

Baseline Conditions

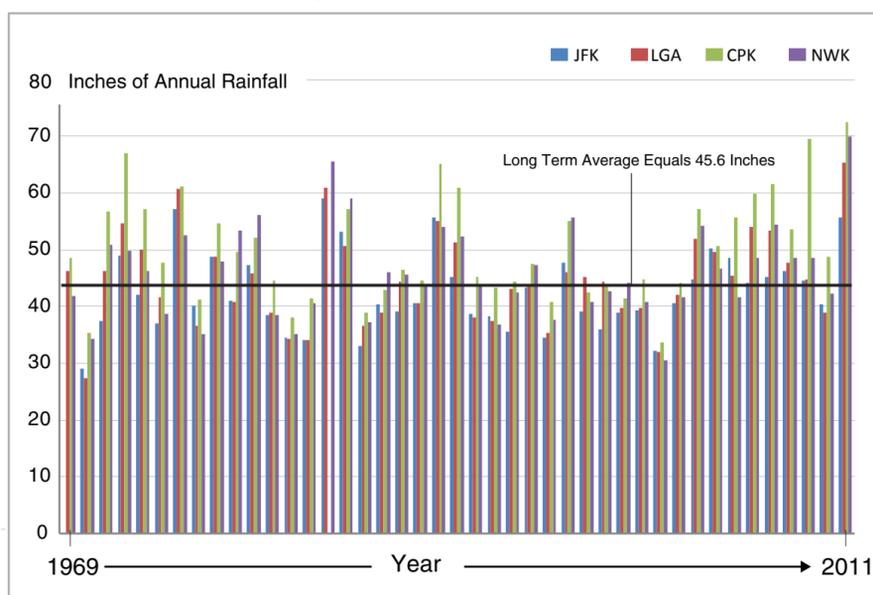
Surface Coverage Characteristics in NYC



Updating Impervious Surface Cover

- Based on satellite images from 2009, 72% of the city's surfaces are impervious

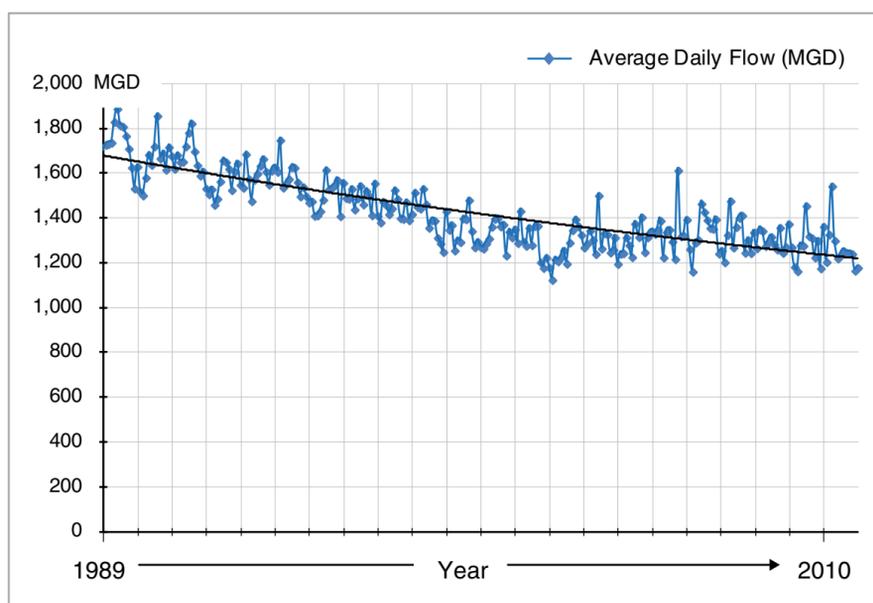
NYC Annual Precipitation



Analyzing Historical Rainfall Patterns

- Over the last 10 years, the average annual rainfall across 4 different locations exceeded the long-term average 8 out of 10 years

Average Daily Flow to the 14 NYC WWTPs



Projecting Wastewater Flows to 2040

- Sanitary flows have decreased over time due to water conservation and sewer system optimization

Potential LTCP Alternatives

Maximize Flow to WWTPs



Increases CSO capture and treatment

Sewer System Optimization



Maximizes flow to plants

Ecological Enhancements



Reduces runoff, improves water quality

Green Infrastructure



Captures and reduces stormwater runoff

Sewer System Modifications



Captures more CSO

High Level Storm Sewers



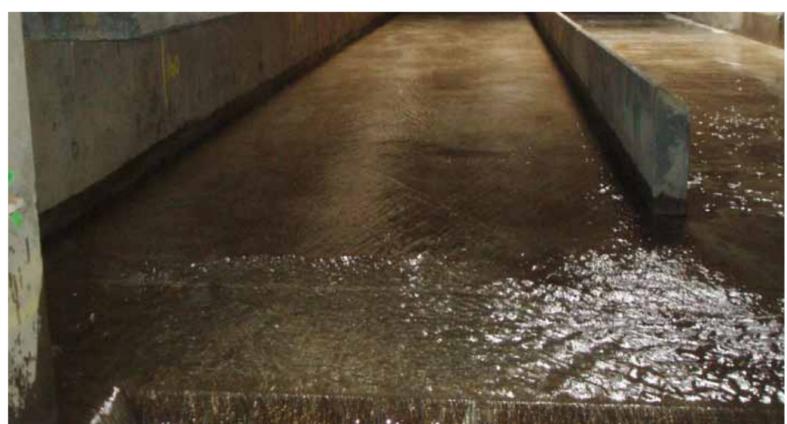
Eliminates CSO

Pumping Station Expansion



Conveys additional CSO to WWTP

Storage Tunnels and Tanks



Captures and treats CSO

Comprehensive Monitoring Program

Current DEP Efforts Include:

- Monitoring water quality at over 70 locations throughout the New York Harbor
- Installing depth sensors at over 115 combined sewer regulators through the supervisory control and data acquisition (SCADA) program
- Piloting real-time monitors at five CSO outfalls during summer 2012 to estimate CSO volume, duration of overflow and peak flow during wet weather periods
- Installing weather stations at all 14 wastewater treatment plants (WWTPs) to enhance the characterization of rainfall distribution in New York City

Citizen Monitoring Efforts

- Are you aware of any citizen monitoring efforts?
We want to learn more about it!
- Place a pushpin on the map where monitoring is occurring and provide us with your contact information so we can follow-up for details!

