Ocean Wind
An Ørsted & PSEG project

Appendix V – Environmental Justice Supplementary Material

Appendix V, Environmental Justice Supplementary Material

1. Introduction

This appendix provides an overview of the racial and ethnic characteristics as well as the poverty rates in the Oyster Creek and BL England study areas for the Ocean Wind Offshore Wind Farm Project (Project). Data was obtained from the U.S. Census American Community Survey File # B17017 and File # B03002 - 2020 5-Year Estimates Detailed Tables data, revised on March 17, 2022. The study area and methodology used to identify environmental justice populations and to evaluate impacts are described in Section 2.3.2 of the COP, Volume II. This appendix also provides the full EJScreen 2.0 report that is described in Section 2.3.2 of the COP, Volume II.

2. Racial and ethnic characteristics in the study areas

Table 2-1 provides an overview of the racial and ethnic characteristics of the population in the census tracts within the study areas in Atlantic, Ocean, and Cape May Counties. For the Oyster Creek study area, the minority threshold is 10 percentage points higher than the county average of 12.6 percent, or 22.6 percent. In the Oyster Creek study area, the minority population in two block groups is higher than the county average; however, neither of these two block groups exceed the minority threshold. For the BL England Study area, in Cape May County, the minority threshold is 10 percentage points higher than the county average of 10.3 percent, or 20.3 percent. Two block groups in the BL England study area have a minority population higher than the county average, but only one block group exceeds the minority threshold. This block group is Block Group 4, Census Tract 201.01, which has a minority population of 41.5 percent. The BL England study area overlaps a small portion of Atlantic County that is not populated. Block groups with a minority population that exceeds the average rate for the county are indicated in bold in **Table 2-1**.

Table 2-1 - Racial and ethnic characteristics in the Oyster Creek and BL England study areas (block groups that exceed the county level minority average are shown in bold).

Geography	White	African American	Native	Asian	Pacific Islander	Other	Two or More Races	Hispanic or Latino	Sum	Percent Minority
Atlantic County	**150,070**	**37,289**	**633**	**20,898**	**103**	**313**	**6,649**	**50,150**	**266,105**	**29.6%**
None	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ocean County	**504,971**	**16,720**	**233**	**11,052**	**123**	**481**	**6,686**	**54,932**	**596,415**	**12.6%**
Block Group 3, Census Tract 7320.02, Ocean County, New Jersey	1,677	16,510	246	11,009	164	573	8,010	232	2,128	12.3%
Block Group 2, Census Tract 7321.04, Ocean County, New Jersey	**1,261**	**189**	**0**	**30**	**0**	**0**	**0**	**120**	**1,457**	**13.4%**
Block Group 3, Census Tract 7321.04, Ocean County, New Jersey	**777**	**0**	**15**	**61**	**0**	**0**	**0**	**64**	**895**	**13.2%**
Block Group 1, Census Tract 7330, Ocean County, New Jersey	2,282	0	0	54	0	0	0	21	2,367	3.6%
Block Group 2, Census Tract 7330, Ocean County, New Jersey	1,134	0	0	0	0	0	64	38	1,172	3.2%
Block Group 3, Census Tract 7330, Ocean County, New Jersey	1,900	0	0	0	0	0	0	130	2,111	10.0%
Block Group 4, Census Tract 7330, Ocean County, New Jersey	3,157	0	70	0	0	0	11	72	3,353	3.6%
Block Group 1, Census Tract 9800, Ocean County, New Jersey	0	0	0	0	0	0	0	0	0	N/A
Cape May County	**79,373**	**4,124**	**20**	**860**	**0**	**106**	**1,450**	**7,153**	**93,086**	**10.3%**
Block Group 1, Census Tract 201.01, Cape May County, New Jersey	**575**	**291**	**0**	**0**	**0**	**0**	**16**	**91**	**973**	**11.0%**
Block Group 2, Census Tract 201.01, Cape May County, New Jersey	741	19	2	0	0	0	19	55	836	9.1%
Block Group 3, Census Tract 201.01, Cape May County, New Jersey	**779**	**17**	**0**	**14**	**0**	**0**	**122**	**21**	**953**	**16.5%**

Geography	White	African American	Native	Asian	Pacific Islander	Other	Two or More Races	Hispanic or Latino	Sum	Percent Minority
Block Group 4, Census Tract 201.01, Cape May County, New Jersey	**548**	**14**	**0**	**70**	**0**	**0**	**74**	**265**	**986**	**41.5%**
Block Group 1, Census Tract 201.02, Cape May County, New Jersey	285	2	0	0	0	0	0	1	288	0.4%
Block Group 2, Census Tract 201.02, Cape May County, New Jersey	653	0	0	0	0	0	0	69	722	9.6%
Block Group 3, Census Tract 201.02, Cape May County, New Jersey	1020	0	0	0	0	0	0	18	1,038	1.7%
Block Group 1, Census Tract 202.03, Cape May County, New Jersey	376	0	0	0	0	0	0	0	376	0.0%
Block Group 2, Census Tract 202.03, Cape May County, New Jersey	906	16	0	0	0	0	0	29	951	3.0%
Block Group 3, Census Tract 202.03, Cape May County, New Jersey	827	0	0	0	0	0	0	0	827	0.0%
Block Group 1, Census Tract 202.06, Cape May County, New Jersey	474	0	0	0	0	0	0	0	474	0.0%
Block Group 2, Census Tract 202.06, Cape May County, New Jersey	368	0	0	0	0	0	0	0	368	0.0%
Block Group 1, Census Tract 203.01, Cape May County, New Jersey	1,056	14	0	10	0	0	0	64	1,144	6.5%
Block Group 2, Census Tract 203.01, Cape May County, New Jersey	1,727	0	0	0	0	0	15	0	1,742	0.9%
Block Group 3, Census Tract 203.01, Cape May County, New Jersey	513	0	0	0	0	0	0	55	568	9.7%
Block Group 4, Census Tract 203.01, Cape May County, New Jersey	1066	0	0	0	0	0	0	0	1,066	0.0%

Source: U.S. Census 2016-2020 ACS 5-Year Estimates

The U.S. Census (2018) uses the following definitions to define race categories:

- White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as "White" or report entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian.

- Black or African American. A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as "Black or African American," or report entries such as African American, Kenyan, Nigerian, or Haitian.
- American Indian and Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicate their race as "American Indian or Alaska Native" or report entries such as Navajo, Blackfeet, Inupiat, Yup'ik, or Central American Indian groups or South American Indian groups.
- Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. This includes people who reported detailed Asian responses such as: "Asian Indian," "Chinese," "Filipino," "Korean," "Japanese," "Vietnamese," and "Other Asian" or provide other detailed Asian responses.
- Native Hawaiian and Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who reported their race as "Fijian," "Guamanian or Chamorro," "Marshallese," "Native Hawaiian," "Samoan," "Tongan," and "Other Pacific Islander" or provide other detailed Pacific Islander responses.
- Two or more races. People may choose to provide two or more races either by checking two or more race response check boxes, by providing multiple responses, or by some combination of check boxes and other responses. For data product purposes, "Two or More Races" refers to combinations of two or more of the following race categories: "White," "Black or African American," American Indian or Alaska Native," "Asian," Native Hawaiian or Other Pacific Islander," or "Some Other Race."

3. Poverty rates in the study areas

Table 3-1 provides an overview of the households with incomes below the poverty line in the block groups in Ocean, Atlantic, and Cape May Counties that are within the Oyster Creek and BL England study areas. The BL England study area overlaps a small portion of Atlantic County that is not populated. In Ocean County, three block groups in the Oyster Creek study area have poverty rates that exceed the county rate of 8.6 percent. In Cape May County, three block groups in the BL England study area have a poverty rate higher than the county average of 9.5 percent. The block groups that exceed the county level poverty rate are indicated in bold in **Table 3-1**.

Table 3-1 - Poverty rates in the Oyster Creek and BL England study areas (block groups that exceed the county level poverty rate are shown in bold).

Geography	Total Households	Households Below Poverty	Percent
Atlantic County, New Jersey	**99,850**	**12,748**	**12.8%**
None	N/A	N/A	N/A
Cape May County, New Jersey	**40,171**	**3,812**	**9.5%**
Block Group 1, Census Tract 201.01, Cape May County, New Jersey	**402**	**67**	**16.7%**
Block Group 2, Census Tract 201.01, Cape May County, New Jersey	380	21	5.5%
Block Group 3, Census Tract 201.01, Cape May County, New Jersey	538	50	9.3%
Block Group 4, Census Tract 201.01, Cape May County, New Jersey	437	40	9.2%
Block Group 1, Census Tract 201.02, Cape May County, New Jersey	119	10	8.4%
Block Group 2, Census Tract 201.02, Cape May County, New Jersey	403	12	3.0%
Block Group 3, Census Tract 201.02, Cape May County, New Jersey	478	28	5.9%
Block Group 1, Census Tract 202.03, Cape May County, New Jersey	**203**	**23**	**11.3%**
Block Group 2, Census Tract 202.03, Cape May County, New Jersey	**435**	**59**	**13.6%**
Block Group 3, Census Tract 202.03, Cape May County, New Jersey	382	9	2.4%
Block Group 1, Census Tract 202.06, Cape May County, New Jersey	205	7	3.4%
Block Group 2, Census Tract 202.06, Cape May County, New Jersey	206	10	4.8%
Block Group 1, Census Tract 203.01, Cape May County, New Jersey	453	37	8.2%
Block Group 2, Census Tract 203.01, Cape May County, New Jersey	710	37	5.2%
Block Group 3, Census Tract 203.01, Cape May County, New Jersey	271	8	2.9%
Block Group 4, Census Tract 203.01, Cape May County, New Jersey	448	7	1.6%

Geography	Total Households	Households Below Poverty	Percent
Ocean County, New Jersey	**226,160**	**19,556**	**8.6%**
Block Group 3, Census Tract 7320.02, Ocean County, New Jersey	**983**	**144**	**14.6%**
Block Group 3, Census Tract 7321.04, Ocean County, New Jersey	331	0	0.0%
Block Group 2, Census Tract 7321.04, Ocean County, New Jersey	**587**	**56**	**9.5%**
Block Group 1, Census Tract 7330, Ocean County, New Jersey	895	13	1.4%
Block Group 2, Census Tract 7330, Ocean County, New Jersey	559	47	8.4%
Block Group 3, Census Tract 7330, Ocean County, New Jersey	**906**	**161**	**17.8%**
Block Group 4, Census Tract 7330, Ocean County, New Jersey	1,711	131	7.7%
Block Group 1, Census Tract 98000, Ocean County, New Jersey	0	0	0%

4. Literature Cited

U.S. Census Bureau. 2018. Race. Retrieved from: https://www.census.gov/quickfacts/fact/note/US/RHI425217.

U.S. Census Bureau. 2022. 2016-2020 American Community Survey 5-Year Estimates. Data revised March 17, 2022.

EJScreen Report (Version 2.0)

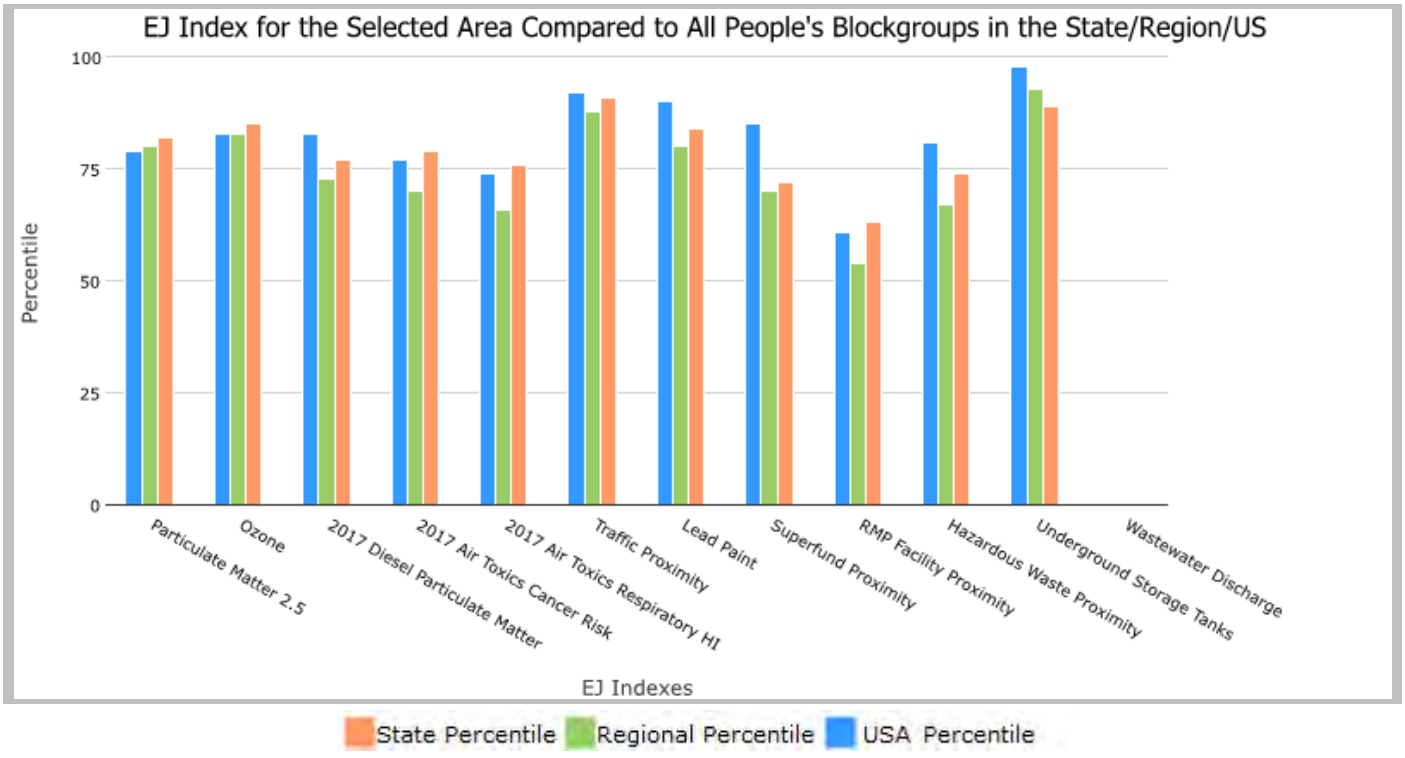
20 miles Ring Centered at 39.117946,-74.239474, NEW JERSEY, EPA Region 2

Approximate Population: 27,888

Input Area (sq. miles): 1256.38

OCW (The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	82	80	79
EJ Index for Ozone	85	83	83
EJ Index for 2017 Diesel Particulate Matter*	77	73	83
EJ Index for 2017 Air Toxics Cancer Risk*	79	70	77
EJ Index for 2017 Air Toxics Respiratory HI*	76	66	74
EJ Index for Traffic Proximity	91	88	92
EJ Index for Lead Paint	84	80	90
EJ Index for Superfund Proximity	72	70	85
EJ Index for RMP Facility Proximity	63	54	61
EJ Index for Hazardous Waste Proximity	74	67	81
EJ Index for Underground Storage Tanks	89	93	98
EJ Index for Wastewater Discharge	N/A	N/A	N/A



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

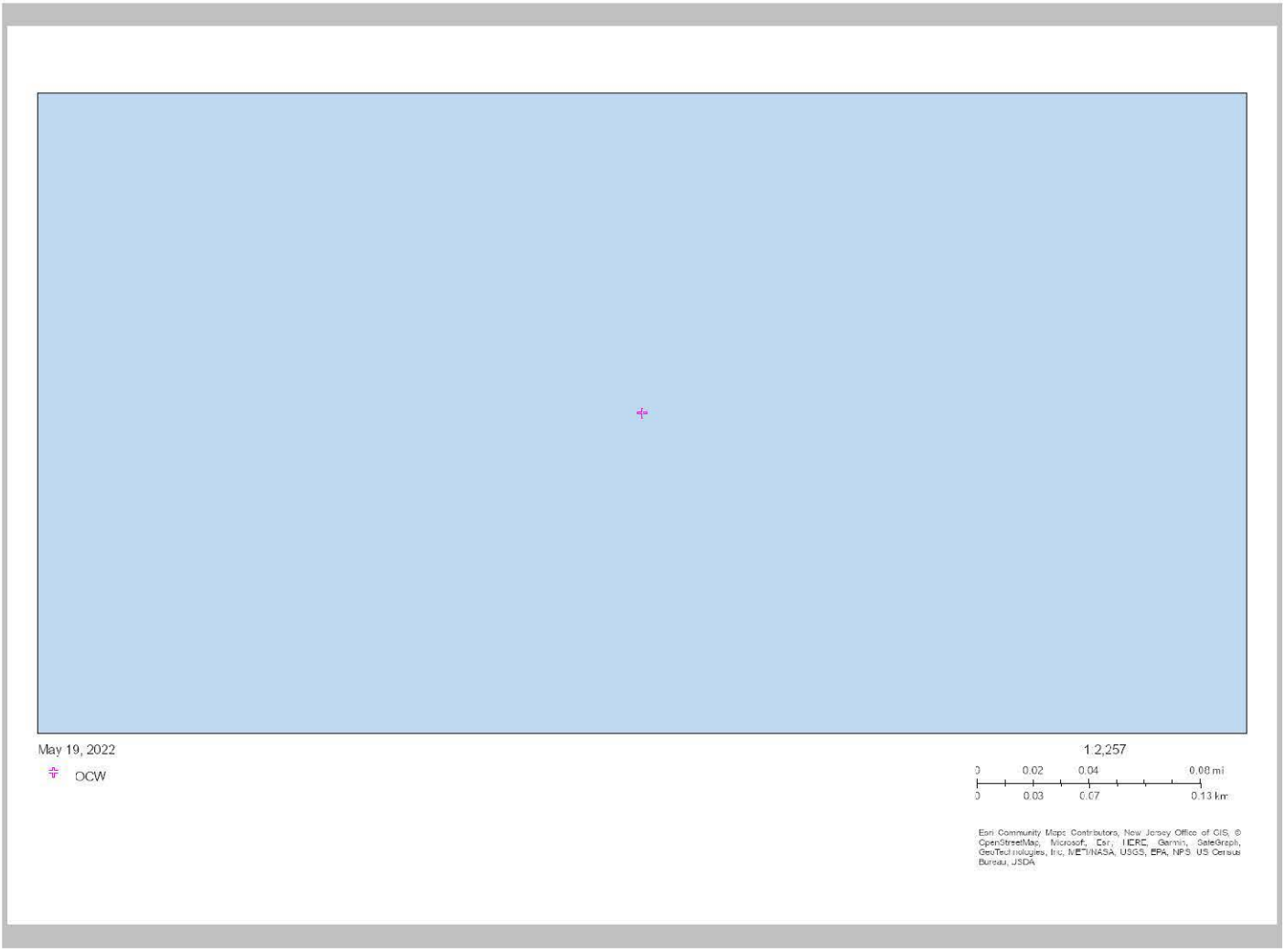
EJScreen Report (Version 2.0)

20 miles Ring Centered at 39.117946,-74.239474, NEW JERSEY, EPA Region 2

Approximate Population: 27,888

Input Area (sq. miles): 1256.38

OCW (The study area contains 1 blockgroup(s) with zero population.)



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	1

EJScreen Report (Version 2.0)

20 miles Ring Centered at 39.117946,-74.239474, NEW JERSEY, EPA Region 2

Approximate Population: 27,888

Input Area (sq. miles): 1256.38

OCW (The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 (µg/m^3)	6.87	8.32	1	8.03	15	8.74	11
Ozone (ppb)	39.6	42.1	3	41.8	14	42.6	30
2017 Diesel Particulate Matter* (µg/m^3)	0.304	0.511	32	0.558	<50th	0.295	60-70th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	20	29	19	29	<50th	29	<50th
2017 Air Toxics Respiratory HI*	0.21	0.38	8	0.37	<50th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	1200	860	81	840	79	710	85
Lead Paint (% Pre-1960 Housing)	0.51	0.4	60	0.46	52	0.28	78
Superfund Proximity (site count/km distance)	0.1	0.44	15	0.28	34	0.13	67
RMP Facility Proximity (facility count/km distance)	0.02	0.76	0	0.62	0	0.75	0
Hazardous Waste Proximity (facility count/km distance)	1	3.3	43	4.9	35	2.2	57
Underground Storage Tanks (count/km^2)	27	15	80	9.3	89	3.9	97
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.22	N/A	2.3	N/A	12	N/A
Socioeconomic Indicators							
Demographic Index	68%	34%	88	41%	78	36%	88
People of Color	78%	45%	79	49%	68	40%	82
Low Income	57%	23%	92	32%	82	31%	87
Unemployment Rate	10%	6%	86	6%	81	5%	85
Linguistically Isolated	16%	7%	85	14%	75	5%	90
Less Than High School Education	26%	10%	90	13%	84	12%	87
Under Age 5	6%	6%	54	6%	55	6%	49
Over Age 64	17%	16%	65	16%	60	16%	63

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.