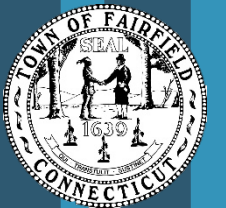


Resilient Fairfield

CIRCA Design Workshop
05/15/2023



Agenda

Project Background

Adaptation Strategies

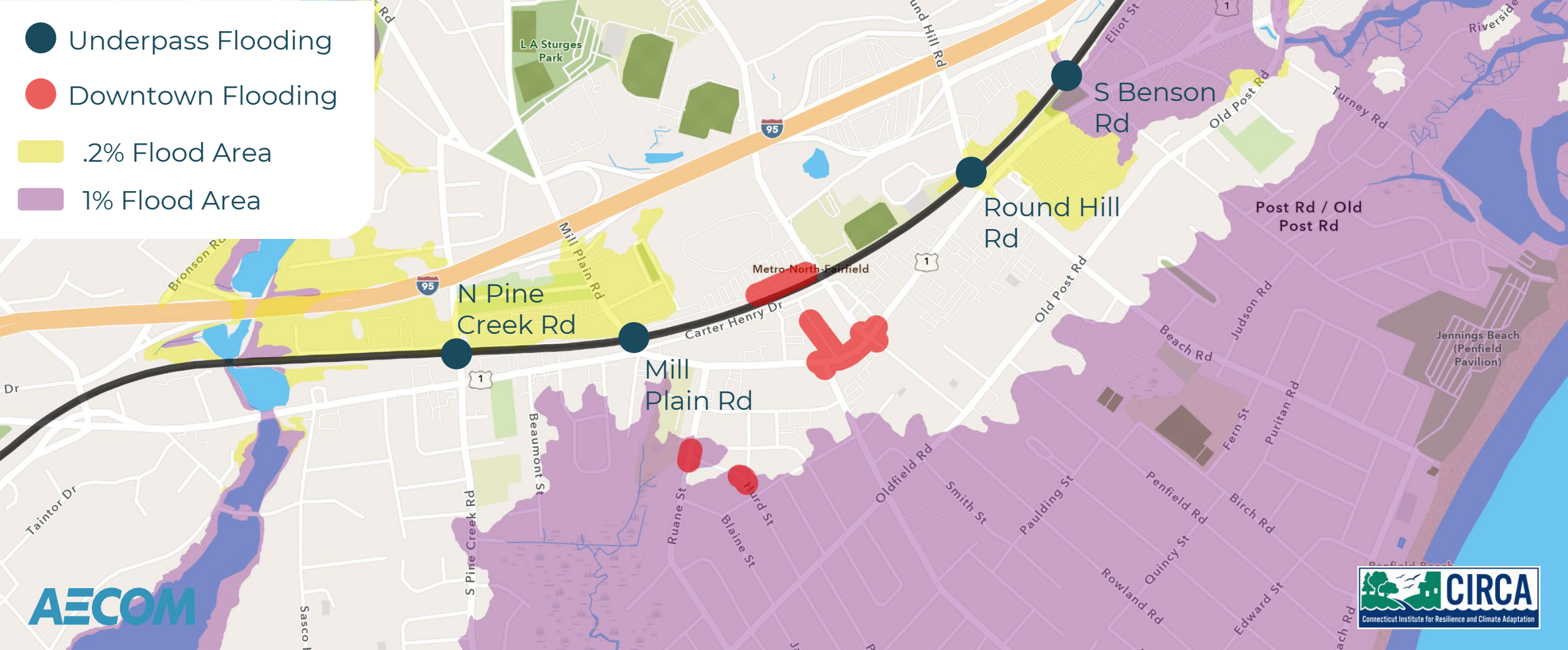
- Green Infrastructure
- Flood Control
- Infrastructure

Next Steps

Questions

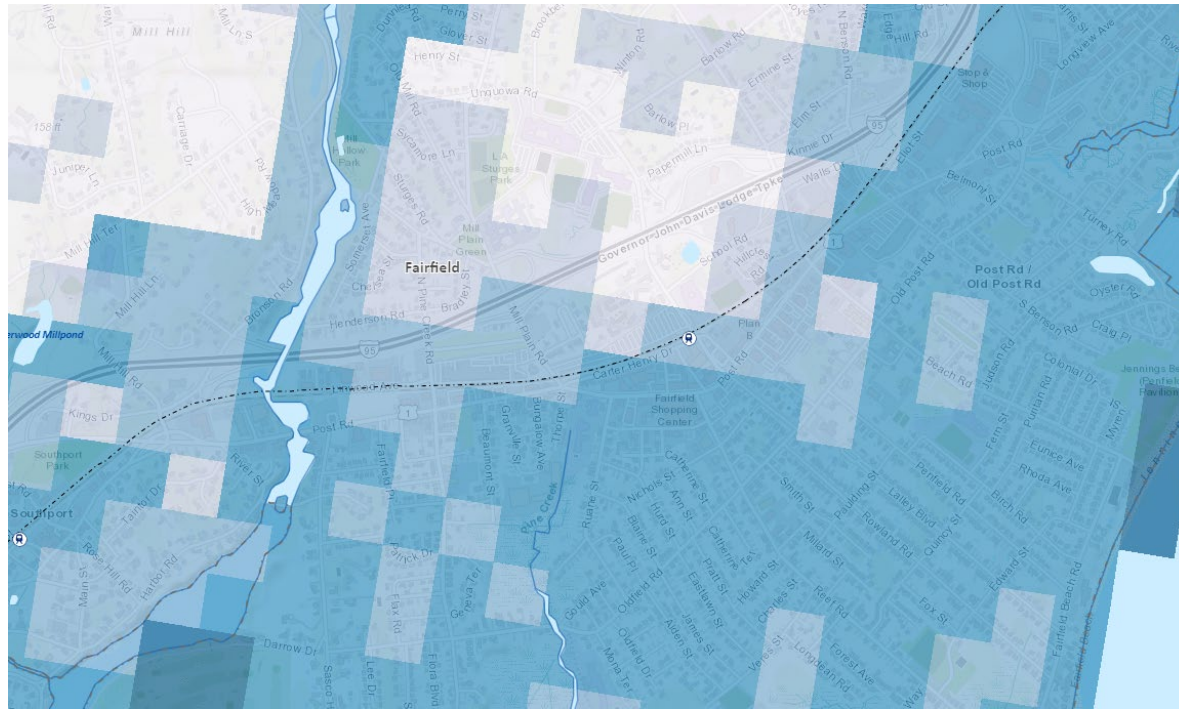


Project Background

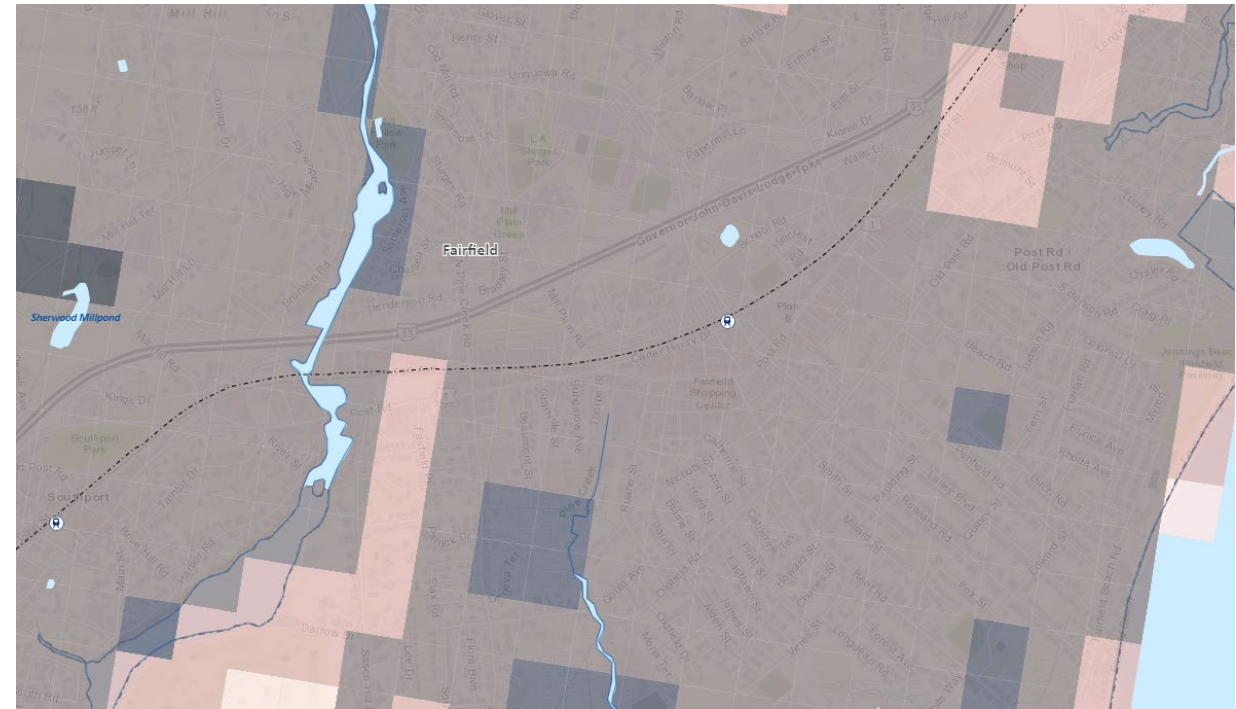


Project Background

Flood Vulnerability

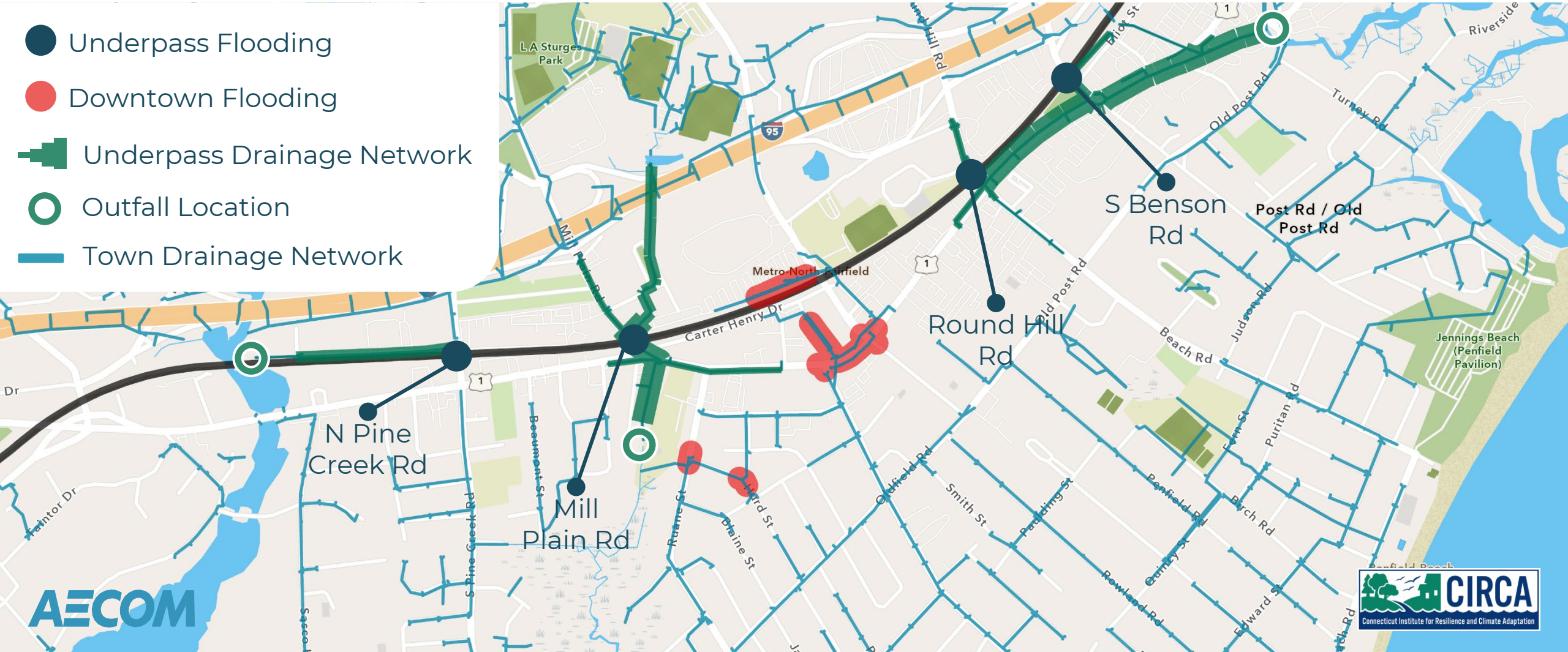


Adaptive Capacity



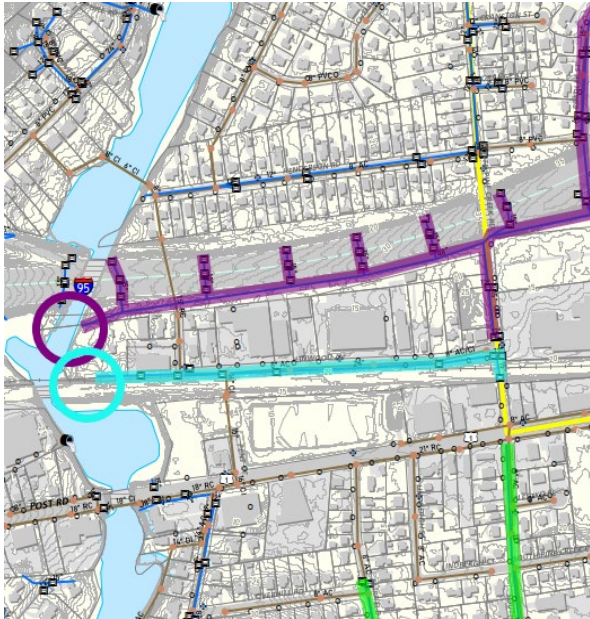
Existing Drainage Network

- Underpass Flooding
- Downtown Flooding
- Underpass Drainage Network
- Outfall Location
- Town Drainage Network



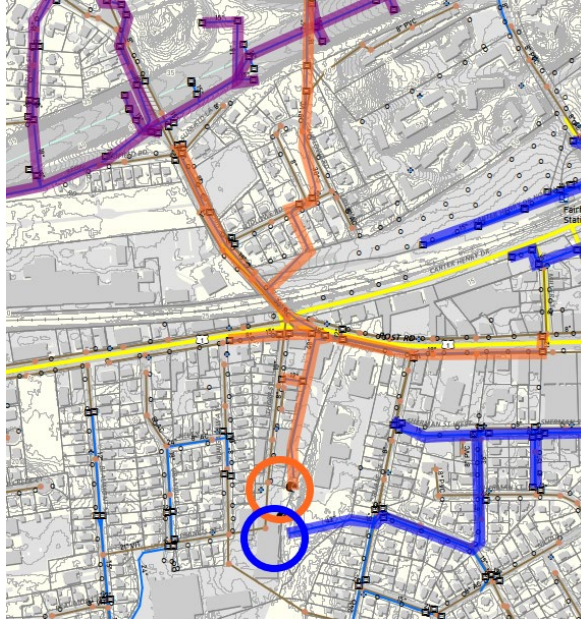
Underpass Drainage Assessment

Pine Creek Road



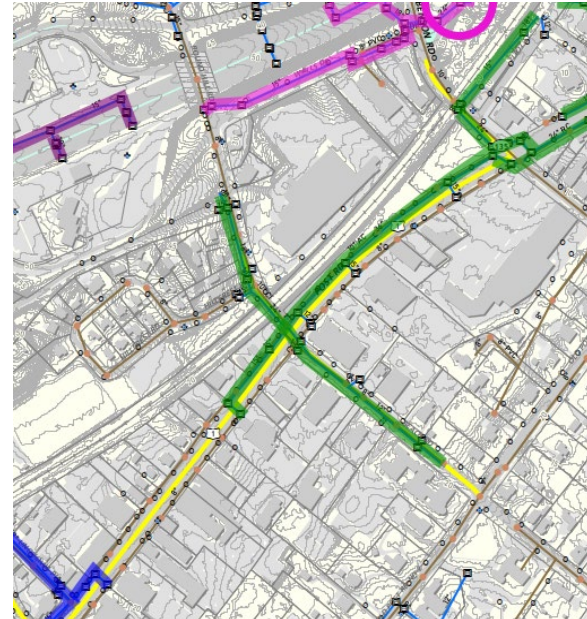
- Unique in the downtown area
- Experiences the least severe flooding

Mill Plain Road



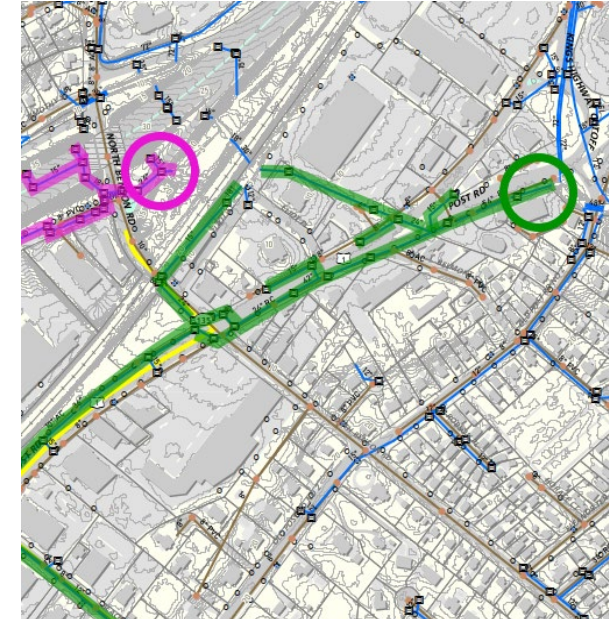
- Significant runoff from the north of the underpass.
- Fairfield Train Station, Mill Plain Road & Ludlow Rd/Ct.

Round Hill Road



- Shares a drainage network with North Benson Rd
- Within the 500-year floodplain

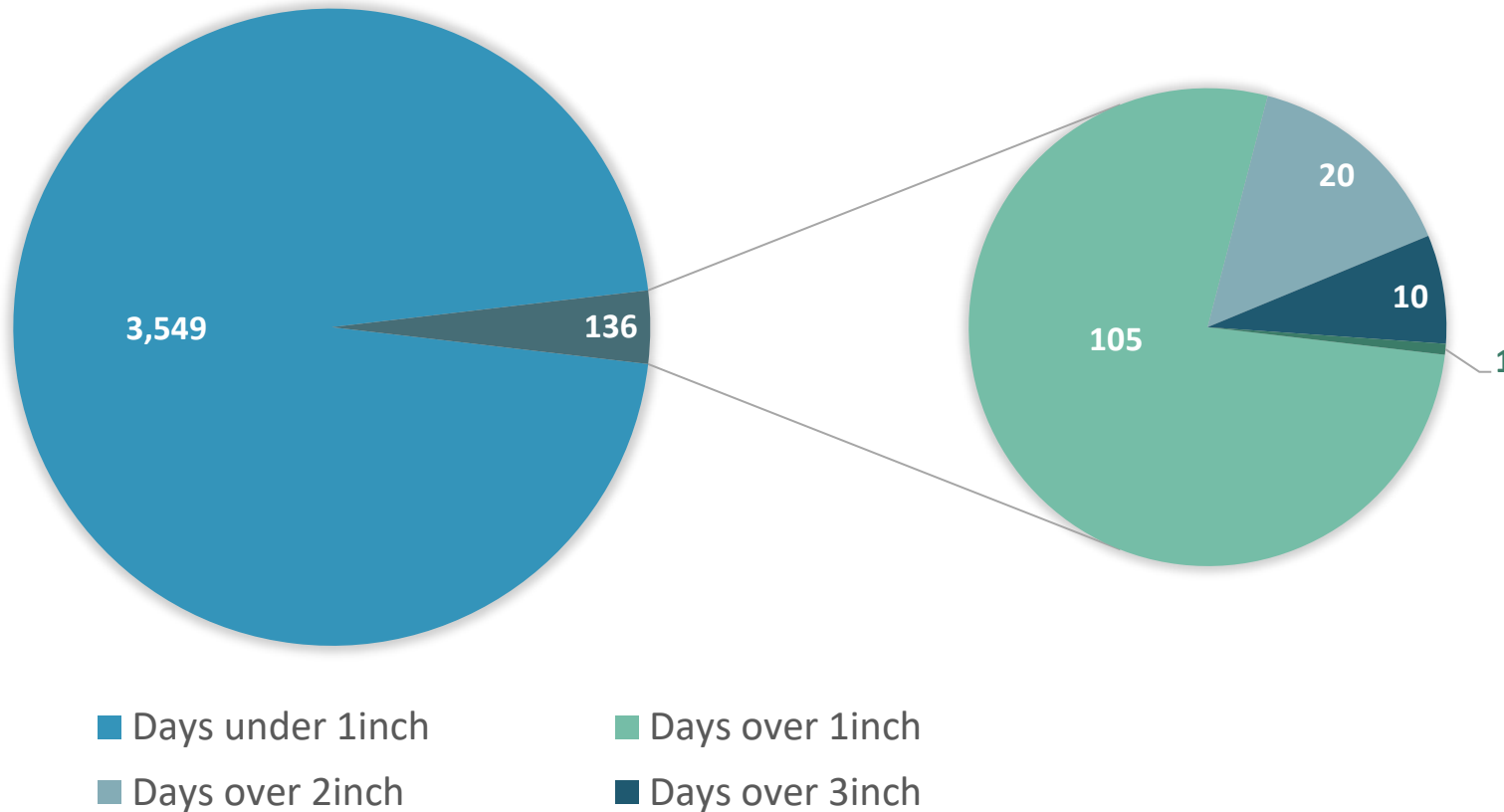
North Benson Road



- Discharges into to Ash Creek.
- Within the 100-year floodplain.

Current and Future Flooding

Precipitation Days 2012-2022



20 More days with < 1" of Precipitation by Mid-Century per Year.

When the town receives intense rain over short periods drainage systems can be overwhelmed.



Flooding can be exacerbated by high-tides and storm surge events.

Adaptation Ideas



**Green
Infrastructure**



Flood Control



Infrastructure

Green Infrastructure



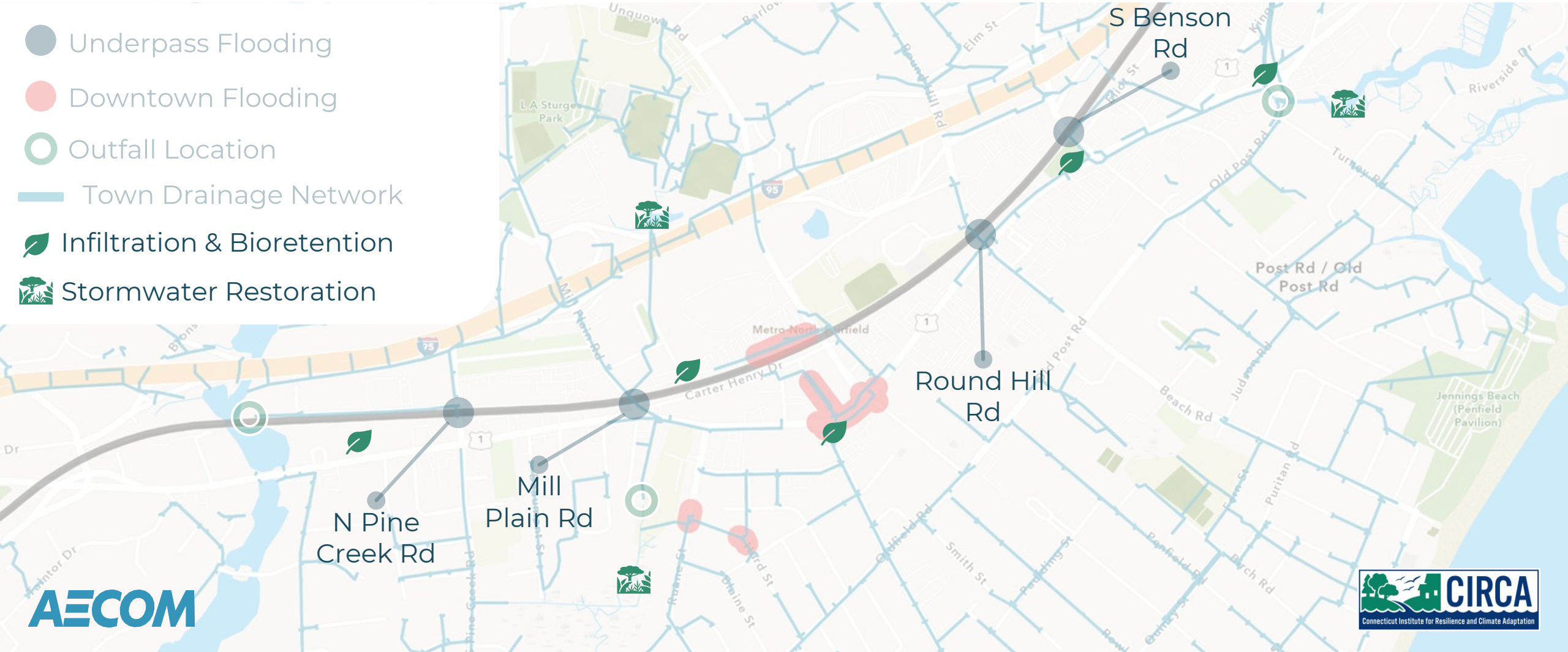
Bio-infiltration &
Bioretention



Stormwater
Restoration

Green Infrastructure

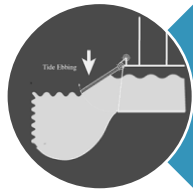
- Underpass Flooding
- Downtown Flooding
- Outfall Location
- Town Drainage Network
- 🌿 Infiltration & Bioretention
- 🌳 Stormwater Restoration



Flood Control



Drainage Network



Tide Gates



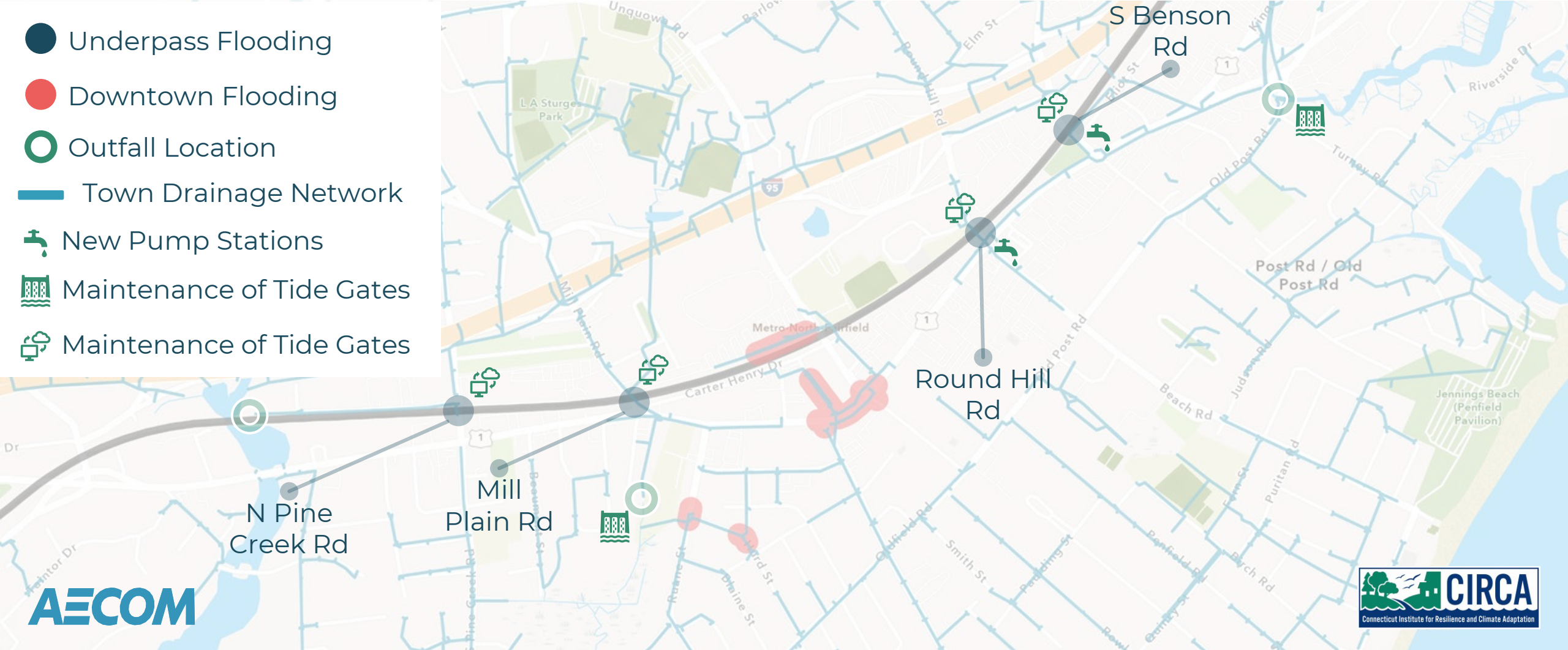
Pump Stations



Warning and Monitoring Systems

Flood Control

- Underpass Flooding
- Downtown Flooding
- Outfall Location
- Town Drainage Network
- 🚰 New Pump Stations
- 🏗️ Maintenance of Tide Gates
- 🏗️ Maintenance of Tide Gates



Roadway Infrastructure



Underpass
Modification



New Overpasses

Thank You

