



ENVIRONMENTAL JUSTICE

ENVIRONMENTAL JUSTICE

- “The *fair treatment and meaningful involvement* of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.”

CAN WE PREDICT AT-
RISK AREAS FOR
ENVIRONMENTAL
INJUSTICE?

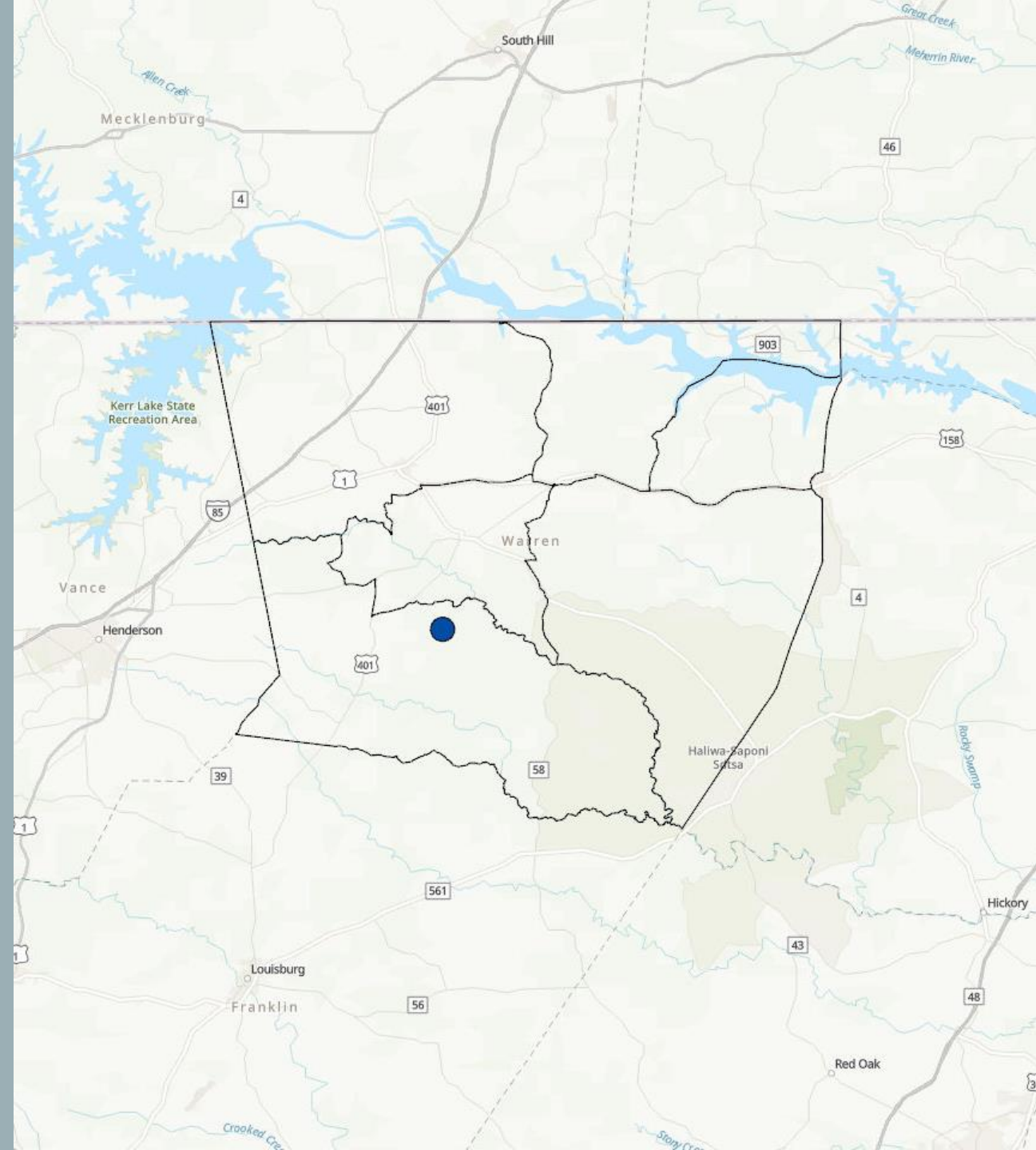
CAN WE PREDICT WHERE
ENVIRONMENTAL INJUSTICE
WILL OCCUR?

WARREN COUNTY, NC

1982 PCB landfill

Began the Environmental Justice movement

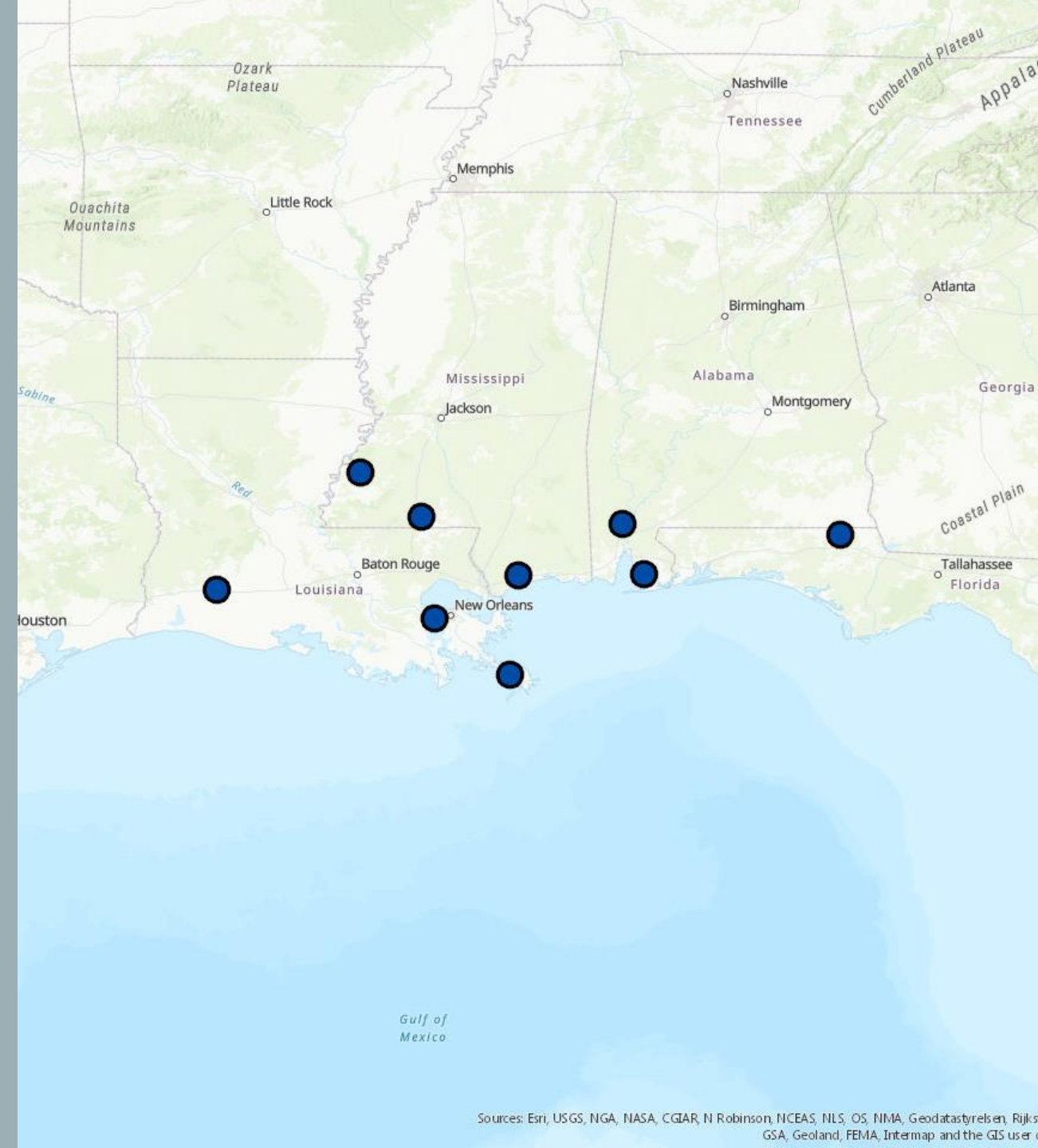
Detoxification completed in 2004



DEEPWATER HORIZON

Private contractors were hired to clean up
the polluted shorelines of the Gulf of
Mexico

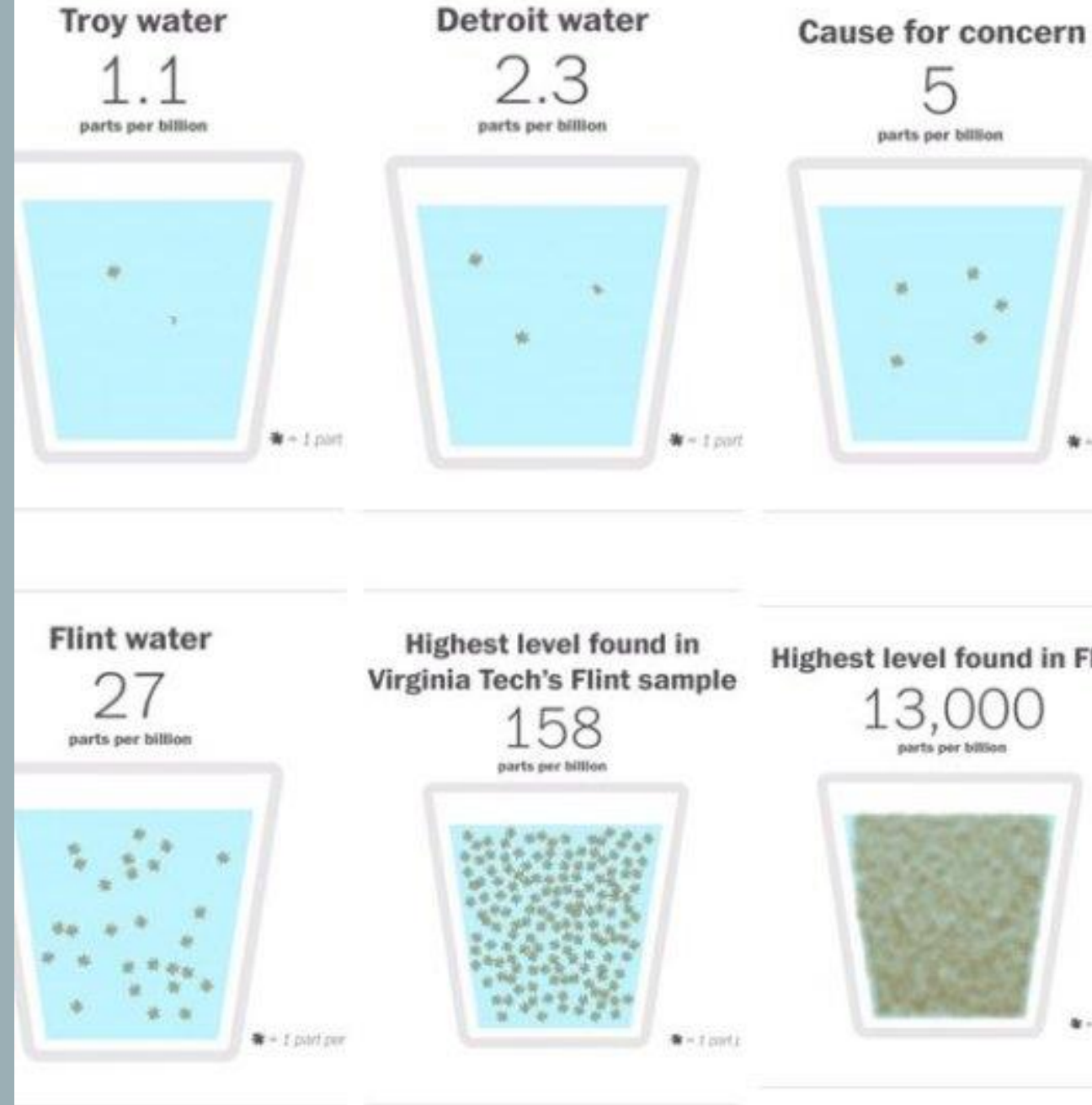
39,457 tons of solid waste were disposed of
over 9 landfills in the Gulf region



FLINT, MICHIGAN

Lead in the water

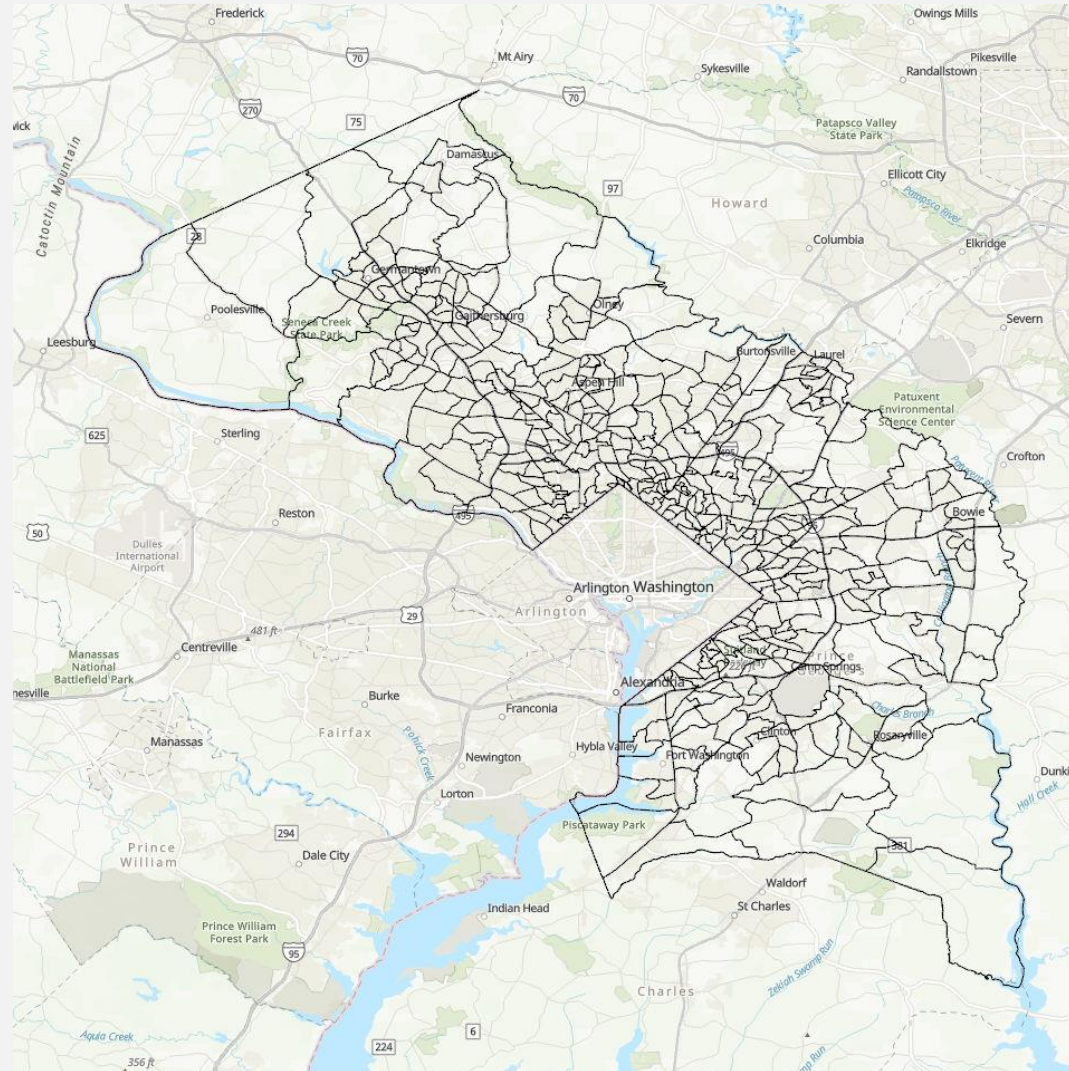
Community has gone years
without aid



WHAT DO THESE CASES HAVE IN COMMON?

- High minority populations
- High populations in poverty
- Proximity to impaired waters
- Proximity to other sources of toxins

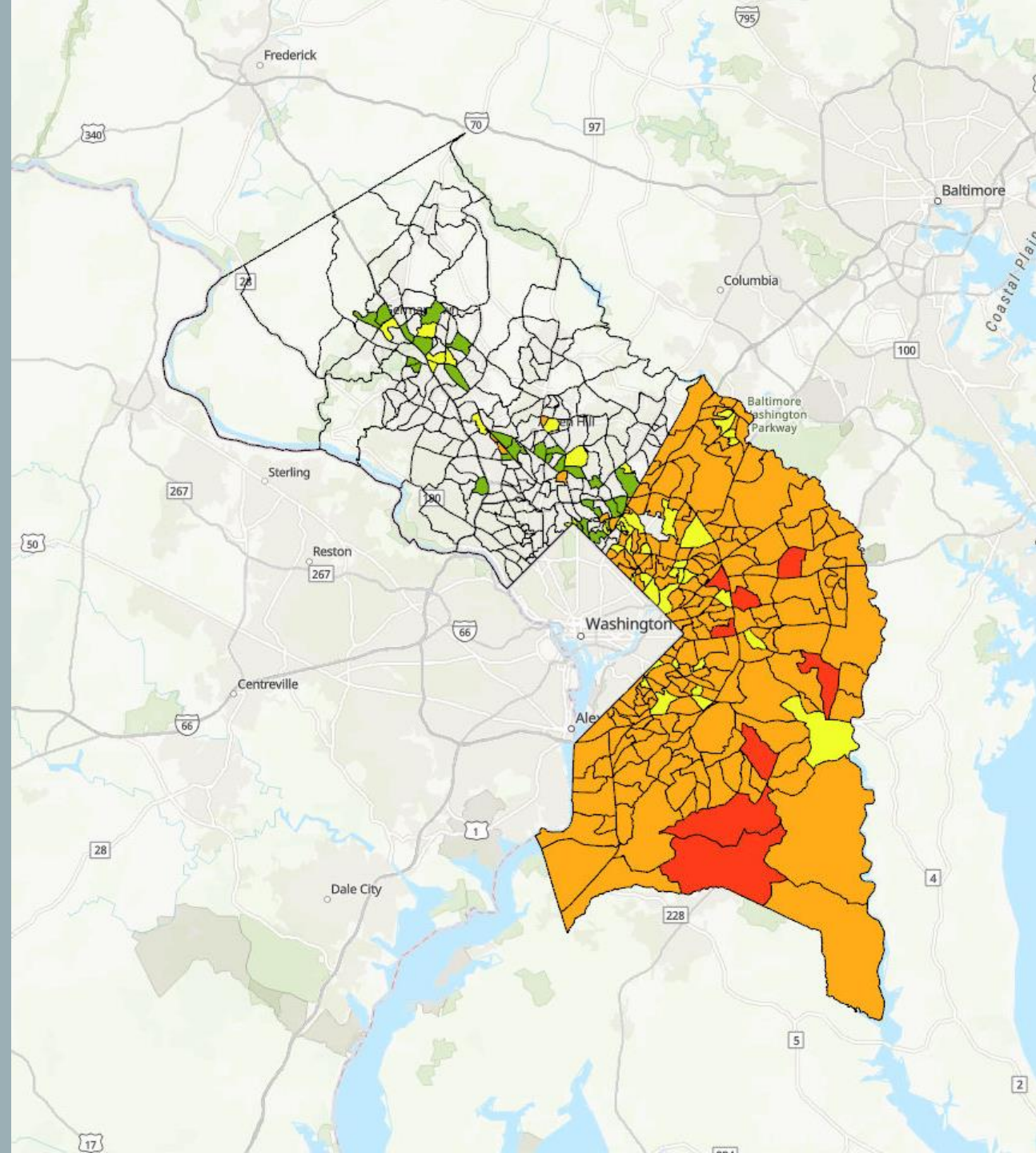
AREA IN QUESTION



POVERTY

Average: 23.69%

Average: 6.73%



MINORITY

Prince George's County

Maximum: 98.53%

Minimum: 23.97%

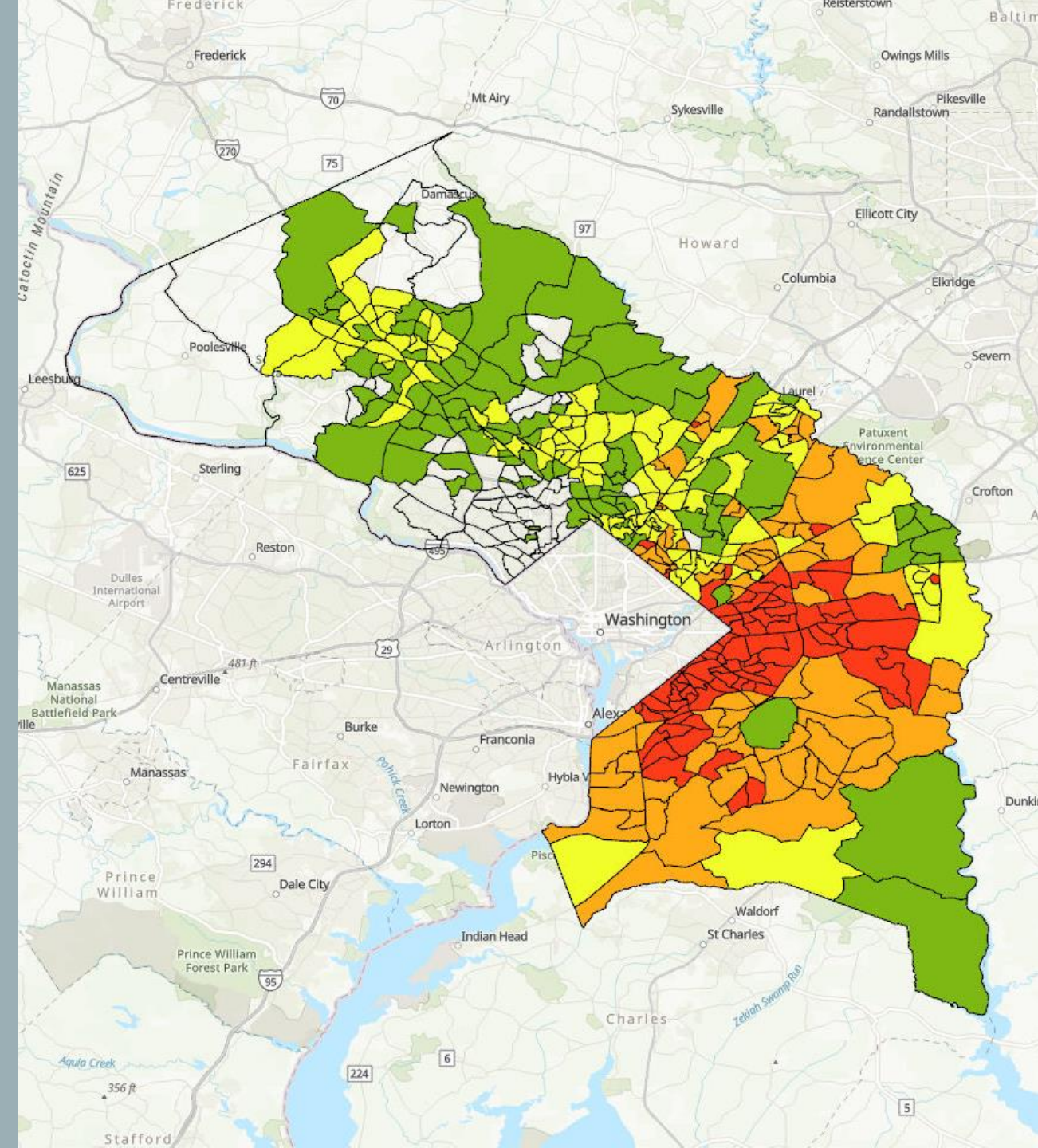
Average: 80.34%

Montgomery County

Maximum: 90.85%

Minimum: 4.32%

Average: 40.15%



IMPERVIOUS COVER

Prince George's County

Maximum: 51.74%

Minimum: 0.63%

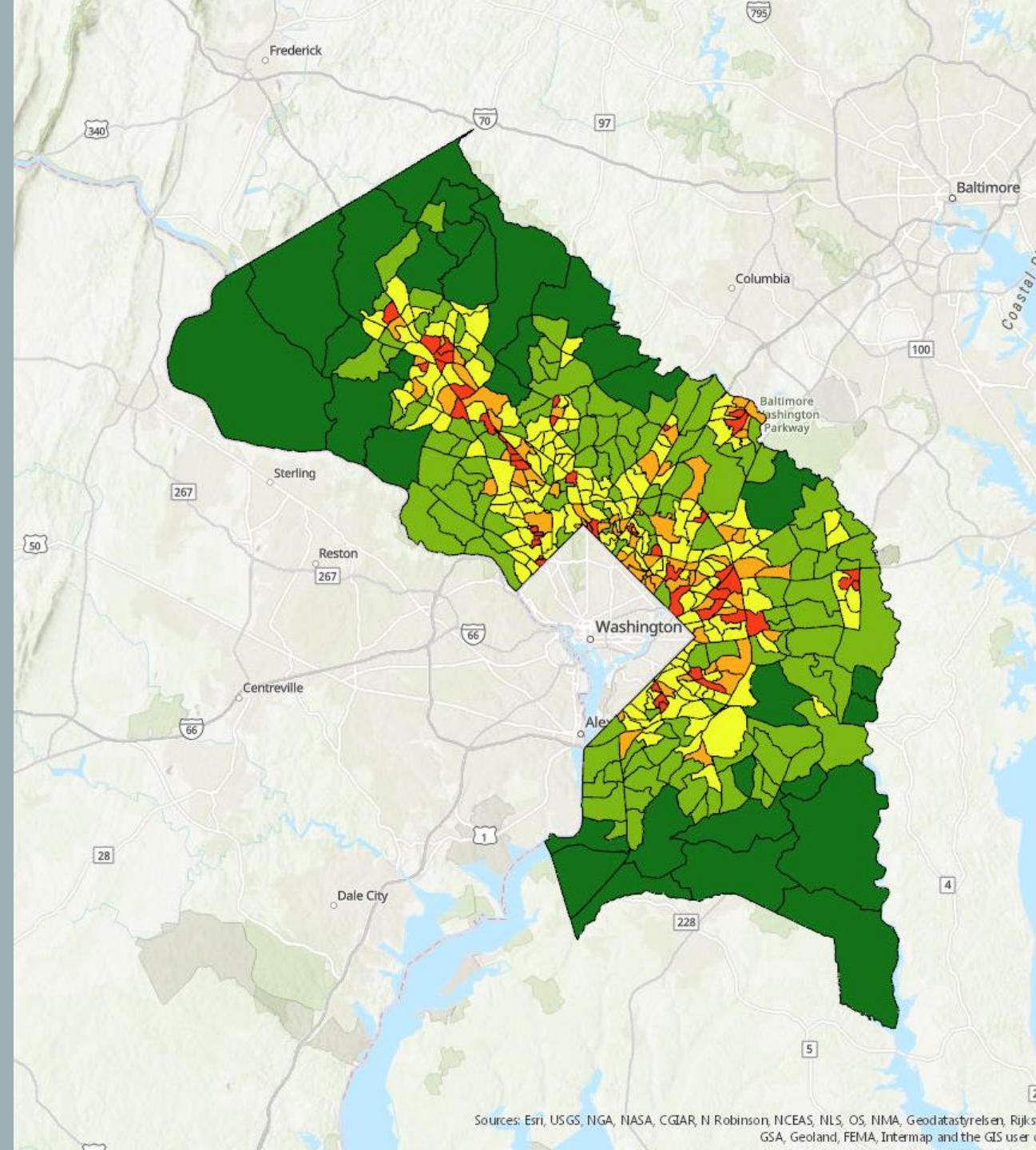
Average: 20.04%

Montgomery County

Maximum: 67.71%

Minimum: 0.82%

Average: 19.91%



FOREST COVER

Prince George's County

Maximum: 73.95%

Minimum: 10.95%

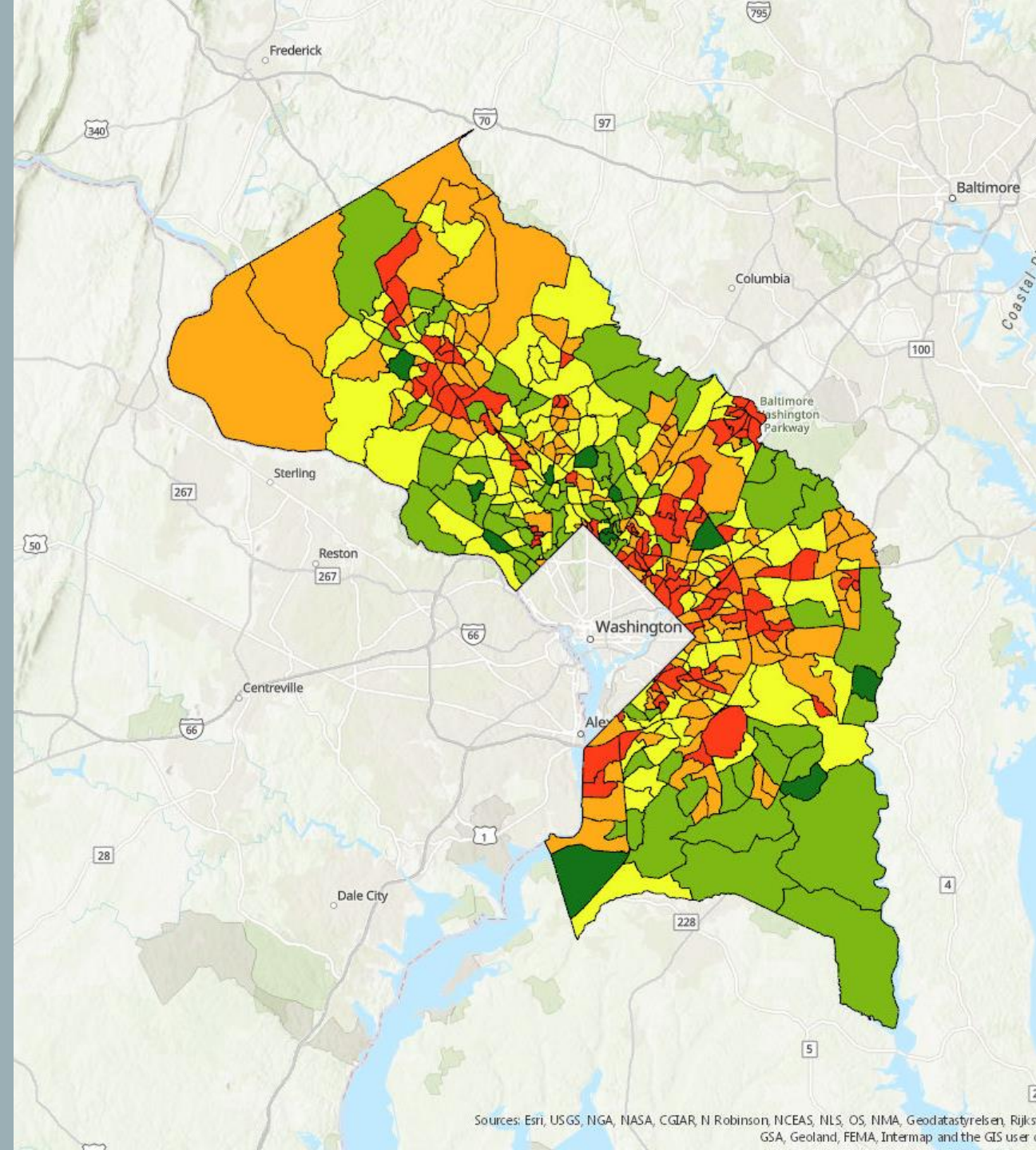
Average: 37.28%

Montgomery County

Maximum: 64.01%

Minimum: 7.53%

Average: 41.96%

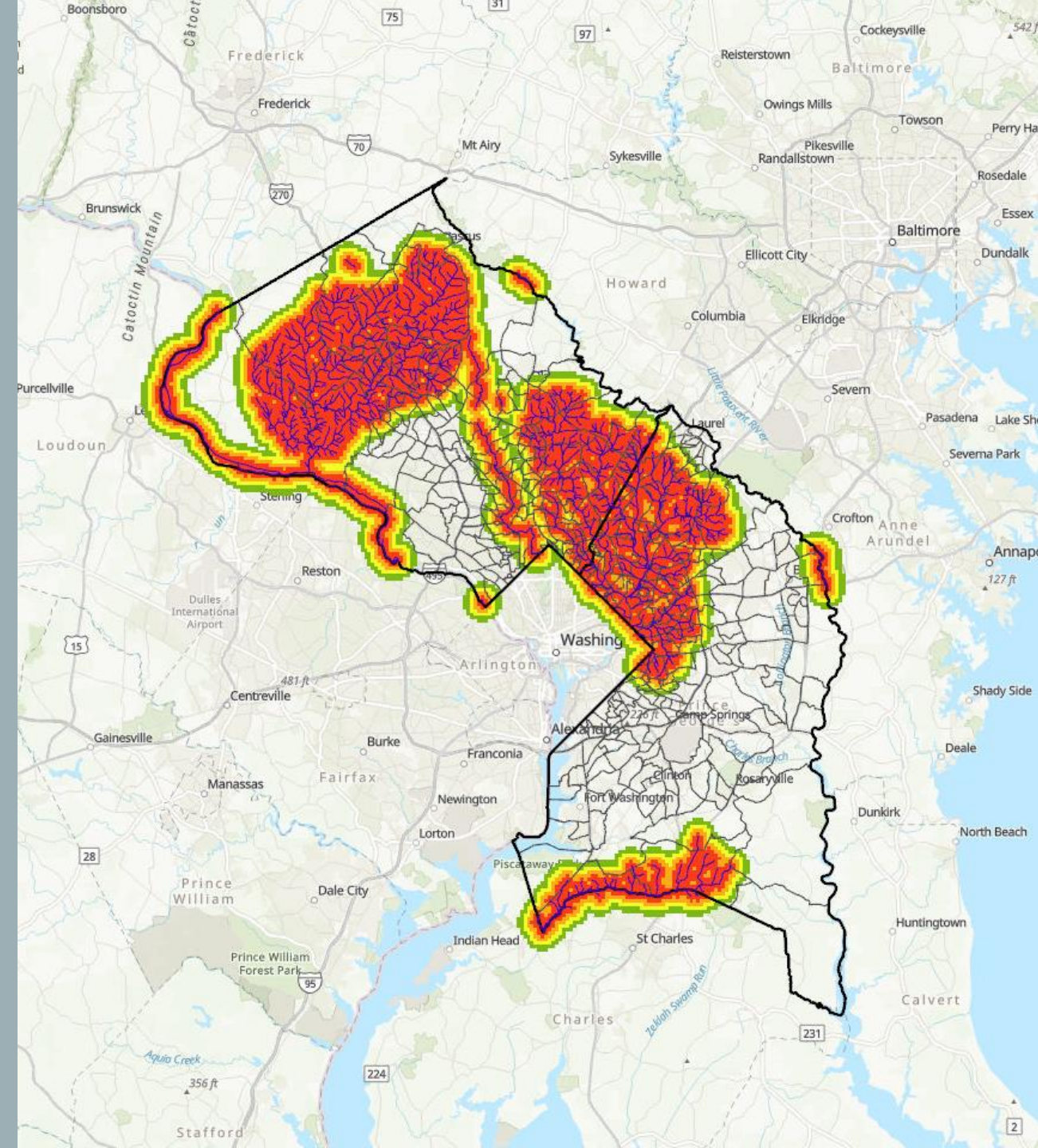


TOXINS AND IMPAIRMENTS

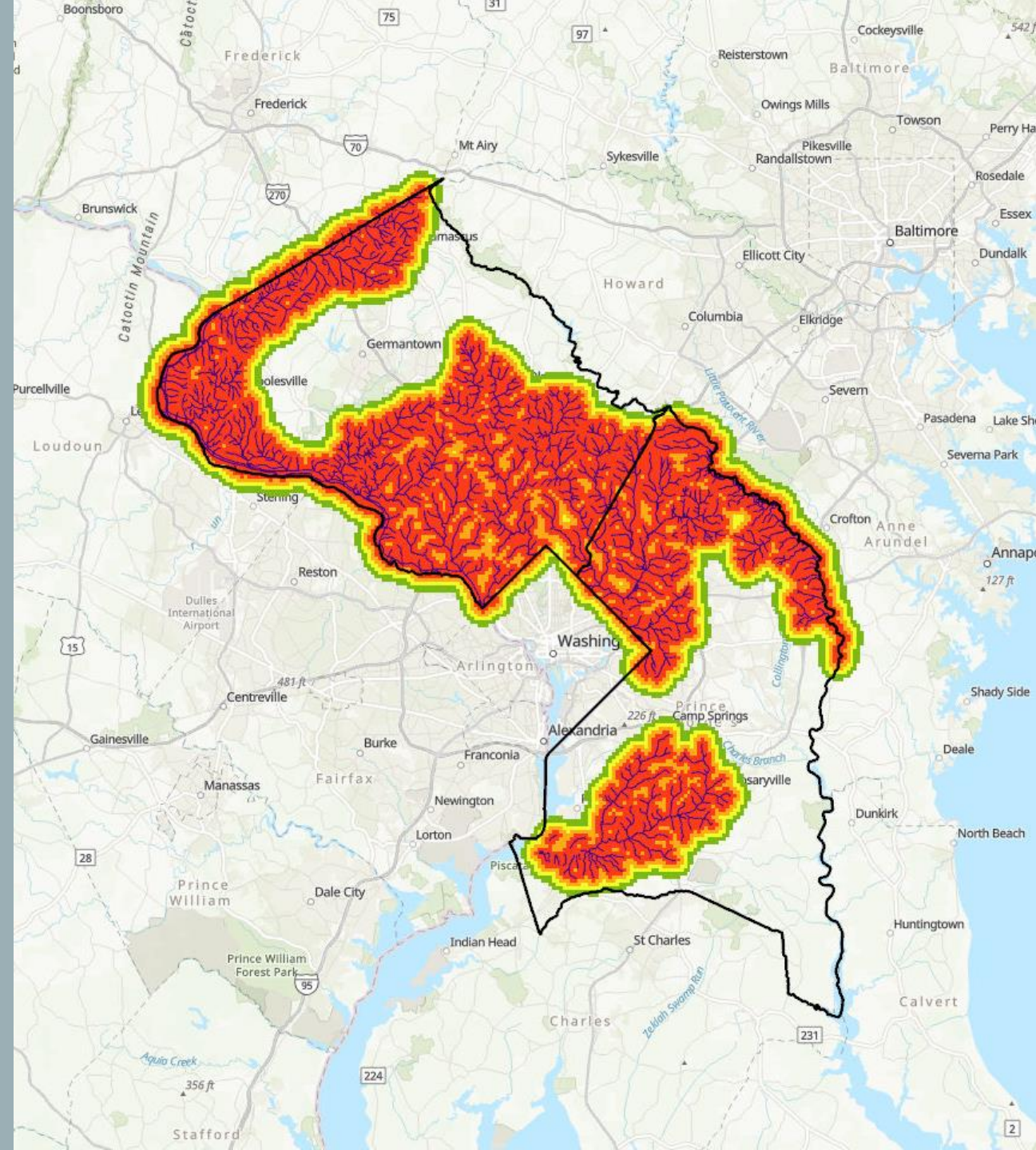
Eight toxins/impairments used

Data came from Maryland Department for
the Environment

Identified the streams and rivers that
exceeded their TMDL



BACTERIA



COMBINED WEIGHTED DATA

Prince George's County

Maximum: 172.48

Minimum: 38.26

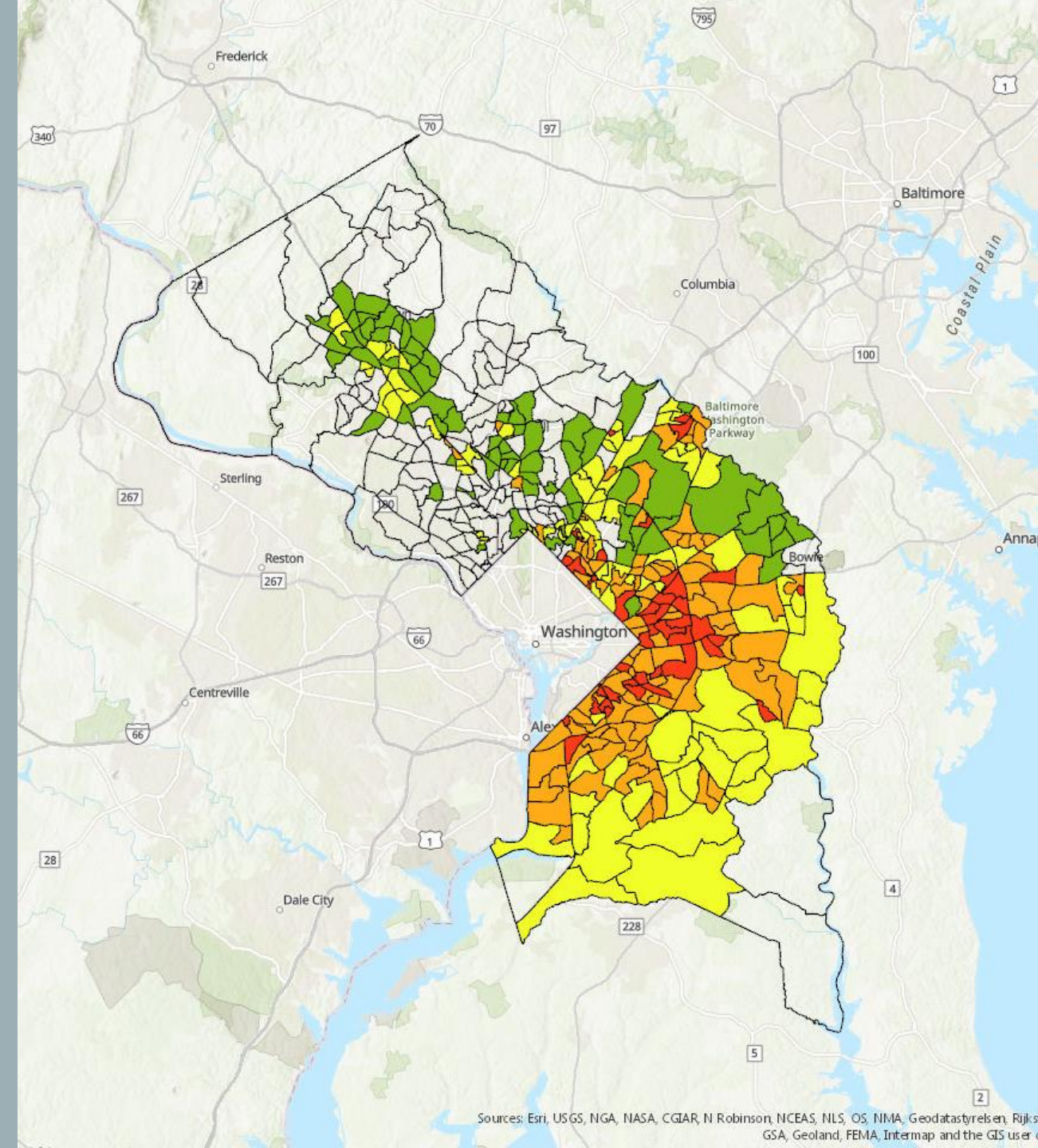
Average: 105.43

Montgomery County

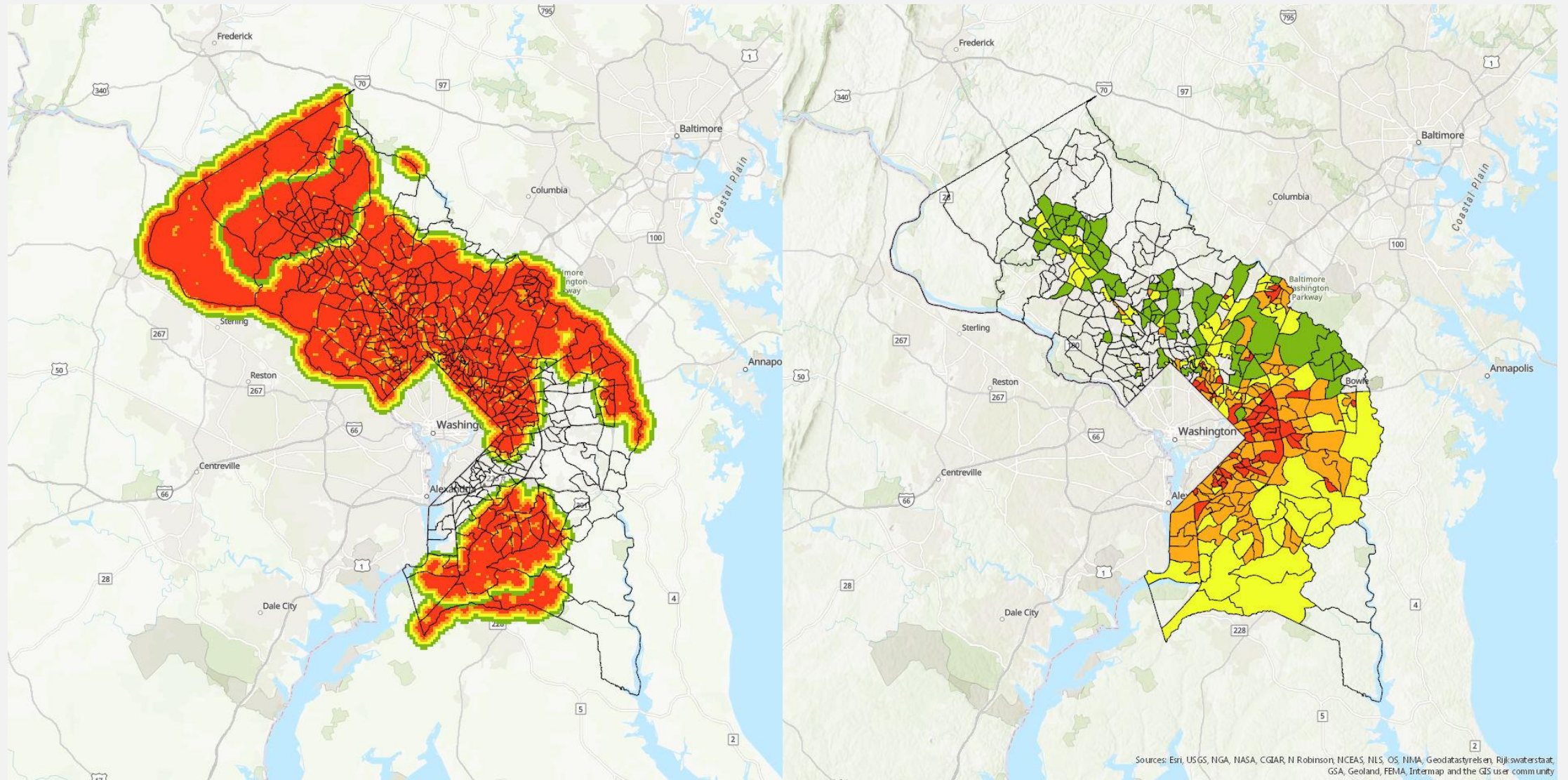
Maximum: 127.30

Minimum: -8.24

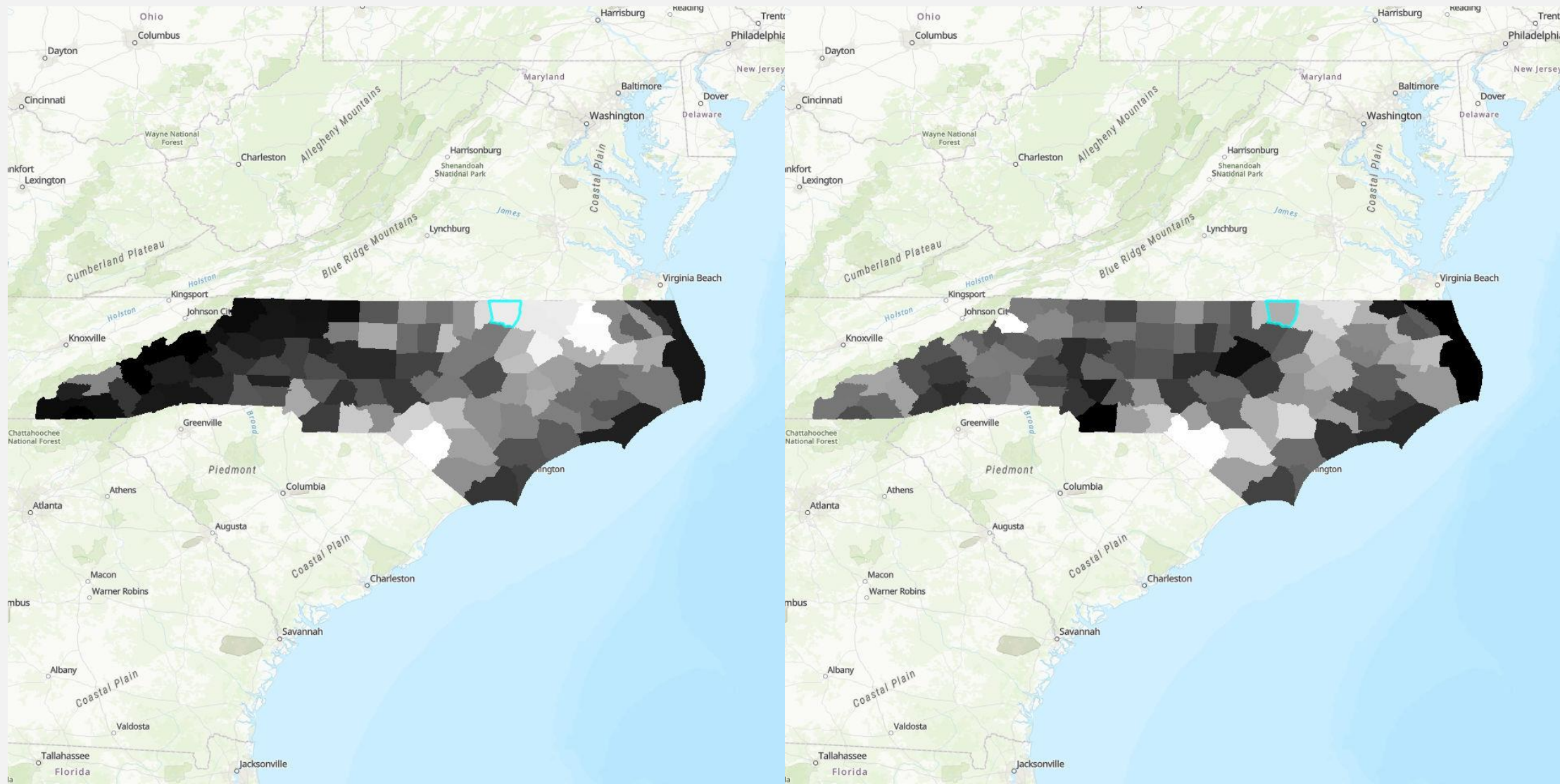
Average: 45.86



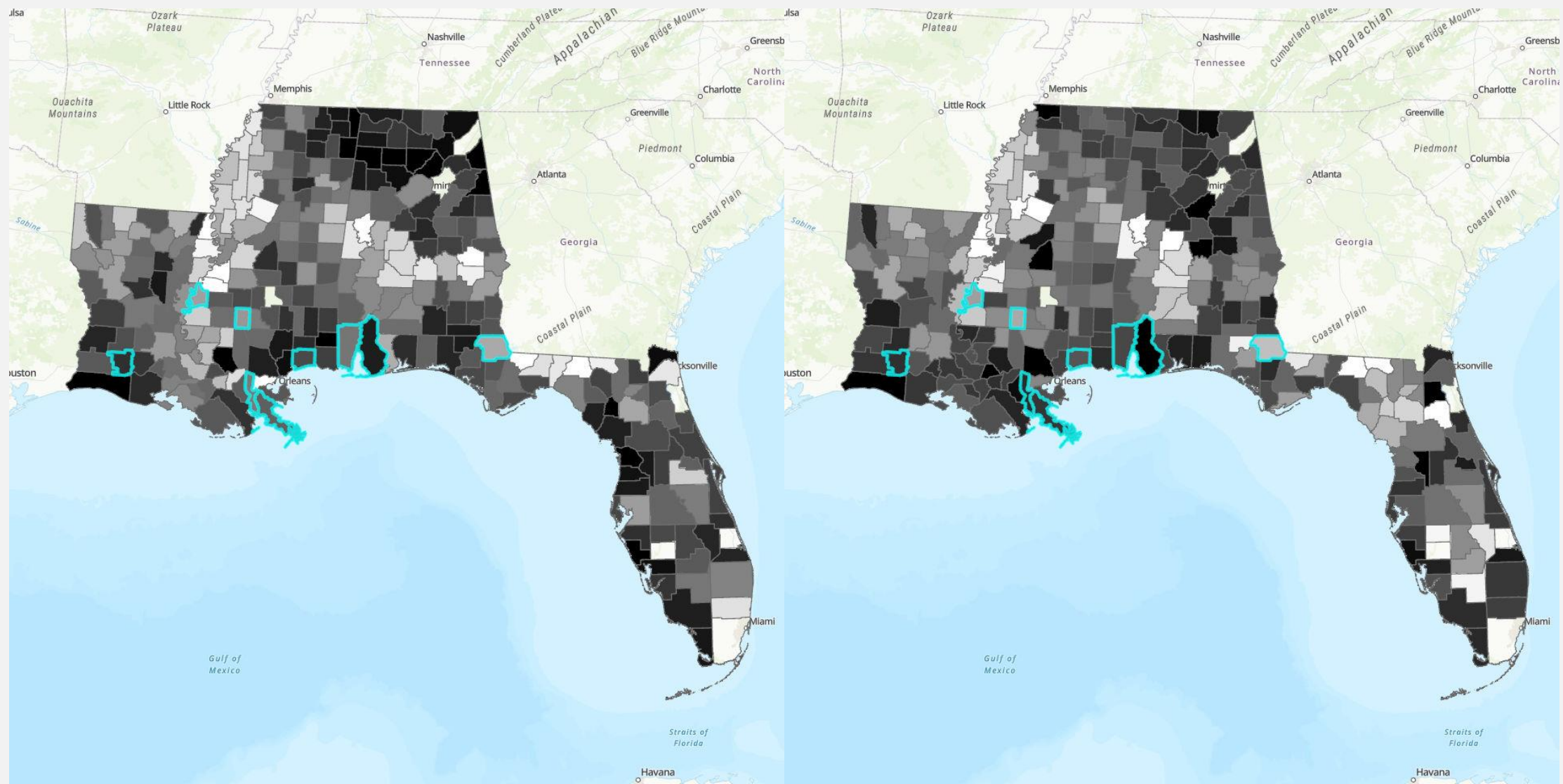
DOES THIS WORK?



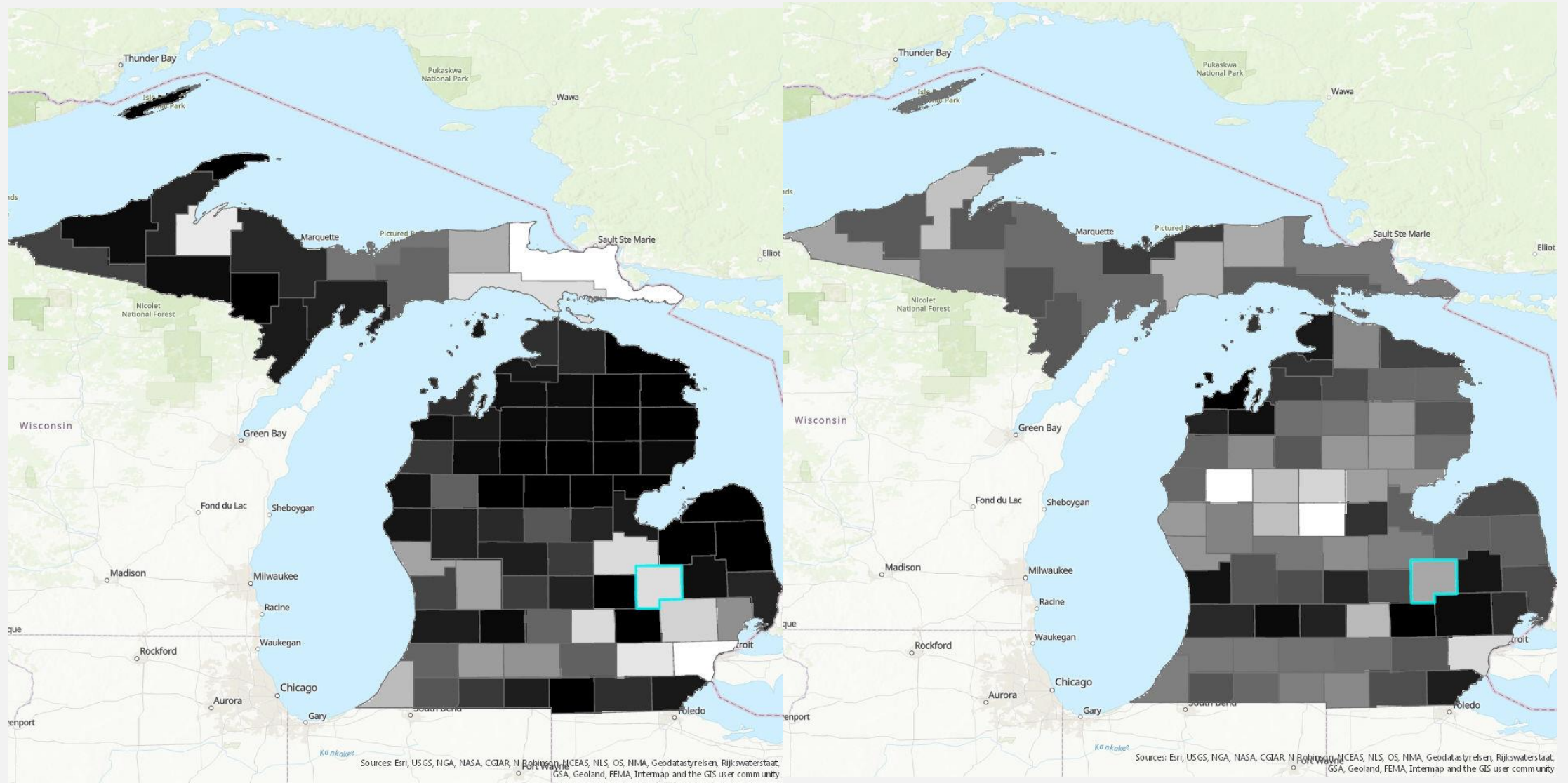
BACK TO WARREN



GULF COAST



WHAT ABOUT FLINT?



CONCLUSIONS

- Weight of all the factors are arbitrary
- Who's to say where the cutoff is for what will produce environmental injustice?
- Grouping issues
- Drainage, river flow, and natural disasters

ACKNOWLEDGMENTS

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