

DEQ- North Carolina Community Mapping System
& Environmental Justice Tool
Monday September 21, 2020

Renee Kramer, Title VI and Environmental Justice Coordinator



- **Environmental justice** is 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 (US EPA).

Proposed Criteria

- Race and Ethnicity
- Age and Sex
- Disability
- Poverty
- Household Income
- Limited English Proficiency

-10% or more in comparison to the county average

-50% or more minority

-5% or more in comparison to the county average for poverty

Distributional Justice

- Equal distribution of environmental benefits and burdens

Procedural Justice

- Equal protection from rulemaking and enforcement

Process Justice

- Equal opportunities for meaningful engagement

Justice-Equality vs. Equity



EQUALITY VERSUS EQUITY



In the first image, it is assumed that everyone will benefit from the same supports. They are being treated equally.



In the second image, individuals are given different supports to make it possible for them to have equal access to the game. They are being treated equitably.



In the third image, all three can see the game without any supports or accommodations because the cause of the inequity was addressed. The systemic barrier has been removed.



Stakeholder Engagement and Development Process

- **Academic Focus Groups**

- Spoke with with GIS and EJ scholars from NC State, Chapel Hill, Duke, UNCG, NC Central, UNC Charlotte, and App State

- Calls with **other states** that have developed EJ mapping

- Meetings with Pennsylvania, California and EPA

- **Public Community Meetings**

- Wayne County
- Forsyth County
- Rutherford County

- **6 Small Community Organization Meetings/Calls**

- **Website and Public Survey**

<https://deq.nc.gov/outreach-education/environmental-justice/deq-north-carolina-community-mapping-system>

Also on the Website:

- Other States
- Survey
- 'How To'



DEQ North Carolina Community Mapping System

The N.C. Department of Environmental Quality (DEQ) is creating a department community mapping system to increase local outreach and public participation. The first version will be a BETA version, and DEQ will seek stakeholder feedback.

[Click for survey →](#)

Additional Information

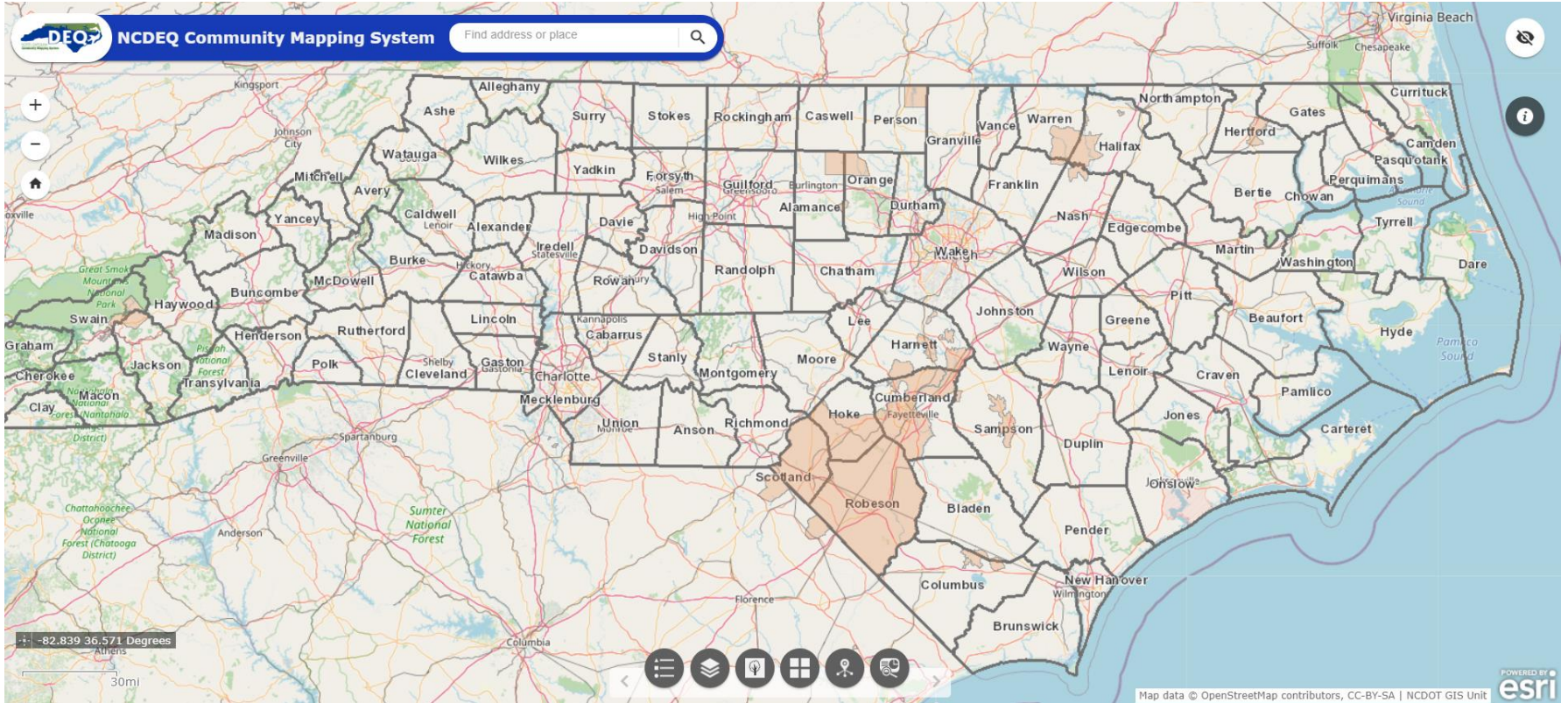
[Stakeholder Engagement Opportunities](#)

[State and Nationwide Mapping Tools](#)

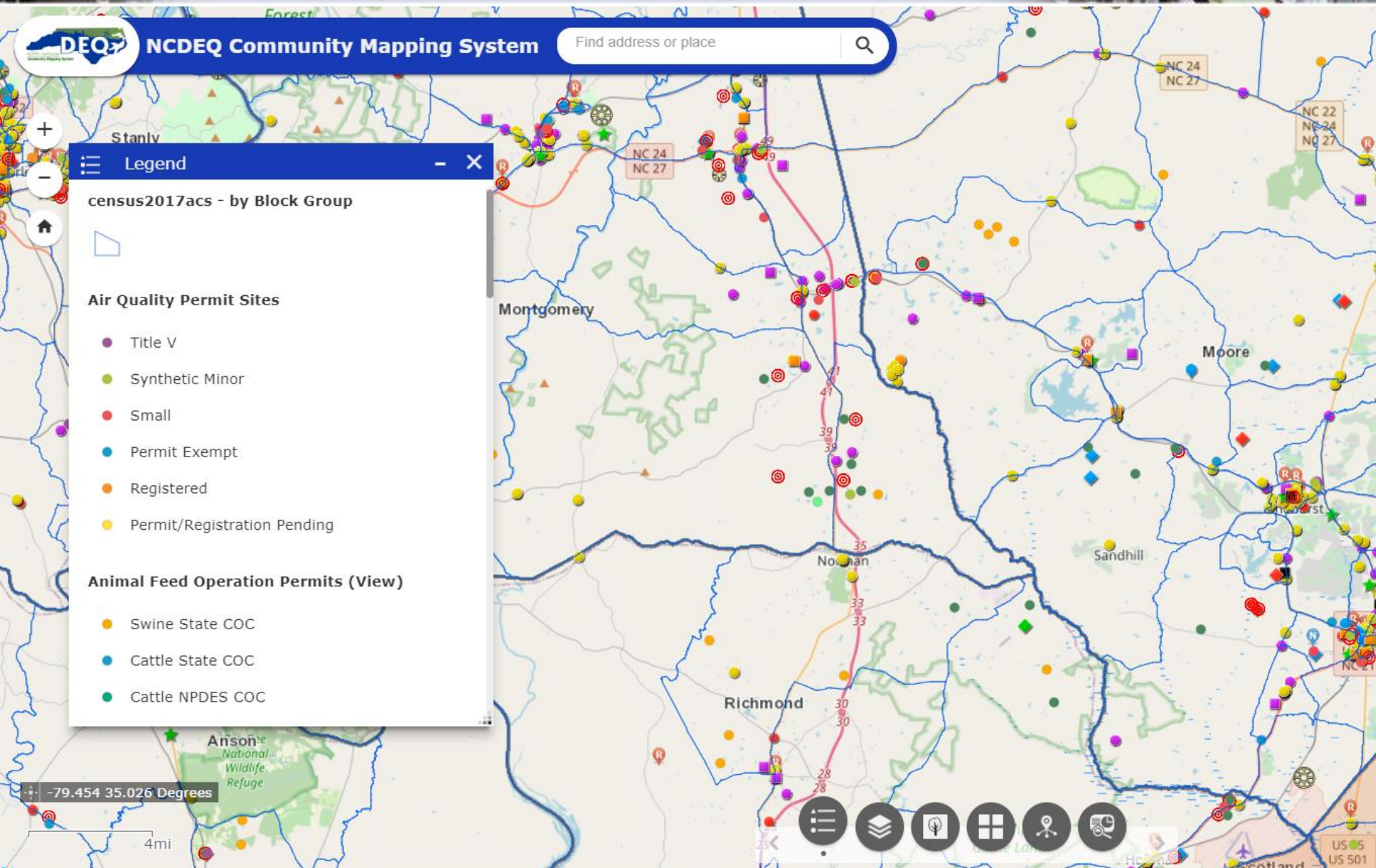
The N.C. Department of Environmental Quality will be hosting three information sessions to gain community feedback on what a North Carolina Community Mapping System should look like to benefit all North Carolinians. Below are the dates of the three community engagements across North Carolina. If you are unable to attend one of the meetings, please provide feedback via the survey located on the "Community Mapping System Stakeholder Survey" tab.



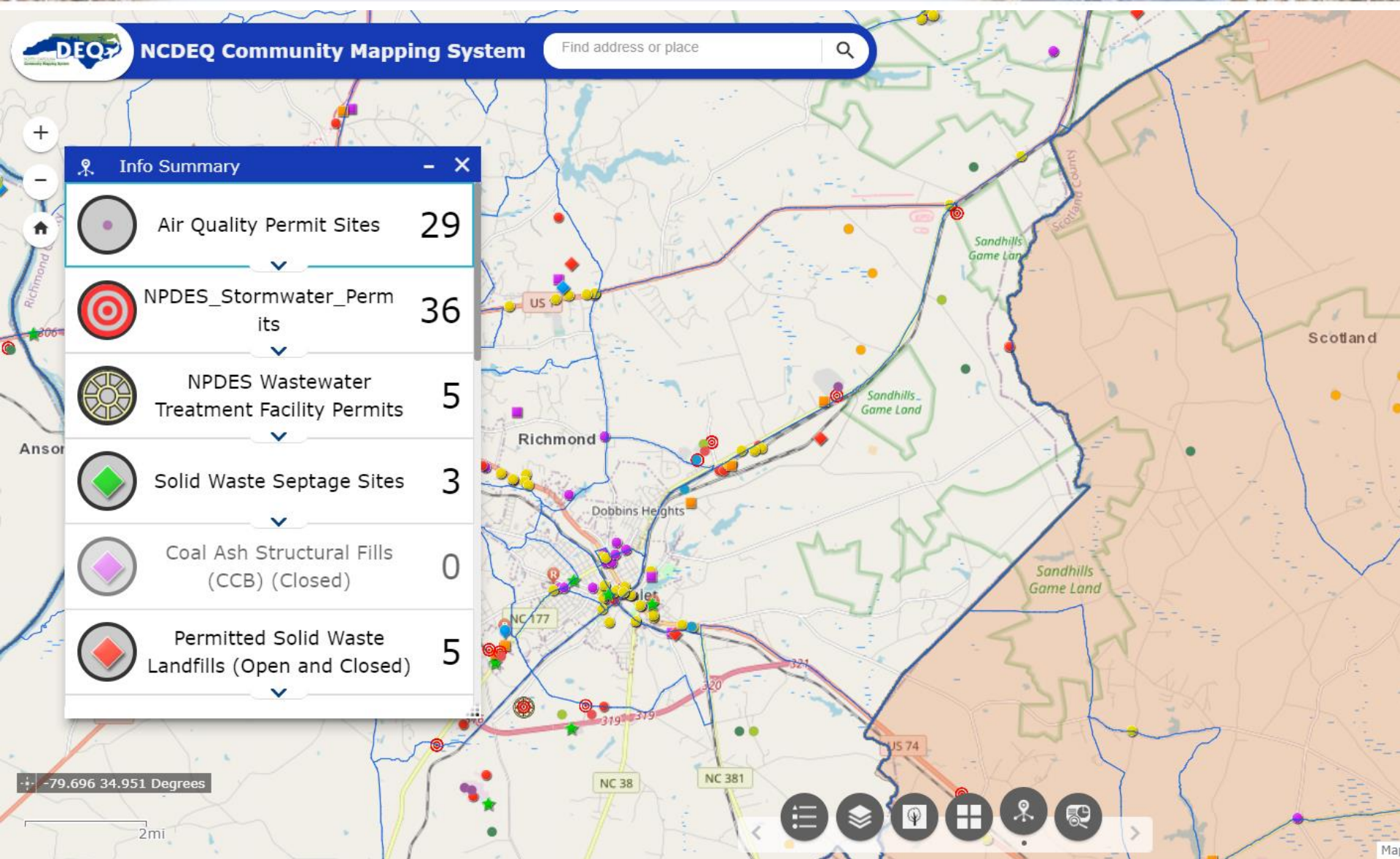
Community Mapping System



Permits and Incidents




Info Summary



Info Summary



 **NCDEQ Community Mapping System**

Info Summary 29

Air Quality Permit Sites

- Fayetteville Regional Office - Concrete Supply Co., LLC - Hamlet - 7700060
- Fayetteville Regional Office - Latham Pool Products, Inc. d/b/a Viking Pools - NC - 7700087
- Fayetteville Regional Office - Duke Energy Progress, LLC - Blewett - 0400032
- Fayetteville Regional Office - CSX Transportation - 7700095
- Fayetteville Regional Office - Vulcan Construction Materials, LLC - Rockingham Quarry - 7700031
- Fayetteville Regional Office - Trinity Manufacturing, Inc. - 7700053
- Fayetteville Regional Office - RSI Home Products - 7700100
- Fayetteville Regional Office - Covia Holdings Corporation - Marston Plant - 7700042

Richmond, Dobbins Heights, Sandhills Game Land, Scotland, US, NC 177, NC 38, NC 381, US 74, 320, 319, 319, 321

-79.654 34.824 Degrees

2mi

Info Summary



DEQ NCDEQ Community Mapping System Find address or place

Info Summary - X

- Air Quality Permit Sites **8**
- NPDES_Stormwater_Permit_s **6**
- NPDES Wastewater Treatment Facility Permits **0**
- Solid Waste Septage Sites **0**
- Coal Ash Structural Fills (CCB) (Closed) **0**
- Permitted Solid Waste Landfills (Open and Closed) **3**

Map showing Sandhills Game Land, Richmond County, and Scotland County. Locations include Hamlet, Hamlet, and Hamlet. Coordinates: -79.639 34.873 Degrees. Scale: 1 mi.

Permit Information

(1 of 3)

NPDES_Stormwater_Permits

Permit Number	NCG020314
VERSION	
Owner Type	Organization
Owner Name	US Army Garrison Fort Bragg
Owner Affiliation	Monica Stephenson
Facility Name	Lamont West Borrow Pit
Facility Address	Lamont Rd
Facility Address 2	

[Zoom to](#) ...

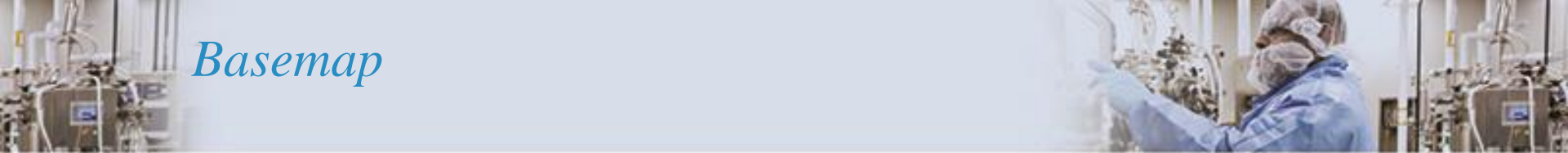
(2 of 3)

Address 2

City	Fort Bragg
State	NC
Zip	28307
Permit Type	Mining Activities Stormwater Discharge COC
Status	Active
Issue Date	3/18/2016, 4:00 AM
Effective Date	3/18/2016, 4:00 AM
Expiration Date	9/30/2020, 4:00 AM
Original Issue	10/30/1995, 3:00 AM
Location	35.138889, -79.081944

[Zoom to](#) ...

Basemap



DEQ NCDEQ Community Mapping System

Basemap Gallery

- Human Geography Map
- Imagery Hybrid
- Mid-Century Map
- National Geographic
- Imagery
- Light Gray Canvas
- Modern Antique Map
- Navigation

Richmond, Marston, Cognac, Fruitland, Dobbins Heights, Hamlet, New Town, Steen Town, Andrew Jackson Hwy, N US 1 Hwy, Ledbetter Lake, Pee Dee River, Diggs, Gibson, Scotland, Reservation

-79.602 34.856 Degrees

2mi

Old Hur, NCDOT GIS Unit | NC CGIA, Earthstar Geographics | State of North

Screening Tool

The screenshot displays the NCDEQ Community Mapping System interface. At the top, a blue header contains the DEQ logo, the text "NCDEQ Community Mapping System", and a search bar with the placeholder "Find address or place". The main area is a satellite map of a region in North Carolina, with several towns labeled: Richmond, Marston, Cognac, Fruitland, Dobbins Heights, Hamlet, New Town, Steen Town, and Andrew Jackson Hwy. A red circle highlights a specific area near Cognac, with a red location pin in the center. A blue dashed line outlines a larger area of interest. The "Screening" sidebar is open on the left, featuring a search icon, a home button, and a search bar for the "Area of Interest". Below this are tabs for "Place name", "Draw", and "Coordinates". The "Draw" mode is selected, and four drawing tools are shown: a rectangle, a line, a polygon, and a circle. The "Buffer distance (optional)" is set to "1" Miles. At the bottom of the sidebar are "Report" and "Start Over" buttons. In the bottom left corner, coordinates are shown as "-79.542 34.825 Degrees" and a 2-mile scale bar is present. The bottom right corner contains a toolbar with icons for layers, home, location, and other map functions. A footer at the very bottom reads "Old Hwy NCDOT GIS Unit | NC CGIA, Earthstar Geographics | State of North Carolina".

Screening Tool

DEQ NCDEQ Community Mapping System Find address or place

Screening Area : 87,513,003.27 ft²

- Report
- Back
- NPDES_Stormwater_Permits (0)
- NPDES Wastewater Treatment Facility ... (0)
- Solid Waste Septage Sites (0)
- Coal Ash Structural Fills (CCB) (Closed) (0)
- Permitted Solid Waste Landfills (Open ... (0)
- Land Clearing and Inert Debris (LCID)... (0)
- Contaminated Dry-Cleaning Sites (0)
- Inactive Hazardous Sites (0)

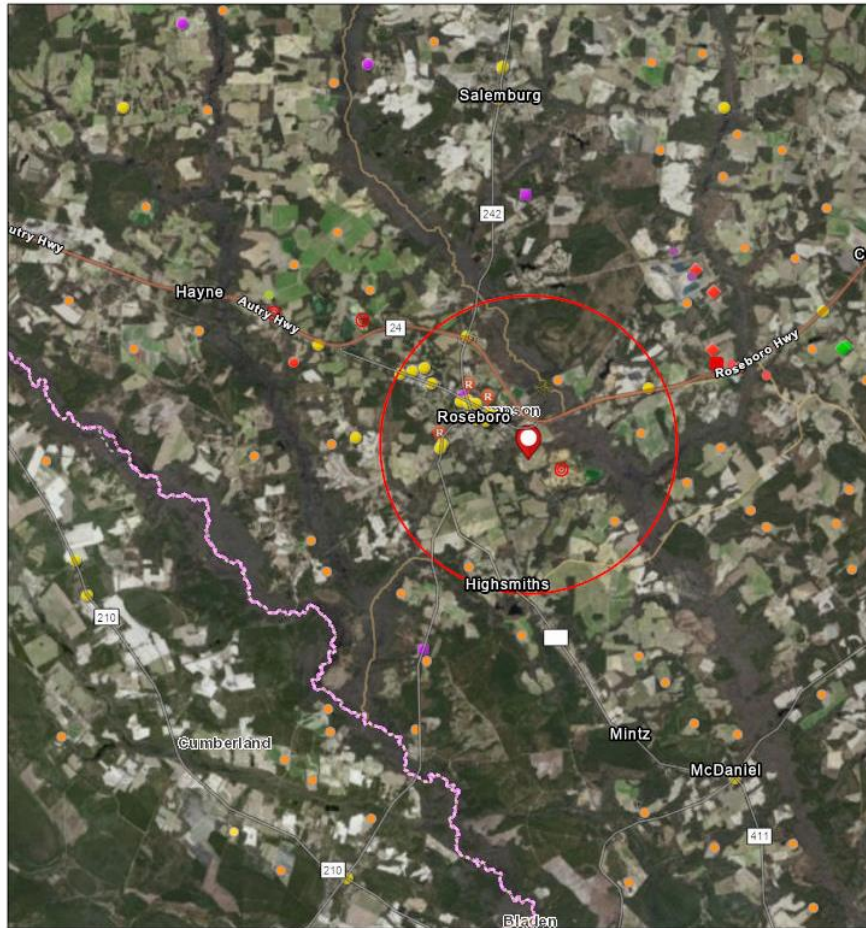
Map labels: Richmond, Marston, Cognac, Fruitland, Dobbins Heights, Hamlet, New Town, Steen Town, Andrew Jackson Hwy, Ledbetter Lake, N US 1 Hwy, Pee Dee River, Diggs, Scotland, Gibson Mi, Reservation

Coordinates: -79.496 34.825 Degrees

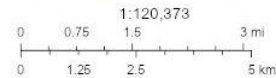
Scale: 2mi

Footer: Old Hur, NCDOT GIS Unit | NC CGIA, Earthstar Geographics | State of North Car

Info Summary Report



- Air Quality Permit Sites
 - Title V
 - Synthetic Minor
 - Small
 - Animal Operation Permits
 - Swine State COC
- Animal Individual State
 - NPDES_Stormwater_Permits
 - NPDES Wastewater Treatment Facility Permits
 - Minor
 - Solid Waste Septage Sites
 - Permitted Solid Waste Landfills (Open and Closed)

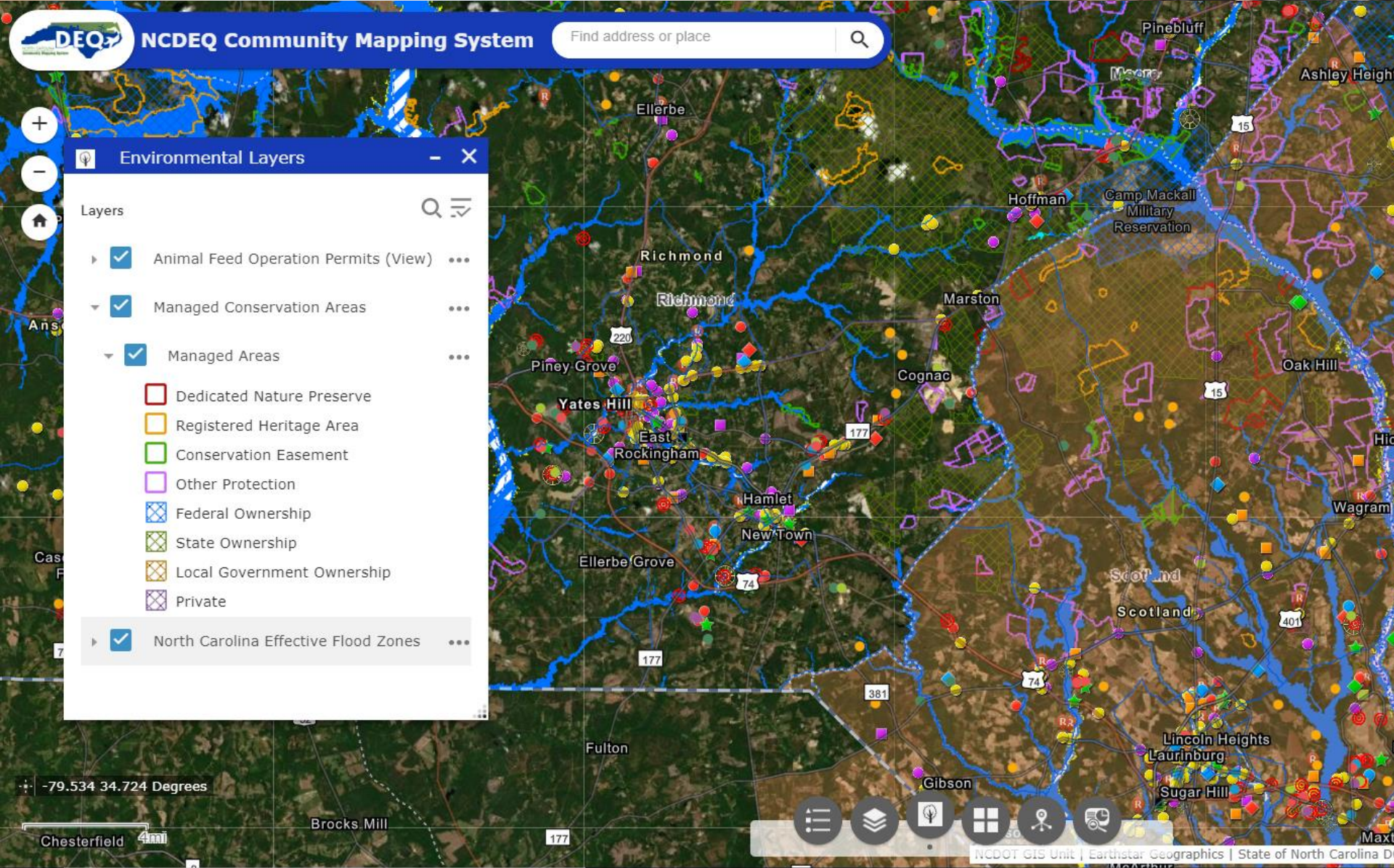


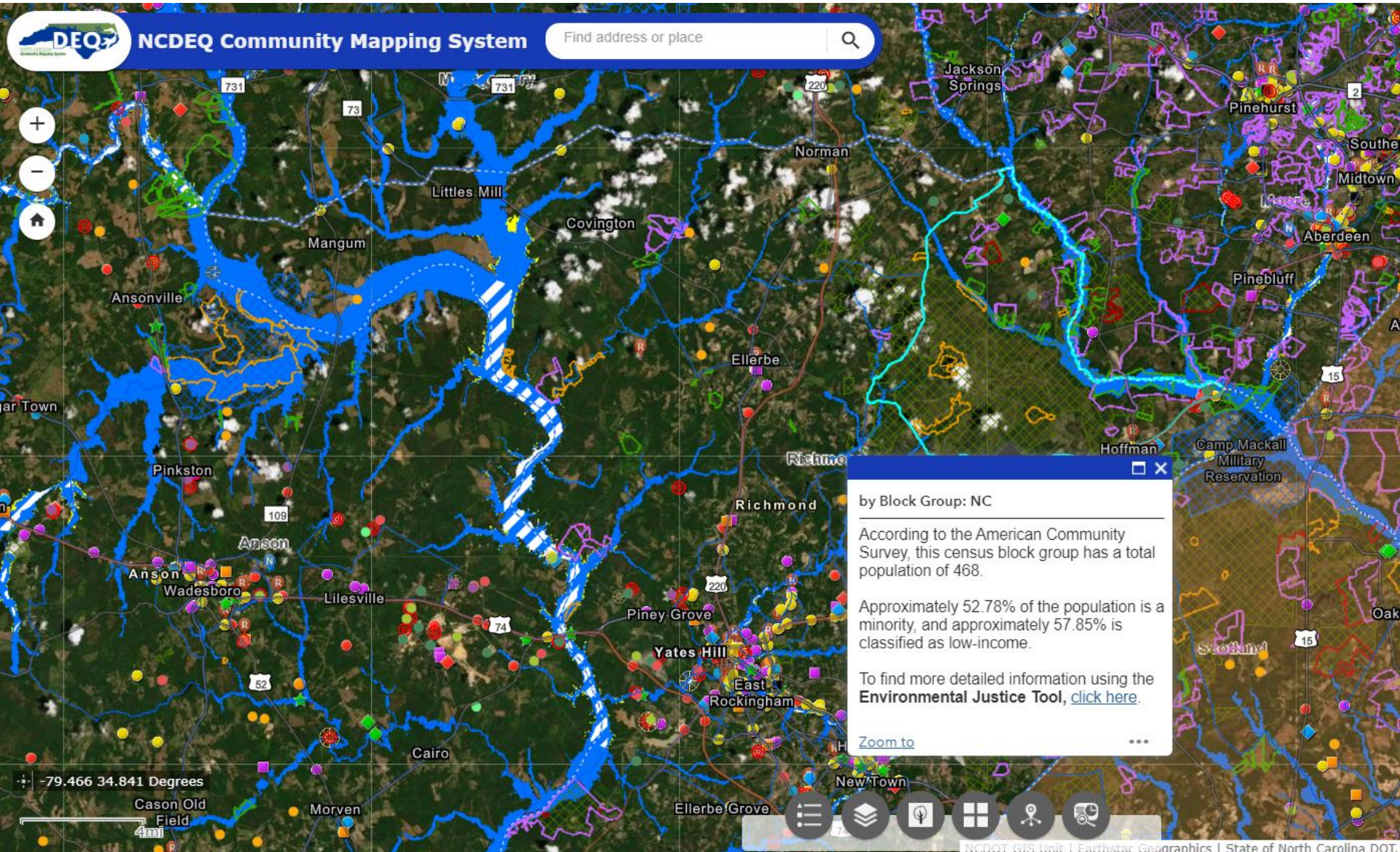
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, NC Counties, NCCOGA, NC OneMap, US EPA, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User

Summary

Name	Count
Animal Operation Permits	4
NPDES_Stormwater_Permits	1
NPDES Wastewater Treatment Facility Permits	1
Solid Waste Septage Sites	0
Coal Ash Structural Fills (CCB) (Closed)	0
Permitted Solid Waste Landfills (Open and Closed)	0
Land Clearing and Inert Debris (LCID) Notifications	0
Contaminated Dry-Cleaning Sites	0
Possible Dry-Cleaning Contamination	0
Inactive Hazardous Sites	0
Pre-Regulatory Landfill Sites	0
Brownfields Program Sites	0
Hazardous Waste Sites	0
Underground Storage Tank Incidents	18
Above Ground Storage Tank Incidents	1
Underground Storage Tank Active Facilities	4
Petroleum Contaminated Soil Remediation Permits	0
Land Use Restriction and/or Notices	3

Environmental Layers





NCDEQ Community Mapping System

Find address or place



by Block Group: NC

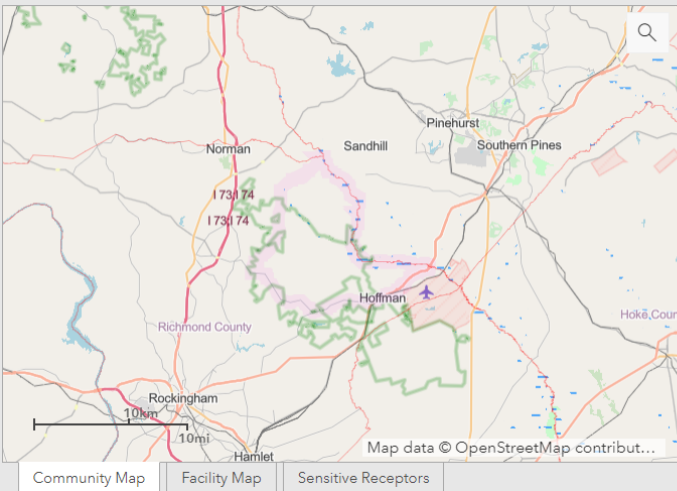
According to the American Community Survey, this census block group has a total population of 468.

Approximately 52.78% of the population is a minority, and approximately 57.85% is classified as low-income.

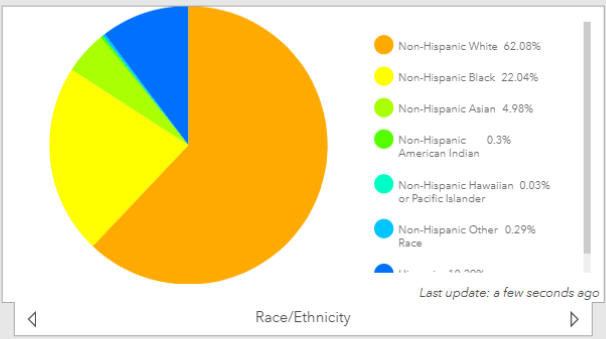
To find more detailed information using the **Environmental Justice Tool**, [click here](#).

Zoom to ...

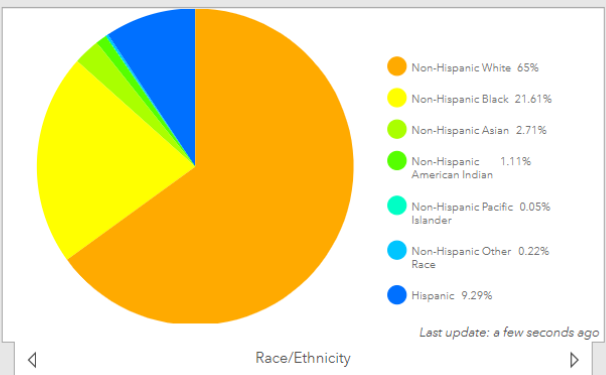
-79.466 34.841 Degrees
 Cason Old Field
 4mi



Selected Area Demographics



Statewide Demographics



Environmental Justice Tool Maps
 The three maps above can be toggled for additional information on demographics, facilities, and sensitive receptors (these are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants). Pop-ups on the map display the information. Click on a block group, or facility, sensitive receptor for more information.

Demographic and Health Data
 The Demographic Dashboard displays information on the census block group level from the 2017 5-year estimate American Community Survey (ACS). The North Carolina Department of Health and Human Services (NCDHHS) provides health data at the county level, so data shown on the dashboard for health rates tell the overall county average, not the census block group average. The data shown in the graphics are an average of all the block groups (or counties for health data) included on the above map extent. Zoom in and out for information on a smaller or larger scale. More information can be found about how each demographic group is defined in the Glossary of Terms section.

Health Dashboard

Average of Heart Disease Deaths

189.614

State Average 163.7

Last update: a few seconds ago

Average of PreTerm Birth Rate

10.543

State Average = 10

Last update: a few seconds ago

Average Deaths caused by Stroke

46.343

State Average 43.1

Last update: a few seconds ago

Hospitalizations due to Asthma

16 (Ages 0-14) - State Average 28

61 (Total) - State Average 90

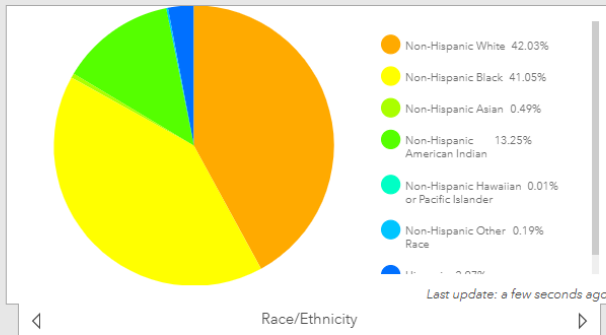
Last update: a few seconds ago

EJ Tool

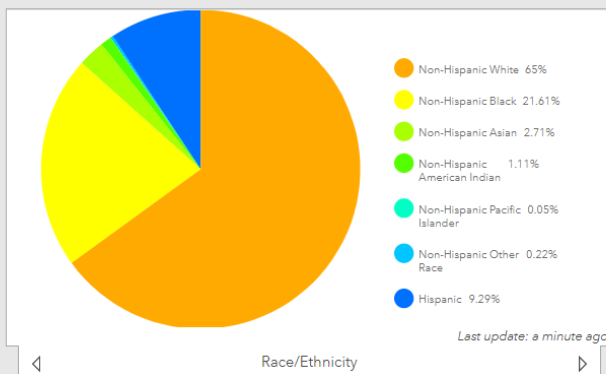
Zoom in



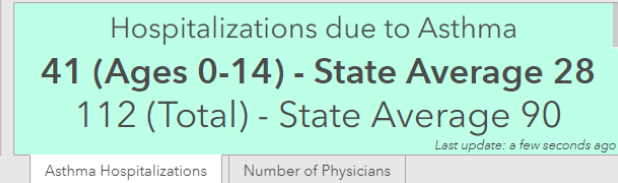
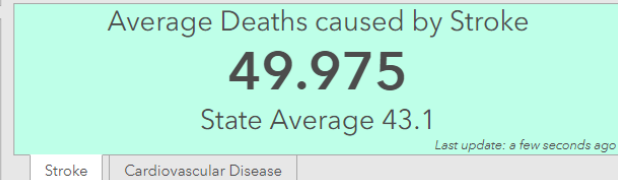
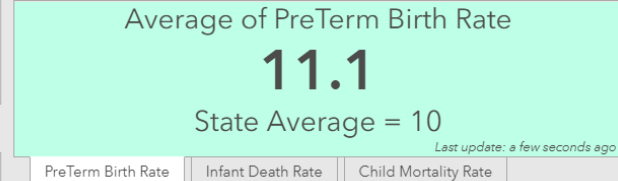
Selected Area Demographics



Statewide Demographics



Health Dashboard

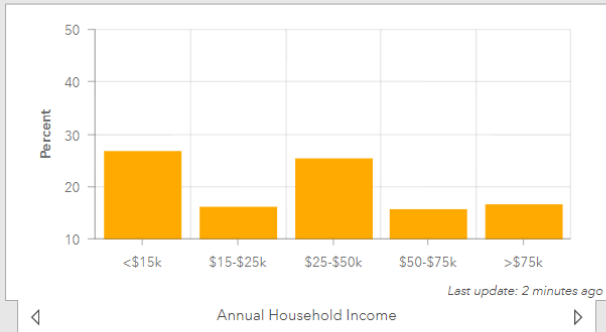


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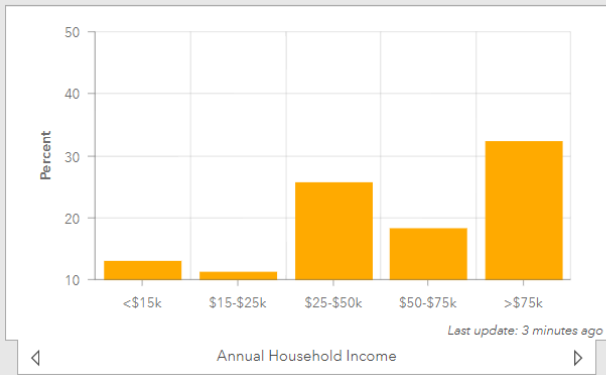
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Selected Area Demographics



Statewide Demographics



Health Dashboard

Average Deaths caused by Cancer

184

State Average 169.1

Last update: 2 minutes ago

- Heart Disease
- Cancer**
- Diabetes

Average of Infant Death Rate 2011-2015 (Per 100,000)

9.775

State Average 7.2

Last update: 2 minutes ago

- PreTerm Birth Rate
- Infant Death Rate**
- Child Mortality Rate

Average Cardiovascular Disease Deaths

287.15

State Average 221.9

Last update: 2 minutes ago

- Stroke
- Cardiovascular Disease**

Number of Primary Care Physicians

6.381

State Average 4.812

Last update: 2 minutes ago

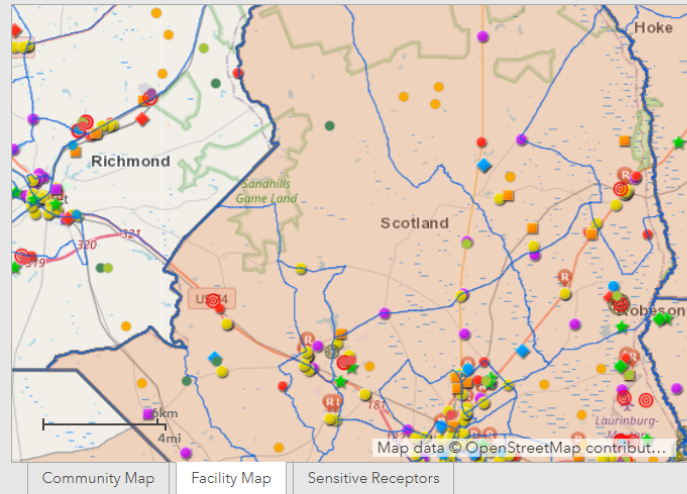
- Asthma Hospitalizations
- Number of Physicians**

Environmental Justice Tool Maps
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EJ Tool

Demographic and Health Dashboard



Selected Area Demographics

Median Household Income
\$32,885.738

Last update: 3 minutes ago

Median Household Income

Health Dashboard

Average Deaths caused by Diabetes

42.6
 State Average 22.8

Last update: 3 minutes ago

Heart Disease | Cancer | **Diabetes**

Child Mortality Rate 2011-2015 (Per 100,000)

79.575
 State Average 57.8

Last update: 3 minutes ago

PreTerm Birth Rate | Infant Death Rate | **Child Mortality Rate**

Average Cardiovascular Disease Deaths

287.15
 State Average 221.9

Last update: 3 minutes ago

Stroke | **Cardiovascular Disease**

Number of Primary Care Physicians

6.381
 State Average: 4.812

Last update: 3 minutes ago

Asthma Hospitalizations | **Number of Physicians**

Statewide Demographics

Median Household Income
\$50,320

Last update: 5 minutes ago

Median Household Income

Environmental Justice Tool Maps

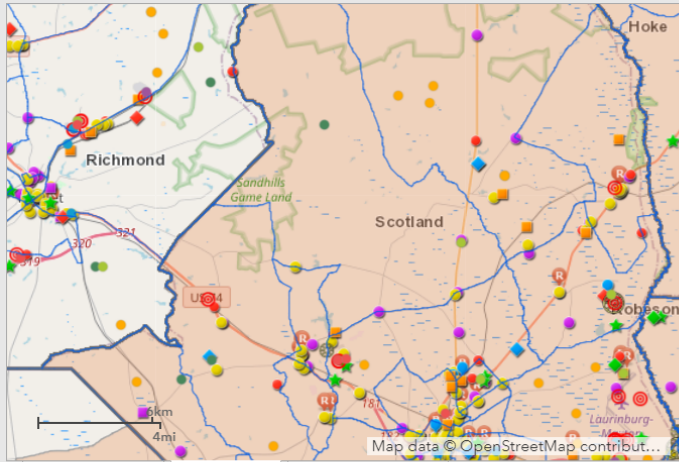
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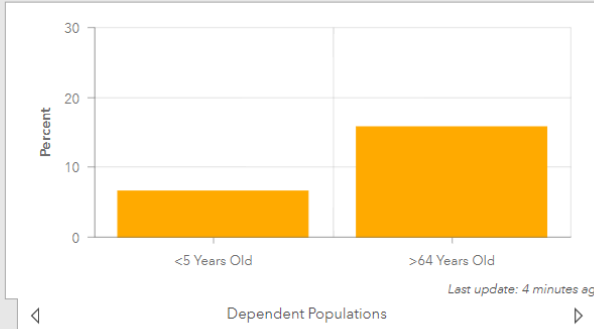
EJ Tool

Facility Map

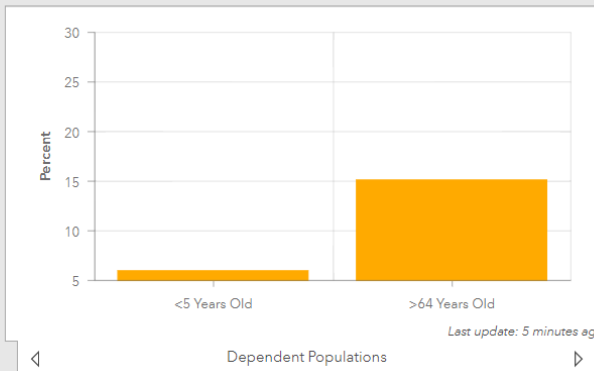


Community Map | **Facility Map** | Sensitive Receptors

Selected Area Demographics



Statewide Demographics



Health Dashboard

Average Deaths caused by Diabetes

42.6

State Average 22.8

Last update: 4 minutes ago

Heart Disease | Cancer | **Diabetes**

Child Mortality Rate 2011-2015 (Per 100,000)

79.575

State Average 57.8

Last update: 4 minutes ago

PreTerm Birth Rate | Infant Death Rate | **Child Mortality Rate**

Average Cardiovascular Disease Deaths

287.15

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Last update: 4 minutes ago

Stroke | **Cardiovascular Disease**

Number of Primary Care Physicians

6.381

State Average: 4.812

Last update: 4 minutes ago

Asthma Hospitalizations | **Number of Physicians**

Environmental Justice Tool Maps

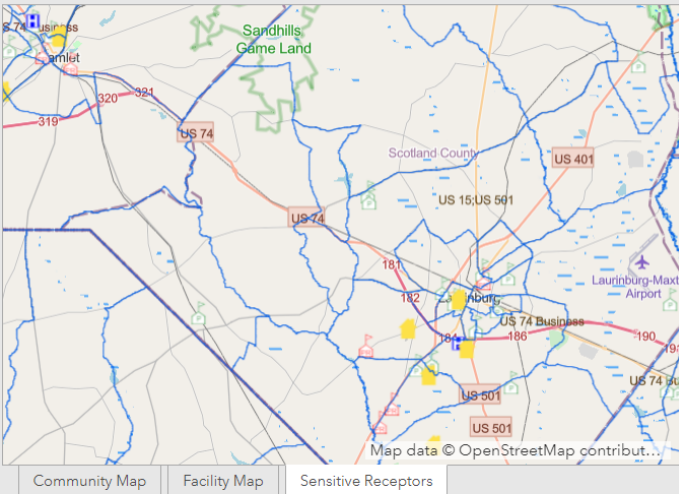
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EJ Tool

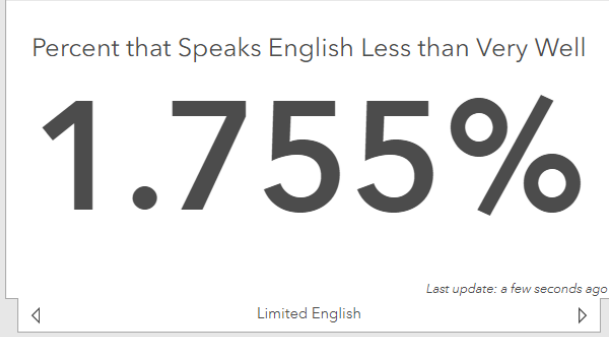
Sensitive Receptors Map



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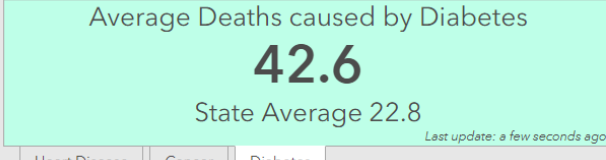
Selected Area Demographics



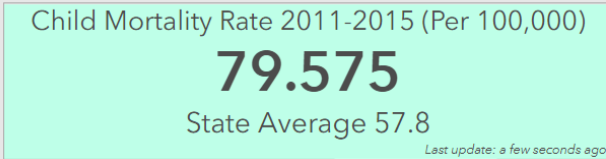
Statewide Demographics



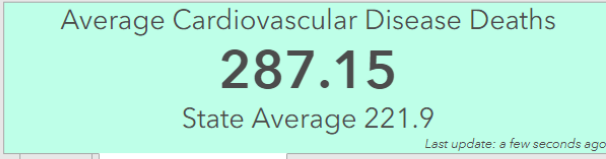
Health Dashboard



Heart Disease | Cancer | **Diabetes**



PreTerm Birth Rate | Infant Death Rate | **Child Mortality Rate**



Stroke | **Cardiovascular Disease**



Asthma Hospitalizations | **Number of Physicians**

Renee Kramer

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