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Hydrologic Monitoring in the Central Pine Barrens

Pine Barrens Commission Meeting
Wednesday, March 18, 2020

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U.S. Department of the Interior
U.S. Geological Survey

Objective:

Expand and operate a comprehensive water-resources monitoring program for the Central Pine Barrens region

- Publicly accessible database of hydrologic conditions
- Baseline of water-resources conditions to assess hydrologic changes and trends
- Provide a data resource to monitor ecohydrologic stress

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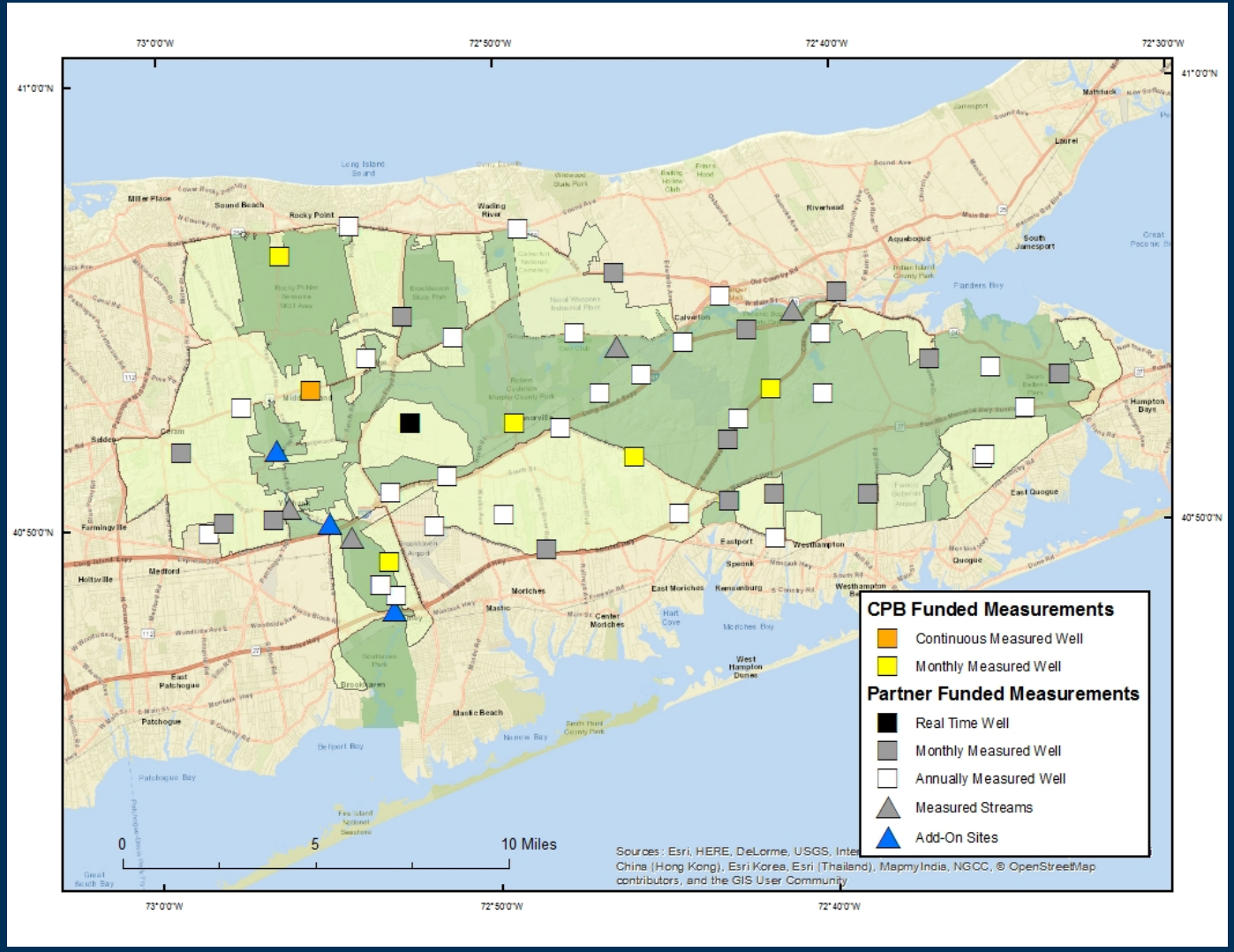
Water Quantity within the Central Pine Barrens



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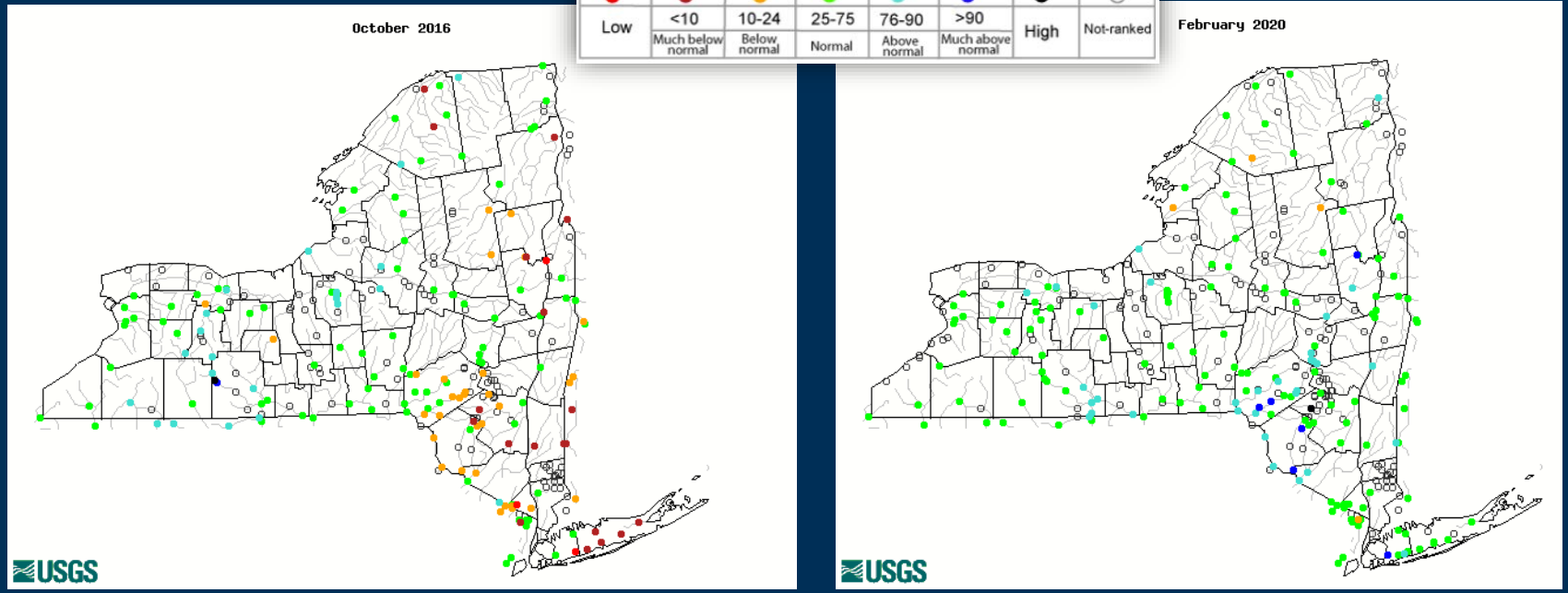
Comparison of Streamflow Maps



https://waterwatch.usgs.gov/

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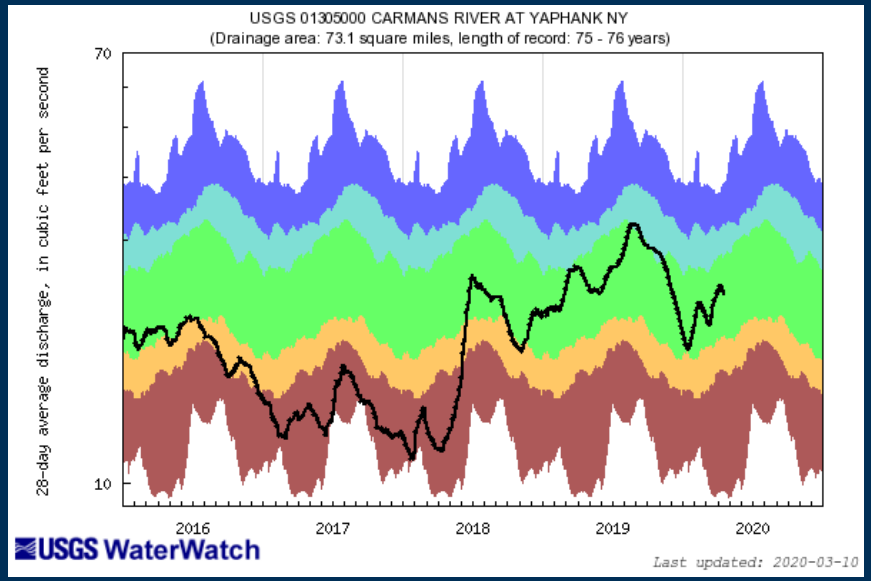
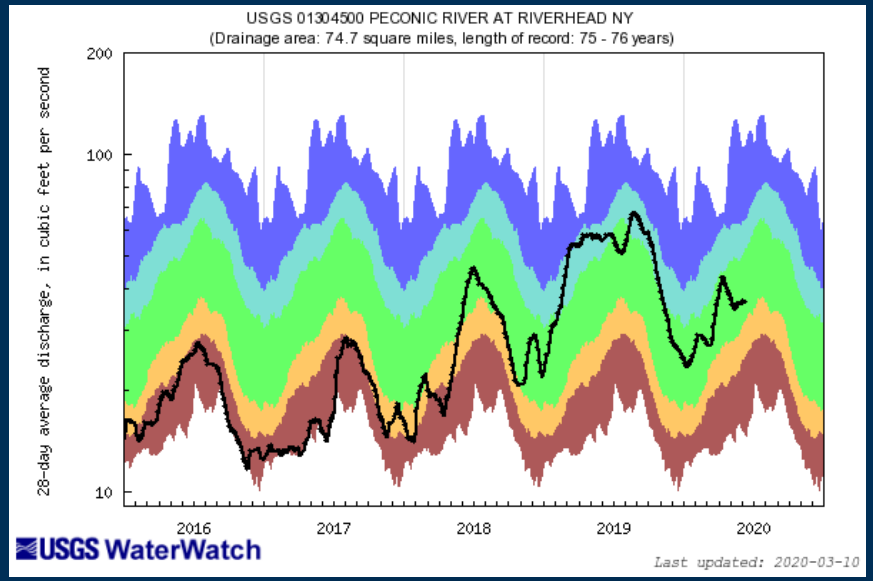
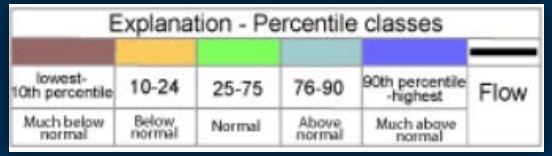
Carmans & Peconic Hydrographs, 2016-2020







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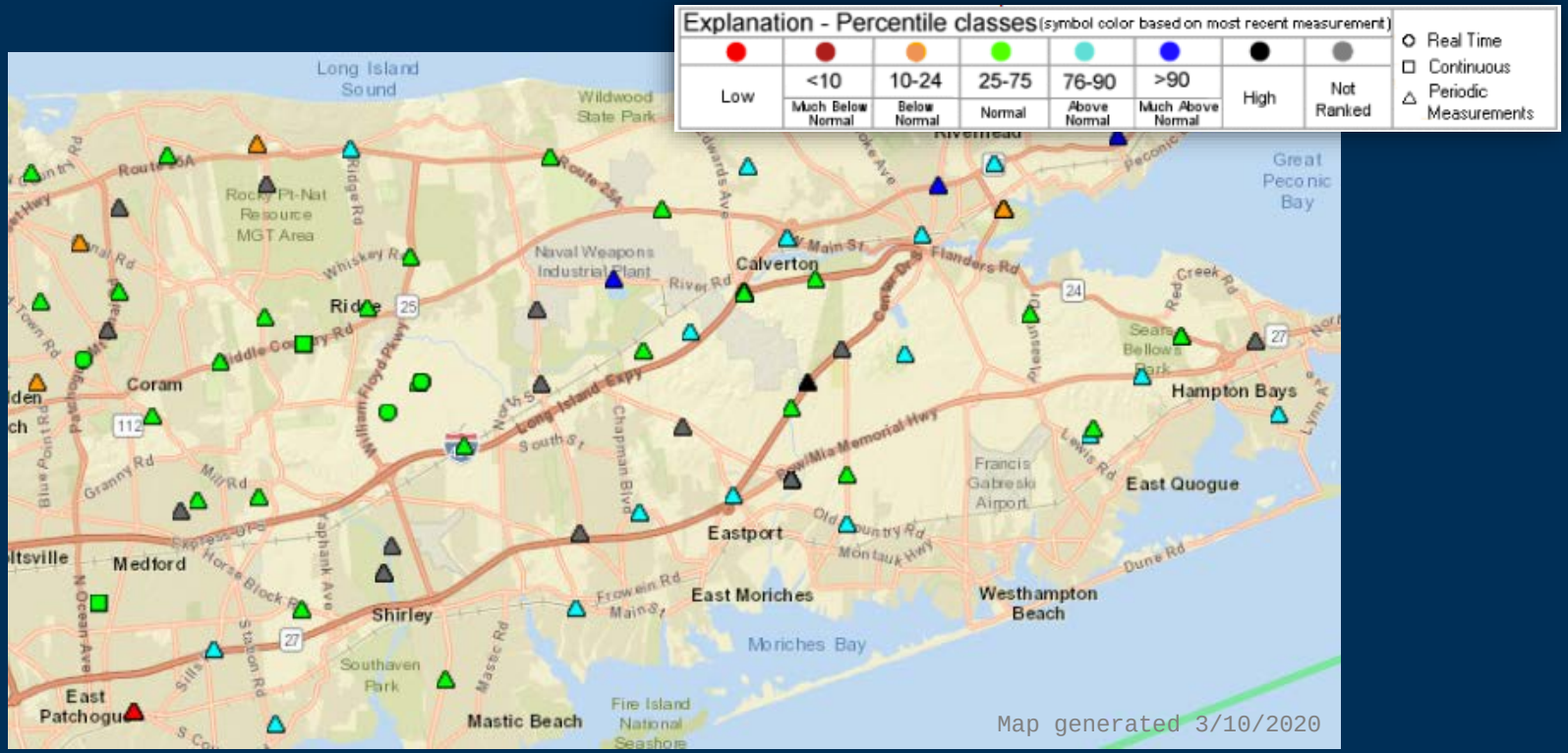
Active Groundwater Sites near CPB



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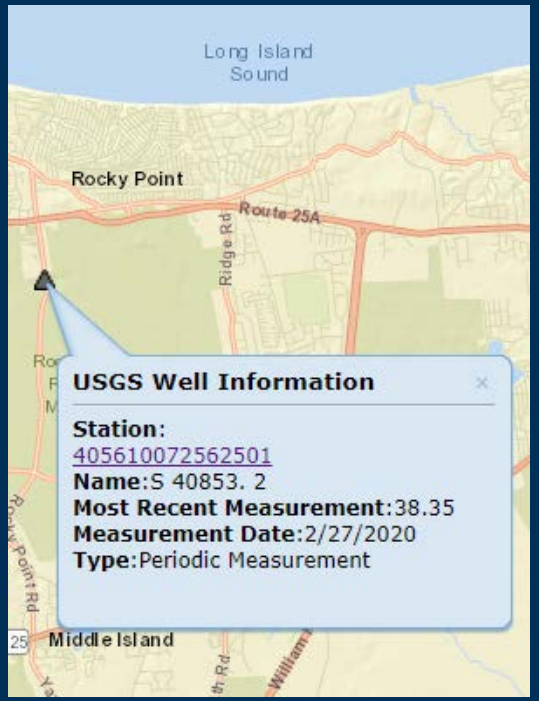
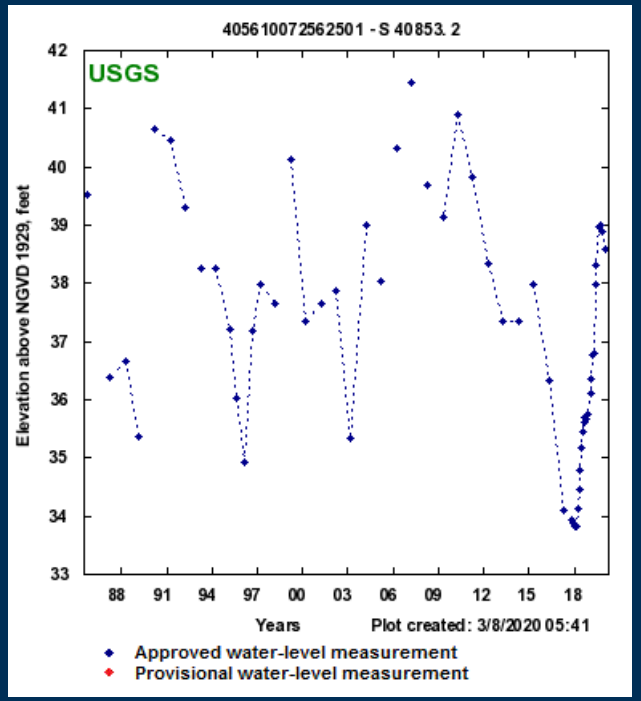
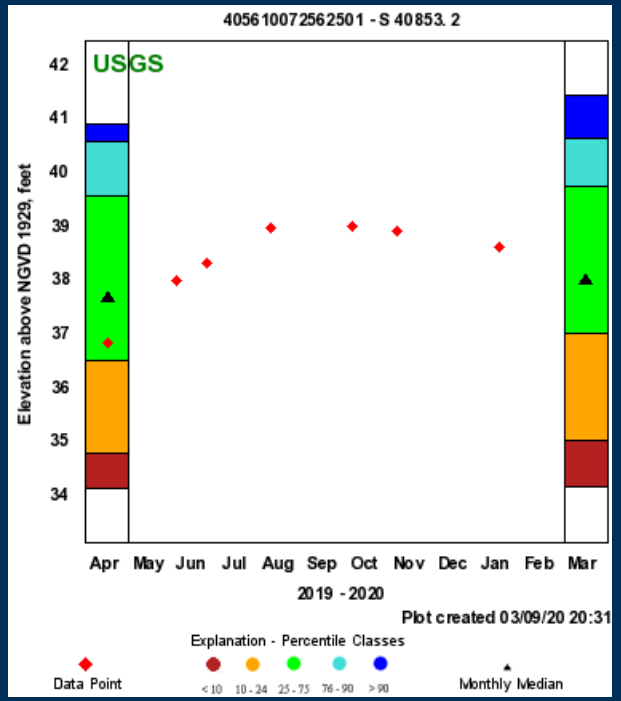
S 40853.2 – Groundwater Measurements







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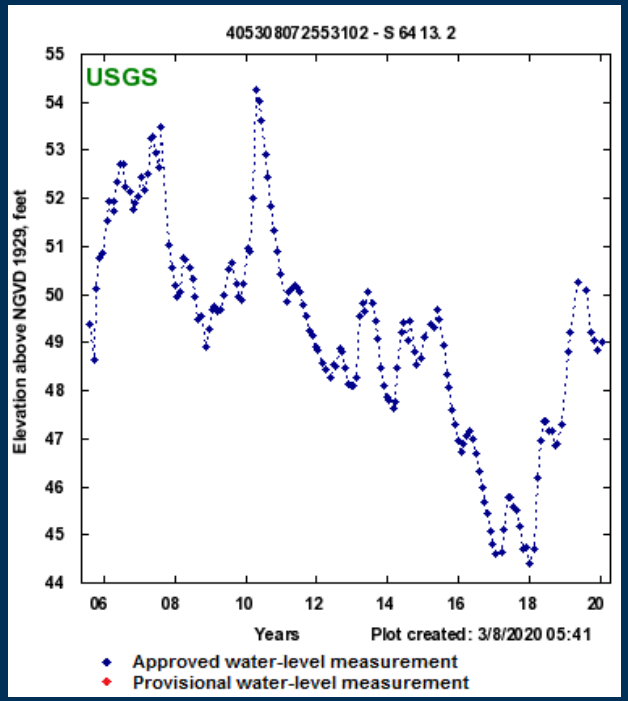
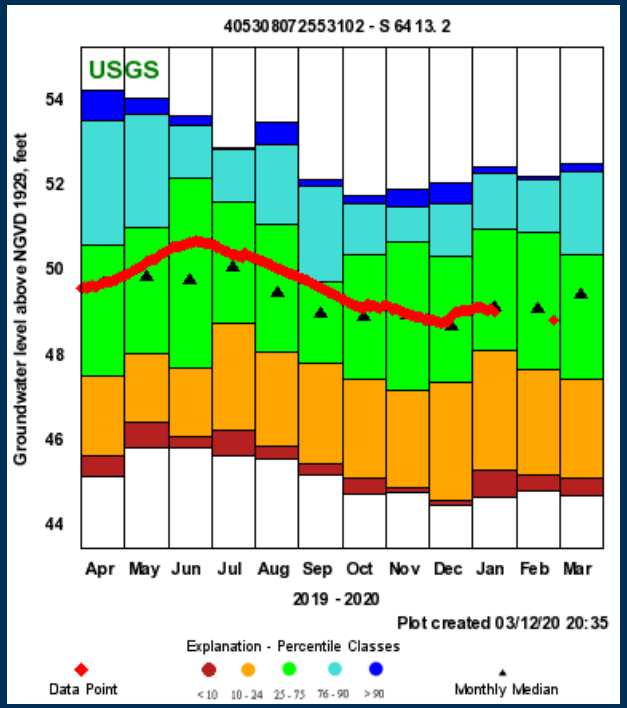
S 6413. 2 – Groundwater Measurements





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https://groundwaterwatch.usgs.gov/

Water Quality

Develop baseline chemistry for the streams

Determine the degree of influence from anthropogenic sources

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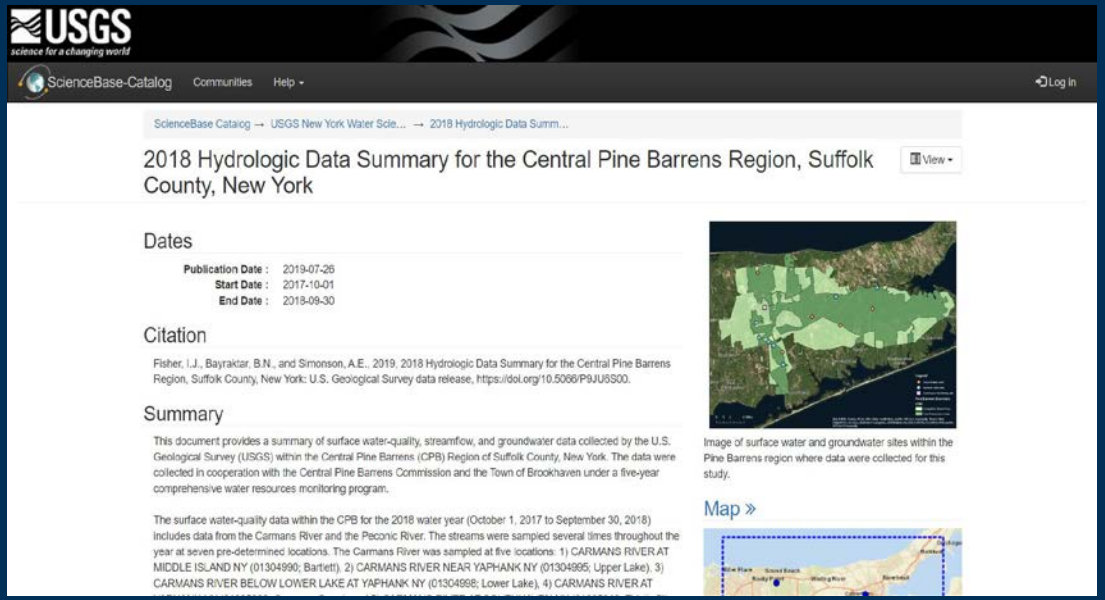
2018 Data Release

USGS.gov/LIPineBarrens

- Access to this data release and all future data releases can be found under the “Data and Tools” tab of the project page.
- Data releases are in Science Bases.



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2019 WQ Update

All samples collected for FY 2019 ☺

2019 Data Release will be available soon on USGS.gov/LIpinebarrens

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2020 Sampling Plan

FY 2020 Pine Barrens Sampling

- Carman's River: Fall*, Winter, Spring, Summer
- Peconic River: Fall* and Spring

* organics collected

Fall and Winter sampling for 2020 has been completed.

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Organic Detections

Organic detections in Pine Barrens streams November 2017		
Stream	**Pharmaceutical**	**Pesticide**
Carmans River	2	4
Peconic River	9	4

Organic detections in Pine Barrens streams May 2019		
Stream	**Pharmaceutical**	**Pesticide**
Carmans River	1	5
Peconic River	4	10

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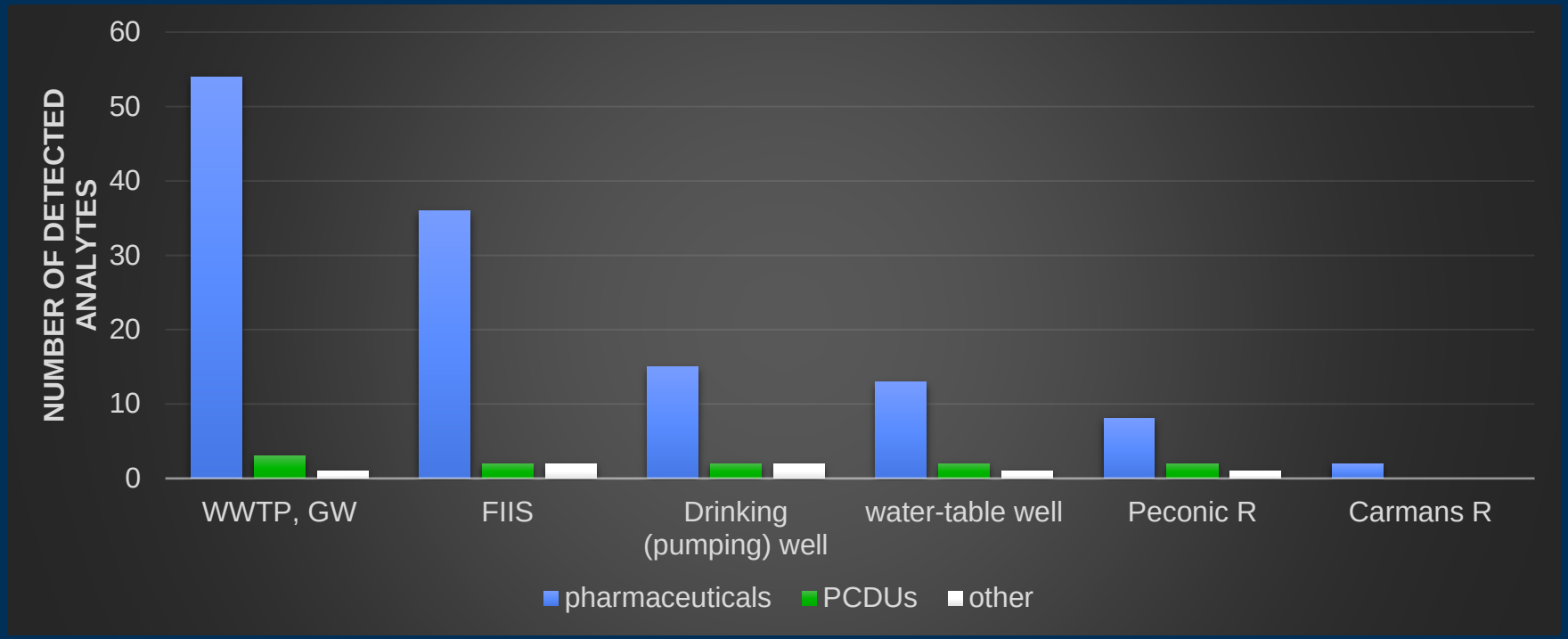
Comparing Stream WQ to Long Island GW WQ



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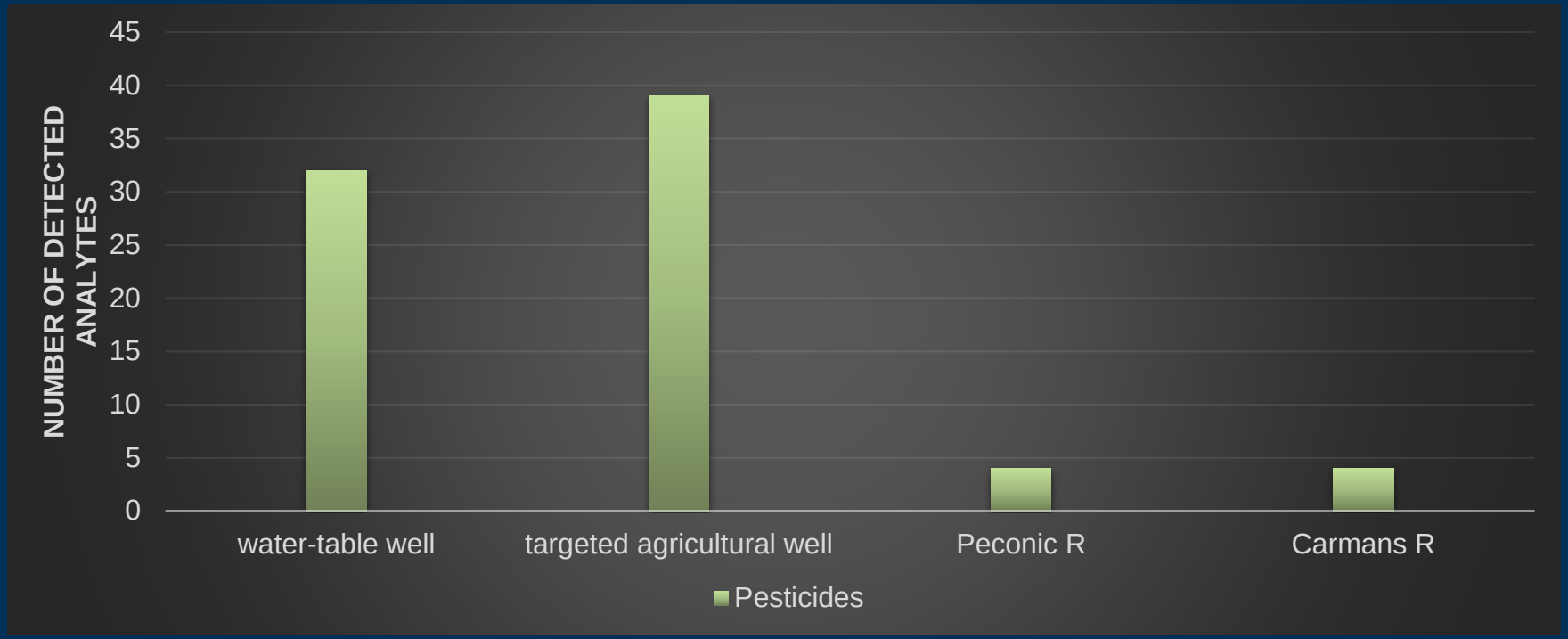

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Deliverables:

- Regular presentations on project progress
- Website with data mapper
- Annual data summary; available on project website

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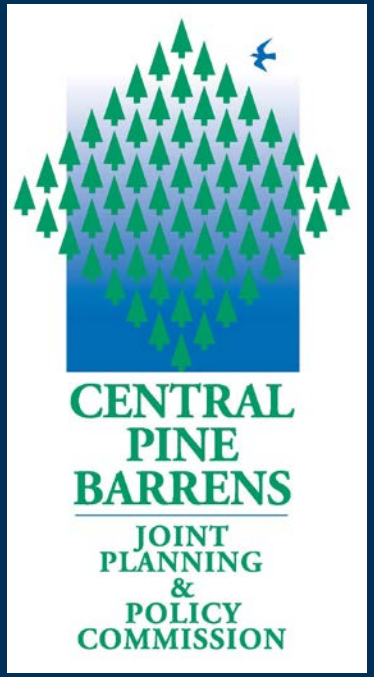
Partners



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Visit the project page at USGS.gov/LIpinebarrens

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