



# ECOLAB, INC. - New Hanover

## Draft Environmental Justice Report

North Carolina Department of Environmental Quality

July 29, 2021

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## 1 Introduction

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 evaluation examines the demographic and environmental conditions in New Hanover County, as well as Census Tract 109 and the one-mile radius around the property boundary of the existing Ecolab, Inc.-New Hanover facility. Finally, the demographics of the entire state of North Carolina are also considered as they compare to both the county and local census tract 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 the Final EJ Report.

## 2 Environmental Justice Evaluation

The Department has assessed the permit application and the demographics of the communities surrounding the requested permit application. Accordingly, this Draft Environmental Justice Report includes:

- Permit applications submitted by Ecolab, Inc. - New Hanover
- Facility emissions overview
- Study of area demographics for both locations [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
- Local industrial sites (using the NCDEQ Community Mapping System <https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1eb0fbe2bcfb4cccb3cc212af8a0b8c8>)

Demographics from New Hanover County, as well as the state, will be compared to the local (census tract and project radius) level data to identify any disparities surrounding the project areas. Using standard environmental justice guidelines from the EPA and National Environmental Policy Act (NEPA) documentation, certain areas will be flagged as potentially underserved communities (more detail under Section 5: Regional and Local Settings; page 10).

### 3 Proposed Project

Ecolab, Inc. has an existing fumigation operation located on the North Carolina State Port at Wilmington, NC. This fumigation operation was, previously permitted under North Carolina air quality permit (10313R02) for emission sources associated with fumigation of import and export commodities (primarily log export). The facility has submitted a permit renewal application as well as a modification application to incorporate requirements established under the 15A NCAC 2D .0546 “Control of Emissions from Log Fumigation Operations” regulation, which was effective on November 1, 2020. Ecolab, Inc. plans to fumigate logs in shipping containers using methyl bromide as well as other commodities inside of containers using phosphine. With this application, Ecolab, Inc. plans to add fumigation of imported perishable commodities inside a cold storage facility under tarps using methyl bromide. The facility has requested to retain synthetic minor status; therefore, the annual emission limit for methyl bromide will remain 10 tons per year in the permit.

Emissions modeling was submitted with the application to demonstrate compliance with methyl bromide and phosphine Acceptable Ambient Levels (AALs) provided in 15A NCAC 2D.1100 “Control of Toxic Air Pollutants.” Fugitive emissions are considered in the modeling. Based upon the modeling results, the application requests the following emissions limits for each of the two emission release points:

Affected Source	Toxic Air Pollutant	Emission Limit	2D .1104 AAL	% of the AAL
ES-1 containers	Methyl Bromide	2234 lb/day	1.0 mg/m <sup>3</sup>	99.7%
ES-1 containers	Methyl Bromide	20,000 lb/yr*	0.005 mg/m <sup>3</sup>	94.4%
ES-1 containers	Phosphine	2.5 lb/hr	0.13 mg/m <sup>3</sup>	98.6%

Affected Source	Toxic Air Pollutant	Emission Limit	2D .1104 AAL	% of the AAL
ES-2 bulk piles	Methyl Bromide	400 lb/day	1.0 mg/m <sup>3</sup>	99.7%
ES-2 bulk piles	Methyl Bromide	9500 lb/yr	0.005 mg/m <sup>3</sup>	94.4%

The two emission release points ES-1 and ES-2 will both vent to a single stack (2 feet in diameter, 40 feet minimum height, and 57.6 feet per second minimum velocity) that will be permanently constructed at each of the two locations dictated by the modeling.

## 4 Geographic Area

The facility Ecolab, Inc. - New Hanover, is located at 2202 Burnett Boulevard Wilmington, NC 28402 in New Hanover County (Figure 1). The highest off-site ambient air impacts will occur at the plant fence line. A one-mile radius was used to evaluate the local demographics and socioeconomic to appropriately include the surrounding community and help inform public outreach efforts. Although much of this radius falls within New Hanover County, it also includes a small area in Census Tract 202.02 in neighboring Brunswick County.



Figure 1. Ecolab, Inc. facility location with one-mile radius.

This facility is located in New Hanover County. In 2020, New Hanover and Brunswick County's were designated as Tier 2 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. Tier 2 counties encompass the next 40 counties based on this ranking system.

The one-mile radius used in this analysis includes areas encompassed by Census Tract 109 in New Hanover County. The one-mile buffer for the facility also enters census tracts 108 and 107 in New Hanover County, and 202.02 in Brunswick County (Figure 2). Census tracts are small, relatively permanent statistical subdivisions of a county with a unique numeric code (US Census Bureau). Census Tract 109 does not encompass land within a state designated tribal statistical area. However, this does not mean that there are no individuals within these census tracts with Tribal or Native American/American Indian affiliation.



Figure 2. Census tract boundaries surrounding the Ecolab Inc. 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 US 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 the counties will be compared to the local level data to identify any disparities surrounding the project area. Using standard environmental justice guidelines from the EPA and NEPA documentation, the following conditions will be flagged as potential communities of concern:

1. 10% or more in comparison to the county or state average
2. 50% or more minority
3. 5% or more in comparison to the county or state 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 2018 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 2014-2018 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 zero 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 1). The three most common racial and ethnic groups across the state were White (68.3%), Black or African American (21.2%), and Hispanic or Latino (of any race) at 8.4%.

New Hanover County had a total population of 202,607 individuals (Table 1). The three most common racial or ethnic groups within the county were White (76.8%), Black or African American (14.5%), and Hispanic or Latino (5.3%). The only population that was greater than 10% different when compared to the state was the White population.

Brunswick County had a total population of 107,431 individuals. The three most common racial or ethnic groups within the county were White (80.8%), Black or African American (11.3%), and Hispanic or Latino (5.2%). The only population that was greater than 10% different when compared to the state was the White population

**Table 1. Regional Setting - Race and Ethnicity**

	North Carolina		New Hanover County		Brunswick County	
<b>Race and Ethnicity</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Total Population	9,535,483	100.0	202,667	100	107,431	100
White	6,223,995	65.3	155,631	<b>76.8</b>	86,818	<b>80.8</b>
Black or African American	2,019,854	21.2	29,469	14.5	12,120	11.3
American Indian or Alaska Native	108,829	1.1	798	0.4	652	0.6
Asian	206,579	2.2	2,380	1.2	560	0.5
Native Hawaiian and Other Pacific Islander	5,259	0.1	108	0.1	33	0.0
Some other Race	15,088	0.2	353	0.2	128	0.1
Two or More Races	155,759	1.6	3,212	1.6	1,571	1.5
HISPANIC OR LATINO (of any race)	800,120	8.4	10,716	5.3	5,549	5.2
Source: US Census Bureau, ACS 2018 5-year Estimates						
All <b>bolded and orange</b> 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 9: Hispanic or Latino, and Not Hispanic or Latino by race or ethnicity, the largest population within Census Tract 109 was White at 80.4%, followed by Black or African American at 10.4%, and Hispanic or Latino at 3.5% (Table 2). The Black or African American Population (42.6%) was greater than 10%

different compared to the county (20.6%) and state (21.2%). The largest population group within Census Tract 109 was White at 80.4%, followed by Black or African American at 10.4%, and Hispanic or Latino (of any race) at 5.6%.

The largest population in the one-mile radius surrounding the Ecolab, Inc. facility was White at 67.0%, followed by Black or African American (19.0%), and Hispanic or Latino (of any race) (8.9%). Black or African American, Hispanic or Latino, and Some other race have percentages in the one-mile project radius greater than 10% different as compared to the counties and the state or just the counties.

Census Tract 107 had a total population of 3,699. The largest populations were White (56.1%), Black or African American (31.5%) and Hispanic or Latino or any race (8.1%). Both Black or African American and Hispanic or Latino of any race had differences greater than 10% when compared to the county and the state or just the county.

Census Tract 108 had a total population of 1,193, with the largest populations being White (44.7%), followed by Hispanic or Latino of any race (27.6%).

Census Tract 202,02 had a total population of 5,719, with the largest population being White (83.1%) followed by black or African American (9.4%).

**Table 2. Local Setting - Race and Ethnicity**

Race and Ethnicity	Project Area - 1 Mile		Census Tract 109		Census Tract 107		Census Tract 108		Census Tract 202.02	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Population	4,936	100	2,250	100	3,699	100	2,668	100	5,719	100
White	3,298	67	1,809	<b>80.4</b>	2,074	56.1	1,193	44.7	4,750	<b>83.1</b>
Black or African American	921	<b>19.0</b>	235	10.4	1,166	<b>31.5</b>	633	23.7	539	9.4
American Indian or Alaska Native	45	<b>1.0</b>	5	0.2	18	0.5	19	0.7	17	0.3
Asian	39	1.0	22	1.0	28	0.8	17	0.7	61	1.1
Native Hawaiian and Other Pacific Islander	3	0.0	3	0.1	1	0.0	0	0.0	4	0.1
Some other Race	495	<b>10.0</b>	5	0.2	8	0.2	20	<b>0.7</b>	13	0.2
Two or More Races	135	<b>3.0</b>	46	2.0	104	2.8	50	1.9	115	<b>2.0</b>
HISPANIC OR LATINO (of any race)	812	<b>16</b>	125	5.6	300	<b>8.1</b>	736	<b>27.6</b>	220	3.8

Source: US Census Bureau, ACS 2018 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 both the County and the State

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

## 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 3). The largest percentage of the total state population (63.1%) was between the ages of 18 and 64, followed by under 18 years (23.9%), and 65 years and older (12.9%).

New Hanover County had a total population of 202,667 individuals. The largest percentage of the total population (66.2%) was between the ages of 18 and 64, followed by under 18 years (19.9%), and 65 years and older (13.9%). The median age for both sexes was about the same as the state.

Brunswick County had a total population of 107,431 individuals. The largest percentage of the total population (59.8%) was between the ages of 18 and 64, followed by 65 years and older (21.4%). Both sexes, male and female 65 years and over were greater than 10% different from the state. The median age for both sexes was much higher compared to the state.

**Table 3. Regional Setting - Age Groups and Sex**

Age	North Carolina						New Hanover County						Brunswick County					
	Number			Percent			Number			Percent			Number			Percent		
	Both sexes	Male	Female	Both sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both	Male	Female	Both	Male	Female
Total Population	9,535,483	4,645,492	4,889,991	100%	100%	100%	202,667	98,269	104,398	100	100	100	107,431	52,660	57,441	100	100	100
Under 5 years	632,040	322,871	309,169	6.6	7	6.3	5,738	5,986	5,738	2.8	6.1	5.5	5,828	3,034	2,794	5.4	5.8	4.9
Under 18 years	2,281,635	1,167,303	1,114,332	23.9	25.1	22.8	40,413	20,726	19,687	19.9	21.1	18.9	16,827	7,380	9,447	15.7	14.0	16.4
18 to 64 years	6,019,769	2,954,233	3,065,536	63.1	63.6	62.7	134,162	65,609	68,553	66.2	66.8	65.7	64,244	31,036	33,208	59.8	58.9	57.8
65 years and over	1,234,079	523,956	710,123	12.9	11.3	14.5	28,092	11,934	16,158	13.9	12.1	15.5	23,026	11,210	11,816	<b>21.4</b>	<b>21.3</b>	<b>20.6</b>
<b>Median Age</b>	<b>37.4</b>	<b>36</b>	<b>38.7</b>				<b>37.3</b>	<b>35.7</b>	<b>38.9</b>				<b>47.4</b>	<b>46.1</b>	<b>48.6</b>			

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 P 12: Sex by Age, Census Tract 109 had a total population of 2,250 individuals (Table 4). The largest percentage of the total population was between the ages of 18 and 64 (73.4%), followed by under 18 years (15.1%), and 65 years and older (10.5%).

Census Tract 107 had a total population of 3,669 individuals (Table 4). The largest percentage of the total population was between the ages of 18 and 64 (65.2%), followed by 65 years and older (24.5%), and under 18 years (16.8%).

Census Tract 108 had a total population of 2,668 individuals. The largest percentage of the total population was between the ages of 18 and 64 (63.3%), followed by under 18 years (26.9%), and under 5 years (9.9%).

Census Tract 202.02 had a total population of 5,719 individuals. The largest percentage of the total population was between the ages of 18 and 64 (63.0%), followed by under 18 years (20.4%), and 65 years and older (19.2%).

**Table 4. Local Setting - Age Groups and Sex**

Age	Census Tract 107						Census Tract 108					
	Number			Percent			Number			Percent		
	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total Population	3,669	1,732	1,967	100	100	100	2,668	1,370	1,298	100	100	100
Under 5 years	227	123	104	6.2	7.1	5.3	264	143	121	9.9	10.4	10.4
Under 18 years	616	338	278	16.8	19.5	14.1	718	390	328	26.9	28.5	25.3
18 to 64 years	2,392	1,154	1,238	65.2	66.6	62.9	1,688	900	788	63.3	65.7	60.7
65 years and over	898	447	451	<b>24.5</b>	<b>25.8</b>	<b>22.9</b>	238	80	158	8.9	5.8	12.2
<b>Median Age</b>	<b>39.9</b>	<b>36.4</b>	<b>43.8</b>				<b>31.1</b>	<b>30.2</b>	<b>32.5</b>			
Age	Census Tract 109						Census 202.02					
	Number			Percent			Number			Percent		
	Both	Male	Female	Both	Male	Female	Both	Male	Female	Both	Male	Female
Total Population	2,250	1,104	1,146	100	100	100	5,719	2,794	2,925	100	100	100
Under 5 years	119	61	58	5.3	5.5	5.1	449	238	211	7.9	8.5	7.2
Under 18 years	339	169	170	15.1	15.3	14.8	1,168	625	543	20.4	22.4	18.6
18 to 64 years	1,652	828	824	<b>73.4</b>	<b>75.0</b>	<b>71.9</b>	3,605	1,722	1,883	63.0	61.6	61.6
65 years and over	236	84	152	10.5	7.6	13.3	1,098	599	499	<b>19.2</b>	<b>21.4</b>	<b>17.1</b>
<b>Median Age</b>	<b>37.3</b>	<b>36</b>	<b>38.6</b>				<b>43.1</b>	<b>41.8</b>	<b>43.9</b>			
<p>Source: US Census Bureau, 2010 Census            All <b>bolded and orange</b> cells indicate a difference that is greater than 10% when compared to the State            All <b>bolded and blue</b> cells indicate a difference that is greater than 10% when compared to the county and the State</p>												

### One Mile Radius

EJSCREEN identified an approximate population of 4,936 in the one-mile buffer area surrounding the facility. The largest population was 18+ years (79%), followed by Under 18 years at 21% (Table 5).

**Table 5. Project Radius - Age Groups and Sex**

Age	Project Area - 1 Miles					
	Number			Percent		
	Both sexes	Male	Female	Both sexes	Male	Female
Total Population	4,936	2471	2465	100	50	50
Under 5 years	374			8		
Under 18 years	1,034			21		
18+	3,902			79		
65 years and over	480			10		
Source: US Census Bureau, 2010 Census. Obtained through EJSCREEN 2019						

### 5.3 Disability

#### Regional Setting

According to the 2018 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 9,952,031 noninstitutionalized citizens. Of those individuals, an estimated 13.6% (MOE +/- 0.1%) had a disability. By race, American Indian and Alaskan Native had the highest estimated disability rate of 18.5% (MOE +/- 0.8%). Black or African American, White, and Two or More Races were the next three highest population estimates with disabilities in North Carolina, at 14.8% (MOE +/-0.2%), 14.6% (MOE +/- 0.1%), and 11.4% (MOE +/- 0.5%), respectively (Table 6).

New Hanover County had an estimated total population of 221,731 noninstitutionalized civilians (Table 7). Of those, an estimated 12.7% (MOE +/- 0.5%) had a disability. By race, American Indian and Native American races had the highest estimated disability rate (16.8%, MOE +/-13.6%). The following population groups displayed estimates that were greater than 10% different when compared to the state: Some other race, Two or more races, and Hispanic or Latino.

Brunswick County had an estimated total population of 130,804 with 16.4% estimated as having a disability. By race, Native Hawaiian and Other Pacific Islander had the highest estimated disability rates at 33.3% (MOE +/- 66.1%). The majority of subjects had a disability rate higher than that of the state.

**Table 6. Regional Setting – Disability**

Subject	North Carolina					
	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total civilian noninstitutionalized population	9,952,031	1,743	1,350,533	7,387	13.6	0.1
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>						
White (not Hispanic or Latino)	6,316,065	2,254	920,269	6,535	14.6	0.1
Black or African American	2,123,353	5,762	314,216	3,706	14.8	0.2
American Indian and Alaska Native	118,231	1,604	21,874	929	18.5	0.8
Asian	279,615	2,022	13,450	961	4.8	0.3
Native Hawaiian and Other Pacific Islander	6,447	668	635	178	9.8	2.7
Some other Race	303,837	7,743	16,218	1,100	5.3	0.4
Two or more races	255,739	6,070	29,063	1,446	11.4	0.5
Hispanic or Latino	916,366	863	57,239	1,970	6.2	0.2
Source: US Census Bureau, ACS 5-year Estimates (2018)						

**Table 7. Regional Setting – Disability (Counties)**

Subject	New Hanover County						Brunswick 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	221,731	322	28,069	1,217	12.7	0.5	130,804	250	21,429	933	<b>16.4</b>	0.7
RACE AND HISPANIC OR LATINO ORIGIN												
White (not Hispanic or Latino)	171,198	298	21,793	1,048	12.7	0.6	107,195	219	17,925	846	<b>16.7</b>	0.8
Black or African American	30,801	706	4,580	551	14.9	1.8	12,670	602	2,137	395	<b>16.9</b>	3.1
American Indian and Alaska Native	423	195	71	67	16.8	13.6	907	203	156	97	17.2	10.0
Asian	2983	332	116	69	3.9	2.4	766	149	129	75	<b>16.8</b>	9.9
Native Hawaiian and Other Pacific Islander	185	46	0	29	0.0	17.2	9	12	3	5	<b>33.3</b>	66.1
Some other Race	2510	609	214	135	<b>8.5</b>	4.6	3084	609	266	154	<b>8.6</b>	5.5
Two or more races	4830	674	779	232	<b>16.1</b>	4.3	3196	603	497	192	<b>15.6</b>	4.9
Hispanic or Latino	12084	75	872	213	<b>7.2</b>	1.8	6304	36	570	198	<b>9.0</b>	3.1
Source: US Census Bureau, ACS 5-year Estimates (2018)												
All <b>bolded</b> and <b>orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State												

## Local Setting

According to the 2018 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, Census Tract 107 had an estimated total population of 4,254 noninstitutionalized citizens (Table 8). Of those individuals, an estimated 21.6% (MOE +/- 5.4%) had a disability. By race, the largest populations with a disability were Two or more races at 34.9% (MOE +/- 30.2%) and White (Not Hispanic or Latino) at 27.8% (MOE +/- 7.3%). The majority of estimates had a difference greater than 10% different when compare to the county and state or just the state.

Census Tract 108 had an estimated total population of 2,653 noninstitutionalized citizens. Of those individuals, an estimated 17.6% (MOE +/- 4.4%) had a disability. By race, the largest populations with a disability were American Indian and Alaska Native at 58.0% (MOE +/- 40.7%), followed by Black or African American at 26.2% (MOE +/- 12.4%). The majority of estimates had a difference greater than 10% different when compare to the county and state or just the state.

Census Tract 109 had an estimated total population of 2,415 noninstitutionalized citizens (Table 9). Of those individuals, an estimated 14.6% (MOE +/- 4.7%) had a disability. By race, the largest populations with a disability were Black or African American at 21.5% (MOE +/- 20.4) and White (Not Hispanic or Latino) at 16.2% (MOE +/- 5.6%). White and Black or African American had differences greater than 10% when compared to the county and the state.

Census Tract 202.02 had an estimated total population of 9,145 noninstitutionalized citizens. Of those individuals, an estimated 12.1% (MOE +/- 2.1%) had a disability. By race, the largest populations with a disability were Some other race at 41.2% (MOE +/- 58.8) and Two or more races at 20.5% (MOE +/- 8.3%). Some other race and Two or more races had differences greater than 10% when compared to the county and the state.

**Table 8. Local Setting - Disability**

Subject	Census Tract 107						Census Tract 108					
	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	4,254	439	919	244	<b>21.6</b>	5.4	2,653	393	468	129	<b>17.6</b>	4.4
RACE AND HISPANIC OR LATINO ORIGIN												
White (not Hispanic or Latino)	1,979	306	550	180	<b>27.8</b>	7.3	1,015	212	242	103	<b>23.8</b>	8.2
Black or African American	1,976	465	327	177	<b>16.5</b>	8.3	539	215	141	91	<b>26.2</b>	12.4
American Indian and Alaska Native	20	34	0	12	0.0	68.8	50	49	29	35	<b>58.0</b>	40.7
Asian	87	104	0	12	0.0	31.9	0	12	0	12	-	**
Native Hawaiian and Other Pacific Islander	0	12	0	12	-	**	0	12	0	12	-	**
Some other Race	58	66	8	12	<b>13.8</b>	13.0	335	191	17	26	5.1	7.3
Two or more races	63	52	22	29	<b>34.9</b>	30.2	105	89	19	35	<b>18.1</b>	21.5
Hispanic or Latino	129	103	20	24	<b>15.5</b>	12.9	1056	388	92	92	<b>8.7</b>	8.0
Source: US Census Bureau, ACS 5-year estimates (2018) All <b>bolded and orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State All <b>bolded and blue</b> highlighted cells indicate a difference that is greater than 10% when compared to the County and State												

**Table 9. Local Setting- Disability**

Subject	Census Tract 109						Census Tract 202.02					
	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	2,270	199	396	101	<b>17.4</b>	4.5	9,145	788	1,111	243	12.1	2.1
RACE AND HISPANIC OR LATINO ORIGIN												
White (not Hispanic or Latino)	1,870	183	320	88	<b>17.1</b>	4.7	7,608	602	936	213	12.3	2.4
Black or African American	202	158	44	38	<b>21.8</b>	23.8	750	247	26	40	3.5	5.1
American Indian and Alaska Native	11	22	0	12	0.0	92.8	0	17	0	17	-	**
Asian	0	12	0	12	-	**	48	56	0	17	0.0	44.4
Native Hawaiian and Other Pacific Islander	0	12	0	12	-	**	0	17	0	17	-	**
Some other Race	12	18	0	12	0.0	88.8	34	40	14	21	<b>41.2</b>	58.8
Two or more races	134	101	32	35	<b>23.9</b>	28.6	657	590	135	128	<b>20.5</b>	8.3
Hispanic or Latino	53	73	0	12	0.0	42.3	68	54	0	17	0.0	37.3
Source: US Census Bureau, ACS 5-year estimates (2018) All <b>bolded and orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State All <b>bolded and blue</b> highlighted cells indicate a difference that is greater than 10% when compared to the County and State												

## 5.4 Poverty

### Regional Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2018 American Community Survey 5-Year Estimates, from the US Census Bureau, North Carolina had an estimated population of 9,881,292, with 15.4% (MOE +/- 0.2%) below the poverty level (Table 10). Across all subjects, Some Other Race had the highest percent living below the poverty level at 29.5% (MOE +/- 1.5%). The next three subjects with the highest poverty level were Hispanic or Latino at 28.5% (MOE +/- 0.2%), American Indian and Alaska Native at 25.1% (MOE +/- 1.3%), and Black or African-American at 23.5% (MOE +/- 0.4%).

New Hanover County had an estimated population of 217,333 with 17.3% (MOE +/-0.9%) living below the poverty level (Table 11). Across all subjects, Native Hawaiian and Other Pacific Islander had the highest percent living below the poverty level at 94.1% (MOE +/- 20.4%). The next subjects with the highest poverty level were Black or African American at 33.3% (MOE +/- 3.4%) and Hispanic or Latino (of any race) at 30.2% (MOE +/- 5.9%). Almost all subject groups had a greater than 5% difference when compared to the state.

Brunswick County had an estimated population of 130,834 with 11.8% (MOE +/-1.1%) living below the poverty level. Across all subjects, Hispanic or Latino had the highest percent living below the poverty level at 28.4% (MOE +/- 8.4%), followed by Black or African American at 21.5% (MOE +/- 4.2%).

**Table 10. Regional Setting - Poverty**

Subject	North Carolina					
	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	9,881,292	1,522	1,523,949	15,319	15.4	0.2
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>						
White	6,281,258	2,576	668,925	9,394	10.6	0.2
Black or African American	2,096,490	5,812	493,496	8,392	23.5	0.4
American Indian and Alaska Native	117,702	1,595	29,577	1,585	25.1	1.3
Asian	275,301	1,983	32,712	2,356	11.9	0.9
Native Hawaiian and Other Pacific Islander	6,414	671	1,246	264	19.4	4.2
Some other Race	302,934	7,911	89,305	5,371	29.5	1.5
Two or more races	252,709	6,223	54,335	2,369	21.5	0.8
Hispanic or Latino	915,426	901	260,607	5,682	28.5	0.2
All individuals below:						
200 percent of poverty level	3,513,670	25,035				
Source: US Census Bureau, ACS 5-year estimates (2018)						

**Table 11. Regional Setting- Poverty (Counties)**

Subject	New Hanover County						Brunswick 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	217,333	569	37,602	1,917	<b>17.3</b>	0.9	130,834	217	15,402	1,392	11.8	1.1
RACE AND HISPANIC OR LATINO ORIGIN												
White	176,420	509	22,647	1,751	<b>13.5</b>	1.0	107,282	190	10,205	1,076	9.5	1.0
Black or African American	30,275	690	10,070	1,071	<b>33.3</b>	3.4	12,629	593	2,711	513	21.5	4.2
American Indian and Alaska Native	413	197	58	71	14.0	15.0	907	203	34	37	3.7	4.0
Asian	2,938	323	387	162	<b>13.2</b>	5.6	766	149	58	56	7.6	7.0
Native Hawaiian and Other Pacific Islander	185	46	174	70	<b>94.1</b>	20.4	9	12	-	29	0.0	100.0
Some other Race	2,503	608	604	283	24.1	10.4	3,084	609	539	274	17.5	9.1
Two or more races	46,599	669	1,215	542	<b>26.4</b>	9.3	3,180	605	608	295	19.1	9.2
Hispanic or Latino	11,938	74	3,608	695	30.2	5.9	6,304	36	1,792	530	28.4	8.4
All individuals below:												
200 percent of poverty level	75,340	2,524					37,202	1,916				
Source: US Census Bureau, ACS 5-year estimates (2018)												
All <b>bolded</b> and <b>orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State												

## Local Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2018 American Community Survey 5-Year Estimates, from the US Census Bureau, Census Tract 107 had an estimated population of 4,265 with 33.7% (MOE +/-8.3%) living below the poverty level (Table 12). Across all subjects, Some other race (87.9%, MOE +/- 24.8%) had the highest percent living below the poverty level, followed by Hispanic or Latino at 46.5% (MOE +/- 33.4%). About half of the subjects had a greater than 5% difference when compared to the county and the state.

Census Tract 108 had an estimated population of 2,653 with 38.4% (MOE +/-10.3%) living below the poverty level. Across all subjects, Black or African American (62.9%, MOE +/- 25.1%) had the highest percent living below the poverty level, followed by Hispanic or Latino at 48.0% (MOE +/- 17.9%). Most subject groups had a greater than 5% difference when compared to either the county and the state or just the state.

Census Tract 109 had an estimated population of 2,405 with 10.0% (MOE +/-4.8%) living below the poverty level (Table 13). Across all subjects, White 12.6% (MOE +/- 5.9%) had the highest percent living below the poverty level, followed by Black or African American at 6.3% (MOE +/- 11.0%).

Census Tract 202.02 had an estimated population of 9,167 with 5.7% (MOE +/-2.8%) living below the poverty level. Across all subjects, Black or African American 34.5% (MOE +/- 28.6%) had the highest percent living below the poverty level, followed by Asian at 14.6% (MOE +/- 41.8%). Black and African American and Asian had a greater than 5% difference when compared to either the county and the state or just the state.

**Table 12. Local Setting- Poverty**

Subject	Census Tract 107						Census Tract 108					
	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	4,265	432	1,439	418	<b>33.7</b>	8.3	2,653	393	1,019	353	<b>38.4</b>	10.3
RACE AND HISPANIC OR LATINO ORIGIN												
White	2,010	294	638	225	<b>31.7</b>	9.8	1,624	372	576	280	<b>35.5</b>	12.1
Black or African American	1,956	463	741	412	<b>37.9</b>	16.3	539	215	339	232	<b>62.9</b>	25.1
American Indian and Alaska Native	20	34	0	12	0.0	68.8	50	49	16	26	<b>32.0</b>	44.5
Asian	87	104	-	12	0.0	31.9	-	12	-	12	-	**
Native Hawaiian and Other Pacific Islander	-	12	-	12	-	**	-	12	-	12	-	**
Some other Race	58	66	51	64	<b>87.9</b>	24.8	335	191	82	86	24.5	23.8
Two or more races	63	52	-	12	0.0	38.8	105	89	6	9	5.7	10.1
Hispanic or Latino	129	103	60	65	<b>46.5</b>	33.4	1,056	388	507	298	<b>48.0</b>	17.9
All individuals below:												
200 percent of poverty level	2,423	469					1,880	386				
Source: US Census Bureau, ACS 5-year estimates (2018)												
All <b>bolded and orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State												
All <b>bolded and blue</b> highlighted cells indicate a difference that is greater than 10% when compared to the County and State												

**Table 13. Local Setting - Poverty cont'd**

Subject	Census Tract 109						Census Tract 202.02					
	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	2,405	278	240	115	10.0	4.8	9,167	791	527	248	5.7	2.8
RACE AND HISPANIC OR LATINO ORIGIN												
White	1,800	277	226	109	12.6	5.9	7,630	603	218	121	2.9	1.6
Black or African American	223	148	14	20	6.3	11.0	750	247	259	215	<b>34.5</b>	28.6
American Indian and Alaska Native	13	24	0	12	0.0	85.4	0	17	0	17	-	**
Asian	-	12	-	12	-	**	48	56	7	20	<b>14.6</b>	41.8
Native Hawaiian and Other Pacific Islander	-	12	-	12	-	**	-	17	-	17	-	**
Some other Race	11	22	-	12	0.0	92.8	34	40	-	17	0.0	52.8
Two or more races	131	105	-	12	0.0	23.2	657	590	43	70	6.5	13.7
Hispanic or Latino	238	211	-	12	0.0	13.6	68	54	-	17	0.0	37.3
All individuals below:												
200 percent of poverty level	924	236					1,457	434				
Source: US Census Bureau, ACS 5-year estimates (2018)												
All <b>bolded and orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State												
All <b>bolded and blue</b> highlighted cells indicate a difference that is greater than 10% when compared to the County and State												

## 5.5 Household Income

### Regional Setting

The following table (Table 14) was compiled using data from the Census Table S1901, Income in the Past 12 Months (in 2018 Inflation-Adjusted Dollars) 2018 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 \$52,413 and the mean income was \$73,753.

The household income range for New Hanover County with the highest percent was \$50,000 to \$74,999 at 18.5% (MOE +/- 2.5%). The median income was \$52,239 and the mean income was \$73,080. The income range of less than \$10,000 was greater than 10% when compared with the state.

The household income range for Brunswick County with the highest percent was \$50,000 to \$74,999 at 20.0% (MOE +/- 1.1%). The median income was \$58,236 and the mean income was \$75,081. The income range of \$75,000-499,999 was greater than 10% when compared with the state.

**Table 14. Regional Setting - Household Income**

Subject	North Carolina		New Hanover County		Brunswick County	
	Households		Households		Households	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total	3,918,597	8,585	98,151	2,425	56,056	940
Less than \$10,000	6.8%	0.1	<b>9.6%</b>	1.8	6.9%	0.9
\$10,000 to \$14,999	5.4%	0.1	4.4%	1.3	4.5%	0.6
\$15,000 to \$24,999	10.7%	0.1	10.1%	2.1	8.7%	0.7
\$25,000 to \$34,999	10.7%	0.1	8.3%	1.7	9.8%	0.9
\$35,000 to \$49,999	14.2%	0.1	14.2%	2.2	13.2%	1.2
\$50,000 to \$74,999	18.1%	0.1	18.5%	2.5	20.0%	1.1
\$75,000 to \$99,999	12.0%	0.1	13.1%	2.2	<b>14.0%</b>	1.2
\$100,000 to \$149,999	12.5%	0.1	11.7%	1.7	14.0%	0.9
\$150,000 to \$199,999	4.7%	0.1	4.6%	1.1	4.7%	0.5
\$200,000 or more	4.9%	0.1	5.5%	1.1	4.2%	0.5
Median income (dollars)	52,413	224	52,239	3,225	58,236	1,634
Mean income (dollars)	73,753	332	73,080	3,223	75,081	2,052
Source: American Community Survey 5-year Estimates, 2018						
All <b>bolded and orange</b> cells indicate a difference that is greater than 10% when compared to the State						

## Local Setting

The following table (Table 15) was compiled using data from the Census Table S1901, Income in the Past 12 Months (in 2018 Inflation-Adjusted Dollars) 2018 American Community Survey 5-Year Estimates. For Census Tract 107, the household income range with the highest percent was \$25,000 to \$34,999, at 20.0%. All income ranges below \$49,999 were greater than 10% difference when compared to the state and county. The median household income was \$30,259 and the mean income was \$37,413.

The household income range for Census Tract 108 with the highest percent was \$15,000 to \$24,999 at 20.3% (MOE +/- 7.7%), followed by less than \$10,000 at 19.6% (MOE +/- 9.0). Three of the five lowest income brackets were greater than 10% different when compared to both the state and the county. The median income was \$30,265, and the mean income was \$37,615.

The household income range for Census Tract 109 with the highest percent was \$35,000 to \$49,999 at 25.5% (MOE +/- 8.5%), followed by the \$50,000 to \$74,999 at 19.2% (MOE +/- 7.7). All three lowest income brackets were greater than 10% different when compared to both the state and the county. The median income was \$46,270, and the mean income was \$54,527.

The household income range for Census Tract 202.02 with the highest percent was \$50,000 to \$74,999 at 21.7% (MOE +/- 5.1). All four highest income brackets were greater than 10% different when compared to both the state and the county. The median income was \$80,970, and the mean income was \$92,473.

**Table 15. Local Setting - Household Income**

Subject	Census Tract 107		Census Tract 108		Census Tract 109		Census Tract 202.02	
	Households		Households		Households		Households	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total	1,909	105	949	94	1,076	101	3,622	232
Less than \$10,000	<b>11.7%</b>	5.8	<b>19.6%</b>	9	4.6%	3.9	2.8%	1.8
\$10,000 to \$14,999	<b>9.6%</b>	5	5.4%	3.8	5.1%	3.4	2.8%	2.2
\$15,000 to \$24,999	<b>15.0%</b>	6.8	<b>20.3%</b>	7.7	<b>14.0%</b>	6.6	7.2%	2.6
\$25,000 to \$34,999	<b>20.0%</b>	5.9	9.6%	5	8.9%	5.7	6.0%	2.9
\$35,000 to \$49,999	<b>18.5%</b>	5.4	<b>16.2%</b>	8.3	<b>25.5%</b>	8.5	6.2%	2.6
\$50,000 to \$74,999	13.1%	5.3	15.0%	6.1	19.2%	7.7	21.7%	5.1
\$75,000 to \$99,999	9.0%	4.3	8.9%	5.1	9.2%	5.2	<b>17.2%</b>	5.1
\$100,000 to \$149,999	3.1%	2.7	3.9%	3.5	10.6%	6.4	<b>21.1%</b>	4.5
\$150,000 to \$199,999	0.0%	1.8	1.2%	1.4	1.2%	2	<b>7.3%</b>	2.7
\$200,000 or more	0.0%	1.8	0.0%	3.6	1.7%	2.4	<b>7.6%</b>	3.3
Median income (dollars)	30,259	6,011	30,265	8,588	46,270	5,774	80,970	6,472
Mean income (dollars)	37,413	4,750	37,615	5,863	54,527	6,657	92,473	7,386

Source: US Census, 2018 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

The household income range for the one-mile project radius with the highest percent was \$25,000 to \$50,000 at 33%. EJSCREEN data is divided into different income brackets so cannot be compared to the county level data.

**Table 16. Project Radius - Household Income**

Subject	1 mile		
	Number	Percent	MOE
Number of Households	2,040	100	
Owner Occupied	941	45	
Renter Occupied	1,099	55	
Household Income			
<\$15,000	370	18%	105
\$15,000-\$25,000	361	18%	113
\$25,000-\$50,000	668	33%	149
\$50,000-\$75,000	313	15%	141
\$75,000+	328	16%	151

## 6 Limited English Proficiency (LEP)

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 five percent 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 five percent 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 EPA guidance for LEP persons, and implemented by DEQ when deemed appropriate.

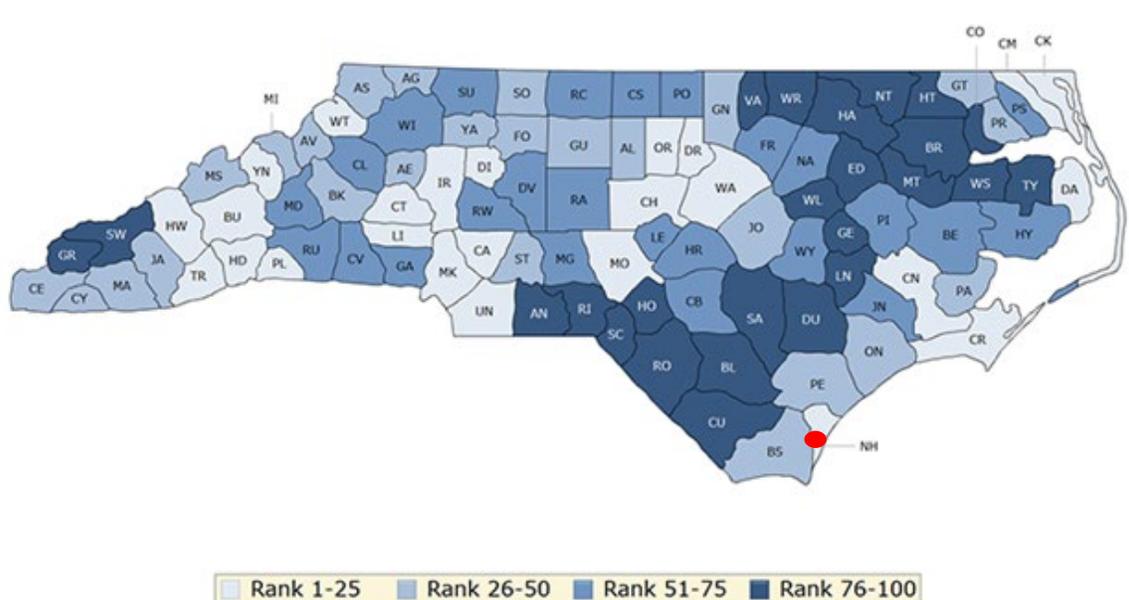
One potential LEP language group was identified during this initial screening of demographic data as having more than zero individuals within the census tract who speak English less than very well (Table 17). This group- Spanish or Spanish Creole, did reach the 5% threshold in Census Tract 108 at 20.5% of individuals speaking English less than very well. DEQ will evaluate the resources available and determine the best options to reach the Spanish speaking community in this census tract, following the Safe Harbor Guidelines.

**Table 17. Limited English Proficiency**

	Census Tract 107		Census Tract 108		Census Tract 109		Census Tract 202.02	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
<b>Total (population 5 years and over):</b>	4,083	425	2,174	277	2,284	188	6,555	490
Speak only English	3,856	409	1,323	221	2,049	211	6,252	494
Spanish or Spanish Creole:	204	176	710	270	125	130	181	119
Speak English "very well"	118	92	264	157	100	100	159	115
Speak English less than "very well"	86	105	446	179	25	32	22	36

## 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](http://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), New Hanover County ranks 14<sup>th</sup> in health factors and 12<sup>th</sup> in health outcomes, and Brunswick County ranks 28<sup>th</sup> in both health factors and health outcomes.



*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, the rates of death in New Hanover county are similar to the state averages (Table 18). Additionally, the hospitalization due to asthma in New Hanover County is 95 (per 100,000 individuals), as compared to the state at 90 individuals per 100,000 individuals. The number of primary care physicians in New Hanover County (7.966 per 10,000 residents) is higher than the state average (4.812 per 10,000 residents). The rates of death in Brunswick County are similar to state averages for cancer, stroke, and diabetes but are greater for heart disease and cardiovascular disease (Table 18). The hospitalization due to asthma is 118 (per 100,000 individuals), as compared to the state at 90 (per 100,000 individuals). The number of primary care physicians in Brunswick County is 6.6 per 10,000 residents, which is higher than the state average of 4.8 primary care physicians per 10,000 residents.

**Table 18. Health Outcomes**

Cause of Death	New Hanover County	Brunswick County	North Carolina
Cancer	168.4	169.4	169.1
Heart Disease	154.8	187.9	163.7
Stroke	44.8	45.3	43.1
Cardiovascular Disease	213.2	246.6	221.9
Diabetes	17.4	18.1	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 of the Methyl Bromide Ecolab, Inc. facility, the following potential sensitive receptors were identified (Figure 6):

- CVS Pharmacy
- Sunset South Building 11
- Sunset South Building 6
- Cape Fear Center for Inquiry
- Faith Baptist Church
- Prayer and Bible Independent Church Of God For All People
- Sunset Park Baptist Church
- Sunset Park Elementary
- Coastal Pulmonary Medicine
- Accordius Health of Wilmington

Located slightly beyond the one-mile project radius, the following potential sensitive receptors were identified:

- New Hanover Medical Center
- CVS Pharmacy

Additional sensitive receptors may be identified during the permit application process, such as during the field reconnaissance visit or through public comment.

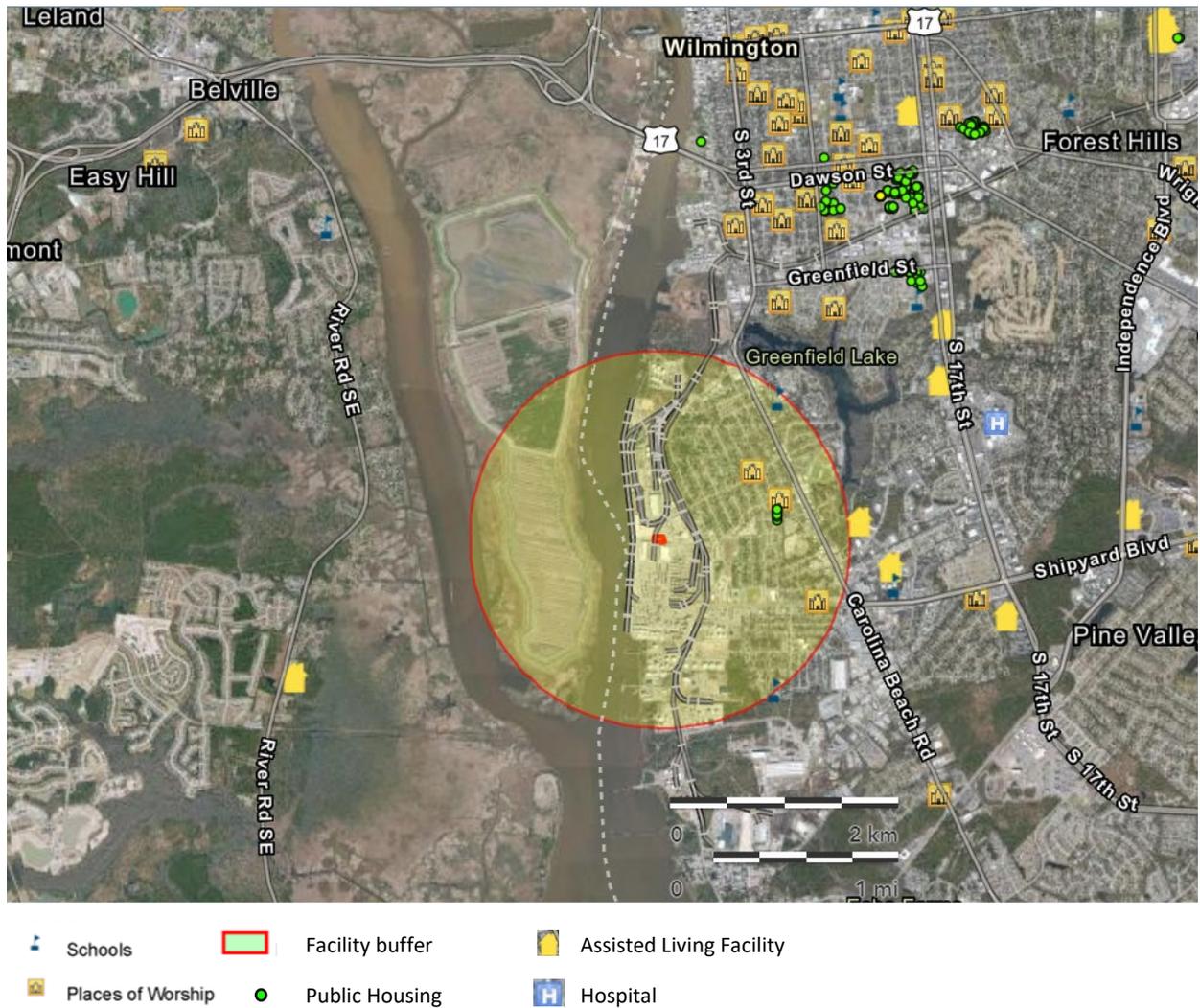


Figure 4. Sensitive Receptors surrounding the Ecolab, Inc. Facility.

## 9 Local Industrial Sites

Within the one-mile radius, 116 other facility permits or incident reports were identified using the NCDEQ Community Mapping System (as of June 29, 2021). These include:

- 18 Air Quality permitted sites
- 4 NPDES Wastewater Treatment Facilities
- 1 Contaminated Dry-cleaning site
- 10 Inactive Hazardous Sites
- 2 Brownfield Program Sites
- 29 Underground Storage Tank Incidents
- 24 Above Ground Storage Tank Incidents
- 8 Underground Storage Tank Active Facilities
- 11 Land Use Restriction or Notices

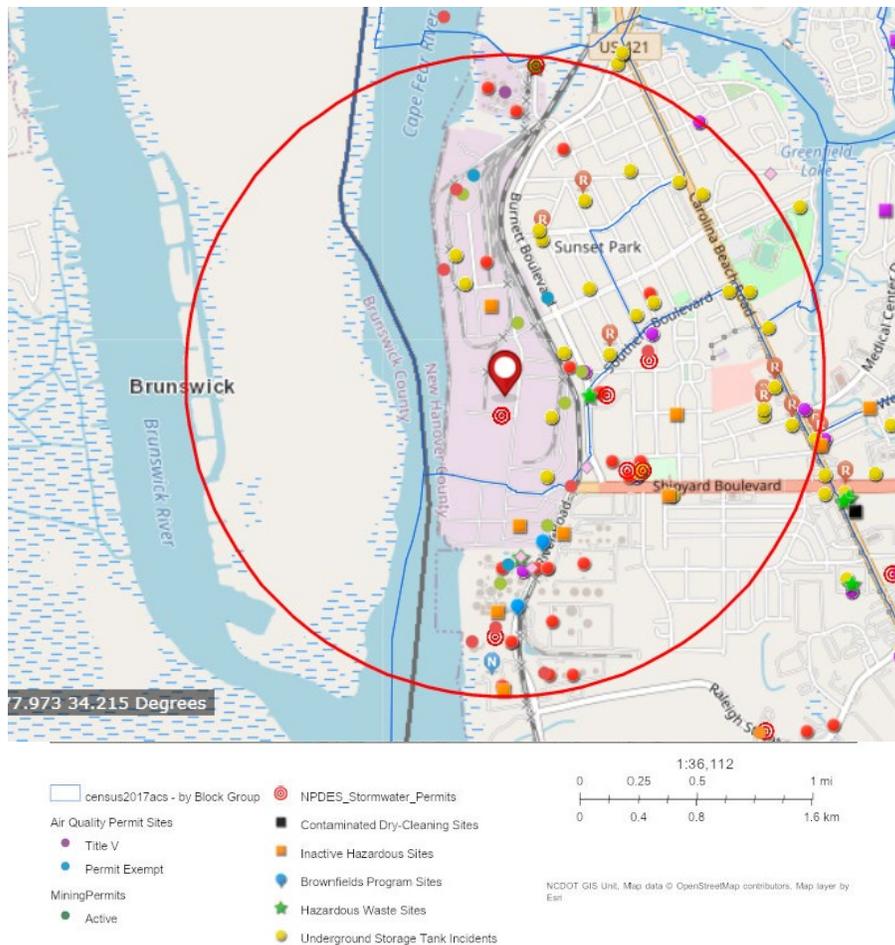


Figure 5. Permitted facilities and incidents with the one-mile radius surrounding the Ecolab, Inc. facility.

## 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, New Hanover County, Census Tract 109, and the one-mile radius around the Ecolab, Inc. 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 2018 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 Ecolab, Inc. facility regarding its permit application. New Hanover and Brunswick County's, the census tracts, and the one-mile project radius display generally higher percentages of White populations than that of the state.

Census Tracts 107 and 108 showed the lowest household income levels, with both census tracts having much higher percentages than the state and New Hanover County making less than \$10,000. These census tracts also had higher percentages of the population living below the poverty line than the state and New Hanover County. Census Tracts 107, 108, and 109 all had a higher percentage of their populations living with disabilities than the state and New Hanover County. Census Tract 202.02 showed a higher percentage of Black or African Americans and Asians living in poverty than the levels for the state and Brunswick County. New Hanover County ranks 14<sup>th</sup> in health factors and 12<sup>th</sup> in health outcomes, and Brunswick County ranks 28<sup>th</sup> in both health factors and health outcomes. There were 116 permitted facilities and incidents within one mile from the facility.

Based on the data from this report, the following recommendations for enhanced outreach have been made:

- Additional outreach to the identified sensitive receptors.
- Further analysis of feasibility to translate relevant materials into Spanish, especially for Census Tract 108.
- Known community leaders in the area will be informed.
- The nearby towns of Leland and Navassa will be informed of project information.
- Enhanced outreach within Census Tract 109, where there was a higher percentage of low-income urban or suburban populations identified.