



# Amite River and Tributaries East of the Mississippi River, Louisiana Feasibility Study (ART)



## Appendix D-4: Environmental Justice

December 2023

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## Section 1

# Environmental Justice

The Environmental Justice (EJ) Appendix D-4 provides more detailed information than is available in the Environmental Assessment's (EA) EJ Section 3.2.3.3, in the main feasibility report. The EJ appendix provides information on the methodology used to identify areas of EJ concern. The EJ assessment in Chapter 5 of the EA identifies impacts to these areas of EJ concern and describes how residents may be beneficially and adversely impacted by the Federal action. Appendix D-4 also provides tables and figures not in the main report.

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. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. (<https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>, accessed 01/2023).

EJ is institutionally significant because of Executive Order (EO) 12898 of 1994, EO 14008 of 2021 and the Department of Defense's Strategy on Environmental Justice of 1995. Federal agencies are to identify and address any disproportionately high and adverse human health or environmental effects of Federal actions to minority and/or low-income populations and to those populations challenged with environmental hazards.

This resource is technically significant because the social and economic welfare of minority and low-income populations may be positively or adversely disproportionately impacted by the proposed actions. This resource is publicly significant because of public concerns about the fair and equitable treatment (fair treatment and meaningful involvement) of all people with respect to environmental and human health consequences of Federal laws, regulations, policies, and actions.

Below are other relevant EOs and memorandum related to EJ:

- Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities through the Federal government dated 20 January 2021;

- Executive Order 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis dated 20 January 2021;
- Executive Order 14008, Tackling the Climate Crisis at Home and Abroad dated 27 January 2021; Office of Management and Budget Memorandum M-21-28;
- Comprehensive Documentation of Benefits in Decision Document, January 5, 2021, Issued by the Assistant Secretary of the Army (Civil Works);
- Indian Self-Determination and Education Assistance Act, as Amended (25 U.S. Code Chapter 46) SACW Subject; Implementation of Environmental Justice and the Justice40 Initiative 2;
- Water Resources Development Act (WRDA) of 2020, December 27, 2020;
- Interim Implementation Guidance for the Justice40 Initiative, dated 20 July 2021; and Memorandum for Commanding General. U.S. Army Corps of Engineers Subject: Implementation of Environmental Justice and the Justice40 Initiative Dated 15 March 2022.
- Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental

## 1.1 JUSTICE FOR ALL

Minority populations are those persons who identify themselves as Black, Hispanic, Asian American, American Indian/Alaskan Native, Pacific Islander, some other race, or a combination of two or more races. A minority population exists where the percentage of minorities in an affected area either exceeds 50 percent or is meaningfully greater than in the general population. Low-income populations as of 2020 are those whose income are \$26,200 for a family of four and are identified using the Census Bureau's statistical poverty threshold. For the purpose of this study, a low-income population is defined as residents in a geographic area, such as a census block group, exceeding Louisiana's 2020 low-income percentage of 19.6 percent. Minority and low-income populations, identified using the above thresholds, are considered areas of EJ concern and an evaluation of the Federal action impacts to areas of EJ concern is provided in this section.

EO 12898 directs Federal agencies to identify and address any disproportionately high adverse human health or environmental effects of Federal actions to minority and/or low-income populations. Areas of EJ concern are identified to help inform planners as to the location of those areas needing a particular focus and attention when determining the impacts of the Federal action, as described in EO 12898. Federal agencies should assess the effects of their projects on communities with EJ concerns in accordance with EO 12898: Environmental Justice, 1994 and EO 14008, Tackling the Climate Crisis at Home and Abroad, 2021. For U.S. Army Corps of Engineers, compliance with these EOs is mandatory pursuant to Section 112(b)(1) of WRDA 2020 (Public Law 116-260). ("In the formulation of water development resources projects, the Secretary shall comply with any existing Executive Order regarding environmental justice . . . to address any disproportionate and adverse human health or environmental effects on minority communities, low-income communities, and Indian Tribes."). For purposes of consistency with EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income



Populations, the terms “minority populations” and low-income populations” are used in this document.

## 1.2 JUSTICE40

EO 14008, signed by President Biden in April 2023, is a commitment to securing environmental justice and spurring economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, and health care. As per EO 14008, the Federal government has made it a goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. This goal has been designated the Justice40 Initiative.

The Council on Environmental Quality developed the Climate and Economic Justice Screening Tool (CEJST) to assist identifying economically disadvantaged communities. The CEJST uses several burdens that qualify a census tract as disadvantaged. Burden categories in CEJST include housing, health, climate change, energy, legacy pollution, transportation, water/wastewater infrastructure, and workplace development. For a tract to be considered disadvantaged, it must be at or above the 90th percentile in one or more burdens and be at or above the 65th percentile for low income. Detailed methodology can be found on the CEJST website.

Out of 146 census tracts in the ART study area, 57 are historically burdened by a CEJST burden category. These identified communities would be impacted disproportionately by inundation events as they may not have the resources to recover from the impacts or be able to properly mitigate prior to the event. Refer to Appendix F, Economic and Social Considerations, Section 7.2.6 for more information on Justice40.

For the EJ assessment, the project delivery team (PDT) used U.S Census data to identify areas of EJ concern (minority and low-income communities) within the ART study area. Twelve parishes or counties comprise the ART study area, including Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, St. Helena, St. James and St. John the Baptist Parishes in Louisiana and the Mississippi Counties of Amite, Franklin, Lincoln and Wilkinson.

For purposes of the EJ analysis, “environmental justice communities” were defined as communities that meet established thresholds for identifying low-income residents or who identify as a person of color, or minority. Methods for determining thresholds are explained



in the Environmental Protection Agency's (EPA) EJ Promising Practices document and are presented below.

### 1.2.1 Census Data

The PDT used the National Historical Geographic Information System (NHGIS) tool to obtain the most recent U.S. Census Bureau 5-year survey data, 2017-2021, herein referred to as 2021 data. Similar data is available through the EJSCREEN tool. Data for cities and towns and for U.S. Census block groups are presented, which helps highlight areas of EJ concern for different geographic areas. Cities and towns are identified by the U.S. Census Bureau. The U.S. Census block is a geographic area consisting of several smaller U.S. Census blocks, which are combined to form block groups. Each of these groups represent geographic areas and people living in communities.

### 1.2.2 Low-income threshold criteria

A reference area's percentage of residents living below poverty was used as the threshold for identifying areas of EJ concern based upon poverty status. The state of Louisiana is the reference area for the study area that is located in Louisiana and is the state of Mississippi for study area counties. The 2021 percentage of Louisiana residents living below the poverty level is 18.8 percent and for Mississippi is 19.4 percent. Any area in Louisiana and Mississippi the study, area that consists of 18.8 and 19.4 percent or more of residents living below poverty, respectively, is considered an area of EJ concern. The poverty income level for year 2021 in the United States was \$26,500 for a family of four.

### 1.2.3 Minority population threshold criteria

If 50 percent of residents in an area identify as a person of color (minority), then the area is considered an area of EJ concern. Additionally, if the percentage of minority residents in an area is meaningfully greater (15 percent) than the percentage minority in the state of Louisiana or Mississippi, that area is also considered an area of EJ concern. The threshold used to identify minority areas of EJ concern is the lower of the two. In this case, the minority threshold used to identify areas of EJ concern in Louisiana is 48.5 percent or greater and in Mississippi is 50 percent or greater.

Data for parishes and counties gives a broad-brush overview of the study area's likelihood of having residents living in areas of EJ concern based upon the minority composition and low-income status. Tables D4-1 and D4-2 show the racial composition for the Louisiana parishes and Mississippi counties in the study area. Six of the eight Louisiana parishes in the study area are considered areas of EJ concern based upon exceeding the minority threshold of 48.5 percent and only one of the four Mississippi counties in the ART study area is an area of EJ concern and exceeds the 50 percent threshold, Wilkinson County.



Table D-4-1. 2021 U. S. Census Bureau Information

Race and Ethnicity	Louisiana Parishes								State of LA
	Ascension	East Baton Rouge	East Feliciana	Iberville	Livingston	St. Helena	St. James	St. John the Baptist	
<b>Total Population</b>	125,289	455,447	7,502	30,651	141,057	10,881	20,390	42,704	4,657,305
<b>Not Hispanic</b>	117,797	435,520	7,363	29,768	135,147	10,660	20,029	39,840	4,408,523
White	84,024	199,459	2,120	14,327	120,869	4,808	9,933	13,522	2,693,832
Black	28,360	205,826	4,992	14,366	9,466	5,583	10,065	24,380	1,475,549
Native American	328	492	54	21	172	60	-	4	21,492
Asian	1,587	14,096	-	16	1,188	-	5	365	79,562
Hawaiian	36	74	-	-	9	-	-	-	2,017
Some Other Race	492	1,309	23	196	127	-	-	716	16,965
Two or more races	2,970	14,264	174	842	3,316	209	26	853	119,106
<b>Hispanic</b>	7,492	19,927	139	883	5,910	221	361	2,864	248,782
White	2,148	7,011	14	365	2,816	198	115	1,503	112,043
Black	175	853	50	24	46	-	-	216	10,453
Native American	44	282	-	3	201	-	-	-	4,058
Asian	94	18	-	-	36	-	-	11	876
Hawaiian	-	-	-	-	-	-	48	-	155
Some other race	3,275	7,623	51	118	1,611	12	148	682	62,662
Two or more races	1,756	4,140	24	373	1,200	11	50	452	58,535
<b>Percent Minority*</b>	<b>32.90%</b>	<b>56.20%</b>	<b>71.70%</b>	<b>53.30%</b>	<b>14.30%</b>	<b>55.80%</b>	<b>51.30%</b>	<b>68.30%</b>	<b>42.20%</b>
*includes Population Not Hispanic non white races and all Hispanic races									
Red highlighted numbers represent Parishes with Minority threshold being exceeded and are considered areas of EJ concern.									
U.S. Census Bureau 2017-2021, ACS									

Table D4-2. 2021 U. S. Census Bureau Information, Mississippi

Race	Mississippi Counties				State of MS
	Amite County	Franklin County	Lincoln County	Wilkinson County	
<b>Total Population</b>	12,718	7,705	34,910	8,706	2,967,023
<b>Not Hispanic</b>	12,710	7,703	34,447	8,623	2,871,380
White	7,317	4,806	23,331	2,417	1,661,874
Black	5,193	2,758	10,665	6,020	1,109,577
Native American	2	12	-	-	11,587
Asian	15	-	161	2	28,758
Hawaiian	-	-	-	-	993
Some Other race	20	28	2	111	6,743
Two or more races	163	99	288	73	51,848
<b>Hispanic</b>	8	2	463	83	95,643
White	-	1	305	43	40,115
Black	-	-	12	-	3,837
Native American	7	-	-	-	1,770
Asian	-	-	-	-	334
Hawaiian	-	-	-	-	136
Some Other race	1	1	11	40	31,310
Two or more races	-	-	135	-	18,141
<b>Percent Minority*</b>	<b>42.50%</b>	<b>37.60%</b>	<b>33.20%</b>	<b>72.20%</b>	<b>44.00%</b>





\*includes Population Not Hispanic non white races and all Hispanic races

Note: Red highlighted numbers represent Counties with Minority threshold being exceeded and are identified areas of EJ concern.

Source: U.S. Census Bureau 2017-2021, ACS

Table D-4-3 shows the percentage of people living below poverty for the Parish and counties in the ART study area. The EPA recommends using the state's low-income percentage to identify areas of EJ concern, which is 18.8 percent for Louisiana for year 2021 and 19.4 percent for Mississippi for 2021. Two parishes in Louisiana, Iberville and St. Helena, and all four of the counties in Mississippi meet or exceed the poverty threshold and are considered areas of EJ concern.

*Table D-4-3. Places within Study Area, Percent of Population Living Below Poverty*

Parish/County	Population for Whom Poverty Status is Known	% of Population Living Below Poverty
State of LA	4,531,545	18.80%
Ascension	124,142	9.80%
East Baton Rouge	445,909	17.70%
East Feliciana	16,459	13.90%
Iberville	27,421	18.90%
Livingston	139,802	10.70%
St. Helena	10,666	25.20%
St. James	20,189	12.00%
St. John the Baptist	42,088	14.90%
State of MS	2,874,132	19.40%
Amite County	12,622	30.80%
Franklin County	7,628	22.90%
Lincoln County	34,451	20.00%
Wilkinson County	7,536	21.40%
Note: Red Highlighted numbers indicate Parishes/Counties considered areas of EJ concern		
Source: U.S. Census Bureau 2017-2021 ACS		

However, there may be neighborhoods within these large parishes and counties that meet the criteria for an area of EJ concern and those that do not meet the criteria for being an area of EJ concern.

A more refined and zoomed in approach uses U.S. Census block groups, which are much smaller geographic areas compared to cities and towns. Census block groups are smaller geographic areas made up of Census blocks (the smallest geographic area for which U.S. Census data is available).

A closer look at the study area reveals pockets of neighborhoods with EJ concerns located in Census block groups within the larger parishes and counties, which are identified in Figure D-4-1. The colored polygons depict the U.S. Census Block groups in the study area that meet or exceed minority or low-income thresholds (or both) used to identify areas of EJ concern.



Just under 800,00 people live in the ATR study area, defined as the population in Louisiana and Mississippi block groups within or intersecting the ATR study area. The vast majority are in Louisiana. Just over 380,000 of the ART study area population live in areas of EJ concern.

About 150,000 residents live in EJ areas (green polygons) identified as meeting both minority and poverty criteria, roughly 160,000 are in EJ areas (yellow polygons) identified as meeting just the minority threshold, while the remainder, about 73,000 people, live in EJ areas (blue polygons) identified using the poverty criteria.

The Census block groups shown on Figure D4-4 represent the areas of EJ concern in the ART study area and are the focus of the EJ impacts assessment in Chapter 5 of the EA, which identifies adverse and beneficial effects from the Federal action.

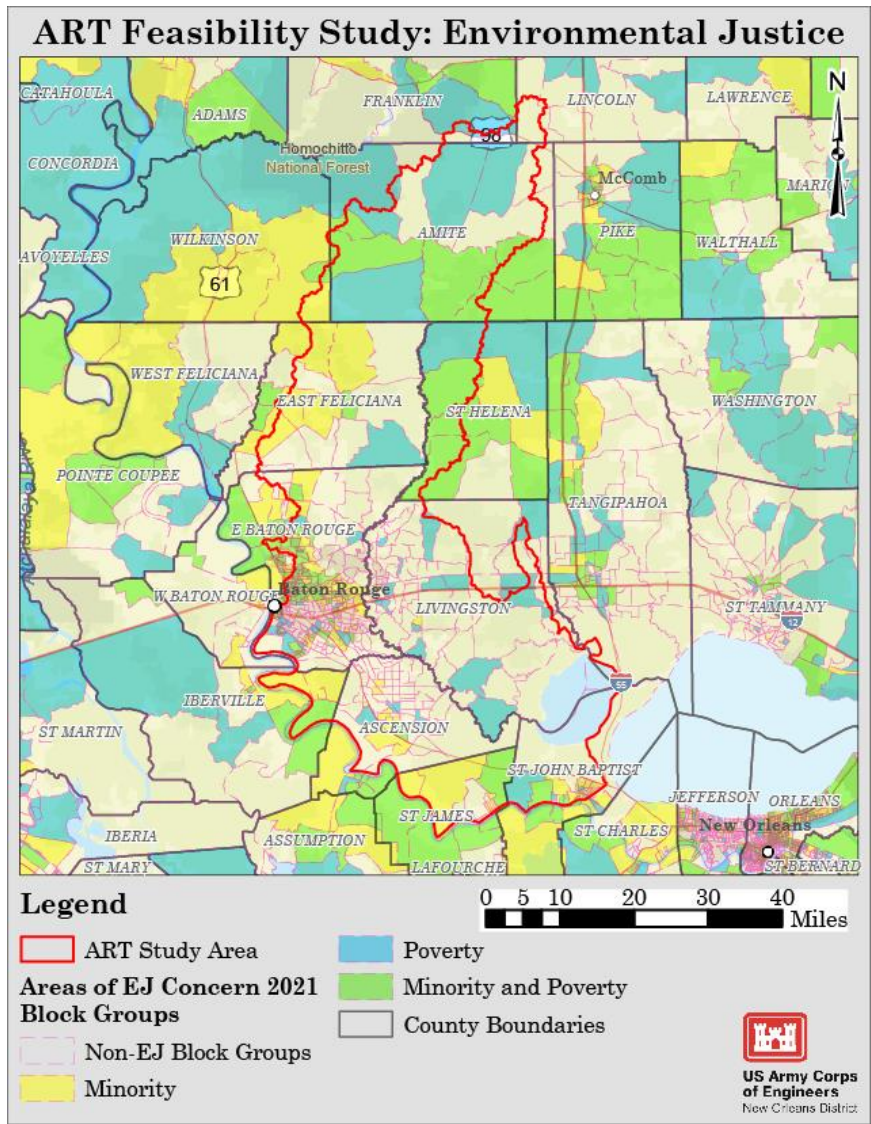


Figure D4-1. Areas of EJ concern at the Block Group Level, Study Area

Source: Steven Manson, Jonathan Schroeder, David Van Riper, Tracy Kugler, and Steven Ruggles. IPUMS National Historical Geographic Information System: Version 16.0 [dataset]. Minneapolis, MN: IPUMS. 2021. <http://doi.org/10.18128/D050.V16.0>

Demographic indicators are often used as proxies for a community’s health status and potential susceptibility to pollution. Environmental and demographic data and indicators may be viewed separately or in combination. The EJ indexes presented in Table D-4-3 combines demographic data with environmental indicators and are presented as a percentile.

The EJSCREEN tool, developed by EPA, uses environmental indicators to help identify environmental risks to communities. EPA selected the following environmental indicators for use in the 2020 version of EJSCREEN:



1. Air pollution
  - a. PM2.5 level in air.
  - b. Ozone level in air.
  - c. NATA air toxics:
    - i. Diesel particulate matter level in air. Air toxics cancer risk.
    - ii. Air toxics respiratory hazard index.
2. Traffic proximity and volume: Amount of vehicular traffic nearby, and distance from roads.
3. Lead paint indicator: Percentage of housing units built before 1960, as an indicator of potential exposure to lead.
4. Proximity to waste and hazardous chemical facilities or sites: Number of significant industrial facilities and/or hazardous waste sites nearby, and distance from those:
  - d. National Priorities List (NPL) sites.
  - e. Risk Management Plan (RMP) Facilities.
  - f. Hazardous waste Treatment, Storage and Disposal Facilities (TSDFs).
5. Wastewater discharge indicator: Proximity to toxicity-weighted wastewater discharges

If an EJ area's exposure to the environmental indicators is above the 80<sup>th</sup> percentile in the state or the nation and the Federal action exacerbates any of those environmental risks, a potential disproportionate impact may occur. Specifically, a disproportionate impact occurs when a proposed project impacts a much higher percentage of minority and low-income populations than other communities located within the project area or when the benefits and impacts are not evenly distributed between EJ and non-EJ communities. According to EPA, environmental indicators above the 80<sup>th</sup> percentile in the state or nation indicate that one could expect environmental concerns.

The EJ study area includes parishes in Louisiana and counties in Mississippi, with the majority of the study area being in Louisiana. Environmental indicators for the ART study area are presented in Table D4-4. Five of the indexes are at or above the 80<sup>th</sup> percentile as compared to Louisiana or the nation and include particulate matter, ozone, air toxics cancer risk, toxic releases to air, and wastewater discharge. Much of the construction activities associated with the tentatively selected plan will not exacerbate the five noted environmental concerns as identified by EPA's EJSCREEN tool. Nonetheless, best management practices

will be used to avoid, reduce, and contain temporary impacts to human health and safety. For more information on air quality, refer to Section 5.3.1.8 of the EA.

*Table D4-4, EJSCREEN Environmental Indicators, ART Study Area*

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter	9.22	8.62	81	8.08	78
Ozone (ppb)	61.7	59.8	88	61.6	55
Diesel Particulate Matter	0.281	0.247	68	0.261	64
Air Toxics Cancer Risk* (lifetime risk per million)	44	32	95	25	94
Air Toxics Respiratory	0.45	0.38	43	0.31	70
Toxic Releases to Air	49,000	15,000	93	4,600	98
Traffic Proximity	71	86	69	210	48
Lead Paint (% Pre-1960 Housing)	0.11	0.22	45	0.3	37
Superfund Proximity	0.073	0.076	72	0.13	56
RMP Facility Proximity	0.42	0.62	61	0.43	73
Hazardous Waste Proximity	1.2	1.1	66	1.9	64
Underground Storage Tanks	1.7	2.2	62	3.9	56
Wastewater Discharge	1.2	49	94	22	92

Note: 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. For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

#### 1.2.4 EJ Outreach and Meetings

EJ outreach meetings were conducted for the Amite River and Tributaries Feasibility Report Environmental Impact Statement on February 28, 2023, and March 1, 2023, to inform and engage residents about the flood risk reduction measures, which included the nonstructural plan.

Outreach efforts focused on civic and faith-based organizations that serve residents in areas of EJ concern, including local churches, libraries, nonprofits, and community center. Initial and follow-up calls were made to 29 churches, four community centers, three nonprofits, and three academic institutions. Of those contacted, six churches, two community centers, two nonprofits, and two academic institutions agreed to disseminate our one-page summary of the outreach effort to the residents of whom they serve. Twelve people attended the meetings, including Non-Governmental Organizations (NGOs), a professor from an academic institution and community members.

Several questions were asked by attendees and included the following:

- How will the dam impact nearby cemeteries in St. Helena Parish? (If there would be relocation)
- What kind of financial support would homeowners receive to participate in the nonstructural plan?
- Under a structural plan, does the Corps have to buy-out the homes of those living nearby?
- Does the widening and expansion of I-10 and I-12 effect/have anything to do with the proposed project?
- How does the dam impact migratory and endangered species?
- Clarification on the EJ maps, specifically the source of the data and what was being represented.
- Clarification about what kind of structures are included in ~4,000 structures to be impacted.

Questions related to the dam are no longer relevant since the dam is no longer considered a constructible alternative. More information is provided in the EJ assessment in the environmental assessment (EA) of the main report that details the out-of-pocket costs

homeowners may be responsible and other implementation requirements to have their houses elevated and the possible programs and entities that may assist bridging the financial gap to participate in the elevation program. Finally, related to the last two bullets, the EJ report in the EA and in this appendix explains the sources of data and methods used to identify areas of EJ concern.



## References and Resources

### Project References

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