Preventing Flooding with Cloud Technology

"The infrastructure we have today is capable of much more than we realize," states Shively. "By understanding and improving the system that already exists, we can adapt best management practices and begin to utilize existing assets to the maximum extent possible, UEA to the MEP."

— City of Kansas City, MO

The evolution in stormwater management

Traditional Grey Infrastructure

Conventional Green Infrastructure

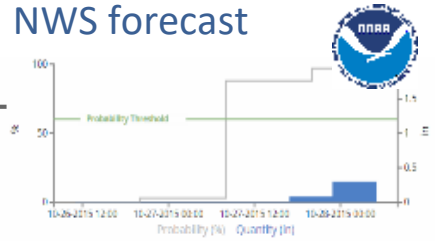
Intelligent Green Infrastructure

Continuous Monitoring & Adaptive Control (CMAC)

web-based dashboard

cloud software

NWS forecast



control panel

runoff

adaptive use of storage

water level sensor

stormwater infrastructure

actuated valve outlet

infiltration

Field view of typical hardware components

What is the status of my stormwater infrastructure?

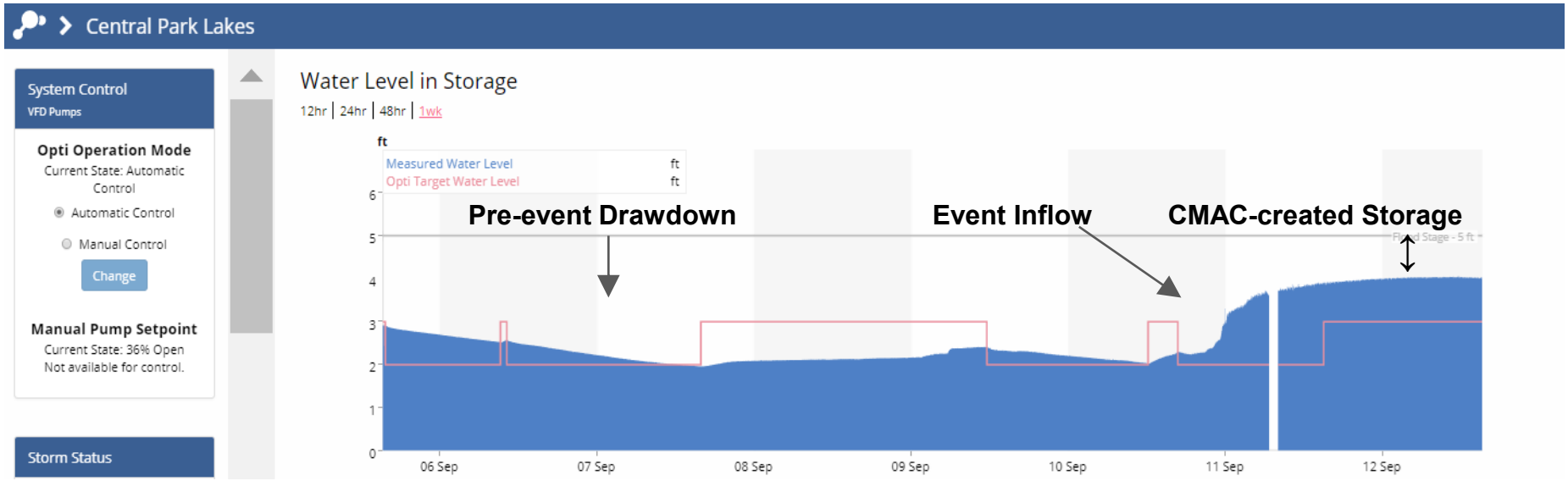
What needs to be done in preparation of the event?

What resources do we need for emergency operations?

Leverage existing stormwater assets and infrastructure

OptiRTC

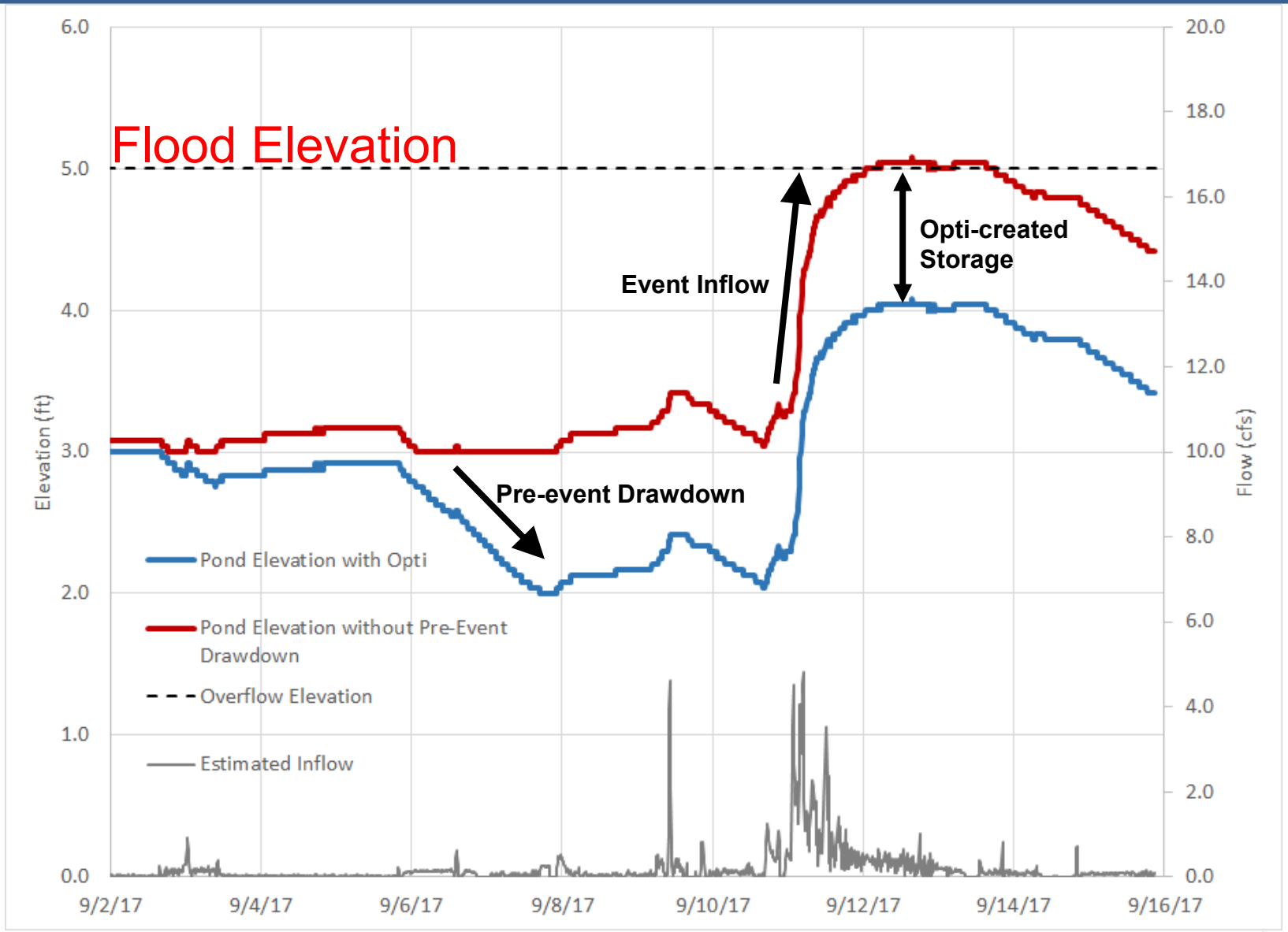
Maximizing storage before Hurricane Irma



Summary Statistics	
Total Precipitation (NOAA)	8.4 in
Total Estimated Inflow *(Sept. 6 – Sept.14, 2017)*	13.5 MM ft^3 or 300 ac-ft.

OptiRTC

Pre-event drawdown prevented flooding



OptiRTC

Case Study: Chicago

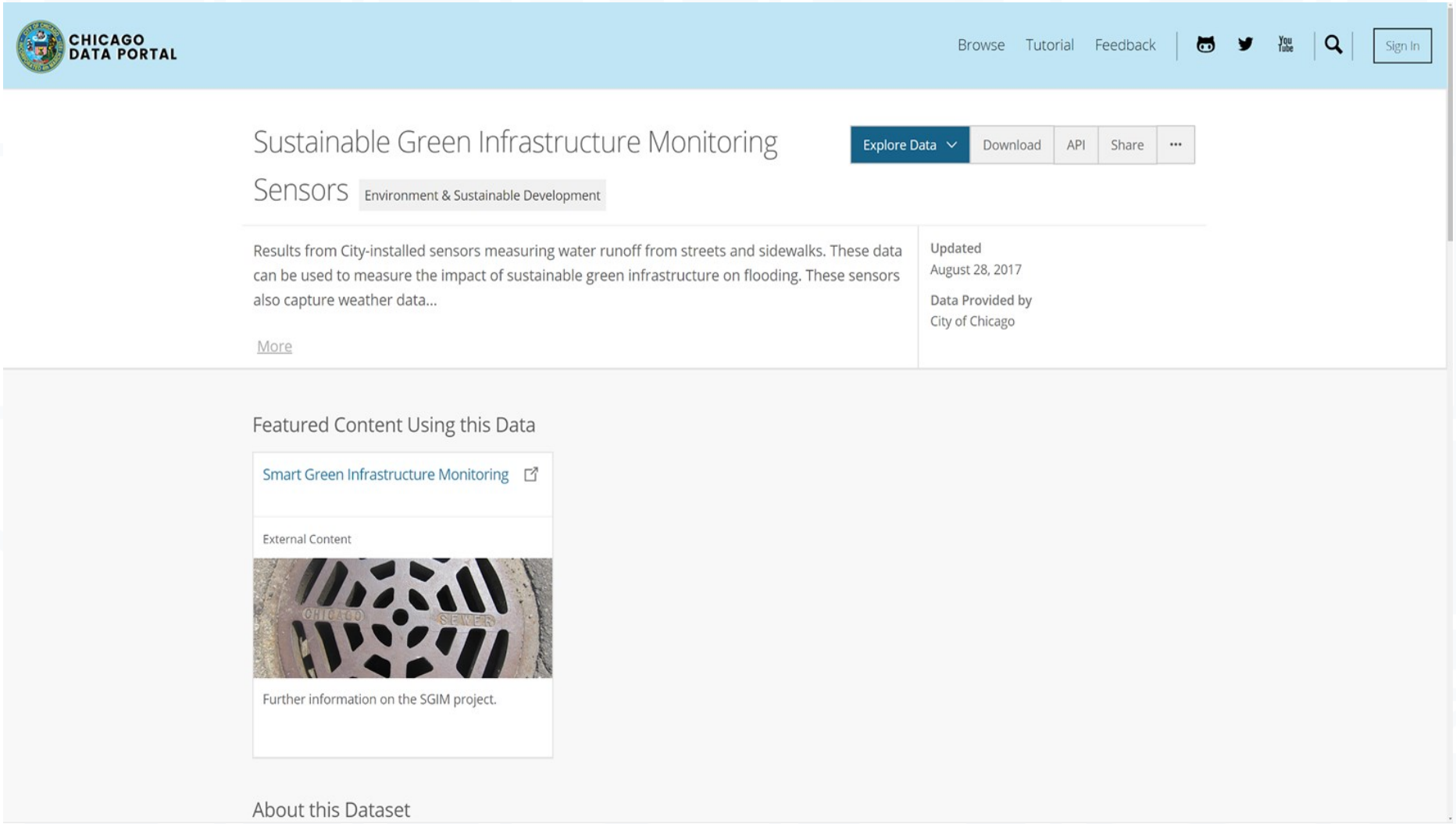
Smart Green Infrastructure Monitoring

Microsoft AECOM UI LABS SENFORMATICS Sensing • Informatics • Innovation Opti

Mayors Explore Data-Driven Sustainability Solutions with Opti, City Digital Partners

Mayor of London Sadiq Khan tours green technology pilots in Chicago with Mayor Rahm Emanuel

Monitoring platform and Public API



Coordinated urban watershed

Thank you

Viktor Hlas

OptiRTC

vhlas@optirtc.com