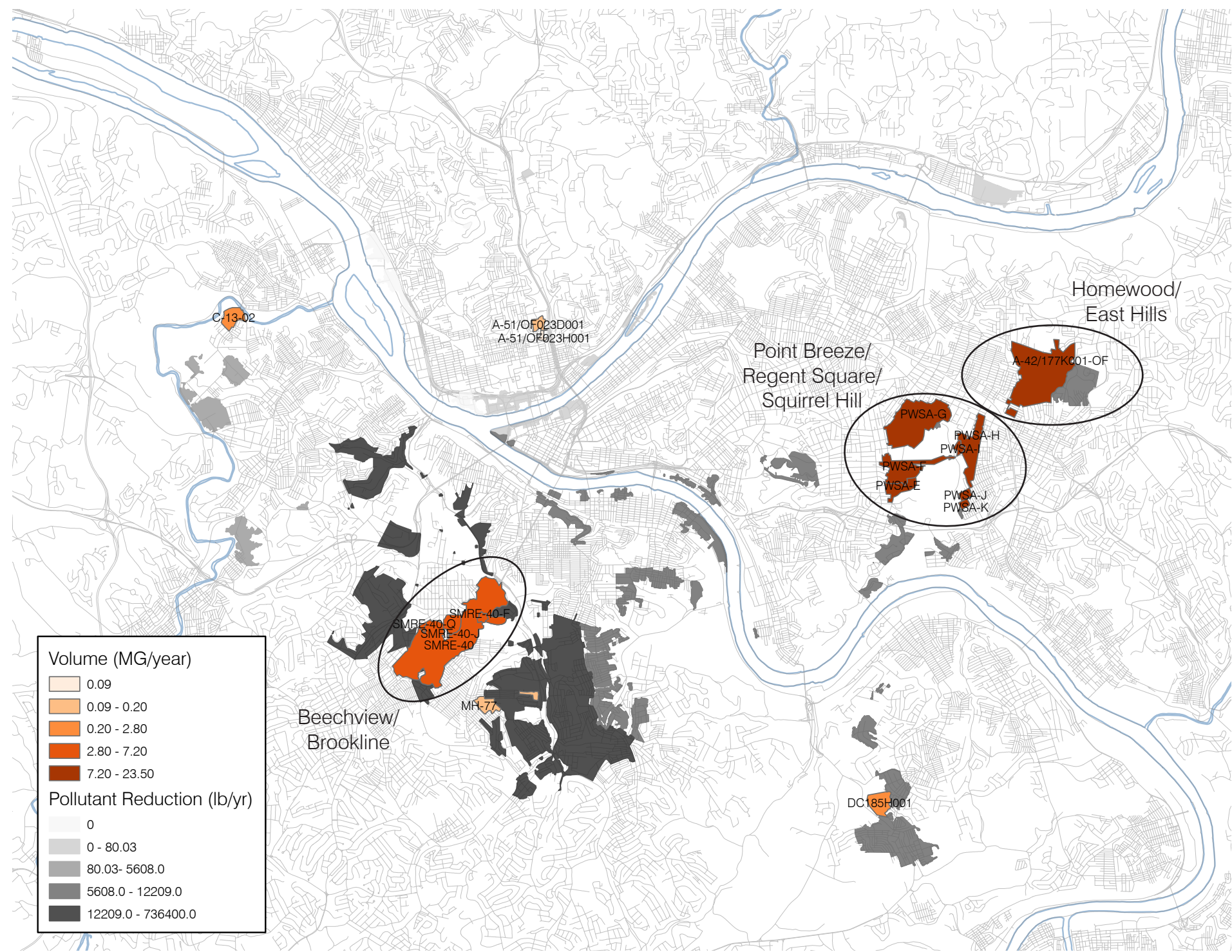


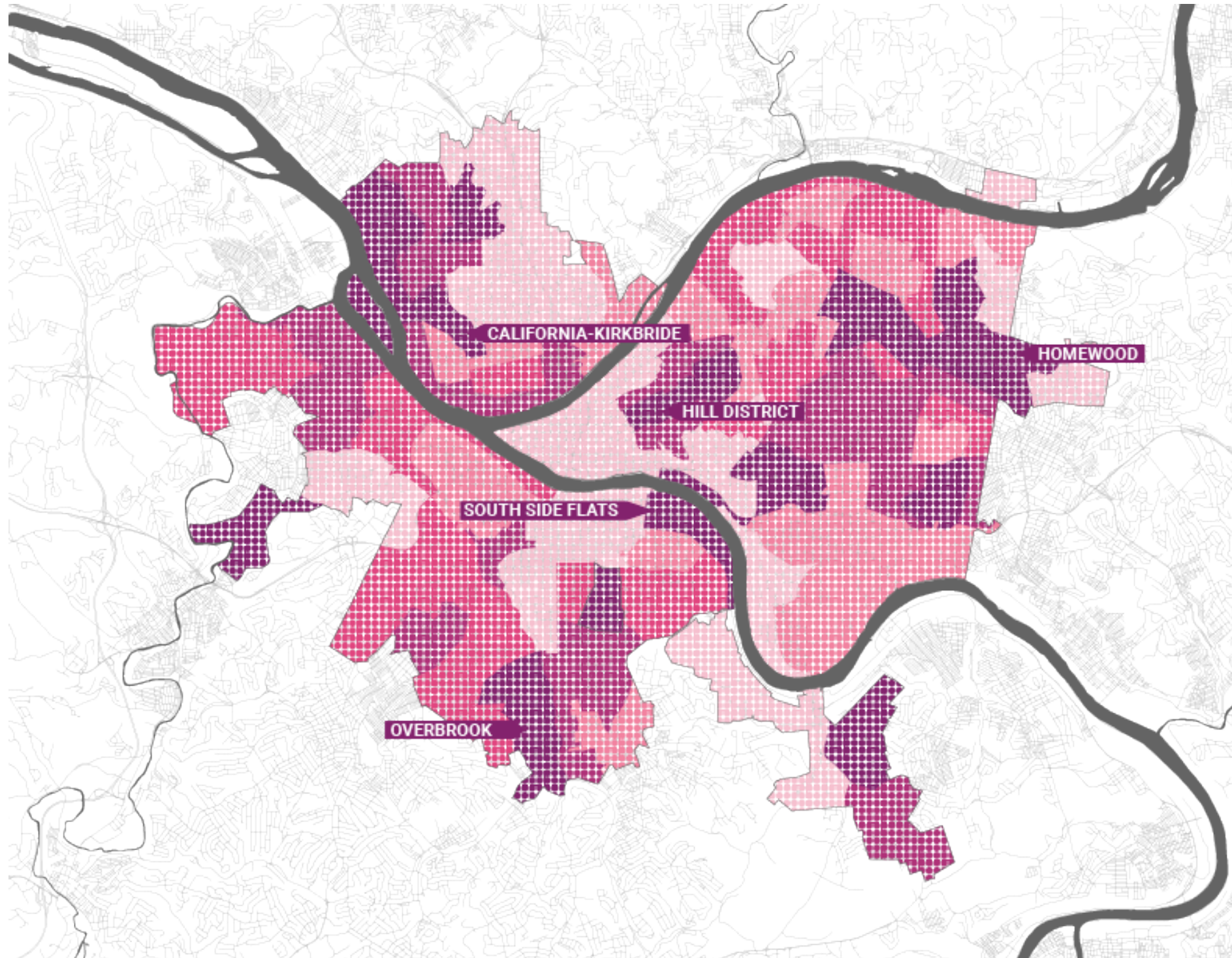
Project Area Prioritization

PWSA Water Quality Responsibility



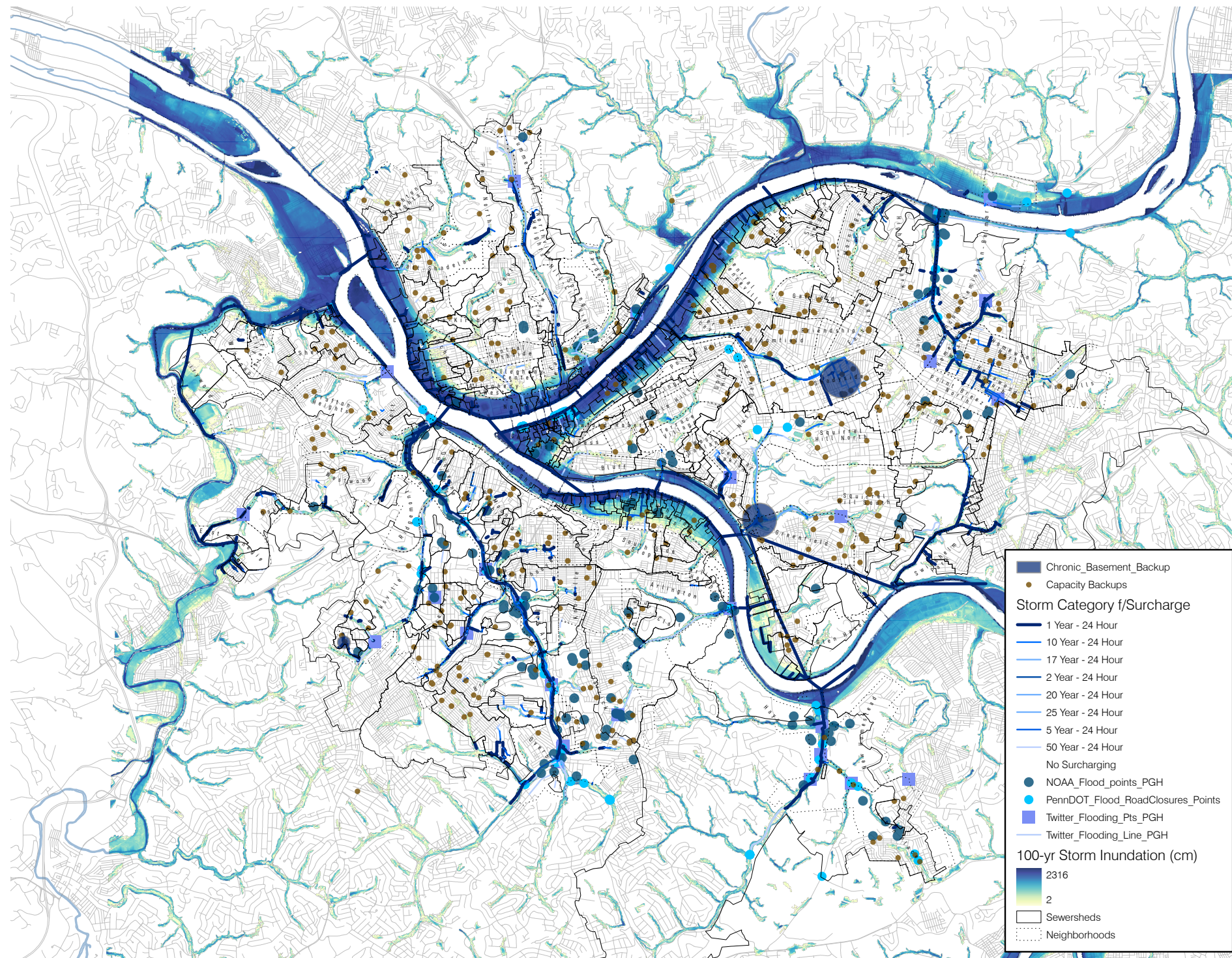
- There are only a handful of sewer sheds with outfall volume that will remain fully PWSA's responsibility.
- The highest volume areas are found in Homewood/East Hills, Point Breeze/Regent Square/Squirrel Hill, and Beechview/Brookline

Environmental Justice Composite



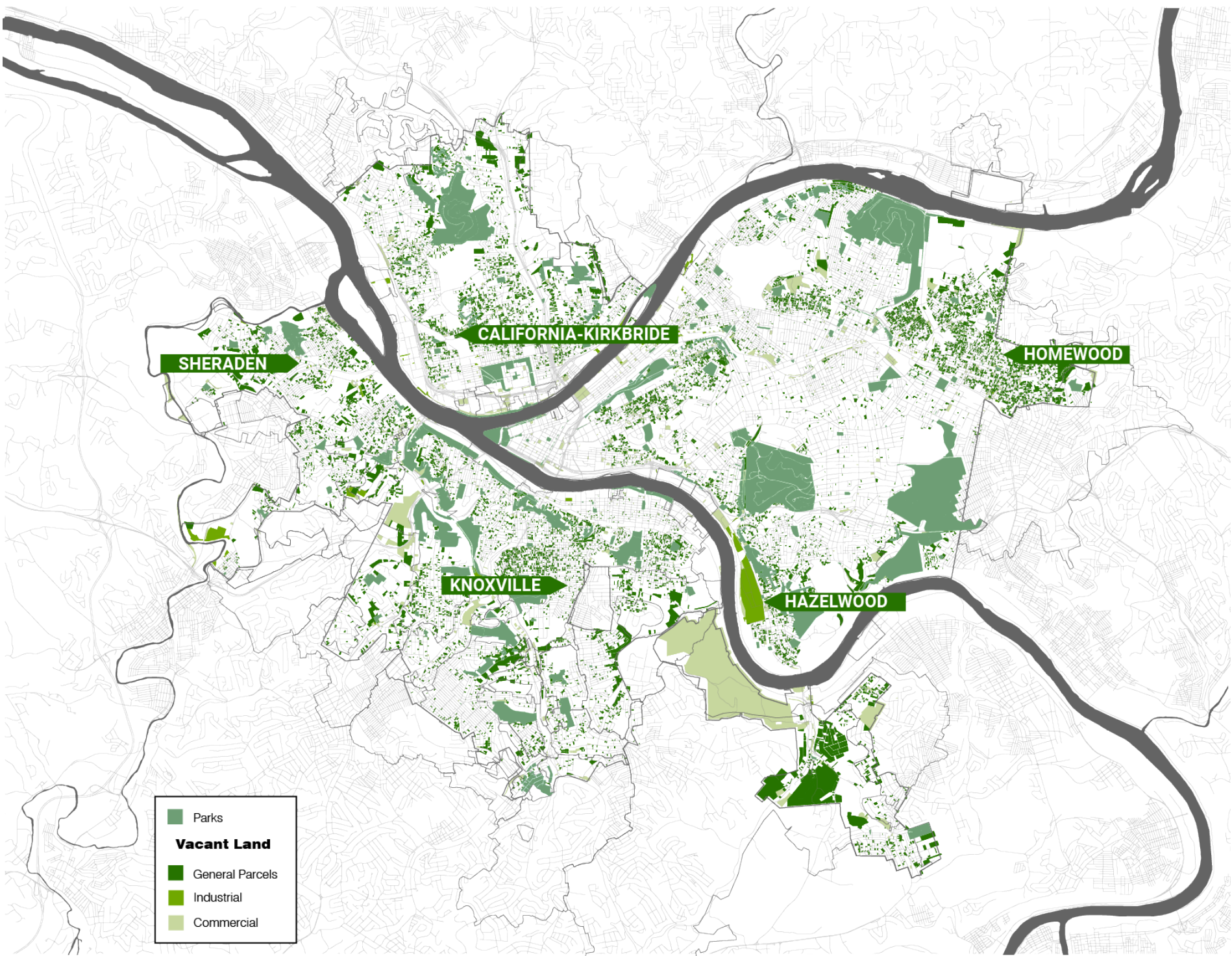
- Allegheny County Environmental Justice Index

Flooding Hazard Data



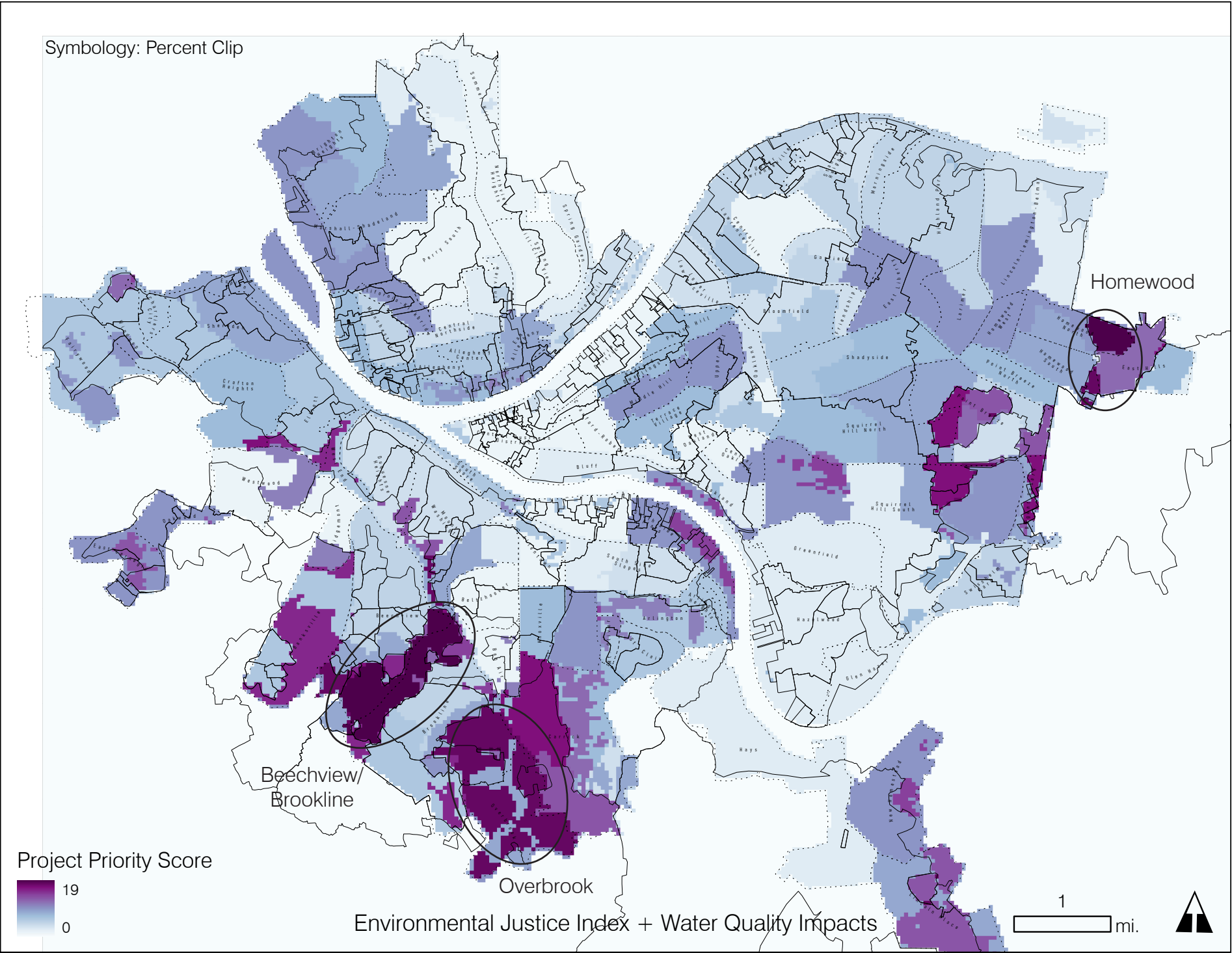
- First Street Foundation Flood Factor inundation forecast for 1-in-100 year storm event in 2020 climate conditions.
- Pipe surcharging data.
- PWSA investigated and confirmed capacity-related basement backup locations between 2020 and 2021.
- NOAA overland flooding concern points
- Overland flooding locations scraped from Twitter

Opportunities Data



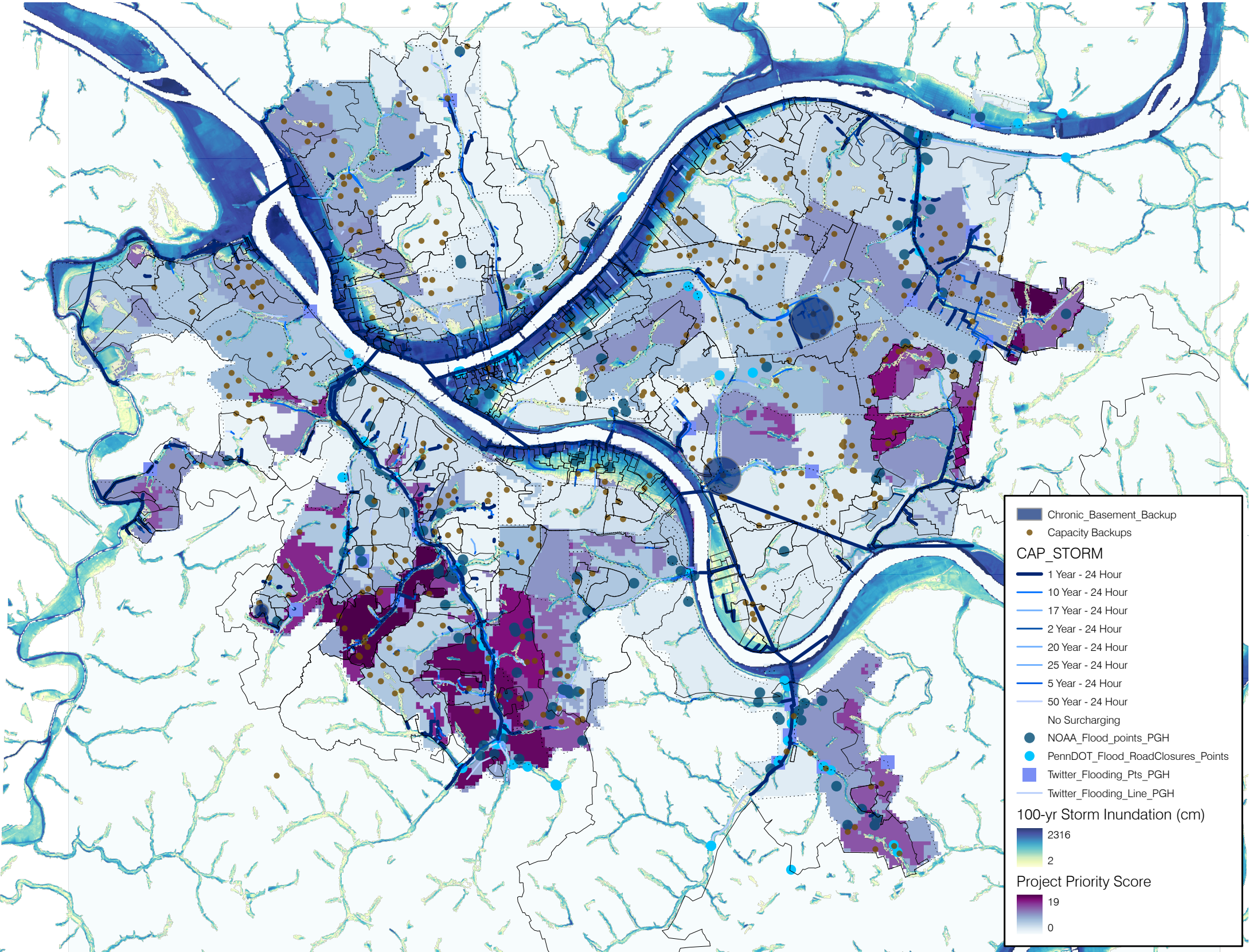
- Parks + Greenways
- Vacant Parcels (general, industrial, commercial)

Water Quality + Environmental Justice Composite



- Contributing layers are PWSA CSO Volumes post-IWWP, MS4 Required Pollutant Reductions, and the Allegheny County Environmental Justice Index.

Water Quality + EJ Index, with Flooding data overlayed



- Flooding data will remain as individual vector data to guide priority selection rather than being combined in to a composite.

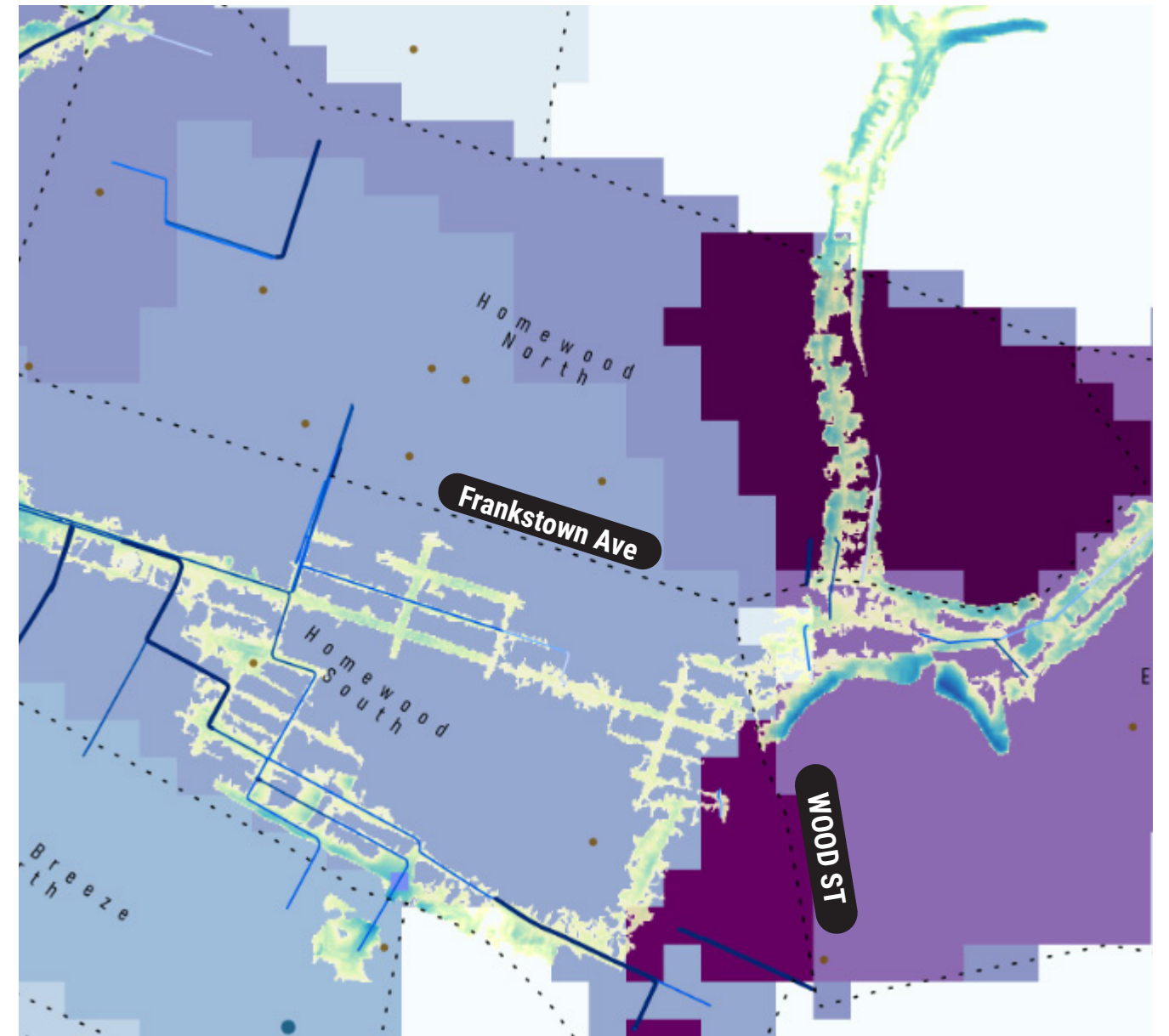
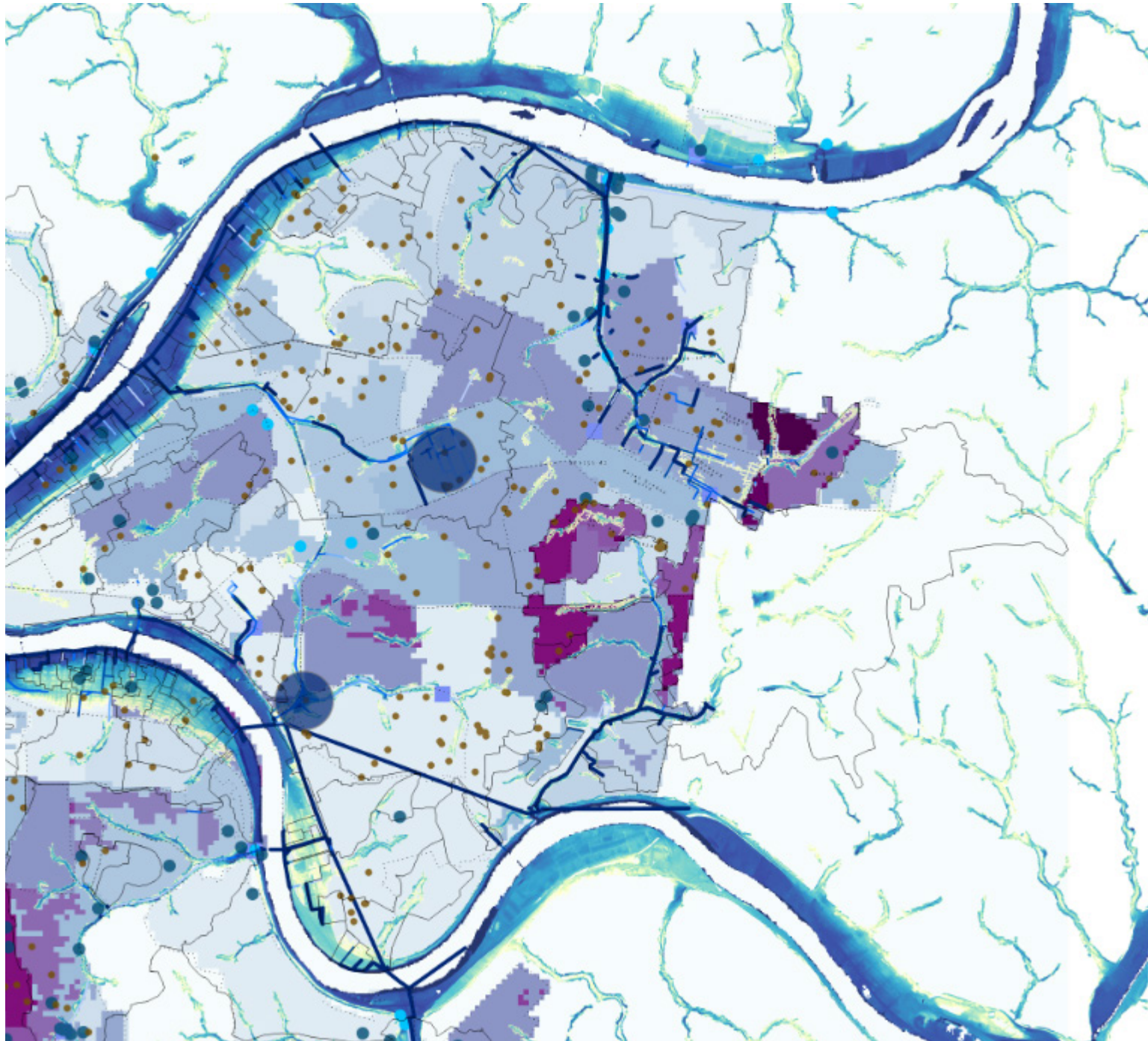
Selection Criteria

- Meaningful Intersection of flooding, water quality, and equity.
- Moderately sized watershed where modest investment could result in a measurable, substantial improvement in WQ and flooding in a short-term focused investment.
- No fatal flaw or high level feasibility issues.
- Opportunity for the creation of transformational public space that advances community goals.

Feasibility Layers

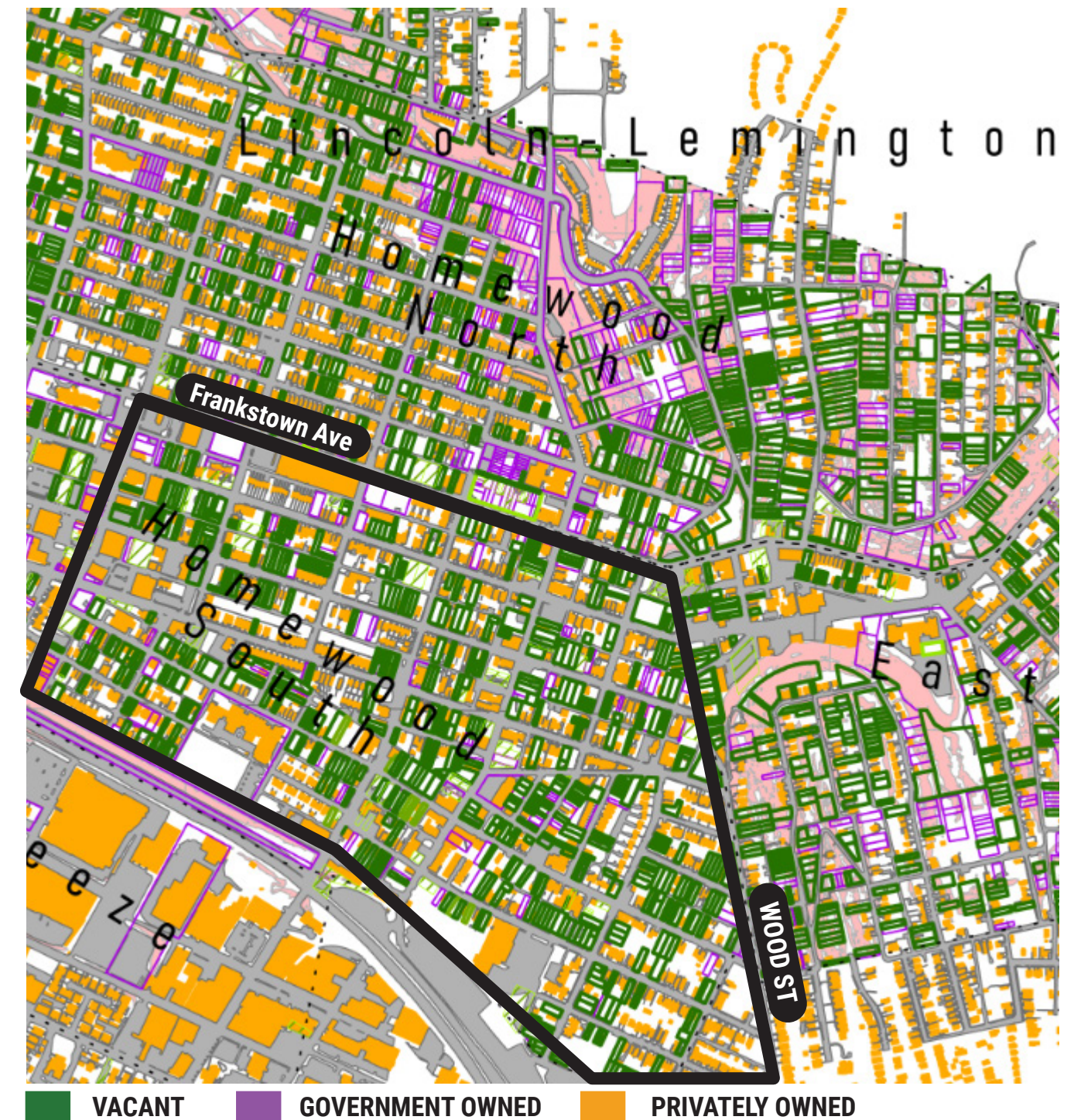
- Topography
- Steep Slopes
- Undermined Areas
- Parcel ownership

Homewood/East Hills



Homewood/East Hills

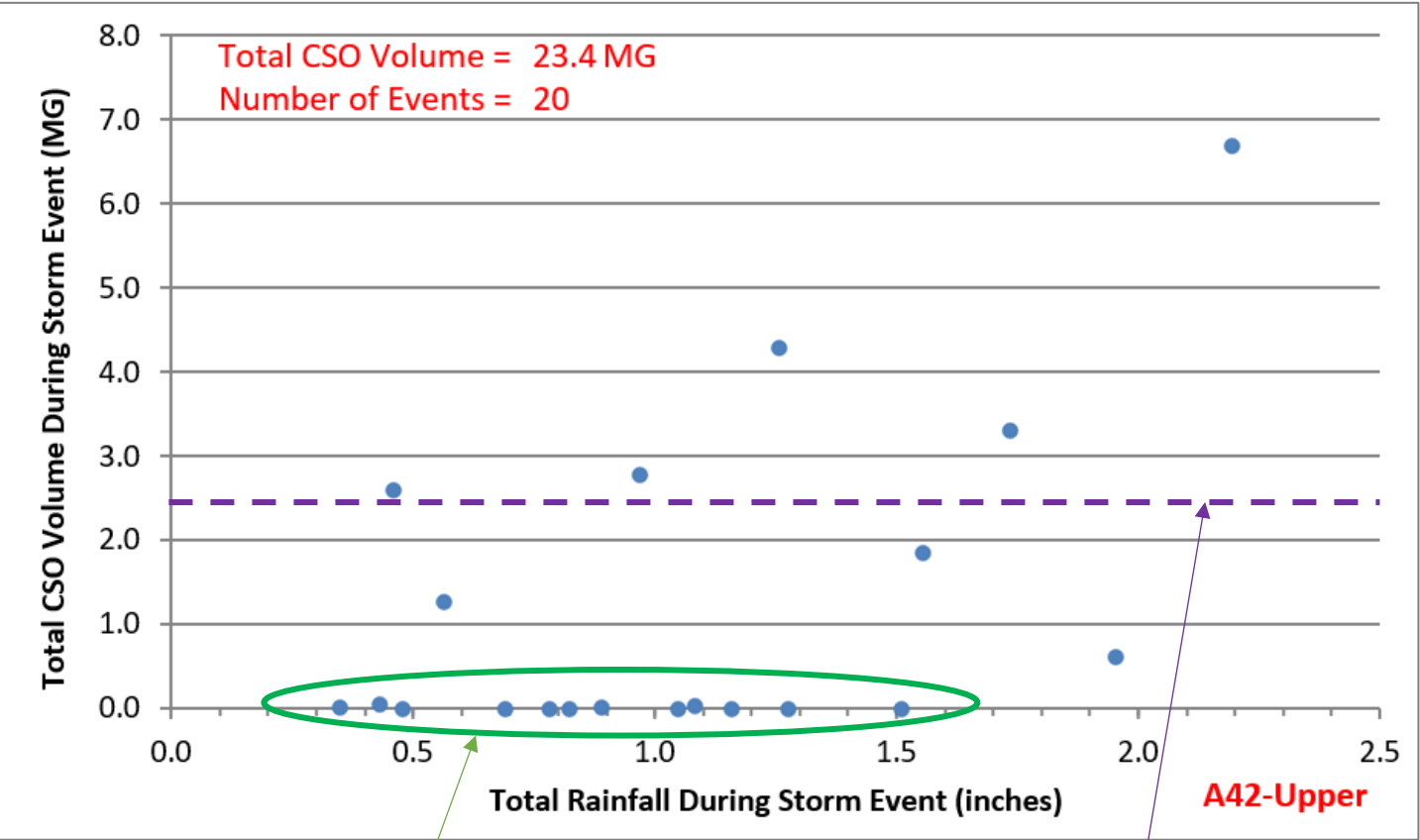
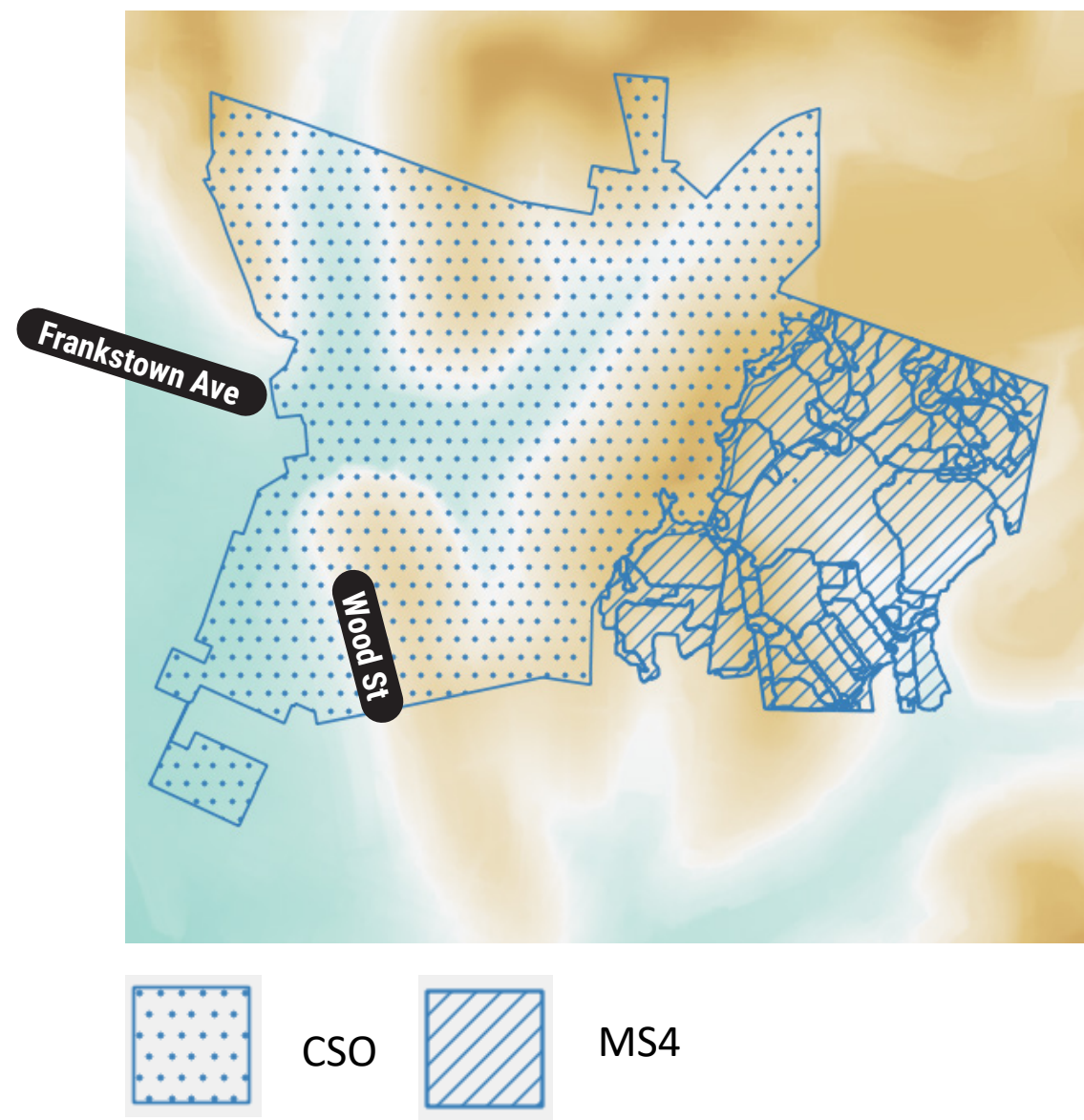
- Includes CSO shed with long term PWSA responsibility (A-42/177K001-OF)
- Absence of steep slopes and undermined areas
- Frequent flooding and basement backups
- Tributary to high-risk flooding areas in Negley Run watershed
- Large number of vacant properties creates potential for city-wide model
- High level of disinvestment enables potential linkage with affordable housing/repopulation and anti-gentrification measures
- Potential for neighborhood-scale impact



Homewood



Homewood

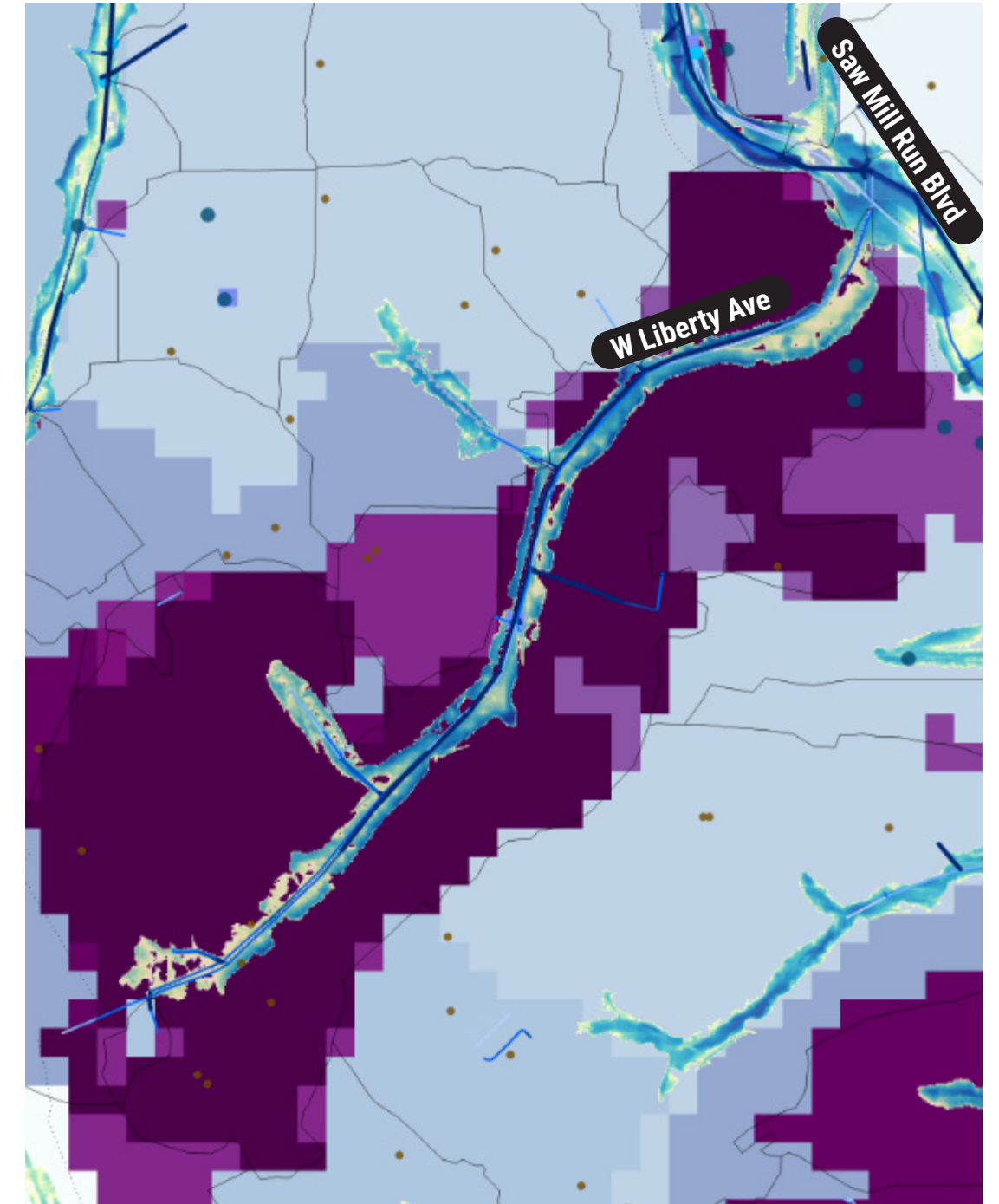
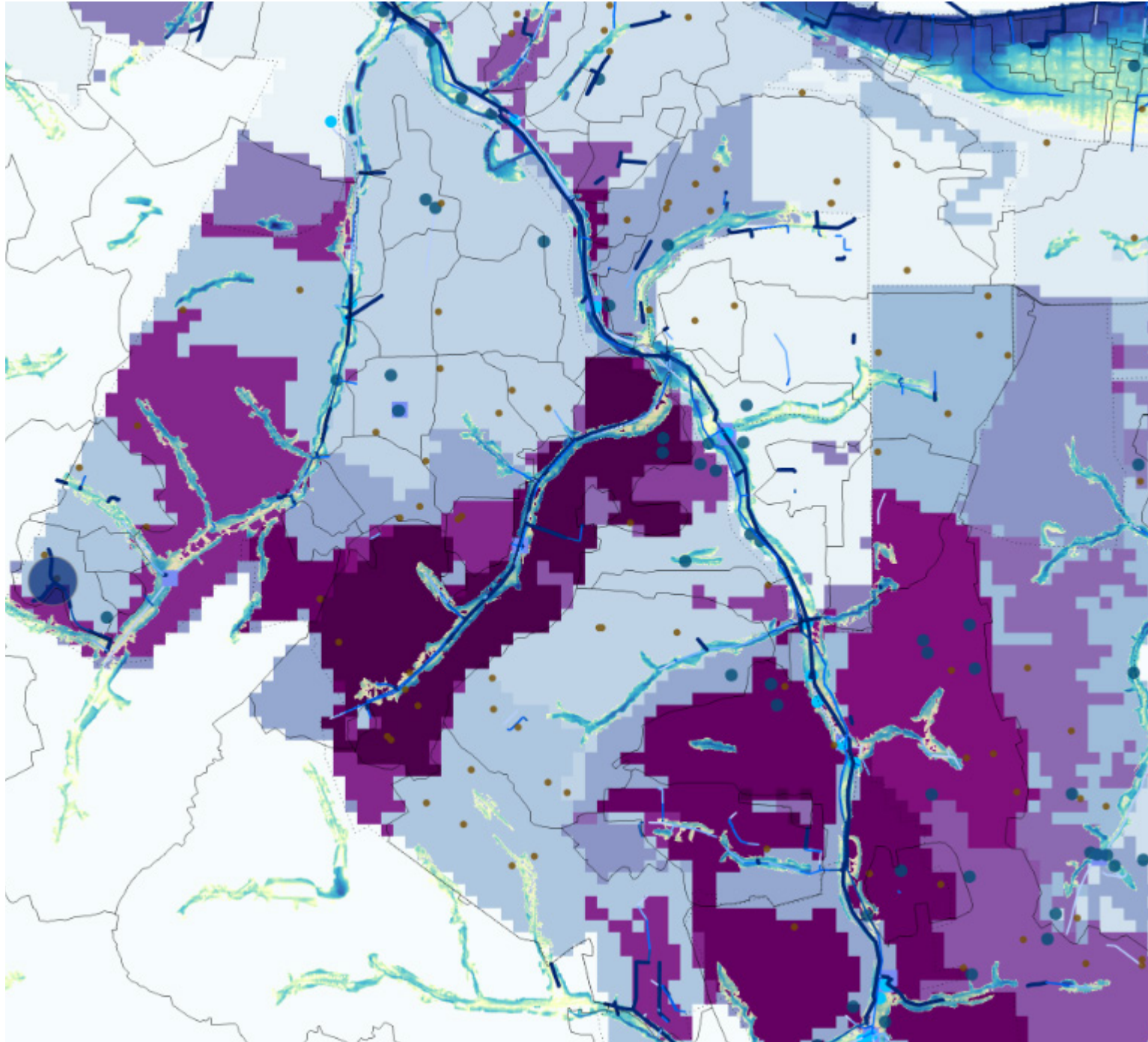


Most of the 20 events are small < 0.1 MG

2016 WWFS (AECOM)
2.25 MG tank and pump station
4 overflows per year target

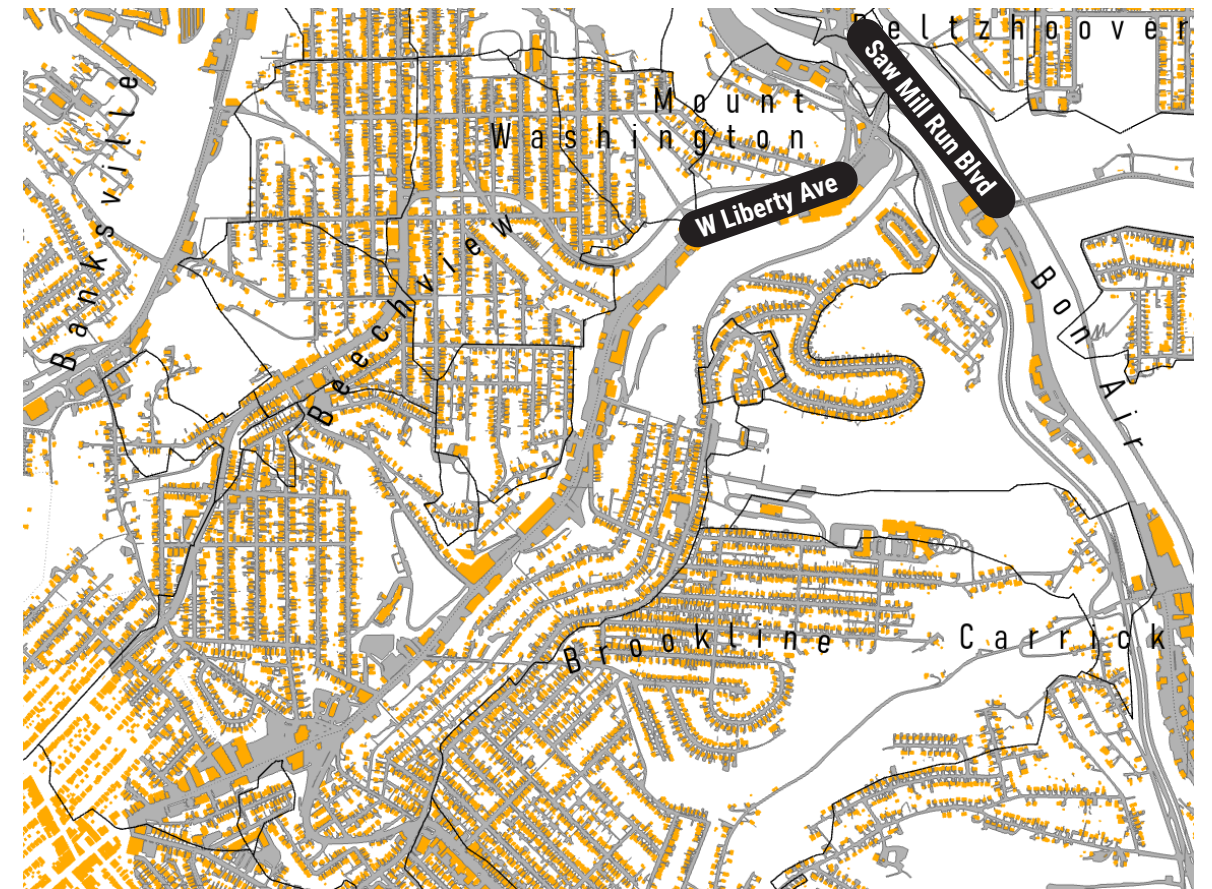
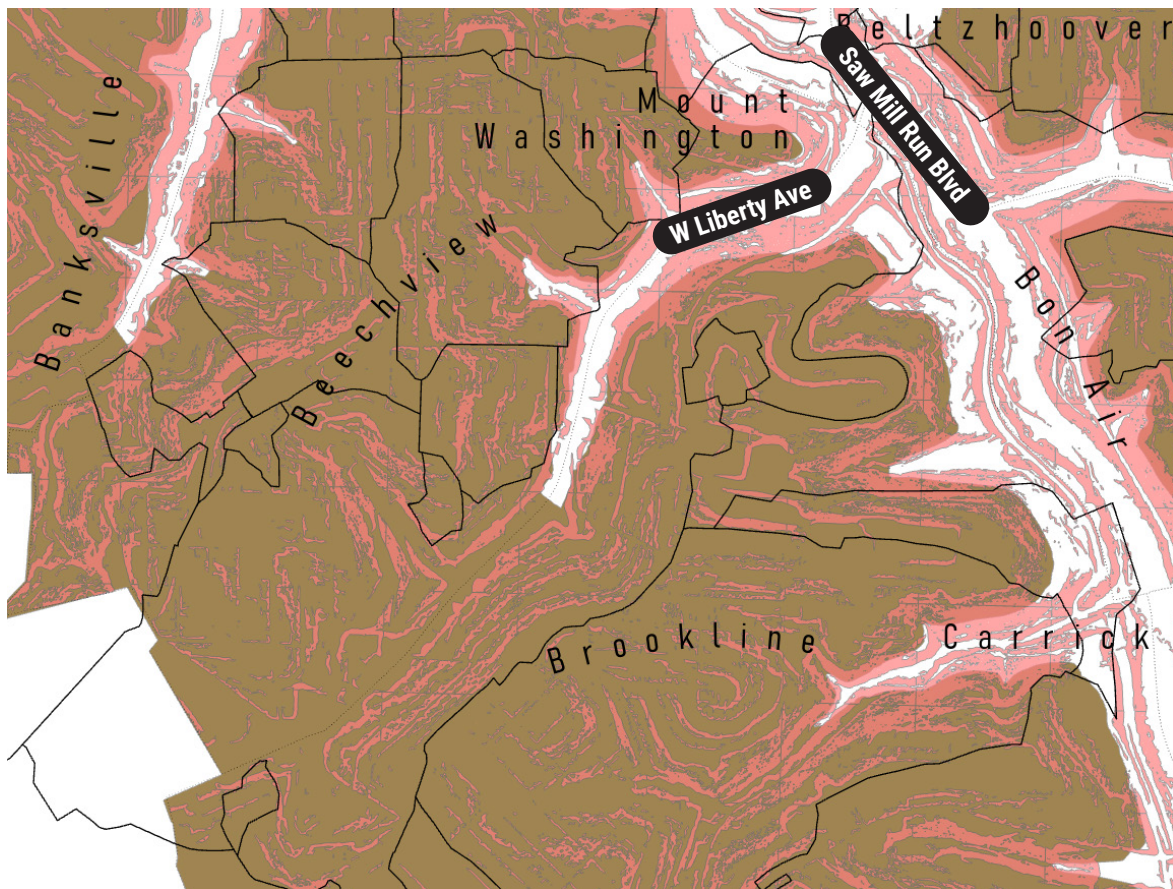
Other Areas Considered

Beechview/Brookline

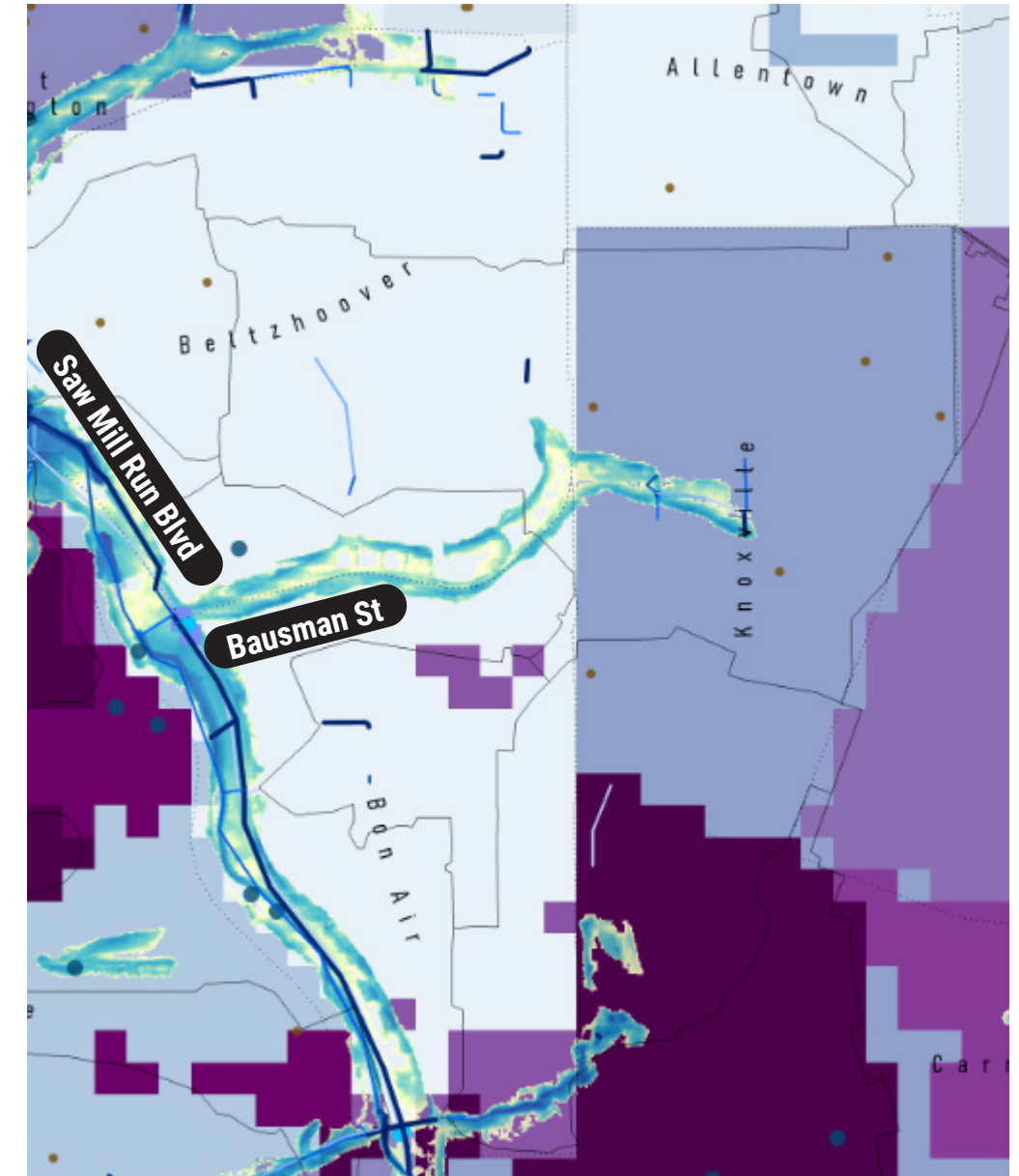
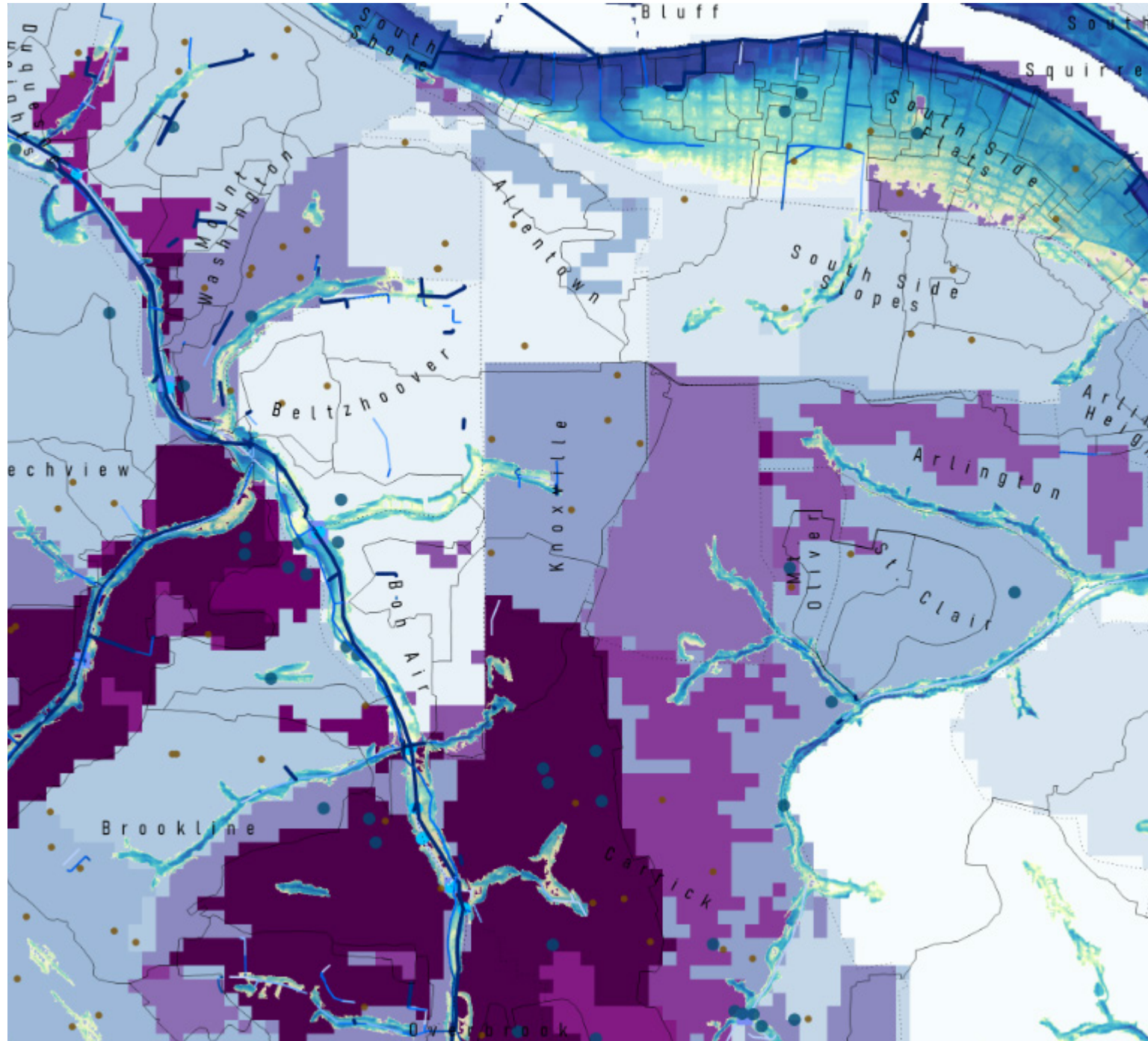


Beechview/Brookline: Prohibitively Constrained

- Located in high flooding, WQ and EJ index ranked area
- Economically less disadvantaged than Knoxville
- Heavily developed, so limited opportunity for intervention: commercial corridor, lots of road/parking/auto-related lots and businesses.
- Steep slopes, tight valleys, almost entirely undermined.

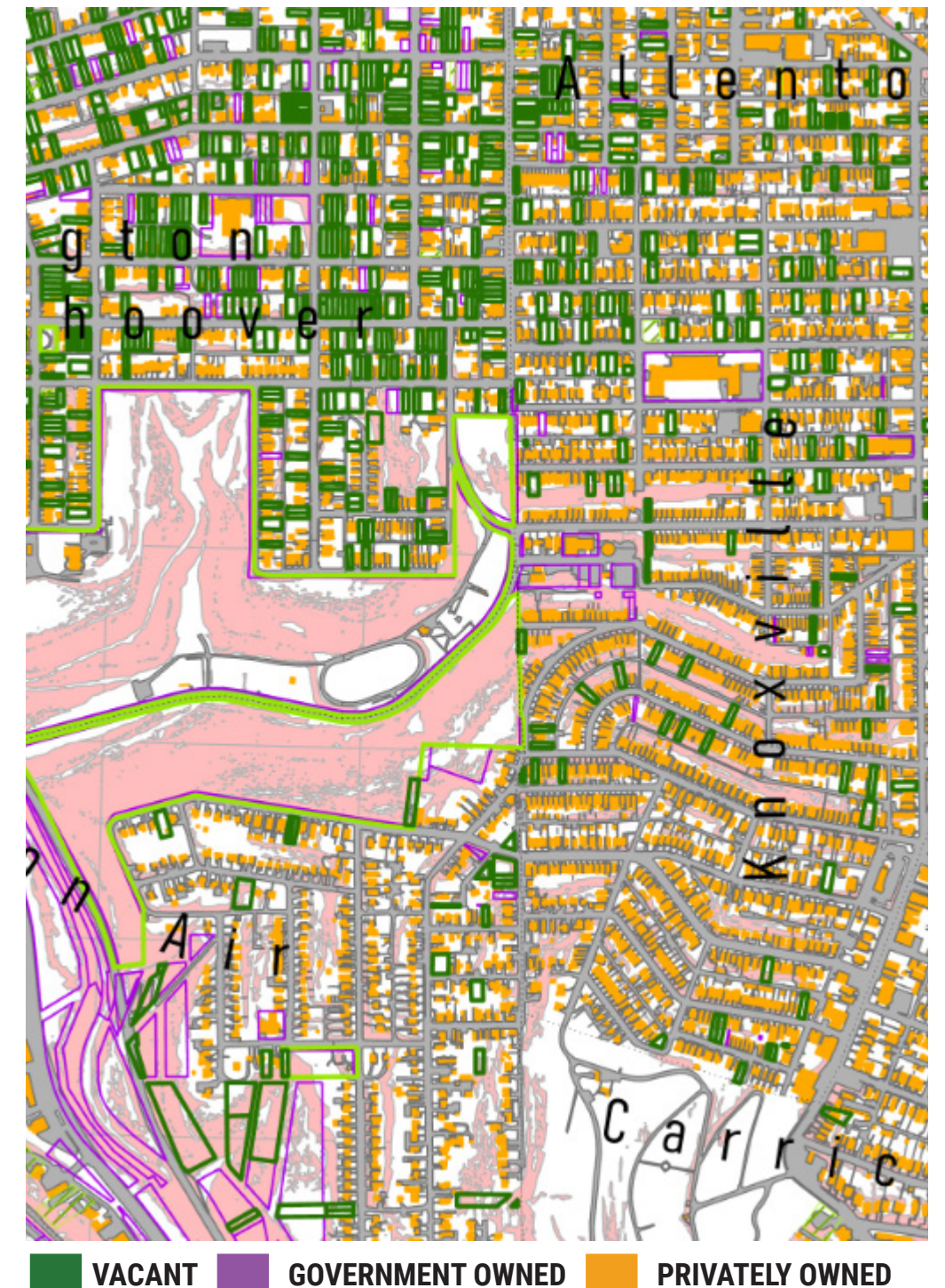


Knoxville/McKinley Park/Beltzhoover

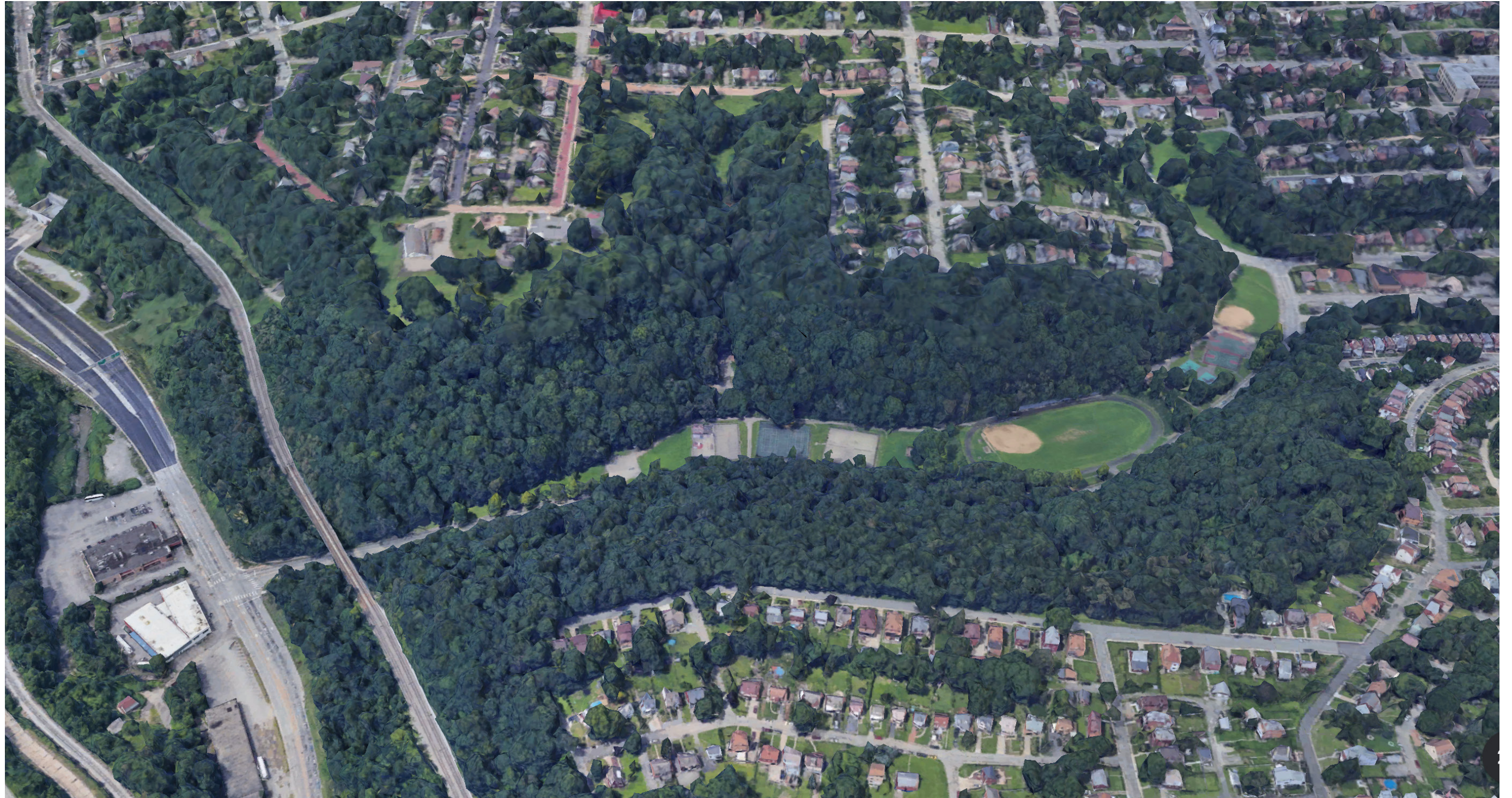


Knoxville/McKinley Park/Beltzhoover

- Mid-level environmental justice index score within Knoxville
- Creates opportunities for potential “trading” across CSO sheds or MS4 sheds
- CSO sheds will not be managed under interim wet weather plan
- Tributary to major “red, white, and blue” flooding zone on Saw Mill Run Blvd
- McKinley Park is #1 ranked park in PPC park screening but steep slopes could pose a challenge for implementation + need sewer separation to get large amounts of flow.
- Majority of area is undermined

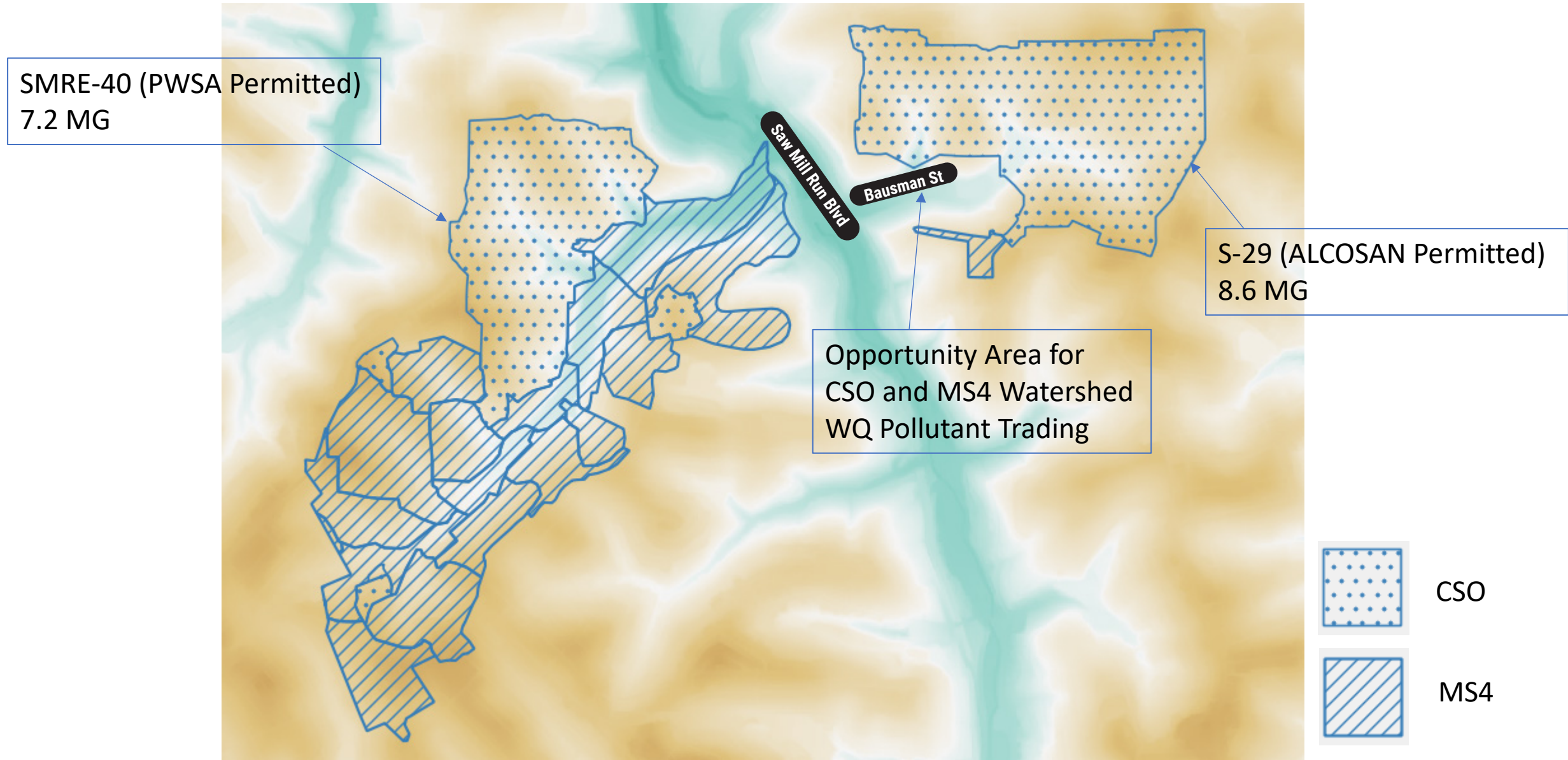


Knoxville/McKinley Park/Beltzhoover

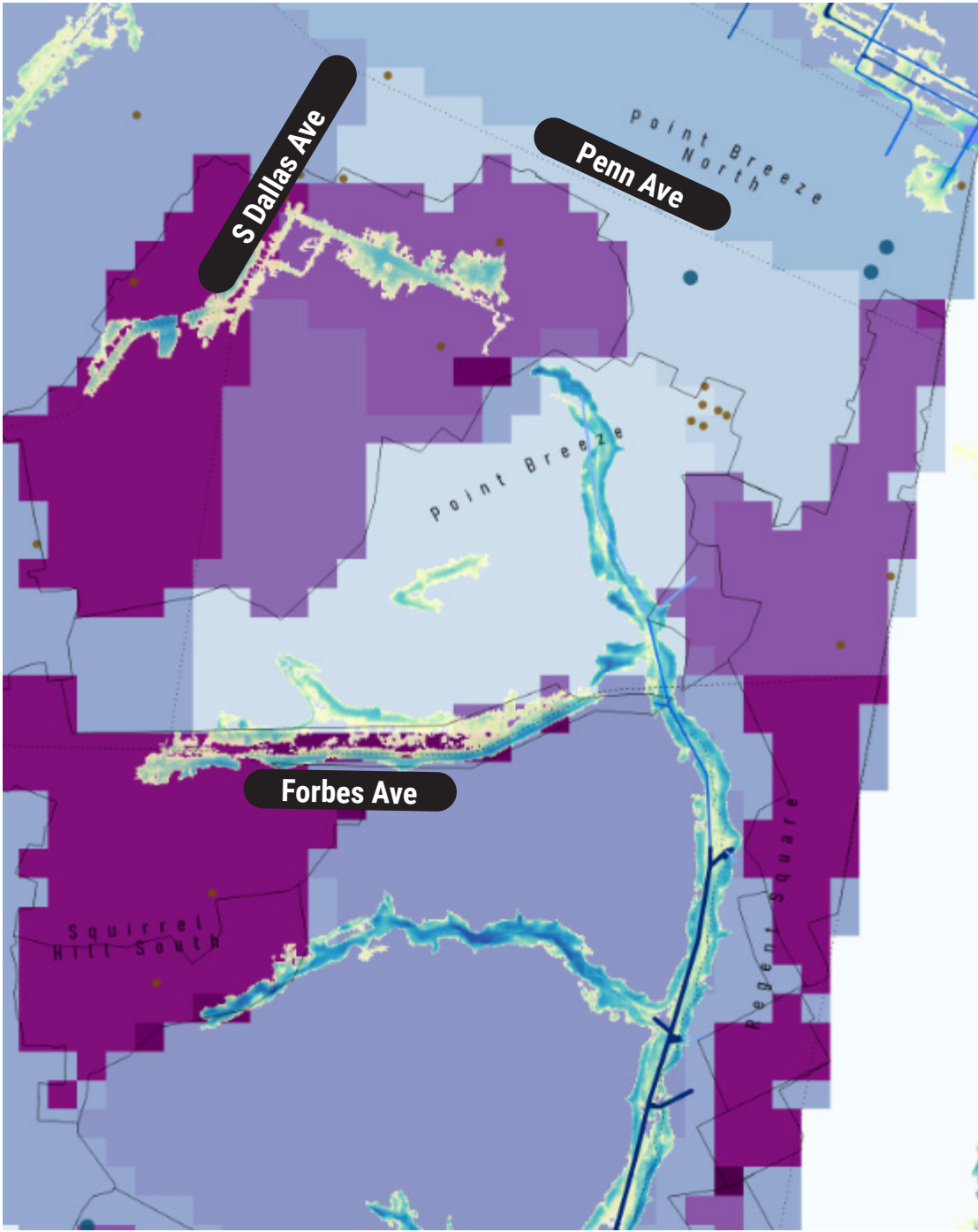
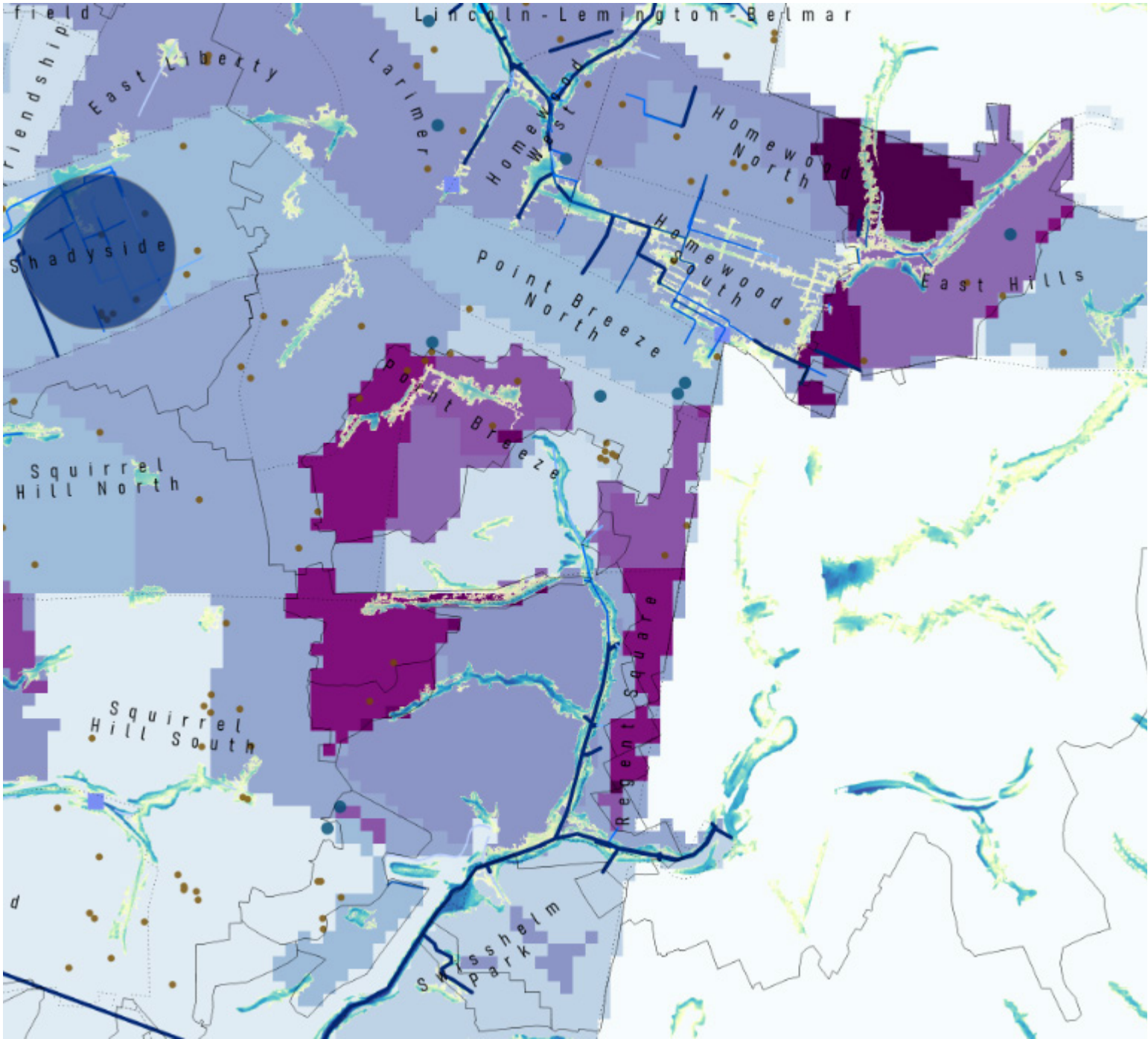


Knoxville/McKinley Park/Beltzhoover

Advance IWM Approach and Watershed Pollutant Trading

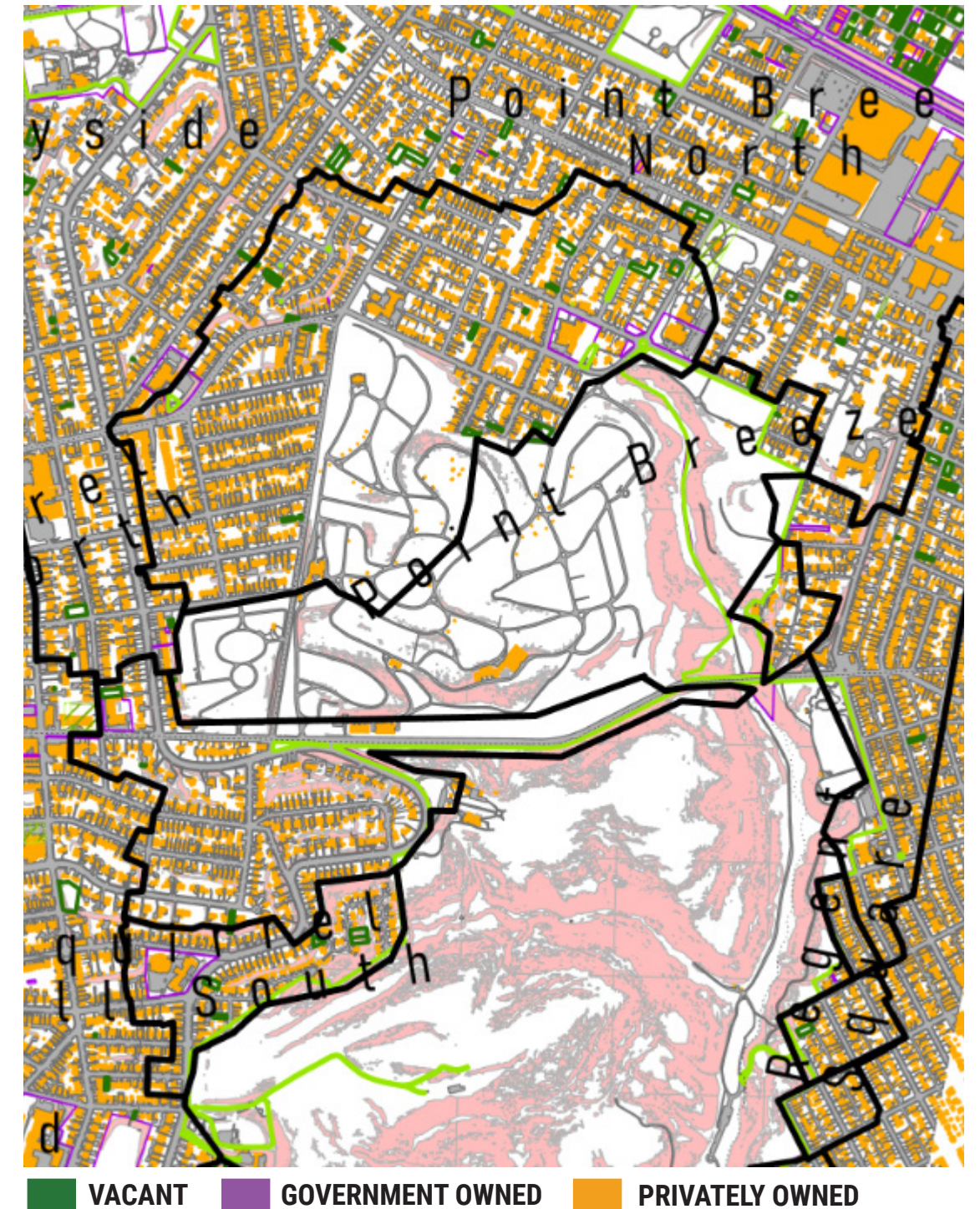


Point Breeze

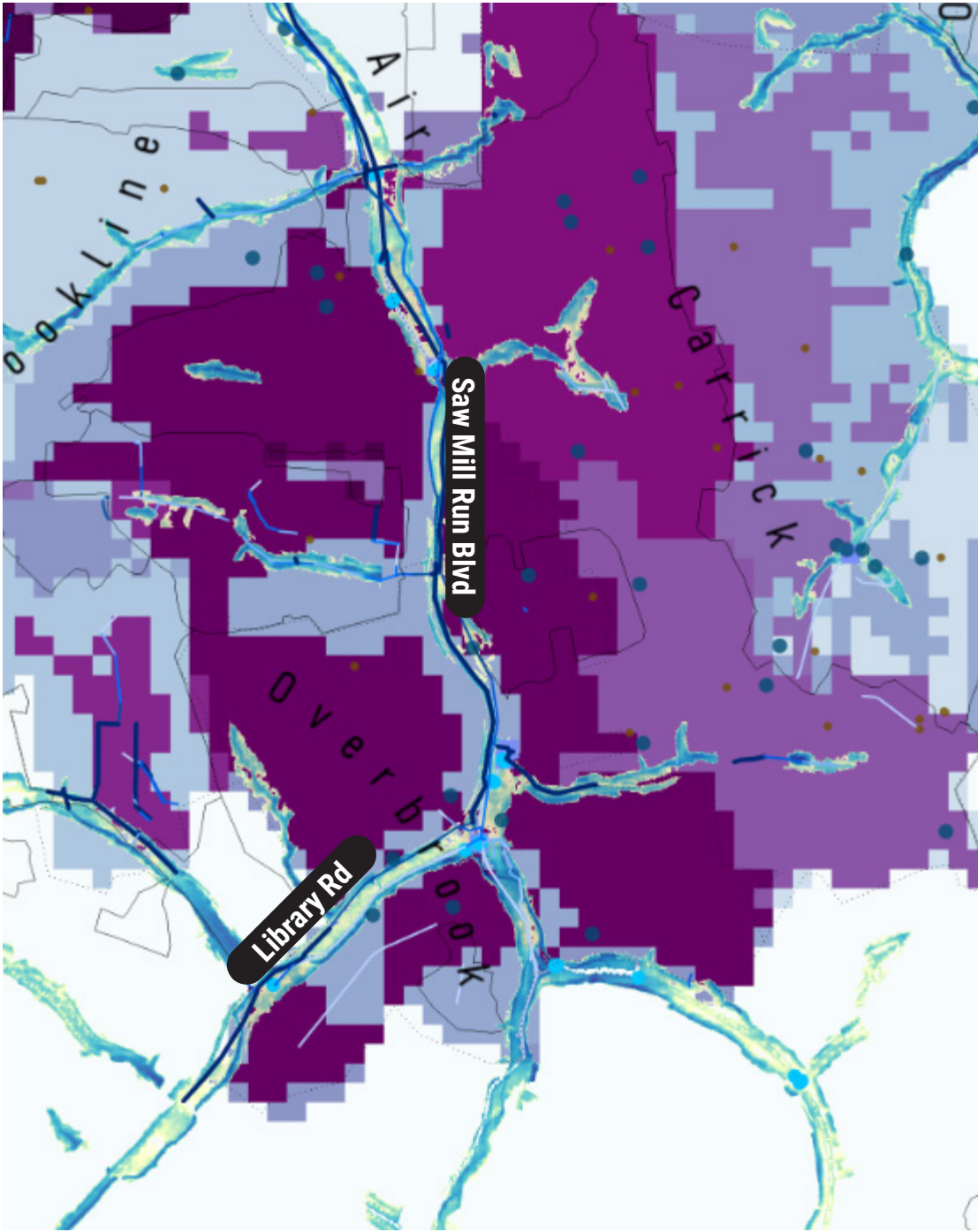
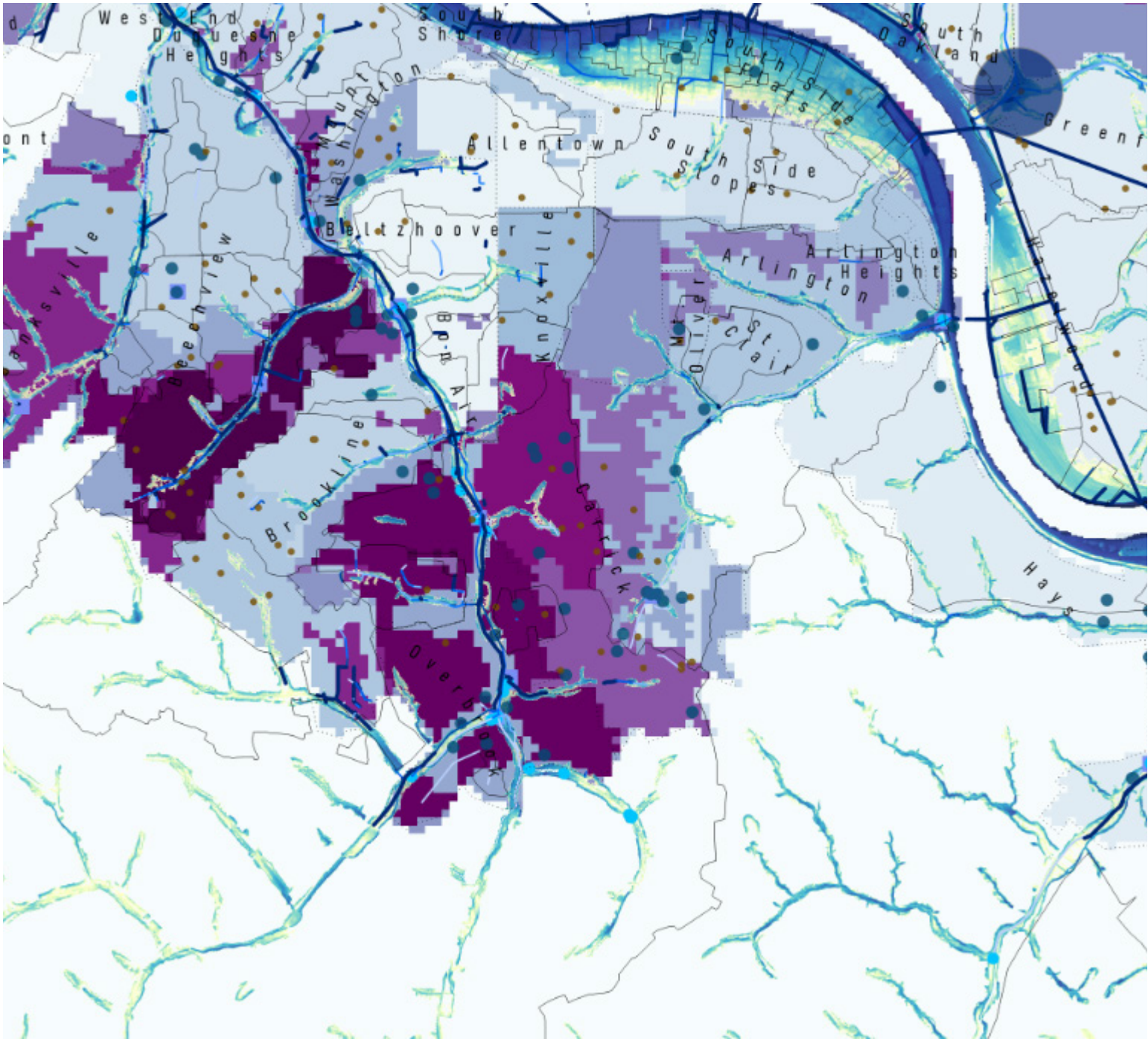


Point Breeze

- Lower EJ index score
- Limited vacancy, substantial private development
- Less acute flooding concerns



Overbrook



Overbrook

- MS4 obligations, but no CSO obligations
- High level of flood hazards at Saw Mill Run Blvd & Library Rd
- One large greenway system (Fairhaven Greenway)
- Limited vacant parcel opportunities
- Mostly undermined

