

Restore a functioning tidal wetland

Clean up a brownfield

Create a safe and attractive wetlands park

Reduce mosquito breeding grounds

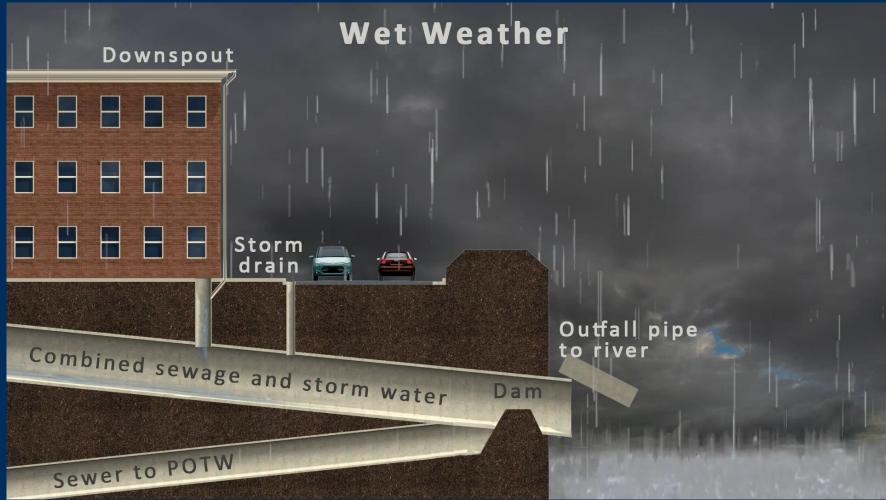








### Conditions During a Storm







### Wetland Park & Sewer Separation Areas



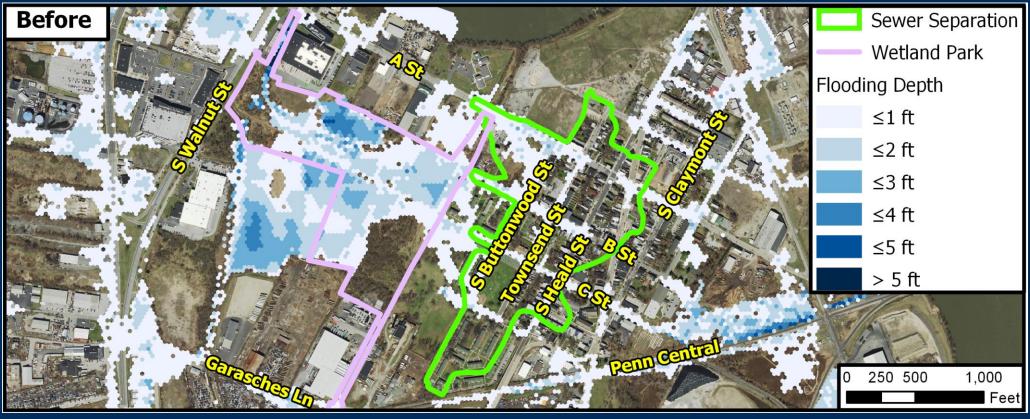
34.60 acres

>1,000 Residences





# Modelling Results



### Current Impacts of 10-yr 24-hr Storm

- 2.1 million gallons of sewage overflow
- 12.6 acres flooded in Southbridge

### Modelling Results



### **Impacts after Project Completion**

- Flooding reduced & concentrated in the Wetland Park
- 2.1 million gallon decrease of sewer back-up
- 12.1 acre *decrease* in Southbridge flooding



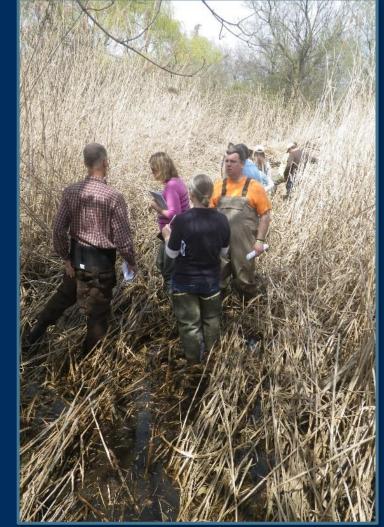








































### Project Goals in Summary

Mitigate/reduce flooding

- 2.1 million gallon *decrease* of sewer back-up
- 12.1 acre *decrease* in Southbridge flooding

Improve water quality

• Treat 36.4 acres of stormwater run-off

Restore a functioning tidal wetland

Restore a 15-acre tidal freshwater wetland

Clean up a brownfield

Remove 100,000 cubic yards contaminated soils

Create a safe and attractive wetlands park

 Create walking paths, passive recreation, and planting of native species

Reduce mosquito breeding grounds

Natural biological controlled of mosquito larvae







