North Carolina Renewable Power – Lumberton, LLC

Draft Environmental Justice Report

North Carolina Department of Environmental Quality
November 2, 2021

Contents

1 Introduction

Environmental justice (EJ) 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). This evaluation examines the demographic and environmental conditions in Robeson County, Census Tracts 9608.02, 9611, and 9616.01, and the one-mile radius around the property boundary of the North Carolina Renewable Power – Lumberton, LLC facility. Finally, the demographics of the entire state of North Carolina are also considered as they compare to both the county, census tracts, and radius settings.

The primary goal of the Draft EJ Report is to encourage comments and suggestions from the surrounding community, industry, and environmental groups throughout the comment period. Public comments will be considered throughout the remainder of the comment period to inform preparation of the Final EJ Report.

2 Environmental Justice Evaluation

The North Carolina Department of Environmental Quality (NCDEQ) has assessed the permit application and the potential impact on communities surrounding the requested permit application. The assessment of potential impacts included:

- Review of the permit application submitted by North Carolina Renewable Power – Lumberton, LLC
- An emissions overview
- Study of area demographics (determined by utilizing the US EPA Environmental Justice tool (EJSCREEN) https://ejscreen.epa.gov/mapper/ and current, available census data. https://data.census.gov/cedsci/)
- Comparison of local area demographics to both county and statewide census data
- County health assessment
- Surrounding sensitive receptors
- Identification of local industrial sites (using the NCDEQ Community Mapping System https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1eb0fbe2bcfb4cccb3cc212af8a0b8c8).

Demographics for Robeson County will be compared to the local (census tracts and project radius) level data to identify any disparities surrounding the project area. Using standard environmental justice guidelines from the EPA and National Environmental Policy Act (NEPA) documentation, the following conditions will be flagged as communities with the potential for having environmental justice concerns:

- 10% or more in comparison to the county or state average

- 50% or more minority

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

3   Proposed Project

North Carolina Renewable Power – Lumberton, LLC (NCRP) currently holds Title V Permit No. 05543T277, with an expiration date of August 31, 2022, for a cogeneration power plant in Lumberton, Robeson County, North Carolina. NCRP fires wood, poultry litter, and poultry cake in its two stoker boilers (ID Nos. ES-1A and ES-1B). The boilers produce steam for the generation of electricity from the existing turbine.

NCRP has submitted a permit application for a Prevention of Significant Deterioration (PSD) modification at the existing facility in Robeson County. The current PSD application is the culmination of two Special Orders by Consent, and the resulting permit will include appropriate permit conditions based on the facility's emissions. In 2015, DAQ no longer permitted coal combustion at the facility. When the facility went back on-line in 2015, the boilers were permitted to combust poultry litter in the former coal combustion boilers.

The application includes installation of Best Achievable Control Technology (BACT) for the boilers, including selective non-catalytic reduction (SNCR) systems, multiclones, bagfilters, and two dry sorbent injection (DSI) systems. This equipment will control nitrogen oxides and particulate matter.

NCRP also permitted three belt dryers (ID Nos. ES-17, ES-18, and ES-19) and a poultry litter warehouse (ID No. ES-16) when the facility was returned to operation in 2015. These emission sources are considered as part of the PSD modification and were included in the BACT analysis conducted by NCRP.

More detailed information on the facility, processes, the modification, the emissions, and methods of calculation are included in the draft permit review. Please refer to the draft permit review for more in-depth information.

4   Geographic Area

The facility is located at 1866 Hestertown Rd, Lumberton NC 28358 (Robeson County). The highest off-site ambient air impacts will occur at the plant fence line. Although ambient impacts are expected to be minimal, a one-mile radius was used to evaluate the local demographics and socioeconomics to appropriately include the surrounding community and help inform public outreach efforts (Figure 1).
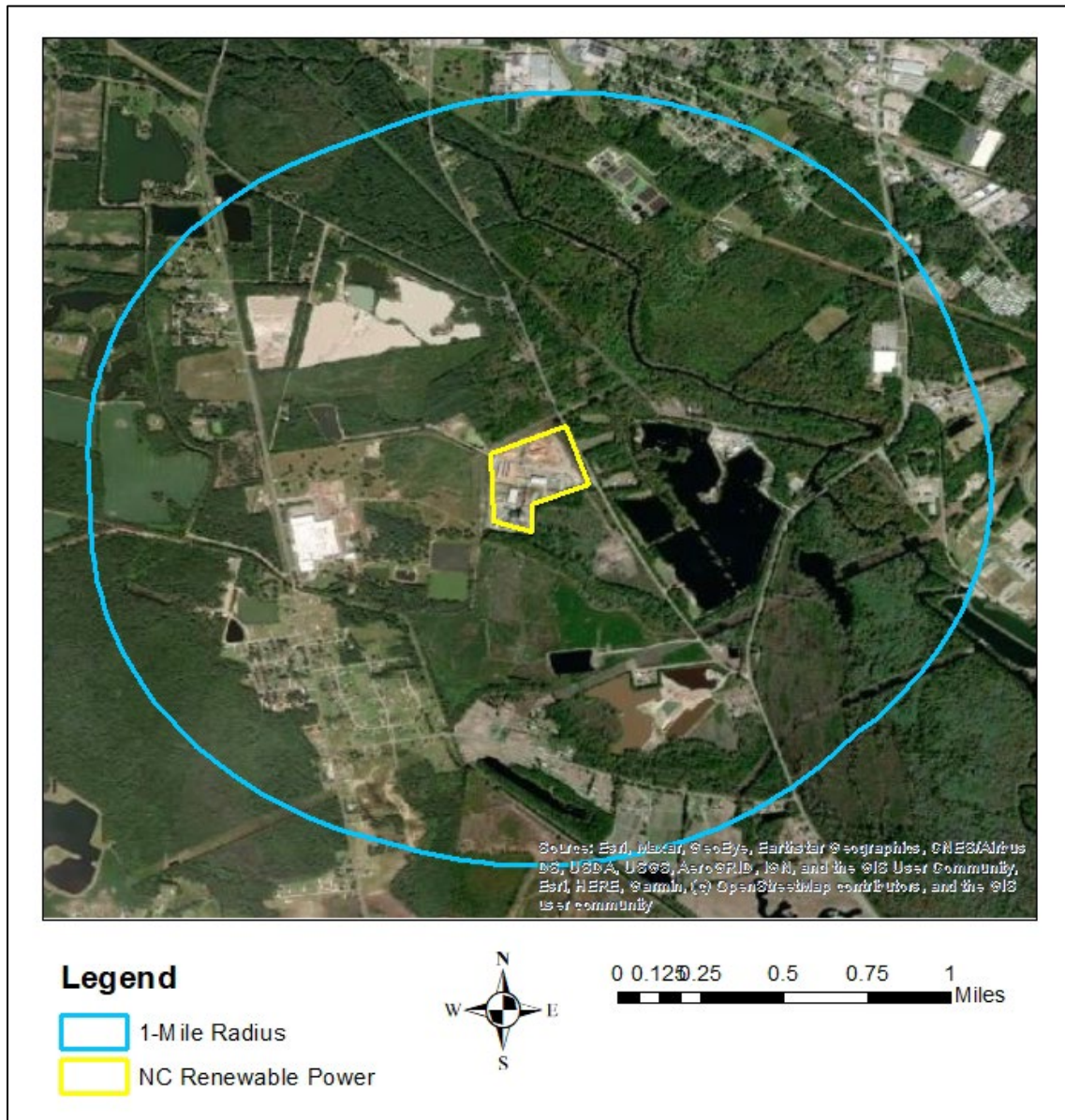
Figure 1. Facility location with one-mile radius.

Robeson County is designated as a Tier 1 county by the NC Department of Commerce. Tier 1 counties encompass the 40 most distressed counties based on average unemployment rate, median household income, percentage growth in population, and adjusted property tax per capita. The one-mile radius around the facility used in this analysis is fully within Robeson County and is encompassed by three census tracts: 9608.02, 9611, and 9616.01 (Figure 2). The facility is located in Census Tract 9608.02. Census tracts are small, relatively permanent statistical subdivisions of a county with a unique numeric code (US Census Bureau). The census tracts encompass land within the state designated tribal statistical area for the Lumbee Tribe.

The Lumbee Tribe is the largest tribe in North Carolina and is the largest tribe east of the Mississippi and takes its name from the Lumber River. There are over 55,000 members of the Lumbee Tribe in North Carolina and they reside primarily in Robeson, Hoke, Cumberland, and Scotland counties. (https://ncadmin.nc.gov/citizens/american-indians/nc-tribal-communities).
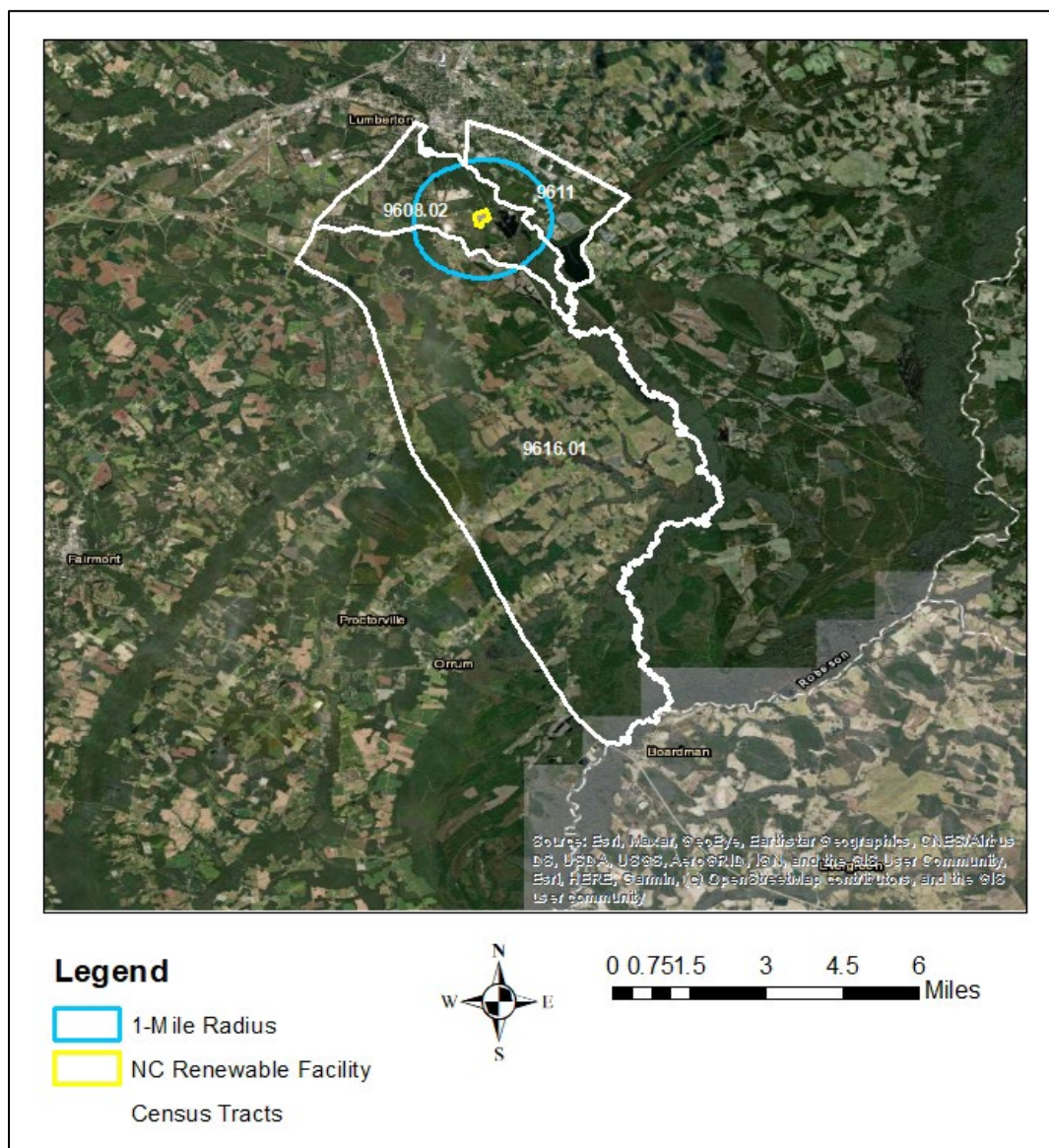
Figure 2. Census tracts surrounding facility location

5   Regional and Local Settings

The following sections on race and ethnicity, age and sex, disability, poverty, household income, and Limited English Proficiency (LEP) populations are based on U.S. Census Bureau data, first at a state and county level (regional setting), and then at a census tract and project radius level (local setting). The surrounding census tracts included will be any census tract that overlaps into the one-mile radius. Demographics of Robeson County will be compared to the local level data to identify any disparities surrounding the project area.   Using standard environmental justice guidelines from the U.S. EPA and NEPA documentation, the following conditions will be flagged as potential communities of concern:

1. 10% or more in comparison to the county average
2. 50% or more minority
3. 5% or more in comparison to the county average for poverty

For example, if a census tract has 35% of the population classified as low income but the county consists of 30% low income, the census tract would exceed the county average by 16.7% and thus be flagged as a potential area of concern. For this report, census data from 2010 and census data estimates from 2011-2015 and 2013-2017 were used. 2010 Census Bureau data is real data gathered every ten years, whereas the estimates from the more recent years are modeled based on the real data. For the data gathered from the 2013-2017 and 2011-2015 estimates, the margin of error (MOE) has been included. This value is a measure of the possible variation of the estimate around the population value (US Census Bureau). The Census Bureau standard for the MOE is at the 90% confidence level and may be any number between 0 and the MOE value in either direction (indicated by +/-).

5.1 Race and Ethnicity

Regional Setting

According to the 2010 US Census Data Table 9: Hispanic or Latino, and Not Hispanic or Latino By Race, North Carolina's population totaled 9,535,483 individuals (Table 4). The three most common racial groups across the state were White (68.5%), Black or African-American (21.5%), and Hispanic or Latino (of any race) at 8.4%.

Robeson County had a total population of 134,168 individuals. The three most common racial groups within the county were American Indian or Alaska Native (38.4%), White (29.0%), and Black or African American (24.3%). The Black or African American population (24.3%) was greater than 10% different when compared to the state (21.5%), as was the American Indian or Alaska Native population (38.4% vs. 1.3%), the population identifying as Some other race (5.0% vs. 4.3%), or Two or more races (2.5% vs. 2.2%), and the Mexican population (6.4% vs. 5.1%).

Table 1. Regional Setting - Race and Ethnicity

Race and Ethnicity	North Carolina		Robeson County	
	Number	Percent	Number	Percent
Total Population	9,535,483	100.0%	134,168	100.0%
White	6,528,950	68.5%	38,877	29.0%
Black or African American	2,048,628	21.5%	32,637	**24.3%**
American Indian or Alaska Native	122,110	1.3%	51,502	**38.4%**
Asian	208,962	2.2%	993	0.7%
Native Hawaiian and Other Pacific Islander	6,604	0.1%	86	0.1%
Some other Race	414,030	4.3%	6,672	**5.0%**
Two or More Races	206,199	2.2%	3,401	**2.5%**
HISPANIC OR LATINO (of any race)	800,120	8.4%	10,932	8.1%
Mexican	486,960	5.1%	8,616	**6.4%**
Puerto Rican	71,800	0.8%	629	0.5%
Cuban	18,079	2.3%	80	0.1%
Other Hispanic or Latino	223,281	2.3%	1,607	1.2%
Source: US Census Bureau, 2010 Census				
All **bolded and orange** cells indicate a difference that is greater than 10% when compared to the State				

Local Setting

According to the 2010 US Census Data Table 9: Hispanic or Latino, and Not Hispanic or Latino By Race, the largest population within Census Tract 9608.02 was Black or African American at 1,542 individuals and 78.2% (Table 5). The next largest populations were American Indian or Alaska Native (10.8%) and White (8.5%). The Black or African American population (78.2%) was greater than 10% different when compared to the state (21.5%) and county population (24.3%). The American Indian or Alaska Native population was greater than 10% different when compared to state populations at 10.8% in the census tract at 1.3% in the state.

The largest population within Census Tract 9611 was White with 865 individuals and 42.2%, followed by Black or African American (31.6%) and American Indian or Alaska Native (15.9%). The Black or African American population (31.6%) was greater than 10% different when compared to the state (21.5%) and county (24.3%) population, as was the Native Hawaiian and other Pacific Islander population (0.3% vs. 0.1% in the state and 0.1% in the county), the population of some other race (5.5% vs. 2.2% in the state and 2.5% in the county), two or more races (3.3% vs. 2.2% in the state and 2.5% in the county), Hispanic (11.0% vs. 8.4% in the state and 8.1% in the county), Mexican (7.2% vs. 5.1% in the state and 6.4% in the county), and other Hispanic or Latino (3.0% vs. 2.3% in the state and 1.2% in the county). The American Indian or Alaska Native population was greater than 10% when compared to the state (15.9% vs. 1.3%).

The largest population within Census Tract 9616.01 was White with 2,254 individuals and 58.5% followed by Black or African American (21.5%) and American Indian or Alaska Native (16.7%). The American Indian or Alaska Native population was greater than 10% different when compared to the state population (16.7% vs. 1.3%).

Within the one-mile project area, the largest population was Black or African American at 41% and approximately 250 individuals, followed by White (37%), and American Indian or Alaska Native (16%). The Black or African American population was greater than 10% different when compared to the state (21.5%) and county (24.3%). The American Indian or Alaska Native population was greater than 10% different when compared to the state (1.3%).

Table 2. Local Setting – Race and Ethnicity

Race and Ethnicity	Project Area – 1- Mile		Census Tract 9608.02		Census Tract 9611		Census Tract 9616.01	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Population	606	100.0%	1,971	100.0%	2,050	100.0%	3,856	100.0%
White	225	37.0%	168	8.5%	865	42.2%	2,254	58.5%
Black or African American	250	**41.0%**	1,542	**78.2%**	653	**31.6%**	829	21.5%
American Indian or Alaska Native	95	**16.0%**	213	**10.8%**	325	**15.9%**	645	**16.7%**
Asian	4	1.0%	3	0.2%	20	1.0%	13	0.3%
Native Hawaiian and Other Pacific Islander	0	-	1	0.1%	7	**0.3%**	-	0.0%
Some other Race	16	3.0%	17	0.9%	112	**5.5%**	28	0.7%
Two or More Races	16	3.0%	27	1.4%	68	**3.3%**	87	2.3%
HISPANIC OR LATINO (of any race)	32	5.0%	47	2.4%	225	**11.0%**	89	2.3%
Mexican			23	1.2%	148	**7.2%**	55	1.4%
Puerto Rican			18	**0.9%**	13	0.6%	29	0.8%
Cuban			-	0.0%	2	0.1%	-	0.0%
Other Hispanic or Latino			6	0.3%	62	**3.0%**	5	0.1%

Source: US Census Bureau, 2010 Census
All **bolded** and orange highlighted cells indicate a difference that is greater than 10% when compared to the State
All **bolded** and blue highlighted cells indicate a difference that is greater than 10% when compared to the County and State.

5.2 Age and Sex

Regional Setting

According to the 2010 US Census Data Table P 12: Sex by Age, North Carolina had a total population of 9,535,483 individuals (Table 6). The largest percentage of the total state population (63.13%) was between the ages of 18 and 64, followed by under 18 years (23.93%), and 65 years and older (13.61%).

Robeson County had a total population of 134,168 individuals. The largest percentage of the total population (61.98%) was between the ages of 18 and 64, followed by under 18 years (26.78%), and 65 years and older (11.72%). For both male and female subgroups, as well as the population overall, the population of under 5 years and under 18 years is greater than 10% different when compared to the state. This indicates the population in Robeson County trends younger than the state.

Table 3. Regional Setting- Age Groups and Sex

Subject	North Carolina		Robeson County	
	Number	**Percent**	**Number**	**Percent**
Total Population:	9,535,483	100.00	134,168	100.0%
Under 5 years:	632,040	6.63	10,222	**7.6%**
Under 18 years:	2,281,635	23.93	35,927	**26.8%**
18 to 64 years:	6,019,769	63.13	83,163	62.0%
65 years and older:	1,297,652	13.61	15,721	11.7%
Male:	4,645,492	100.00	65,243	100.0%
Under 5 years:	322,871	6.95	5,243	**8.0%**
Under 18 years:	1,167,303	25.13	18,453	**28.3%**
18 to 64 years:	2,954,233	63.59	40,537	62.1%
65 years and older:	523,956	11.28	6,253	9.6%
Female:	4,889,991	100.00	68,925	100.0%
Under 5 years:	309,169	6.32	4,979	**7.2%**
Under 18 years:	1,114,332	22.79	17,474	**25.4%**
18 to 64 years:	3,251,345	66.49	45,568	66.1%
65 years and older:	710,123	14.52	8,825	12.8%
Source: US Census Bureau, 2010 Census				
All **bolded** and orange highlighted cells indicate a difference that is greater than 10% when compared to the State				

Local Setting

According to the 2010 US Census Data Table P 12: Sex by Age, Census Tract 9608.02 had a population of 1,971 individuals (Table 7). The largest population was between 18 and 64 years of age, at 56.37%. The under 5 years population (9.08%) was greater than 10% different when compared to the state (6.63%) and the county (7.62%). In addition, the under 18 years population (30.44%) was greater than 10% different when compared to the state (23.93%) and the county (26.78%).

Census Tract 9611 had a population of 2,050. The largest population was between 18 and 64 years of age, at 60.78%. The under 5 years population (9.32%) was greater than 10% different when compared to the state (6.63%) and the county (7.62%). In addition, the under 18 years population (29.46%) was greater than 10% different when compared to the state (23.93%) and the county (26.78%).

Census Tract 9616.01 had a population of 3,856. The largest population was between 18 and 64 years of age, at 62.71%. The under 5 years population (7.88%) was greater than 10% different when compared to the state (6.63%). In addition, the under 18 years population (27.72%) was greater than 10% different when compared to the state (23.93%).

EJSCREEN identified an approximate population of 606 in the 1-mile surrounding the facility (Table 8). The under 5 years population (9%) was greater than 10% different when compared to the state (6.63%) and the county (7.62%).

Table 4. Local Setting- Age Groups and Sex

	Census Tract 9608.02		Census Tract 9611		Census Tract 9616.01	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Total Population:	1,971	100.0%	2,050	100.0%	3,856	100.0%
Under 5 years:	179	**9.1%**	191	**9.3%**	304	**7.9%**
Under 18 years:	600	**30.4%**	604	**29.5%**	1,069	**27.7%**
18 to 64 years:	1,111	56.4%	1,246	60.8%	2,418	62.7%
65 years and older:	272	13.8%	209	10.2%	373	9.7%
Male:	894	100.0%	982	100.0%	1,870	100.0%
Under 5 years:	104	**11.6%**	97	**9.9%**	165	**8.8%**
Under 18 years:	312	**34.9%**	303	**30.9%**	571	**30.5%**
18 to 64 years:	475	53.1%	599	61.0%	1,130	60.4%
65 years and older:	107	12.0%	80	8.2%	169	9.0%
Female:	1,077	100.0%	1,068	100.0%	1,986	100.0%
Under 5 years:	75	**7.0%**	94	**8.8%**	139	**7.0%**
Under 18 years:	288	**26.7%**	301	**28.2%**	498	**25.1%**
18 to 64 years:	687	63.8%	685	64.1%	1,371	69.0%
65 years and older:	153	14.2%	120	11.2%	200	10.1%
Source: US Census Bureau, 2010 Census All **bolded** and orange highlighted cells indicate a difference that is greater than 10% when compared to the State All **bolded** and blue highlighted cells indicate a difference that is greater than 10% when compared to the County and State.						

Table 5. Project Radius- Age Groups and Sex

Subject	1-mile facility radius	
	Number	**Percent**
Total Population:	606	100.0%
Under 5 years:	54	**9.0%**
Under 18 years:	178	29.0%
18 years +	428	71.0%
65 years +	62	10.0%
Source: US Census Bureau, 2010 Census All **bolded** and orange highlighted cells indicate a difference that is greater than 10% when compared to the State All **bolded** and blue highlighted cells indicate a difference that is greater than 10% when compared to the County and State.		

5.3 Disability

Regional Setting

According to the 2013-2017 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, the state of North Carolina had an estimated total population of 9,845,238 noninstitutionalized citizens (Table 9). Of those individuals, an estimated 13.7% (MOE +/- 0.1%) had a disability. The largest population of disabled civilians were 75 years and over (51.0%, MOE +/- 0.5%). The second largest population was the 65 years and older population at 27.2% (MOE +/- 0.3%). By race, American Indian and Alaskan Native had the highest estimated disability rate of 18.3% (MOE +/- 0.7%). Black or African American, White, and Native Hawaiian and Other Pacific Islander were the next three highest population estimates with disabilities in North Carolina, at 15.1% (MOE +/-0.2%), 14.0% (MOE +/- 0.1%), and 11.6% (MOE +/- 3%), respectively.

Robeson County had an estimated total population of 132,407 noninstitutionalized citizens. Of those an estimated, 16.6% (MOE +/- .6%) had a disability. The largest population of disabled civilians were 75 years and over (62%, MOE +/- 3.1%) followed by 65 years and older (41.2%, MOE +/-2.5%). By race, White residents had the highest estimated disability rate (18.3%, MOE 1.1%) followed by Black or African American, American Indian and Alaska Native alone, and two or more races, at 17.4% (MOE +/-1.3%), 16.9% (MOE +/- 0.9%), and 14.1% (MOE +/- 4%). All populations, excluding American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Hispanic or Latino, Some other race alone, Under 5 years, 5 to 17 years, and 18 to 34 years displayed estimates that were greater than 10% different when compared to the state.

Table 6. Regional Setting- Disability

Subject	North Carolina						Robeson County					
	Total		With a Disability		Percent with a Disability		Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total civilian noninstitutionalized population	9,845,238	1,883	1,344,677	9,296	13.7%	0.1	132,407	248	22,033	774	**16.6%**	0.6
SEX												
Male	4,734,744	2,356	644,157	5,756	13.6%	0.1	63,426	174	10,167	463	**16.0%**	0.7
Female	5,110,494	1,611	700,520	5,791	13.7%	0.1	68,981	163	11,866	547	**17.2%**	0.8
RACE AND HISPANIC OR LATINO ORIGIN												
White alone	6,805,260	7,679	950,044	7,928	14.0%	0.1	38,036	704	6,956	402	**18.3%**	1.1
Black or African American alone	2,101,735	5,025	316,325	4,035	15.1%	0.2	31,635	236	5,500	402	**17.4%**	1.3
American Indian and Alaska Native alone	114,961	1,802	20,994	862	18.3%	0.7	52,041	463	8,781	480	16.9%	0.9
Asian alone	266,672	1,954	13,149	763	4.9%	0.3	878	55	99	47	**11.3%**	5.2
Native Hawaiian and Other Pacific Islander alone	5,842	533	678	170	11.6%	3	55	50	0	28	0.0%	40
Some other race alone	306,809	7,341	15,461	1,136	5.0%	0.3	6,610	736	252	104	3.8%	1.5
Two or more races	243,959	5,401	28,026	1,407	11.5%	0.5	3,152	492	445	145	**14.1%**	4
Hispanic or Latino	895,338	953	53,910	1,944	6.0%	0.2	11,350	47	573	145	5.0%	1.3
AGE												
Under 5 years	603,917	730	5,099	590	0.8%	0.1	9,219	8	44	35	0.5%	0.4
5 to 17 years	1,682,039	807	95,840	2,124	5.7%	0.1	25,035	43	1,279	195	5.1%	0.8
18 to 34 years	2,190,572	2,241	144,807	3,125	6.6%	0.1	30,663	102	2,200	285	7.2%	0.9
35 to 64 years	3,894,704	2,076	560,147	6,001	14.4%	0.2	49,646	158	9,801	522	**19.7%**	1.1
65 to 74 years	895,249	1,047	243,488	2,801	27.2%	0.3	11,339	138	4,673	294	**41.2%**	2.5
75 years and over	578,757	1,013	295,296	2,759	51.0%	0.5	6,505	183	4,036	213	**62.0%**	3.1

Source: US Census Bureau, ACS 5-year Estimates (2013-2017)

All **bolded** and orange highlighted cells indicate a difference that is greater than 10% when compared to the State

Local Setting

Census Tract 9608.02 had an estimated total population of 1,709 noninstitutionalized citizens. Of those individuals, an estimated 17.5% (MOE+/- 4%) had a disability (Table 10). The largest population of disabled civilians were 75 years and over (69.6%, MOE +/- 15.3%). By race, White alone had the highest estimated disability rate of 18.4% (MOE +/- 12.5%). The following population groups had a greater than 10% difference when compared to the state and county: female, some other race alone, two or more races, Hispanic or Latino, 35 to 64 years, 75 years and over. The following populations had a greater than 10% difference when compared to the state only: total civilian noninstitutionalized population, male, white alone, Black or African American alone.

Census Tract 9611 had an estimated total population of 2,025 noninstitutionalized citizens. Of those individuals, an estimated 13.6% (MOE+/- 3.7%) had a disability. The largest population of disabled civilians were 65 to 74 years and over (36.8%, MOE +/- 15.5%). By race, American Indian and Alaska Native had the highest estimated disability rate of 27.5% (MOE +/- 14.2%). The following population groups had a greater than 10% difference when compared to the state and county: white alone, American Indian and Alaska Native alone, Asian alone, two or more races, 5 to17 years and 18 to 34 years. The following populations had a greater than 10% difference when compared to the state only: female, 35 to 64 years, and 65 to 74 years.

Census Tract 9616.01 had an estimated total population of 3,756 noninstitutionalized citizens. Of those individuals, an estimated 11.1% (MOE+/- 2.5%) had a disability (Table 11). The largest population of disabled civilians were 75 years and over (47.3%, MOE +/- 15%). By race, White alone had the highest estimated disability rate of 17% (MOE +/- 4.4%) which is greater than 10% when compared to the state. EJSCREEN does not provide data on disability, and thus disability was not assessed for the one-mile radius

Table 7. Local Setting- Disability

Subject	Census Tract 9608.02						Census Tract 9611					
	Total		With a Disability		Percent with a Disability		Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total civilian noninstitutionalized population	1,709	185	299	75	**17.5%**	4	2,025	186	276	73	13.6%	3.7
SEX												
Male	842	101	128	42	**15.2%**	4.6	1,026	113	163	48	**15.9%**	4.7
Female	867	122	171	52	**19.7%**	5.5	999	125	113	37	11.3%	3.8
RACE AND HISPANIC OR LATINO ORIGIN												
White alone	163	57	30	24	**18.4%**	12.5	733	128	117	40	**16.0%**	6
Black or African American alone	1,337	169	231	70	**17.3%**	4.7	657	136	51	29	7.8%	4.7
American Indian and Alaska Native alone	129	59	23	19	17.8%	14.7	316	102	87	58	**27.5%**	14.2
Asian alone	8	13	0	12	0.0%	100	8	12	1	3	**12.5%**	41
Native Hawaiian and Other Pacific Islander alone	0	12	0	12	-	**	0	12	0	12	-	**
Some other race alone	57	64	7	10	**12.3%**	16.7	236	110	0	12	0.0%	12.8
Two or more races	15	21	8	11	**53.3%**	13	75	81	20	22	**26.7%**	20.6
Hispanic or Latino	57	64	7	10	**12.3%**	16.7	332	126	6	9	1.8%	2.8
AGE												
Under 5 years	132	50	0	12	0.0%	21.6	232	76	0	12	0.0%	13
5 to 17 years	431	79	21	19	4.9%	4.3	406	87	32	23	**7.9%**	5.6
18 to 34 years	265	73	18	18	6.8%	6.8	575	105	52	35	**9.0%**	6.4
35 to 64 years	654	78	160	51	**24.5%**	6.5	633	74	130	40	**20.5%**	6.1
65 to 74 years	112	25	20	15	17.9%	11.8	133	26	49	22	**36.8%**	15.5
75 years and over	115	39	80	33	**69.6%**	15.3	46	23	13	11	28.3%	27.5

Source: US Census Bureau, American Community Survey (5-year estimates)

All **bolded** and orange highlighted cells indicate a difference that is greater than 10% when compared to the State

All **bolded** and blue highlighted cells indicate a difference that is greater than 10% when compared to the County and State.

Table 8. Local Setting- Disability (cont'd)

Subject	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total civilian noninstitutionalized population	3,756	370	416	96	11.1%	2.5
SEX						
Male	1,778	220	202	66	11.4%	3.6
Female	1,978	221	214	70	10.8%	3.5
RACE AND HISPANIC OR LATINO ORIGIN						
White alone	1,908	257	324	89	**17.0%**	4.4
Black or African American alone	968	206	20	20	2.1%	2.1
American Indian and Alaska Native alone	638	245	72	49	11.3%	6.3
Asian alone	0	12	0	12	-	**
Native Hawaiian and Other Pacific Islander alone	0	12	0	12	-	**
Some other race alone	213	165	0	12	0.0%	14.1
Two or more races	29	37	0	12	0.0%	55.1
Hispanic or Latino	310	209	17	24	5.5%	6.7
AGE						
Under 5 years	218	98	0	12	0.0%	13.8
5 to 17 years	861	195	35	37	4.1%	4.2
18 to 34 years	803	147	0	12	0.0%	4
35 to 64 years	1,366	156	199	70	14.6%	5.2
65 to 74 years	246	75	58	36	23.6%	13.2
75 years and over	262	77	124	52	47.3%	15

Census Tract 9616.01

5.4 Poverty

Regional Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2013-2017 American Community Survey 5-Year Estimates, from the US Census Bureau, North Carolina had an estimated population of 9,783,738, with 16.1% (MOE +/- 0.2%) below the poverty level (Table 12). Across all subjects, Some Other Race had the highest percent living below the poverty level at 32.0% (MOE +/- 1.4%). The next three subjects with the highest poverty level were Hispanic or Latino at 30.1% (MOE +/- .8%), American Indian and Alaska Native at 26.2% (MOE +/- 1.5%), and Black or African American at 24.9% (MOE +/- .4%). The age group with the highest population below poverty was under 18 (22.9%, MOE +/- 0.6%), followed by 18 to 64 (15.3%, MOE +/- 0.2%).

Robeson County had an estimated population of 130,706 with 29.2% (MOE +/-1.3%) living below the poverty level. Across all subjects, Some Other race had the highest percent living below the poverty level at 44.1% (MOE +/- 7.4%). The next three subjects with the highest poverty level were Under 18 at 42.1% (MOE 2.2%), Hispanic or Latino at 41.6% (MOE +/- 4.7%), and Black or African American at 36.7 (MOE +/- 2%). All subject groups had a greater than 5% difference when compared to the state, except for Native Hawaiian and Other Pacific Islander.

Table 9. Regional Setting- Poverty

| Subject | North Carolina | | | | | | Robeson County | | | | | |
| | Total | | Below poverty level | | Percent below poverty level | | Total | | Below poverty level | | Percent below poverty level | |
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	9,783,738	1,751	1,579,871	17,833	16.1%	0.2	130,706	623	38,182	1,667	**29.2%**	1.3
AGE						0.4						
Under 18	2,256,186	1,865	516,821	9,185	22.9%	0.6	33,707	183	14,202	758	**42.1%**	2.2
18 to 64	6,053,546	1,090	923,859	9,663	15.3%	0.2	79,155	598	20,769	1,062	**26.2%**	1.3
65 years and over	1,474,006	881	139,191	2,754	9.4%	0.2	17,844	239	3,211	256	**18.0%**	1.4
SEX												
Male	4,733,269	2,259	694,126	9,539	14.7%	0.2	62,722	282	17,208	921	**27.4%**	1.4
Female	5,050,469	2,443	885,745	10,217	17.5%	0.2	67,984	419	20,974	928	**30.9%**	1.3
RACE AND HISPANIC OR LATINO ORIGIN												
White	6,766,691	7,591	845,573	13,639	12.5%	0.2	37,263	839	7,741	781	**20.8%**	1.9
Black or African American	2,077,559	4,736	517,071	8,162	24.9%	0.4	30,958	373	11,351	661	**36.7%**	2.0
American Indian and Alaska Native	114,751	1,804	30,017	1,757	26.2%	1.5	51,937	468	14,967	1,079	**28.8%**	2.0
Asian	262,596	1,970	33,282	2,248	12.7%	0.9	874	55	284	123	**32.5%**	13.8
Native Hawaiian and Other Pacific Islander	5,886	537	1,097	297	18.6%	4.9	55	50	-	28	0.0%	40.0
Some other Race	305,431	7,334	97,609	5,276	32.0%	1.4	6,516	730	2,971	621	**44.1%**	7.4
Two or more races	240,824	5,455	55,222	2,570	22.9%	1	3,103	495	968	258	**31.2%**	6.4
Hispanic or Latino	894,810	1,312	268,985	7,035	30.1%	0.8	11,197	83	4,653	526	**41.6%**	4.7
All individuals below:												
50 percent of poverty level	688,118	10,757					17,199	1,351				
125 percent of poverty level	2,094,292	20,441					48,025	1,615				
150 percent of poverty level	2,596,452	22,139					56,948	1,637				
185 percent of poverty level	3,291,075	23,713					68,119	1,805				
200 percent of poverty level	3,571,557	25,056					72,223	1,891				
Source: US Census, ACS 5-year Estimates 2013-2017. All **orange and bolded** cells indicate a difference of greater than 5% increase when compared to the state.												

Local Setting

Census Tract 9608.02 had an estimated population of 1,678. Of this population, 41.2% (MOE 7.5%) were estimated to be below the poverty level (Table 13). The largest age group living under the poverty level was under 18, at 58.8% (MOE +/-12%). The largest racial group was Asian at 100% (MOE +/- 100%). The following groups were greater than 5% different when compared to both the county and the state: overall population, under 18 years, 18 to 64 years, male, female, white, Black or African American, American Indian and Alaska Native, Asian. 65 years and older was greater than 5% different when compared just to the state.

Census Tract 9611 had an estimated population of 2,025. Of this population, 46% (MOE +/- 8.1%) were estimated to be below the poverty level. The largest age group living under the poverty level was Under 18, at 65.2% (MOE 11.8%). The largest racial group was Black or African American at 62.7% (MOE +/- 12.3%). All population groups, except for American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and two or more races had an estimate that was greater than 5% different when compared to both state and county estimates.

Census Tract 9616.01 had an estimated population of 3,736. Of this population, 29.7% (MOE 8%) were estimated to be below the poverty level (Table 14). The largest age group living under the poverty level was 18 to 64, at 42.5% (MOE +/-15.6%). The largest racial group was American Indian and Alaska Native at 49.7% (MOE +/- 21.4%). The following groups were greater than 5% different when compared to both the county and the state: 65 years and over, White, American Indian and Alaska native. The following groups were greater than 5% different when compared just to the state: overall population, under 18, 18 to 64, male, female, and some other race.

Table 10. Local Setting- Poverty

Subject	Census Tract 9608.02						Census Tract 9611					
	Total		Below poverty level		Percent below poverty level		Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	1,612	176	627	147	**38.9%**	8.6	2,093	193	975	198	**46.6%**	7.3
AGE												
Under 18 years	521	99	302	98	**58.0%**	14.7	662	117	443	122	**66.9%**	11.8
18 to 64 years	882	120	293	65	**33.2%**	7.5	1,255	122	503	110	**40.1%**	7.7
65 years and over	209	34	32	19	**15.3%**	8.6	176	28	29	20	**16.5%**	9.8
SEX												
Male	788	112	269	76	**34.1%**	8.6	1,103	144	495	123	**44.9%**	8.3
Female	824	103	358	94	**43.4%**	10.8	990	108	480	103	**48.5%**	7.5
RACE AND HISPANIC OR LATINO ORIGIN												
White	128	51	24	19	**18.8%**	11.4	760	152	314	129	**41.3%**	12.7
Black or African American	1,297	166	519	133	**40.0%**	8.8	601	121	399	127	**66.4%**	12.8
American Indian and Alaska Native	89	46	61	47	**68.5%**	28.9	344	86	117	52	**34.0%**	12.8
Asian	23	30	23	30	**100.0%**	64.2	16	19	0	12	0.0%	76.9
Native Hawaiian and Other Pacific Islander	0	12	0	12	-	**	0	12	0	12	-	**
Some other race	60	64	0	12	0.0%	39.7	285	129	145	104	**50.9%**	23
Two or more races	15	21	0	12	0.0%	79.5	87	77	0	12	0.0%	31.9
Hispanic or Latino origin (of any race)	60	64	0	12	0.0%	39.7	447	146	238	124	**53.2%**	16.4
All individuals below:												
50 percent of poverty level	195	80					332	136				
125 percent of poverty level	759	145					1,122	193				
150 percent of poverty level	844	141					1,264	199				
185 percent of poverty level	1,026	157					1,480	205				
200 percent of poverty level	1,053	162					1,480	205				

Source: US Census, 2013-2017 ACS 5-Year Estimates. All **orange and bolded** highlighted cells indicate a difference that is greater than 5% when compared to the state. All **bolded** and blue highlighted cells indicate a difference that is greater than 5% when compared to the county and the state.

Table 11. Local Setting- Poverty (cont'd)

Subject	Census Tract 9616.01					
	Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	3,736	358	1,110	315	**29.7%**	8
AGE						
Under 18	1,059	212	450	191	**42.5%**	15.6
18 to 64	2,169	224	538	152	**24.8%**	7
65 years and over	508	77	122	61	**24.0%**	11.9
SEX						
Male	1,768	213	498	172	**28.2%**	9.1
Female	1,968	215	612	179	**31.1%**	8.4
RACE AND HISPANIC OR LATINO ORIGIN						
White	1898	250	479	168	**25.2%**	7.6
Black or African American	968	206	218	135	22.5%	13.6
American Indian and Alaska Native	628	238	312	163	**49.7%**	21.4
Asian	0	12	0	12	0.0%	0
Native Hawaiian and Other Pacific Islander	0	12	0	12	0.0%	0
Some other Race	213	165	101	105	**47.4%**	35.9
Two or more races	29	37	0	12	0.0%	55.1
Hispanic or Latino	310	209	101	105	32.6%	33.3
All individuals below:						
50 percent of poverty level	552	228				
125 percent of poverty level	1,544	365				
150 percent of poverty level	1,702	358				
185 percent of poverty level	2,145	369				
200 percent of poverty level	2,225	375				
Source: US Census, 2013-2017 ACS 5-Year Estimates. All **orange and bolded** highlighted cells indicate a difference that is greater than 5% when compared to the state. All **bolded** and blue highlighted cells indicate a difference that is greater than 5% when compared to the county and the state.						

5.5 Household Income

Regional Setting

The following table (Table 15) was compiled using data from the Census Table S1901, Income in the Past 12 Months (in 2017 Inflation-Adjusted Dollars) 2013-2017 American Community Survey 5-Year Estimates for North Carolina. The North Carolina household income range with the highest percent was $50,000 to $74,999, at 18.1%. The median household income was $50,320 and the mean income was $70,523. The household income range for Robeson County with the highest percent was $15,000 to $24,999 at 15.2%. The median income was $32,407 and the mean income was $46,080. All income ranges less than $35,000 had percentages that were more than 10% higher than the state ranges.

Table 12. Regional Setting- Household Income

Subject	North Carolina		Robeson County	
	Households		**Households**	
	Estimate	**Margin of Error (+/-)**	**Estimate**	**Margin of Error (+/-)**
Total	3,874,346	8,789	46,163	427
Less than $10,000	7.3%	0.1	**14.5%**	0.9
$10,000 to $14,999	5.8%	0.1	**9.9%**	0.7
$15,000 to $24,999	11.1%	0.1	**15.2%**	0.9
$25,000 to $34,999	11.0%	0.1	**13.4%**	0.8
$35,000 to $49,999	14.5%	0.1	14.9%	0.8
$50,000 to $74,999	18.1%	0.1	14.7%	0.9
$75,000 to $99,999	11.8%	0.1	8.8%	0.7
$100,000 to $149,999	11.7%	0.1	6.0%	0.6
$150,000 to $199,999	4.4%	0.1	1.5%	0.3
$200,000 or more	4.3%	0.1	1.2%	0.2
Median income (dollars)	50,320	204	32,407	916
Mean income (dollars)	70,523	287	46,080	1,625
Source: US Census, ACS 5-year Estimates 2013-2017. All **orange and bolded** cells indicate a difference of greater than 10% increase when compared to the state.				

Local Setting

In Census Tract 9608.02, the household income range with the highest percent was less than $10,000 at 24.2% (MOE +/- 6.2%). The median household income was $25,926 and the mean income was $45,330. The less than $10,000 and $10,000 to $14,999 income ranges were greater than 10% different compared to the county and the state. The $15,000 to $24,999 and $25,000 to $34,999 income ranges were greater than 10% different compared to the state (Table 16).

In Census Tract 9611, the household income range with the highest percent was between $15,000 and $24,999 at 20.7% (MOE +/- 5.3%). The median household income was $26,435 and the mean income was $32,185. The $10,000 to $14,999, $15,000 to $24,999, and $25,000 to $34,999 income ranges were greater than 10% different compared to the county and the state. The less than $10,000 income range was greater than 10% different compared to the state.

In Census Tract 9616.01, the household income range with the highest percent was between $50,000 and $74,999 at 18.3% (MOE +/- 5.8%). The median household income was $26,435 and the mean income was $32,185. The $10,000 to $14,999, $15,000 to $24,999, and $25,000 to $34,999 income ranges were greater than 10% different compared to the county and the state. The less than $10,000 income range was greater than 10% different compared to the state.

In the one-mile facility radius, the household income range with the highest percent was $25,000-$50,000 at 28%, followed by less than $15,000 at 25% (Table 17).

Table 13. Local Setting- Household Income

Subject	Census Tract 9608.02 Households		Census Tract 9611 Households		Census Tract 9616.01 Households	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total	616	55	653	48	1,362	89
Less than $10,000	**24.2%**	6.2	**15.6%**	4.5	**12.4%**	4.6
$10,000 to $14,999	**11.4%**	4.3	**11.3%**	4.2	**11.7%**	4.1
$15,000 to $24,999	**12.8%**	5.2	**20.7%**	5.3	**17.8%**	5.2
$25,000 to $34,999	**13.5%**	5.1	**17.3%**	5.4	**15.6%**	4.9
$35,000 to $49,999	14.3%	4.9	14.5%	4.3	14.9%	4.7
$50,000 to $74,999	14.6%	4.9	13.9%	4.1	18.3%	5.8
$75,000 to $99,999	2.9%	2.8	4.1%	2.8	3.3%	2.6
$100,000 to $149,999	3.6%	2.7	2.5%	2.1	6.0%	3.1
$150,000 to $199,999	1.0%	1.4	0.0%	4.9	0.0%	2.4
$200,000 or more	1.8%	1.9	0.0%	4.9	0.0%	2.4
Median income (dollars)	25,926	4,946	26,435	3,433	31,853	2,846
Mean income (dollars)	45,330	16,277	32,185	2,826	38,063	4,400
Source: US Census, 2013-2017 ACS 5-Year Estimates. All **orange and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state. All **bolded** and blue highlighted cells indicate a difference that is greater than 10% when compared to the county and the state.						

Table 14. Project Radius- Household Income

Subject	1-mile facility radius		
	Estimate	MOE	Percent
Total:	197	78	100%
Less than $15,000	50	67	25%
$15,000-$25,000	30	58	15%
$25,000-$50,000	55	78	28%
$50,000-$75,000	35	61	18%
$75,000 or more	26	64	13%
Source: EJSCREEN. US Census, 2013-2017 ACS 5-year Estimates			

Per Capita Income

Per Capita Income data was obtained through the Census Table B19301, Per Capita Income in the Past 12 Months (In 2017 Inflation-Adjusted Dollars), 2013-2017 American Community Survey 5-Year Estimates. The North Carolina per capita income estimate is $28,123. The Robeson County estimate is $17,161 and the estimates for the census tracts are: $17,366 (9608.02), $11,566 (9611), and $14,687 (9616.01). Both the county and the census tracts had a significantly lower Per Capita Income compared to the state (Table 18).

The EJSCREEN analysis also provided per capita income estimates for the one-mile buffer surrounding the NC Renewable Power site. The per capita income estimate for the populations inside the one-mile buffer was $16,644, also lower than the state and the county.

Table 15. Per Capita Income

Location	Subject		Per Capita Income in Last 12 Months (Dollars)
North Carolina	Per Capita Income	Estimate	28,123
		Margin of Error +/-	130
Robeson County	Per Capita Income	Estimate	17,161
		Margin of Error +/-	621
Census Tract 9608.01	Per Capita Income	Estimate	7,756
		Margin of Error +/-	977
Census Tract 9608.02	Per Capita Income	Estimate	17,366
		Margin of Error +/-	5,923
Census Tract 9610	Per Capita Income	Estimate	20,267
		Margin of Error +/-	4188
Census Tract 9611	Per Capita Income	Estimate	11,566
		Margin of Error +/-	1,344
Census Tract 9616.01	Per Capita Income	Estimate	14,687
		Margin of Error +/-	1743
One Mile	Per Capita Income	Estimate	16,644
		Margin of Error +/-	-
Source: US Census, 2013-2017 ACS 5-Year Estimates			

6 Limited English Proficiency (LEP)

The following table (Table 19) was prepared using data from Census Table B16001, Language Spoken at Home by Ability to Speak English for the population 5 years and over, 2011-2015 American Community Survey 5-Year Estimates. Per the Safe Harbor Guidelines, should an LEP Group be identified during the permit application process, written translations of vital documents for each eligible LEP language group that constitutes 5% or includes 1,000 members (whichever is less) of the population of persons eligible to be served or likely to be affected or encountered. If there are fewer than 50 persons in a language group that reaches the 5% trigger, then DEQ will not translate vital written materials, but instead will provide written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost. The safe harbor provisions apply to the translation of written documents only. Safe harbor guidelines are per the U.S. EPA guidance for LEP persons and implemented by DEQ when deemed appropriate.

The following seven potential LEP language groups were identified during this initial screening of demographic data: Spanish or Spanish Creole, French, Vietnamese, and Other Asian languages (Table 19). However, none of the language groups identified reached the 5% threshold. If larger LEP groups are identified during the permit process or specific translation requests are received, DEQ will revisit the Safe Harbor Guidelines.

Table 16. Limited English Proficiency

LANGUAGE SPOKEN AT HOME	Census Tract 9608.02		Census Tract 9611		Census Tract 9616.01	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	1,783	+/-232	1,865	+/-204	3,428	+/-338
Speak only English	1,747	+/-232	1,663	+/-184	3,237	+/-349
Spanish or Spanish Creole:	36	+/-46	183	+/-98	108	+/-84
Speak English "very well"	26	+/-38	93	+/-58	35	+/-42
Speak English less than "very well"	**10**	+/-11	**90**	+/-73	**73**	+/-75
French (incl. Patois, Cajun):	0	+/-12	9	+/-12	0	+/-12
Speak English "very well"	0	+/-12	0	+/-12	0	+/-12
Speak English less than "very well"	0	+/-12	**9**	+/-12	0	+/-1
Vietnamese:	0	+/-12	0	+/-12	61	+/-53
Speak English "very well"	0	+/-12	0	+/-12	18	+/-26
Speak English less than "very well"	0	+/-12	0	+/-12	**43**	+/-37
Other Asian languages:	0	+/-12	10	+/-16	0	+/-12
Speak English "very well"	0	+/-12	0	+/-12	0	+/-12
Speak English less than "very well"	0	+/-12	**10**	+/-16	0	+/-12
Source: US Census, ACS 5-year estimates 2011-2015						

7 County Health

The University of Wisconsin Population Health Institute, in collaboration with the Robert Wood Johnson Foundation, calculated a County Health Rankings system for all the States in the United States (www.countyhealthrankings.org).This ranking is based on health outcomes (such as lifespan and self-reported health status) and health factors (such as environmental, social and economic conditions). According to this 2021 report, out of all 100 counties in North Carolina (with 1 indicating the healthiest), Robeson County ranks 100th in health factors and 100th in health outcomes (Figure 3).
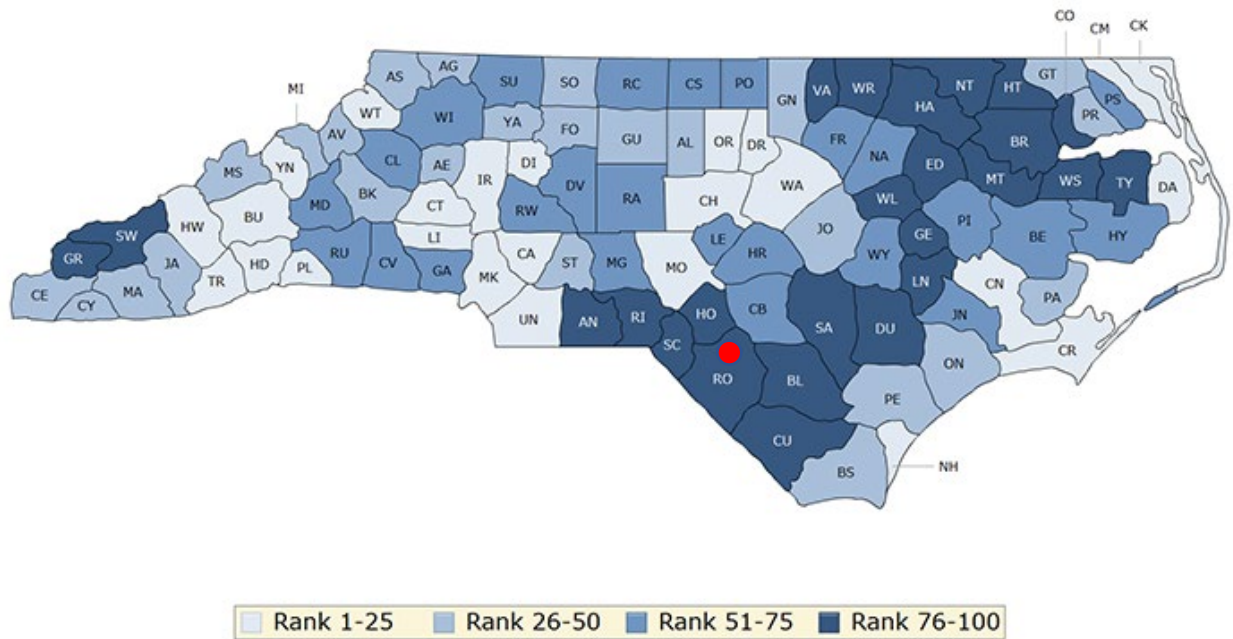
Figure 3. County Health Rankings for Health Factors in North Carolina provided by University of Wisconsin Public Health Institute.

According to the NC DEQ Community Mapping System Environmental Justice Tool, all causes of death (per 100,000 deaths) identified showed a higher rate in Robeson County than the state (Table 20).

Table 17. Health Outcomes

Cause of Death	Robeson County	North Carolina
Cancer	191.7	169.1
Heart Disease	218.1	163.7
Stroke	48.1	43.1
Cardiovascular Disease	281.7	221.9
Diabetes	46.5	22.8
Source: NCDEQ 2020 EJ Tool		

8 Local Sensitive Receptors

The Environmental Protection Agency suggests that sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Extra care must be taken when dealing with contaminants and pollutants in close proximity to areas recognized as sensitive receptors. For instance, children and the elderly may have a higher risk of developing asthma from elevated levels of certain air pollutants than a healthy individual aged between 18 and 64.

Within the one-mile project radius, the following potential sensitive receptors were identified (Figure 4):

- Robeson Community College Emergency Services Training Center
- Christian Faith Center - Lumberton

Additional sensitive receptors may be identified during the permit application process.
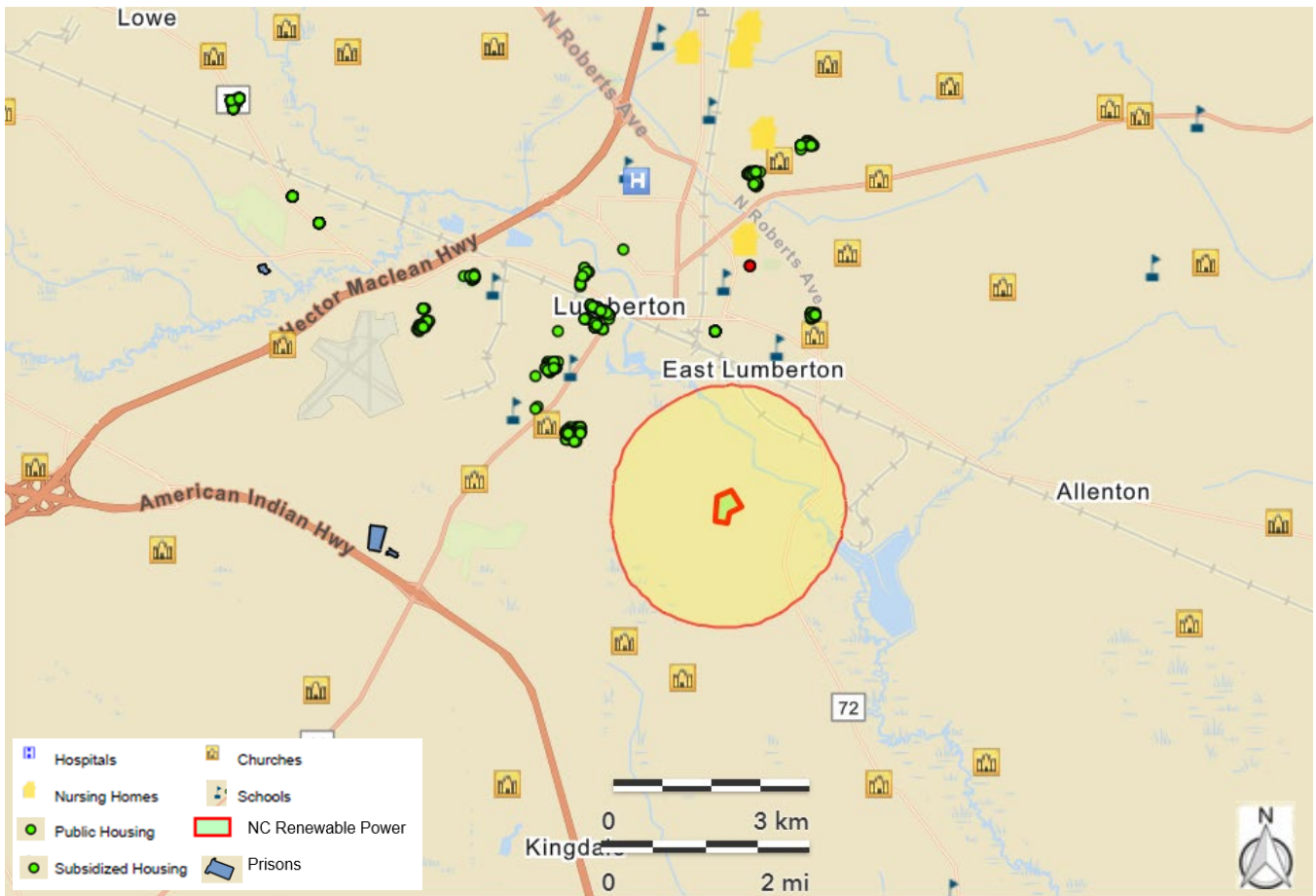

Figure 4. Sensitive receptors surrounding facility.

9 Local Industrial Sites

Within the one-mile radius, there are 21 facility permits or incident reports (as of September 3, 2021). The 21 facility permits and incident reports include:

- 3 air quality permit sites
- 4 NPDES wastewater treatment facility permits
- 2 coal ash structural fills
- 2 permitted solid waste landfills
- 2 inactive hazardous sites
- 1 pre-regulatory landfill site
- 2 brownfield program sites
- 1 hazardous waste sites
- 2 aboveground storage tank incidents
- 1 underground storage tank active facilities
- 1 land use restrictions or notices

It is important to note that there may be multiple permits associated with one facility and incidents vary in size, significance, and timeframe.
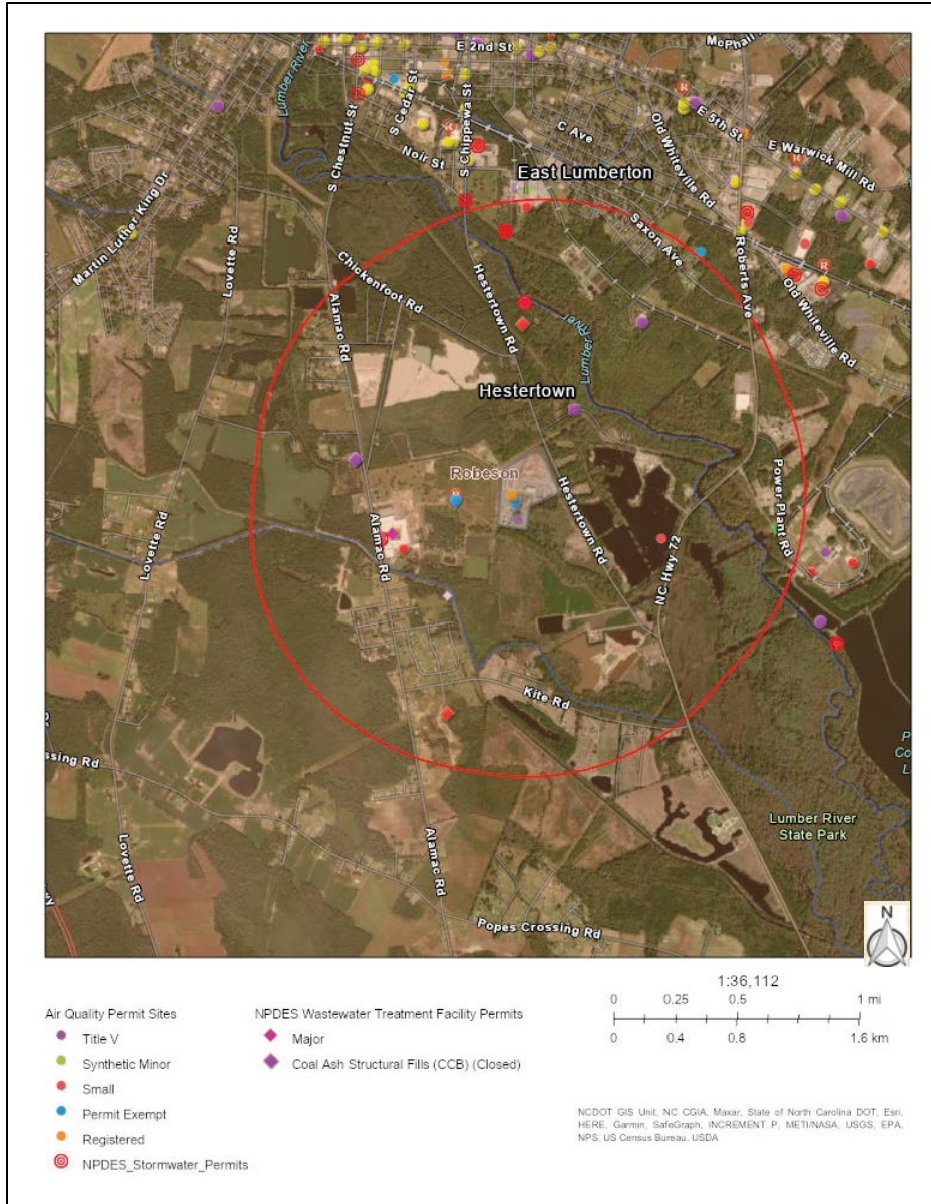
Figure 5. Permitted facilities and incidents with the 1-mile radius surrounding the NC Renewable Power facility

10 Conclusion

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). This report examined the demographic and environmental conditions in North Carolina, Robeson County, Census Tracts 9608.02, 9611, 9616.01, and the one-mile radius around the NC Renewable Power facility. Potential emissions rates outlined in the permit application and county level health data were also included, as well as data from the NCDEQ Community Mapping System.

It is important to keep in mind that based on the available data, the following limitations of this report: census data is from 2010 and may be outdated; the more recent census data through 2017 are estimates; EJSCREEN does not provide all of the data categories that were used in this analysis so the census tract and county data cannot be compared to the radius used surrounding the facility boundary for all criteria; census tracts can still be large areas and do not allow for exact locations of each population; some of the census tracts slightly overlap with the one-mile radius; and the Department cannot determine which populations are in that small amount of overlap around the facility.

The Department assessed the available demographic and socioeconomic data of the communities surrounding the NC Renewable Power facility in regard to its permit application. The racial composition of the immediate area shows a much larger proportion of Black or African American residents (41% in the one-mile buffer) when compared to the county and the state and a significantly larger proportion of American Indian or Alaska Native residents (16% in the one-mile buffer) compared to the state. The census tracts and county also show a higher proportion of Black or African American and American Indian or Alaska Native residents when compared to the state.

In addition, disability estimates for almost every population group at the census tract level were significantly higher than the state, and in many cases, the county rates as well. Poverty status is high in most surrounding census tract levels, with census tracts displaying overall levels of 41.2% (9608.02), 46% (9611), 29.7% (9616.01) compared to 16.1% in the state and 29.2% in Robeson County. Household income analysis found that in all census tracts, as well as Robeson County, there were significantly more people in the bottom four income brackets when compared to the state. Analysis of the one-mile buffer area around the facility showed that the majority of households have an income below $50,000. From a health perspective, out of all 100 counties in North Carolina (with 1 indicating the healthiest), Robeson County ranks 100th in health factors and 100th in health outcomes and demonstrates a higher rate of all causes of death than the state.

Based on the results from this Draft EJ Report, the Department will provide the following outreach strategies to ensure meaningful engagement from this community:

- Provide the opportunity to make comments by phone during the public hearing;
- Set up and monitor a dedicated phone line for commenters to leave comments by voicemail at their convenience;

- Communicate by with community leaders, local tribal officials, and community-based organizations about the facility either by phone or virtually;
- Prepare and distribute an easy-to-read one-page overview describing the draft air quality permit and how to provide public comment;
- Connect with officials from the city of Lumberton and Robeson County, including the local health department;
- Consult the list of sensitive receptors when distributing the one-page overview.