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Annex A Chatham County Unincorporated Areas

A.1 PLANNING PROCESS

The table below lists the HMPC members who represented Chatham County unincorporated areas and the Town of Vernonburg.

Table A-1 – HMPC Members

Member Name	Title	Agency/Department
Randall Mathews	Deputy Director	Chatham Emergency Management Agency
Tiffany Arant	Emergency Management Specialist	Chatham Emergency Management Agency
James Vickers	Fire Chief	Chatham County Fire Department
Keith Hardin	Deputy Fire Chief	Chatham County Fire Department
Chuck Kearns	Chief Executive Officer	Chatham EMS
Jefferson Kirkland	Environmental Program Manager	Chatham County Engineering
Angela Bliss	Floodplain Manager	Chatham County Engineering
Cate McCain	Floodplain Assistant	Chatham County Engineering
Andrew Cree	Director	Chatham County ICS
Anna McQuarrie	Planner – Special Projects & Transportation	Metro Planning Commission
Subhashi Karunarathne	Planner – Special Projects & Transportation	Metro Planning Commission
Solomon Roberts	Maintenance Supervisor	Chatham County Facilities Maintenance & Operations
Harold Alston	Maintenance Supervisor	Chatham County Facilities Maintenance & Operations
William Wright	Director	Chatham County Public Works
Jackie Jackson	Resilience Program Administrator	Resilient Chatham County

A.2 COMMUNITY PROFILE

A.2.1 Overview of the Community

Chatham County is located in the U.S. state of Georgia on the state's Atlantic coast. One of the original counties of Georgia, Chatham County was created February 5, 1777, and is named after William Pitt, 1st Earl of Chatham. Chatham County is the northernmost of Georgia's coastal counties and is bounded by the Savannah River to the north and the Ogeechee River to the south. The county seat and largest city is Savannah.

Chatham County has a total area of 630.0 square miles, of which 432.7 square miles are land (68.7%) and 197.3 square miles (31.3%) are water.¹ Unincorporated Chatham County has a total area of 438.8 square miles or 280,832 acres.

According to the U.S. Census, the county population was 295,291 in 2020 and has an estimated population of 307,336 (2024). The countywide population per square mile of land area in 2020 was 692. The 2024 population estimates place the population density at 710 people per square mile of land area. The population for unincorporated Chatham County was 92,334 for the 2019-2023 5-year period, including

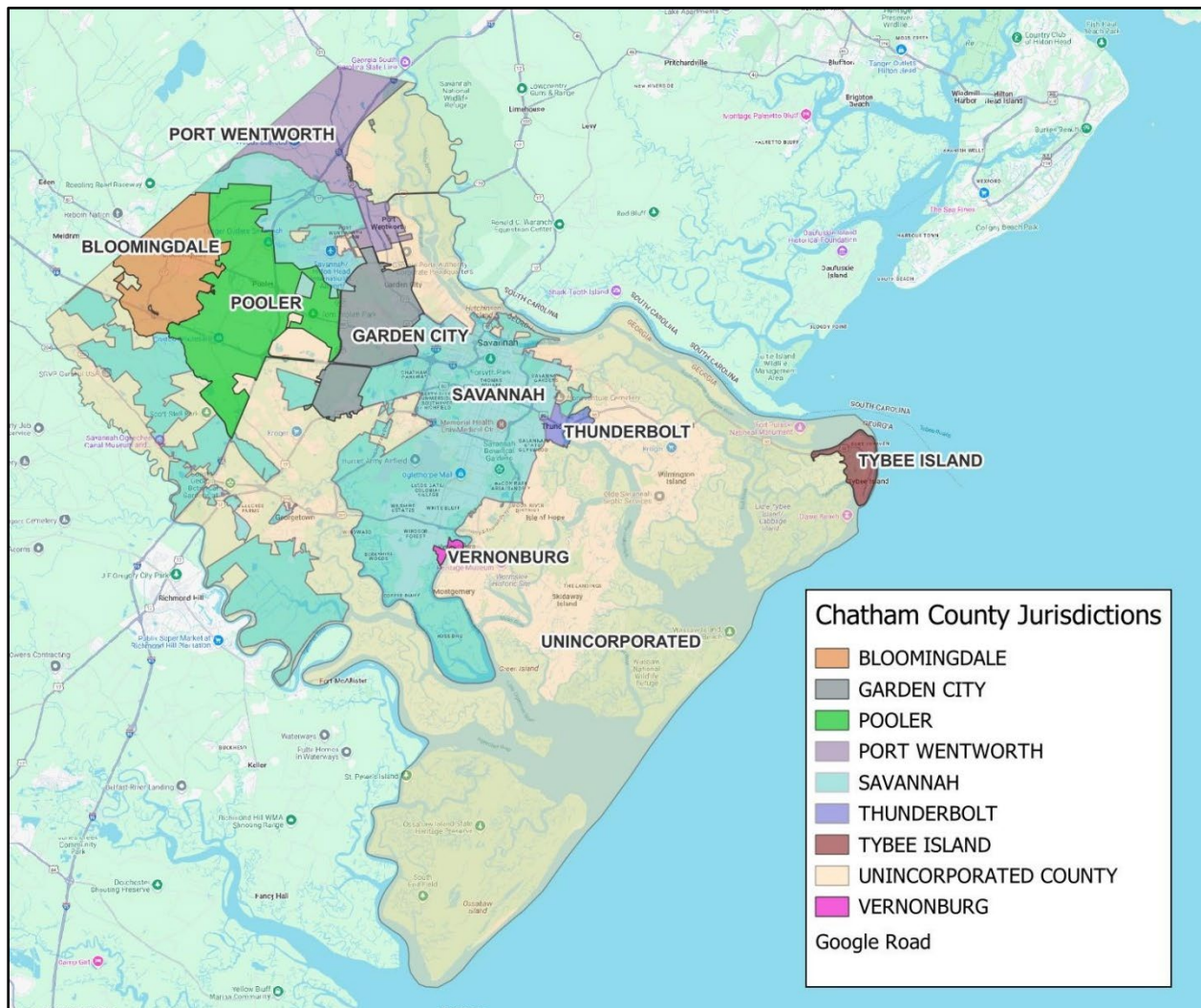
¹ <https://www.census.gov/quickfacts/fact/table/chathamcountygeorgia/IPE120223>. Retrieved 06-05-2025.

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREAS

130 people in Vernonburg.² Values for unincorporated Chatham County were estimated by calculating the difference between the County's total and the sum of its incorporated jurisdictions. For the purposes of this Plan, the town of Vernonburg is included alongside unincorporated Chatham County due to its small size and limited capacity.

The Location Map below reflects the boundaries of the unincorporated portions of the County and shows its location within the county and in relation to surrounding municipalities.

Figure A-1 – Location Map, Chatham County



² <https://data.census.gov/table/ACSDP5Y2023.DP05?q=Vernonburg+town,+Georgia>. Retrieved 07-11-2025.

A.2.2 Geography and Climate

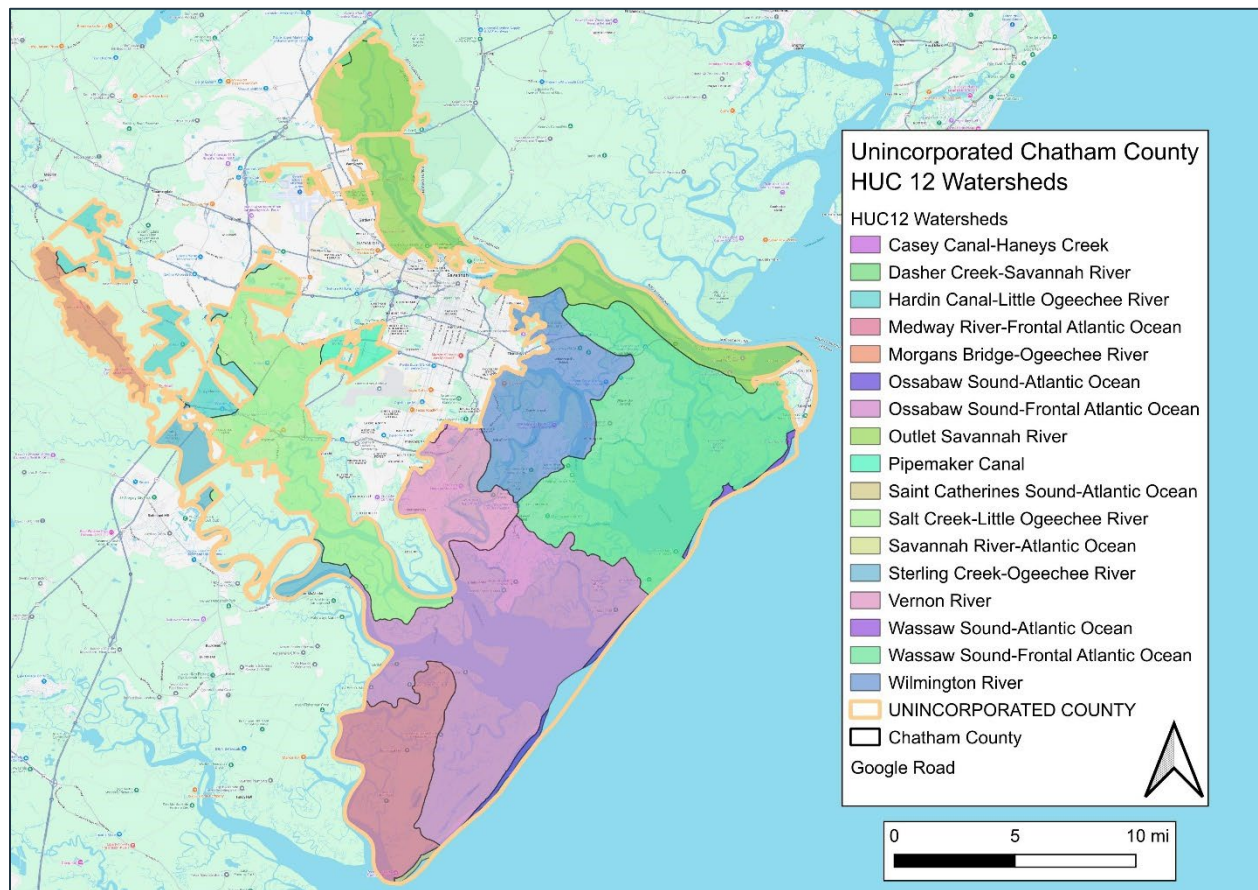
Countywide geography and climate information is provided in the Hazard Mitigation Plan. Refer to Section 1.8.2 for details.

Portions of Unincorporated Chatham County lie within eighteen (18) different HUC 12 watersheds as summarized in Table A-2. Figure A-2 depicts the HUC 12 watersheds in Unincorporated Chatham County.

Table A-2 – HUC 12 Watersheds

Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Dasher Creek – Savannah River	87.86	3.11	84.75	Outlet Savannah River	030601090305
Wright River	42.28	0.004	42.27	Atlantic Ocean	030601090306
Outlet Savannah River	196.73	109.31	87.42	Atlantic Ocean	030601090307
Wilmington River	32.75	32.75	0.00	Wassaw Sound – Frontal Atlantic Ocean	030602040101
Wassaw Sound – Frontal Atlantic Ocean	69.90	68.8	1.10	Wassaw Sound – Atlantic Ocean	030602040102
Hardin Canal – Little Ogeechee River	74.75	47.94	26.81	Salt Creek – Little Ogeechee River	030602040201
Pipemakers Canal	14.41	14.41	0.00	Salt Creek – Little Ogeechee River	030602040202
Morgans Bridge – Ogeechee River	117.02	13.7	103.32	Sterling Creek – Ogeechee River	030602020605
Casey Canal – Haneys Creek	13.78	13.78	0.00	Vernon River	030602040302
Salt Creek – Little Ogeechee River	73.24	73.24	0.00	Ossabaw Sound – Frontal Atlantic Ocean	030602040203
Sterling Creek – Ogeechee River	67.43	14.11	53.32	Ossabaw Sound – Frontal Atlantic Ocean	030602040301
Vernon River	27.98	27.98	0.00	Ossabaw Sound – Frontal Atlantic Ocean	030602040303
Ossabaw Sound – Frontal Atlantic Ocean	86.63	69.55	17.08	Ossabaw Sound – Atlantic Ocean	030602040304
Medway River – Frontal Atlantic Ocean	96.61	24.14	72.47	Saint Catherines Sound – Atlantic Ocean	030602040502
Savannah River – Atlantic Ocean	0.73	0.73	0.00	Ocean	030601090309
Wassaw Sound – Atlantic Ocean	0.96	0.96	0.00	Ocean	030602040103
Ossabaw Sound – Atlantic Ocean	1.67	1.67	0.00	Ocean	030602040305
Saint Catherines Sound – Atlantic Ocean	0.35	0.35	0.00	Ocean	030602040503

Figure A-2 – HUC 12 Watersheds, Unincorporated Chatham County



A.2.3 Cultural, Historic, and Natural Resources

A.2.3.1 Cultural and Historic Resources

Community Centers in unincorporated Chatham County include:

- Frank G. Murray Community Center at 125 Wilmington Island Road, Savannah, GA 31410
- Lake Mayer Community Center at 1850 Montgomery Crossroads, Savannah, GA 31406
- Tom Triplett Park at 100 Tom Triplett Road, Pooler, GA 31322
- Chatham County Aquatic Center at 7240 Sallie Mood Drive, Savannah, GA 31406

Sites in unincorporated Chatham County listed on the National Register of Historic Places can be found in the table below.

Table A-3 – Historic Sites, Unincorporated Chatham County

Site	Address	Nearest City/Location
St. Bartholomew's Church	Chevis Rd.	Burroughs
Nicholsonville Baptist Church	White Bluff Rd.	Nicholsonville
Vernonburg Historic District	Dancy Ave., Rockwell Ave. and S. Rockwell Ave.	Vernonburg
Isle of Hope Historic District	Roughly bounded by Skidaway River, Parkersburg Rd., Island, Cornus, and Noble Glen Drs.	Savannah

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Source: National Register of Historic Places, 2025

A.2.3.2 Parks, Preserves, and Conservation

Community Parks in the unincorporated County include:

- L. Scott Stell at 195 Scott Stell Community Park, Savannah, GA 31419
- Lake Mayer at 1850 E. Montgomery Crossroads, Savannah, GA 31406
- Mother Mathilda Beasley at 500 E. Broad St, Savannah, GA 31401
- Retha Mae McCoy at 240 Riverview Rd, Savannah, GA 31404
- Tom Triplett at 100 Tom Triplett Rd, Pooler, GA 31322
- Wilmington Island at Cohen Ave at Walthour Rd, Savannah, GA 31410

Nature preserves include:

- Bungard Conservation Area at Basin Rd, Savannah, GA 31419
- Whitemarsh Preserve on Wilmington Island, Savannah, GA 31419
- Frank O. Williamson Lake on Sallie Mood Dr, Savannah, GA 31406
- Ogeechee Trail on Fort Argyle Rd, Savannah, GA 31419

Multipurpose Trails include:

- McQueen Island Rails to Trails along Hwy. 80 East, Savannah, GA 31410
- Robert McCorkle Bike Trail on Wilmington Island, Savannah, GA 31419

Pin Point Heritage Museum

Located at 9924 Pin Point Ave, the Pin Point Heritage Museum, celebrates the life, work, and history of this Gullah/Geechee community that calls Pin Point home.



A.2.3.3 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within the unincorporated Chatham County are identified in the figure below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table A-4 – Flood Zones, Unincorporated Chatham County

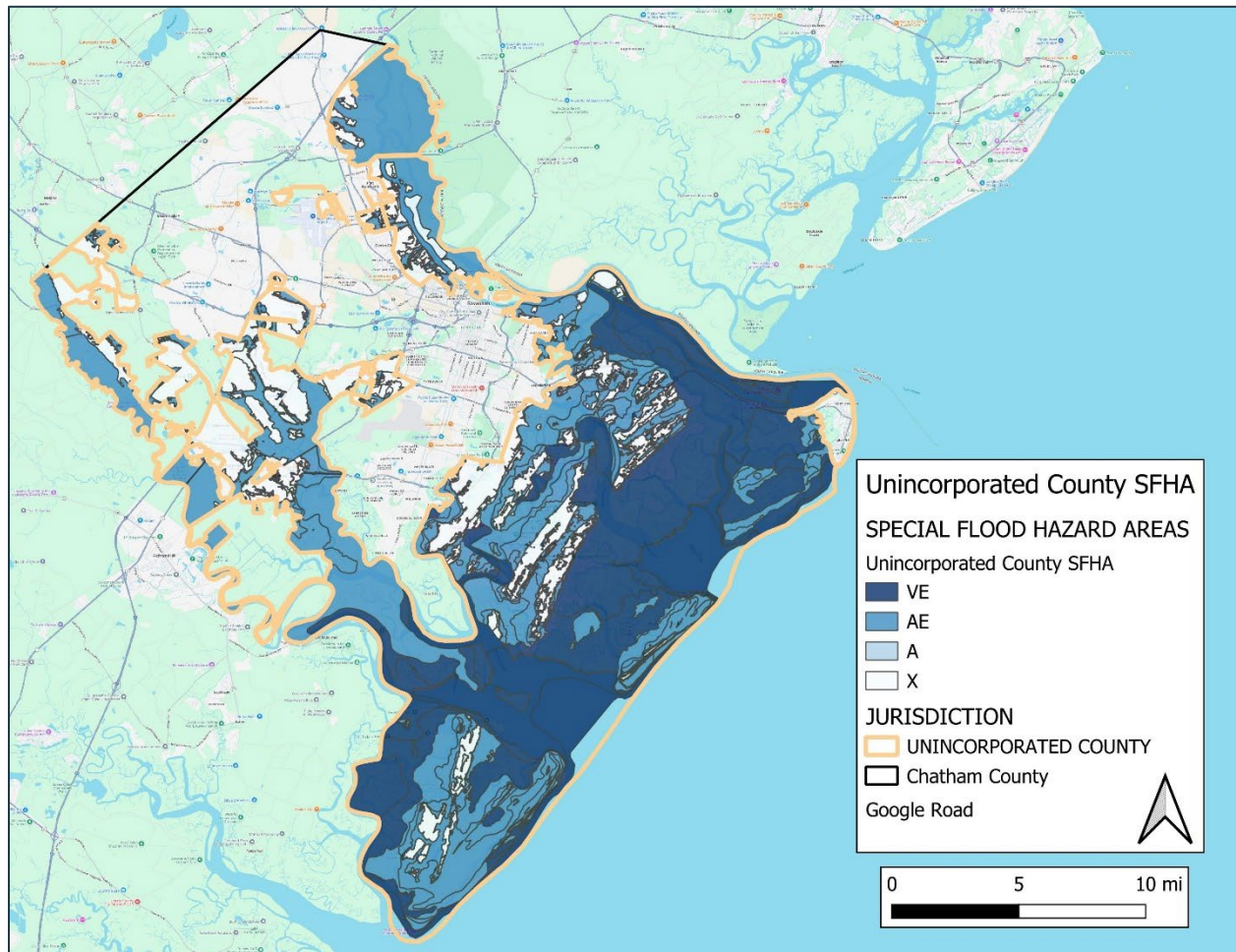
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of County (%)
Outside of Flood Zones / Ocean	74,920	117.06	26.7
A	62	0.10	0.0002
AE	84,666	132.29	30.1
VE	81,945	128.04	29.2
X500	14,768	23.08	5.3
X	24,471	38.26	8.7
TOTAL	280,832	438.8	100.0

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, unincorporated Chatham County has 321.74 total square miles located in flood zones. 260.43 square miles of the unincorporated County is located within a 100-year floodplain (Zone AE, A, and VE), which equals about 59.4 percent of the unincorporated area. An additional 38.26 square miles are located within moderate or minimal flood hazard areas (8.7%). With nearly 60 percent of the area at high risk of flooding in the Special Flood Hazard Area (SFHA), the County should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in the County include wetland areas and low-lying land along the major rivers in and around the unincorporated County, including the Ogeechee River, Little Ogeechee River, Vernon River, Wilmington River, South Channel of the Savannah River, and the Atlantic Ocean. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates, and acting as a flood storage area to reduce downstream peaks. The County should strive to keep floodplain and floodplain waters free of contaminants, such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

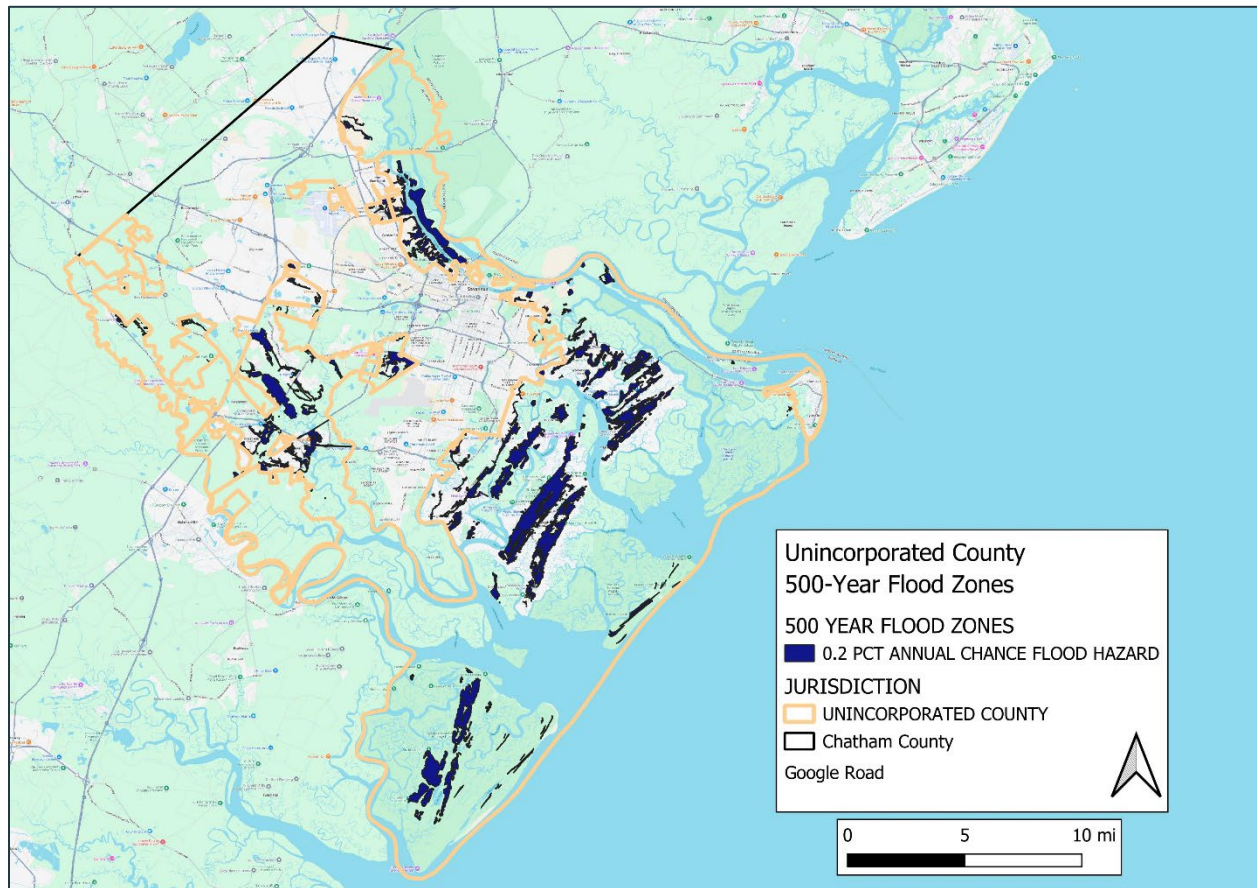
Figure A-3 – FEMA Flood Zone Map, Unincorporated Chatham County



Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplain, these zones can still experience significant flooding during extreme events. The X500 zone for unincorporated Chatham County is depicted in the map below and represented in Table A-4 above.

Figure A-4 – X500 Zone, Unincorporated Chatham County



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through these processes pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetlands Inventory (NWI), wetlands in unincorporated Chatham County make up 118,053.90 acres (184.46 square miles) or 42.0 percent of the City (see Figure A-5 below).

Table A-5 – Wetland Types, Unincorporated Chatham County

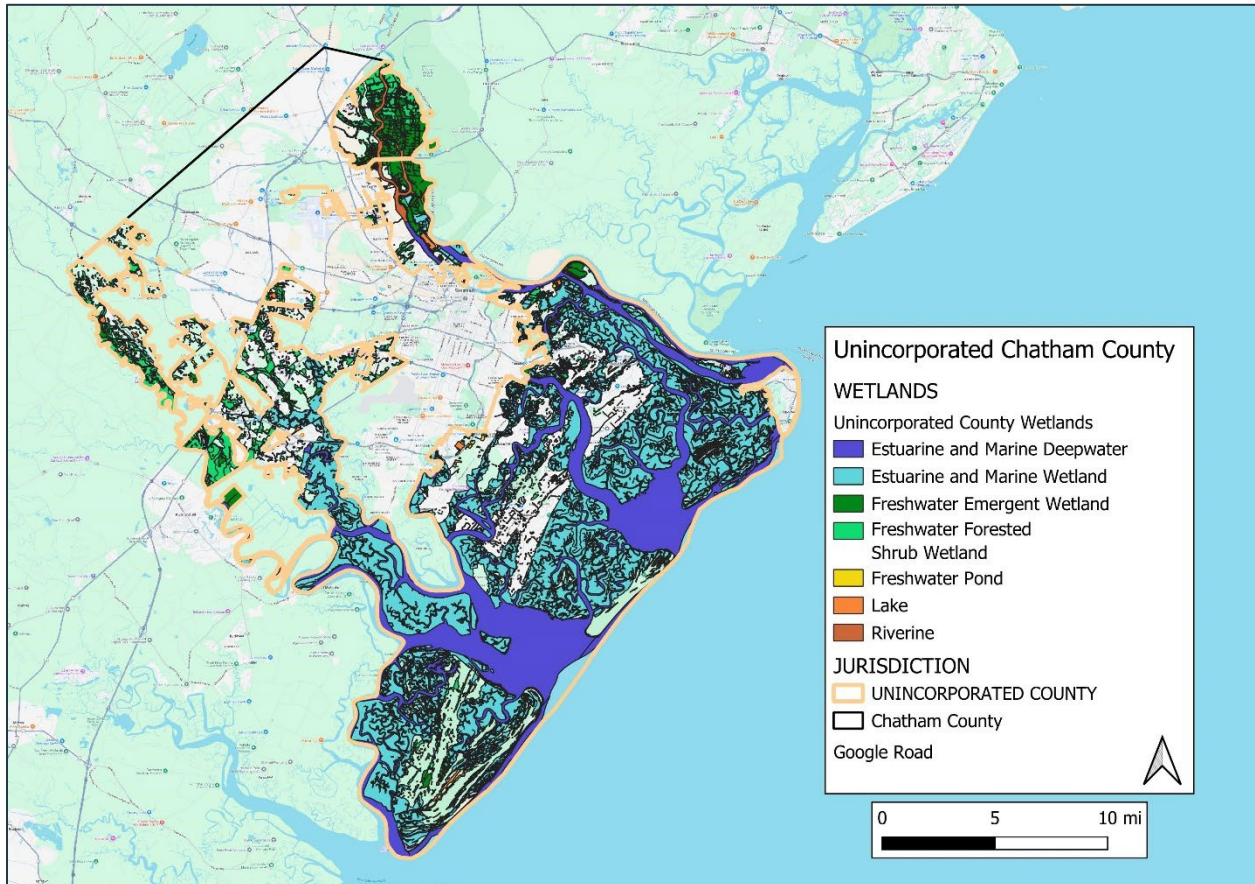
Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of Unincorporated
Non-Wetland	162,778.1	254.34	58.0
Estuarine and Marine Deepwater	1,648.38	2.58	1.4
Estuarine and Marine Wetland	84,263.64	131.66	71.4
Freshwater Forested/Shrub Wetland	18,144.89	28.35	15.4
Freshwater Pond	1,340.43	2.09	1.1
Lake	600.83	0.94	0.5
Riverine	4,242.14	6.63	3.6

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of Unincorporated
Non-Wetland	162,778.1	254.34	58.0
TOTAL	280,832	438.8	100.0

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Figure A-5 – Wetlands Map, Unincorporated Chatham County



Source: National Wetlands Inventory, 2022; SAGIS, 2025

Estuarine and Marine Deepwater

Estuarine and marine deepwater classifications, as defined by the Cowardin classification system, are distinguished by their location and water chemistry. Marine deepwater is part of the Marine System, which is exposed to the open ocean and extends from the outer edge of the continental shelf shoreward. Estuarine deepwater, part of the Estuarine System, is partially enclosed by land and has a mixture of fresh and saltwater.

Estuarine and Marine Wetland

Estuarine and marine wetlands are classified within a broader hierarchical system that includes five main systems: marine, estuarine, riverine, lacustrine, and palustrine. These classifications are based on factors like salinity, water type, vegetation, and geological features. Within the marine and estuarine systems, further subdivisions exist, such as subsystems (subtidal and intertidal) and classes (e.g., rock bottom, unconsolidated bottom, aquatic bed).

Chatham County

Multi-Jurisdictional Pre-Disaster Hazard Mitigation Plan
2025

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Freshwater Pond

Within the Palustrine system, ponds are often categorized as Lacustrine or Palustrine. Specifically, ponds may be classified as emergent, scrub-shrub, or forested, depending on the dominant vegetation.

Lake

Lacustrine wetlands are defined as wetlands associated with lakes and large ponds. They are characterized by the water level of the lake influencing the water table of the adjacent wetland, and they often occur along lake shores.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across unincorporated Chatham County, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure A-6 – Land Cover Map, Unincorporated Chatham County

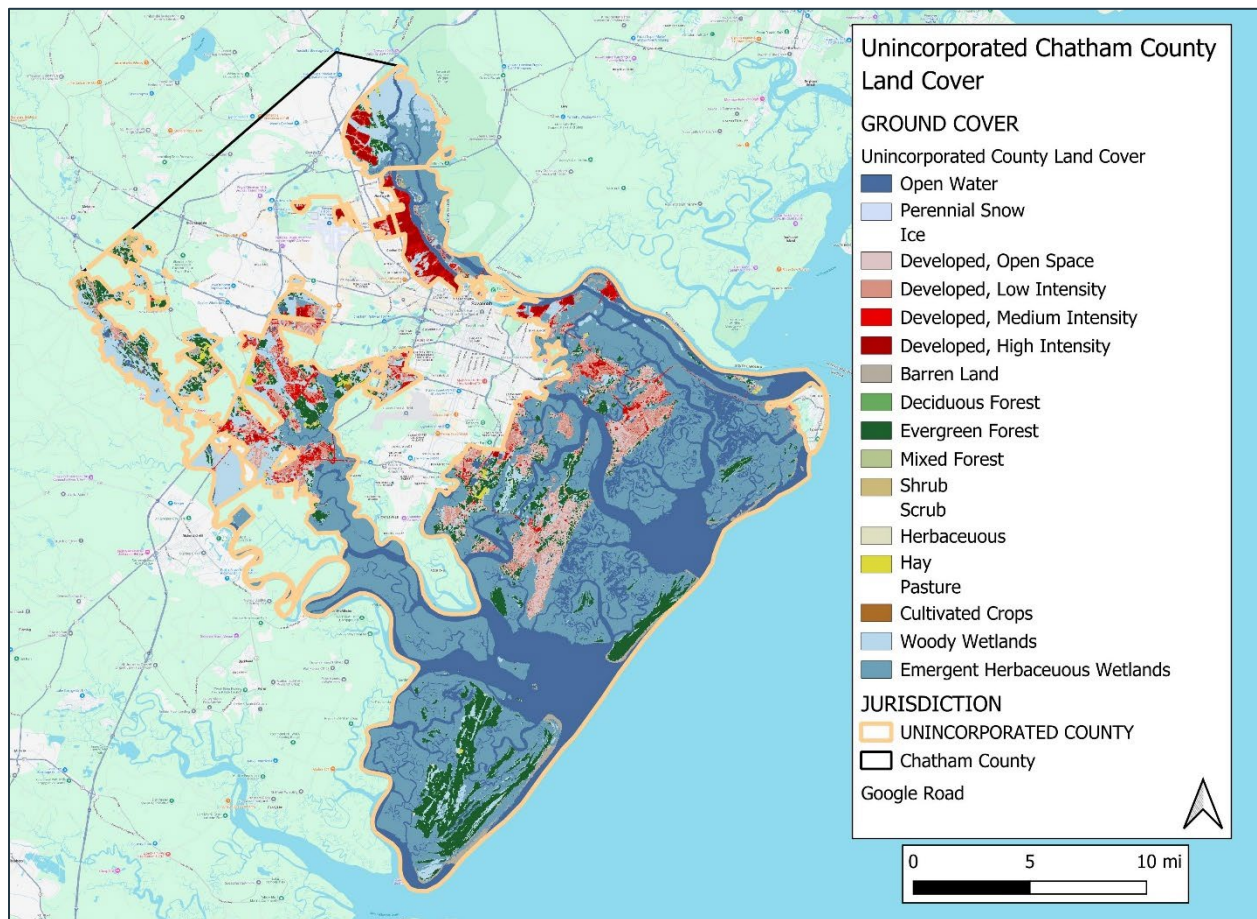
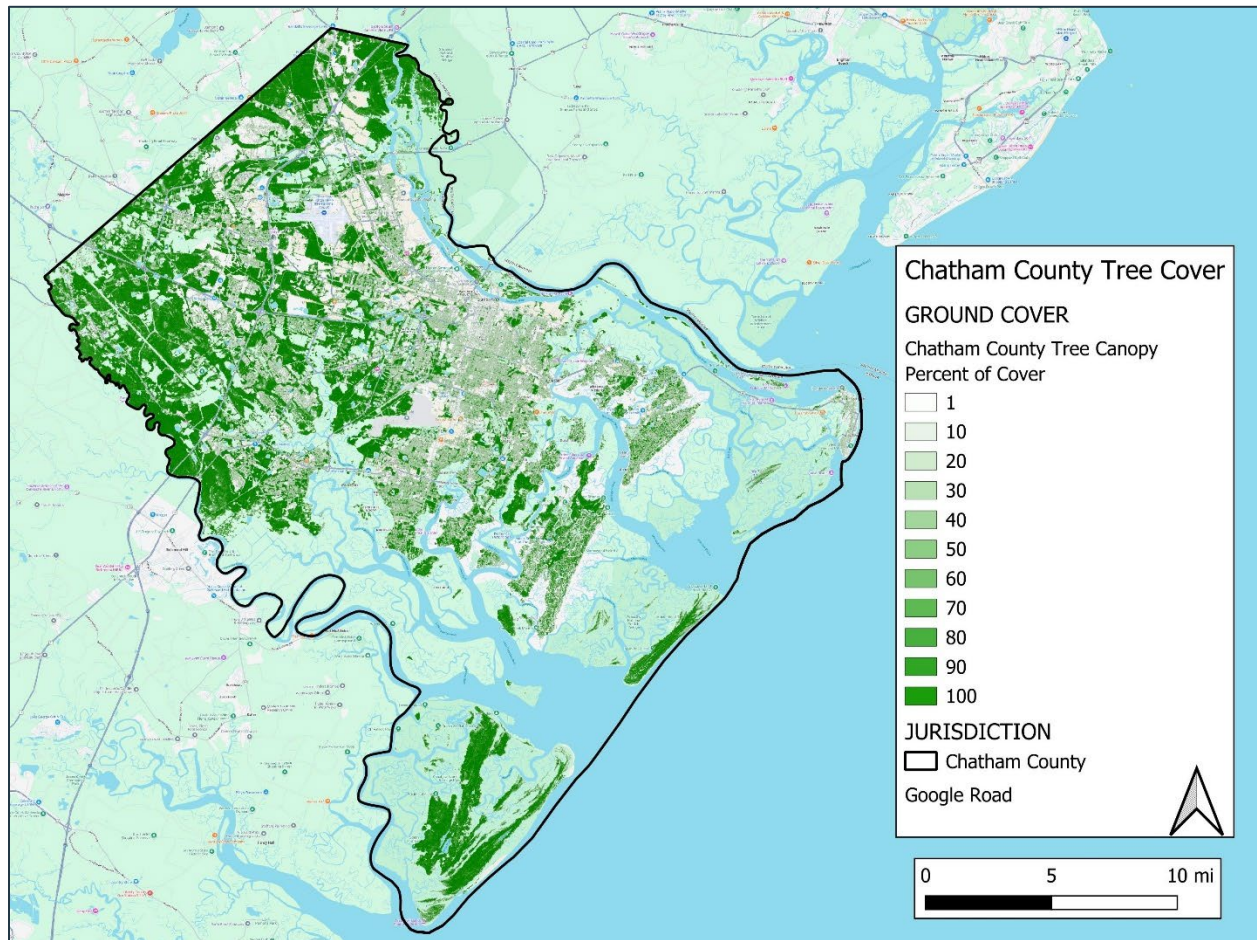


Figure A-7 – Tree Cover Map, Unincorporated Chatham County



A.2.4 History

History for Chatham County is discussed in the Chatham County Community Profile as well as the Community Profiles for other jurisdictions.

A.2.5 Economy

Wages, employment, and major employers are discussed in the Chatham County Community Profile.

A.2.6 Housing

According to the 2013-2017 ACS 5-Year Estimates, there are 39,235 housing units in unincorporated Chatham County, of which 91 percent (36,575) are occupied. Vernonburg has 63 housing units. Approximately 73.1 percent (26,733) of occupied units are owner-occupied (27.0% / 9,862 occupied by renters). A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because, according to Cutter, et al. (2003), renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster. Therefore, higher rates of home rentals in the County may indicate that residents are not able to implement certain types of mitigation in their homes.

Of the unincorporated County's owner-occupied housing units, 64.4 percent (17,217) have a mortgage. Most householders (84.76% / 31,002) have lived in their current homes since the year 2000 or later; of

that number, 22.41 percent (6,948) moved in between 2000 and 2009, 27.98 percent (8,675) moved in between 2010 and 2017, 35.09 percent (10,877) moved in between 2018 and 2020, and 14.52 percent (4,502) moved in 2021 or later. 4.5 percent (1,653) of occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

The majority (72.2% / 28,997) of housing units in the unincorporated County are detached single family homes. However, 4.7 percent (1,882) of units are mobile homes, which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

The County's housing stock is aging, with the majority (67.1% / 26,943) of total housing built before 2000. Table H-8 details housing age in the unincorporated County.

Table A-6 – Housing Age, Unincorporated Chatham County

Year Structure Built	Percent of Occupied Housing	Number of Structures
2020 or later	1.0	414
2010 to 2019	10.6	4,261
2000 to 2009	21.4	8,603
1980 to 1999	40.6	16,307
1960 to 1979	18.5	7,425
1940 to 1959	5.7	2,290
1939 or earlier	2.1	847

Source: U.S. Census Bureau, American Community Survey 2019-2023 5-Year Estimates

Age can indicate the potential vulnerability of a structure to certain hazards. For example, Chatham County first entered the National Flood Insurance Program in 1980. Therefore, based on housing age estimates, at least 26.3 percent of housing in the unincorporated County was built before any floodplain development restrictions were required.

A.2.7 Population

According to the U.S. Census Bureau, the unincorporated County had an estimated population of 92,334 residents in 2023 and a population of 92,173 at the time of the 2020 U.S. Census (0.2% increase from 2020-2023). As of 2023, the unincorporated County's population density was 210 persons per square mile. Vernonburg had an estimated population of 130 in 2023 and a population of 139 at the time of the 2020 U.S. Census. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates for both unincorporated Chatham County and the Town of Vernonburg.

Table A-7 – Unincorporated Chatham County Demographic Profile Data, 2019-2023

Demographic	Unincorporated County	Vernonburg
Gender/Age		
Male	44,858	58
Female	47,476	72
Under 5 Years	5,370	7
65 Years and Over	19,018	26
Race/Ethnicity (One Race)		
White	56,938	117
Black or African American	20,946	0
American Indian/Alaska Native	345	0
Asian	3,284	10

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Demographic	Unincorporated County	Vernonburg
Two or More Races	6,725	3
Hispanic or Latino ¹	7,630	3
Education		
High School Graduate or Higher	61,948	99
Bachelor's Degree or Higher	51,544	82

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

¹Hispanics may be of any race, so also are included in applicable race categories.

A.2.8 Land Use

Land use data was obtained from the 2020 Update to the Chatham County – Savannah Comprehensive Plan (Comp Plan). The intent of the Comp Plan is to serve as a comprehensive planning document that guides Chatham County's and Savannah's collective growth and development decisions over the next 20 years. The Comp Plan serves both participating communities as a general statement of intent to promote local goals related to economic development, land use, transportation, housing, quality of life, and other related topics.

A.2.8.1 Character Areas

The Character Areas established by the Chatham County – Savannah Comp Plan include those listed below and shown in the Character Areas Map.

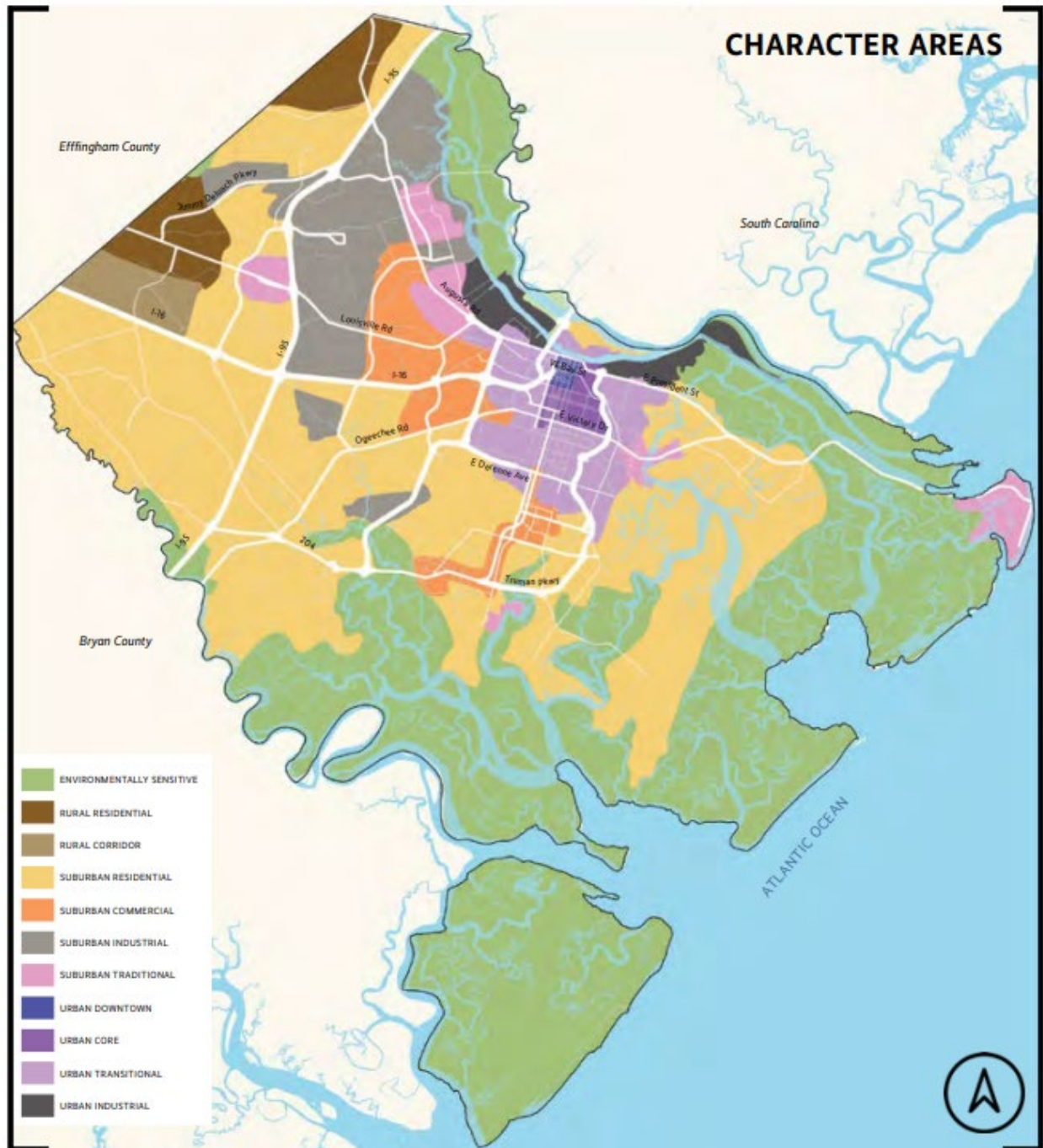
Table A-8 – Character Areas, Unincorporated Chatham County

Character Area	Definition
Environmentally Sensitive	Open space areas that offer opportunities for limited to no development that is well-integrated with the natural landscape system.
Rural Residential	Contains low-intensity development with large lots, low pedestrian orientation and access, and a sizeable amount of open space. It may be undeveloped or associated with working farms.
Rural Corridor	Contains a mix of lower density light industrial, warehousing, or service uses along Interstate 16.
Suburban Residential	Includes low and medium density developments, which are largely single-family structures on large lots or medium-lot residential subdivisions.
Suburban Commercial	Automobile-oriented commercial centers that contain community and regional shopping and service needs.
Suburban Industrial	Areas that generally contain large-footprint buildings and businesses that accommodate warehousing, light industrial, manufacturing, office spaces, and other uses, such as airports and landfills.
Suburban Traditional	Areas that have a more "urban" style of development, with gridded/interconnected street patterns, attached buildings, and sidewalks.
Urban Downtown	Consists of local and National Register Landmark Historic Districts with mixed-use, mid-rise buildings and attached single-family homes.
Urban Core	Contains the local and National Register Victorian and Streetcar Historic Districts, as well as the Eastside neighborhoods in the city of Savannah. This area is characterized by a mix of detached and attached single-family homes, mid-size multi-family buildings, and smaller-scale, neighborhood commercial.
Urban Traditional	Areas classified as "urban edge" or "urban expansion" with automobile-oriented, suburban style residential areas that still provide access to urban amenities and public transit.

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Character Area	Definition
Urban Industrial	Areas near the Urban Downtown and Core that have higher intensity uses, such as light and heavy manufacturing, warehouses, and ports.

Figure A-8 – Character Areas Map, Unincorporated Chatham County



Source: Chatham County – Savannah Comprehensive Plan 2020-2040

A.2.8.2 Existing Land Use

Chatham County

Multi-Jurisdictional Pre-Disaster Hazard Mitigation Plan
2025

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The unincorporated County includes a total area of 280,832 acres (438.8 square miles) as calculated from GIS and obtained from the U.S. Census. According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

Table A-9 – Existing Land Use, Unincorporated Chatham County

Land Use/Zoning	Area (Acres)	Area (Square Miles)
Agricultural	2,780	4.34
Business	413	0.65
Conservation	114,110	178.30
Downtown Expansion	278	0.43
Extensive Industry	46	0.07
Heavy Commercial	53	0.08
Heavy Industrial	7,763	12.13
Industrial	129	0.20
Institutional	103	0.16
Interchange Commercial	217	0.34
Light Industrial	2,084	3.26
Limited Business	4	0.01
Manufacturing	195	0.30
Maritime District	45	0.07
Residential Multi-Family	824	1.29
Neighborhood Business	59	0.09
Office and Institutional	2	0.00
Residential Single-Family	12,699	19.84
Planned Agricultural	31	0.05
Planned Business	966	1.51
Planned Development	3,926	6.13
Planned Institutional Professional	45	0.07
Planned Light Industrial	46	0.07
Planned Manufacturing	23	0.04
Planned Unit Development	14,502	22.66
Planned Neighborhood Business	134	0.21
Planned Residential Manufactured/Mobile Home Park	16	0.03
Planned Industrial	53	0.08
Protected River Corridor	28	0.04
Residential Agricultural	49,245	76.95
Residential Business	1	0.002
Residential Manufactured Home Park	582	0.91
Tourist Business	95	0.15
Waterfront Industry	14	0.02
TOTAL	211,511	330.49

Source: SAGIS – Zoning, 2024

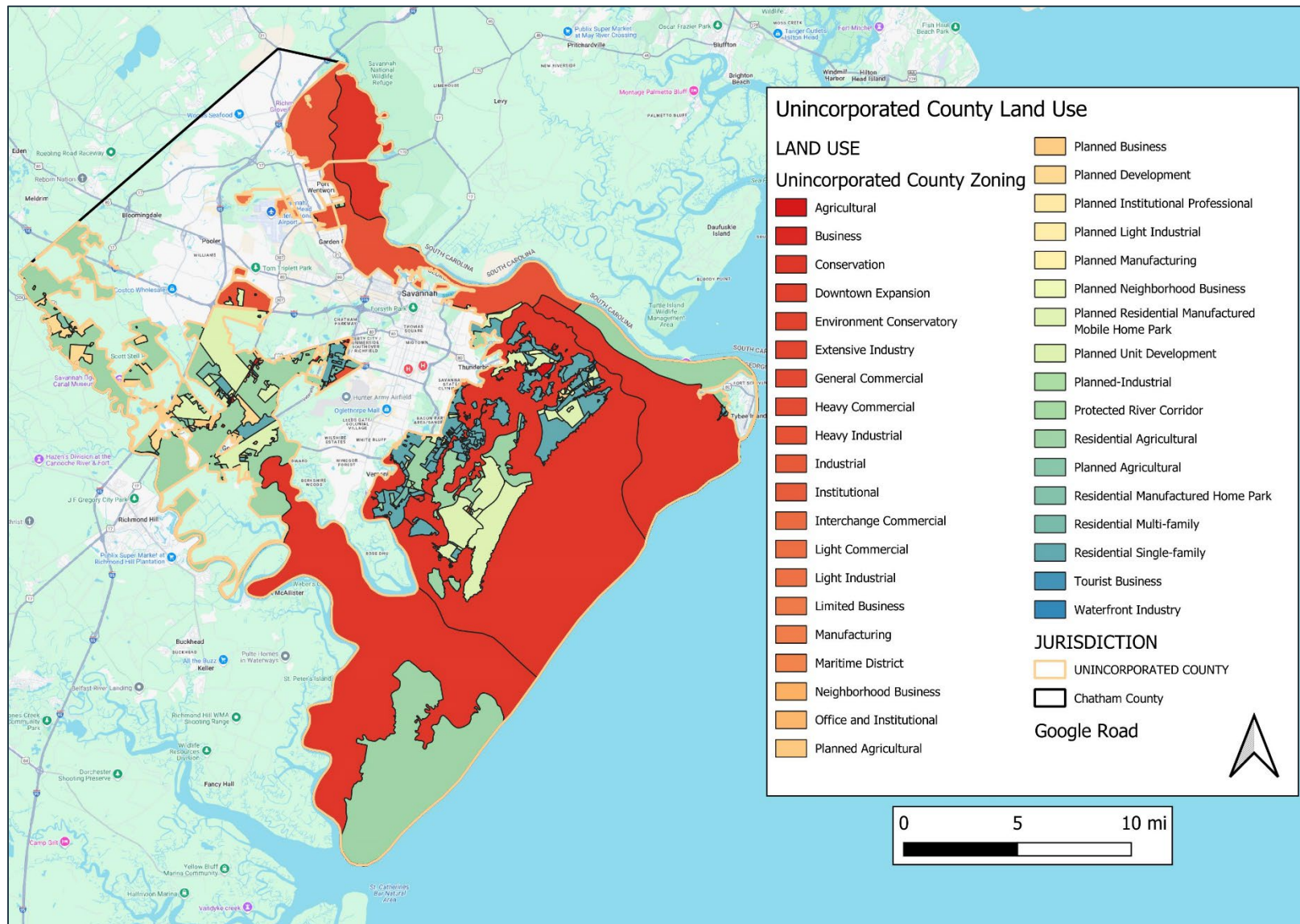
SAGIS zoning data shows the total area for unincorporated Chatham County as 330.49 square miles, which is lower than the 438.8 square miles used for this report from the U.S. Census. The difference is likely due

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

to SAGIS using an alternate County boundary that includes less of the ocean, attributes more land to Savannah and the County's other municipalities, and/or does not include unplanned barren land.

An existing land use map for zoning is included below for unincorporated Chatham County, as taken from the SAGIS map viewer for Chatham County.

Figure A-9 – Existing Land Use and Zoning Map, Unincorporated Chatham County



Source: SAGIS – Zoning, 2024

Chatham County

Multi-Jurisdictional Pre-Disaster Hazard Mitigation Plan
2025

A.2.8.3 Future Land Use

The 2020 Chatham County – Savannah Comprehensive Plan includes a Future Land Use Map (FLUM) that serves as a guide for zoning decisions. The FLUM represents the City’s and County’s future development policy and is taken into consideration for all zoning requests, local policy reviews, and land development decisions. The FLUM’s Future Land Use Categories include those listed below and shown in the following maps.

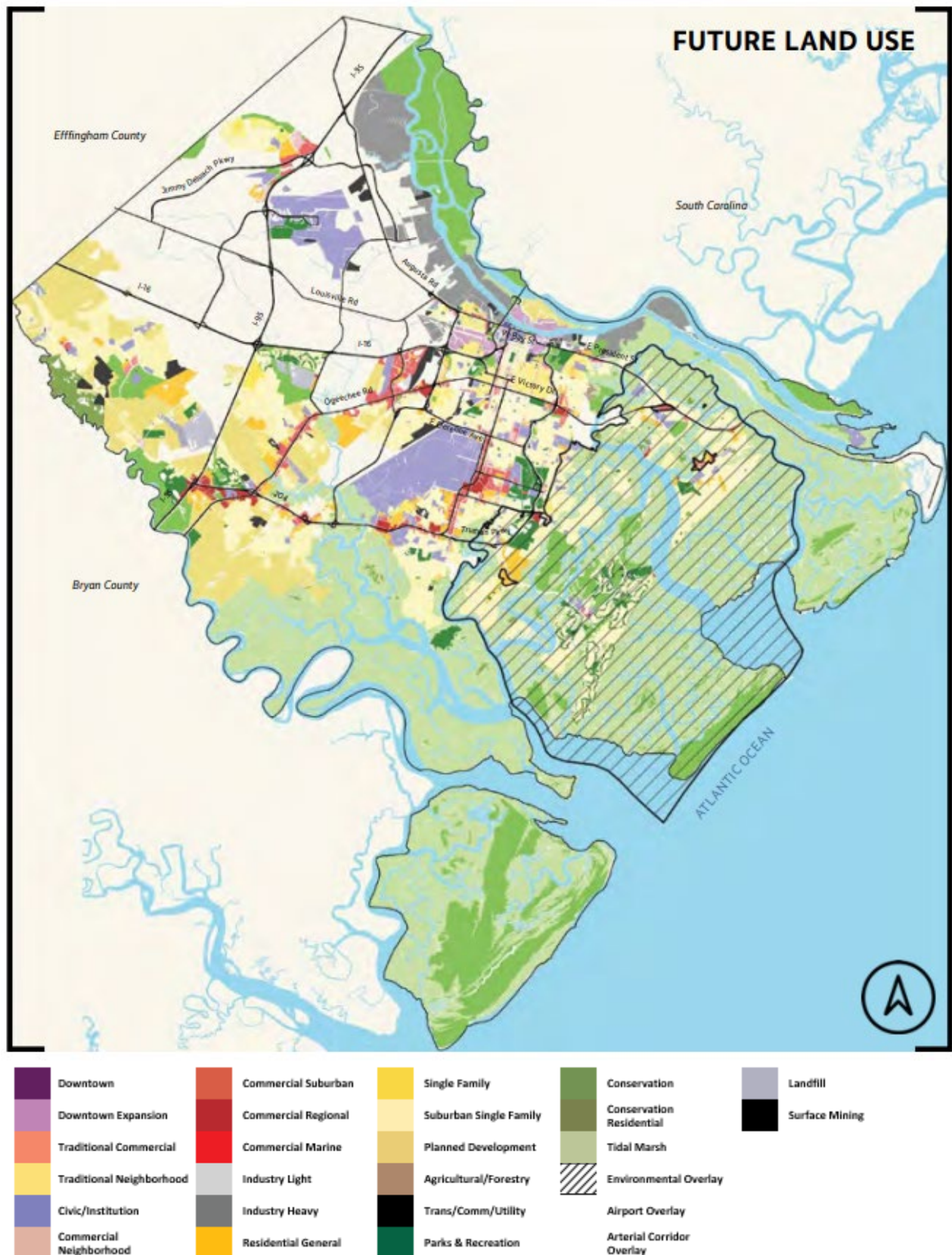
Table A-10 – Future Land Use Categories, Unincorporated Chatham County

Future Land Use Category	Definition
Downtown	Traditional Central Business District, including retail, office, entertainment, institutional, civic, and residential uses.
Downtown Expansion	Areas in close proximity to the Central Business District that are identified for growth.
Traditional Commercial	Business areas in close proximity to downtown or in outlying historically settled areas.
Traditional Neighborhood	Residential areas in close proximity to downtown or in outlying historically settled areas.
Civic / Institution	Areas that consist of educational, religious, medical, and/or public uses, which may be in a campus setting and may include private or public open space.
Commercial Neighborhood	Nodal and multi-tenant retail areas that are within predominately residential areas and are developed at a scale and intensity compatible with adjacent residential uses.
Commercial Suburban	Business areas supporting shopping centers and corridor commercial uses at a scale and intensity capable of serving regional markets.
Commercial Regional	Business areas supporting most retail, service, office, and institutional uses.
Commercial Marine	Land dedicated to marina operations including those ancillary uses that are both marine-related and an integral part of the marina complex.
Industry Light	Areas supporting warehouses, wholesale facilities, and the manufacturing, assembly or production of parts and products that may require intensive truck traffic and outdoor storage but that do not produce noise, odor, dust, or waterborne contaminants above ambient levels.
Industry Heavy	Areas supporting uses that are involved in the large-scale freight, operation, demolition, surface mining, and production of materials and may produce noise, odor, dust, and waterborne contaminants measurably above ambient levels.
Residential General	Areas with a wide range of residential uses, including multi-family dwellings, attached dwellings, small lot single-family dwellings at densities greater than 10 units per gross acre.
Single Family	Areas identified for single-family detached residential dwellings at a density not to exceed eight (8) units per gross acre.
Suburban Single Family	Areas identified for single-family detached residential dwellings at a density not to exceed five (5) units per gross acre.
Planned Development	Master planned areas accommodating cluster development, neotraditional development, or mixed residential, commercial, or civic uses.
Agricultural / Forestry	Areas principally used for farming, silviculture, dairy or livestock production, and resources extraction.
Transportation / Communication / Utility	Areas dedicated principally to railroad facilities, airports, cell towers, sub stations, solar farms, and similar uses that produce intensive or obtrusive activities that are not readily assimilated into other districts.
Parks / Recreation	Land dedicated to open space that is accessible to the public or areas dedicated to sports, exercise, or other types of leisure activities.

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Future Land Use Category	Definition
Conservation	Land that is publicly or privately held and designated for preservation in a natural state or for use for passive recreation.
Conservation Residential	This category is for back barrier islands that are in private ownership and have uplands exceeding two acres on a contiguous land mass.
Tidal Marsh	Areas of estuarine influence that are inundated by tidal waters on a daily basis and are characterized by <i>Spartina</i> (cord grass) habitat.
Environmental Overlay	The island, estuarine, and marsh areas of unincorporated Chatham County, to include back barrier islands, hammocks, and other environmentally sensitive areas and/or habitats.
Airport Overlay	Areas adjacent to airport facilities that are within Clear Zones, Accident Potential Zones, and Noise Zones where day-night averages are greater than 65 decibels, or similar zones of influence.
Arterial Corridor Overlay	Areas having established residential character that, due to their arterial location, are confronted with potential commercial intrusion.
Landfill	A land depository or excavation area operated in a controlled manner for the dumping of debris or inert material; or a disposal site operated by means of compacting and covering solid waste with an approved material.
Surface Mining	Areas constituting all or part of a process for the removal of minerals, ores, or other solid matter for sale or for consumption.

Figure A-10 – Future Land Use Map, Unincorporated Chatham County



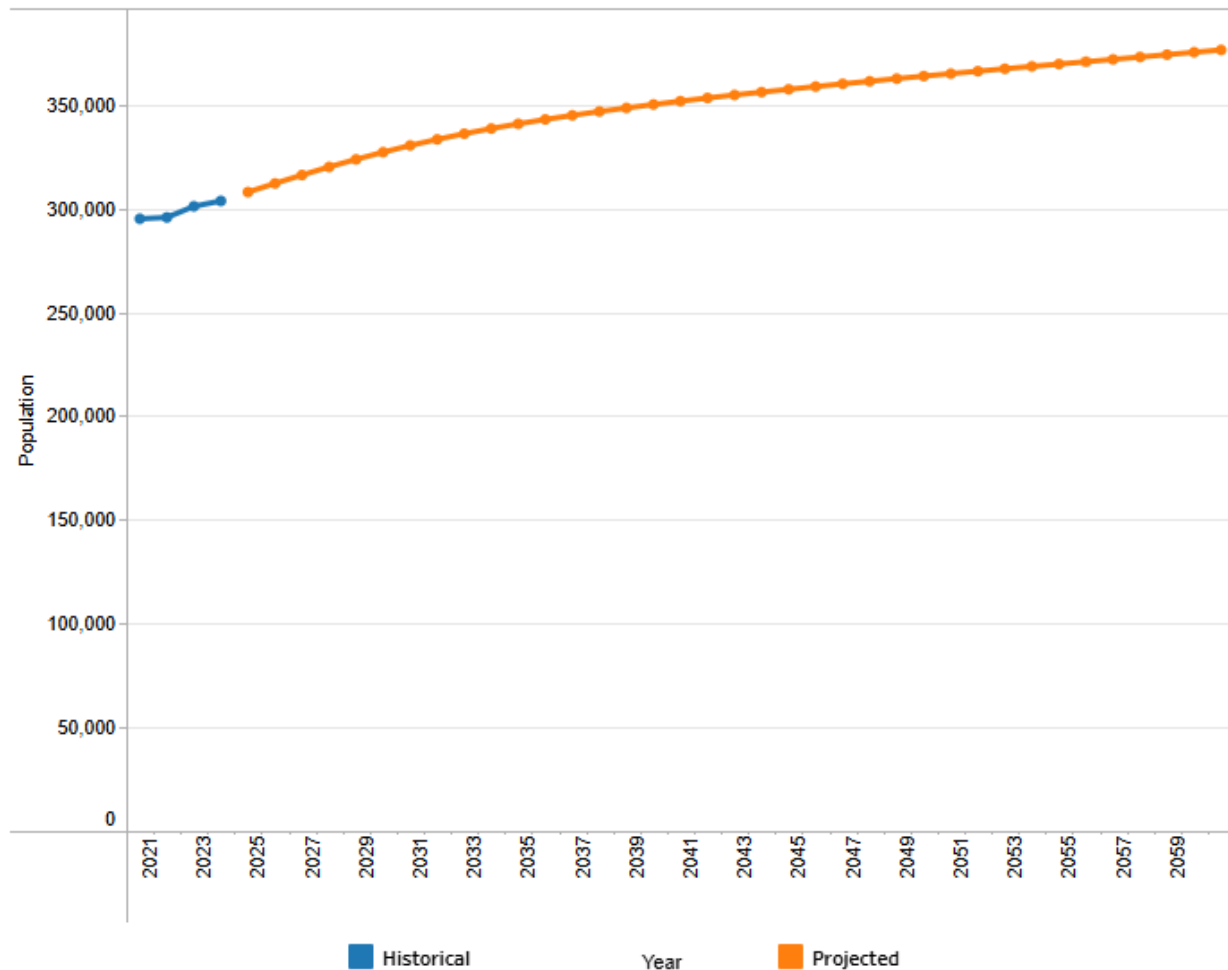
A.2.9 Growth and Development Trends

According to U.S. Census and American Community Survey population estimates, unincorporated Chatham County's population has increased slightly from 92,173 in 2020 to 92,334 in 2023, representing a total increase of 0.2 percent and an annual increase of .07 percent. The total Chatham County population including incorporated areas was 307,336 in 2024.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be on average about 0.8 percent through 2060. Only population projections for Chatham County are included in this section as there are currently no population projections available for unincorporated Chatham County at the time of planning.

Figure A-11 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget

A.3 ASSET INVENTORY

A.3.1 Property

Table A-11 – Chatham County Building Exposure

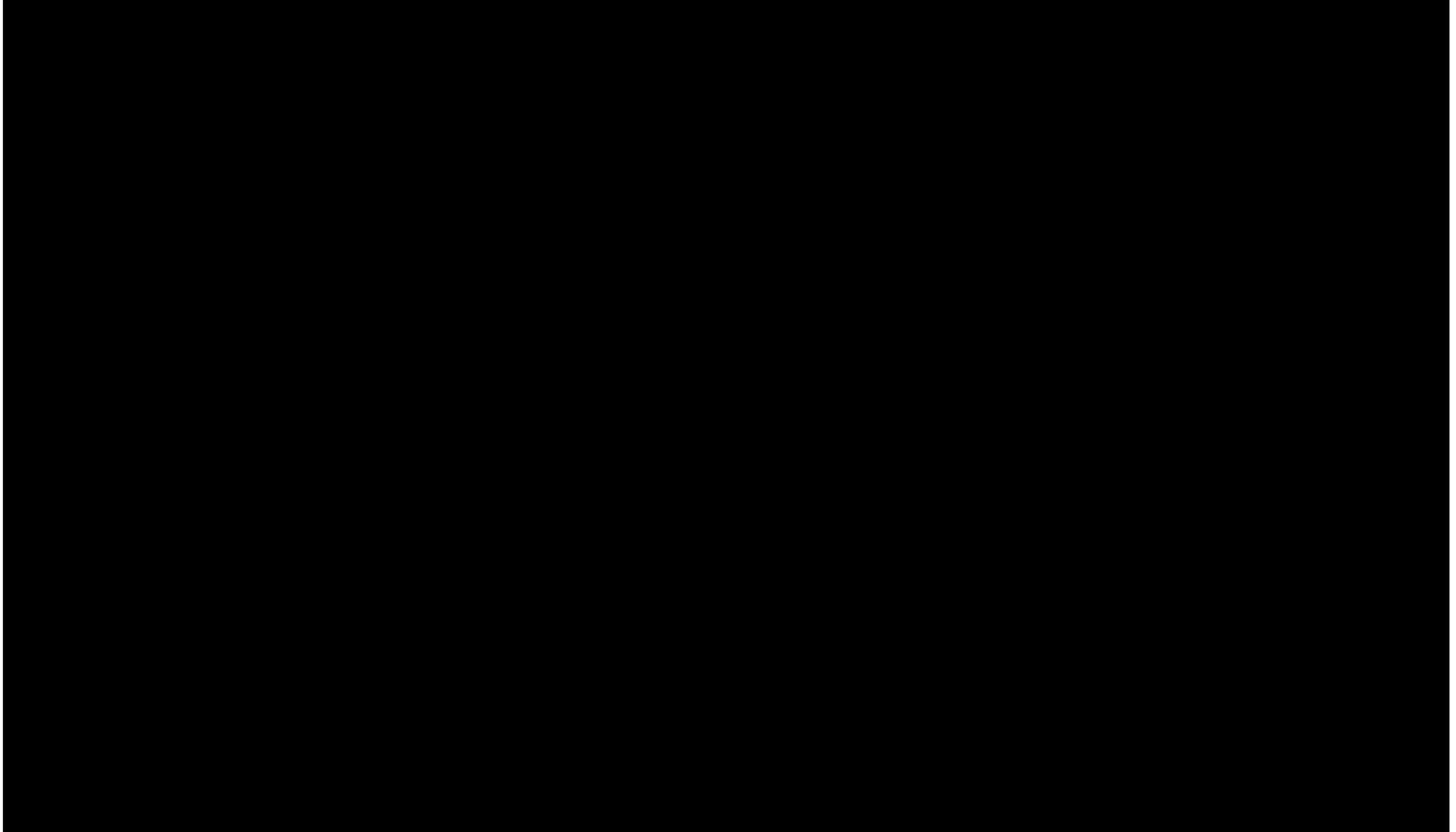
Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	888	\$1,348,968,701	\$1,348,968,701	\$2,697,937,402
Government	26	\$143,570,100	\$143,570,100	\$287,140,200
Industrial	256	\$1,095,642,472	\$1,643,463,708	\$2,739,106,180
Non-Profit	195	\$189,677,200	\$189,677,200	\$379,354,400
Residential*	35,625	\$9,561,670,727	\$4,797,566,984	\$14,409,432,571
Utility	56	\$2,847,990	\$4,271,985	\$7,119,975
Total	37,046	\$12,342,377,190	\$8,127,518,678	\$20,520,090,728

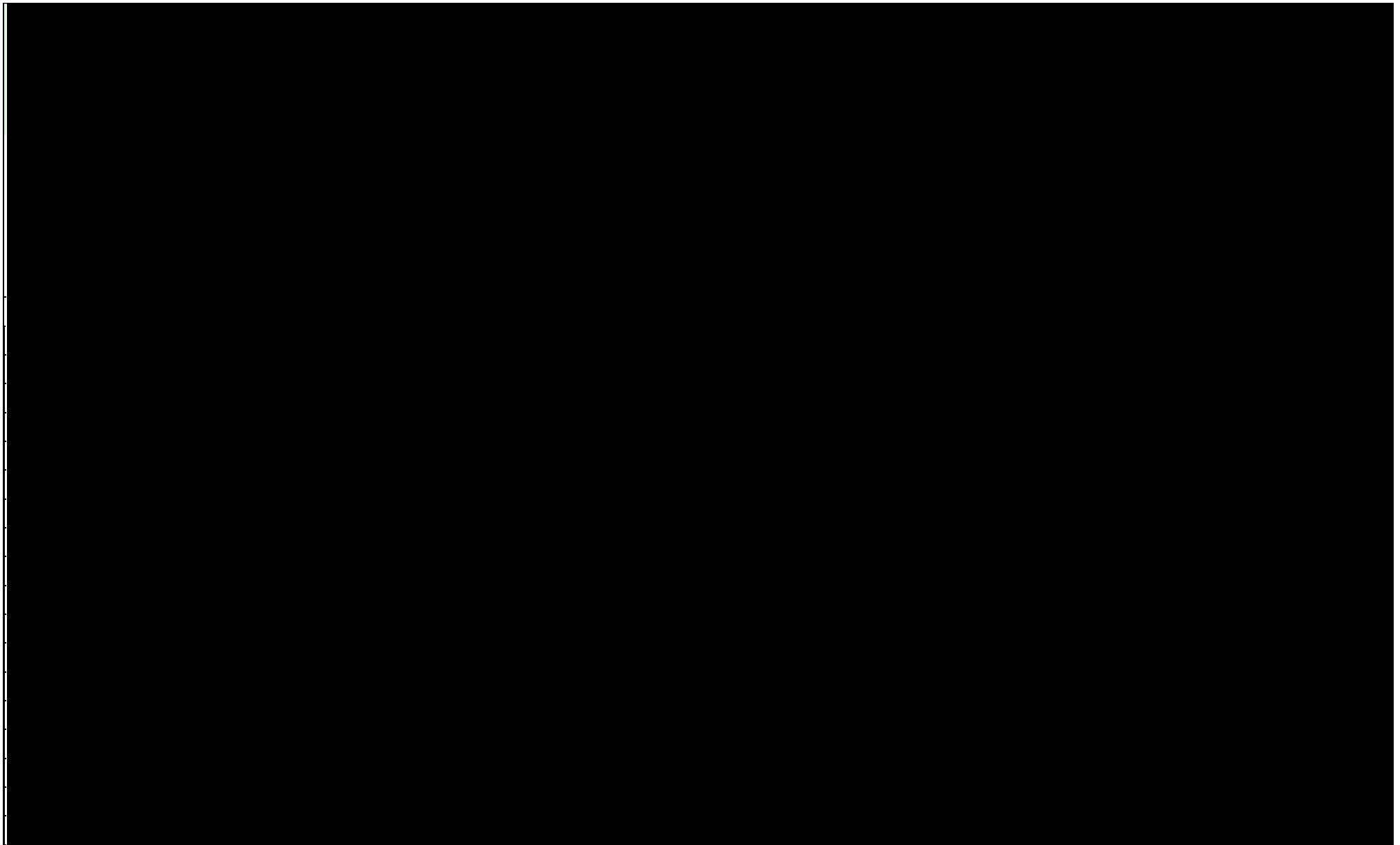
Source: Chatham County parcel and building footprint data, 2025

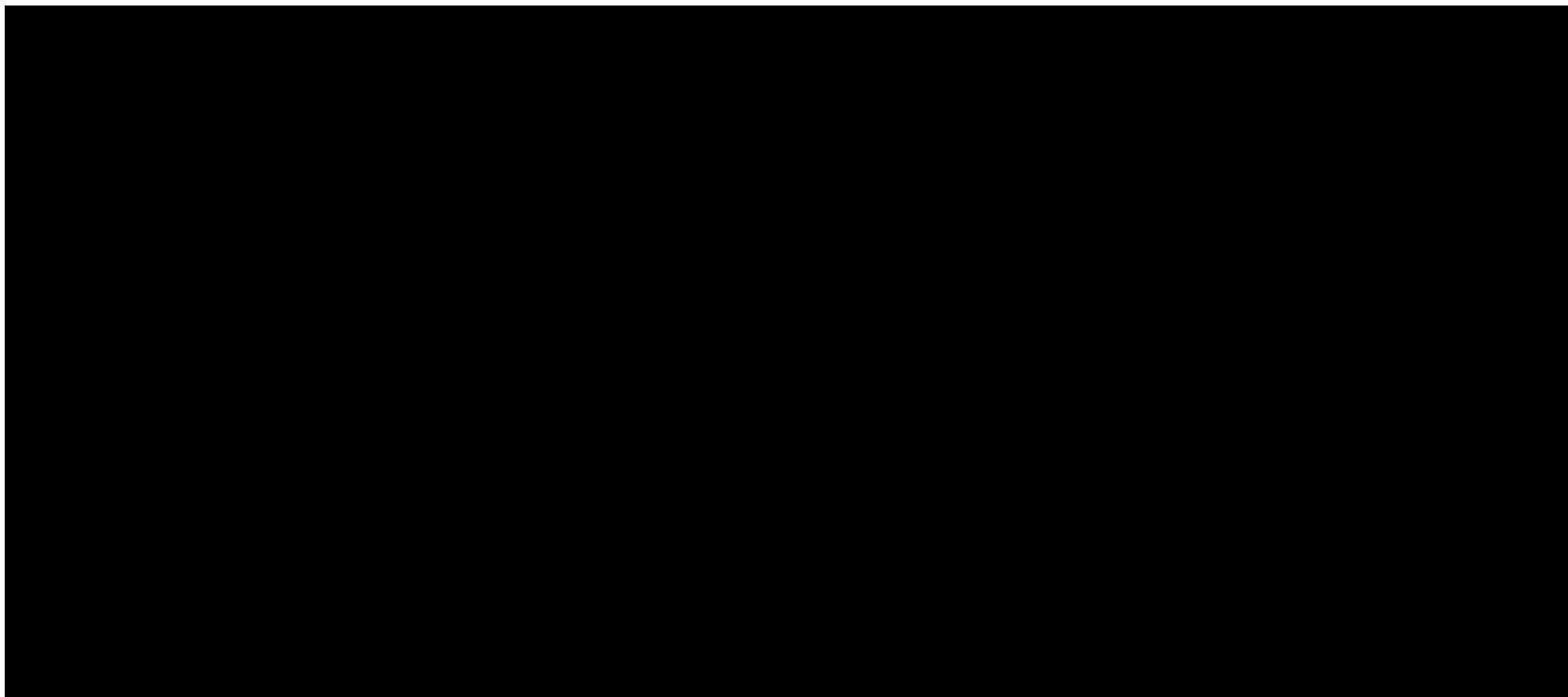
*Residential data includes the City of Vernonburg. No other occupancy types are provided for Vernonburg.

A.3.2 Critical Facilities

Table A-12 – Critical Facilities and Infrastructure at Risk, Chatham County

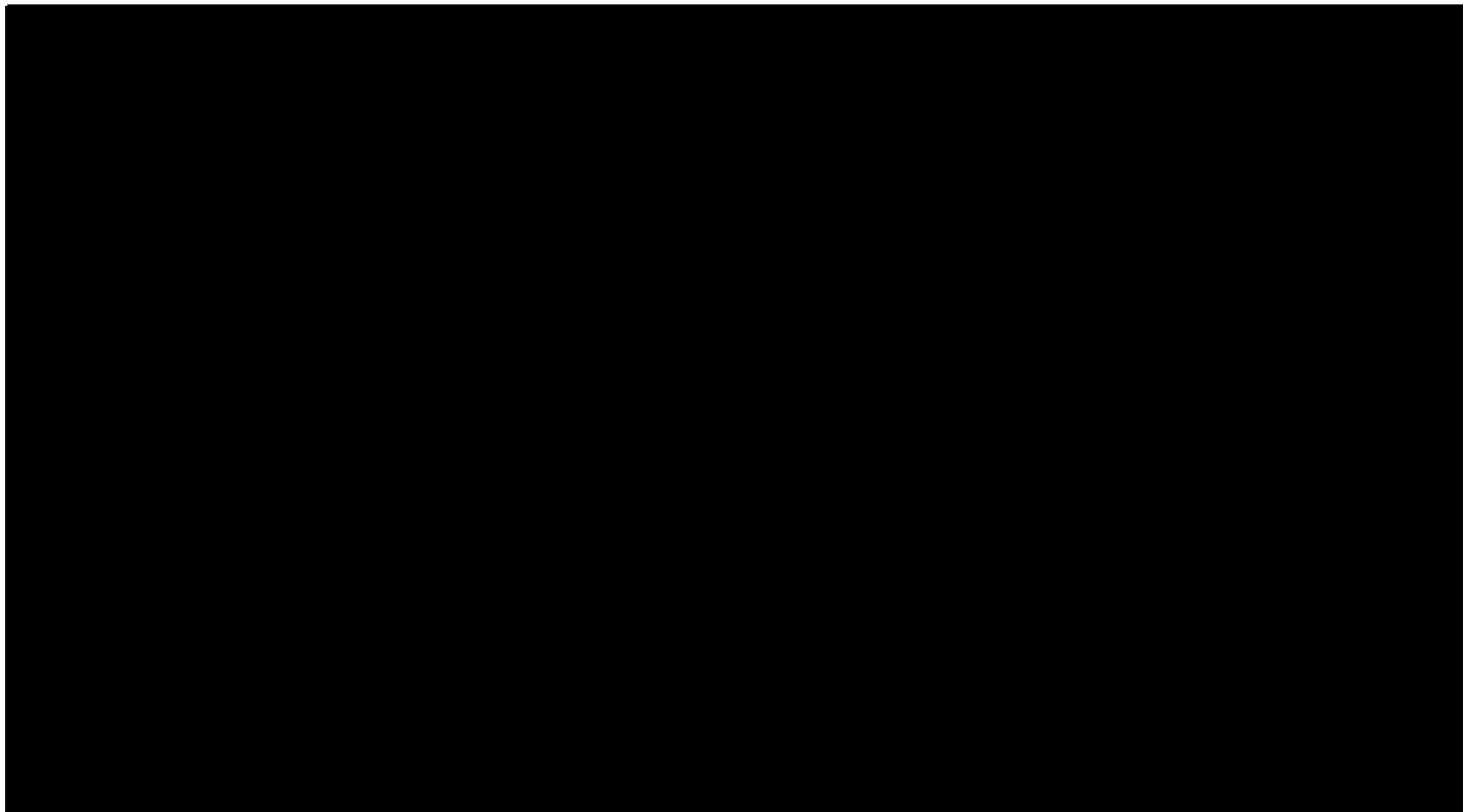


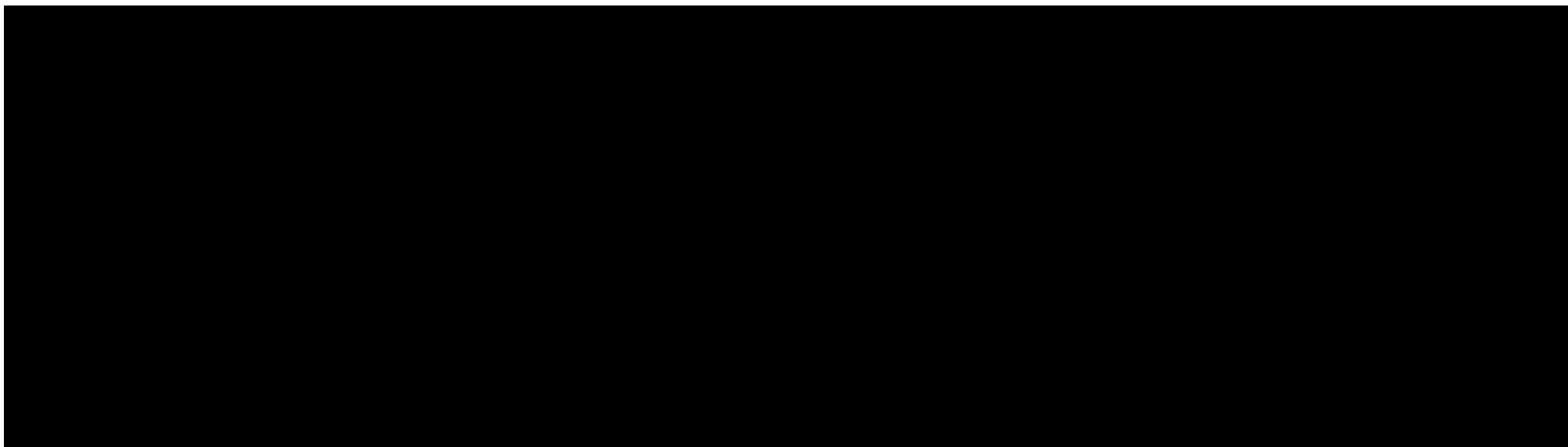




Source: Chatham County

Table A-13– Critical Facilities and Infrastructure at Risk, Other





Source: Chatham County

A.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

A.4.1 Flood

Approximately 17.9 percent of buildings in unincorporated areas of Chatham County are within the mapped 1%-annual-chance floodplains. (Zones A, AE, and VE) and 24.0 percent are within the X500 zone. Figure A-12 reflects the mapped flood hazard zones for Unincorporated Chatham County, and Figure A-13 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table A-14 and 15 (for Vernonburg), below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

Table A-14 – Unincorporated County Properties at Risk by Flood Zone

Flood Zone	Number of Buildings	Total Fair Market Building Value
AE	9,075	\$4,952,137,188
VE	119	\$39,672,500
X500	12,310	\$5,561,453,369
Total	21,504	\$10,553,263,057

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2024

Table A-15 – Vernonburg Properties at Risk by Flood Zone

Flood Zone	Number of Buildings	Total Fair Market Building Value
AE	5	\$2,887,400
VE	1	\$10,000
X500	36	\$18,757,000
Total	42	\$21,654,400

Source: FEMA 2018 DFIRM & Chatham County parcel data, 2024

Table A-16 provides building counts and estimated damages by occupancy type for the 1% annual chance of a riverine flood event. No critical facilities were identified to be at risk in the HAZUS scenario.

Table A-16 – Unincorporated County Estimated Building Damage, 1% Annual Chance of Riverine Flood

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damaged Buildings
Religious	61	3	\$24,660,245	\$200,500	0.81%
Education	18	2	\$144,587,298	\$586,417	0.41%
Industrial	224	51	\$2,399,899,758	\$19,371,263	0.81%
Government	16	1	\$56,104,525	\$5,677	0.01%
Commercial	490	43	\$732,496,488	\$9,917,439	1.35%
Residential	32,316	6,101	\$9,717,023,077	\$368,194,826	3.79%

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damaged Buildings
Vernonburg Residential	66	7	\$48,807,676	\$1,002,257	2.05%
Total	33,191	6,208	\$13,123,579,067	\$399,278,379	3.04%

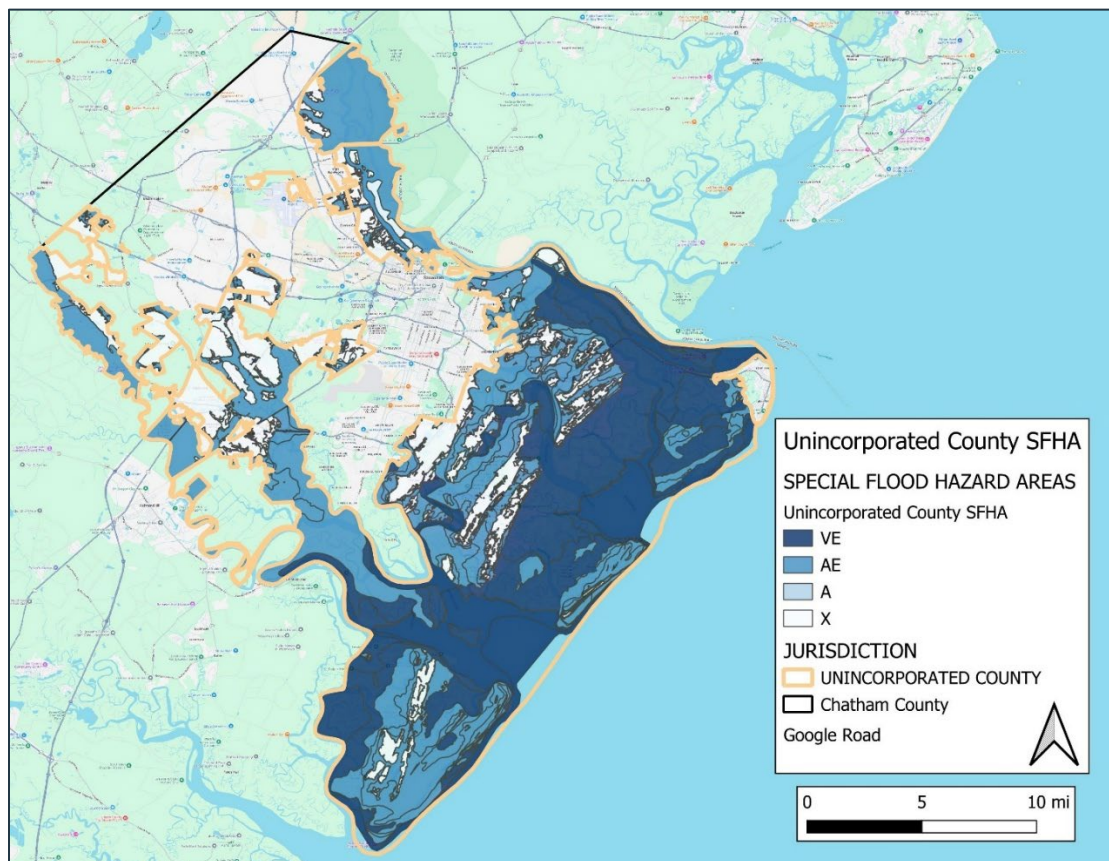
Source: HAZUS

Table A-17 provides building counts and estimated damages by occupancy type for the 1% annual chance of a coastal flood event.

Table A-17 – Unincorporated County Estimated Building Damage, 1% Annual Chance of Coastal Flood

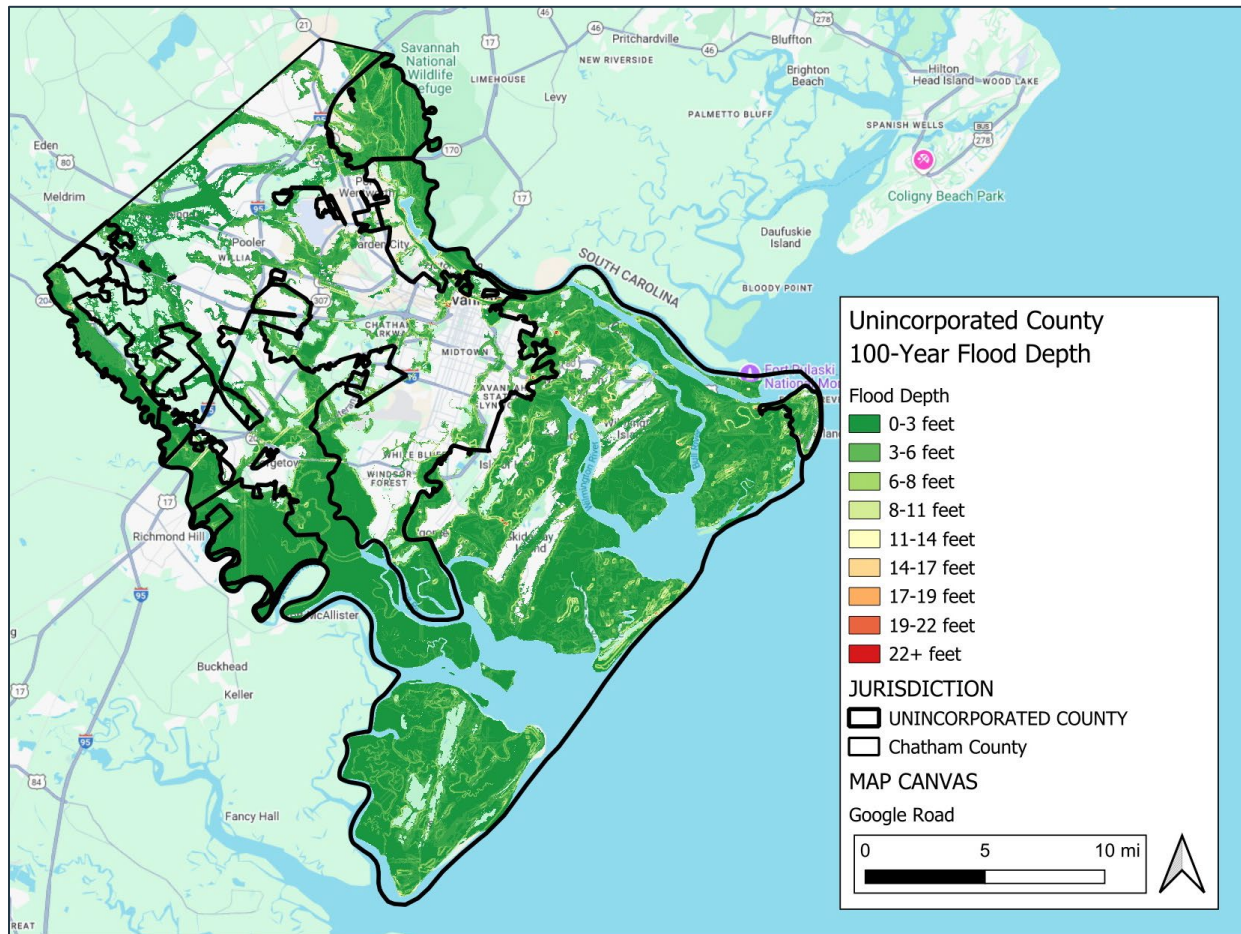
Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damages Buildings
Commercial	490	2	\$732,496,488	\$9,321	0.00
Residential	32,316	95	\$9,717,023,077	\$9,420,854	0.10%
Total	32,806	97	\$10,449,519,565	\$9,430,175	0.09%

Figure A-12 – FEMA Flood Hazard Areas, Unincorporated Chatham County



Source: FEMA 2018 DFIRM

Figure A-13 – Flood Depth, 1%-Annual-Chance Floodplain, Chatham County



Source: GEMA, UGA ITOS 2025

A.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table A-18 summarizes the wildfire risk products created for the jurisdiction.

Table A-18 – Wildfire Risk Assessment Products

Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.

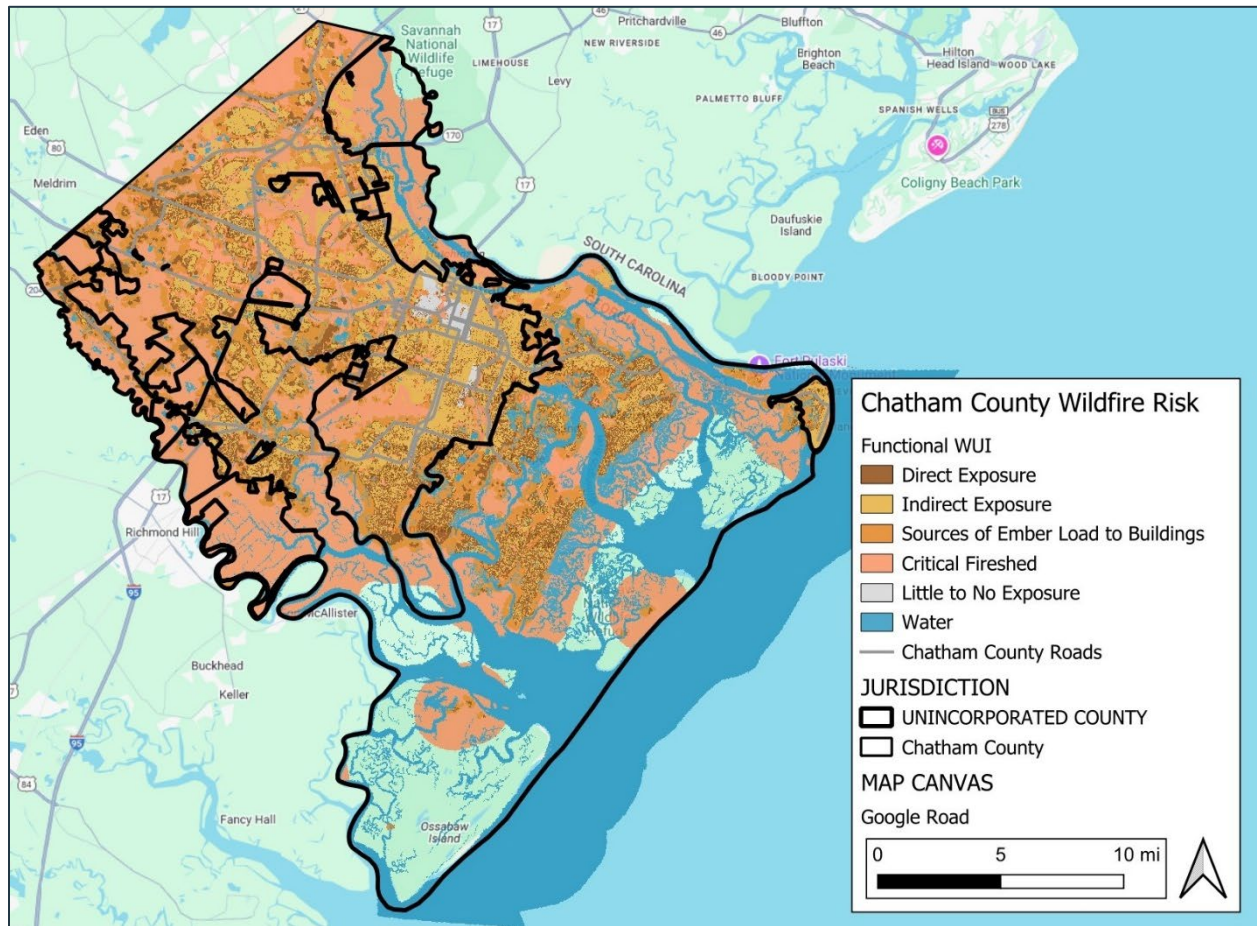
Risk Evaluation Category	Description
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.

Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure A-14 depicts the Functional WUI for Unincorporated Chatham County. Functional WUI risk across unincorporated Chatham County includes significant critical fireshed and sources of ember load with direct and indirect exposure to buildings, primarily on the developed barrier islands, and in the southwestern corner of the county. The categories of risk are defined below:

- **Direct Exposure** - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
- **Indirect Exposure** - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
- **Critical Fireshed** - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
- **Sources of Ember Load to Buildings** - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- **Little-to-No Exposure** - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No-Exposure zone, but smoke and evacuations could still impact this area.

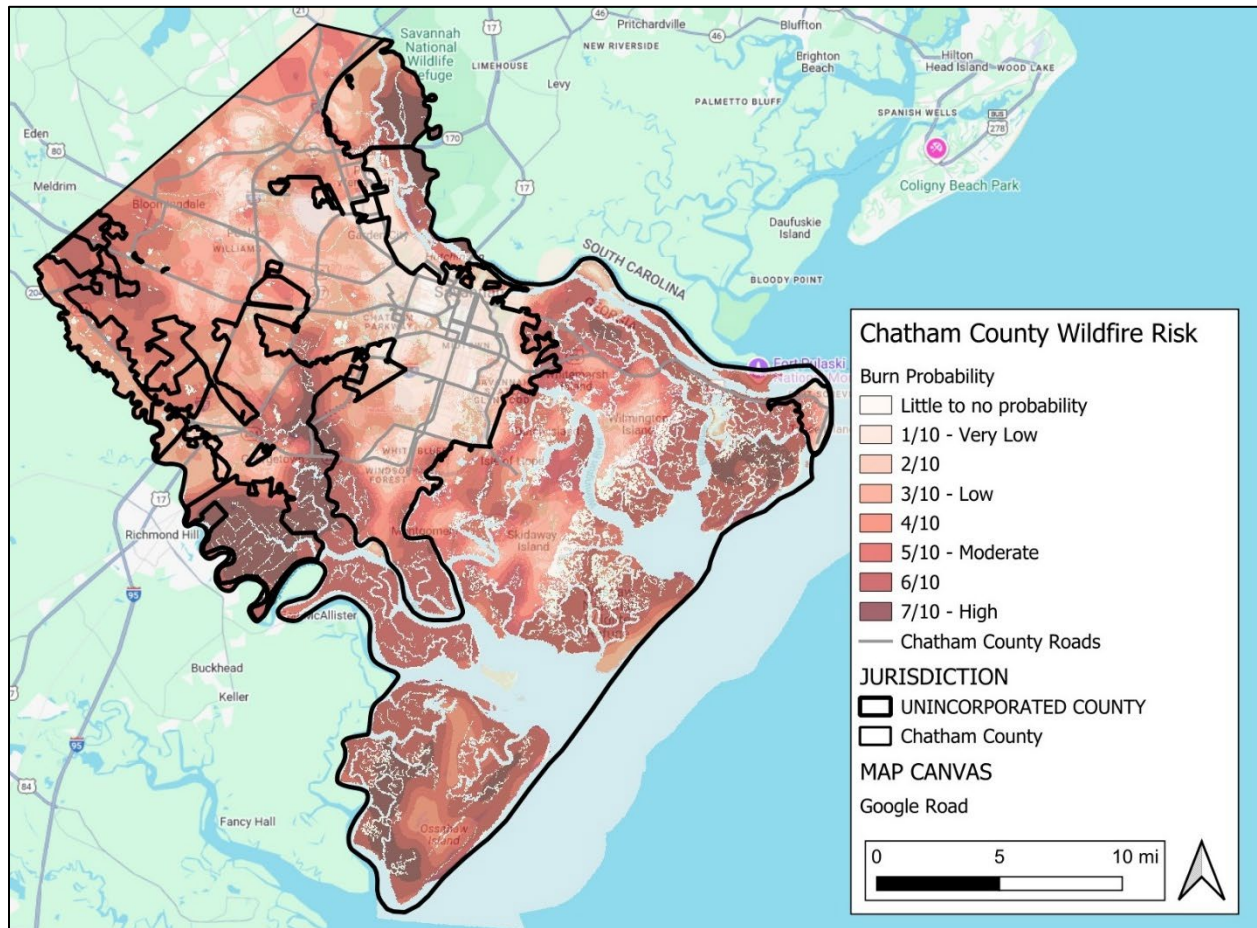
Figure A-14 – Functional Wildland Urban Interface, Chatham County



Source: Southern Wildfire Risk Assessment

Figure A-15 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. The highest burn probability areas in Unincorporated Chatham County are along the northern bank of the Savannah River near Port Wentworth, and in the south-central area east of Georgetown.

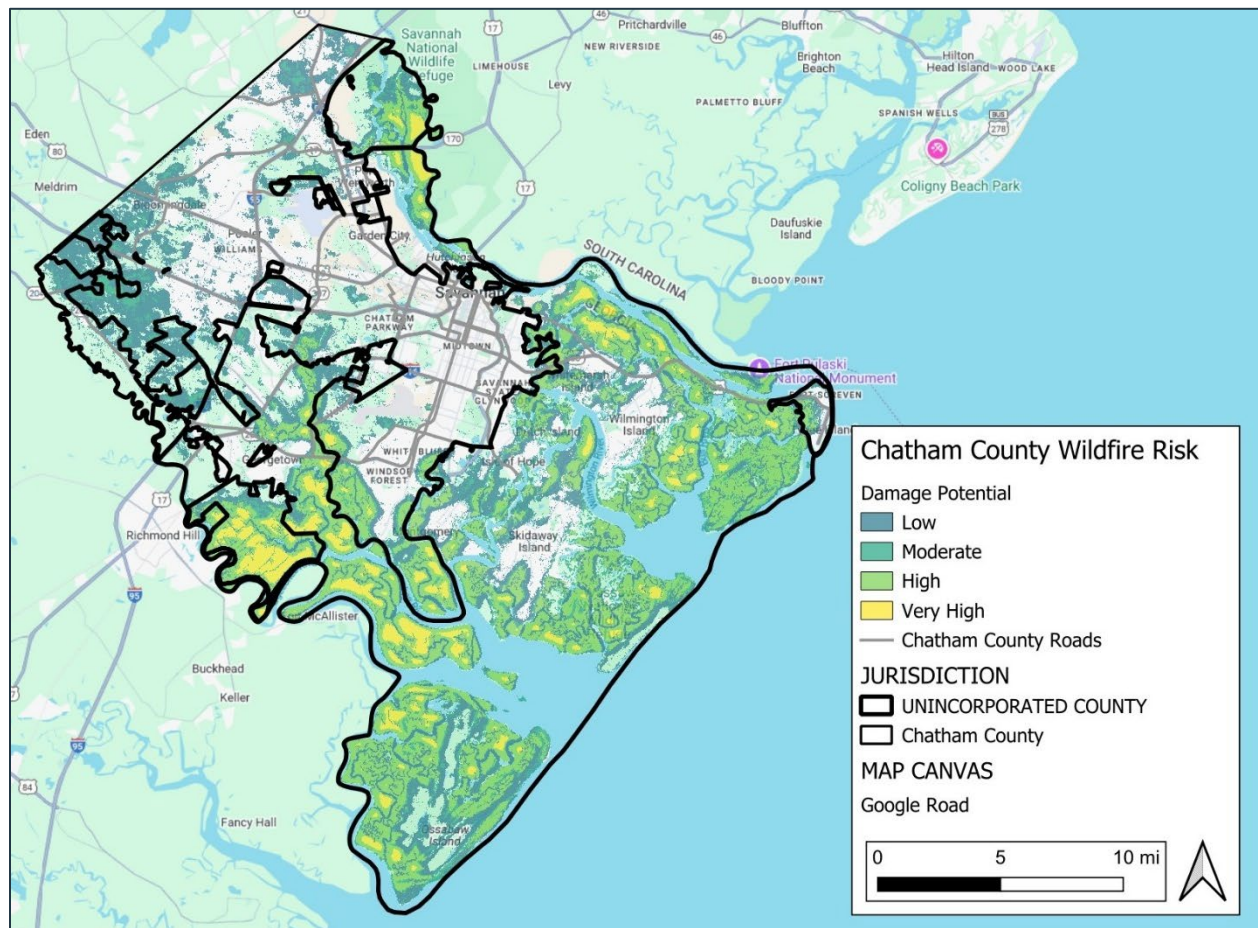
Figure A-15 – Burn Probability, Chatham County



Source: Southern Wildfire Risk Assessment

Figure A-16 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. Much like Burn Probability, the highest Damage Potential areas in Unincorporated Chatham County are along the northern bank of the Savannah River near Port Wentworth, and the south-central area east of Georgetown. Damage Potential risk is also Very High near Fort Jackson and the SeaPoint Terminal Industrial Complex.

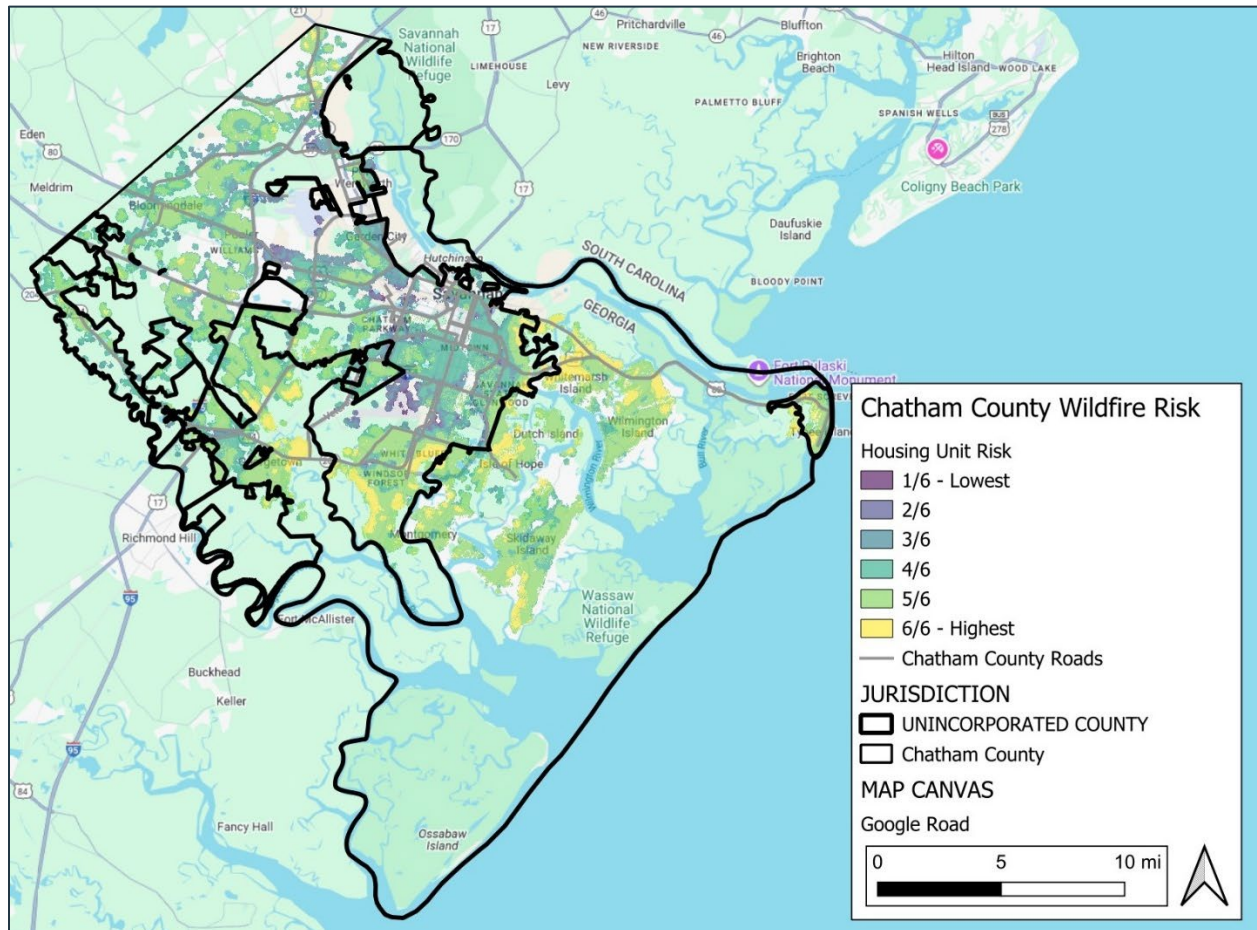
Figure A-16 – Damage Potential, Chatham County



Source: Southern Wildfire Risk Assessment

Figure A-17 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. The highest Housing Unit Risk areas in Unincorporated Chatham County are the Georgetown area, Isle of Hope, Skidaway Island, Talahi Island, Whitmarsh Island, Wilmington Island, and unincorporated Tybee Island.

Figure A-17 – Housing Unit Risk, Chatham County



Source: Southern Wildfire Risk Assessment

A.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

Chatham County joined the NFIP emergency program in 1970 and has been a regular participant in the NFIP since August 1980. The following tables reflect NFIP policy and claim data for the County and Vernonburg categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table A-19 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	12,764	10,629,596	\$4,084,015,000	995	\$21,437,591.02
2-4 Family	62	\$42,515	\$18,487,000	3	\$104,817.94
All Other Residential	444	\$321,653	\$258,116,000	15	\$75,381.73
Non-Residential	305	\$514,958	\$155,851,000	15	\$315,305.29
Total	13,575	\$11,508,722	\$4,516,439,000	1,025	\$21,933,095.98

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Table A-20 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Policies	Number of Post-FIRM Policies
AO1-30 & AE Zones	6,996	\$20,028,683.89	2,349	4,467
A Zones	1	\$0.00	1	0
V01-30 & VE Zones	55	\$977,667.75	32	23
B Zone / X Shaded	35	\$0.00	16	19
C / X Zone	6,488	\$860,144.34	2,697	3,791
No Zone Identified	Unavailable	\$66,600	Unavailable	Unavailable
Total	13,575	\$21,933,095.98	5,275	8,300

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

A.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Prevention									
P-1	Relocate fiber cable supporting all county facilities to below ground	All	2.1	Low	CEMA/County Facilities	PDM, HMGP	2026	Carry Forward	Estimated to be completed in 2026.
P-2	Communications Coverage: The radio network has known coverage issues on the southwest side of Wilmington Island and the southern end of Tybee Island.	All	5.1	High	CEMA	HMGP, CIP, PDM	2025	Carry Forward	Construction to start this year (2025)
P-3	Purchase and install the two remaining Bypass Pumps	Flooding, Tropical Cyclone, Coastal Storm, Severe Weather	2.1	High	Public Works	HMGP, CIP, PDM	2027	Carry Forward	Revised. Currently in CIP for future funding.
P-4	Improve and/or retrofit the tide gate system throughout Chatham County	Flooding, Tropical Cyclone, Coastal Storm	2.1	High	Public Works	HMGP, CIP, PDM	2027	Carry Forward	Revised
P-5	Develop a county-wide resilience plan	All	2.2, 2.3, 4.1, 4.2, 4.3	High	Resilience	PDM, HMGP, Federal Grants, & NGO Grants	2028-2030	Carry Forward	
P-6	Improve the conveyance system	Flooding, Tropical Cyclone, Severe Weather	2.1	High	Engineering/Public Works	HMGP, CIP, PDM	2025-2027	New	2025 addition.
P-7	Develop and Implement the Efficiency and Quality Transportation Improvement Plan	All	1.1, 5.2	High	MPC	HMGP, PDM, Federal Grants	2025-2026	New	2025 addition
P-8	Purchase a tethered drone for flood mitigation	Flood	1.1, 1.2	Moderate	Engineering/Public Works	HMGP, CIP, PDM	2026-2027	New	2025 addition
P-9	Evaluate Chatham County's need for alternate fire protection measures	Conflagration	1.1, 2.1	Moderate	CFD	HMGP, CIP, PDM	2026-2027	New	2025 addition
P-10	Extend sanitary sewer infrastructure to areas of the county currently relying on septic systems, prioritizing flood-prone and surface water-adjacent communities to reduce the risk of system failures, contamination, and associated public health hazards during flood events.	All	1.1, 2.1, 2.3, 5.1	High	Engineering/ Public Works	HMGP, CIP, PDM	2026-2028	New	2025 addition
P-11	Evaluate historical structures to determine protection strategies	All	1.1, 1.3	High	CEMA	HMGP, PDM	2025-2028	New	2025 addition
Property Protection									
PP-1	Harden roofs, windows, doors, and rooftop mechanical units at County critical facilities and critical workforce shelters.	All	1.3, 2.1	Moderate	CEMA	PDM; HMGP	2027	Carry Forward	
PP-2	Harden doors, windows, skylight, storage buildings and hangers at Chatham County Mosquito Control.	All	1.3, 2.1	High	County Mosquito Control	PDM; HMGP, CIP	2027	Carry Forward	
PP-3	Anchor membrane roof with mechanical fastening system in order to compartmentalize roof at Chatham County Mosquito Control Building.	All	1.3, 2.1	Low	County Mosquito Control	PDM; HMGP; Federal Grants	2027	Carry Forward	
PP-4	Anchor HVAC units	All	2.1	Moderate	County Facilities	PDM; HMGP; Federal Grants; CIP	2026	Carry Forward	Estimated to be completed in 2026.
PP-5	Construct housing to provide wind and debris protection for fuel pumps at Chatham County Mosquito Control Building.	All	1.3, 2.1	Moderate	County Facilities	PDM; HMGP	2025-2026	Carry Forward	
PP-6	Cut back trees in close proximity to County Facilities	All	2.1	Low	County Facilities	PDM; HMGP	2025-2026	Carry Forward	

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
PP-7	Construct safe rooms	All	1.1, 1.3	Moderate	Resilience; CEMA; Engineering	PDM; HMGP; Federal Grants	2028-2030	Carry Forward	Revised
PP-8	Elevate lift stations above the base flood elevation (BFE) including electrical components.	Flooding	2.1	Moderate	Public Works; County Parks; Engineering	HMP; PDM; FMA	2028	Carry Forward	
PP-9	Utilize vehicle barriers at the Old County Courthouse located at 124 Bull Street.	Hostile Threat	1.1, 1.3, 2.1	Low	County Facilities	DHS; Local Funds	2027	Carry Forward	Revised
PP-10	Reinforce cooling tower and roof on the Old County Courthouse located at 124 Bull Street.	Tropical Cyclone, High Winds, Severe Weather, Tornado	2.1	Moderate	County Facilities	Local Funds	2028	Carry Forward	Currently in process
PP-11	Anchor and harden membrane roof with mechanical fastening system in order to compartmentalize roof at Chatham County Annex, eliminate the vent leak, as well as securing HVAC.	Tropical Cyclone, High Winds, Severe Weather, Tornado	1.3, 2.1	High	County Facilities	Local Funds / SPLOST	2025	Carry Forward	
PP-12	Construct safe room in the Administrative Building at the Chatham County Mosquito Control Building.	All	1.3	Low	County Mosquito Control	PDM; HMGP; Federal Grants	2027-2028	Carry Forward	Revised
PP-13	Add HVAC stands at CNT Building.	Flooding	2.1	Low	County Facilities; CNT Department	Local Funds	2027	Carry Forward	
PP-14	Add a vehicle barrier at the CNT Building.	All	1.1, 1.3, 2.1	Moderate	County Facilities	DHS; Local Funds	2027	Carry Forward	
PP-15	Institute security measures for exposed pipelines.	All	2.1	Low	County Public Works	Local Funds and Staff Time	2026	Carry Forward	
PP-16	Harden and Reinforce McQueens Trail.	Flooding, Tropical Cyclone, Erosion	2.1, 2.2, 2.3	Moderate	County Parks and Rec./ Engineering	HMGP, CIP, PDM	2027	Carry Forward	Revised
PP-17	Hurricane shutters or window protection at both facilities (St. Joe's/Candler hospital) Replace the existing windows to Tropical Cyclone rated windows (estimated cost 350,000).	Tropical Cyclone, Severe Weather, Tornado	1.1, 1.3, 2.1	High	St. Joseph's / Candler Hospital (1st floor windows and 2nd floor outpatient)	HMGP	2028-2029	Carry Forward	
PP-18	Elevate Facility Electrical Equipment at St. Joseph's Hospital. Elevate facility electrical equipment in the basement to prevent water intrusion during a flood. (estimated cost 850,000)	Flooding	2.1	High	St. Joseph's / Candler Hospital Boiler Room	HMGP	2028-2029	Carry Forward	
PP-19	Purchase and Install Shutters for Fire Stations	Tropical Cyclone, Severe Weather, Tornado	1.3, 2.1	Moderate	CFD	HMGP	2027	Carry Forward	
PP-20	Replace garage doors that do not currently meet wind code.	Tropical Cyclone, Severe Weather, Tornado	1.3, 2.1	Moderate	CFD	HMGP	2027	Carry Forward	
PP-21	Acquire or elevate or mitigate properties prone to flooding. If properties are acquired, they could be demolished and land preserved as open space.	Flooding, Severe Weather, Tropical Cyclone, Sea Level Rise	3.1, 4.1,	High	CC Engineering	HMGP/FMA	2025-2030	Carry Forward	
PP-22	Replace A/C Louvers in mechanical rooms (Estimated cost 100,000)	Tropical Cyclone, Severe Weather, Tornado	2.1	High	Candler Hospital (Plant Operations)	HMGP, PDM	2028-2029	Carry Forward	
PP-23	Replace patient tower roofs because current roofs cannot handle the amount of rain and winds a tropical cyclone produces (Estimated cost \$400,000)	Tropical Cyclone, Severe Weather, Flash Flooding, Tornado	1.3, 2.1	High	St. Joseph's Hospital (Plant Operations)	HMGP, PDM	2028-2029	Carry Forward	
PP-24	Replace the windows in the patient tower (Estimated cost 2.1 million)	Tropical Cyclone, Severe Weather, Flash Flooding, Tornado	1.3, 2.1	High	Candler Hospital (Plant Operations)	HMGP, PDM	2028-2029	Carry Forward	
PP-25	Update lightning protection on the building structure to protect the building electrical systems (estimated cost 308,000).	Severe Weather	1.3, 2.1	High	Candler Hospital (Plant Operations) Roof Top	HMGP, PDM	2028-2029	Carry Forward	

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
PP-26	Bury the power line from Skidaway substation to the Skidaway Marine Science Campus to protect the line from tree damage and from extending power outages.	All	2.1, 5.1	Moderate	UGA-Skidaway Institute	HMGP, PDM	2025-2028	New	2025 addition. Working to secure funding to support this project
PP-27	Conduct an engineering study to determine the actions that would best mitigate the threat of coastal flooding from astronomical and tropical events on the Skidaway Marine Science campus of the University of Georgia on Skidaway Island (\$40,000)	Flood	2.2, 2.3, 4.1, 4.3	High	UGA-Skidaway Institute	HMGP	2028	Carry Forward	Working to secure funding to support this project
PP-28	Add sensors and related equipment to determine vulnerability of areas to flooding and other natural hazards	Flood, Tropical Cyclone, Sea Level Rise	2.1, 2.2, 2.3, 4.1, 5.2	Medium	CEMA, Engineering	Local Funds, State/Federal grants	2025	Carry Forward	
PP-29	Elevate or dry floodproof components or systems vulnerable to flood damage	Flood	1.3, 2.1	High	Engineering/Public Works	Local Funds, State grants, HMGP	2025	Carry Forward	
PP-30	Southeast Quadrant Stormwater Drainage Improvements: Stormwater Mitigation - Develop the SEQ in such a way as to capture stormwater runoff for the developed area, mitigate flooding in low-lying areas of the SEQ, and manage stormwater flow into Pipemakers Canal.	Flood, Tropical Cyclone, Sea Level Rise, Severe Weather	2.1	High	Savannah Airport Commission	HMGP	2025-2026	Carry Forward	
PP-31	Conduct a structural study of critical facilities to assess wind and hurricane rating and identify need, methods and cost to harden facilities.	Tropical Cyclone, Severe Weather, Tornado	1.3, 2.1, 4.3	High	CES	HMGP	2025	Carry Forward	
PP-32	Harden critical facilities based on structural study.	Tropical Cyclone, Severe Weather, Tornado	1.3, 2.1, 4.3	High	CES	HMGP	2025	Carry Forward	
PP-33	Elevate or dry floodproof components, systems and/or structures vulnerable to flood damage	Flood	1.3, 2.1	High	SCCPSS	Local Funds, State grants, HMGP	2026	Carry Forward	
PP-34	Harden roof, windows, doors and rooftop units for critical facilities	All	1.3, 2.1	Moderate	SCCPSS	Local Funds, State grants, HMGP	2027	Carry Forward	
PP-35	Evaluate and Improve sewage system at Gamble Rd. Maintenance/Operations facility.	Flood	2.1	High	SCCPSS	PDM, HMGP, Local Funds	2025-2027	New	2025 addition
PP-36	Determine and Implement school security and technology improvements.	All	1.1, 1.3	High	SCCPSS	PDM, HMGP, Local Funds	2025-2027	New	2025 addition
PP-37	Assume, monitor, and mitigate malicious and inadvertent insider threats.	Cyberattack	1.1, 1.2, 1.3	High	ICS	HMGP, CIP, PDM	2025-2026	New	2025 addition
PP-38	Evaluate and Improve the IT Disaster Recovery Plan	Cyberattack	2.1, 4.2, 4.3, 5.2	High	ICS	HMGP, CIP, PDM	2025-2026	New	2025 addition
PP-39	Implement protection strategies for historical structures	All	1.3, 2.1	High	CEMA	HMGP, CIP, PDM	2025-2028	New	2025 addition
Natural Resource Protection									
NRP-1	Acquire flood prone areas for preservation as community green space.	Flood	2.3, 4.1	Moderate	CEMA; County Engineering; Resilience	PDM, HMGP, Federal Grants	2028-2030	Carry Forward	No funding to accomplish this project
Emergency Services									
ES-1	Conduct yearly workshops related to FEMA hazard mitigation grant programs, including FMA, HMGP, PDM, SRL, and RFC.	All	3.1, 3.2, 4.1, 4.3	Moderate	CEMA	HMGP 5%	2028	Carry Forward	
ES-2	Conduct hazardous material transportation accident training, response, and recovery exercises with appropriate agencies.	Hazardous Materials Incident	1.1, 5.1	Moderate	CEMA	Local Funds; Federal and State Grants	2027	Carry Forward	
ES-3	Replace generator at Sheriff's Office	All	2.1, 5.1	High	Sheriff's Office	HMGP, CIP, PDM	2027	Carry Forward	

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
ES-4	Add an emergency generator and all components for the Home Health Building. (estimated cost 142,500).	All	2.1, 5.1	High	Candler Hospital Home Health Building	HMGP	2028-2029	Carry Forward	
ES-5	Add a second emergency generator and all components including a fuel tank to the data center for redundancy (estimated cost 130,000).	All	2.1, 5.1	High	Candler Hospital Data Center	HMGP	2028-2029	Carry Forward	
ES-6	Adding emergency generator and all components, including upgrading paralleling gear in order to support one of the existing chillers. (estimated cost 562,000).	All	2.1, 5.1	High	Candler Hospital Boiler Room	HMGP	2028-2029	Carry Forward	
ES-7	Purchase and Install Generators for 12 Critical Facilities	All	2.1, 5.1	High	CES	HMGP	2028	Carry Forward	
ES-8	Replace the existing generator with a 1000 KW Diesel Generator	All	2.1, 5.1	High	Savannah Airport Commission	HMGP	2025-2026	Carry Forward	
ES-9	Purchase backup portable 1000 KW Diesel Generator	All	2.1, 5.1	Moderate	Savannah Airport Commission	HMGP	2025-2026	Carry Forward	
ES-10	Purchase and install generator quick connects and transfer switches for critical facilities	All	2.1, 5.1	Moderate	Savannah Airport Commission	HMGP, General Fund	2026	Carry Forward	
ES-11	Portable generators for critical facilities	All	2.1, 5.1	High	SCCPSS	Local Funds; CIP	2026	Carry Forward	
ES-12	Purchase and install generator quick connects and transfer switches for critical facilities	All	2.1, 5.1	High	SCCPSS	HMGP, General Fund	2026	Carry Forward	
ES-13	Generators for critical facilities	All	2.1, 5.1	Moderate	SCCPSS	HMGP, General Fund	2026	Carry Forward	
ES-14	Purchase and install electric charging stations and infrastructure (solar with battery backup) to provide power for EV fleet during and after emergencies	All	4.3, 5.1	Moderate	Facilities, CEMA, Resilience	PDM, HMGP, Federal, State, and NGO grants	2028-2032	Carry Forward	Revised
Public Education & Awareness									
PEA-1	Disseminate survey/questionnaire and collect information from business, industry, educational, historical, and cultural institutions regarding their questions and needs. Provide informational brochures for distribution explaining flooding safety and storm surge procedures and mitigation actions that can be undertaken by the institutions.	Flood, Tropical Cyclone	3.1, 3.2	Low	CEMA	Local Funds; HMGP 5%	2028	Carry Forward	
PEA-2	Provide all hazards outreach via various outreach methods (print, tv, radio, social media, etc.)	All	3.1, 3.2	Low	CEMA	Local Funds; HMGP 5%	2027	Carry Forward	
PEA-3	Host/support a hazardous materials clean-up day to appropriately dispose of dangerous household and hard to dispose of materials.	Hazardous Materials Incident	3.1	Moderate	CEMA	Local Funds	2027	Carry Forward	Revised
PEA-4	Provide informational brochures for distribution of public safety procedures and mitigation actions that can be undertaken by business, industry, educational, historical, and cultural institutions.	Hostile Threat, Tornado	3.1, 3.2	Low	CEMA	Local Funds; HMGP 5%	2027	Carry Forward	Revised
PEA-5	Purchase NOAA weather radios and explore opportunities to make weather radios available to low-income residents.	All	1.2	Moderate	CEMA; County Engineering	Local funds, HMGP, PDM	2026	Carry Forward	Revised
PEA-6	Provide outreach to the non-English speaking/multilingual members of the community regarding evacuation.	Tropical Cyclone	3.2	Moderate	CEMA	HMGP 5%; Local Staff Time	2027	Carry Forward	Revised
PEA-7	Develop or support community awareness campaigns that promote healthy habits and disease prevention	Communicable Disease	3.1, 3.2	Moderate	CEMA	Local Funds; HMGP 5%	2026-2027	New	2025 addition

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
PEA-8	Procure weather radios for schools	All	1.2	Moderate	SCCPSS	Local funds, HMGP, PDM	2026-2028	New	2025 addition

Countywide mitigation actions presented in Section 3.3 (Mitigation Action Plans) of the HMP are duplicated below for tracking and mitigation strategy management purposes. These mitigation actions apply to the unincorporated county and all participating jurisdictions.

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Prevention									
P-1	Evaluate critical facilities, including cultural and historical facilities, for the installation and construction of safe rooms.	All	2.1	Low	Emergency Management	HMGP, PDM, Federal Grants	2025	Carry Forward	Revised. Project currently in progress. Working with GEMA and FEMA for evaluation and implementation.
P-2	Evaluate the conveyance system	Flooding, Tropical Cyclone, Severe Weather	2.1	High	Engineering/Public Works	HMGP, CIP, PDM	2027	Carry Forward	Revised
P-3	Flood Mitigation for flood prone areas	Flooding, Tropical Cyclone, Severe Weather, Dam Breaks	2.1, 2.2, 2.3	High	Engineering/Public Works	HMGP, CIP, PDM	2027	Carry Forward	Revised.
P-4	Install signage in tsunami risk areas and along tsunami evacuation routes	Tsunami, Flooding, Severe Weather	1.1, 1.2, 3.1, 3.2	High	Public Works	HMGP, PDM, CIP	2027	New	2025 addition.
P-5	Map and assess community vulnerability to tsunamis	Tsunami, Flooding, Severe Weather	1.1, 4.2	High	Engineering/Public Works	HMGP, PDM, CIP	2025-2027	New	2025 addition
P-6	Evaluation and Modeling of the drainage system	All	1.1, 4.2	High	Engineering/Public Works	HMGP, PDM, CIP	2025-2027	New	2025 addition
P-7	Purchase portable message boards for flood mitigation	Flood	1.1, 1.2, 3.2	High	Emergency Management	HMGP, CIP, PDM	2025-2026	New	2025 addition
P-8	Purchase a vacuum truck for stormwater removal and drainage	All	1.1, 2.1	Moderate	Engineering/Public Works	HMGP, CIP, PDM	2025-2028	New	2025 addition
P-9	Purchase portable stop signs for flood mitigation	Flood	1.1	Moderate	Facilities/ Resilience	HMGP, CIP, PDM	2026-2027	New	2025 addition
P-10	Purchase a camera truck for drain and/or sewer system inspections	All	1.1, 2.1	Moderate	Engineering/Public Works	HMGP, CIP, PDM	2026-2028	New	2025 addition
P-11	Implement alternative fire protection measures	Conflagration	1.1, 2.1	Moderate	Fire Department	HMGP, CIP, PDM	2026-2027	New	2025 addition
P-12	Strengthen policies and/or ordinances for Disaster Resilience	All	1.1, 1.3, 4.1	High	Facilities/Resilience	HMGP, PDM, Federal Grants, & NGO Grants	2025-2028	New	2025 addition
P-13	Acquire/deploy environment monitoring systems for all/various weather hazards.	All	1.1, 1.2, 3.2, 4.3, 5.2	Moderate	Emergency Management	Local Funding, HMGP, PDM	2026-2028	New	2025 addition
Property Protection									
PP-1	Replace windows (if needed) and install hurricane shutters on critical facilities	All	1.3, 2.1	Moderate	Facilities/ Emergency Management	PDM, HMGP, Federal Grants, Local Funds	2027-2028	Carry Forward	Funding limitations have prevented this action from being implemented.
Emergency Services									
ES-1	Purchase and install generator connections for critical facilities	All	2.1, 5.1	Low	Facilities	Local Funds; CIP	2025-2030	Carry Forward	Funding limitations have prevented this action from being completed.
ES-2	Portable generators for critical facilities	All	2.1, 5.1	High	Facilities	Local Funds; CIP	2026	Carry Forward	Funding limitations have prevented this action from being completed.
ES-3	Generators purchased and installed for all critical facilities.	All	2.1, 5.1	Moderate	Emergency Management	HMGP 5%	2028	Carry Forward	Funding limitations have prevented this action from being completed.
ES-4	Install solar panels	All	4.3, 5.1	Moderate	Facilities, Emergency Management, Resilience	PDM, HMGP, Federal, State, and NGO grants	2028-2032	Carry Forward	Revised

ANNEX A: CHATHAM COUNTY UNINCORPORATED AREA

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
ES-5	Install battery backup to provide power during and after emergencies	All	4.3, 5.1	Moderate	Facilities, Emergency Management, Resilience	PDM, HMGP, Federal, State, and NGO grants	2028-2032	Carry Forward	Funding limitations have prevented this action from being implemented.
Public Education & Awareness									
PEA-1	Conduct public forums to provide mitigation information and all hazards preparedness information.	All	3.1, 3.2	Low	Emergency Management	Local Funds; HMGP 5%	2027	Carry Forward	Ongoing mitigation activities

Annex B City of Bloomingdale

B.1 PLANNING PROCESS

The table below lists the HMPC members who represented the City of Bloomingdale.

Table B-1 – HMPC Members

Member Name	Title	Agency/Department
Ferman Tyler	Fire Chief, Code Enforcement	Fire Department
Blair Jeffcoat	Chief of Police	Police Department

B.2 COMMUNITY PROFILE

B.2.1 Overview of the Community

Bloomingdale is located along the northwestern border of Chatham County and is bordered to the northeast by Port Wentworth, to the east by the City of Pooler, to the south by the western portion of the City of Savannah, and to the northwest by Effingham County. U.S. Hwy. 80 runs east–west through Bloomingdale, and I-16 runs parallel to it through its southern part.

According to the U.S. Census Bureau, Bloomingdale has a total area of 14.27 square miles, of which 14.0 square miles (98.1%) is land and 0.27 square miles (1.9%) is water.³

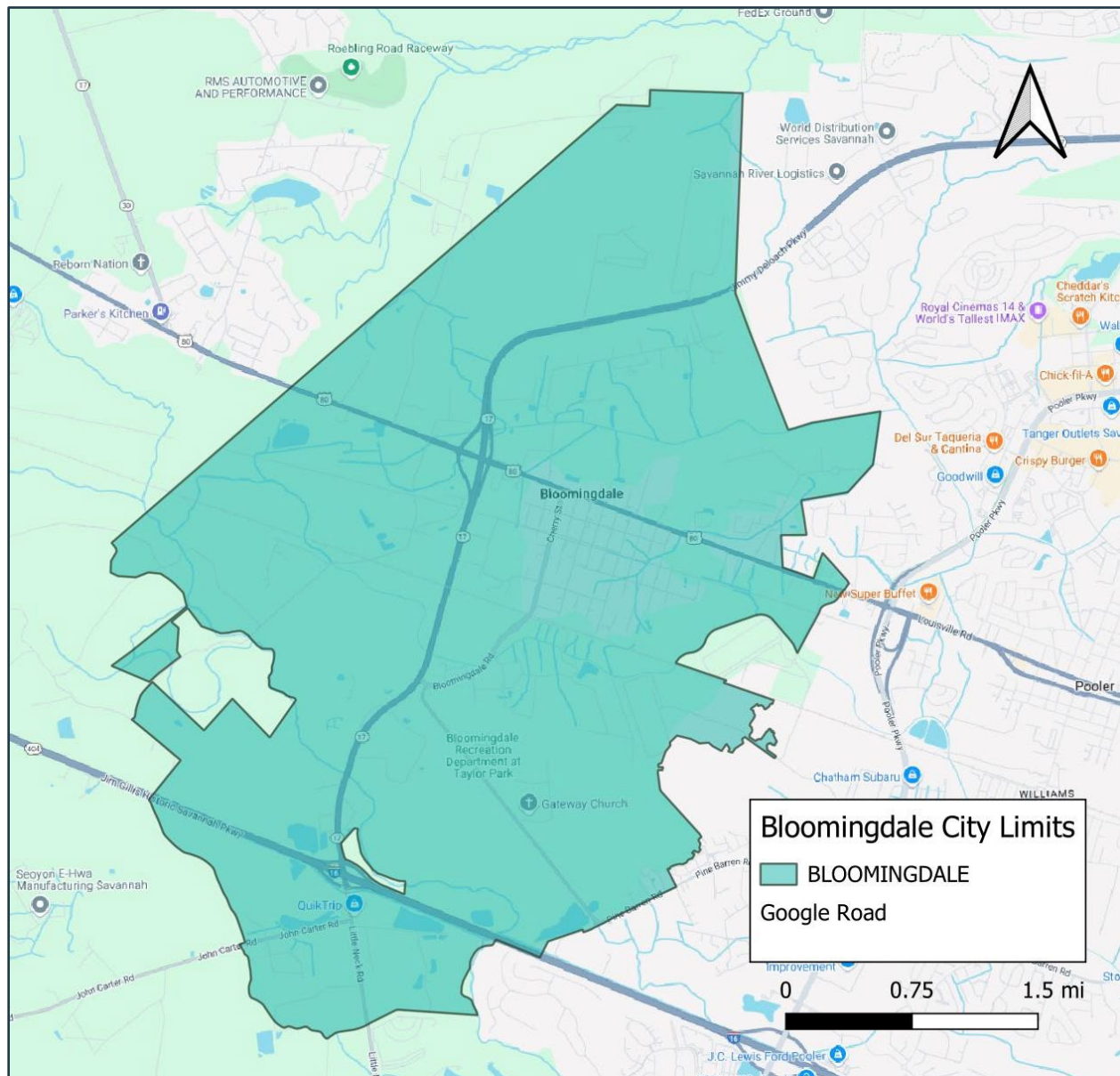
According to the U.S. Census Bureau’s American Community Survey (ACS) 5-Year Estimates, the city had a total population of 2,983 in 2023.⁴ Therefore, the City’s average population density is approximately 209 people per square mile.

The figure below reflects the City of Bloomingdale boundaries and shows the City’s location within the County and in relation to surrounding municipalities.

³ <https://data.census.gov/table?q=Bloomingdale+city,+Georgia+geography>. Retrieved 06-11-2025.

⁴ <https://data.census.gov/table?q=Bloomingdale+city,+Georgia+demographics>. Retrieved 06-11-2025.

Figure B-1 – Location Map, Bloomingdale



B.2.2 Geography and Climate

Please refer to Chatham County Community Profile for a summary of the climate for the city.

Bloomingdale lies within the Sea Island Flatwoods Level IV Ecoregion, which consists of flat plains on marine terraces. Waterways consist of swamps, bays, and low gradient streams with sandy and silty substrates. Elevations average approximately 20 feet. Typical land cover consists of evergreen forests, pine plantations, and forested wetlands.

ANNEX B: CITY OF BLOOMINGDALE

The City of Bloomingdale is located partially within the Outlet Savannah River Basin HUC 12 and the Hardin Canal – Little Ogeechee River HUC 12 Basin.⁵

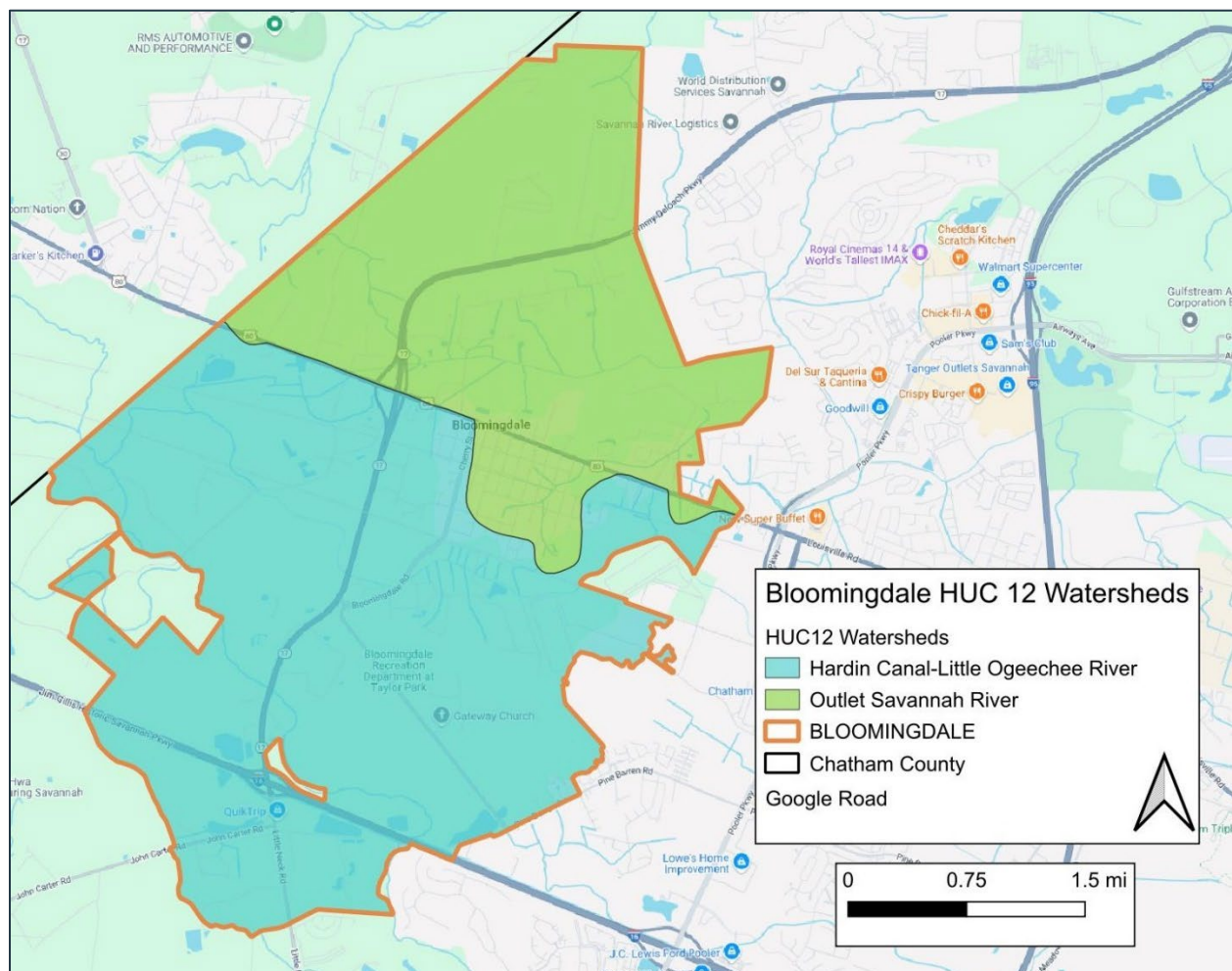
Table B-2 – HUC 12 Watersheds, Bloomingdale

Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Outlet Savannah River	196.73	109.31	87.42	Atlantic Ocean	030601090307
Hardin Canal – Little Ogeechee River	74.75	47.94	26.81	Salt Creek – Little Ogeechee River	030602040201

Source: Chatham County Coastal Watershed Management Plan, 2020

Figure B-2 illustrates the HUC 12 drainage basins and drainage features in and around Bloomingdale.

Figure B-2 – HUC 12 Watersheds, Bloomingdale



B.2.3 Cultural, Historic, and Natural Resources

B.2.3.1 Cultural and Historic Resources

⁵ https://www.researchgate.net/figure/Coastal-Watershed-Planning-Area-CWPA-for-Chatham-County-and-City-of-Savannah-Modeled_fig2_344570004. Retrieved 06-13-2025.

The Bloomingdale History Museum & Visitor's Center is located at 205 East Hwy. 80. The museum is located in the Pierce-Page House which was built in 1920 and was the second brick house built in the city.



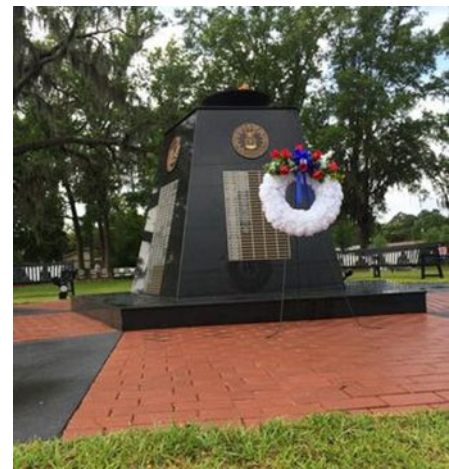
The Bloomingdale Community Building is located at 202 E. Moore Street and is available for rent for community events.

B.2.3.2 Parks, Preserves, and Conservation

The Bloomingdale Veterans Freedom Park is located at 1 West Hwy. 80 and honors all service men and women who live or have lived in Bloomingdale.



Veterans Freedom Park



Veteran's Monument

B.2.3.3 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within the City of Bloomingdale are identified in the table below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table B-3 – Flood Zones, Bloomingdale

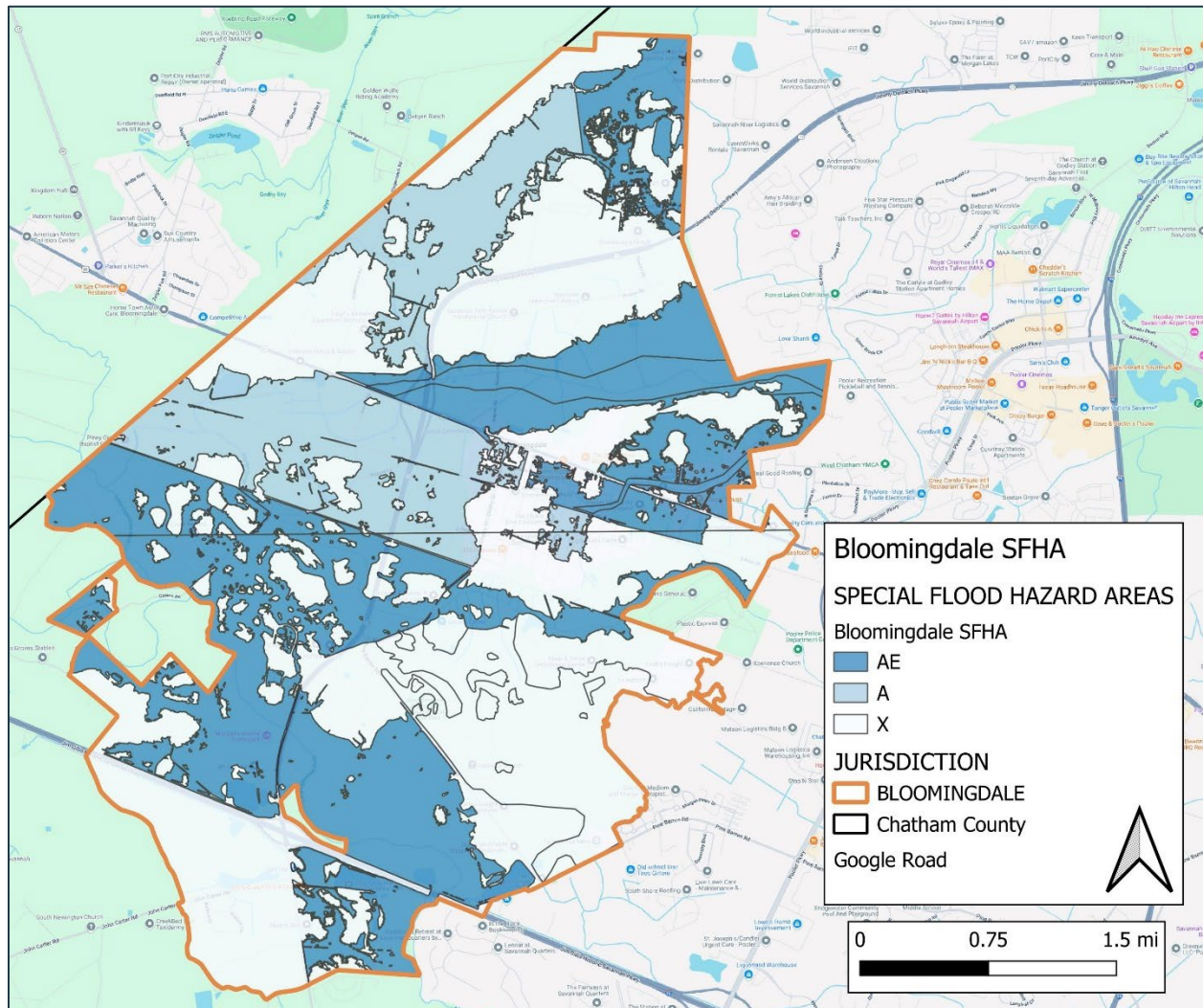
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
A	1,345.29	2.10	14.6
AE	3,142.99	4.91	34.2
X500	763.39	1.19	8.3
X	3,935.66	6.15	42.8
TOTAL	9,187.33	14.36	100.00

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, 4,488.28 acres of the land within the city are located within a 100-year floodplain (Zone AE and A), which equals 48.8% of the city. An additional 763.39 acres are located within the 500-year floodplain (8.3% of the city). With over 48 percent of the city at high risk to flooding in the Special Flood Hazard Area (SFHA) and an additional 8 percent at moderate risk to flooding, the City of Bloomingdale should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in Bloomingdale include wetland areas and low-lying land along the major waterways in and around the city, including the Little Ogeechee River, Hardin Canal, and Pipe Makers Canal. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates and acting as a flood storage area to reduce downstream peaks. The city should strive to keep floodplain and floodplain waters free of contaminants such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

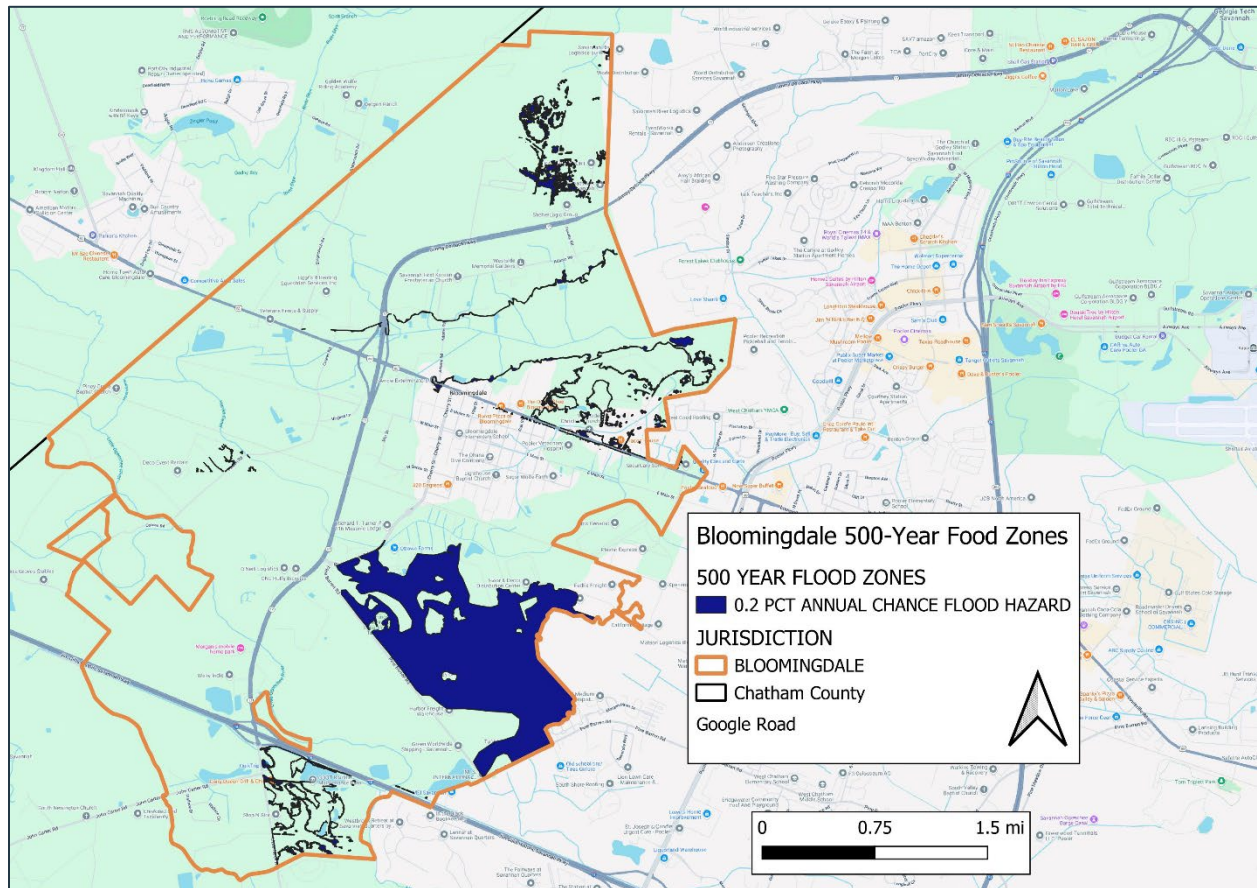
Figure B-3 – FEMA Flood Zone Map, Bloomingdale



Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplain, these zones can still experience significant flooding during extreme events. The X500 zone for Bloomingdale is depicted in the map below and represented in Table B-3 above.

Figure B-4 – X500 Zone, Bloomingdale



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

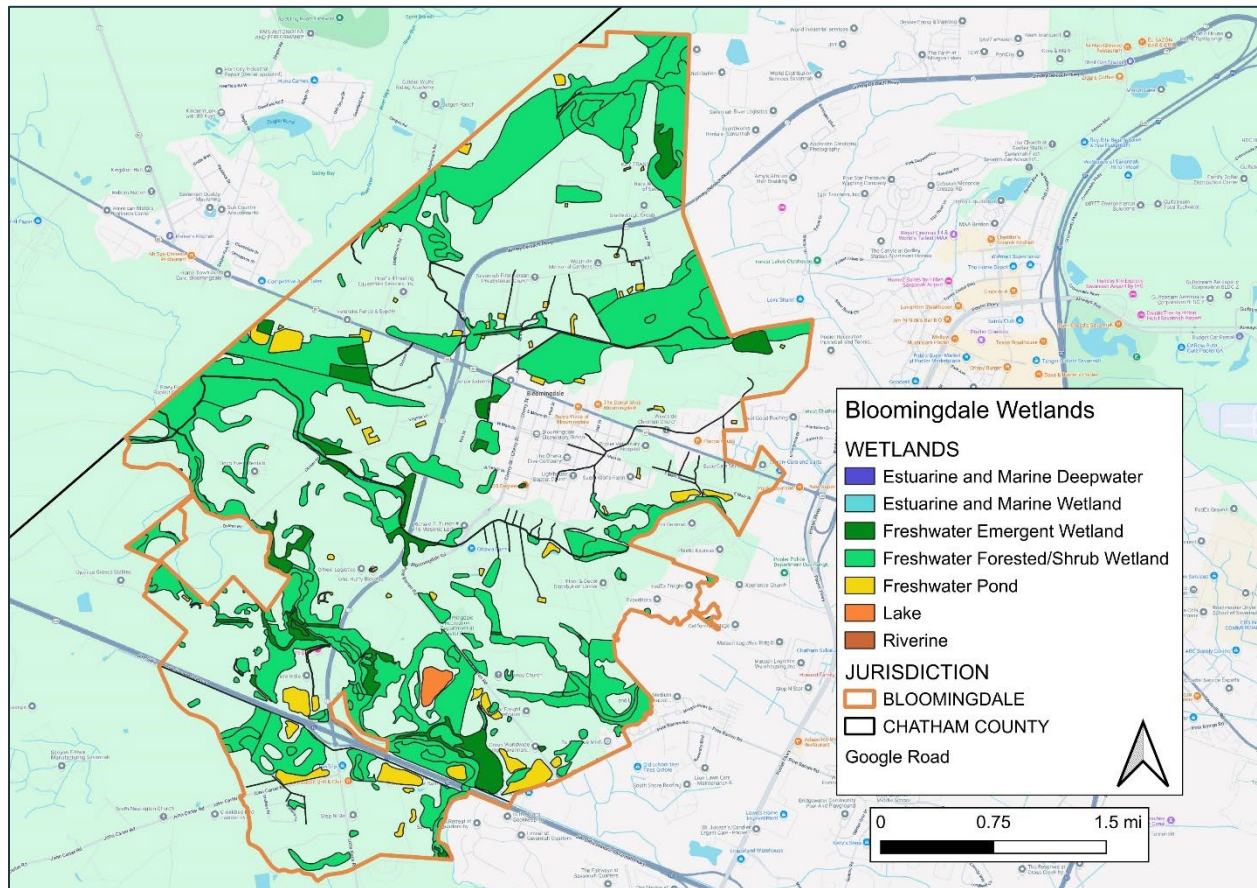
Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through these processes pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetlands Inventory (NWI), wetlands throughout the City of Bloomingdale make up 4,313.99 acres (6.74 square miles) or 47.2 percent of the City (see Figure B-5 below).

Table B-4 – Wetland Types, Bloomingdale

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Non-Wetland	4,818.81	7.53	52.8
Freshwater Emergent Wetland	282.67	0.44	3.1
Freshwater Forested/Shrub Wetland	3,730.45	5.82	40.8
Freshwater Pond	194.89	0.30	2.1
Lake	21.86	0.03	0.2
Riverine	84.14	0.13	0.9
TOTAL	9,132.80	14.27	100.0

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Figure B-5 – Wetlands Map, Bloomington



Freshwater Emergent Wetland

Freshwater emergent wetlands are classified within the Palustrine System by the U.S. Fish and Wildlife Service (USFWS) as part of their National Wetlands Inventory (NWI). This system categorizes wetlands based on their landscape position, vegetation cover, and hydrologic regime. Within the Palustrine System, emergent wetlands are further defined by their vegetation (grasses, sedges, forbs) and whether the vegetation is persistent (remaining until the next growing season) or non-persistent.

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Freshwater Pond

Within the Palustrine system, ponds are often categorized as Lacustrine or Palustrine. Specifically, ponds may be classified as emergent, scrub-shrub, or forested, depending on the dominant vegetation.

Lake

Lacustrine wetlands are defined as wetlands associated with lakes and large ponds. They are characterized by the water level of the lake influencing the water table of the adjacent wetland, and they often occur along lake shores.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across the City of Bloomingdale, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure B-6 – Land Cover Map, Bloomingdale

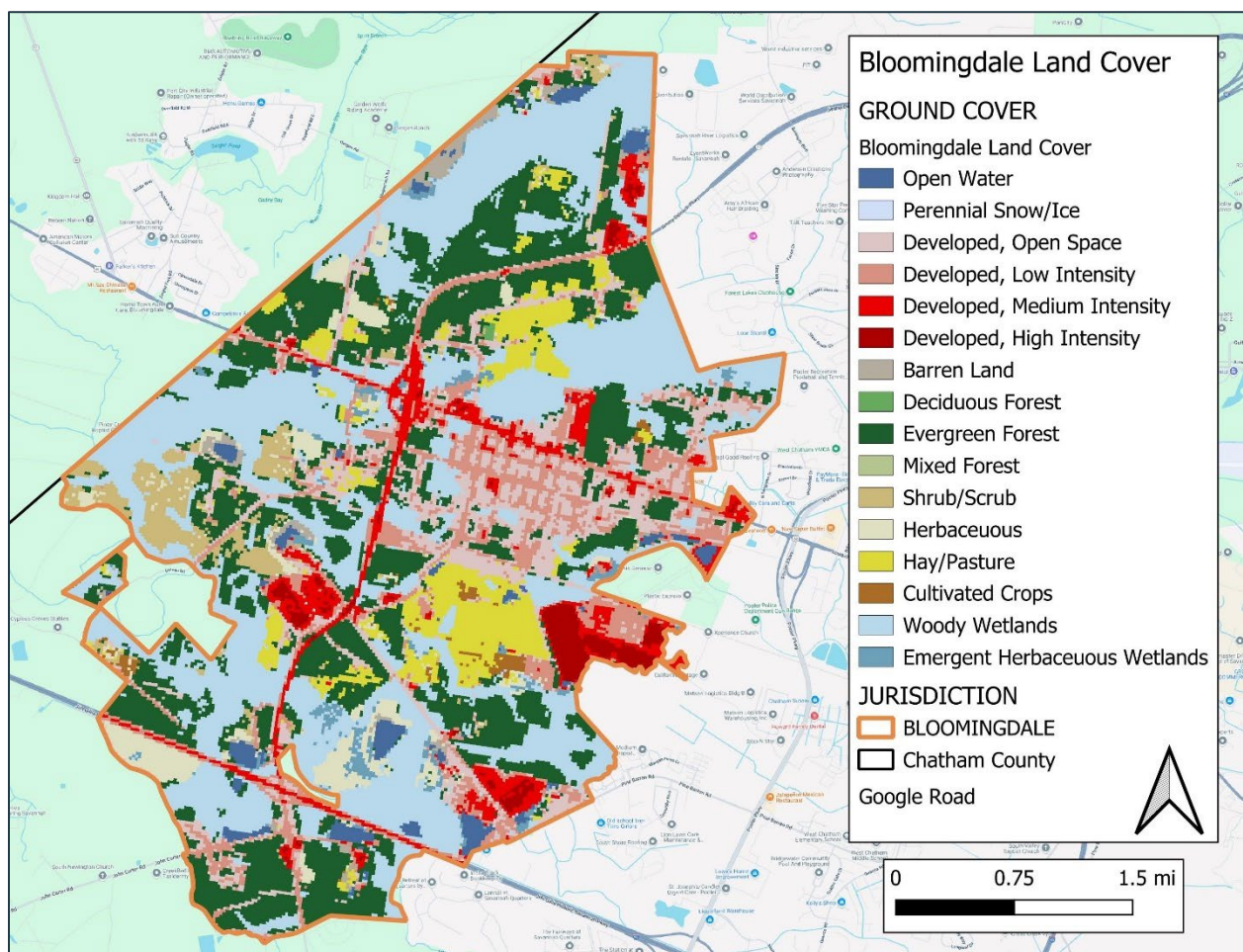
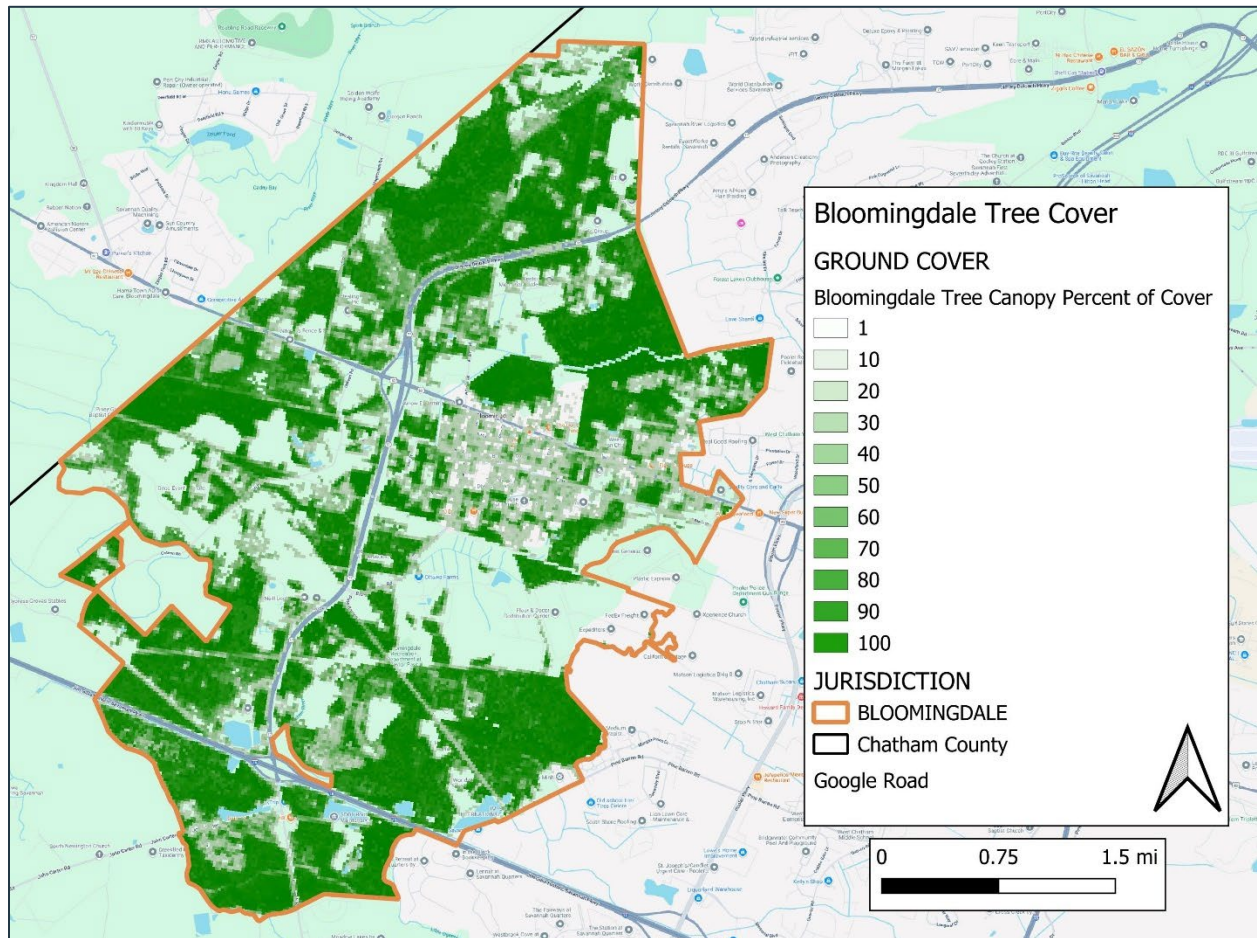


Figure B-7 – Tree Cover Map, Bloomingdale



B.2.4 History

In the early 19th century, settlers were drawn to the fertile lands and proximity to emerging transportation routes in the area that is now the City of Bloomingdale. The construction of the Central of Georgia Railroad in the 1830s played a key role in shaping the community, which became known as “Bloomingdale” due to all the wildflowers along the rail line. Officially incorporated in 1974, Bloomingdale has transitioned from a small railroad stop to a developing city on the outskirts of the Savannah metropolitan area.

Historically, the area’s economy was based on agriculture, specifically with crops like cotton and timber. During the 20th century, Bloomingdale also experienced periods of industrial and residential growth, particularly following the establishment of regional employers and improved infrastructure. Despite these changes, the city retains a rural character in many areas, with pockets of low-density development and natural resources that influence its vulnerability to hazards such as flooding, severe storms, and wildfires.

B.2.5 Economy

B.2.5.1 Wages and Employment

Per the 2019-2023 American Community Survey 5-Year Estimates, the median household income for Bloomingdale is \$55,427, which is 29.6 percent lower than the state’s median household income (\$74,664). Approximately 9.1 percent (272) of the population is considered to be living below the poverty

level. Moreover, 17.7 percent (86) of people living below the poverty level are under 18 years of age and 2.3% percent (13) are 65 years and over.⁶

The table below shows employment and unemployment rates along with industry employment by major classification for the city.

Employment and Occupation Statistics for Bloomingdale, GA, 2019-2023

Employment Status	Count	Percentage (%)
In labor force	1,556	61.8
Employed	1,524	60.1
Unemployed	24	0.9
Armed Forces	18	0.7
Not in labor force	968	38.2
Occupation		
Management, business, science, and arts	480	31.5
Service	174	11.4
Sales and office	228	15.0
Natural resources, construction, and maintenance	216	14.2
Production, transportation, and material moving	426	28.0

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Major industry sectors in the City of Bloomingdale include management, business, science, and arts (31.5%); service (11.4%); and sales and office (15.0%); natural resources, construction, and maintenance (14.2%); and production, transportation, and material moving (28.0%).⁷

Major employers are discussed in the Chatham County Community Profile.

B.2.6 Housing

According to the 2019-2023 ACS 5-Year Estimates, there are 1,334 housing units in Bloomingdale, of which 93.7 percent (1,250) are occupied.⁸ Approximately 67.2% (820) of occupied units are owner-occupied (32.8% / 410 occupied by renters). A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster. Therefore, higher rates of home rentals in Bloomingdale may indicate that residents are not able to implement certain types of mitigation in their homes.

Median home value in Bloomingdale is \$262,100. Of the City's owner-occupied housing units, 64.3 percent (527) have a mortgage. Most householders (76.2% / 952) have lived in their current homes since the year 2000 or later; 19.1 percent (239) moved in between 2000 and 2009, 19.9 percent (249) moved in between 2010 and 2017, 26.0 percent (325) moved in between 2018 and 2020, and 11.1 percent (139) moved in 2021 or later. 4.6 percent (57) of householders in occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

⁶ <https://data.census.gov/table?q=Bloomingdale+city,+Georgia+poverty+status>. Retrieved 06-13-2025.

⁷ <https://data.census.gov/table?q=Bloomingdale+city,+Georgia+employment>. Retrieved 06-13-2025.

⁸ <https://data.census.gov/table/ACSDP5Y2023.DP04?q=Bloomingdale+city,+Georgia+tenure>. Retrieved 06-13-2025.

The majority (81.8% / 1,091) of housing units in Bloomingdale are detached single family homes. However, 8.7 percent (116) of units are mobile homes which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

The City's housing stock is aging, with the majority (74.4% / 930) of housing built before 2000. Table B-5 details housing age in the city.

Table B-5 – Housing Age

Year Structure Built	Percent of Total Housing Units	Number of Structures
2020 or later	3.8%	51
2010 to 2019	8.0%	107
2000 to 2009	12.9%	172
1980 to 1999	36.4%	485
1960 to 1979	18.7%	249
1940 to 1959	15.7%	209
1939 or earlier	4.6%	61

Source: U.S. Census Bureau, American Community Survey 2019-2023 5-Year Estimates

Age can indicate the potential vulnerability of a structure to certain hazards. For example, the City of Bloomingdale first entered the National Flood Insurance Program in 2000. Therefore, based on housing age estimates, at least 77.6 percent of housing in the town was built before any floodplain development restrictions were required.

B.2.7 Population

According to the U.S. Census Bureau, Bloomingdale had an estimated population of 2,983 residents in 2023 and a population of 2,790 at the time of the 2020 U.S. Census (11.3% increase from 2020-2023). As of 2023, Bloomingdale's population density was 209 persons per square mile. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates.⁹

Table B-6 – City of Bloomingdale Demographic Profile Data, 2019-2023

Demographic	Bloomingdale
Gender/Age	
Male	1,531
Female	1,452
Under 5 Years	196
65 Years and Over	570
Race/Ethnicity (One Race)	
White	2,171
Black or African American	397
American Indian/Alaska Native	2
Asian	73
Two or More Races	304
Hispanic or Latino ¹	209
Education	
High School Graduate or Higher	2,028
Bachelor's Degree or Higher	418

⁹ <https://data.census.gov/table/ACSDP5Y2023.DP05?q=Bloomingdale+city,+Georgia+population>. Retrieved 06-13-2025.

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates
¹Hispanics may be of any race, so also are included in applicable race categories.

B.2.8 Land Use

The City of Bloomingdale’s 2021 Comprehensive Plan¹⁰ identifies the City’s current zoning designations and future land use categories to guide decision-making related to future land development.

B.2.8.1 Existing Land Use and Zoning

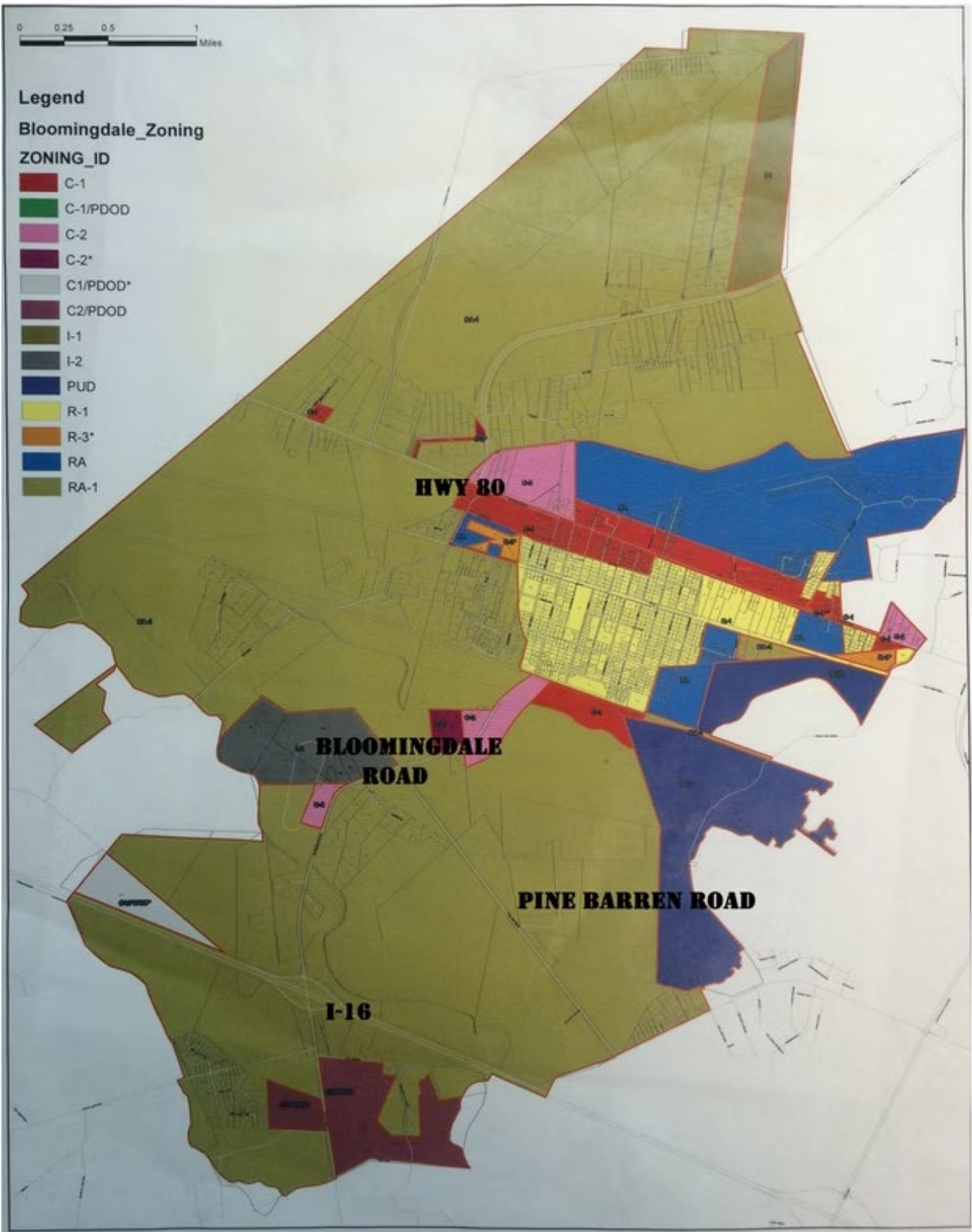
The City’s zoning districts are identified and described in Figure B-8 below. The City’s Zoning Map represents the City’s current zoning districts.

Figure B-8 – Bloomingdale Zoning Districts and Abbreviations

52-705	RA	Agricultural	General farming, raising of farm animals and poultry, Single-family dwellings
52-706	RA-1	All uses in RA, plus recreation	All uses permitted in RA, plus churches, RV campgrounds, recreation parks (not to include amusements parks)
52-707	I	Institutional	Parks, recreation, public and private schools, hospitals, private day care centers, clinics, cemeteries, government buildings
52-708	R-1	One-family residential	Low-density single-family residential
52-709	R-2	One- and two-family residential	Medium-density, one- and two-family dwellings, R-1 uses
52-710	R-3	Multiple-unit residential	Medium- and high-density residential, multiple-family units, R-1 and R-2 uses
52-711	PUD	Planned Unit Development includes (PRD, PCD, PID)	All planned combinations of residential family units, agricultural, group housing, commercial, office, industry, mobile homes, and institutional uses
52-714	O-C	Office - Commercial	professional commercial, public or semi-public use, related nonretail use
52-715	C-1	Central Business District	Shops, services and offices
52-716	C-2	General Commercial	Retail, wholesale, light storage and services, C-1 O-C, R-2, and R-1 uses
52-717	LI	Light Industrial	Heavy commercial, warehousing for retail under 8,000 sq. ft., small equipment repair
52-718	I-1	Intensive Industrial	Warehousing, container yards, heavy equipment maintenance and repair, chassis storage
52-719	I-2	Heavy Industrial	General manufacturing, junk yards
52-720	MHP	Mobile Home Park	Manufactured housing

¹⁰ <https://dca.georgia.gov/bloomingdale-city-comprehensive-plan>. Retrieved 06-16-2025.

Figure B-9 – Bloomingdale Zoning Map



According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

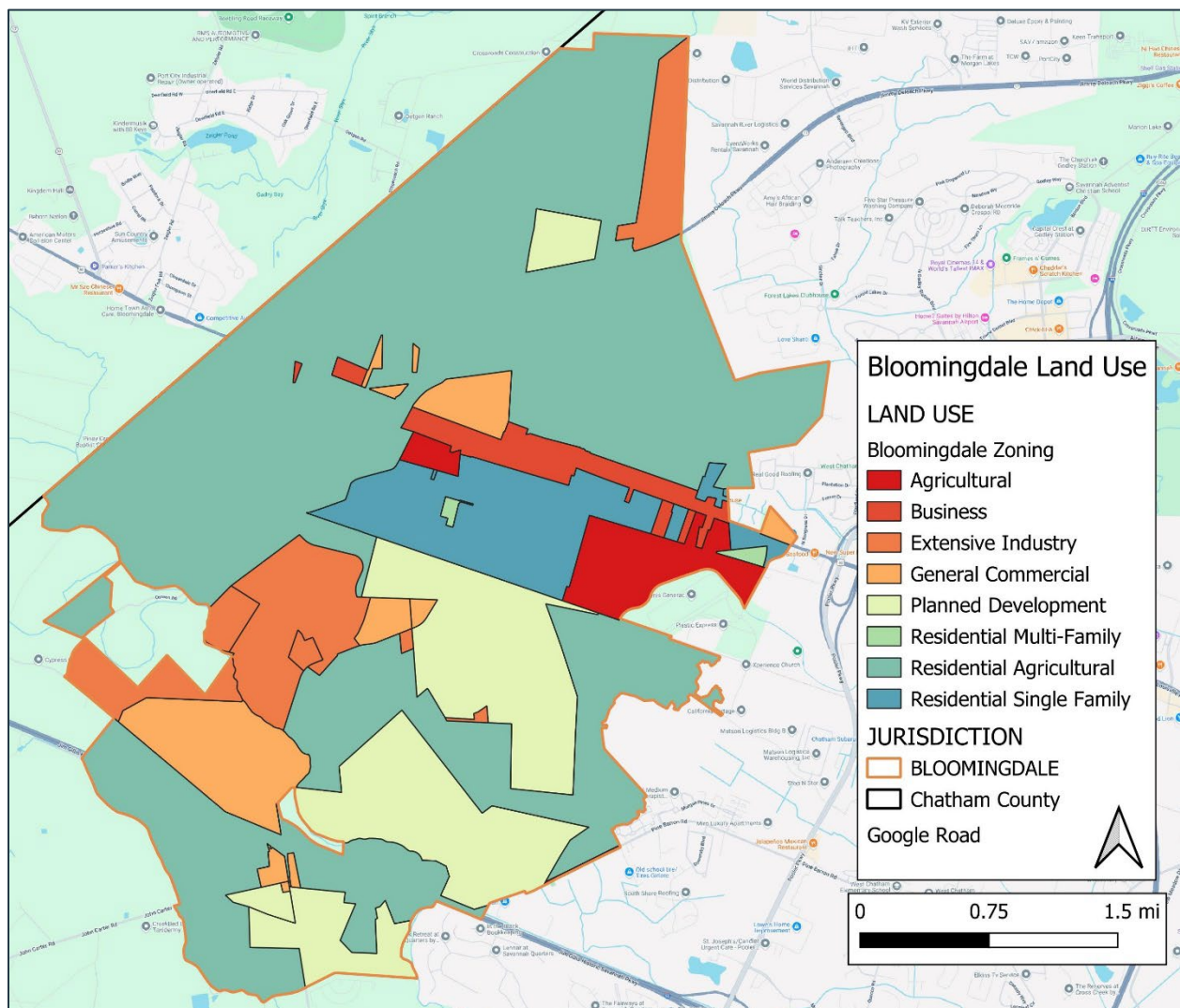
Table B-7 – Existing Land Use, Bloomingdale

Land Use/Zoning	Area (Acres)	Area (Square Miles)
Agricultural	281	0.44
Business	214	0.33
Extensive Industry	693	1.08
General Commercial	511	0.80
Residential Multi-Family	20	0.03
Residential Single-Family	603	0.94
Planned Development	1,416	2.21
Residential Agricultural	5,439	8.50
TOTAL	9,177	14.34

Source: SAGIS – Zoning, 2024

An additional existing land use map for zoning is included below for Bloomingdale, as taken from the SAGIS map viewer for Chatham County.

Figure B-10 – Existing Land Use and Zoning Map, Bloomingdale



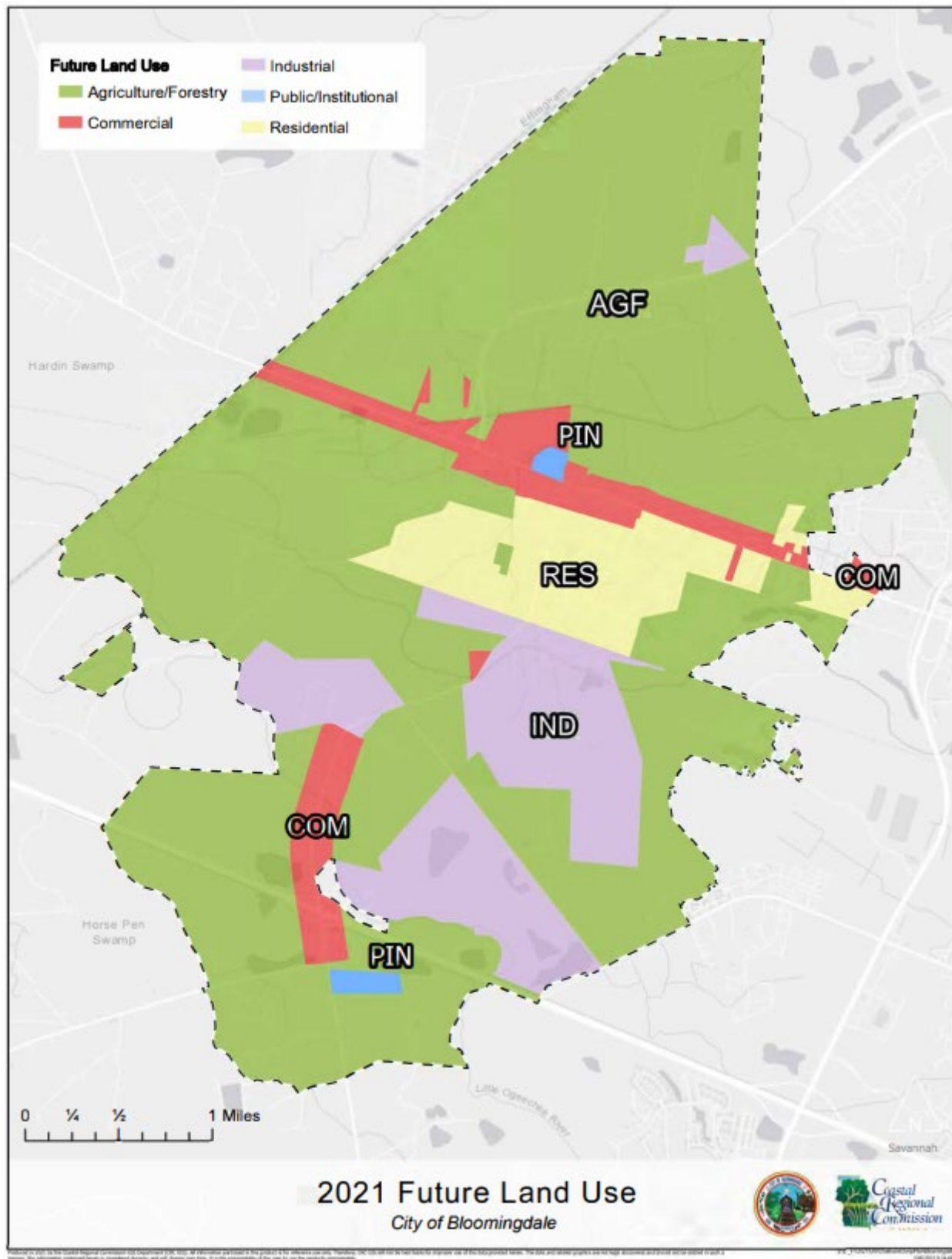
Source: SAGIS – Zoning, 2024

B.2.8.2 Future Land Use

The City's Future Land Use map includes the following categories:

- Residential: This area is predominately single-family and multi-family homes and makes up the largest land use category within Bloomingdale.
- Commercial: The commercial corridor is found in the area of U.S. Hwy. 80.
- Industrial: Industrial use in Bloomingdale is located primarily along Bloomingdale Road and south of the Seaboard Coastline Railroad.
- Public/Institutional: These uses, city hall, police and fire, schools, churches, the library, and the museum are found throughout the community.
- Agriculture/Forestry: Bloomingdale offers both passive and active recreation throughout the community.

Figure B-11 – Bloomingdale Future Land Use Map



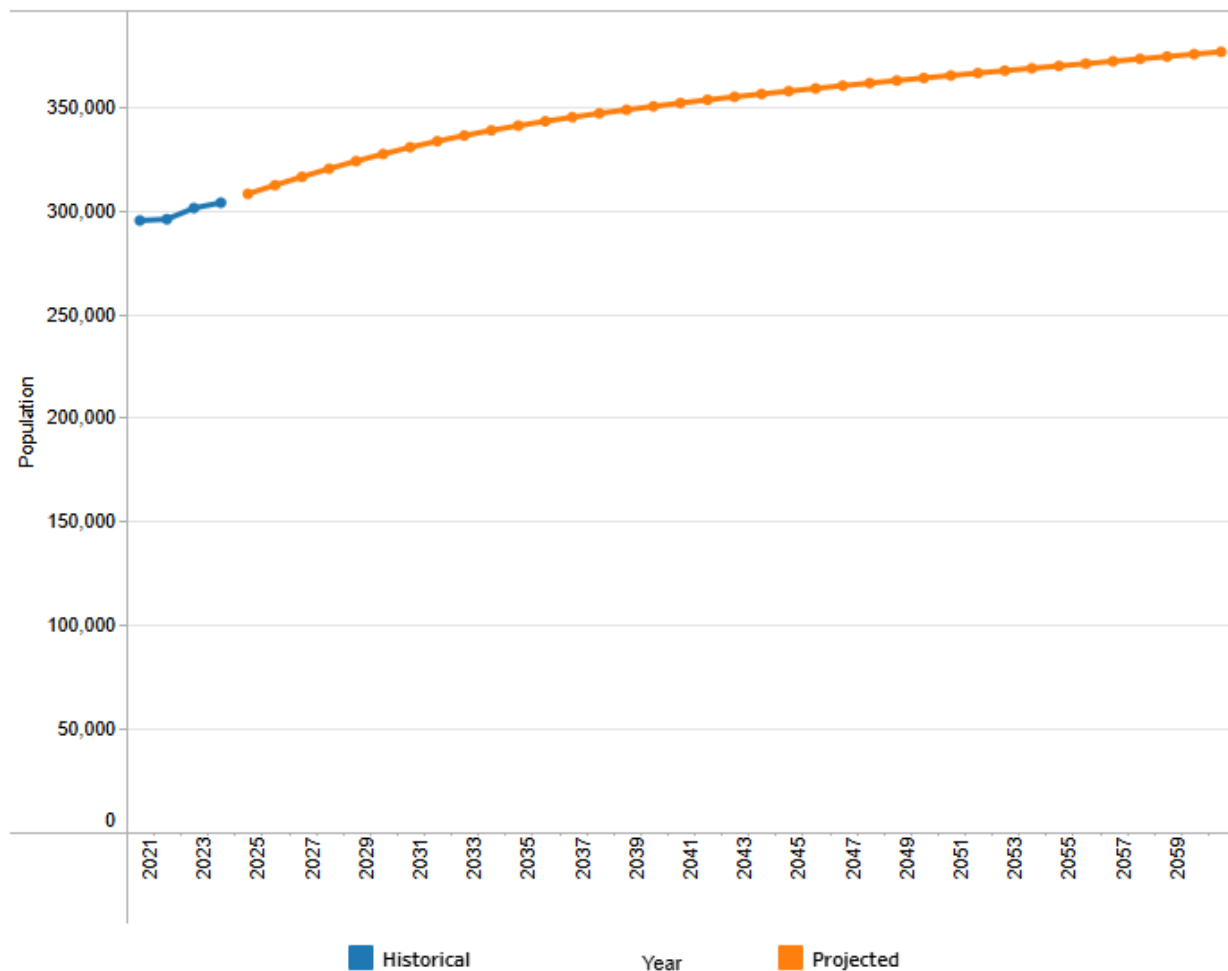
B.2.9 Growth and Development Trends

According to U.S. Census and American Community Survey population estimates, the City of Bloomingdale population has increased from 2,790 in 2020 to 2,983 in 2023, representing a total increase of 6.9 percent and an annual increase of 2.3 percent.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be on average about 0.8 percent through 2060. Only population projections for Chatham County are included in this section as there are currently no population projections available for Bloomingdale at the time of planning.

Figure B-12 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget, 2025

B.3 ASSET INVENTORY

B.3.1 Property

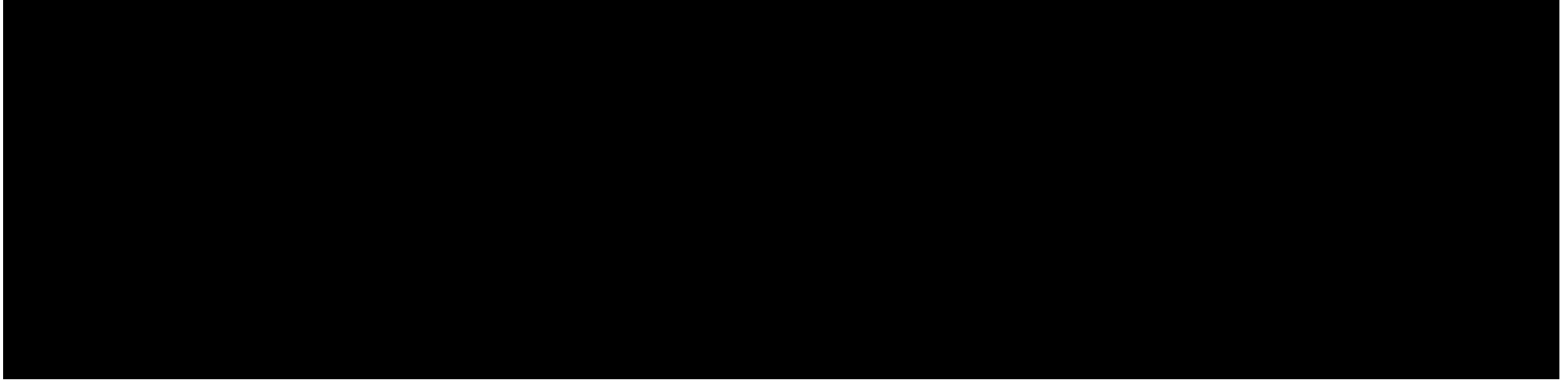
Table B-8 – City of Bloomingdale Building Exposure

Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	74	\$99,707,820	\$99,707,820	\$199,415,640
Government	13	\$4,210,200	\$4,210,200	\$8,420,400
Industrial	19	\$64,346,360	\$96,519,540	\$160,865,900
Non-Profit	32	\$12,426,500	\$12,426,500	\$24,853,000
Residential	1,291	\$125,414,646	\$62,707,323	\$188,121,969
Utility	5	\$147,429	\$221,144	\$368,573
Total	1,434	\$306,252,955	\$275,792,527	\$582,045,482

Source: Chatham County

B.3.2 Critical Facilities

Table B-9 – Critical Facilities and Infrastructure at Risk



Source: Chatham County

*B-6 Shares a generator with B-3.

B.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

B.4.1 Flood

Approximately 16.2 percent of buildings in Bloomindale are within the mapped 1%-annual-chance floodplains (Zones A, AE, and VE) and 3.7 percent are within the X500 zone. Figure B-13 reflects the mapped flood hazard zones for the City of Bloomington, and Figure B-14 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table B-10, below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

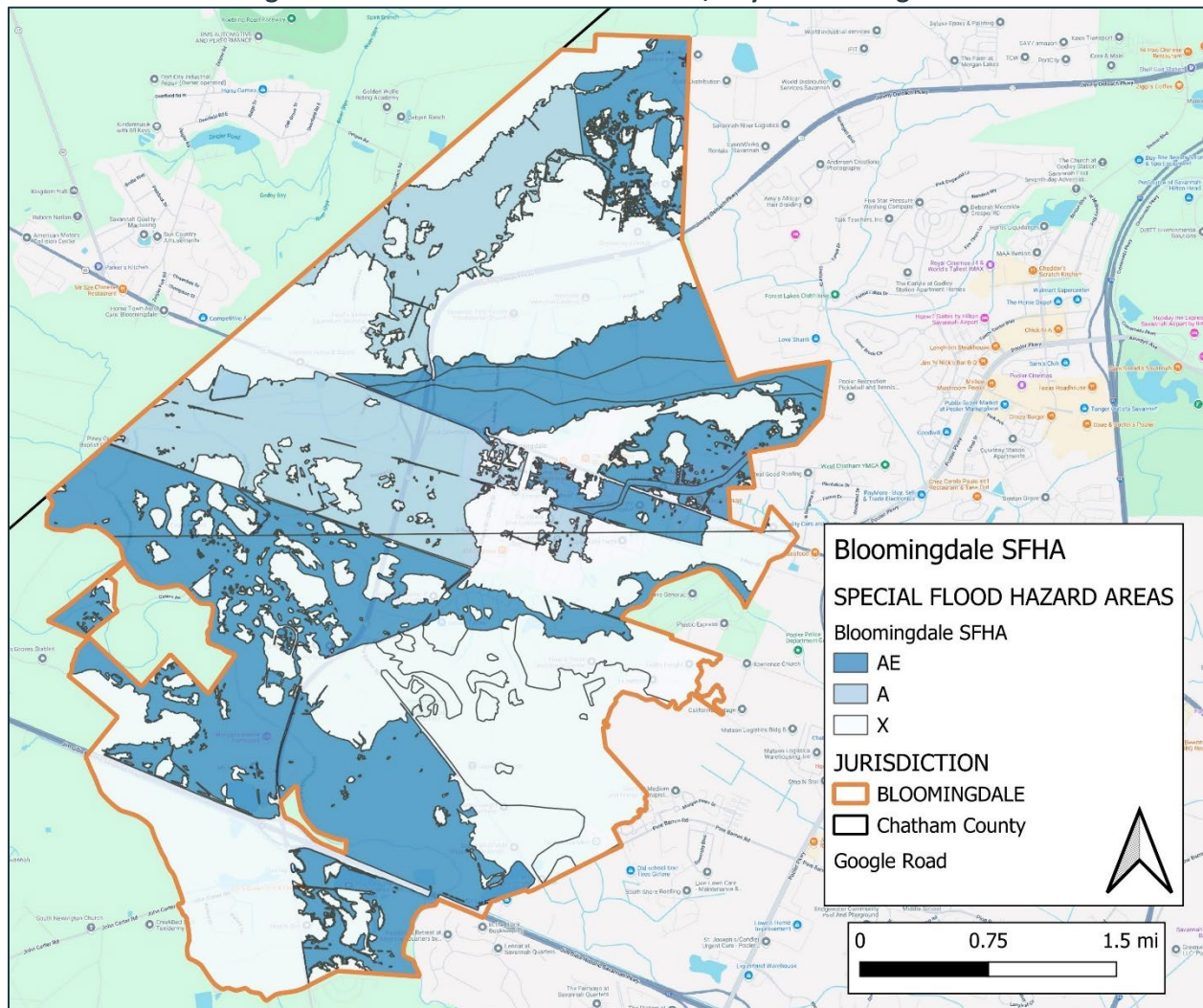
Table B-10 – Properties at Risk by Flood Zone, Bloomington

Flood Zone	Number of Buildings	Total Fair Market Building Value
A	237	\$32,470,100
AE	273	\$260,559,600
X500	115	\$255,144,800
Total	625	\$548,174,500

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2024

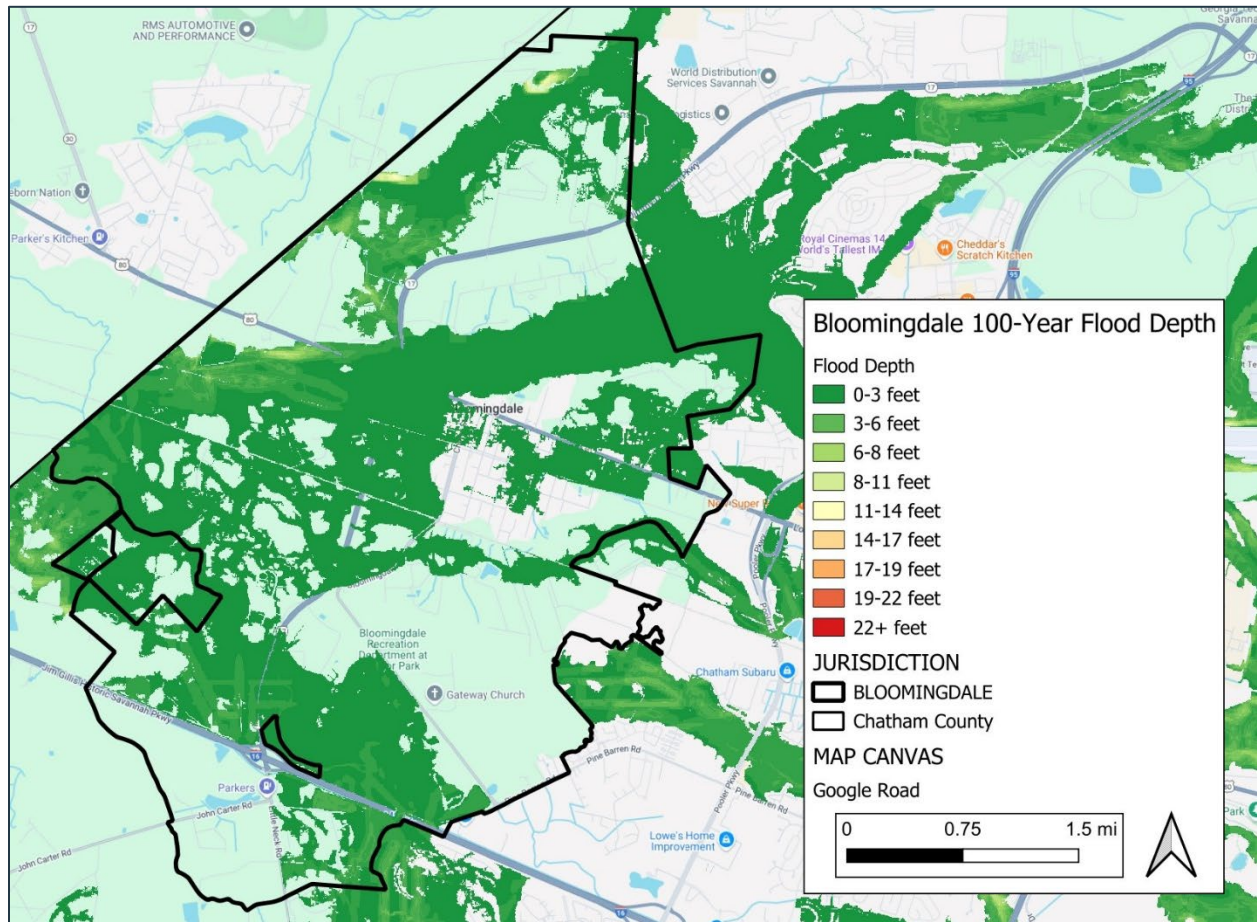
The HAZUS analysis did not provide any riverine or coastal losses in a 1% flood scenario except to note that the Bloomington Police Department may be at risk.

Figure B-13 – FEMA Flood Hazard Areas, City of Bloomington



Source: FEMA 2018 DFIRM

Figure B-14 – Flood Depth, 1%-Annual-Chance Floodplain, City of Bloomingdale



Source: GEMA, UGA ITOS 2025

B.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table B-11 summarizes the wildfire risk products created for the jurisdiction.

Table B-11 – Wildfire Risk Assessment Products

Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.

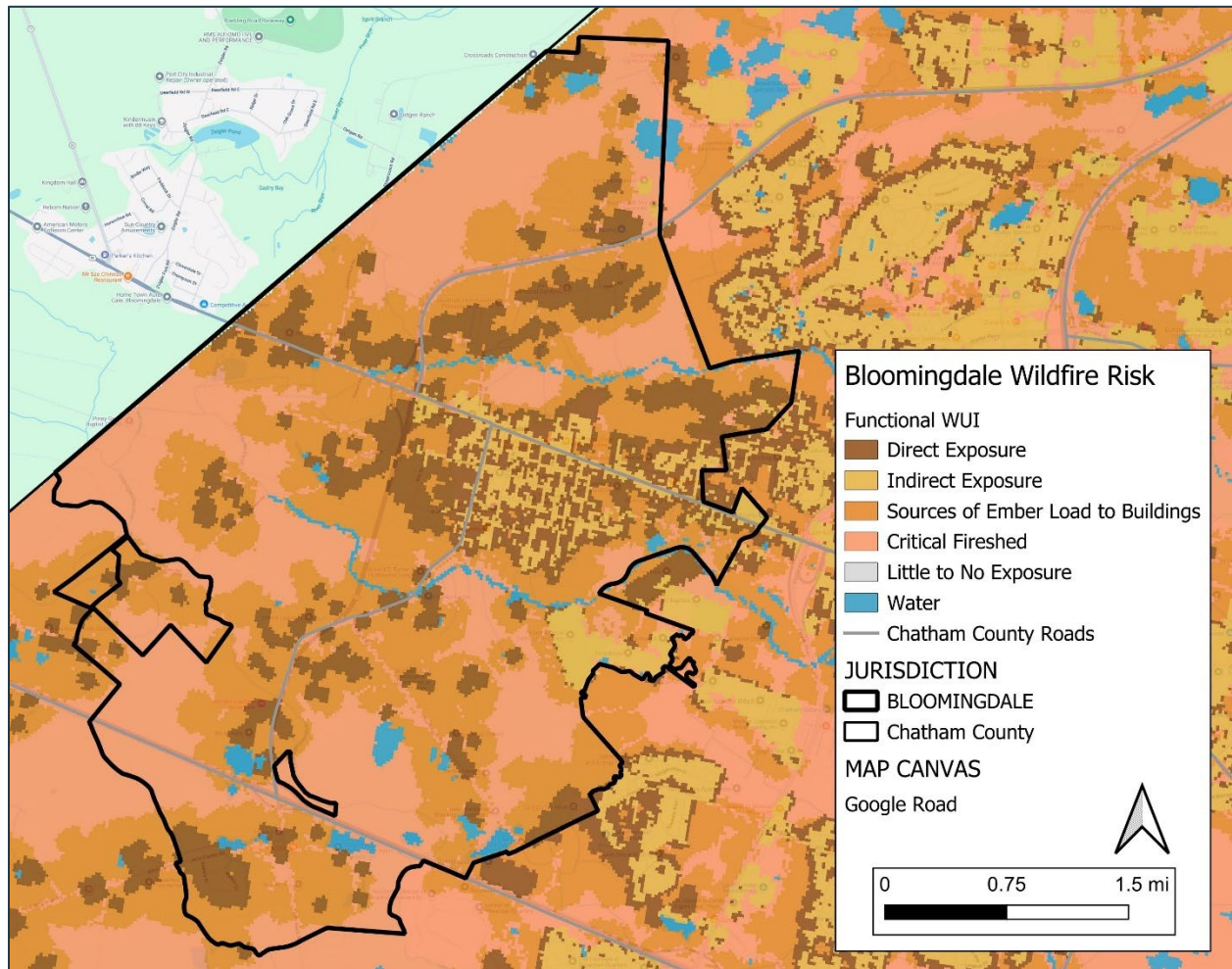
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.

Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure B-15 depicts the Functional WUI for the City of Bloomingdale. Functional WUI risk across the city includes significant critical fireshed and sources of ember load with direct and indirect exposure to buildings, primarily in the city center but also scattered throughout the city limits. The categories of risk are defined below:

- Direct Exposure - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
- Indirect Exposure - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
- Critical Fireshed - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
- Sources of Ember Load to Buildings - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- Little-to-No Exposure - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No-Exposure zone, but smoke and evacuations could still impact this area.

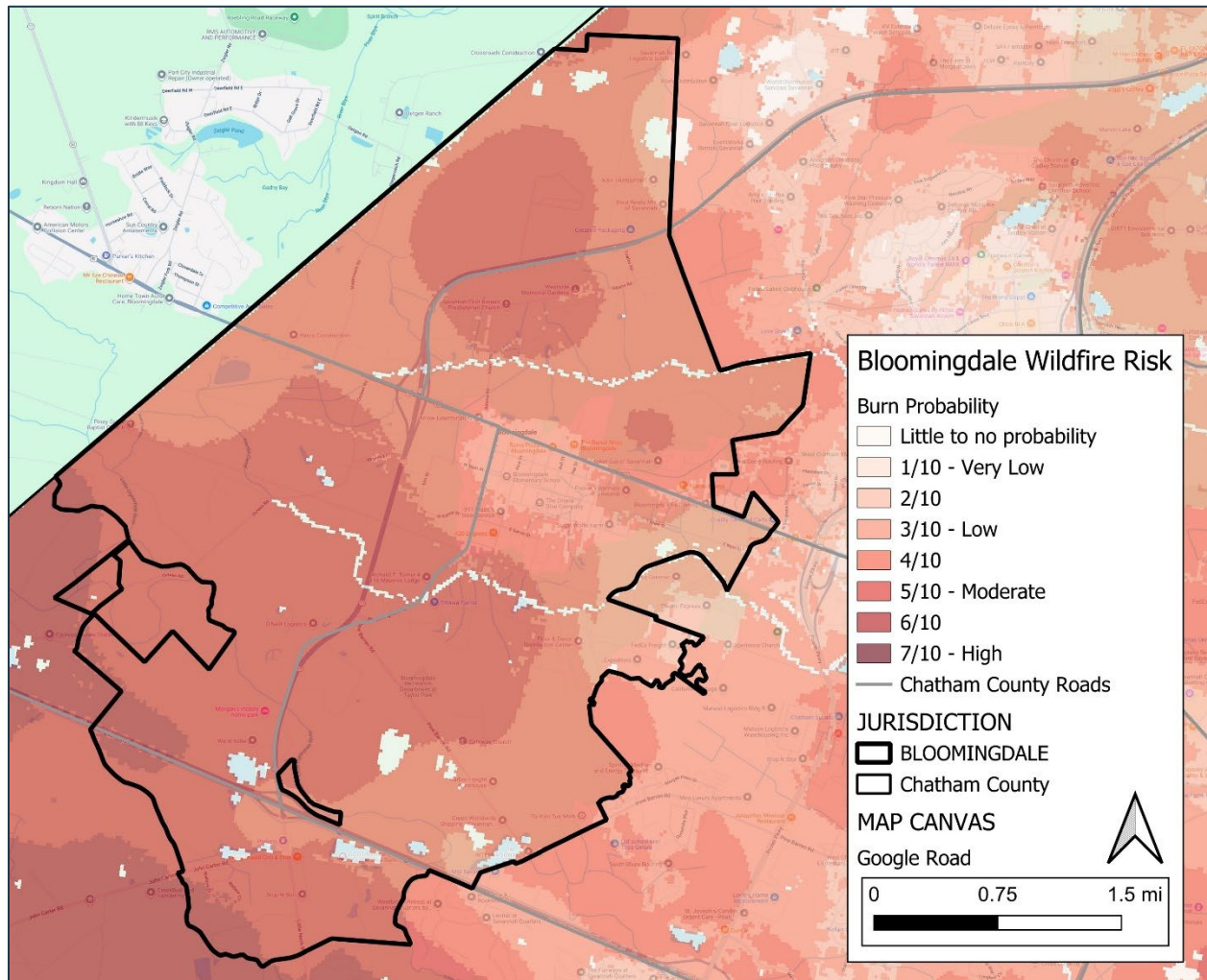
Figure B-15 – Functional Wildland Urban Interface, City of Bloomindale



Source: Southern Wildfire Risk Assessment

Figure B-16 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. The City of Bloomindale has generally low to moderate risk of Burn Probability, with a small area of high risk along the I-16 corridor.

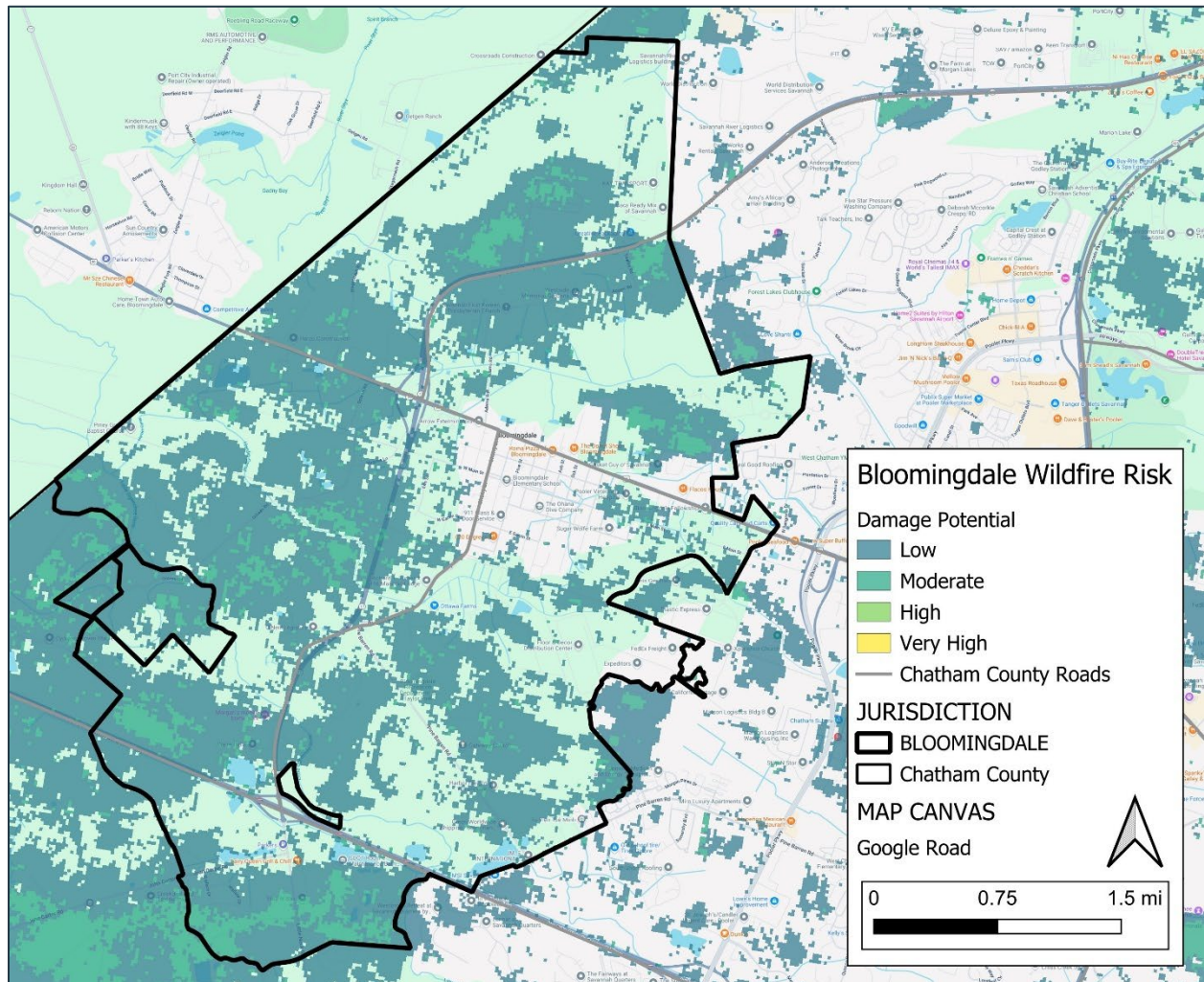
Figure B-16 – Burn Probability, City of Bloomingdale



Source: Southern Wildfire Risk Assessment

Figure B-17 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. Damage Potential is low to moderate across the city with the largest risk areas west of Hwy 17 and south of I-16.

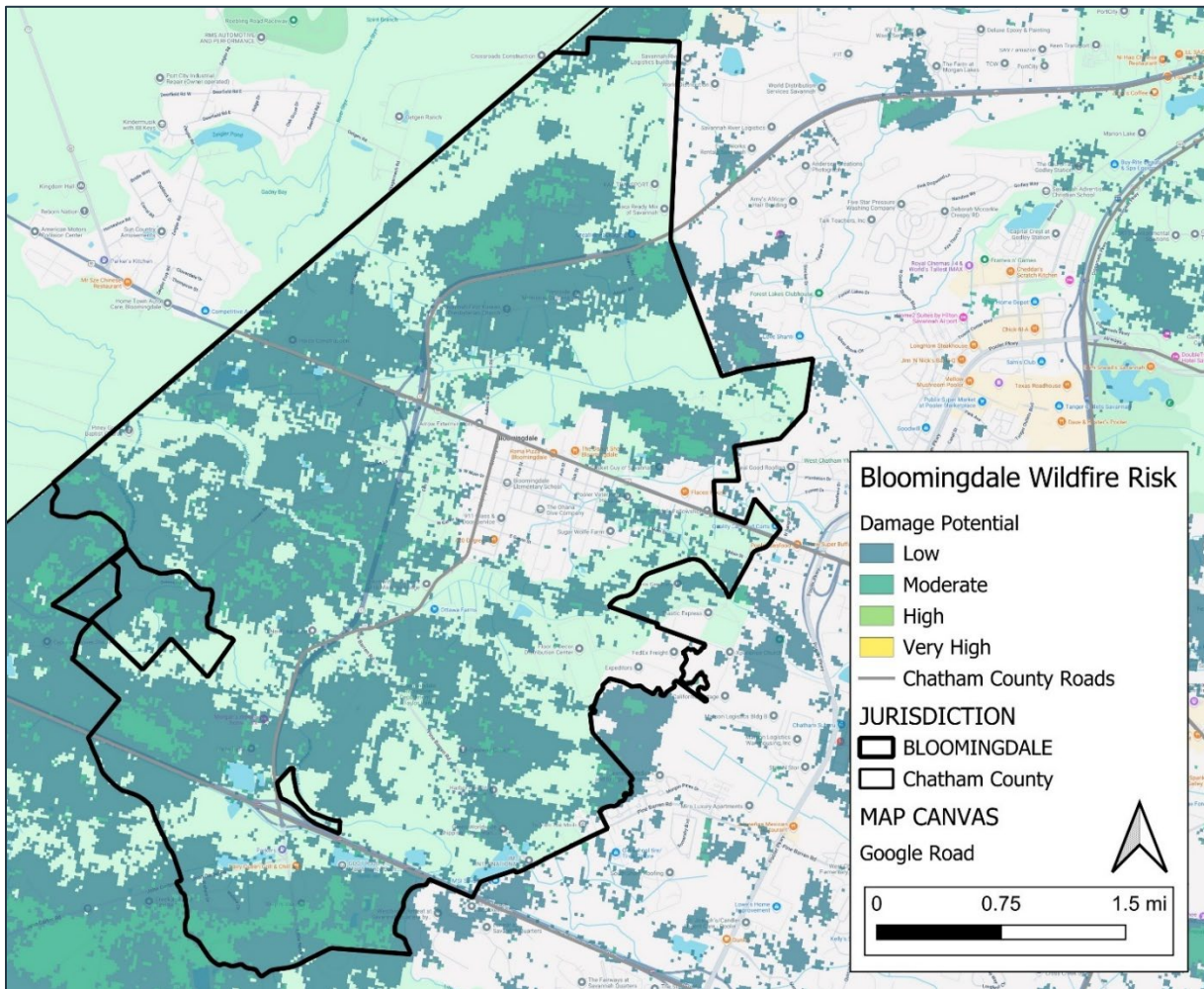
Figure B-17 – Damage Potential, City of Bloomingdale



Source: Southern Wildfire Risk Assessment

Figure B-18 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. The highest Housing Unit Risk areas near the city center and along the major roadways of Hwy 17, Hwy 80, Pine Barren Road, and John Carter Road.

Figure B-18 – Housing Unit Risk, City of Bloomingdale



Source: Southern Wildfire Risk Assessment

B.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

The City of Bloomingdale joined the NFIP emergency program in 1975 and has been a regular participant in the NFIP since July 1981. The following tables reflect NFIP policy and claim data for the City categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table B-12 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	186	\$109,766	\$47,236,000	4	\$818.30
2-4 Family	1	\$588	\$250,000	0	\$0
All Other Residential	4	\$3,269	\$929,000	0	\$0
Non-Residential	15	\$19,113	\$6,134,000	0	\$0
Total	206	\$132,736	\$54,549,000	4	\$818.30

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Chatham County

Multi-Jurisdictional Pre-Disaster Hazard Mitigation Plan
2025

Table B-13 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Policies	Number of Post-FIRM Policies
AO1-30 & AE Zones	104	\$0	61	43
A Zones	67	\$818.30	48	19
V01-30 & VE Zones	0	\$0	0	0
B Zone / X Shaded	1	\$0	0	1
C / X Zone	34	\$0	19	15
No Zone Identified	0	\$0	0	0
Total	206	\$818.30	128	78

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

B.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Property Protection									
PP-1	Harden roof, windows, doors and rooftop units for critical facilities	All	2.1	Moderate	City Administration	PDM; HMGP	2025	Carry Forward	
PP-2	Anchor HVAC units and Storage Tanks	Flood, Tropical Cyclone	2.1	High	City Administration	HMGP, Local Funds	2026	Carry Forward	
PP-3	Acquire or elevate properties prone to flooding	Flood, Tropical Cyclone	2.1	Moderate	City Administration	HMGP, Local Funds	2026	Carry Forward	
PP-4	Elevate or dry floodproof components or systems vulnerable to flood damage	Flood, Tropical Cyclone	2.1	High	City Administration	HMGP, Local Funds	2025	Carry Forward	
Structural Projects									
SP-1	Construct and/or improve drainage systems to alleviate drainage issues	Flood, Severe Weather	2.1	Moderate	City Public Works	Local Funds	2025-2030	Carry Forward	
SP-2	Construct and/or improve drainage systems at the intersection of Little Neck Road and DoT Barn Road/John Carter Road	Flood, Severe Weather, Dam Failure, Tropical Cyclone	2.1	Moderate	City Public Works	HMGP, Local Funds	2028	New	
SP-3	Construct and/or improve drainage systems at the intersection of Poplar Street and Moore Street	Flood, Severe Weather, Tropical Cyclone	2.1	Moderate	City Public Works	HMGP, Local Funds	2028	New	
SP-4	Construct and/or improve drainage systems Chestnut Street and Moore Street	Flood, Severe Weather, Tropical Cyclone	2.1	Moderate	City Public Works	HMGP, Local Funds	2028	New	
Emergency Services									
ES-1	Fixed site generators for critical facilities	All	2.1, 5.1	High	City Administration	HMGP, Local Funds	2025-2030	Carry Forward	
ES-2	Cart generators for critical facilities	All	2.1, 5.1	High	City Administration	HMGP, Local Funds	2025-2030	Carry Forward	
ES-3	Purchase and install generator quick connects and transfer switches for critical facilities	All	2.1, 5.1	High	City Administration	HMGP, Local Funds	2025-2030	Carry Forward	
Public Education and Awareness									
PEA-1	Increase public education and awareness utilizing an all-hazards approach in the city via various outreach methods (print, tv, radio, social media, etc.)	All	3.2	High	City Administration	Local Funds	2025	Carry Forward	

Annex C City of Garden City

C.1 PLANNING PROCESS

The table below lists the HMPC members who represented the City of Garden City.

Table C-1 – HMPC Members

Member Name	Title	Agency/Department
Mike Dick	Fire Chief	Fire Department

C.2 COMMUNITY PROFILE

C.2.1 Overview of the Community

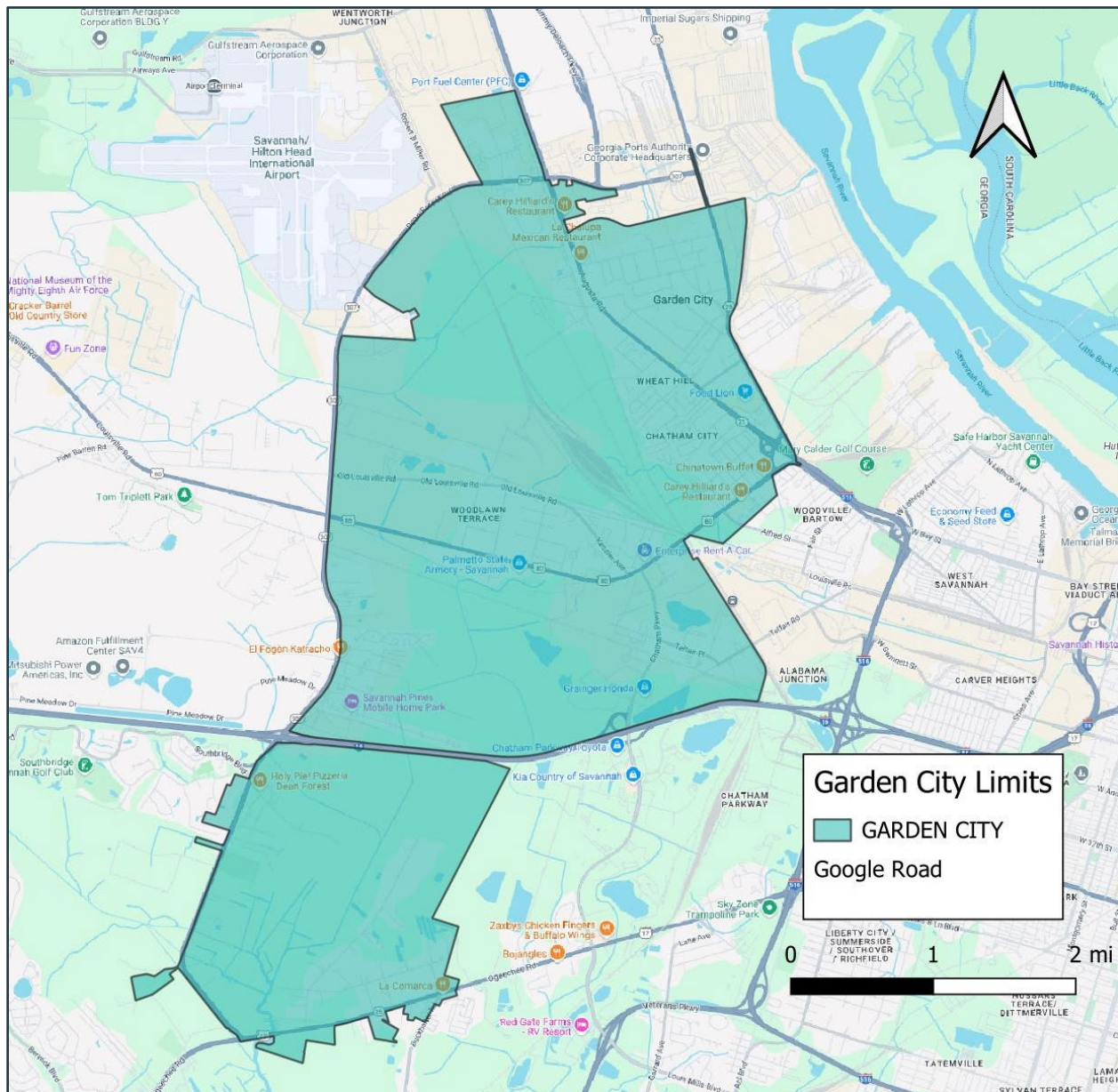
Garden City is located northwest of the center of Chatham County. It is bordered to the southeast by the City of Savannah, to the west by the City of Pooler, and to the north by the City of Port Wentworth. Garden City has a total area of 14.48 square miles, of which 14.32 square miles (98.9%) are land and 0.16 square miles (0.01%) are water.¹¹

According to the U.S. Census, the population of Garden City in 2024 was estimated to be 10,536. Therefore, the population density in 2024 is approximately 728 people per square mile. Garden City is home to much of the heavy industry in Chatham County and is adjacent to the Port of Savannah, which is a major U.S. seaport operated by the Georgia Ports Authority.

The Location Map below reflects Garden City’s boundaries and shows the City’s location within the county and in relation to surrounding municipalities.

¹¹ <https://data.census.gov/table?q=Garden+City+city,+Georgia+geography>. Retrieved 06-18-2025.

Figure C-1 – Location Map, Garden City



C.2.2 Geography and Climate

Please refer to Chatham County Community Profile for a summary of climate for Chatham County.

Portions of Garden City lie within three (3) different HUC 12 watersheds as summarized in the table below and shown in the HUC 12 Watersheds figure.¹²

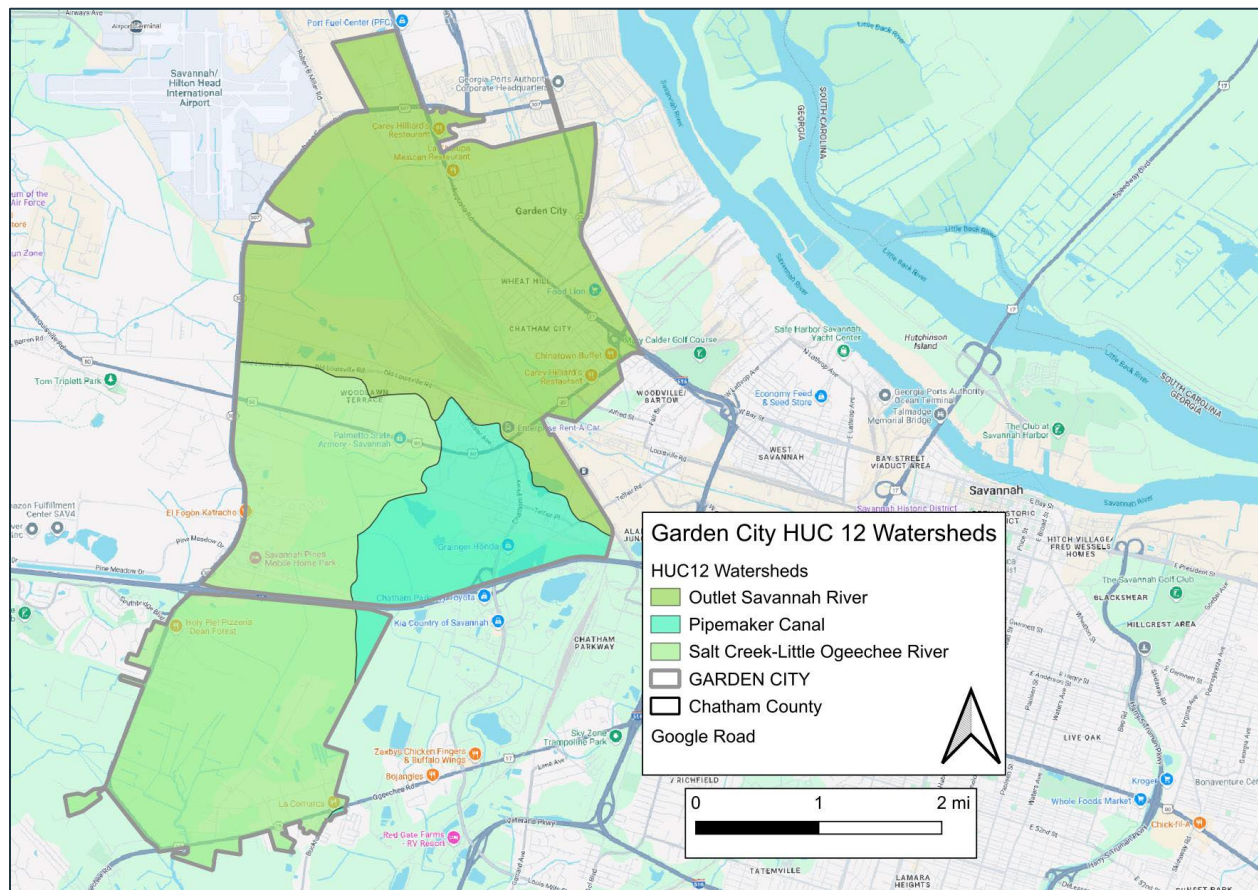
¹² https://www.researchgate.net/figure/Coastal-Watershed-Planning-Area-CWPA-for-Chatham-County-and-City-of-Savannah-Modeled_fig2_344570004, Retrieved 06-13-2025.

Figure C-2 – HUC 12 Watersheds, Garden City

Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Salt Creek – Little Ogeechee River	73.24	73.24	0.00	Ossabaw Sound – Frontal Atlantic Ocean	030602040203
Outlet Savannah River	196.73	109.31	87.42	Atlantic Ocean	030601090307
Pipemakers Canal	14.41	14.41	0.00	Salt Creek – Little Ogeechee River	030602040202

Source: Chatham County Coastal Watershed Management Plan, 2020

Figure C-3 – HUC 12 Watersheds, Garden City



C.2.3 Cultural, Historic, and Natural Resources

C.2.3.1 Cultural and Historic Resources

Garden City has two branches of the Live Oak Public Library System: Garden City Branch located at 104 Sunshine Avenue and the Port City Branch located at 3501 Houlihan Avenue.

The oldest residence in Garden City is the Dotson House, which was built in 1850 and moved from the area of George A. Mercer School to the site of the current town center. Garden City has no listings on the National Register of Historic Places.

C.2.3.2 Parks, Preserves, and Conservation

Chatham County

Garden City has five public parks as summarized in the table below.

Table C-2 – Garden City Parks

Park	Location	Primary Use	Monuments/Facilities
Bazemore Park	1 Bud Brown Drive	Recreational	Baseball Complex
Griffin Park	500 Griffin Road	Recreational	Playground
The Park at Sharon Park	507 Sharon Park Drive	Recreational	Playgrounds (2), gazebo, pond, and hiking trail
Town Green	100 Central Avenue	Esthetic	Fountain and benches
Volunteer Park	5100 Augusta Road (Hwy. 21)	Commemorative	Fountain and benches



Volunteer Park

C.2.3.3 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within Garden City are identified in the figure below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table C-3 – Flood Zones, Garden City

Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
AE	3,089.37	4.83	33.4
X500	647.82	1.01	7.0
X	5,507.27	8.61	59.6

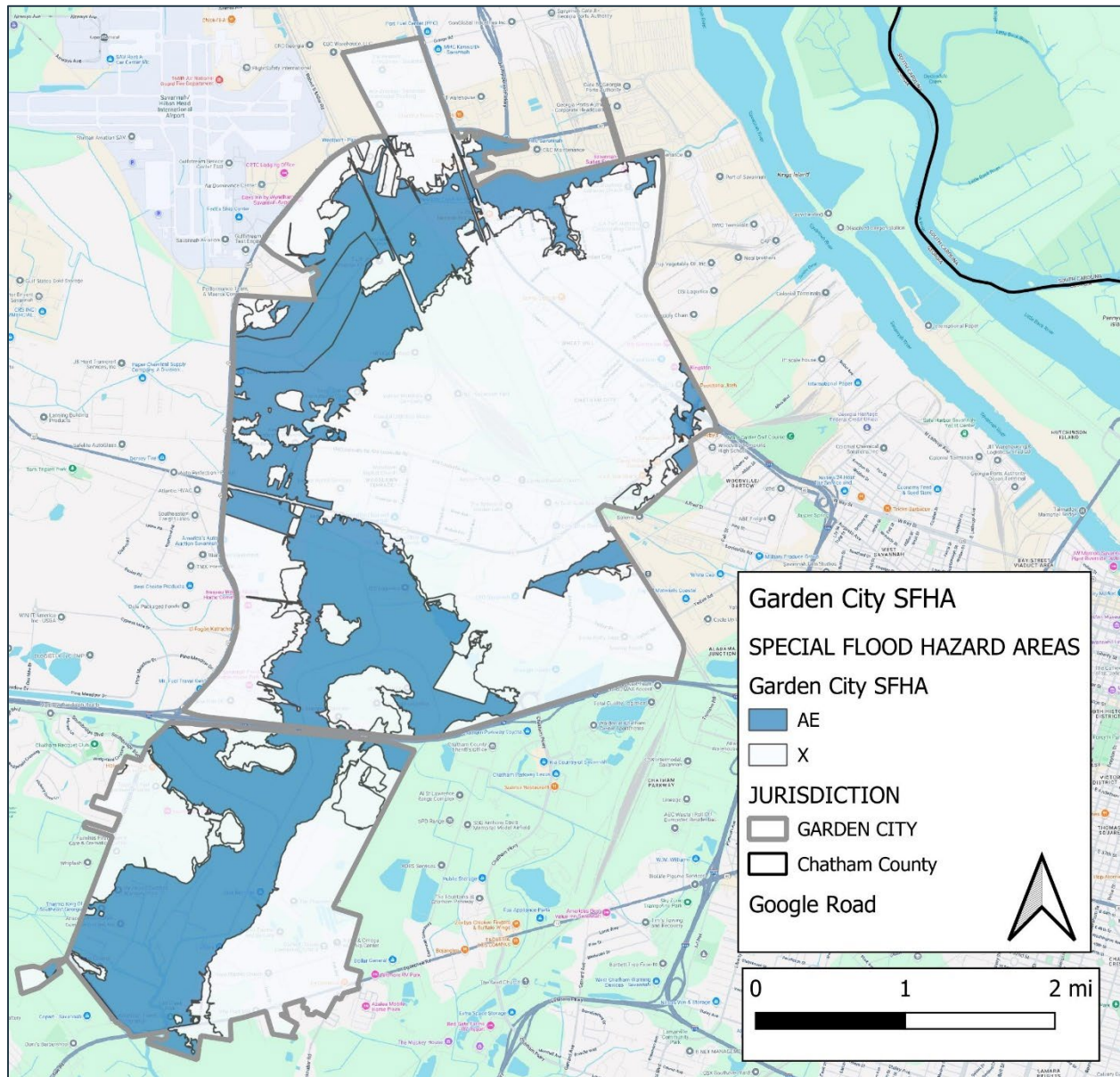
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
TOTAL	9,244.46	14.44	100.00

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, 3,089.37 acres of the land within the city are located within a 100-year floodplain (Zone AE), which equals 33.4 percent of the city. An additional 5,507.29 acres (59.6%) are located within Zone X, which is considered moderate or minimal flood hazard area. Because approximately 1/3 of the city is located within a high flood hazard area (Zone AE), Garden City should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in Garden City include wetland areas and low-lying land along the major waterways in and around the city, including Salt Creek, the Hardin Canal, the Savannah and Ogeechee Canal, Pipemakers Canal, and the Ogeechee Canal. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates and acting as a flood storage area to reduce downstream peaks. The city should strive to keep floodplain and floodplain waters free of contaminants such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

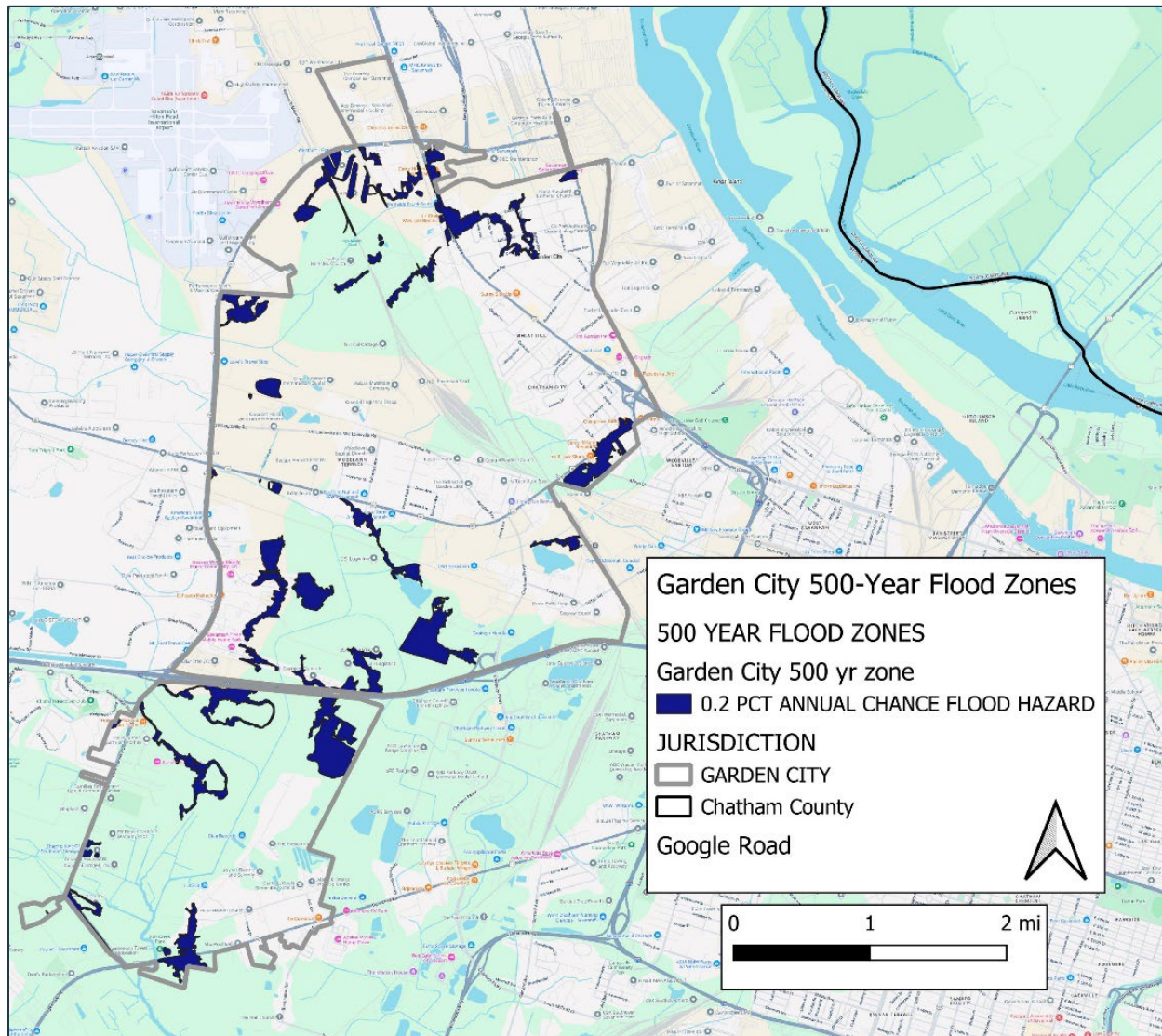
Figure C-4 – FEMA Flood Zone Map, Garden City



Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplains, these zones can still experience significant flooding during extreme events. The X500 zone for Garden City is depicted in the map below and represented in Table C-3 above.

Figure C-5 – X500 Zone, Garden City



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through this process, pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetlands Inventory (NWI), wetlands throughout Garden City make up 3,703.26 acres (5.79 square miles) or 38.7 percent of the City (see Figure C-6 below).

Table C-4 – Wetland Types, Garden City

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Non-Wetland	5,563.94	8.69	61.3
Estuarine and Marine Deepwater	28.03	0.04	0.3

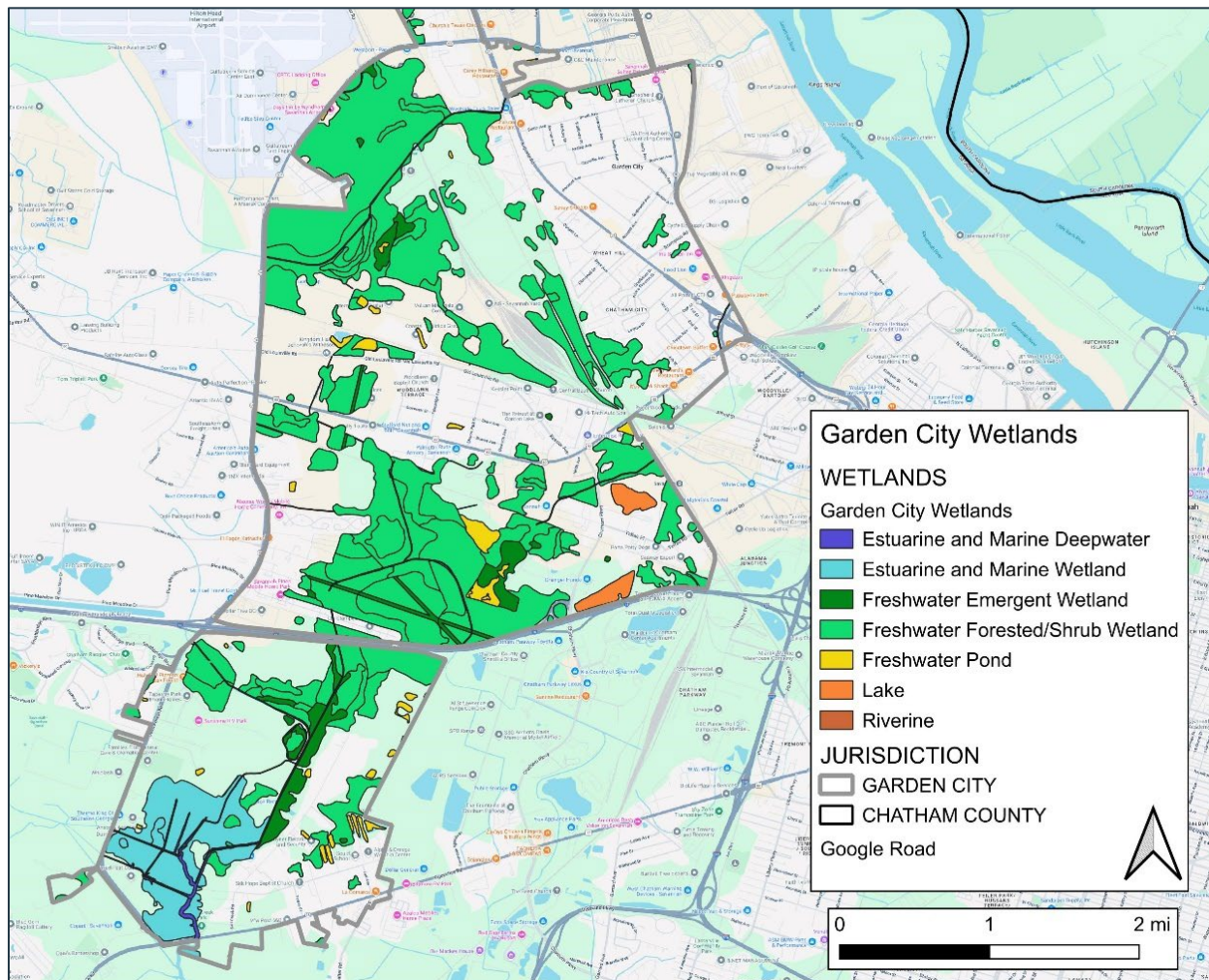
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Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Estuarine and Marine Wetland	515.01	0.80	5.5
Freshwater Emergent Wetland	194.74	0.30	2.1
Freshwater Forested/Shrub Wetland	2,738.80	4.28	29.6
Freshwater Pond	104.02	0.16	1.1
Lake	50.19	0.08	0.6
Riverine	72.46	0.11	0.8
TOTAL	9,267.20	14.48	100.0

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Figure C-6 – Wetlands Map, Garden City



Source: National Wetlands Inventory, 2022; SAGIS, 2025

Estuarine and Marine Deepwater

Estuarine and marine deepwater classifications, as defined by the Cowardin classification system, are distinguished by their location and water chemistry. Marine deepwater is part of the Marine System, which is exposed to the open ocean and extends from the outer edge of the continental shelf shoreward.

Estuarine deepwater, part of the Estuarine System, is partially enclosed by land and has a mixture of fresh and saltwater.

Estuarine and Marine Wetland

Estuarine and marine wetlands are classified within a broader hierarchical system that includes five main systems: marine, estuarine, riverine, lacustrine, and palustrine. These classifications are based on factors like salinity, water type, vegetation, and geological features. Within the marine and estuarine systems, further subdivisions exist, such as subsystems (subtidal and intertidal) and classes (e.g., rock bottom, unconsolidated bottom, aquatic bed).

Freshwater Emergent Wetland

Freshwater emergent wetlands are classified within the Palustrine System by the U.S. Fish and Wildlife Service (USFWS) as part of their National Wetlands Inventory (NWI). This system categorizes wetlands based on their landscape position, vegetation cover, and hydrologic regime. Within the Palustrine System, emergent wetlands are further defined by their vegetation (grasses, sedges, forbs) and whether the vegetation is persistent (remaining until the next growing season) or non-persistent.

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Freshwater Pond

Within the Palustrine system, ponds are often categorized as Lacustrine or Palustrine. Specifically, ponds may be classified as emergent, scrub-shrub, or forested, depending on the dominant vegetation.

Lake

Lacustrine wetlands are defined as wetlands associated with lakes and large ponds. They are characterized by the water level of the lake influencing the water table of the adjacent wetland, and they often occur along lake shores.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across the City of Garden City, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure C-7 – Land Cover Map, Garden City

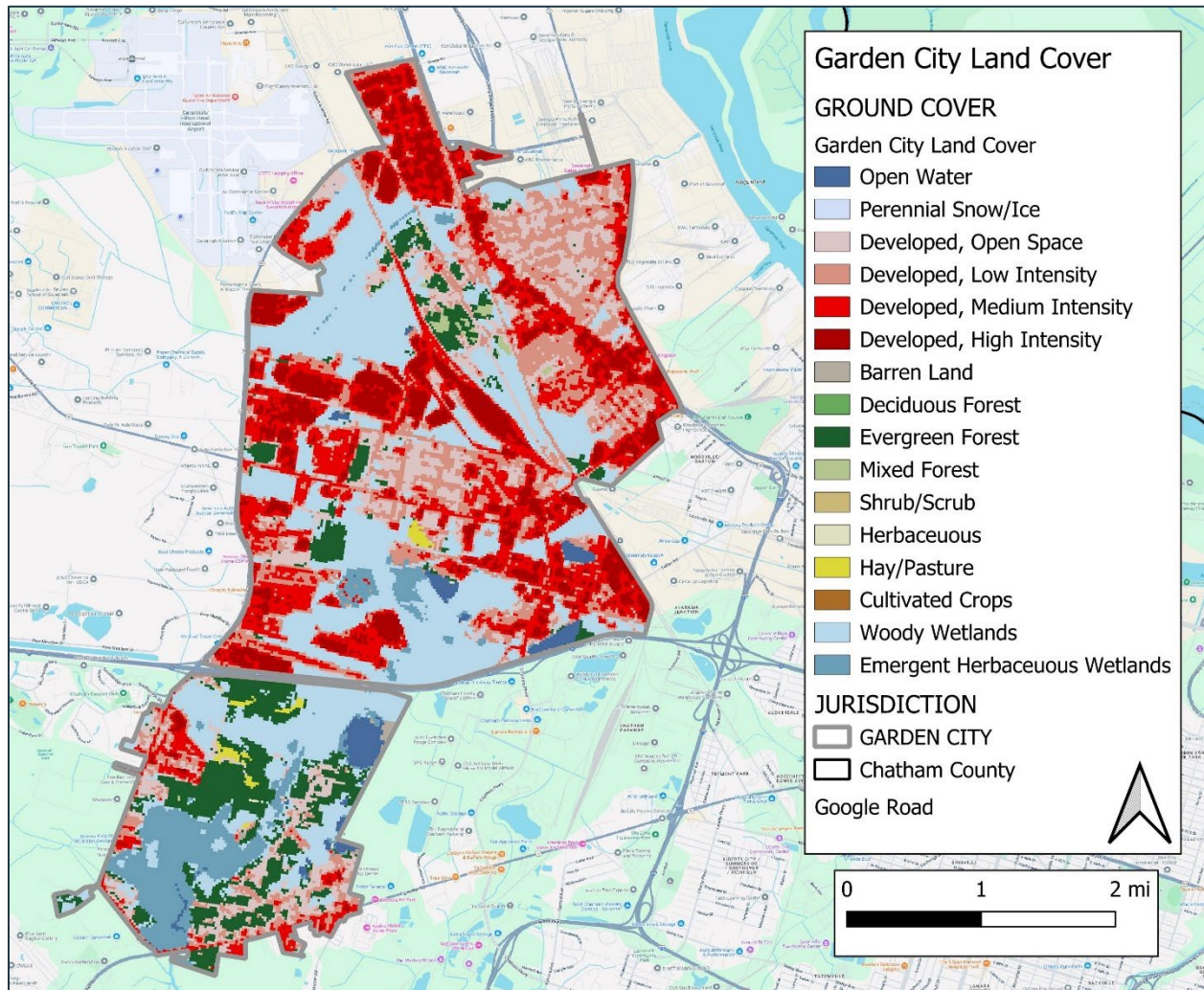
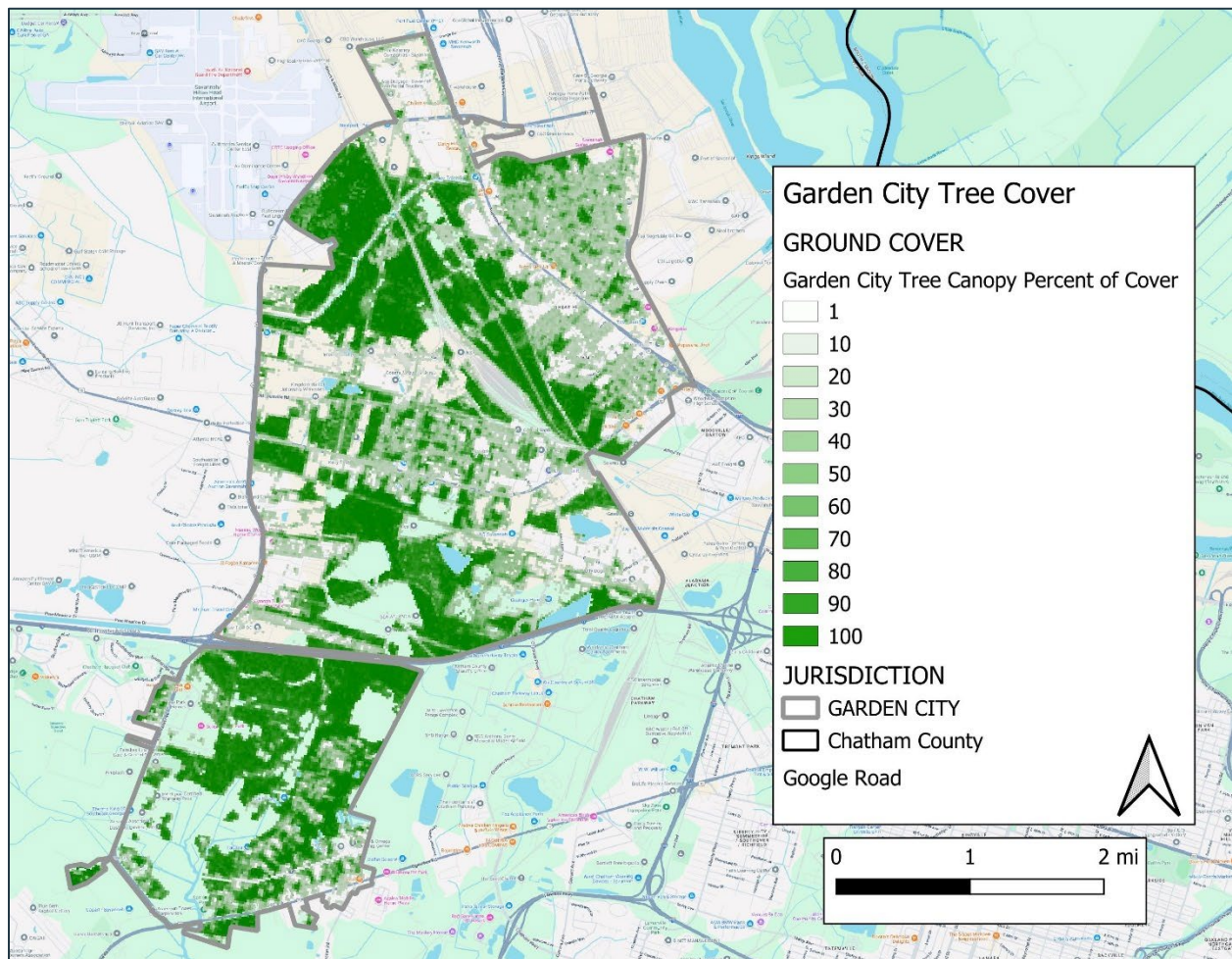


Figure C-8 – Tree Cover Map, Garden City



C.2.4 History

In the early 1930s, in the depth of the Great Depression, Lewis Hamilton Smith showed his optimism for Chatham County's future. He had a vision of developing a place where people could own cheap lots that were big enough to have a vegetable garden and livestock area. With this vision, he began to plan the development of what was then known as "Industrial City Gardens." The name "Garden City" came about after many people began to feel that the name was too long and implied a mill town.

On February 8, 1939, Garden City officially became a state-chartered municipality. The city continued to grow as more and more people settled into the area. A city council was formed, organizations were founded, businesses sprung, and the community continued to thrive as Garden City came into what it is today.

C.2.5 Economy

C.2.5.1 Wages and Employment

Per the 2019-2023 American Community Survey 5-Year Estimates, the median household income for Garden City is \$41,735, which is over 21 percent lower than the state's median household income

(\$74,664).¹³ Approximately 15.0 percent (1,552) of the population is considered to be living below the poverty level. Moreover, 26.4 percent (731) of people living below the poverty level are under 18 years of age, and 12.6 percent (194) of people 65 years and over are living below the poverty level.¹⁴

The table below shows employment and unemployment rates along with industry employment by major classification for the city.¹⁵

Table C-5 – Employment and Occupation Statistics for Garden City, GA, 2019-2023

Employment Status	Count	Percentage (%)
In labor force	5,125	64.4
Employed	4,737	59.5
Unemployed	354	4.4
Armed Forces	34	0.4
Not in labor force	2,838	35.6
Occupation		
Management, business, science, and arts	790	16.7
Service	1,036	21.9
Sales and office	1,041	22.0
Natural resources, construction, and maintenance	828	17.5
Production, transportation, and material moving	1,042	22.0

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Major industry sectors in Garden City include management, business, science, and arts (16.7%); service (21.9%); sales and office (22.0%); natural resources, construction, and maintenance (17.5%); and production, transportation, and material moving (22.0%).

Major employers are discussed in the Chatham County Community Profile.

C.2.6 Housing

According to the 2019-2023 ACS 5-Year Estimates, there are 4,708 housing units in Garden City, of which 93.3 percent (4,391) are occupied.¹⁶ Approximately 40.1 percent (1,759) of occupied units are owner-occupied. A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because, according to Cutter, et al. (2003), renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster. Therefore, higher rates of home rentals in Garden City may indicate that residents are not able to implement certain types of mitigation in their homes.

Median home value in Garden City is \$160,700. Of the City's owner-occupied housing units, 45.7 percent (804) have a mortgage. Most householders (80.4% / 3,529) have lived in their current homes since the year 2000 or later; 11.9 percent (521) moved in between 2000 and 2009, 30.0 percent (1,319) moved in between 2010 and 2017, 29.3 percent (1,288) moved in between 2018 and 2020, and 9.1 percent (401)

¹³ <https://www.census.gov/quickfacts/fact/table/gardencitycitygeorgia,chathamcountygeorgia,GA,US/IPE120223>. Retrieved 06-27-2025.

¹⁴ <https://data.census.gov/table?q=Garden+City+city,+Georgia+poverty+level>. Retrieved 06-27-2025.

¹⁵ <https://data.census.gov/table?q=Garden+City+city,+Georgia+employment>. Retrieved 06-27-2025.

¹⁶ <https://data.census.gov/table/ACSDP5Y2023.DP04?q=Garden+City+city,+Georgia+tenure>. Retrieved 06-27-2025.

moved in 2021 or later. 11.4 percent (499) of householders in occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

Approximately half (45.6% / 2,147) of housing units in Garden City are detached single family homes. However, 19.7 percent (928) of units are mobile homes, which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

The City's housing stock is aging, with the majority (84.0% / 3,956) of occupied housing built before 2000. The table below details housing age in the town.

Table C-6 – Housing Age

Year Structure Built	Percent of Occupied Housing	Number of Structures
2020 or later	2.1	97
2010 to 2019	1.8	83
2000 to 2009	12.1	572
1980 to 1999	28.4	1,337
1960 to 1979	35.8	1,689
1940 to 1959	19.4	912
1939 or earlier	0.4	18

Source: U.S. Census Bureau, American Community Survey 2019-2023 5-Year Estimates

Age can indicate the potential vulnerability of a structure to certain hazards. For example, Garden City first entered the National Flood Insurance Program in 1973. Therefore, based on housing age estimates, at least 51.3 percent of housing in the town was built before any floodplain development restrictions were required.

C.2.7 Population

According to the U.S. Census Bureau, Garden City had an estimated population of 10,536 residents in July of 2024 and a population of 10,289 at the time of the 2020 U.S. Census (2.3% increase from 2020-2024). As of 2024, Garden City's population density was 728 persons per square mile. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates.¹⁷

Table C-7 – City of Garden City Demographic Profile Data, 2019-2023

Demographic	Garden City
Gender/Age	
Male	5,420
Female	4,955
Under 5 Years	349
65 Years and Over	1,226
Race/Ethnicity (One Race)	
White	4,183
Black or African American	4,094
American Indian/Alaska Native	26
Asian	262
Two or More Races	630

¹⁷ <https://data.census.gov/table/ACSDP5Y2023.DP05?q=Garden+City+city,+Georgia+population>. Retrieved 06-27-2025.

Demographic	Garden City
Hispanic or Latino ¹	2,238
Education	
High School Graduate or Higher	5,838
Bachelor's Degree or Higher	1,106

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

¹Hispanics may be of any race, so also are included in applicable race categories.

C.2.8 Land Use

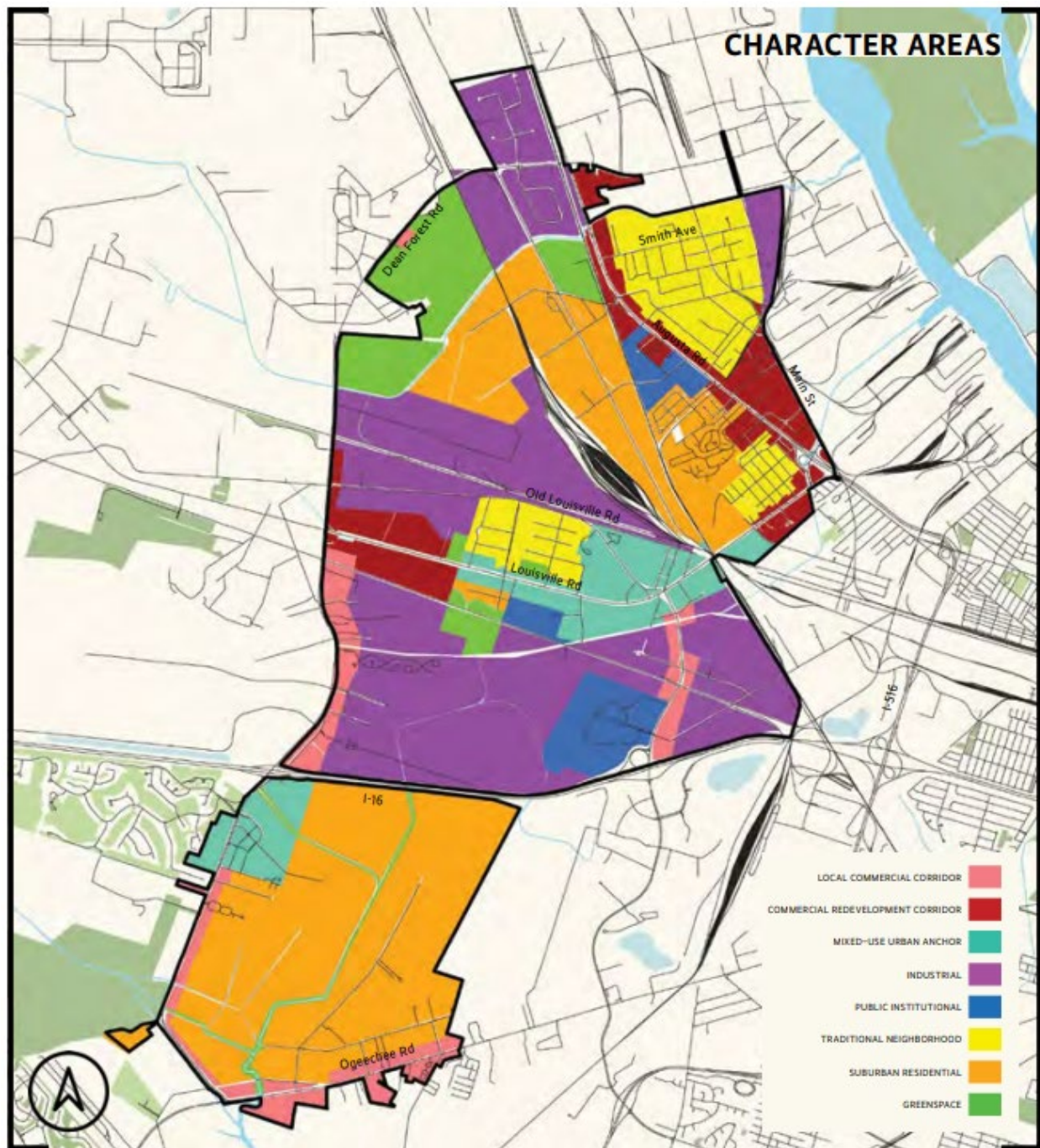
The Garden City's Comprehensive Plan 2020-2040 establishes Character Areas to guide future development and includes a Future Land Use Map.

C.2.8.1 Character Areas

The Character Areas established by the Comp Plan for Garden City include:

- Local Commercial Corridor: Land which is or should be developed for general commercial purposes, institutional, and professional services.
- Commercial Redevelopment Corridor: Highly trafficked areas consisting primarily of commercial/industrial uses adjacent to highways. Some residential development is scattered along highways and local streets.
- Mixed-Use Urban Anchor: Intended for projects that integrate different land uses, such as retail stores, restaurants, residences, civic buildings, offices, and parks within a defined area.
- Industrial: Industrial and commercial land uses. 90 percent of land within the character area is already zoned for industrial use and should be buffered from adjacent residential uses.
- Public/Institutional: Intent is to provide public services, such as infrastructure, equitably throughout the community.
- Traditional Neighborhood: Areas characterized by mixed land uses, grid street patterns, pedestrian circulation, intensively used open spaces, architectural character, and sense of community.
- Suburban Neighborhood: Intended to preserve trees and encourage the preservation of open space and conservation-type subdivisions.
- Greenspace: Areas the City would like to preserve land for natural greenspace and greenways. 70 percent of the land area within this character area is currently zoned for industrial.

Figure C-9 – Character Areas, Garden City 2020-2040



Source: Garden City Comprehensive Plan 2020-2040

C.2.8.2 Existing Land Use

According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

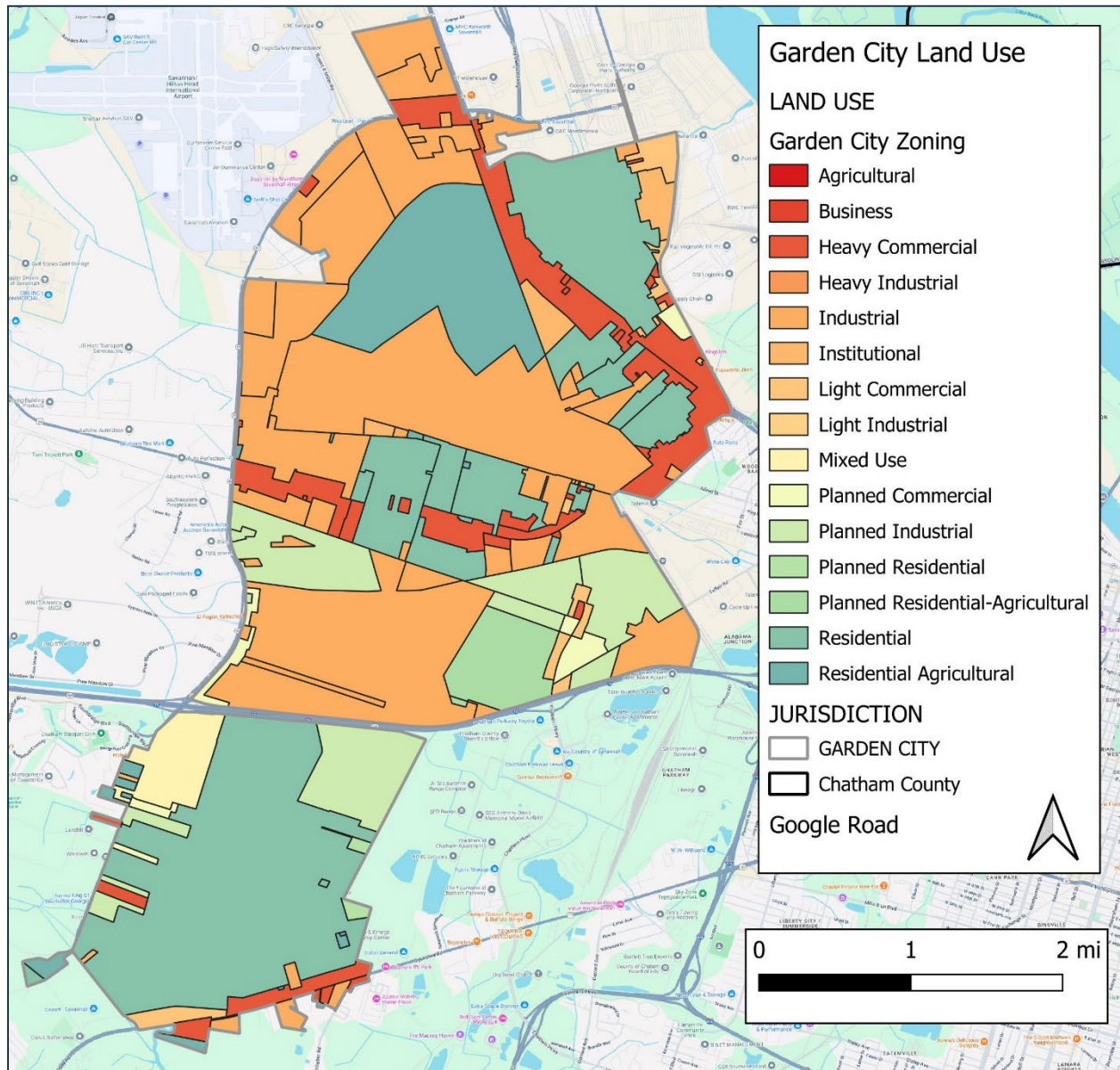
Table C-8 – Existing Land Use, Garden City

Land Use/Zoning	Area (Acres)	Area (Square Miles)
Heavy Commercial	617	0.96
Heavy Industrial	506	0.79
Industrial	3,366	5.26
Institutional	123	0.19
Light Commercial	133	0.21
Light Industrial	3	0.005
Mixed Use	176	0.28
Planned Commercial	119	0.19
Planned Industrial	861	1.35
Planned Residential	19	0.03
Planned Residential-Agricultural	231	0.36
Residential Single-Family	2,697	4.21
Residential Agricultural	735	1.15
TOTAL	9,586	14.98

Source: SAGIS – Zoning, 2024

An existing land use map for zoning is included below for Garden City, as taken from the SAGIS map viewer for Chatham County.

Figure C-10 – Existing Land Use and Zoning Map, Garden City



Source: SAGIS – Zoning, 2024

C.2.8.3 Future Land Use

The Garden City Comp Plan 2020-2040 includes a Future Land Use Map (see Figure C-12 below) that serves as a visual representation of the City's future land use as described in the table below in the Land Use Categories.

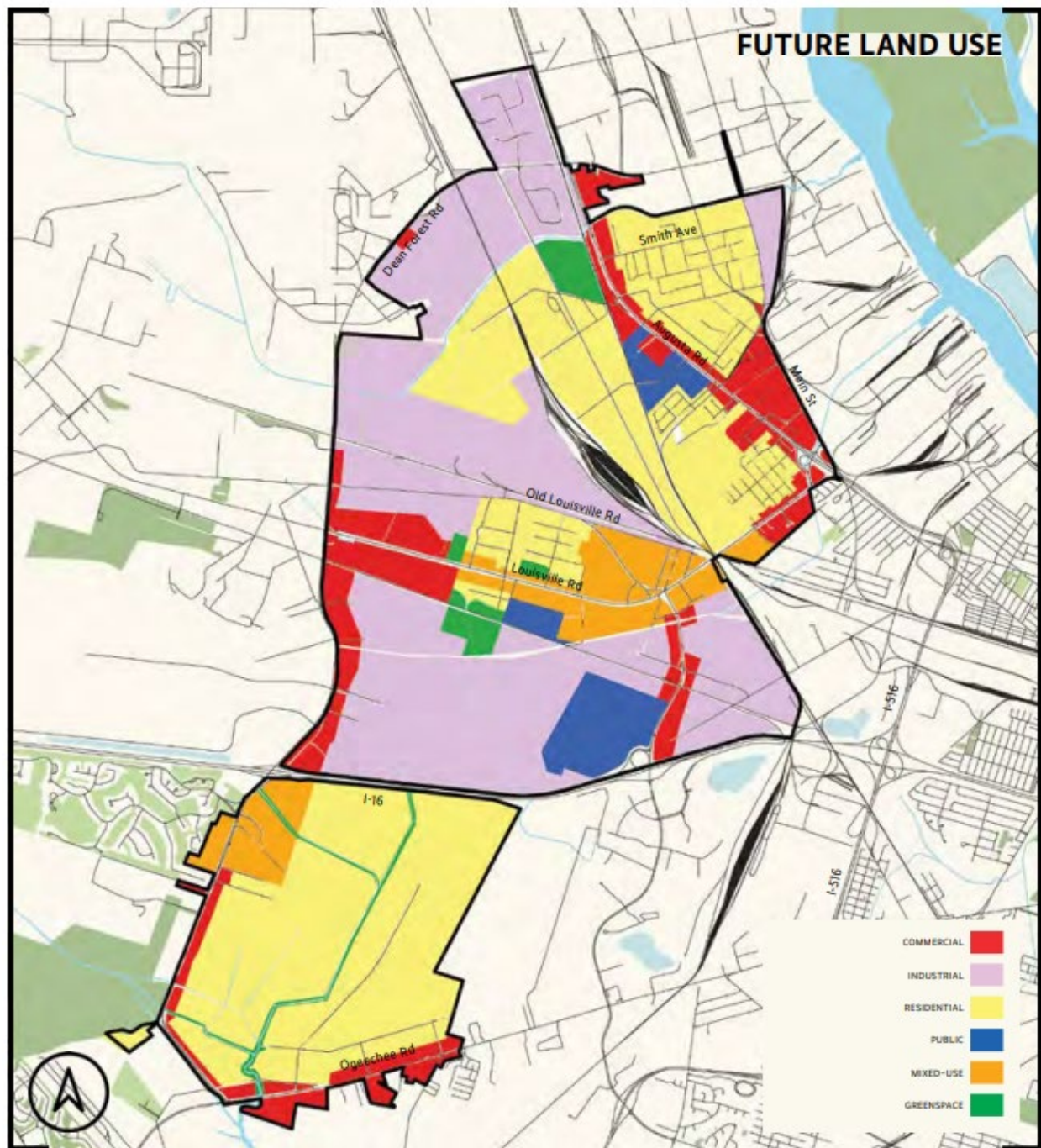
Figure C-11 – Land Use Categories, Garden City

MAP COLOR		
LAND USE	Commercial	Industrial
DEFINITION	This category is for land dedicated to non-industrial business uses—including retail sales, office, service, and entertainment facilities—organized into general categories of intensity. Commercial uses may be located as a single use in one building or grouped together in a shopping center or office building. Communities may elect to separate office uses from other commercial uses such as retail, service, or entertainment facilities.	This category is for land dedicated to manufacturing facilities, processing plants, factories, warehousing, wholesale trade facilities, mining or mineral extraction activities, or other similar uses.
USES	Commercial Retail, Commercial Office	Light Industry, Heavy Industry

MAP COLOR		
LAND USE	Residential	Public/Institutional
DEFINITION	The predominant use of land within the residential category is for single-family and multi-family dwelling units organized into general categories of net densities.	This category includes certain state, federal, or local government uses. Government uses include government building complexes, police and fire stations, libraries, prisons, post offices, schools, and military installations, among others. Examples of institutional land uses include colleges, churches, cemeteries, and hospitals. This category does not include facilities that are publicly owned but would be classified more accurately in another land use category.
USES	Single-Family, Multi-Family	Public/Institutional

MAP COLOR		
LAND USE	Mixed-Use	Greenspace
DEFINITION	For a detailed, fine-grained mixed land use, or one in which land uses are more evenly balanced, mixed land use categories may be created and applied at the discretion of the community. Mixed land use categories must be clearly defined, including the type of land uses allowed and percentage distribution among the mix of uses (or other objective measurement of the combination), as well as the allowable density of each use.	This category is for land dedicated to farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.), agriculture, or commercial timber or pulpwood harvesting. This category is also for land dedicated to active or passive recreational uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers, or similar uses.
USES		

Figure C-12 – Future Land Use Map, Garden City 2020-2040



C.2.9 Growth and Development Trends

According to U.S. Census and American Community Survey population estimates, Garden City's population has increased slightly from 10,289 in 2020 to 10,536 in 2024, representing a total increase of 2.4 percent and an annual increase of 0.6 percent.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be

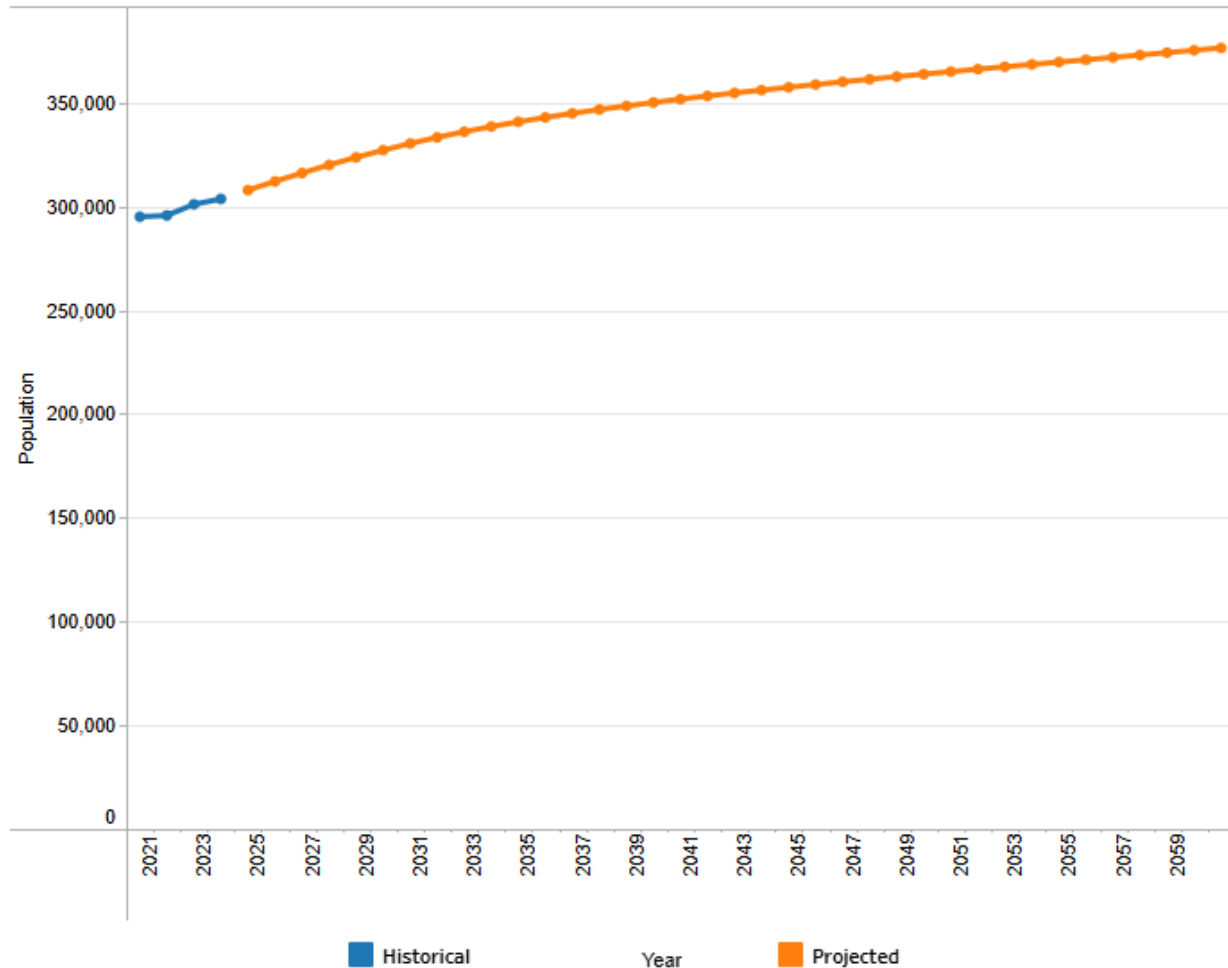
Chatham County

Multi-Jurisdictional Pre-Disaster Hazard Mitigation Plan
2025

about 0.8 percent through 2060. Only population projections for Chatham County are included in this section as there are currently no population projections available for Garden City at the time of planning.

Figure C-13 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget

C.3 ASSET INVENTORY

C.3.1 Property

Table C-9 – City of Garden City Building Exposure

Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	548	\$261,519,692	\$261,519,692	\$523,039,384
Government	20	\$14,026,300	\$14,026,300	\$28,052,600
Industrial	395	\$585,157,621	\$877,736,432	\$1,462,894,053

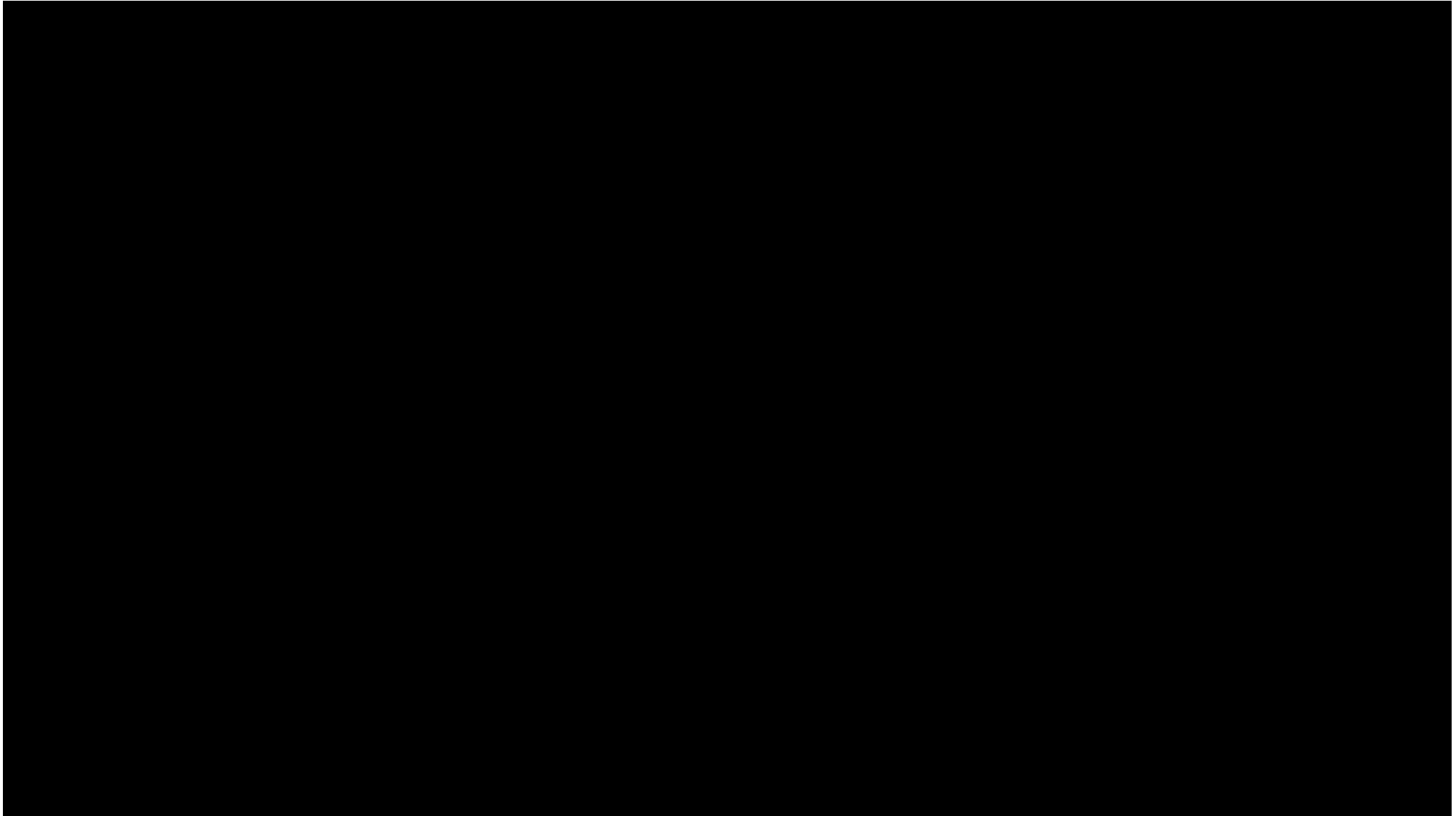
ANNEX C: CITY OF GARDEN CITY

Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Non-Profit	85	\$39,111,200	\$39,111,200	\$78,222,400
Residential	2,288	\$226,147,249	\$113,073,625	\$339,220,874
Utility	32	\$1,118,490	\$1,677,735	\$2,796,225
Total	3,368	\$1,127,080,552	\$1,307,144,984	\$2,434,225,536

Source: Chatham County

C.3.2 Critical Facilities

Table C-10 – Critical Facilities and Infrastructure at Risk





Source: Chatham County

C.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

C.4.1 Flood

Approximately 10.1 percent of buildings in Garden City are within the mapped 1%-annual-chance floodplains (Zones A, AE, and VE) and 8.7 percent are within the X500 zone. Figure C-14 reflects the mapped flood hazard zones for the City of Garden City, and Figure C-15 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table C-11 below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

Table C-11 – Properties at Risk by Flood Zone

Flood Zone	Number of Buildings	Total Fair Market Building Value
AE	270	\$238,966,477
X500	231	\$338,768,104
Total	501	\$577,734,581

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2024

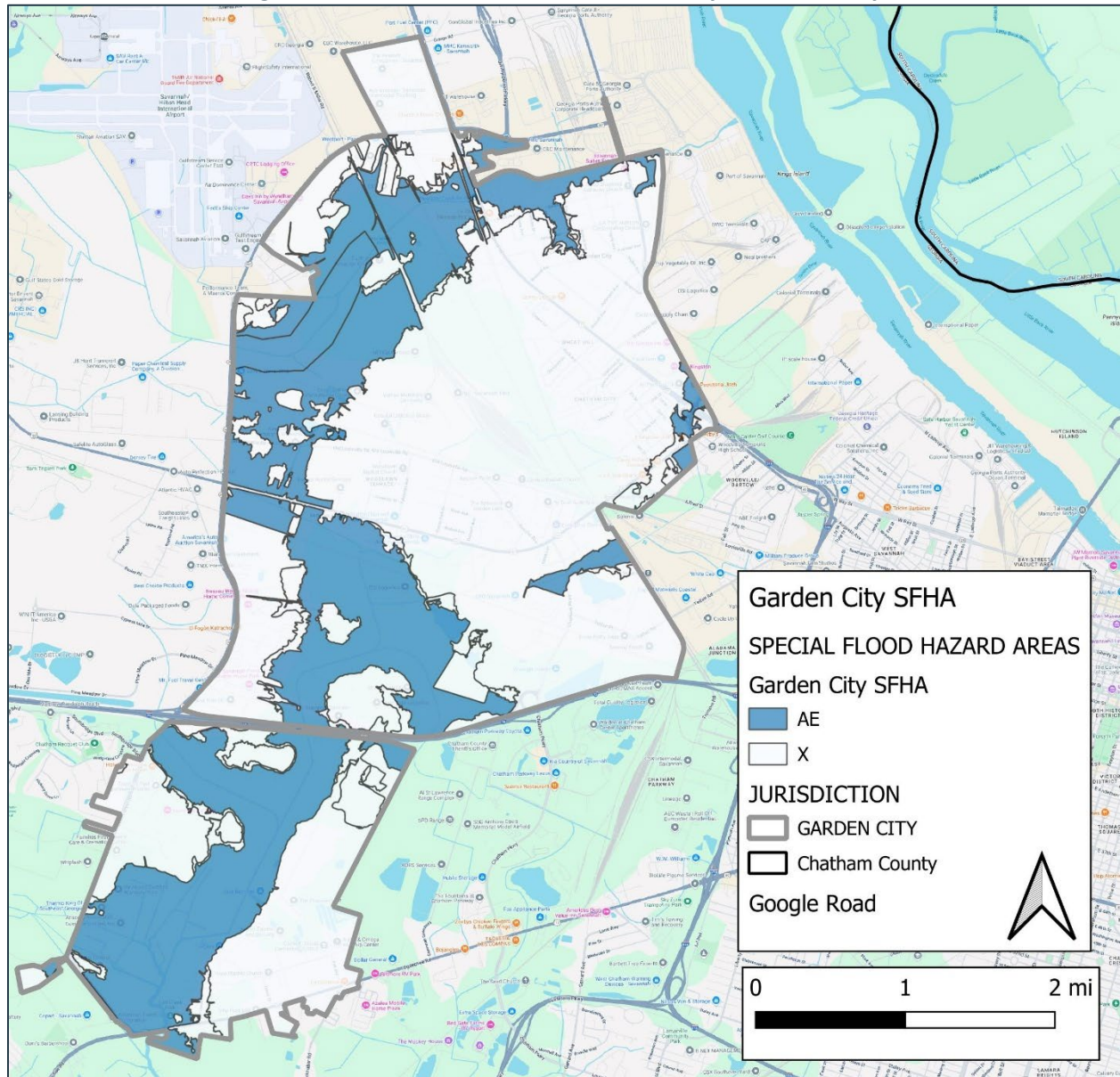
Table C-12 provides building counts and estimated damages by occupancy type for the 1% annual chance of a riverine flood event. No critical facilities were identified to be at risk in the HAZUS scenario.

Table C-12 – Garden City Estimated Building Damage and Content Loss, 1% Annual Chance Flood

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damaged Buildings
Residential	1,845	72	\$273,757,865	\$2,403,421	0.88%
Commercial	322	3	\$199,350,721	\$87,095	0.04%
Industrial	204	3	\$690,091,190	\$1,338,825	0.19%
Education	8	1	\$24,030,240	\$216	0.00%
Total	2,379	79	\$1,187,230,016	\$3,829,557	0.32%

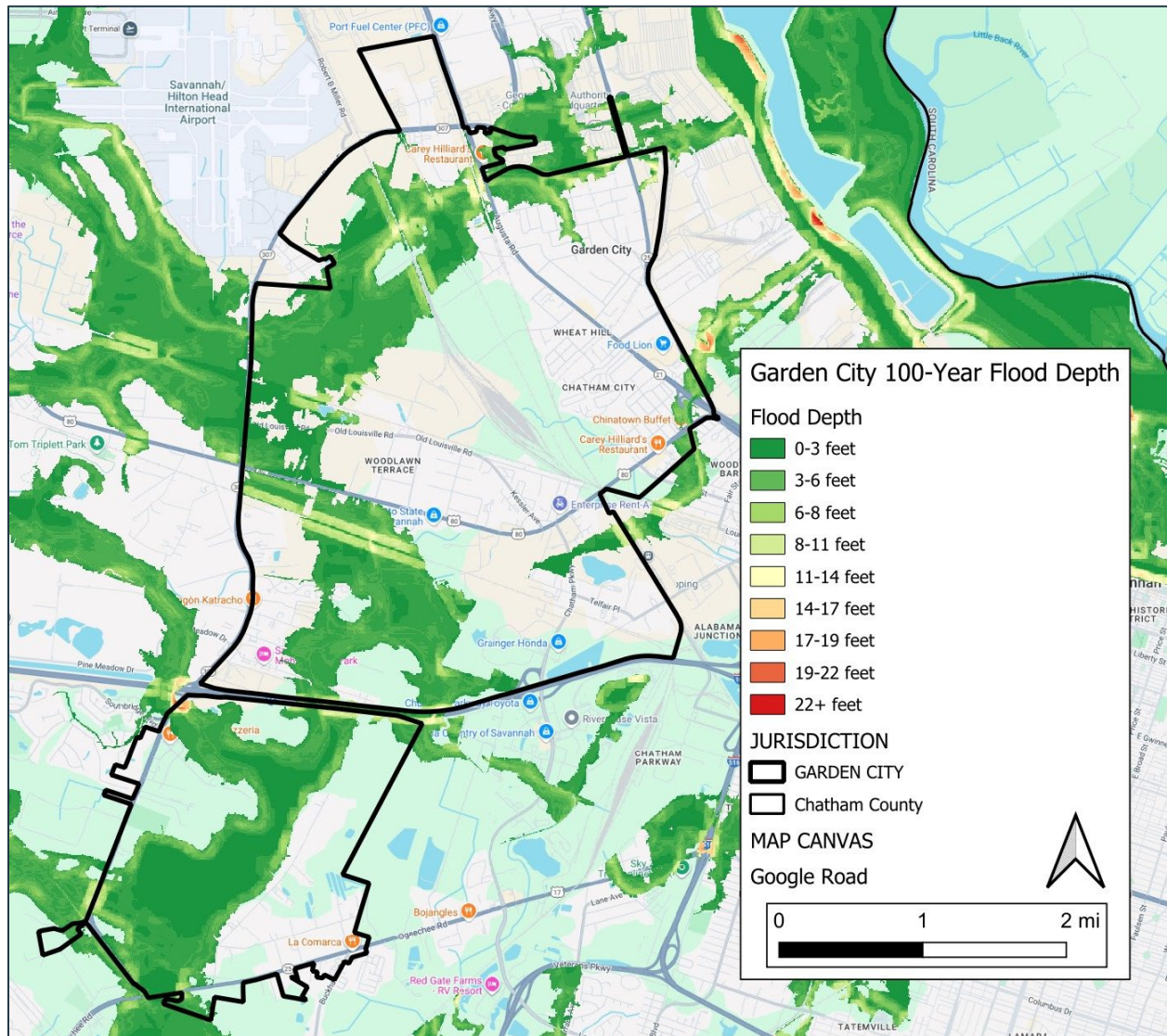
Source: HAZUS

Figure C-14 – FEMA Flood Hazard Areas, City of Garden City



Source: FEMA 2018 DFIRM

Figure C-15 – Flood Depth, 1%-Annual-Chance Floodplain, City of Garden City



Source: GEMA, UGA ITOS 2025

C.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table C-13 summarizes the wildfire risk products created for the jurisdiction.

Table C-13 – Wildfire Risk Assessment Products

Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.

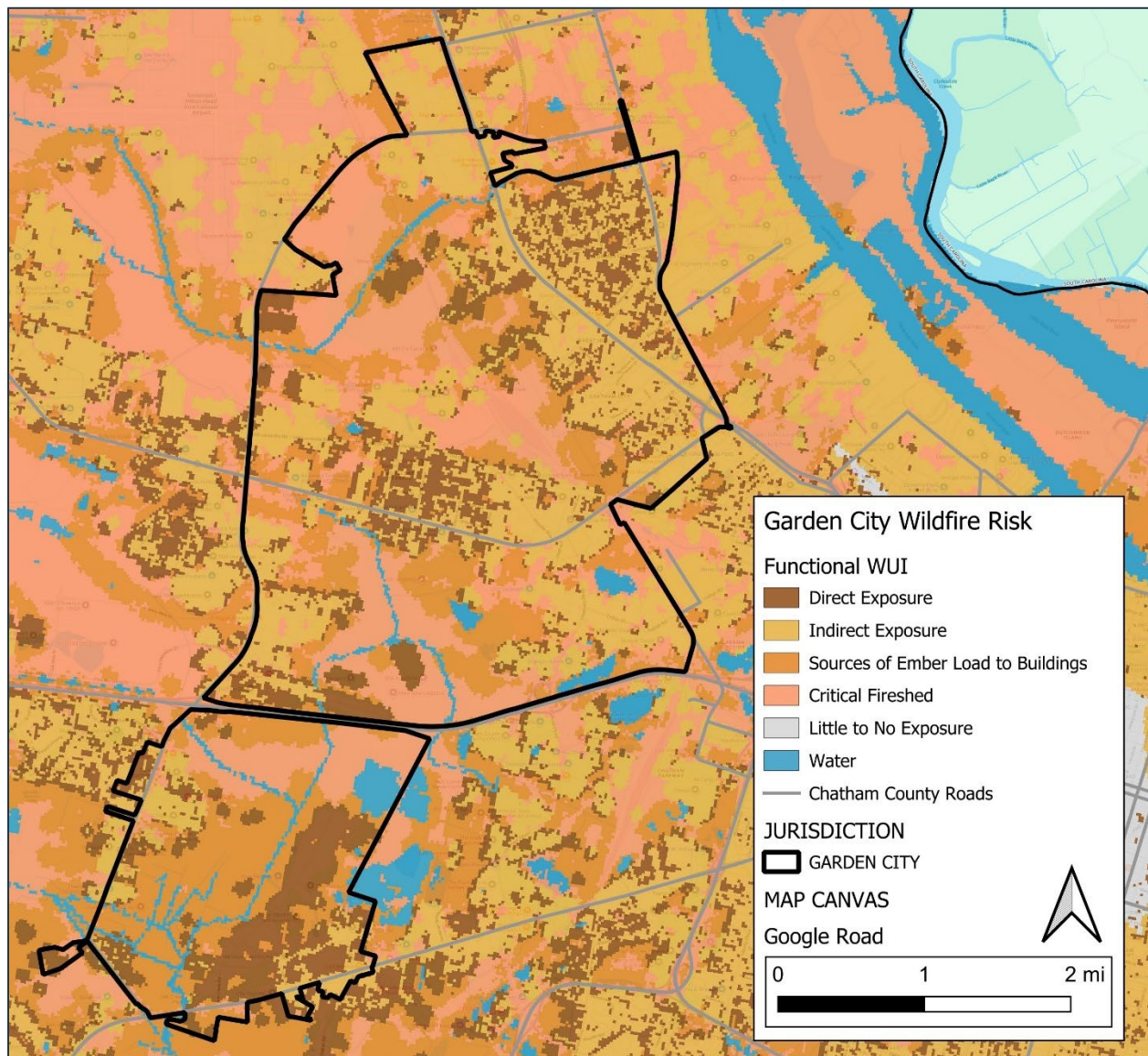
Risk Evaluation Category	Description
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.

Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure C-16 depicts the Functional WUI for Garden City. Functional WUI risk the city includes significant critical fireshed and sources of ember load with direct and indirect exposure to buildings, primarily in the Pineland Drive and Salt Creek Road area. Other higher risk areas are Woodlawn Terrace and the city center. The categories of risk are defined below:

- **Direct Exposure** - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
- **Indirect Exposure** - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
- **Critical Fireshed** - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
- **Sources of Ember Load to Buildings** - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- **Little-to-No Exposure** - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No-Exposure zone, but smoke and evacuations could still impact this area.

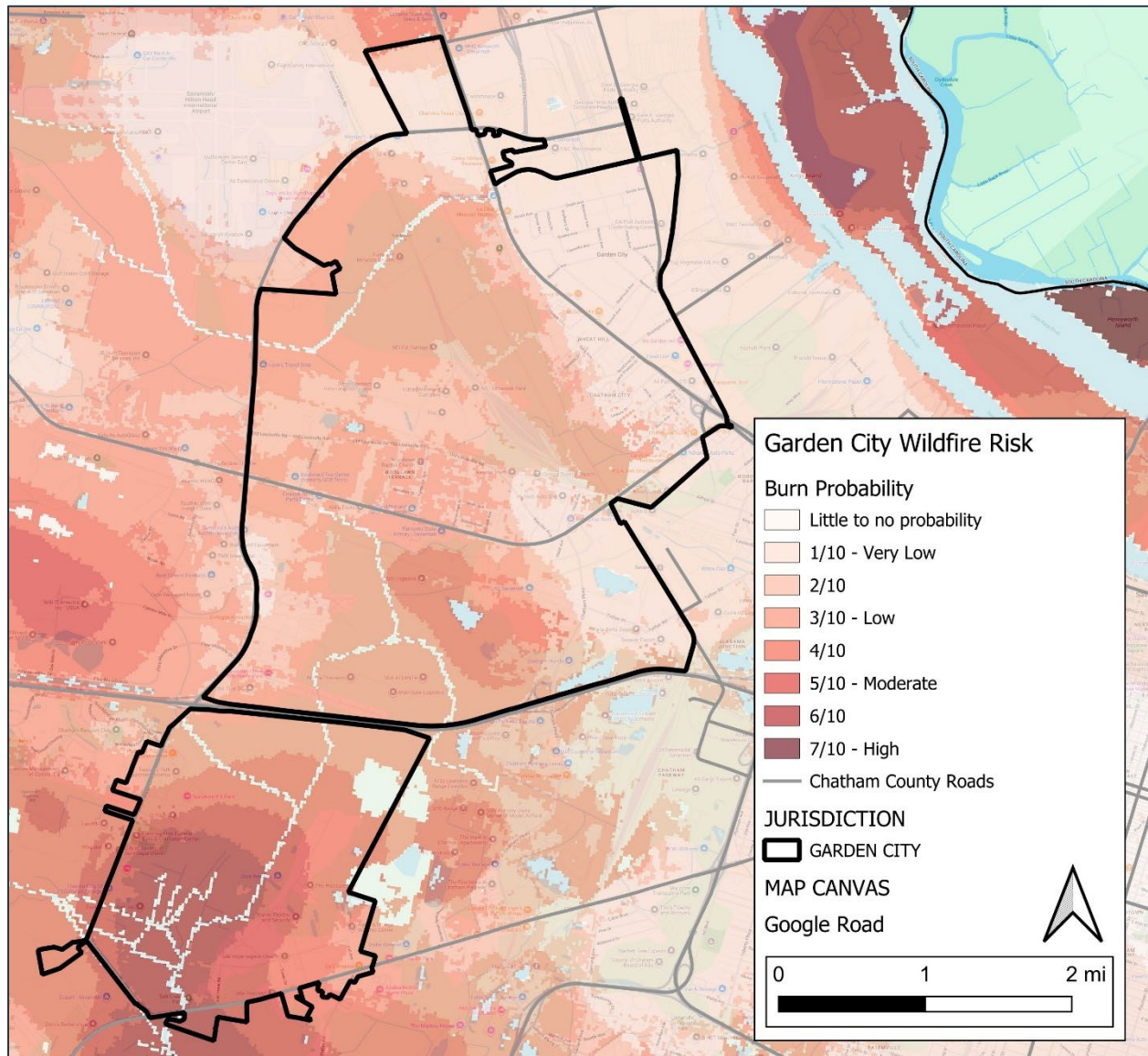
Figure C-16 – Functional Wildland Urban Interface, City of Garden City



Source: Southern Wildfire Risk Assessment

Figure C-17 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. The highest burn probability area in Garden City is along Salt Creek between Hwy 17 and Dean Forest Rd.

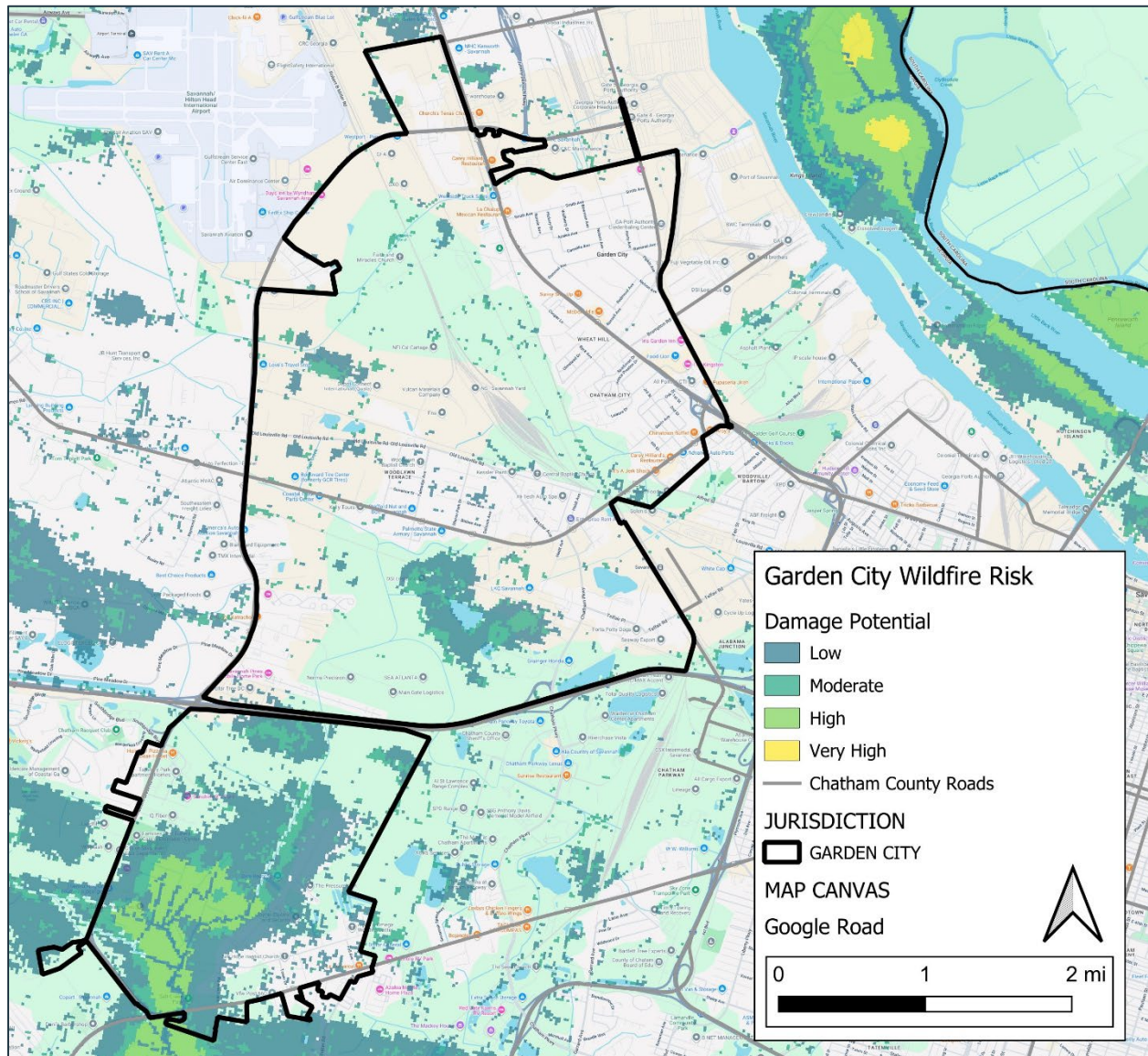
Figure C-17 – Burn Probability, City of Garden City



Source: Southern Wildfire Risk Assessment

Figure C-18 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. The highest risk area for Damage Potential along Salt Creek between Hwy 17 and Dean Forest Rd.

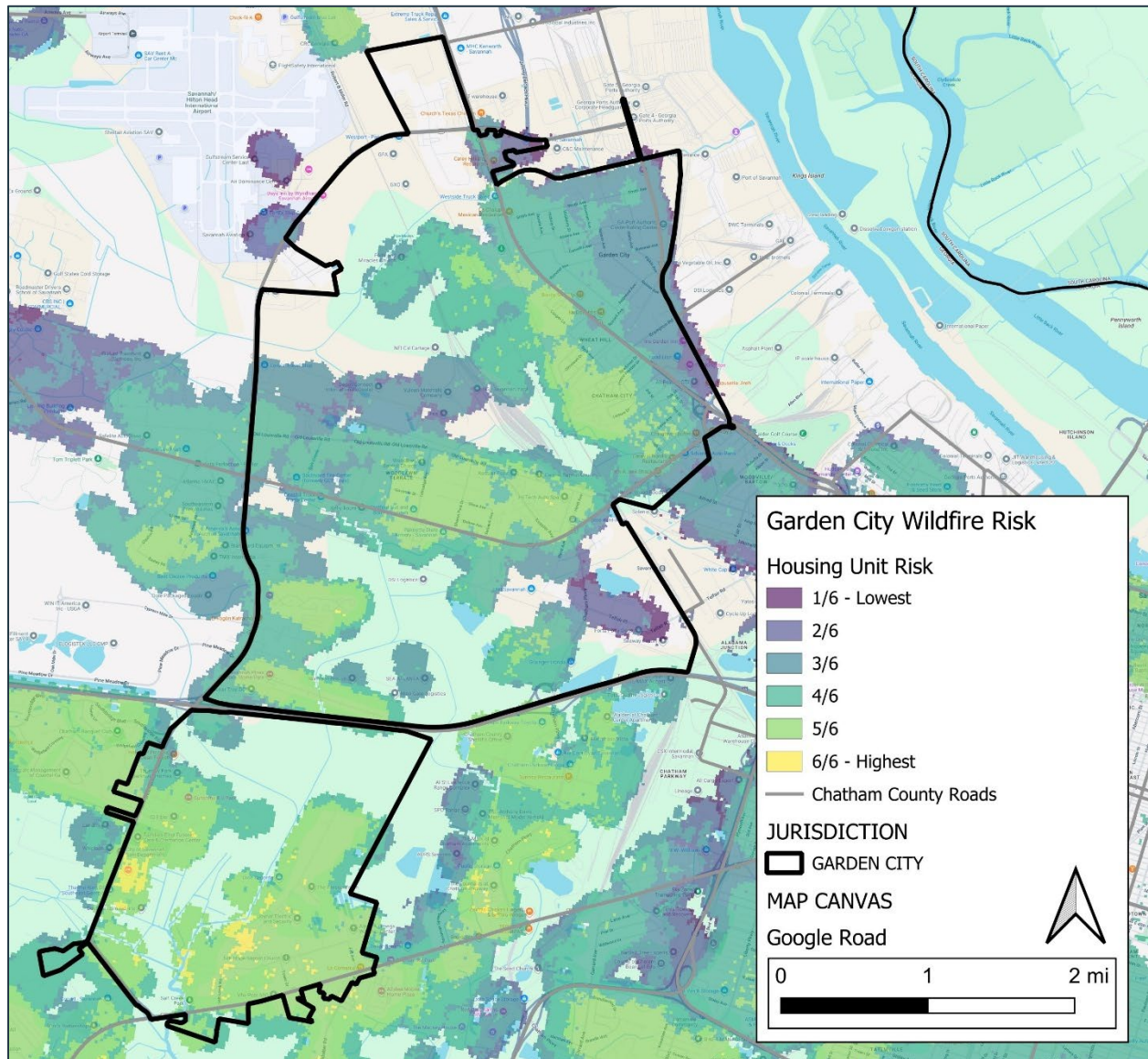
Figure C-18 – Damage Potential, City of Garden City



Source: Southern Wildfire Risk Assessment

Figure C-19 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. The highest Housing Unit Risk areas in Garden City are the Salt Creek area between Hwy 17 and Dean Forest Rd, Woodlawn Terrace, and Chatham City/Wheat Hill.

Figure C-19 – Housing Unit Risk, City of Garden City



Source: Southern Wildfire Risk Assessment

C.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

Garden City joined the NFIP emergency program in 1971 and has been a regular participant in the NFIP since March 1973. The following tables reflect NFIP policy and claim data for the City categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table C-14 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	146	\$136,703	\$37,698,000	39	\$592,433.17

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Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
2-4 Family	1	\$727	\$350,000	1	\$43,536.42
All Other Residential	2	\$693	\$82,000	0	\$0
Non-Residential	64	\$122,106	\$34,304,000	15	\$1,413,573.94
Total	213	\$260,229	\$72,434,000	55	\$2,049,543.53

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Table C-15 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Policies	Number of Post-FIRM Policies
AO1-30 & AE Zones	123	\$1,881,978.01	66	57
A Zones	0	\$0	0	0
V01-30 & VE Zones	0	\$0	0	0
B Zone / X Shaded	0	\$0	0	0
C / X Zone	90	\$167,565.52	58	32
No Zone Identified	0	\$0	0	0
Total	213	\$2,049,543.53	124	89

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

C.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Property Protection									
PP-1	Relocate Fire Station 1 located at 116 Main Street out of susceptible flooding area.	Flood	1.3, 2.1	High	City Administration	HMGP, FMA, AFG,	2029	Carry Forward	In the process of planning and design
PP-2	Raise lift stations out of floodplain	Flood	2.1	High	Water/Sewer	HMGP	2027	Carry Forward	Work in progress
PP-3	Purchase and install bypass pumps	Flood, Tropical Cyclone	2.1	Moderate	Public Works	Local Funds	2027	Carry Forward	
PP-4	Acquire or elevate properties prone to flooding	Flood, Tropical Cyclone	2.2, 3.1	Moderate	City Administration	HMGP, FMA	2030	Carry Forward	
Structural Projects									
SP-1	Construct and/or improve drainage systems to alleviate drainage issues.	Flood, Tropical Cyclone	2.1	Moderate	Public Works	General fund, grants	2026	Carry Forward	
Public Education and Awareness									
PEA-1	Host/support a hazardous materials clean-up day to appropriately dispose of dangerous household chemicals	Hazardous Materials Incident	3.1	Moderate	City Administration	Local Funds, Grants	2026	Carry Forward	

Annex D City of Pooler

D.1 PLANNING PROCESS

The table below lists the HMPC members who represented the City of Pooler.

Table D-1 – HMPC Members

Member Name	Title	Agency/Department
Nicole Johnson	Director	Planning & Development
Rachael Brown	Zoning Administrator	Planning & Development
Marcy Benson	City Planner	Planning & Development

D.2 COMMUNITY PROFILE

D.2.1 Overview of the Community

The City of Pooler is located along western Chatham County northwest of the City of Savannah and is bordered by Port Wentworth to the north and Garden City to the east.

According to the U.S. Census Bureau, Pooler has a total area of 27.9 square miles of which 27.7 square miles (99.3%) is land, and 0.2 square miles (0.7%) is water.¹⁸

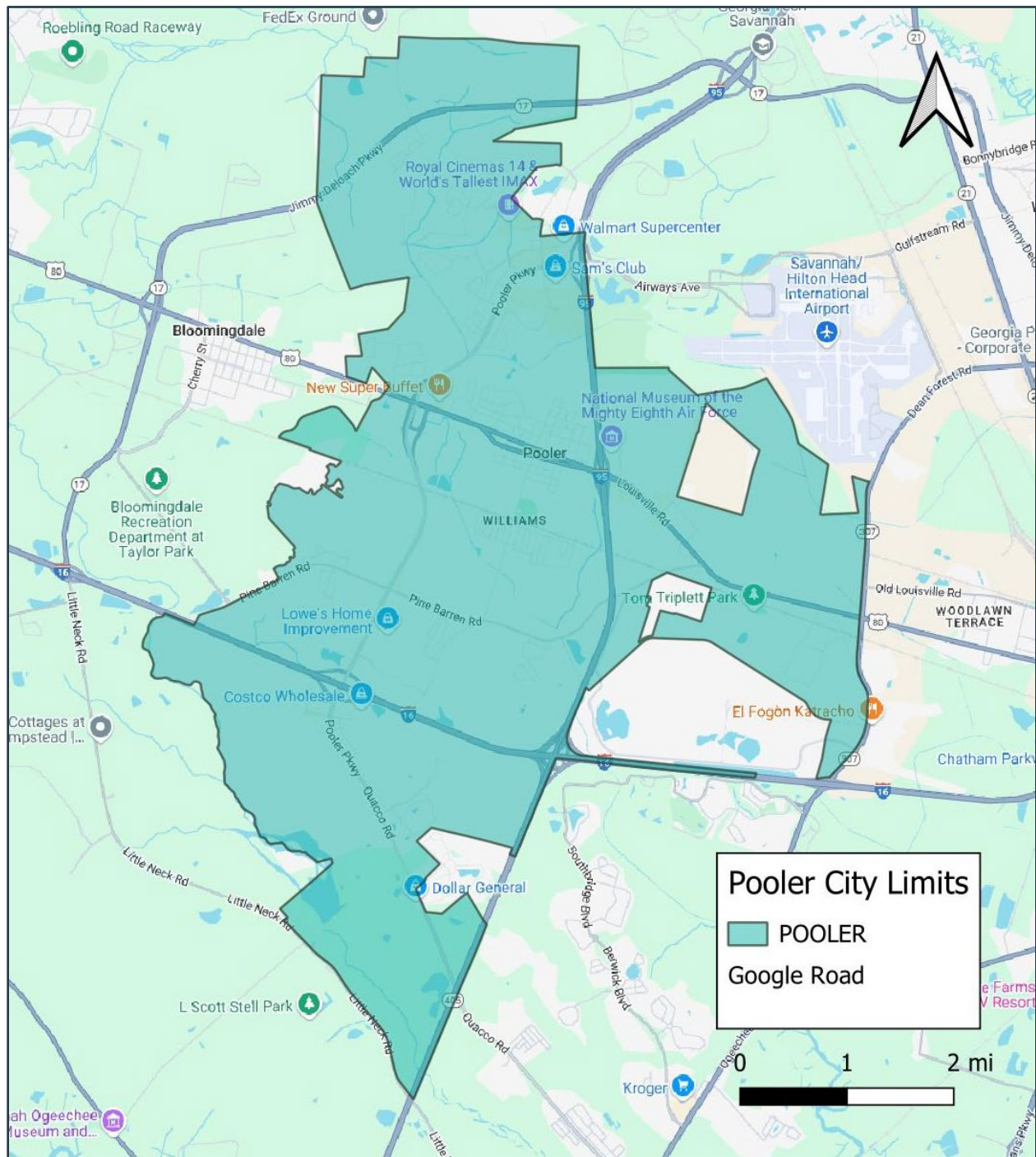
According to the U.S. Census Bureau's American Community Survey (ACS) 5-Year Estimates, the city had a total population of 31,171 in 2024.¹⁹ Therefore, the City's average population density is approximately 1,117 people per square mile.

The figure below reflects Pooler's boundaries and shows the City's location within the county and in relation to surrounding municipalities.

¹⁸ <https://data.census.gov/table?q=Pooler+city,+Georgia+geography>. Retrieved 07-01-2025.

¹⁹ <https://www.census.gov/quickfacts/fact/table/poolercitygeorgia,chathamcountygeorgia,GA,US/IPE120223>. Retrieved 07-01-2025.

Figure D-1 – Location Map, Pooler



D.2.2 Geography and Climate

Please refer to Chatham County Community Profile for a summary of climate for the city.

The City of Pooler lies within the Sea Island Flatwoods Level IV Ecoregion, which consists of flat plains on marine terraces. Waterways consist of swamps, bays, and low gradient streams with sandy and silty substrates. Elevations average approximately 20 feet. Typical land cover consists of evergreen forests, pine plantations, and forested wetlands.

The City of Pooler is located within the HUC 12 Basins listed in the table below.²⁰

Table D-2 – HUC 12 Watersheds, Pooler

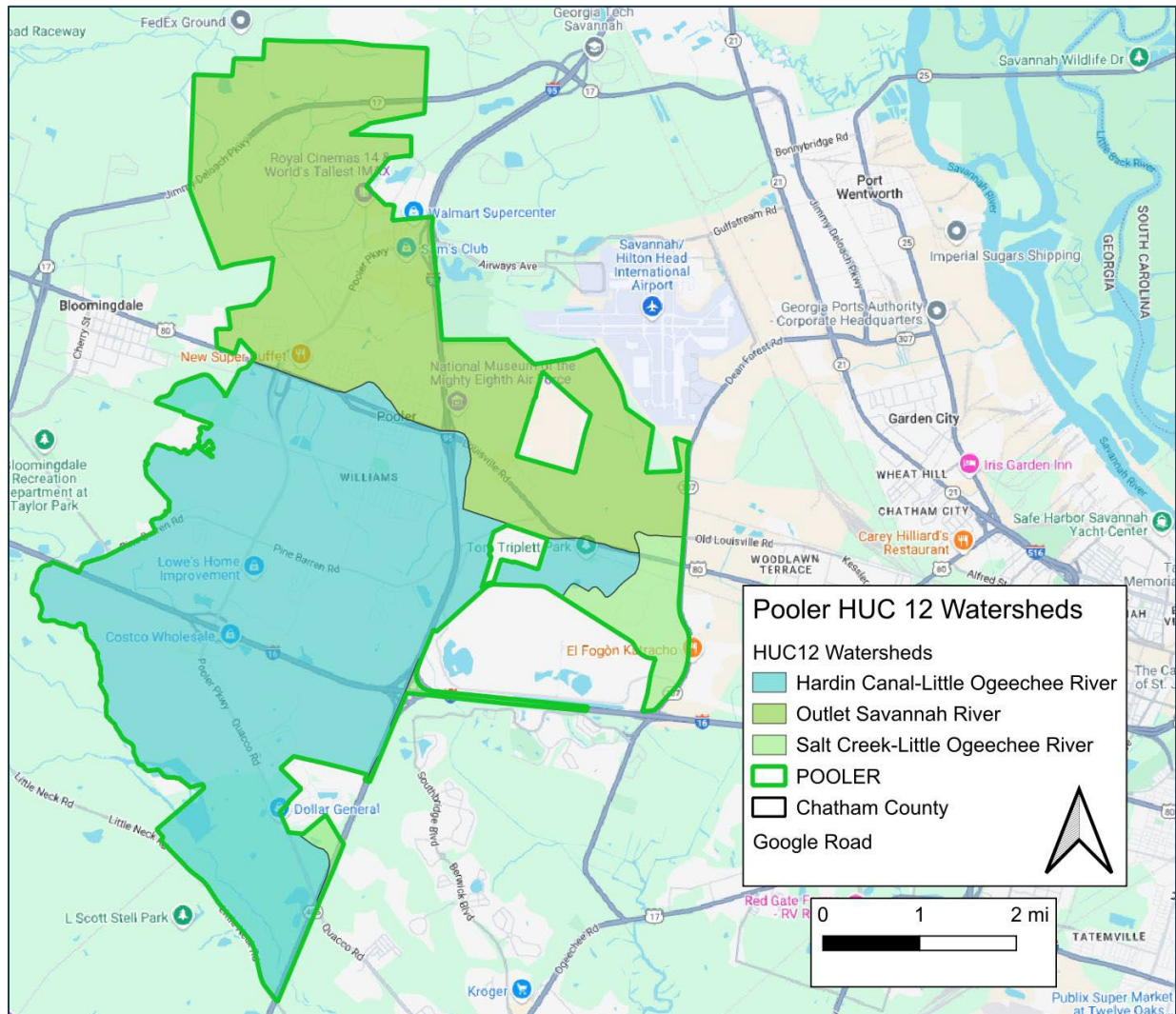
Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Hardin Canal – Little Ogeechee River	74.75	47.94	26.81	Salt Creek – Little Ogeechee River	030602040201
Outlet Savannah River	196.73	109.31	87.42	Atlantic Ocean	030601090307
Salt Creek – Little Ogeechee River	73.24	73.24	0.00	Ossabaw Sound – Frontal Atlantic Ocean	030602040203

Source: Chatham County Coastal Watershed Management Plan, 2020

The figure below illustrates the HUC 12 drainage basins and drainage features in and around Pooler.

²⁰ https://www.researchgate.net/figure/Coastal-Watershed-Planning-Area-CWPA-for-Chatham-County-and-City-of-Savannah-Modeled_fig2_344570004, Retrieved 06-13-2025.

Figure D-2 – HUC 12 Watersheds, Pooler



D.2.3 Cultural, Historic, and Natural Resources

D.2.3.1 Cultural and Historic Resources

National Museum of the Mighty Eighth Air Force

This museum is dedicated to the history of the Eighth Air Force (Mighty Eighth), which is the largest deployed air force in the American army which contributed substantially to the European theatre in World War II. The Eighth Air Force was created in 1944 from the VIII Bomber, Fighter, and Air Support Commands. The Mighty Eighth operated out of a British air based and flew missions against enemy targets in north-east Europe.



D.2.3.2 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within the City of Pooler are identified in the Figure below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table D-3 – Flood Zones, Pooler

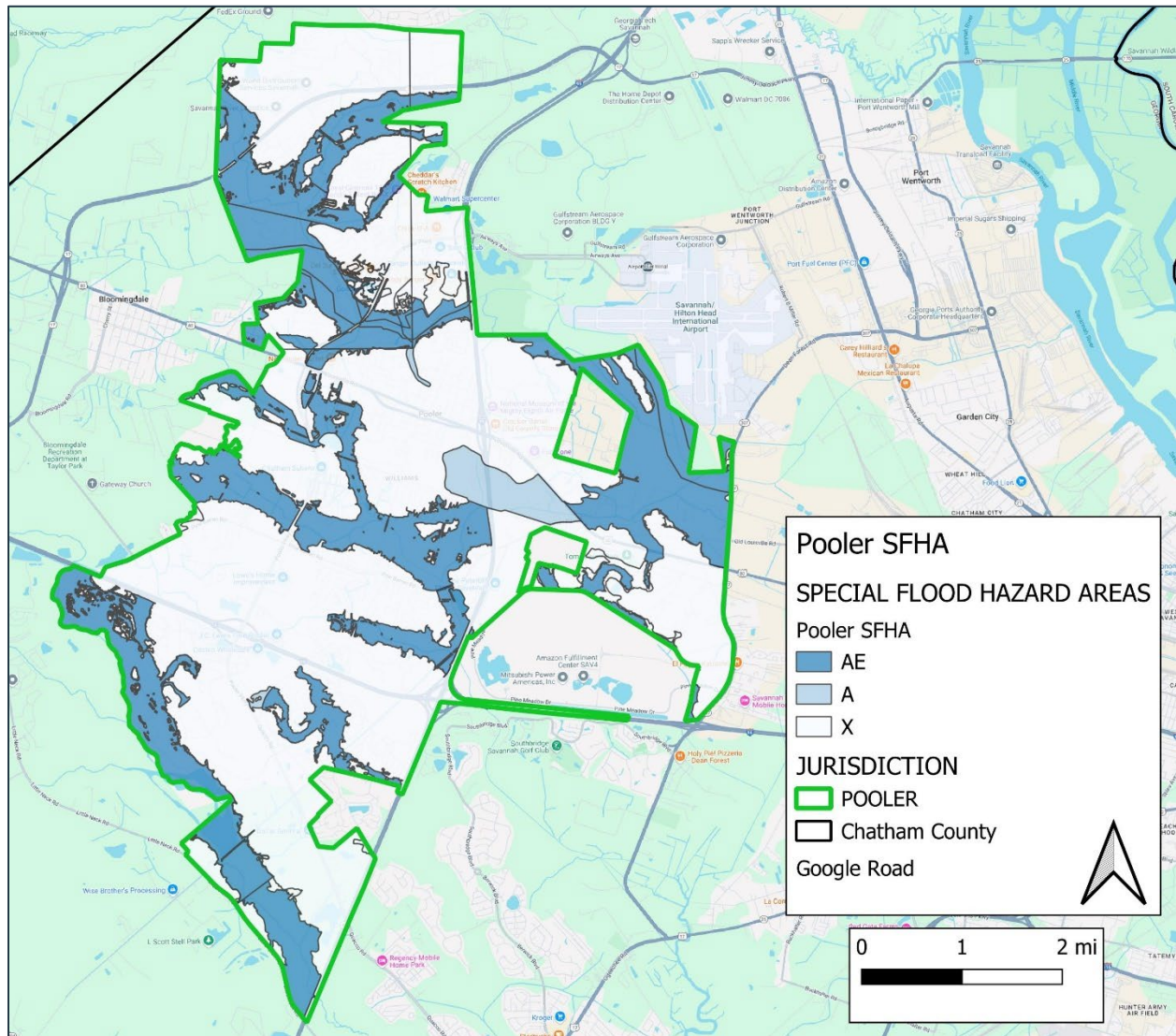
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
A	331	0.52	1.9
AE	5,502	8.60	30.8
X500	477	0.75	2.7
X	11,584	18.1	64.7
TOTAL	17,894	27.96	100.0

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, 5,833 acres of land within the city are located within a 100-year floodplain (Zone AE and A), which equals 32.7 percent of the city. An additional 11,584 acres are located within Zone X, which is considered moderate or minimal flood risk (64.7% of the city). With nearly 33 percent of the city at high risk to flooding in the Special Flood Hazard Area (SFHA) and the remainder at moderate or minimal risk to flooding, the City of Pooler should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in Pooler include wetland areas and low-lying land along the major waterways in and around the city, including the Little Ogeechee River, Hardin Canal, and Pipemakers Canal. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates and acting as a flood storage area to reduce downstream peaks. The city should strive to keep floodplain and floodplain waters free of contaminants, such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

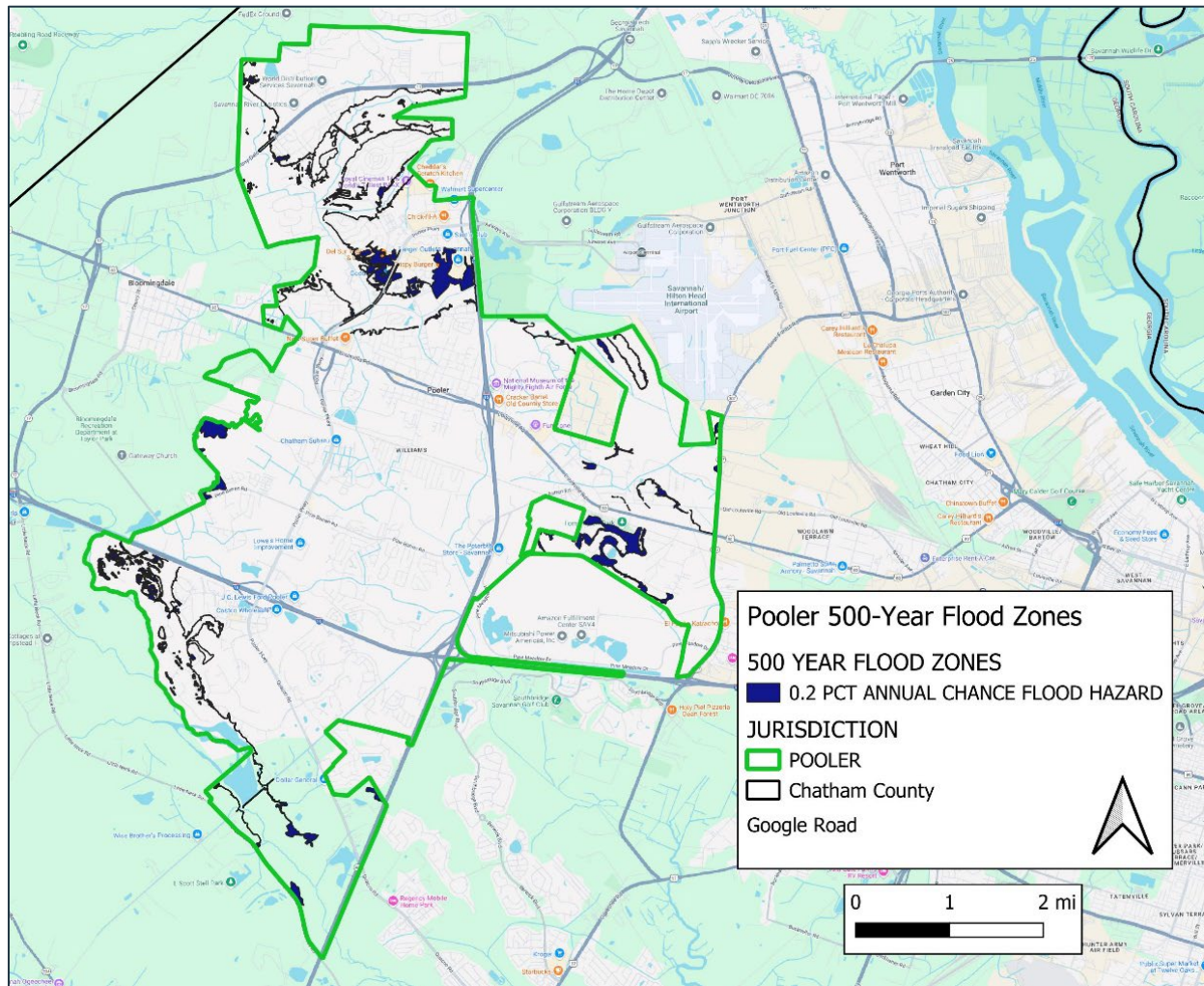
Figure D-3 – FEMA Flood Zone Map, Pooler



Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplain, these zones can still experience significant flooding during extreme events. The X500 zone for Pooler is depicted in the map below and represented in Table D-3 above.

Figure D-4 – X500 Zone, Pooler



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through these processes pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetlands Inventory (NWI), wetlands throughout the City of Pooler make up 7,373.15 acres (11.52 square miles) or 41.3 percent of the City (see Figure D-5 below).

Table D-4 – Wetland Types, Pooler

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Non-Wetland	10,482.85	16.38	58.7
Freshwater Emergent Wetland	211.69	0.33	1.2
Freshwater Forested/Shrub Wetland	6,510.46	10.17	36.5
Freshwater Pond	335.55	0.52	1.9

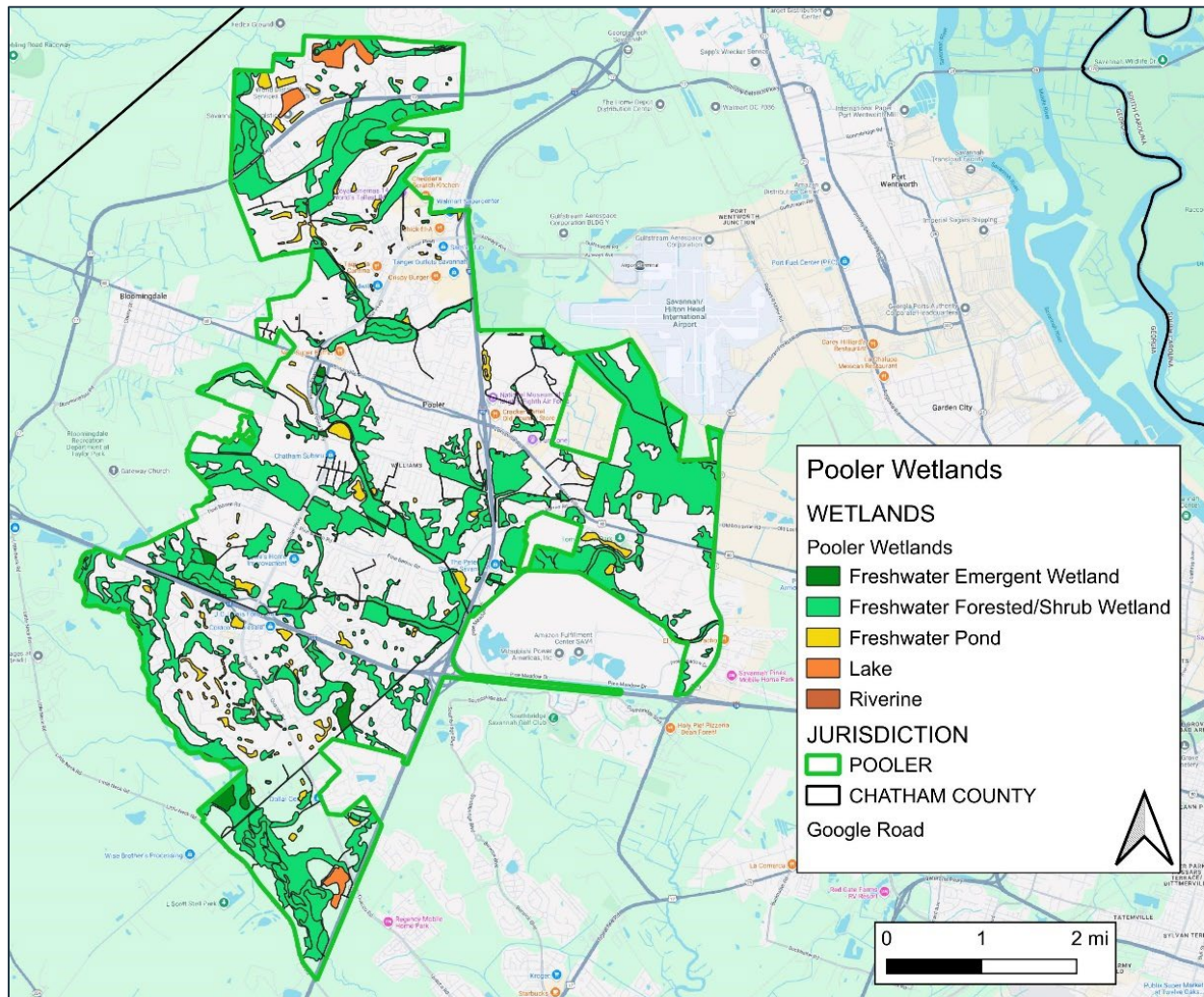
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Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Lake	119.25	0.19	0.7
Riverine	196.20	0.31	1.1
TOTAL	17,856	27.90	100.0

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Figure D-5 – Wetlands Map, Pooler



Source: National Wetlands Inventory, 2022; SAGIS, 2025

Freshwater Emergent Wetland

Freshwater emergent wetlands are classified within the Palustrine System by the U.S. Fish and Wildlife Service (USFWS) as part of their National Wetlands Inventory (NWI). This system categorizes wetlands based on their landscape position, vegetation cover, and hydrologic regime. Within the Palustrine System, emergent wetlands are further defined by their vegetation (grasses, sedges, forbs) and whether the vegetation is persistent (remaining until the next growing season) or non-persistent.

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Freshwater Pond

Within the Palustrine system, ponds are often categorized as Lacustrine or Palustrine. Specifically, ponds may be classified as emergent, scrub-shrub, or forested, depending on the dominant vegetation.

Lake

Lacustrine wetlands are defined as wetlands associated with lakes and large ponds. They are characterized by the water level of the lake influencing the water table of the adjacent wetland, and they often occur along lake shores.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across the City of Pooler, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure D-6 – Land Cover Map, Pooler

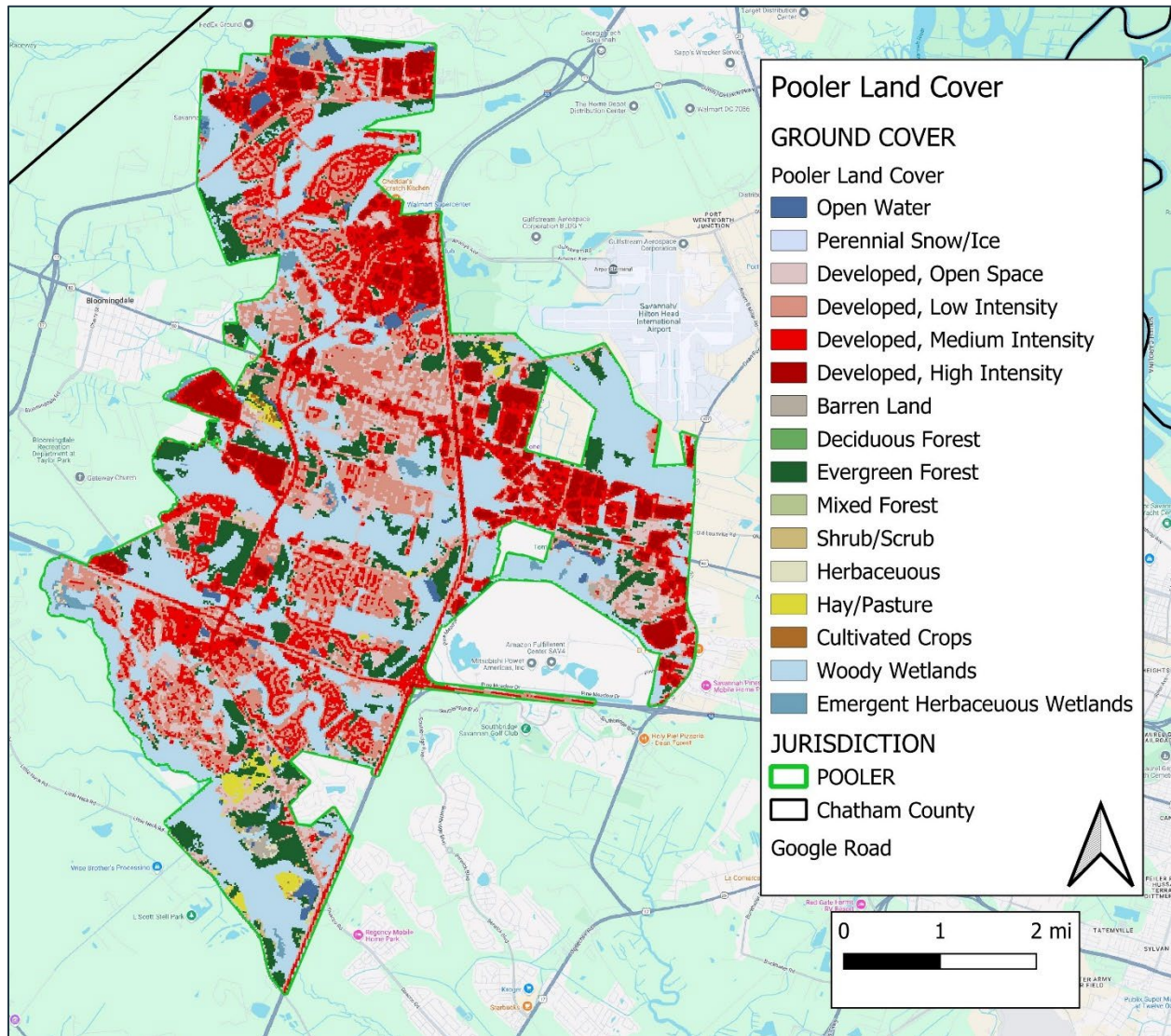
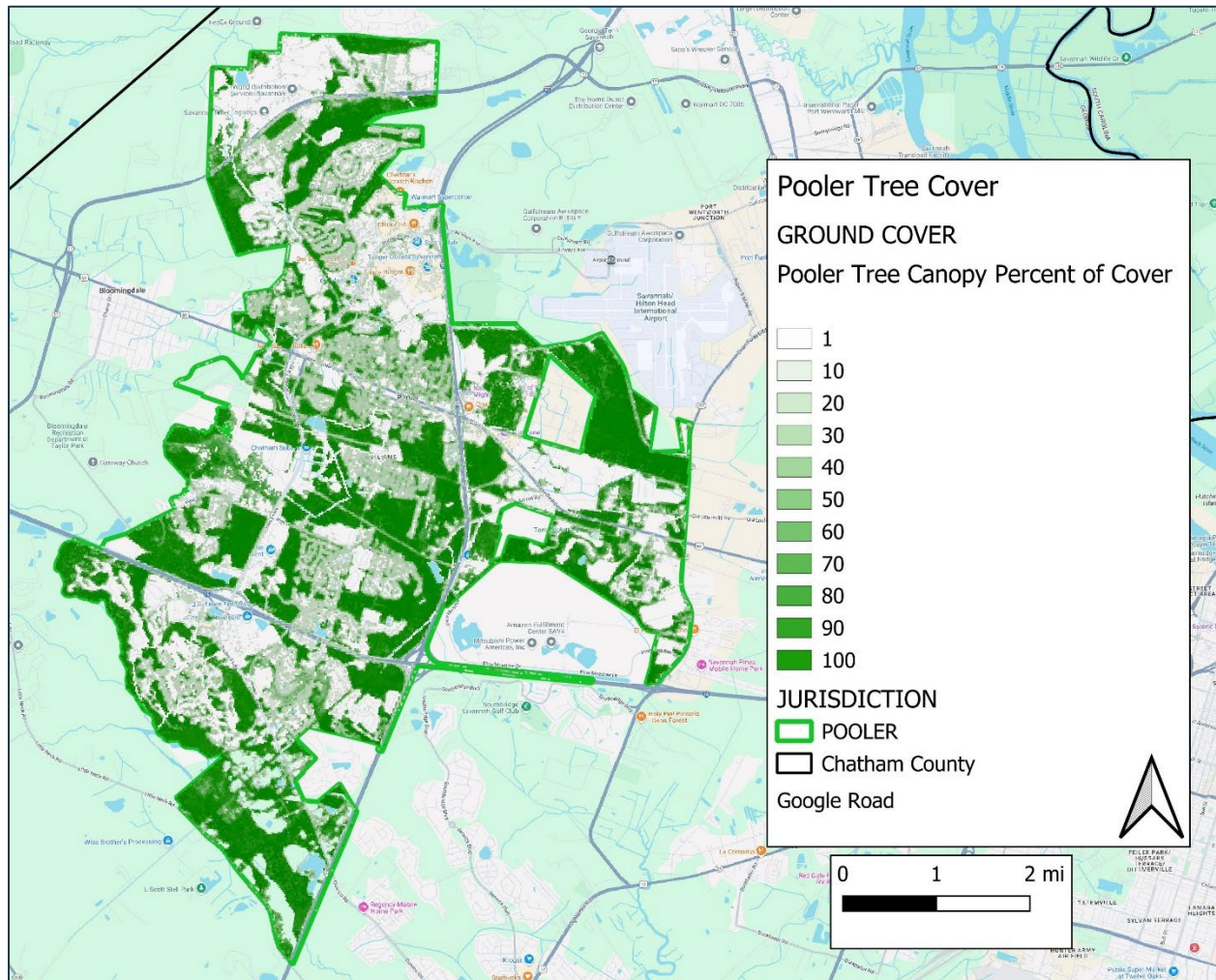


Figure D-7 – Tree Cover Map, Pooler



D.2.4 History

The City of Pooler was named after Robert William Pooler in 1838. Mr. Pooler was a very civic-minded resident of Savannah and worked for the Central of Georgia Railroad. Mr. William W. Gordon, President of the Central of Georgia, named the first station west of Savannah after William Pooler. Mr. Pooler had worked long and hard to establish a "feasibility study" of the venture in the towns and counties through which a proposed railroad would extend. Mr. Gordon and Mr. Pooler were both graduate law and engineering students, both born the same year, 1796, and each took a prominent part in the civic and military affairs of Savannah. Mr. Pooler never lived in the community named after him, and died on Christmas Day, 1853, at his residence on Bull and Liberty Streets in Savannah and was buried in Colonial Cemetery, but later his body was interred in Laurel Grove Cemetery.

About 1883, Mr. Ben Rothwell, bought several hundred acres in the community pioneered in a new method of community development by giving free lots to builders of permanent homes. Dan Newton built the first Baptist Church in Pooler in what is now known as Gleason Park. He also built a Presbyterian Church, which survived only a few years, and gave lumber for Pooler's First Methodist Church. A sawmill was built to supply lumber to homebuilders and the embryonic community began to take shape. The brickyard supplied other needed materials and dairies soon found a ready market. Remains of the brickyard can be found near the railroad tracks just south of what is now I-95.

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In 1907, Pooler was incorporated. Mr. H.G. Beaufort was the first mayor. A town hall was erected in 1923 in order to have a permanent place to transact municipal business. One of the first women to vote in the State of Georgia was Mrs. Lola Goggins, who was also the only woman alderman for the Town of Pooler in the early 1900s.

The town grew with the establishment of banks, automobile service stations and repair shops, restaurants, and with the opening of Interstate 95. The Mighty Eighth Air Force Heritage Museum opened in 1996, bringing the veterans of the Eighth Air Force back “home.” The Town of Pooler transitioned into the City of Pooler in 1976.

D.2.5 Economy

D.2.5.1 Wages and Employment

Per the 2019-2023 American Community Survey 5-Year Estimates, the median household income for Pooler is \$91,497, which is 20.3 percent higher than the state’s median household income (\$74,664). Approximately 6.4 percent (1,734) of the population is considered to be living below the poverty level. Moreover, 4.4 percent (256) of people under 18 years of age and 5.8 percent (241) of people 65 years and over are living below the poverty level.²¹

The table below shows employment and unemployment rates along with industry employment by major classification for the city.²²

Table D-5 – Employment and Occupation Statistics for Pooler, GA, 2019-2023

Employment Status	Count	Percentage (%)
In labor force	15,360	69.5
Employed	13,845	62.7
Unemployed	809	3.7
Armed Forces	706	3.2
Not in labor force	6,725	30.5
Occupation		
Management, business, science, and arts	5,470	39.5
Service	2,379	17.2
Sales and office	2,264	16.4
Natural resources, construction, and maintenance	1,152	8.3
Production, transportation, and material moving	2,580	18.6

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Major industry sectors in the City of Pooler include management, business, science, and arts (39.5%); service (17.2%); sales and office (16.4%); natural resources, construction, and maintenance (8.3%); and production, transportation, and material moving (18.6%).

Major employers are discussed in the Chatham County Community Profile.

²¹ <https://data.census.gov/table?q=Pooler+city,+Georgia+poverty+level>. Retrieved 07-1-2025.

²² <https://data.census.gov/table?q=Pooler+city,+Georgia+employment>. Retrieved 07-01-2025.

D.2.6 Housing

According to the 2019-2023 ACS 5-Year Estimates, there are 12,008 housing units in Pooler, of which 93.3 percent (11,199) are occupied.²³ Approximately 59.8 percent (6,694) of occupied units are owner-occupied (40.2% occupied by renters). A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster. Therefore, higher rates of home rentals in Pooler may indicate that residents are not able to implement certain types of mitigation in their homes.

Median home value in Pooler is \$289,000. Of the City's owner-occupied housing units, 67.6 percent (4,523) have a mortgage. Most householders (91.4% / 10,235) have lived in their current homes since the year 2000 or later, 16.7 percent (1,871) moved in between 2000 and 2009, 24.6 percent (2,757) moved in between 2010 and 2017, 37.8 percent (4,325) moved in between 2018 and 2020, and 12.3 percent (1,372) moved in 2021 or later. 2.5 percent (280) of householders in occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

The majority (61.7% / 7,406) of housing units in Pooler are detached single family homes. However, 4.2 percent (508) of units are mobile homes, which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

The City's housing stock is relatively new, with the majority (73.9% / 8,879) of occupied housing built after 2000. The table below details housing age in the city.

Table D-6 – Housing Age, Pooler

Year Structure Built	Percent of Occupied Housing	Number of Structures
2020 or later	3.7	445
2010 to 2019	31.9	3,828
2000 to 2009	38.4	4,606
1980 to 1999	14.3	1,717
1960 to 1979	7.7	920
1940 to 1959	2.4	293
1939 or earlier	1.7	199

Source: U.S. Census Bureau, American Community Survey 2019-2023 5-Year Estimates

Age can indicate the potential vulnerability of a structure to certain hazards. For example, the City of Pooler first entered the National Flood Insurance Program in 1981. Therefore, based on housing age estimates, approximately 11.8 percent of housing in the city was built before any floodplain development restrictions were required.

D.2.7 Population

According to the U.S. Census Bureau, Pooler had an estimated population of 31,171 residents in 2024 and a population of 25,711 at the time of the 2020 U.S. Census (21.7% increase from 2020-2024). As of 2024, Pooler's population density was 1,117 persons per square mile. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates.²⁴

²³ <https://data.census.gov/table/ACSDP5Y2023.DP04?q=Pooler+city,+Georgia+tenure>. Retrieved 07-01-2025.

²⁴ <https://data.census.gov/table?q=Pooler+city,+Georgia+population>. Retrieved 07-01-2025.

Table D-7 – City of Pooler Demographic Profile Data, 2019-2023

Demographic	Pooler
Gender/Age	
Male	14,103
Female	13,132
Under 5 Years	1,678
65 Years and Over	4,225
Race/Ethnicity (One Race)	
White	14,547
Black or African American	8,319
American Indian/Alaska Native	42
Asian	683
Two or More Races	2,634
Hispanic or Latino ¹	1,926
Education	
High School Graduate or Higher	18,158
Bachelor's Degree or Higher	7,851

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

¹Hispanics may be of any race, so also are included in applicable race categories.

D.2.8 Land Use

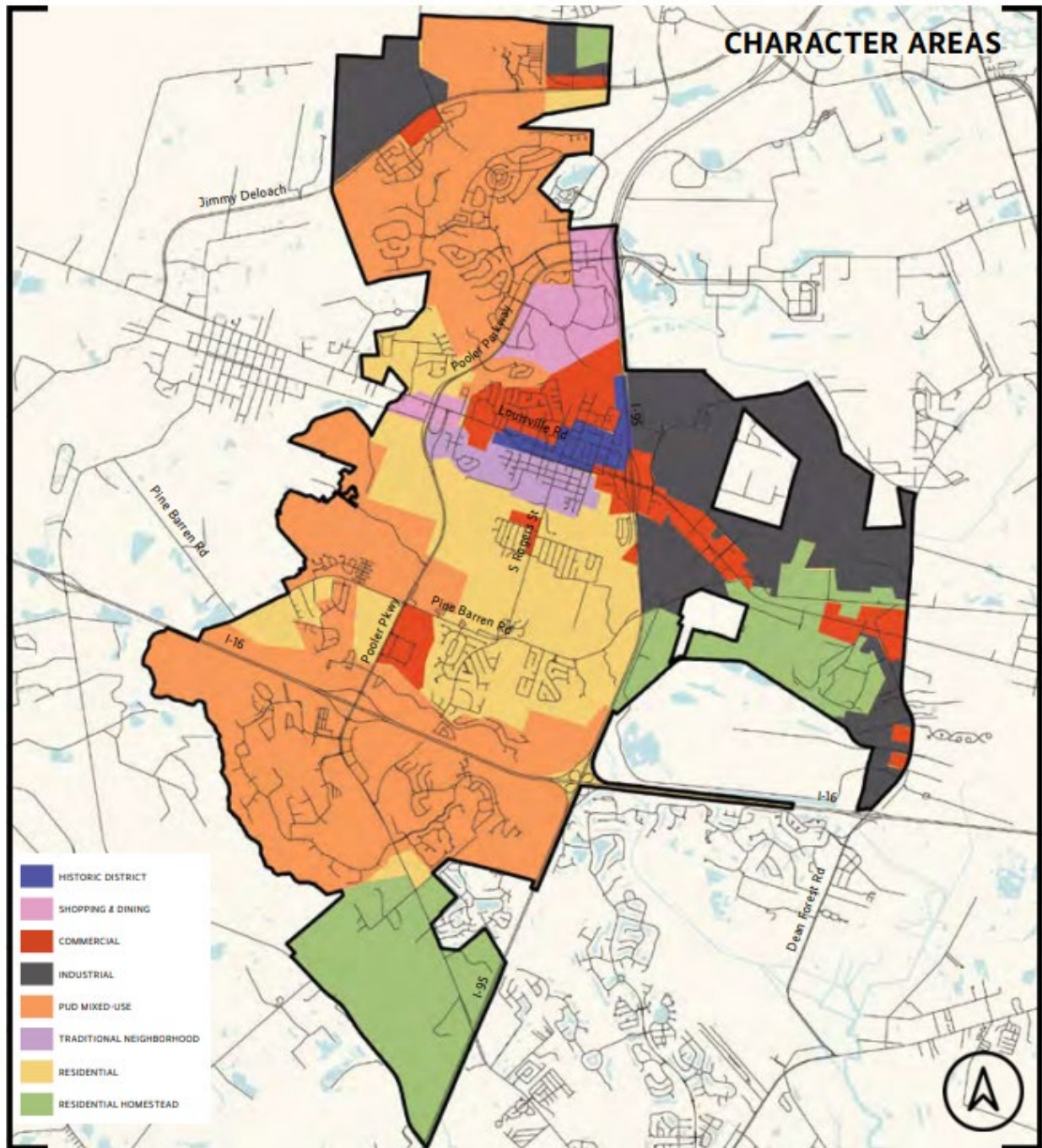
The City of Pooler's Comprehensive Plan 2020-2040 (Comp Plan) establishes Character Areas to guide future development and includes a Future Land Use Map.

D.2.8.1 Character Areas

The Character Areas established by the City's Comp Plan include those listed below and shown in the Character Area Map.

- **Historic District:** Designed to protect the City's historic area from incompatible development.
- **Shopping & Dining:** Intended to retain existing commercial uses and to provide for establishments catering to the lodging, dining, shopping, and service needs of residents and tourists.
- **Commercial:** Strategic location located close to the interstate that will attract commercial businesses.
- **Industrial:** Intended for projects that protect industrial areas from an inappropriate level of unrelated uses and where activity could improve or accommodate a wider range of employment opportunities.
- **PUD Mixed-Use:** Projects that integrate different land uses such as retail stores, restaurants, residences, civic buildings, offices, and parks within a defined area.
- **Traditional Neighborhood:** Characterized by mixed land uses, grid street patterns, pedestrian circulation, intensively-used open spaces, architectural character, and a sense of community.
- **Residential:** Residential districts are characterized by grid street patterns, pedestrian circulation, architectural character, and a sense of community.
- **Residential Homestead:** Designed for large tracts of land upon which a large home or estate can be built.

Figure D-8 – Character Areas Map, Pooler 2020-2040



Source: City of Pooler Comp Plan, 2020-2040

D.2.8.2 Existing Land Use

According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

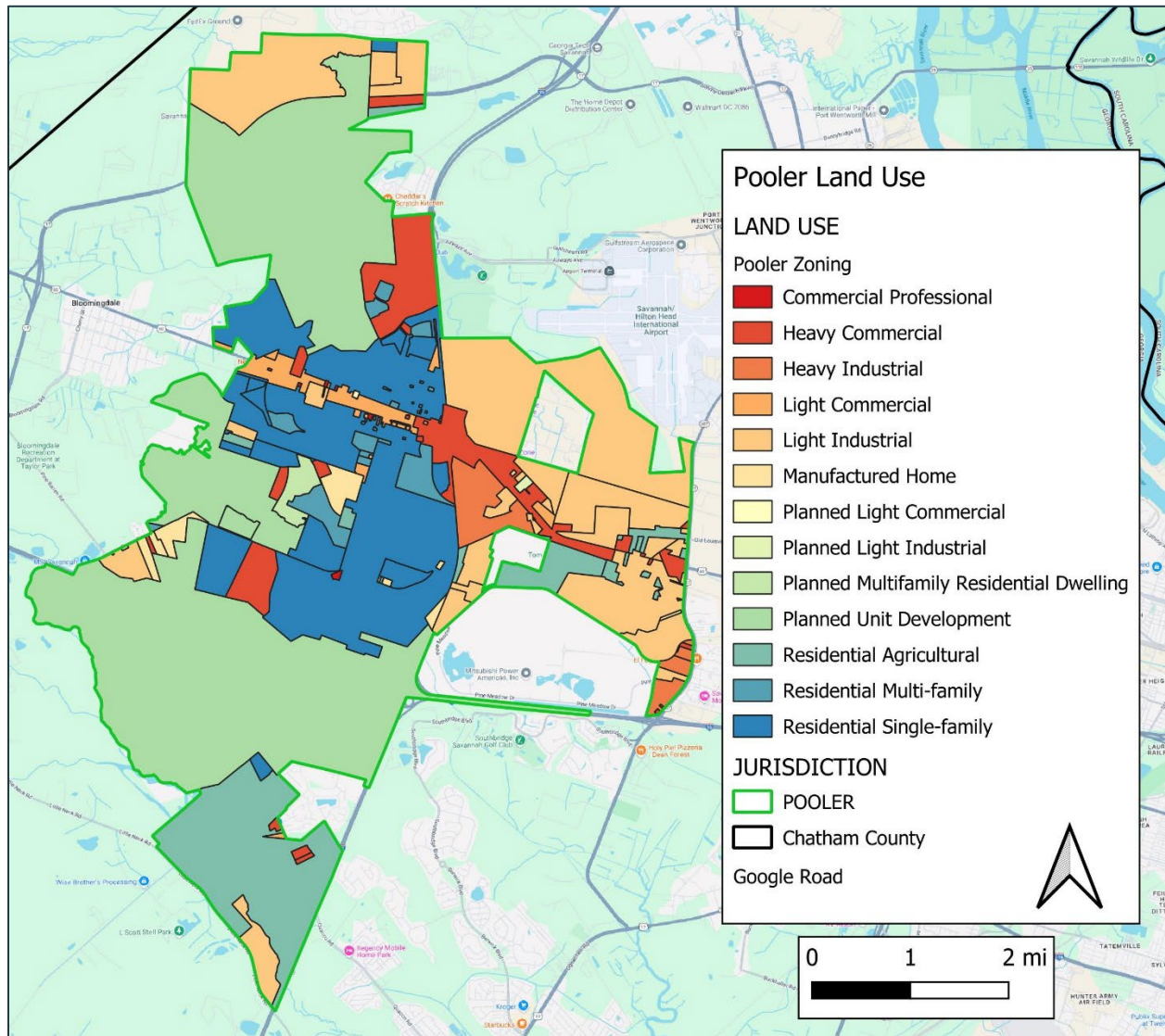
Table D-8 – Existing Land Use, Pooler

Land Use/Zoning	Area (Acres)	Area (Square Miles)
Commercial	9	0.01
Heavy Commercial	1,062	1.66
Heavy Industrial	1,768	2.76
Light Commercial	261	0.41
Light Industrial	3,602	5.63
Residential Manufactured Home Park/Dwelling	205	0.32
Residential Multi-Family	339	0.53
Residential Single-Family	3,218	5.03
Planned Light Commercial	3	0.005
Planned Light Industrial	11	0.02
Planned Residential	103	0.16
Planned Unit Development	7,088	11.08
Residential Agricultural	1,679	2.62
TOTAL	19,348	30.23

Source: SAGIS – Zoning, 2024

An existing land use map for zoning is included below for Pooler, as taken from the SAGIS map viewer for Chatham County.

Figure D-9 – Existing Land Use and Zoning Map, Pooler



Source: SAGIS – Zoning, 2024

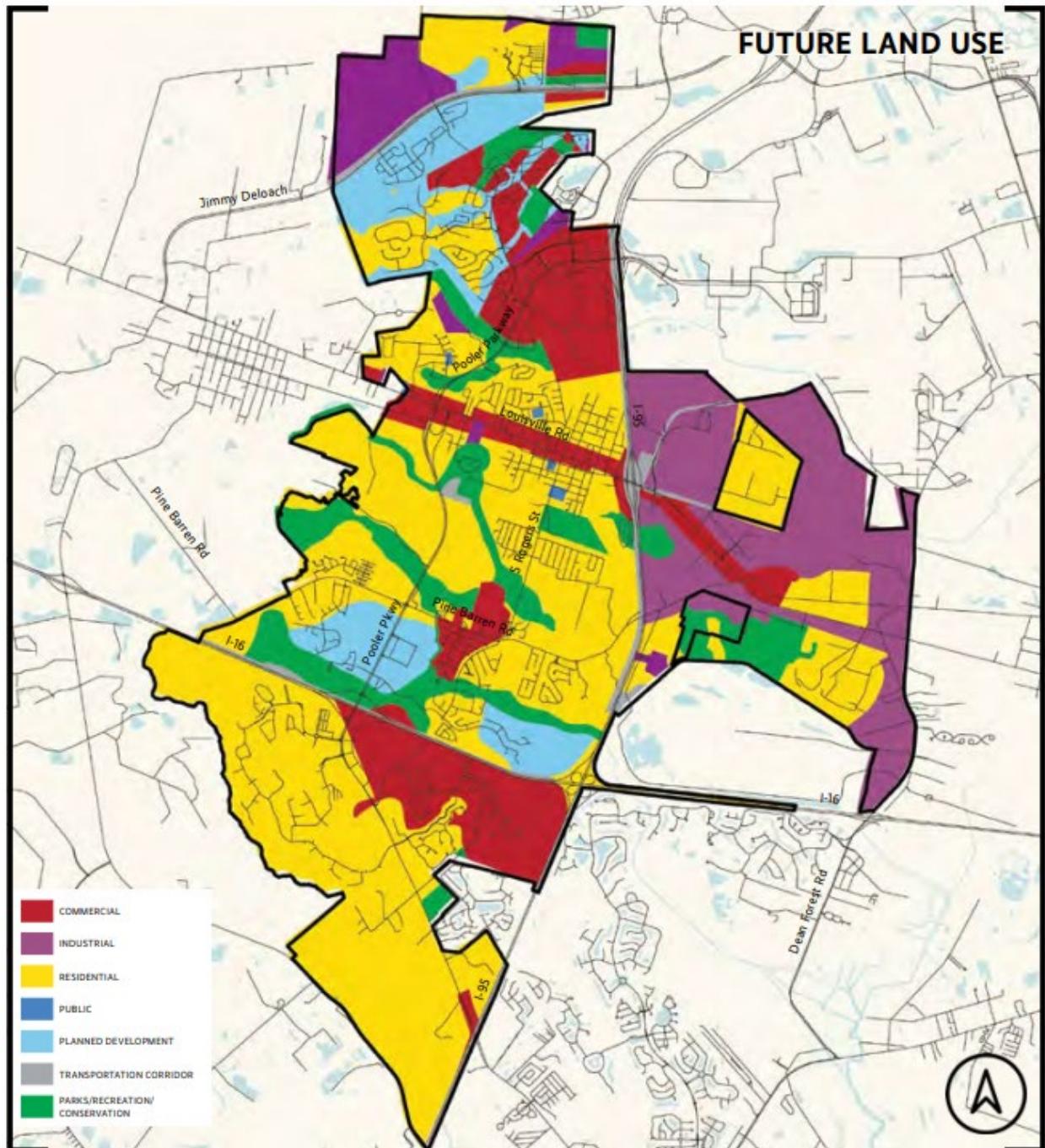
D.2.8.3 Future Land Use

The Pooler Comp Plan establishes the following future land use districts:

- **Commercial:** Area designated for the development of commercial properties with land uses for less than two acres.
- **Industrial:** Land for industrial uses which are not significantly objectionable with regard to noise, odor, fumes, etc., to surrounding properties.
- **Residential:** Land for single-family, multi-family, townhome, condominiums, manufactured homes, and manufactured home park district dwelling units organized into general categories of net densities.
- **Public:** Includes state, federal, or local government uses.
- **Planned Development:** Encourage flexibility in land planning that will result in improved design, character, and quality of new mixed-use developments.

- Transportation Corridor: Includes major transportation routes, public transit stations, power generation plants, railroad facilities, radio towers, telephone switching stations, airports, port facilities, or other similar uses.
- Parks/Recreation/Conservation: Land dedicated to active or passive recreational uses.

Figure D-10 – Future Land Use Map, Pooler 2020-2040



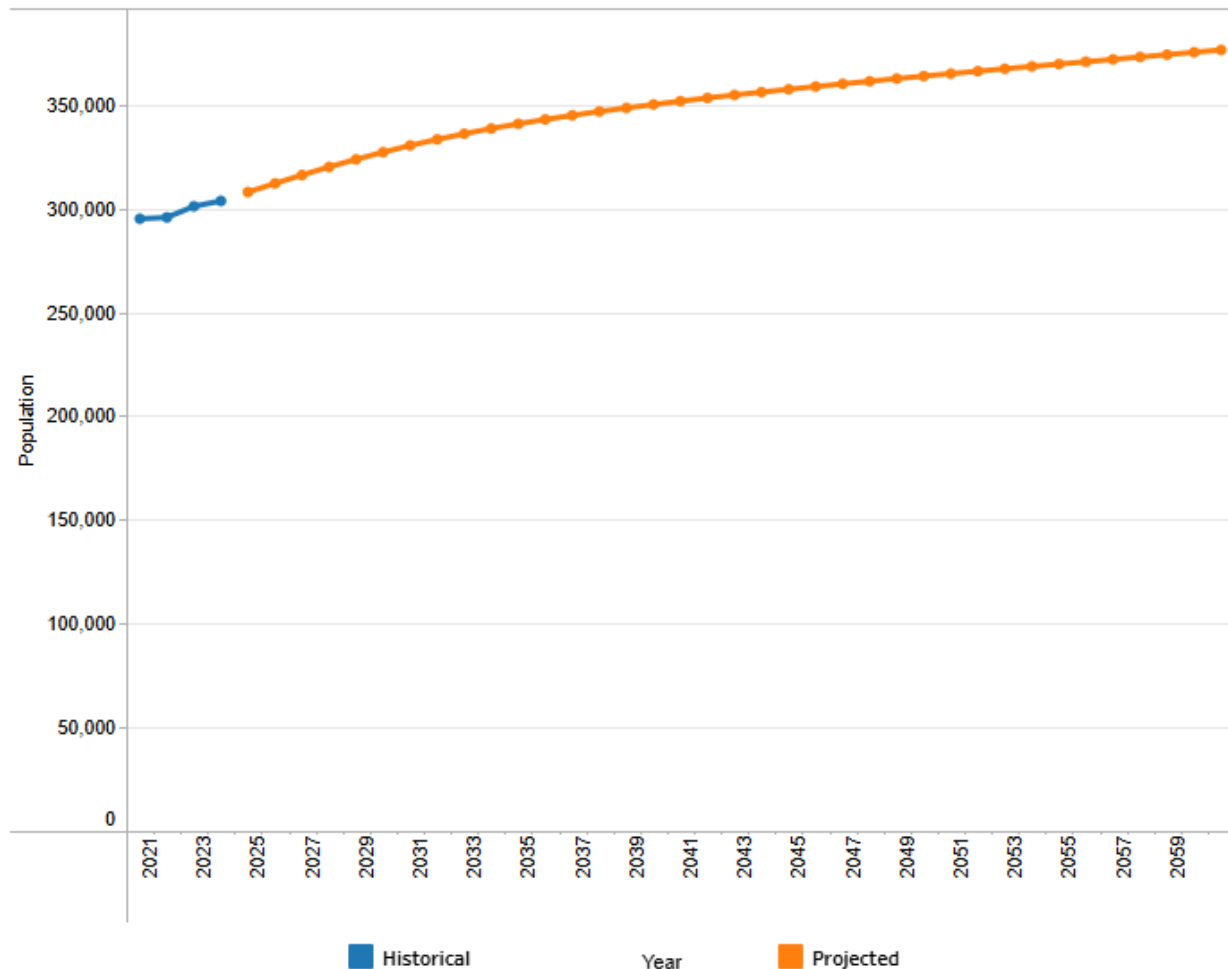
D.2.9 Growth and Development Trends

According to U.S. Census and American Community Survey population estimates, Pooler's population has increased dramatically from 25,711 in 2020 to 31,171 in 2024 representing a total increase of 21.2 percent and an annual increase of 5.3 percent.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be about 0.8 percent through 2060. Only population projections for Chatham County are included in this section as there are currently no population projections available for Pooler at the time of planning.

Figure D-11 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget

D.3 ASSET INVENTORY

D.3.1 Property

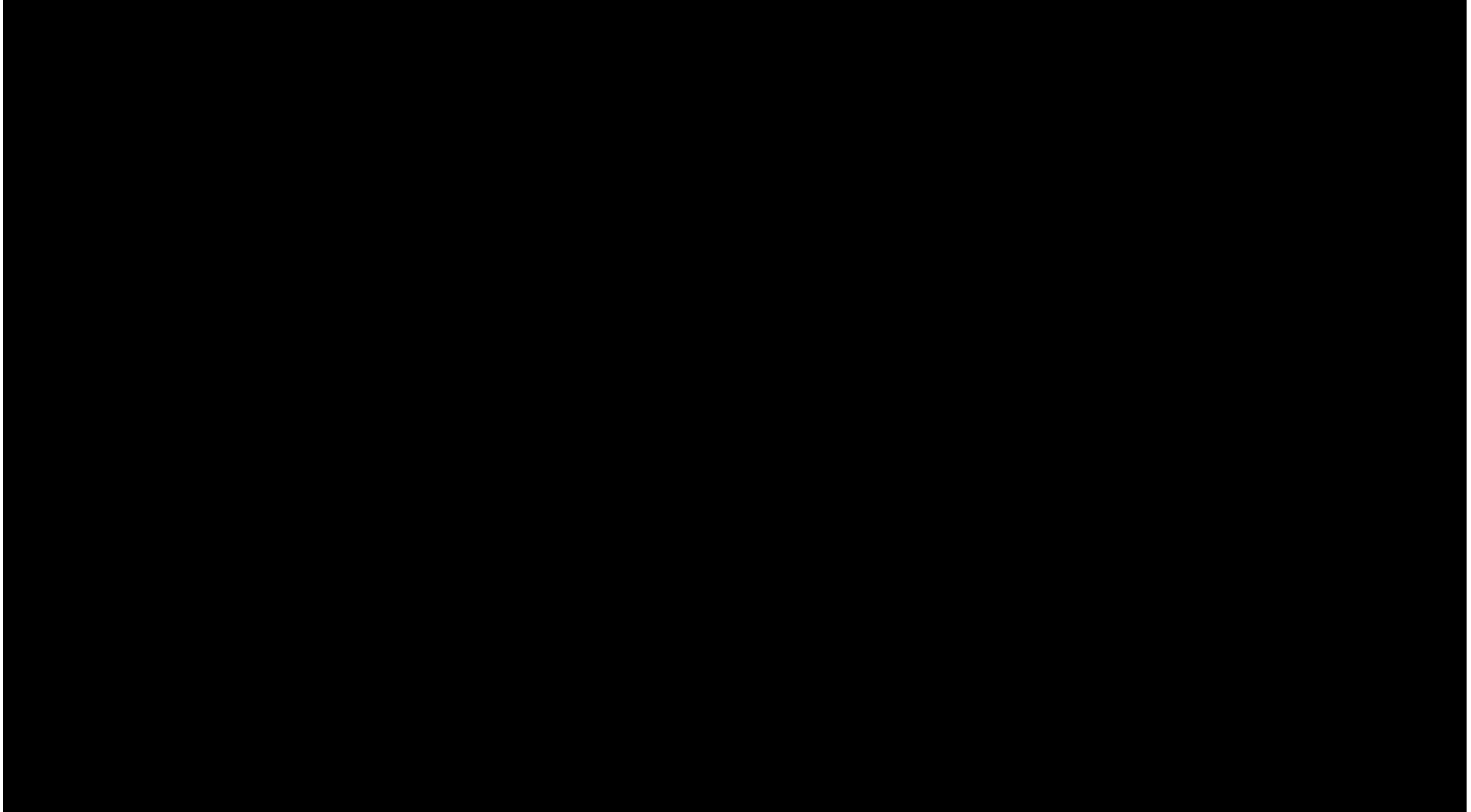
Table D-9 – City of Pooler Building Exposure

Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	770	\$1,094,183,099	\$1,094,183,099	\$2,188,366,198
Government	13	\$6,633,200	\$6,633,200	\$13,266,400
Industrial	177	\$944,621,160	\$1,416,931,740	\$2,361,552,900
Non-Profit	36	\$48,354,800	\$48,354,800	\$96,709,600
Residential	10,107	\$2,291,243,397	\$1,145,621,699	\$3,436,865,096
Utility	11	\$5,136	\$7,704	\$12,840
Total	11,114	\$4,385,040,792	\$3,711,732,242	\$8,096,773,034

Source: Chatham County

D.3.2 Critical Facilities

Table D-10 – Critical Facilities and Infrastructure at Risk



Source: Chatham County

D.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

D.4.1 Flood

Approximately 12.8 percent of buildings in Pooler are within the mapped 1%-annual-chance floodplains (Zones A and AE) and 5.4 percent are within the X500 zone. Figure D-12 reflects the mapped flood hazard zones for the City of Pooler, and Figure D-13 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table D-11, below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

Table D-11 – Properties at Risk by Flood Zone

Flood Zone	Number of Parcels	Total Fair Market Building Value
A	138	\$45,093,400
AE	1,561	\$1,026,296,945
X500	714	\$662,483,710
Total	2,413	\$1,733,874,055

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2024

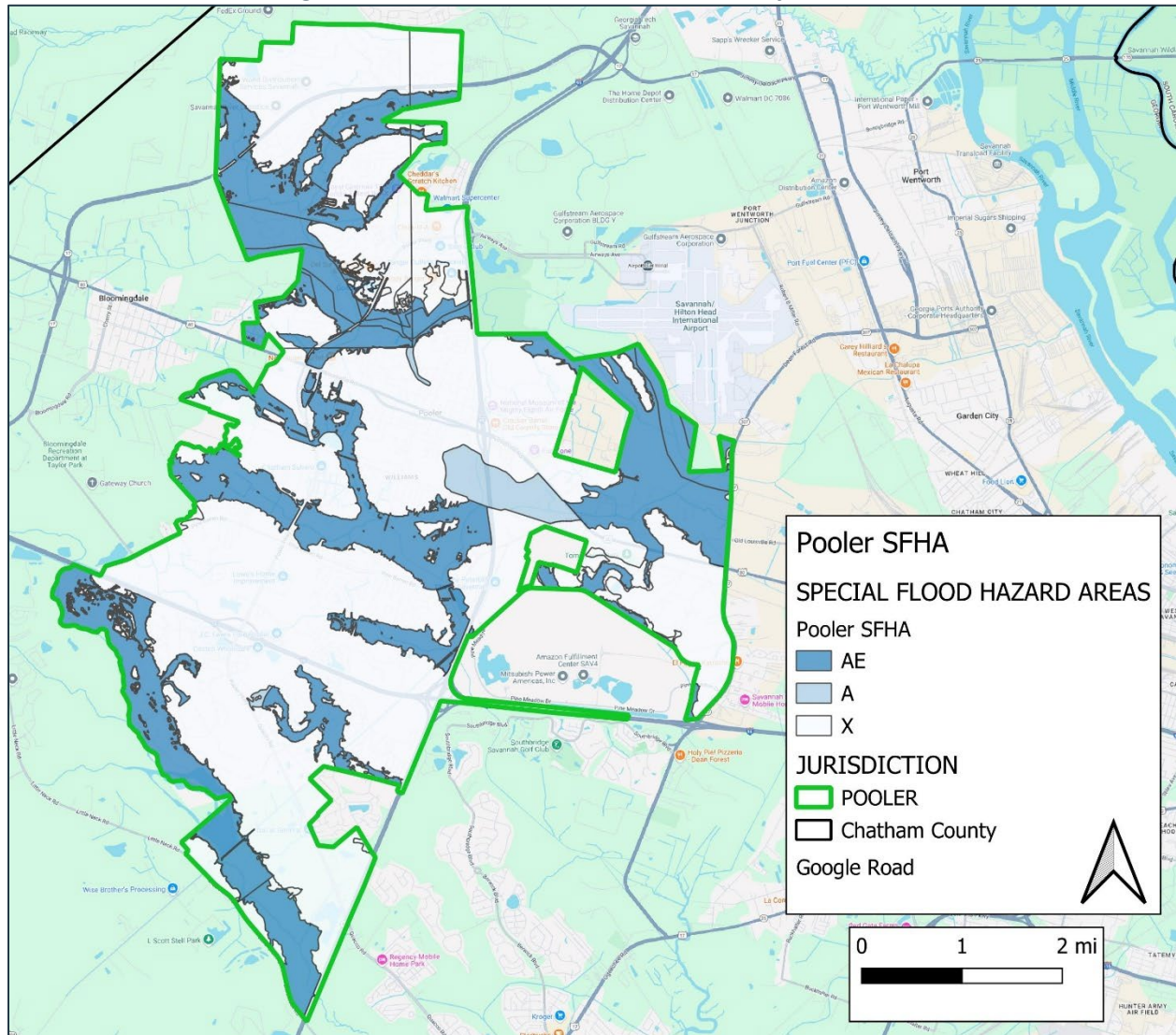
Table D-12 provides building counts and estimated damages by occupancy type for the 1% annual chance of a riverine flood event. The Oaks at Pooler is the only critical facility in Pooler at risk of damage during a 1% annual chance flood.

Table D-12 – Pooler Estimated Building Damage, 1% Annual Chance Riverine Flood

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damaged Buildings
Residential	9,282	1	\$2,694,163,053	\$36,058	0.00%
Total	9,282	1	\$2,694,163,053	\$36,058	0.00%

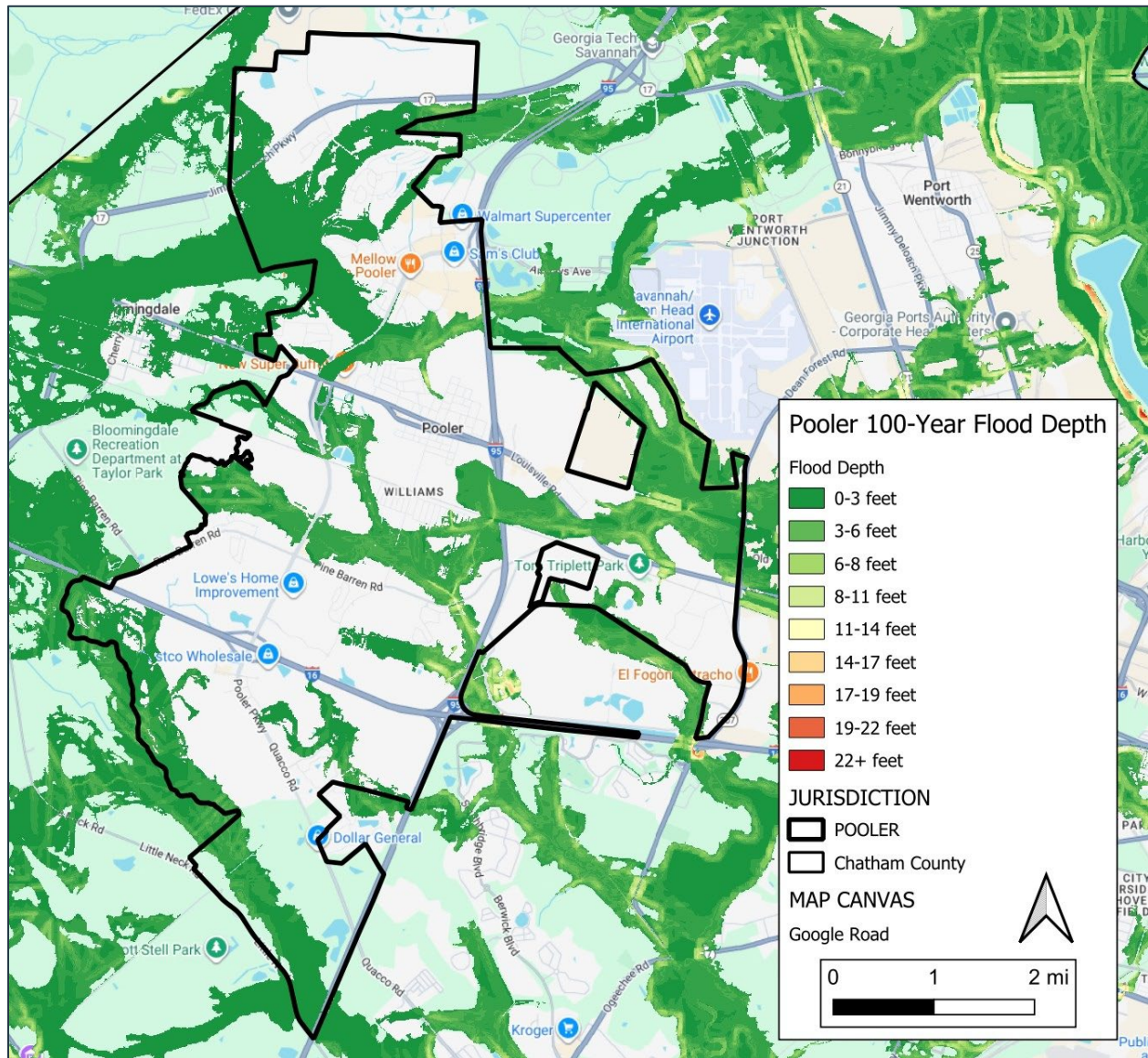
Source: HAZUS

Figure D-12 – FEMA Flood Hazard Areas, City of Pooler



Source: FEMA 2018 DFIRM

Figure D-13 – Flood Depth, 1%-Annual-Chance Floodplain, City of Pooler



Source: GEMA, UGA ITOS 2025

D.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table D-13 summarizes the wildfire risk products created for the jurisdiction.

Table D-13 – Wildfire Risk Assessment Products

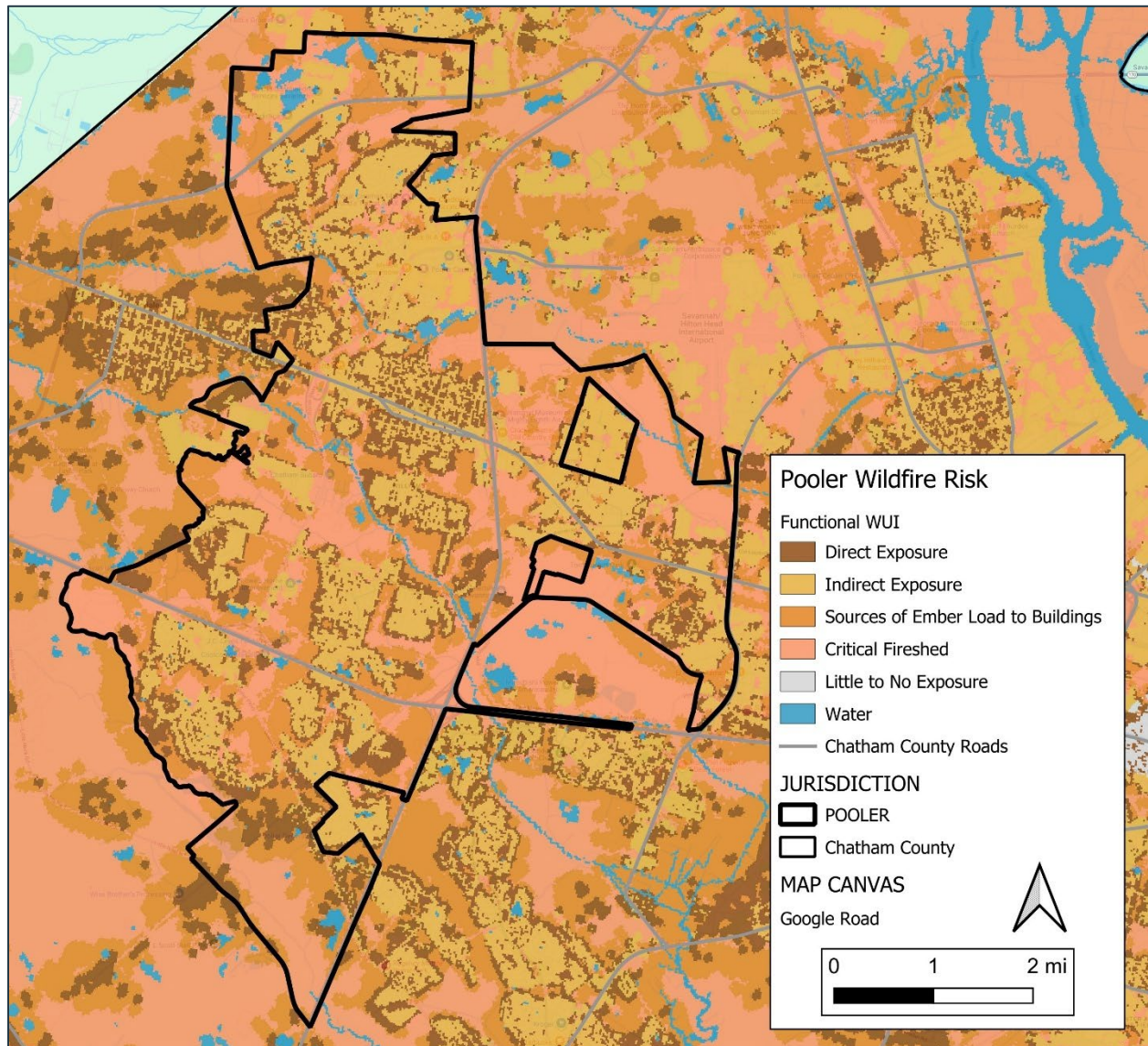
Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.

Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure D-14 depicts the Functional WUI for Pooler. Functional WUI risk across the city includes significant critical fireshed and sources of ember load with mostly indirect exposure to buildings across nearly all developed areas in the entire city. The categories of risk are defined below:

- **Direct Exposure** - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
- **Indirect Exposure** - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
- **Critical Fireshed** - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
- **Sources of Ember Load to Buildings** - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- **Little-to-No Exposure** - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No-Exposure zone, but smoke and evacuations could still impact this area.

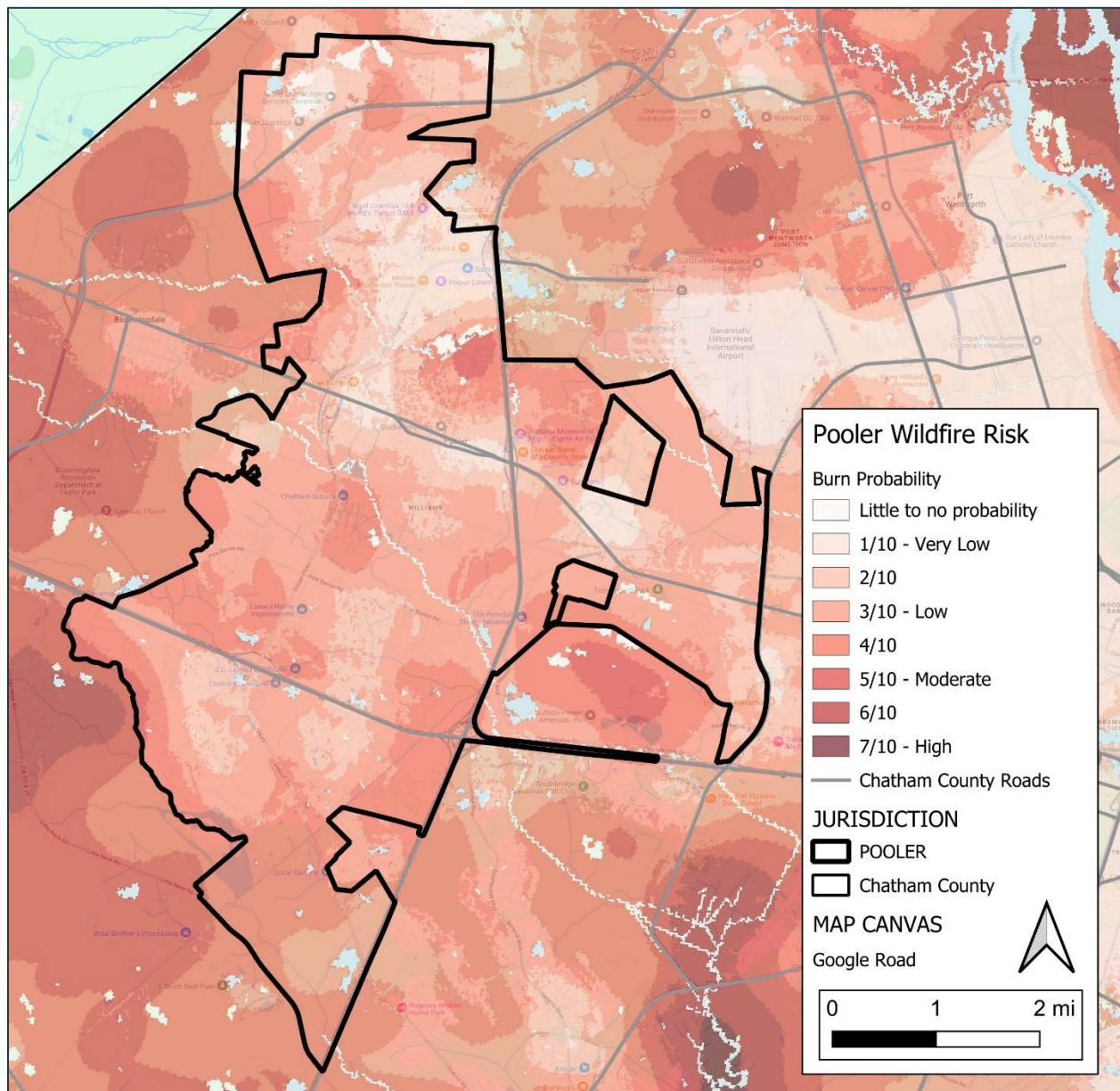
Figure D-14 – Functional Wildland Urban Interface, City of Pooler



Source: Southern Wildfire Risk Assessment

Figure D-15 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. Burn probability is generally low across the city, but there is some moderate risk around Benton Grove and the southern end of Quacco Road.

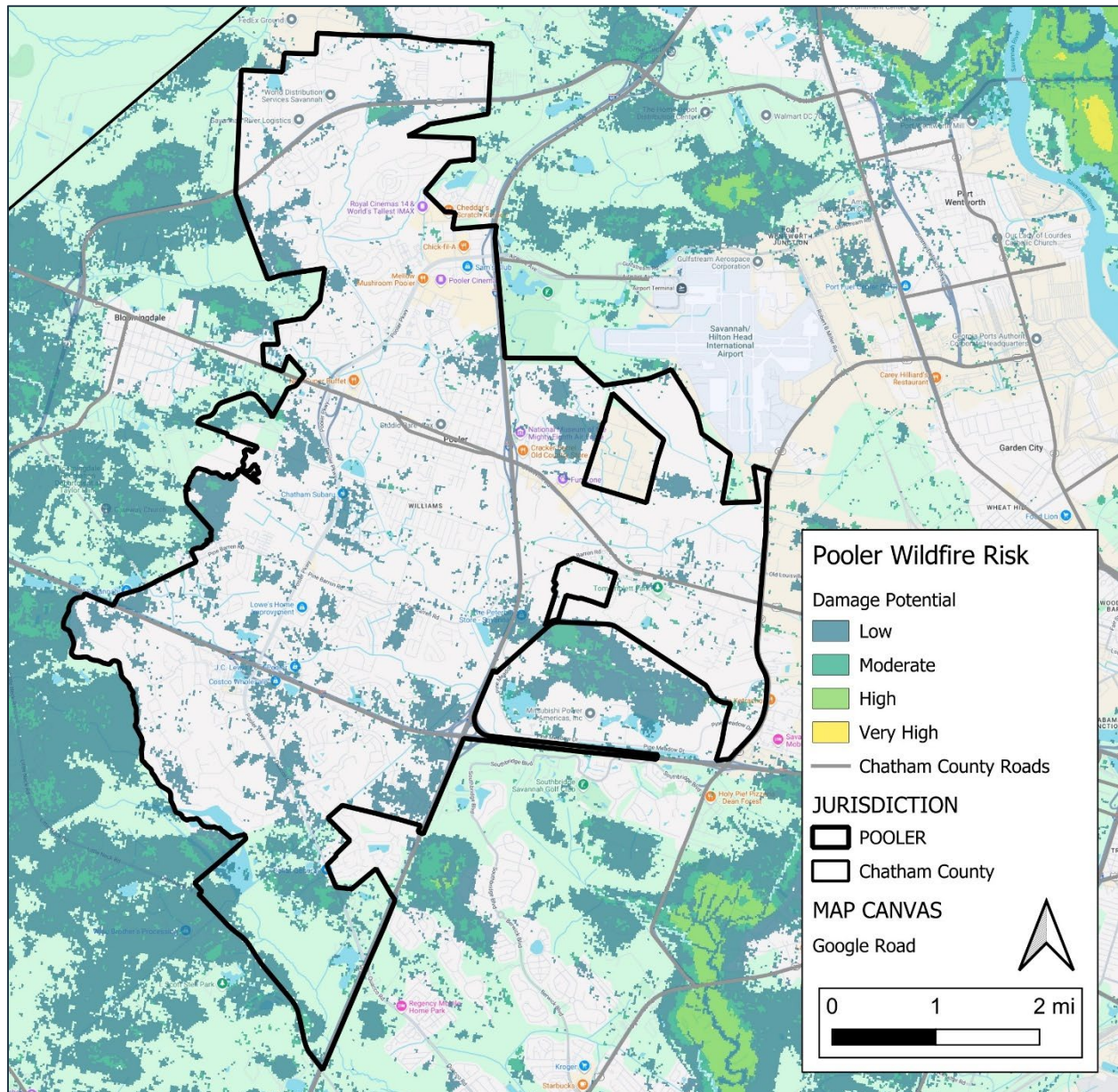
Figure D-15 – Burn Probability, City of Pooler



Source: Southern Wildfire Risk Assessment

Figure D-16 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. Damage Potential in Pooler is generally low across the city.

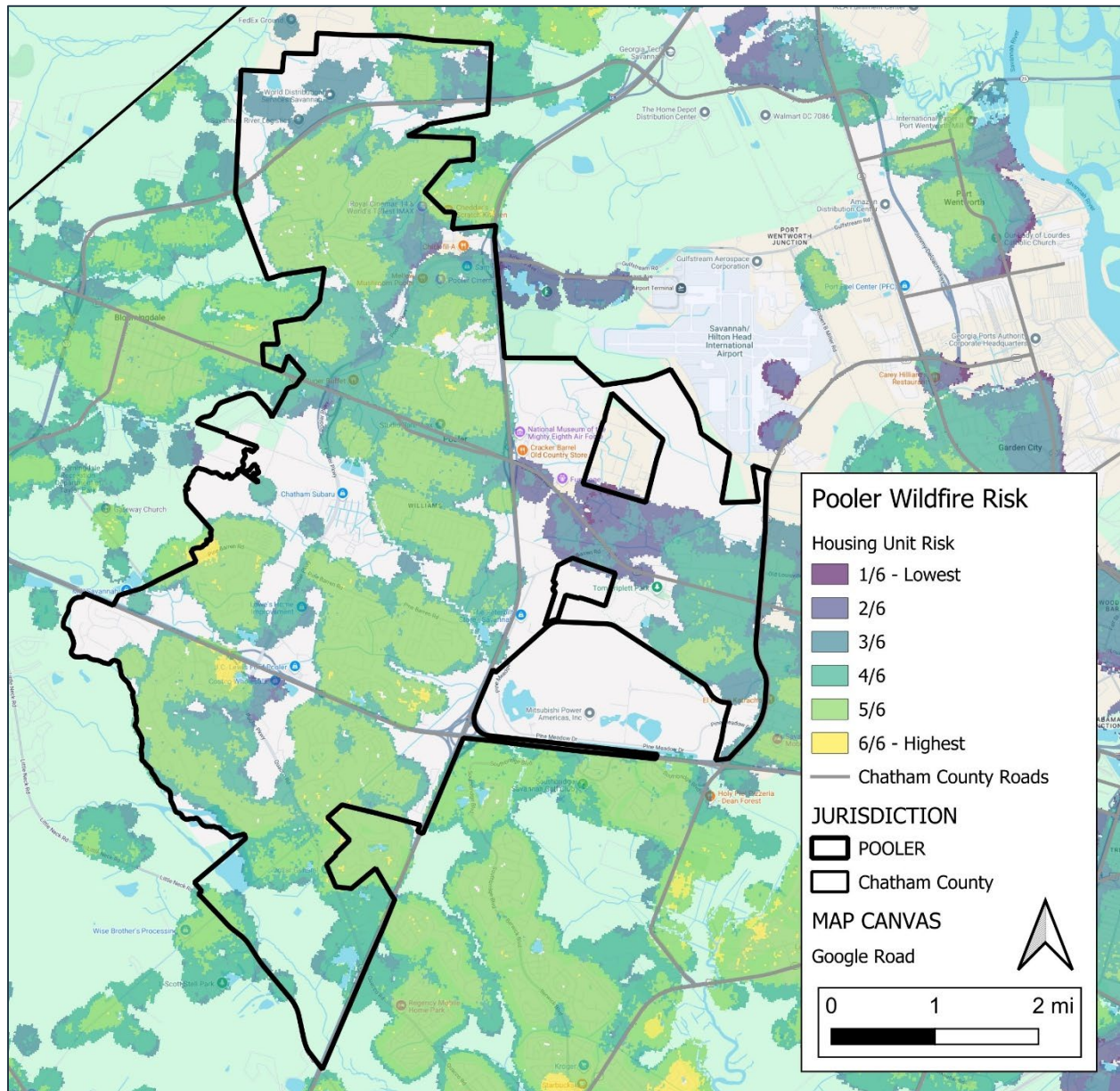
Figure D-16 – Damage Potential, City of Pooler



Source: Southern Wildfire Risk Assessment

Figure D-17 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. Pooler has generally equally moderate to high housing unit risk across the city.

Figure D-17 – Housing Unit Risk, City of Pooler



Source: Southern Wildfire Risk Assessment

D.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

The City of Pooler joined the NFIP emergency program in 1974 and has been a regular participant in the NFIP since September 1981. The following tables reflect NFIP policy and claim data for the City categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table D-14 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	1,521	\$1,110,382	\$470,033,000	50	\$656,250.19
2-4 Family	35	\$24,435	\$9,097,000	0	\$0
All Other Residential	68	\$79,325	\$28,744,000	0	\$0
Non-Residential	96	\$182,457	\$45,112,000	2	\$16,225.89
Total	1,720	\$1,396,599	\$522,986,000	52	\$672,476.08

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Table D-15 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Policies	Number of Post-FIRM Policies
AO1-30 & AE Zones	906	\$284,845.98	383	523
A Zones	66	\$0	49	17
B Zone / X Shaded	1	\$0	0	1
C / X Zone	747	\$387,630.10	259	488
No Zone Identified	0	\$0	0	0
Total	1,720	\$672,476.08	691	1,029

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

D.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Prevention									
P-1	Install hand sanitation stations in public spaces of government buildings	Communicable Disease	1.3, 3.1	Low	Public Works	HMGP, General Fund	2027	New	
P-2	Require portable hand sanitation stations near food stalls, restrooms, and porta-potties at public festivals and events	Communicable Disease	3.1	Low	City Administration	General fund	2027	New	
Property Protection									
PP-1	Protect sewer infrastructure from infiltration from flood water and related debris.	Flood, Tropical Cyclone	2.1	Moderate	City Administration	FMA; HMGP	2028	Carry Forward	Lack of funding
PP-2	Protect primary transportation route and maintain groundwater flow at Canal Bridge.	All	2.1	Moderate	City Administration	HMGP; FMA	2025	Carry Forward	Lack of funding
PP-3	Harden roof, windows, doors and rooftop units for critical facilities	All	1.3, 2.1	Moderate	City Administration	HMGP; PDM	2027	Carry Forward	Lack of funding
PP-4	Anchor HVAC units and Storage Tanks	All	2.1	Moderate	Public Works	TBD	2025	Carry Forward	Lack of funding
PP-5	Acquire or elevate properties prone to flooding	Flood, Tropical Cyclone	2.2, 3.1	Moderate	Public Works	HMGP	2030	Carry Forward	Lack of funding
PP-6	Elevate or dry floodproof components or systems vulnerable to flood damage	Flood, Tropical Cyclone	2.1	Moderate	Public Works	TBD	2025	Carry Forward	Lack of funding
Structural Projects									
SP-1	Construct and/or improve drainage systems to alleviate drainage issues.	Flood, Tropical Cyclone, Sea Level Rise	2.1	Moderate	Public Works	General fund, grants	2028	Carry Forward	Lack of funding
Emergency Services									
ES-1	Generators for critical facilities	All	2.1, 5.1	Moderate	City Administration	HMGP, General Fund	2027	Carry Forward	Lack of funding
ES-2	Portable generators for critical facilities	All	2.1, 5.1	Moderate	City Administration	HMGP, General Fund	2027	Carry Forward	Lack of funding
ES-3	Purchase and install generator quick connects and transfer switches for critical facilities	All	2.1, 5.1	Moderate	City Administration	HMGP, General Fund	2027	Carry Forward	Lack of funding
ES-4	Maintain and replace communication devices with current technology	All	2.1, 5.1	Moderate	City Administration	HMGP, HSGP	2027	New	
Public Awareness and Education									
PEA-1	Enhance our community outreach and education program	All	3.2	Moderate	City Administration	PDM, HMGP, General Fund	2027	New	

Annex E City of Port Wentworth

E.1 PLANNING PROCESS

The table below lists the HMPC members who represented the City of Port Wentworth.

Table E-1 – HMPC Members

Member Name	Title	Agency/Department
Lance Moore	Chief	Fire Department
Morgan Halloran	EMA Coordinator	Fire Department

E.2 COMMUNITY PROFILE

E.2.1 Overview of the Community

The City of Port Wentworth is located within the northern corner of Chatham County and is bordered by Effingham County to the north, by Garden City to the southeast, and the city limits of the City of Savannah to the southwest.

According to the U.S. Census Bureau, Port Wentworth has a total area of 16.12 square miles, of which 16.1 square miles (99.9%) is land and 0.05 square miles (0.1%) is water.²⁵

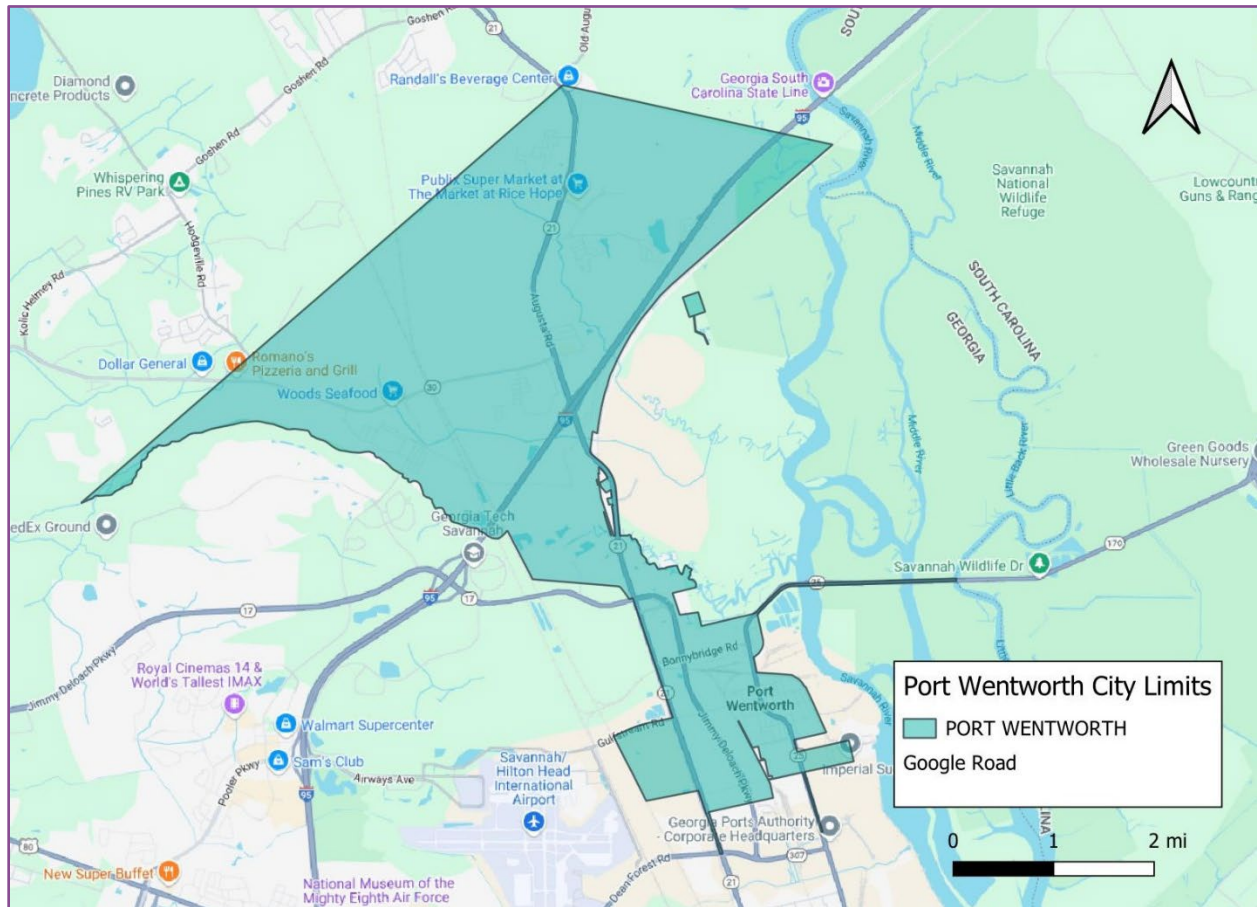
According to the U.S. Census Bureau’s American Community Survey (ACS) 5-Year Estimates, the city had a total population of 14,865 in 2024.²⁶ Therefore, the City’s average population density is approximately 922 people per square mile.

The map below shows Port Wentworth’s boundaries and shows the City’s location within the county and in relation to surrounding municipalities.

²⁵ <https://data.census.gov/table?q=Port+Wentworth+city,+Georgia+geography>. Retrieved 07-02-2025.

²⁶ <https://www.census.gov/quickfacts/fact/table/portwentworthcitygeorgia,chathamcountygeorgia,GA,US/IPE120223>. Retrieved 07-02-2025

Figure E-1 – Location Map, Port Wentworth



E.2.2 Geography and Climate

Please refer to the Chatham County Community Profile for a summary of climate for Chatham County.

The City of Port Wentworth lies within the Sea Island Flatwoods Level IV Ecoregion, which consists of flat plains on marine terraces. Waterways consist of swamps, bays, and low gradient streams with sandy and silty substrates. Elevations average approximately 20 feet. Typical land cover consists of evergreen forests, pine plantations, and forested wetlands.

The City of Port Wentworth is located partially within the Outlet Savannah River Basin HUC 12 and the Dasher Creek – Savannah River HUC 12 Basin.

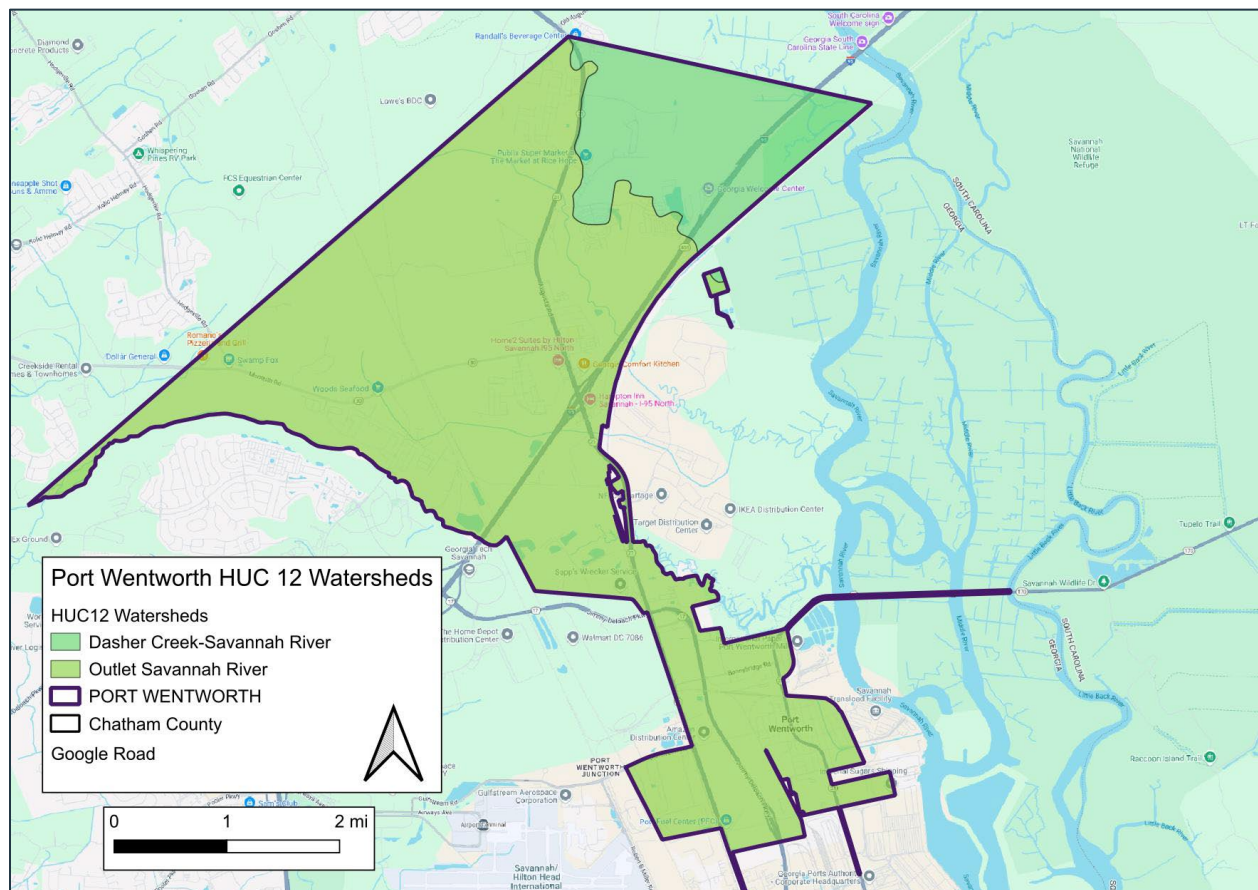
Table E-2 – HUC 12 Watersheds, Port Wentworth

Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Dasher Creek – Savannah River	87.86	3.11	84.75	Outlet Savannah River	030601090305
Outlet Savannah River	196.73	109.31	87.42	Atlantic Ocean	030601090307

Source: Chatham County Coastal Watershed Management Plan, 2020

The figure below illustrates the HUC 12 drainage basins and drainage features in and around Port Wentworth.

Figure E-2 – HUC 12 Watersheds, Port Wentworth



E.2.3 Cultural, Historic, and Natural Resources

E.2.3.1 Cultural and Historic Resources

Community Center

The Community Center is located on Appleby Road and is available for rent by any resident of Port Wentworth. The facility will accommodate approximately 100 people and has a fully equipped kitchen with tables and chairs.



Houston Museum

Houston Baptist Church and its adjoining cemetery were organized in 1886 under the leadership of Reverend Ulysses L. Houston, minister of First Bryan Baptist Church in Savannah. A significant leader in the African-American community, Houston attended the meeting at General Sherman's Savannah headquarters in January 1865 that resulted in Special Field Order No. 15 (the redistribution of confiscated coastal land in 40-acre tracts to newly freed slaves). Houston also served a term in Georgia's Reconstruction legislature. Established in the tradition of plantation praise houses intended to Christianize the enslaved populations of plantations, Houston Baptist Church served the African-Americans of Rice Hope Plantation. The church continued to serve the local community until the 1970s. The original structure collapsed in 2007 after a terrible storm in Port Wentworth. Today, the property is owned by the City of Port Wentworth. The city, community organizations, and residents have rebuilt the structure into a heritage museum honoring the rich history of the area.



Mulberry Grove Plantation



In 1975, Mulberry Grove was listed on the National Register of Historic Places.

During the period when silk production was an industrial objective for colonization, a mulberry nursery was supported. With failure of the silk industry, Mulberry Grove was among the first estates to have its marsh acreage cultivated for rice production and to prosper. When the rice market fluctuated, cotton was experimented with. The cotton gin was invented at Mulberry Grove during this time.

Mulberry Grove was a portion of river acreage designated by Oglethorpe as Joseph's Town, prior to John Cuthbert's 500-acre grant in 1735. The settlement failed while Mulberry Grove flourished, as Cuthbert cooperated with the Trustees by starting a mulberry nursery.

Cuthbert's daughter and heiress married Dr. Patrick Graham who rose to the presidency of the Board of President and Assistants of the Colony. Under his direction, the planting of rice was successfully experimented with. After Graham's death in 1755, Mulberry Grove passed through a number of ownerships being bought in 1774 by John Graham, member of the King's Council and later Lieutenant Governor of Georgia. However, pre-Revolutionary disturbances between patriots and loyalists halted plantation work. Graham left Georgia for England in May of 1776.

Mulberry Grove, as a "Gift Deed," was conveyed to Major General Nathanael Greene by the State on April 13, 1785, as a reward for patriotic activities in Georgia. After moving to Mulberry Grove in October of 1785, Greene died in June of 1786. His family continued to reside at Mulberry Grove, receiving President Washington in 1791.

In 1793, Mrs. Greene's guest Eli Whitney, recognized the need for a more expeditious means of preparing cotton for an expanding market. Whitney experimented with various models, developing a working model from which he built a large ginning machine in 1794.

The main house and many of the outbuildings were destroyed by Union troops. The following years never again saw the restoration of Mulberry Grove to its former status, although some of the fields were cultivated by subsequent owners. The property now lies overgrown with weeds and trees.

E.2.3.2 Parks, Preserve, and Conservation

P.B. Edwards, Jr. Gymnasium

The P.B. Edwards, Jr. Gymnasium is located at 101 Turnberry Street and can be rented for many occasions. The gymnasium measures 100' by 80' and seats approximately 300. It has a full kitchen/concession stand with pull out bleachers, tables, and chairs, as well as a high school regulation basketball court, volleyball court, and skates for skate party rentals.

Basketball Courts

There are two outdoor basketball courts with one located on Warren Drive and the other located behind Fire Station #1 on Cantyre Street. Each court has two goals.



Pavilion

The Pavilion is located near Fire Station #1 on Cantyre Street. It has picnic tables, grills, and electricity. The residents of Port Wentworth are encouraged to use this facility for their next outdoor event.



E.2.3.3 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within the City of Port Wentworth are identified in the figure below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and

Chatham County

Multi-Jurisdictional Pre-Disaster Hazard Mitigation Plan
2025

include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table E-3 – Flood Zones, Port Wentworth

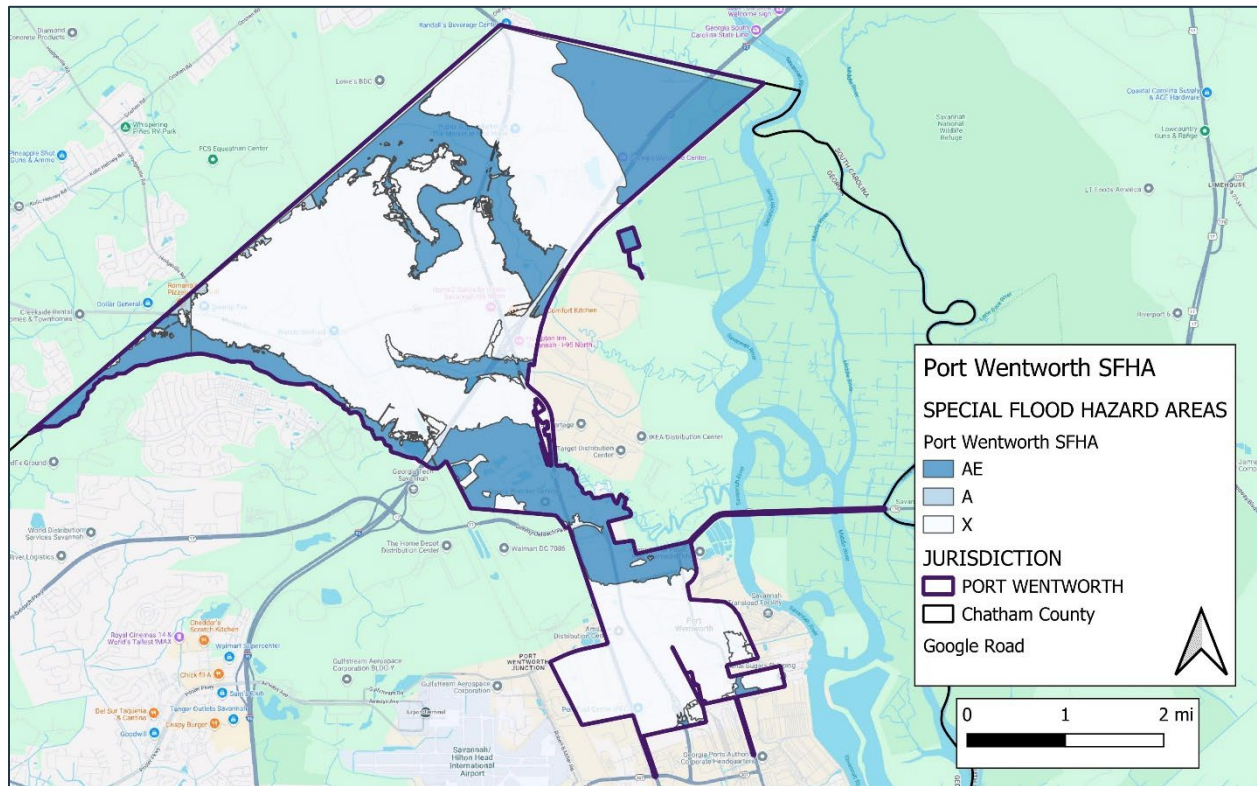
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
A	44	0.07	0.004
AE	3,457	5.40	32.6
X500	280	0.44	2.7
X	6,829	10.67	64.4
TOTAL	10,610	16.58	100.0

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, 3,501 acres of the land within the city are located within a 100-year floodplain (Zone AE and A), which equals 32.6 percent of the city. An additional 6,829 acres are located within moderate or minimal flood hazard areas (64.4% of the city). With nearly 33 percent of the city at high risk of flooding in the Special Flood Hazard Area (SFHA), the City of Port Wentworth should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in Port Wentworth include wetland areas and low-lying land along the major waterways in and around the city including the Savannah River, Black Creek, and Little Hearst Branch. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates, and acting as a flood storage area to reduce downstream peaks. The city should strive to keep floodplain and floodplain waters free of contaminants, such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

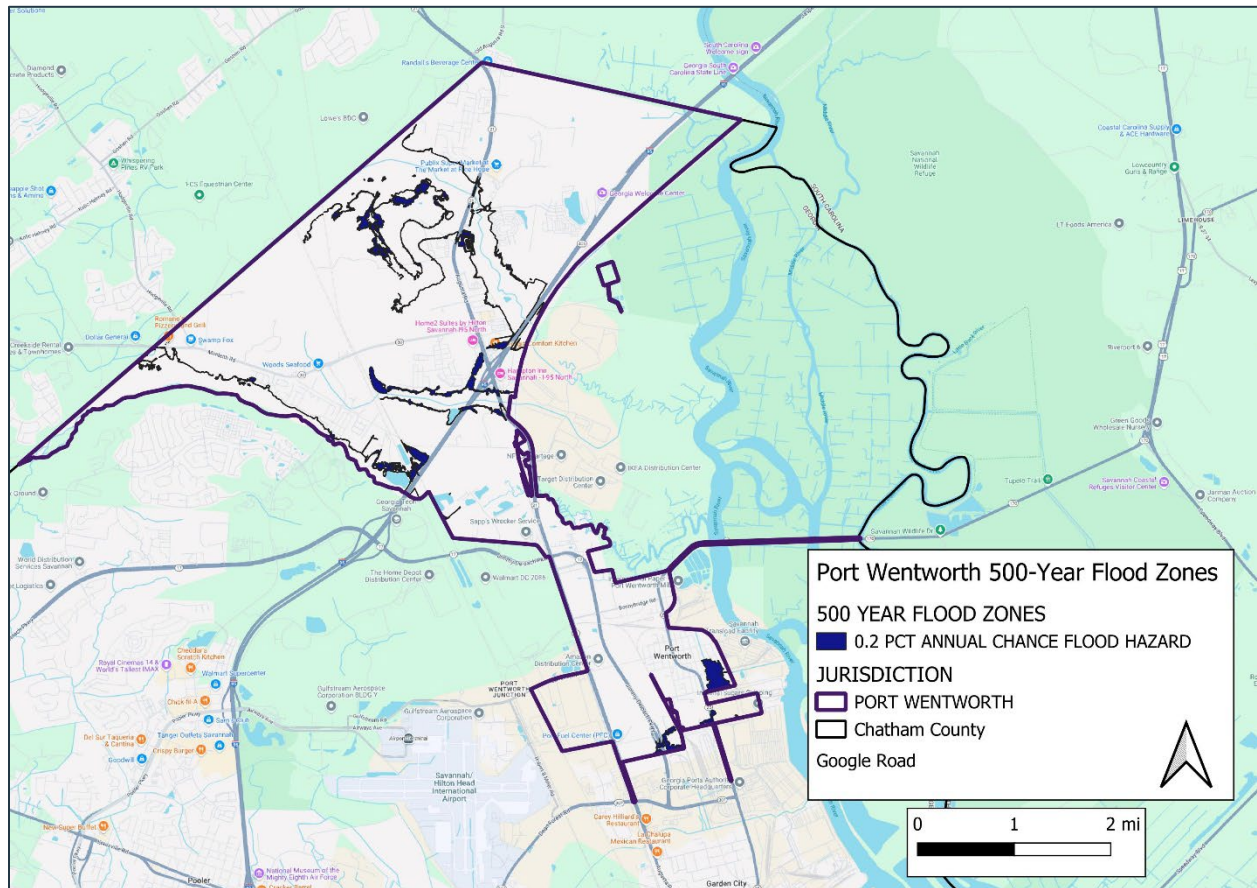
Figure E-3 – FEMA Flood Zone Map, Port Wentworth



Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplain, these zones can still experience significant flooding during extreme events. The X500 zone for Port Wentworth is depicted in the map below and represented in Table E-3 above.

Figure E-4 – X500 Zone, Port Wentworth



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through these processes pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetlands Inventory (NWI), wetlands throughout the City of Port Wentworth make up 8,599.31 acres (13.44 square miles) or 83.4 percent of the city (see the Wetlands Map below).

Table E-4 – Wetland Types, Port Wentworth

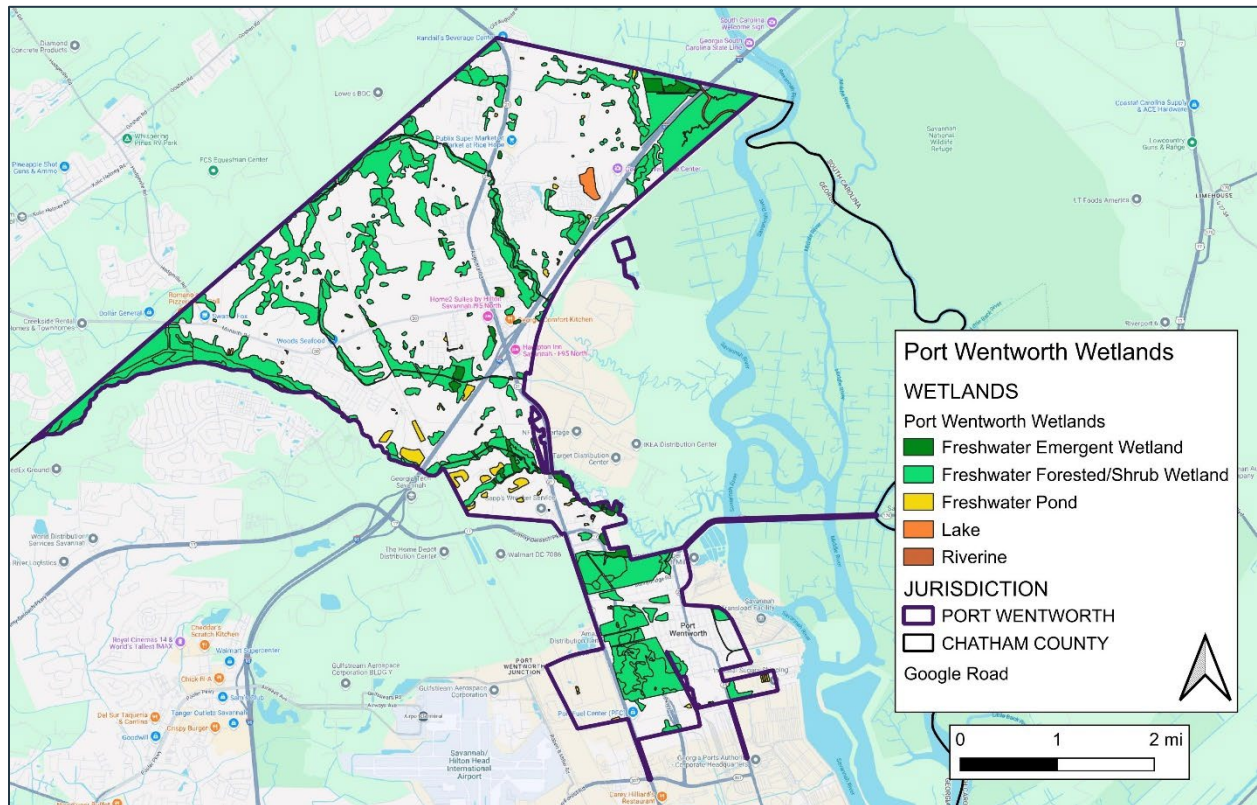
Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Non-Wetland	1,717.49	2.68	16.6
Freshwater Emergent Wetland	892.27	1.39	8.6
Freshwater Forested/Shrub Wetland	5,369.74	8.39	52.0
Freshwater Pond	99.13	0.15	0.9
Lake	24.92	0.04	0.2
Riverine	2,213.25	3.46	21.5
TOTAL	10,316.80	16.12	100.0

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Chatham County

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2025

Figure E-5 – Wetlands Map, Port Wentworth



Source: National Wetlands Inventory, 2022; SAGIS, 2025

Freshwater Emergent Wetland

Freshwater emergent wetlands are classified within the Palustrine System by the U.S. Fish and Wildlife Service (USFWS) as part of their National Wetlands Inventory (NWI). This system categorizes wetlands based on their landscape position, vegetation cover, and hydrologic regime. Within the Palustrine System, emergent wetlands are further defined by their vegetation (grasses, sedges, forbs) and whether the vegetation is persistent (remaining until the next growing season) or non-persistent.

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Freshwater Pond

Within the Palustrine system, ponds are often categorized as Lacustrine or Palustrine. Specifically, ponds may be classified as emergent, scrub-shrub, or forested, depending on the dominant vegetation.

Lake

Lacustrine wetlands are defined as wetlands associated with lakes and large ponds. They are characterized by the water level of the lake influencing the water table of the adjacent wetland, and they often occur along lake shores.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across the City of Port Wentworth, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure E-6 – Land Cover Map, Port Wentworth

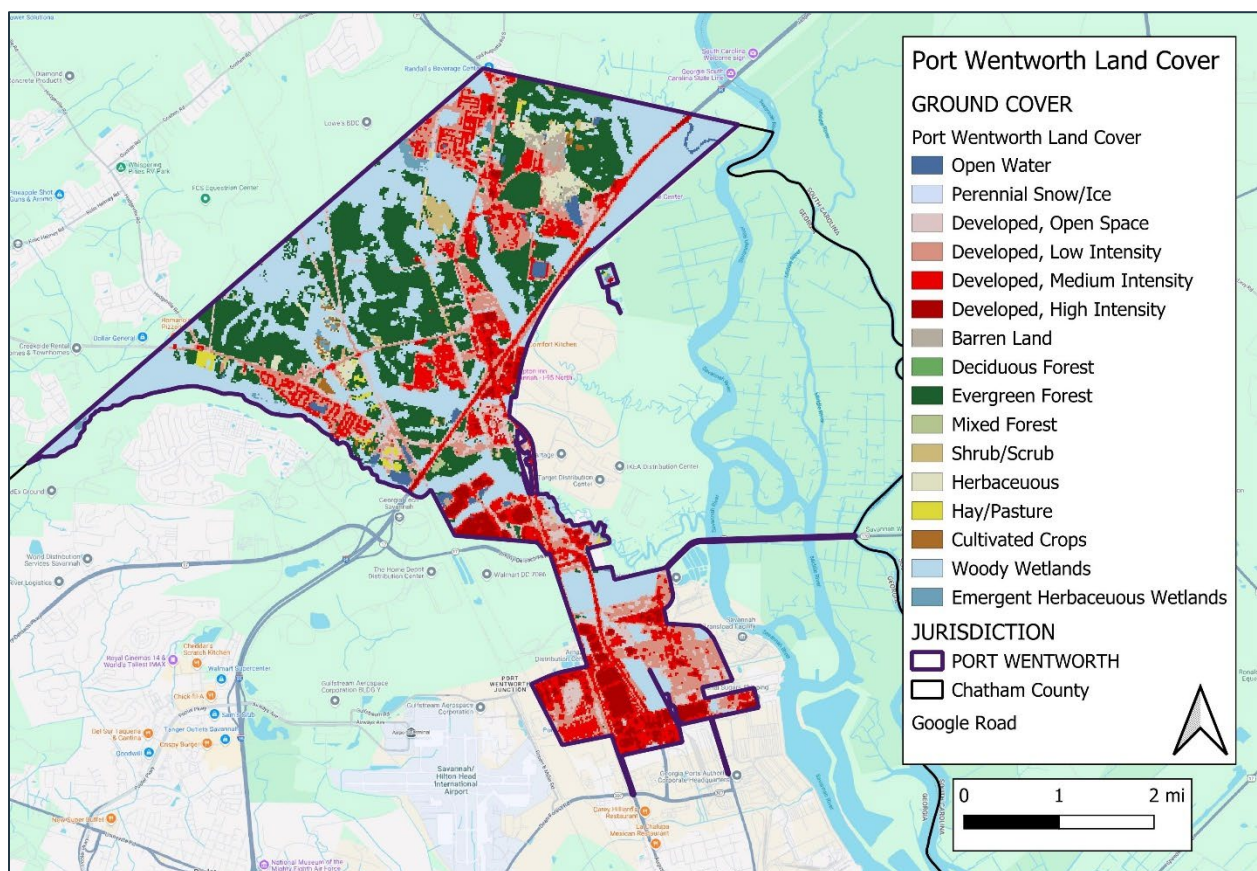
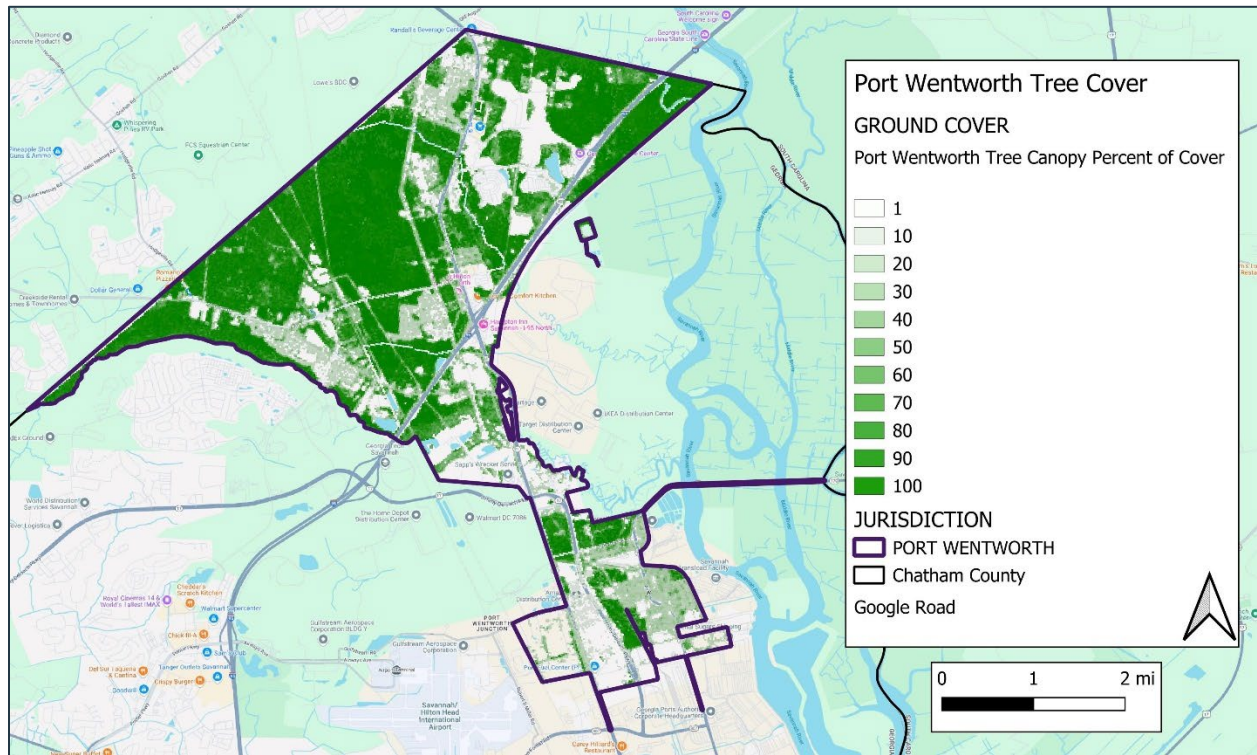


Figure E-7 – Tree Cover Map, Port Wentworth



E.2.4 History

Port Wentworth was founded in 1733 but not incorporated until 1957, and its history arises out of the native Indian tribes and first settlers of the Trust Colony of Georgia. Port Wentworth was originally part of several colonial plantations, including Mulberry Grove where Eli Whitney revolutionized the South by inventing the cotton gin in 1793. Today, Port Wentworth's Exit 109 area is a well-placed home base of hotels, motels, and restaurants and a convenient lodging spot for tourists. Only 11 miles from Savannah's Historic District, exit 109 is the closest I-95 exit to Georgia's First City with direct trolley service from all Port Wentworth hotels.

E.2.5 Economy

E.2.5.1 Wages and Employment

Per the 2019-2023 American Community Survey 5-Year Estimates, the median household income for Port Wentworth is \$78,861, which is 5.5 percent higher than the state's median household income (\$74,664).²⁷ Approximately 9.8 percent (1,172) of the population is considered to be living below the poverty level. Moreover, 16.1 percent (518) of people under 18 years of age and 4.8 percent (50) of people 65 years and over are living below the poverty level.²⁸

The table below shows employment and unemployment rates along with industry employment by major classification for the city.²⁹

²⁷

<https://www.census.gov/quickfacts/fact/table/portwentworthcitygeorgia,chathamcountygeorgia,GA,US/IPE120223>. Retrieved 07-02-2025.

²⁸ <https://data.census.gov/table?q=Port+Wentworth+city,+Georgia+poverty+level>. Retrieved 07-02-2025.

²⁹ <https://data.census.gov/table?q=Port+Wentworth+city,+Georgia+employment>. Retrieved 07-02-2025.

Table E-5 – Employment and Occupation Statistics for Port Wentworth, GA, 2019-2023

Employment Status	Count	Percentage (%)
In labor force	7,107	78.3
Employed	6,702	73.9
Unemployed	288	3.2
Armed Forces	117	1.3
Not in labor force	1,967	21.7
Occupation	Count	Percentage (%)
Management, business, science, and arts	2,037	30.4
Service	833	12.4
Sales and office	2,051	30.6
Natural resources, construction, and maintenance	328	4.9
Production, transportation, and material moving	1,453	21.7

Source: U.S. Census Bureau, 2019-2023 American Community Survey (ACS)

Major industry sectors in the City of Port Wentworth include management, business, science, and arts (30.4%); service (12.4%); sales and office (30.6%); natural resources, construction, and maintenance (4.9%); and production, transportation, and material moving (21.7%).

Major employers are discussed in the Chatham County Community Profile.

E.2.6 Housing

According to the 2019-2023 ACS 5-Year Estimates, there are 4,854 housing units in Port Wentworth, of which 91.0 percent (4,419) are occupied.³⁰ Approximately 66.0 percent (2,917) of occupied units are owner-occupied (34.0% occupied by renters). A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because, according to Cutter, et al. (2003), renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster. Therefore, higher rates of home rentals in Port Wentworth may indicate that residents are not able to implement certain types of mitigation in their homes.

Median home value in Port Wentworth is \$204,900. Of the town's owner-occupied housing units, 75.7 percent (2,209) have a mortgage. Most householders (72.7% / 3,213) have lived in their current homes since the year 2000 or later, 13.1 percent (577) moved in between 2000 and 2009, 31.0 percent (1,370) moved in between 2010 and 2017, 24.1 percent (1,064) moved in between 2018 and 2020, and 20.4 percent (902) moved in 2021 or later. 1.1 percent (48) of householders in occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

The majority (68.1% / 3,304) of housing units in Port Wentworth are detached single family homes. However, 1.6 percent (78) of units are mobile homes, which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

The City's housing stock is relatively new, with the majority (69.8% / 3,389) of occupied housing built after 2000. The table below details housing age in the town.

³⁰ <https://data.census.gov/table/ACSDP5Y2023.DP04?q=Port+Wentworth+city,+Georgia+tenure>. Retrieved 07-02-2025.

Table E-6 – Housing Age, Port Wentworth

Year Structure Built	Percent of Occupied Housing	Number of Structures
2020 or later	5.8	282
2010 to 2019	27.3	1,326
2000 to 2009	36.7	1,781
1980 to 1999	8.3	405
1960 to 1979	11.8	570
1940 to 1959	9.2	448
1939 or earlier	0.9	42

Source: U.S. Census Bureau, American Community Survey 2019-2023 5-Year Estimates

Age can indicate the potential vulnerability of a structure to certain hazards. For example, the City of Port Wentworth first entered the National Flood Insurance Program in 1973. Therefore, based on housing age estimates, approximately 16 percent of housing in the City was built before any floodplain development restrictions were required.

E.2.7 Population

According to the U.S. Census Bureau, Port Wentworth had an estimated population of 14,865 residents in 2024 and a population of 10,878 at the time of the 2020 U.S. Census (36.7% increase from 2020-2024).³¹ As of 2024, Port Wentworth's population density was 922 persons per square mile. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates.

Table E-7 – City of Port Wentworth Demographic Profile Data, 2019-2023

Demographic	Port Wentworth
Gender/Age	
Male	5,598
Female	6,399
Under 5 Years	713
65 Years and Over	1,085
Race/Ethnicity (One Race)	
White	4,990
Black or African American	5,886
American Indian/Alaska Native	0
Asian	68
Two or More Races	177
Hispanic or Latino ¹	1,336
Education	
High School Graduate or Higher	6,427
Bachelor's Degree or Higher	2,232

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

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<https://www.census.gov/quickfacts/fact/table/portwentworthcitygeorgia,chathamcountygeorgia,GA,US/IPE120223>. Retrieved 07-02-2025.

¹Hispanics may be of any race, so also are included in applicable race categories.

E.2.8 Land Use

Land use information discussed in this section was obtained from the Port Wentworth 2021-2041 Comprehensive Plan (Comp Plan).

E.2.8.1 Existing Land Use

According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

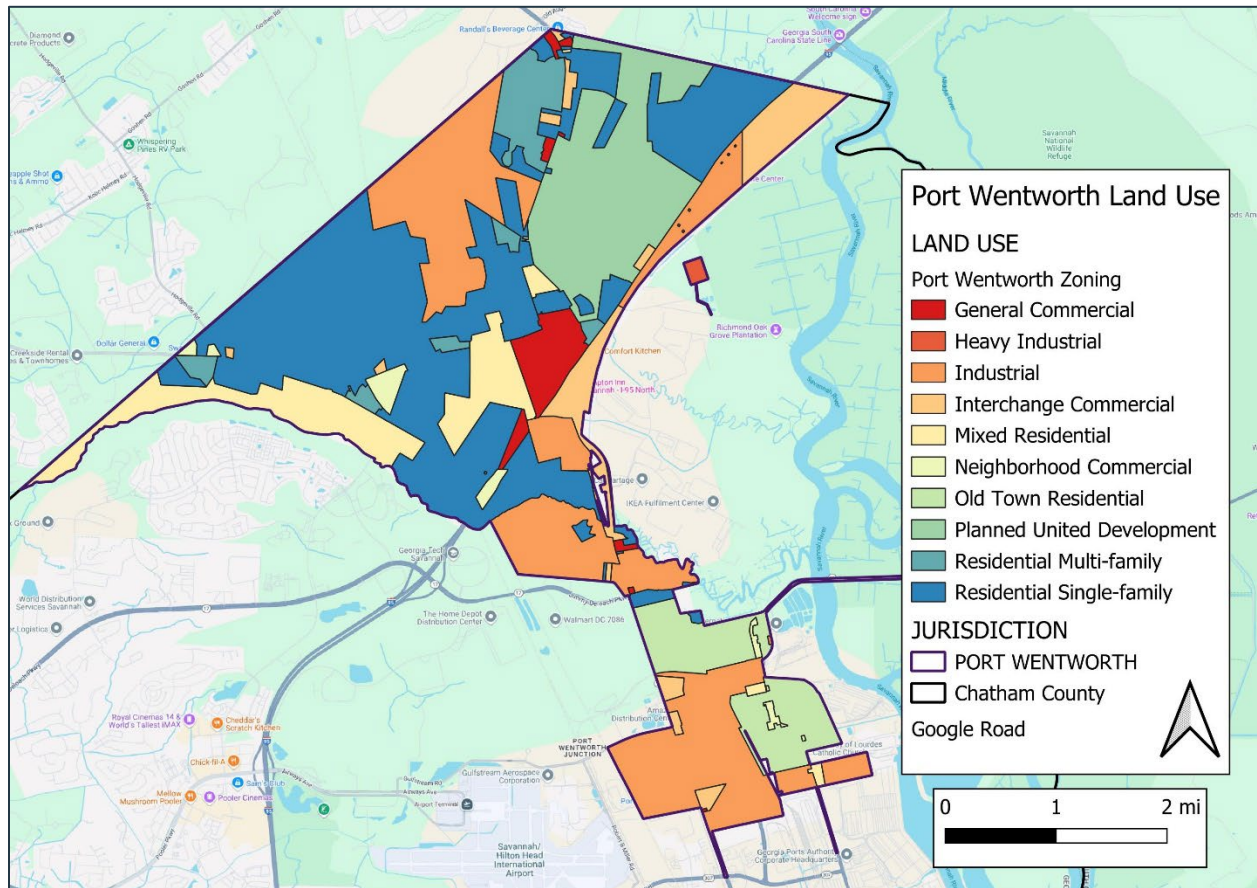
Table E-8 – Existing Land Use, Port Wentworth

Land Use/Zoning	Area (Acres)	Area (Square Miles)
General Commercial	308	0.48
Heavy Industrial	4,465	6.98
Industrial	2,686	4.20
Interchange Commercial	586	0.92
Mixed Residential	908	1.42
Residential Multi-Family	419	0.65
Neighborhood Business/Commercial	124	0.19
Old Town Residential	724	1.13
Planned Unit Development	1,353	2.11
Residential Single-Family	3,706	5.79
TOTAL	15,279	23.87

Source: SAGIS – Zoning, 2024

An existing land use map for zoning is included below for Port Wentworth, as taken from the SAGIS map viewer for Chatham County.

Figure E-8 – Existing Land Use and Zoning Map, Port Wentworth



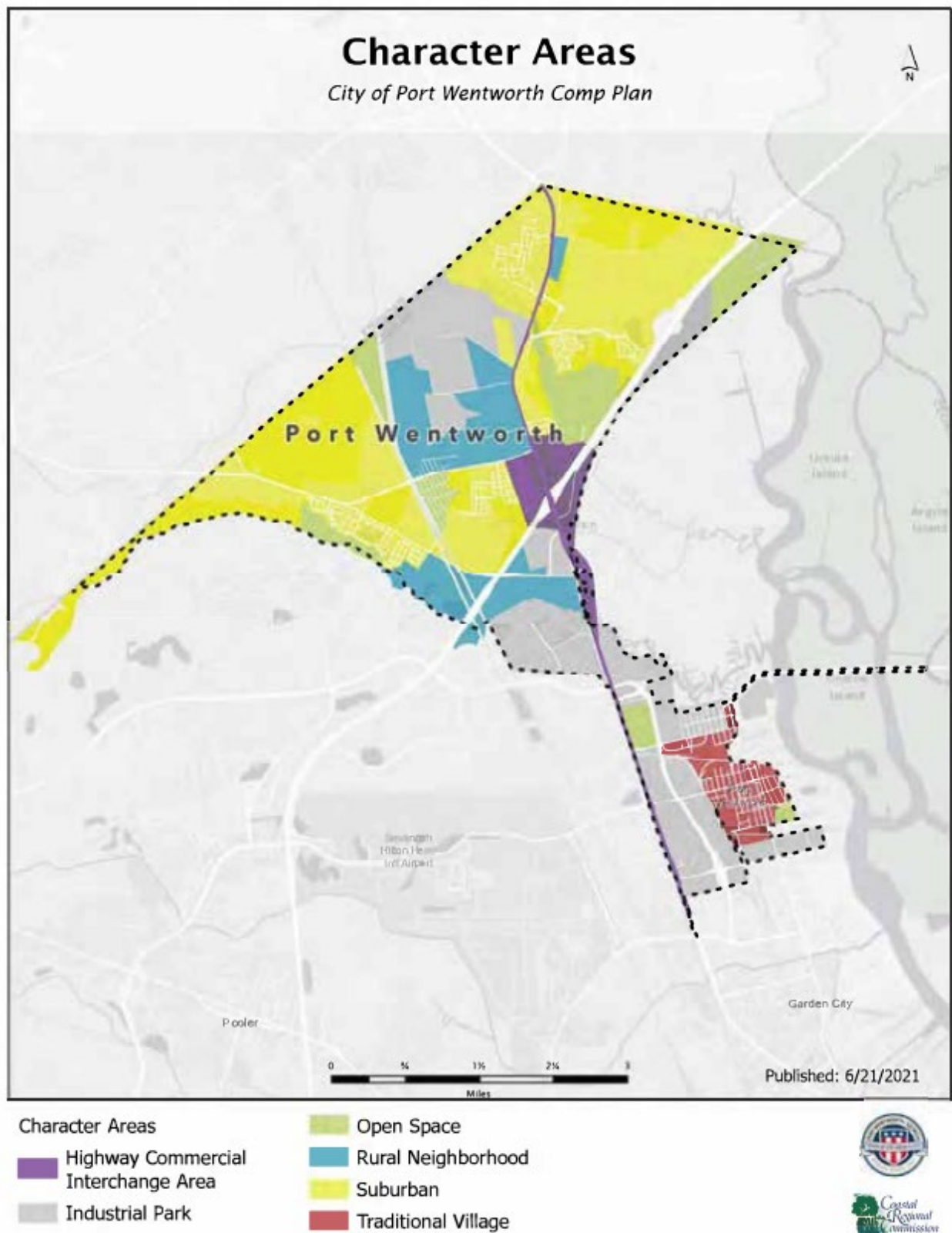
Source: SAGIS – Zoning, 2024

E.2.8.2 Community Character Areas and Future Development Strategy

The City of Port Wentworth identified “character areas” in the city to identify future development patterns in the community. The following Character Areas were established:

- **Traditional Village:** Comprises the historic downtown district surrounded by older residential areas with more traditional development patterns.
- **Rural Neighborhood:** Rural, undeveloped land having little development pressure for suburban growth.
- **Suburban:** Areas where typical types of suburban residential subdivision development have already occurred and will occur in the future.
- **Highway Commercial Interchange Area:** Includes restaurants, trucking stops, and shelters along Highway 21, including the I-95 and Highway 21 intersection that is a significant means of access to the city.
- **Industrial Park:** Areas include higher intensity manufacturing, assembly, processing, transportation, and warehouse activities.
- **Open Space:** Area of protected lands established for recreation, alternative transportation, or conservation.

Figure E-9 – Character Areas Map, Port Wentworth



Source: 2021-2041 Comprehensive Plan

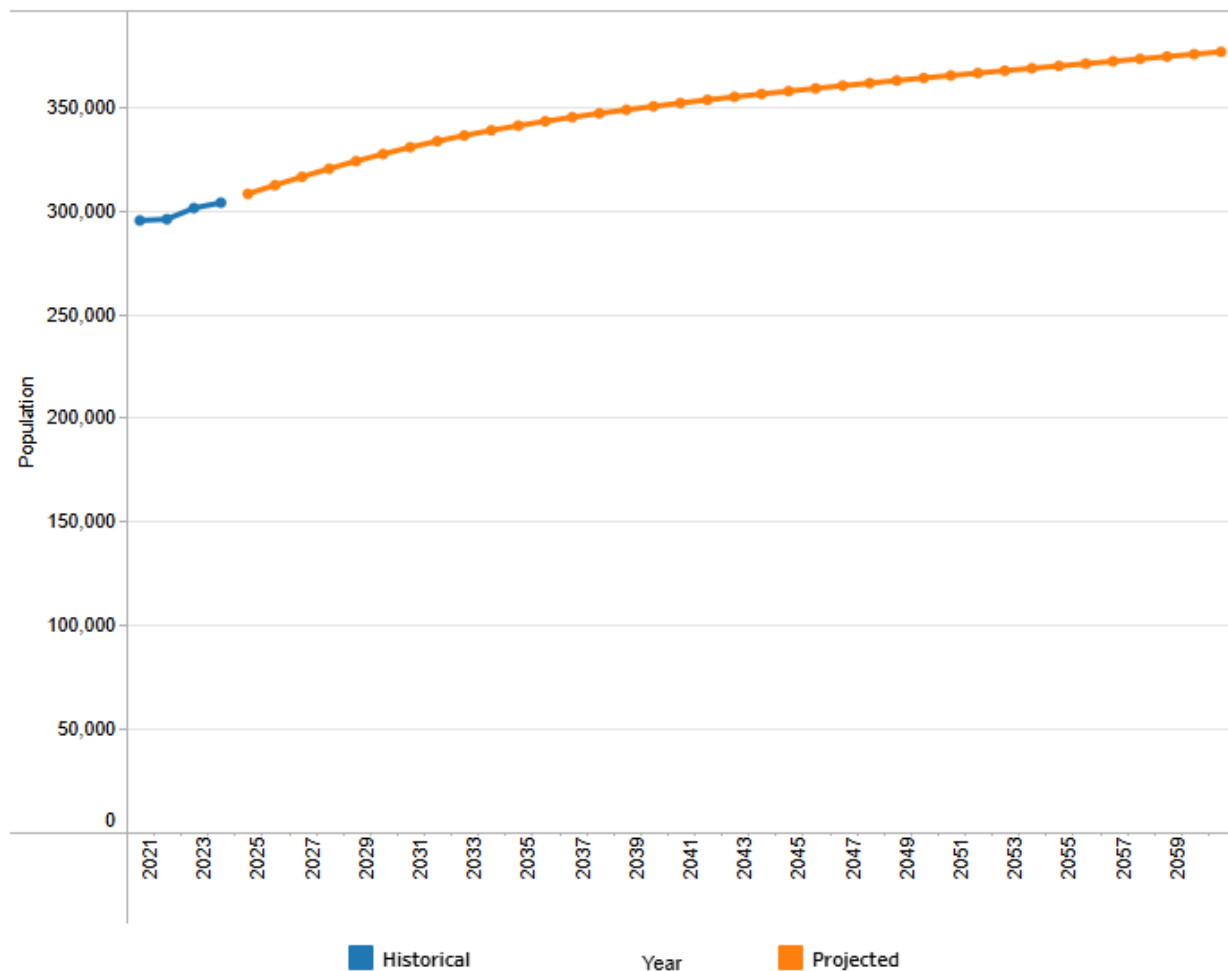
E.2.9 Growth and Development Trends

According to the U.S. Census Bureau, Port Wentworth had an estimated population of 14,865 residents in 2024 and a population of 10,878 at the time of the 2020 U.S. Census, representing a total increase of 36.7 percent and an annual increase of 9.2 percent.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be about 0.8 percent through 2060. Only population projections for Chatham County are included in this section as there are currently no population projections available for Port Wentworth at the time of planning.

Figure E-10 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget

E.3 ASSET INVENTORY

E.3.1 Property

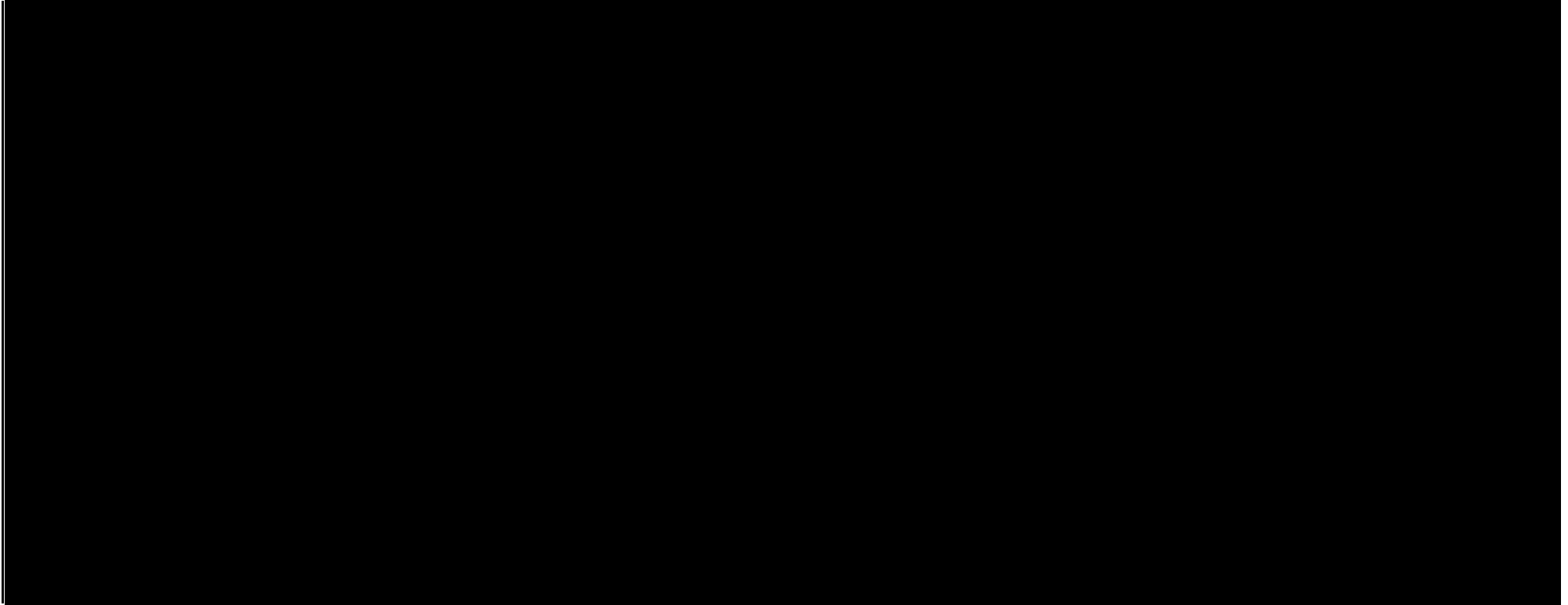
Table E-9 – City of Port Wentworth Building Exposure

Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	213	\$315,335,050	\$315,335,050	\$630,670,100
Government	20	\$5,905,200	\$5,905,200	\$11,810,400
Industrial	100	\$362,361,118	\$543,541,677	\$905,902,795
Non-Profit	29	\$4,512,900	\$4,512,900	\$9,025,800
Residential	4,436	\$719,187,958	\$359,593,979	\$1,078,781,937
Utility	25	\$5,056	\$7,584	\$12,640
Total	4,823	\$1,407,307,582	\$1,228,896,390	\$2,636,203,672

Source: Chatham County

E.3.2 Critical Facilities

Table E-10 – Critical Facilities and Infrastructure at Risk



Source: Chatham County

*Served by PTW-2 Generator

** Per J. Thornburg on 5 oct 09, no generators are required for pump stations. The city will use diesel pumps as backup service.

E.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

E.4.1 Flood

Approximately 3.9 percent of buildings in Port Wentworth are within the mapped 1%-annual-chance floodplains (Zones A, AE, and VE) and 2.4 percent are within the X500 zone. Figure E-11 reflects the mapped flood hazard zones for the City of Port Wentworth, and Figure E-12 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table E-11, below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

Table E-11 – Properties at Risk by Flood Zone

Flood Zone	Number of Buildings	Total Fair Market Building Value
AE	218	\$218,784,566
X500	135	\$96,511,900
Total	353	\$315,296,466

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2024

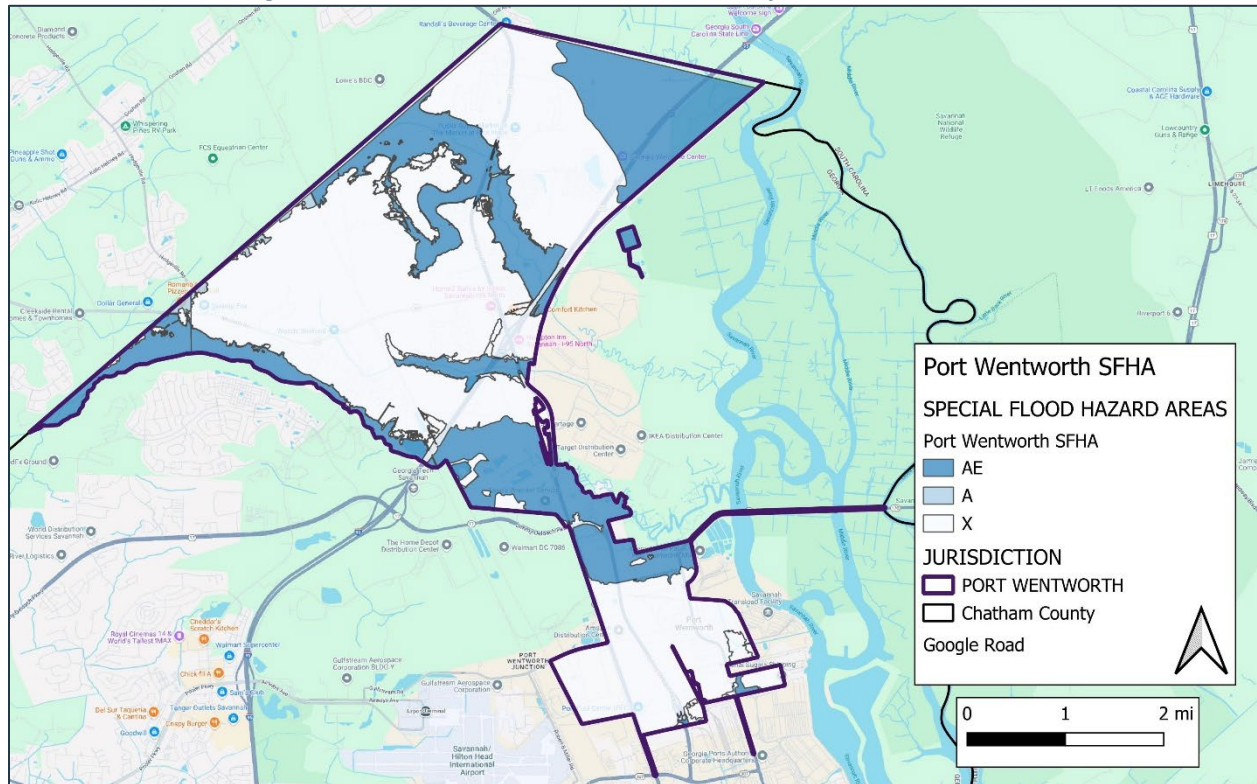
Table E-12 provides building counts and estimated damages by occupancy type for the 1% annual chance of a riverine flood event. No critical facilities were identified to be at risk in the HAZUS scenario.

Table E-12 – Port Wentworth Estimated Building Damage and Content Loss, 1% Annual Chance Riverine Flood

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Damaged to Exposed Buildings
Industrial	50	2	\$635,651,416	\$2,423,558	0.38%
Residential	3,959	24	\$755,813,567	\$4,989,868	0.66%
Commercial	96	2	\$190,543,319	\$387,172	0.20%
Total	4,105	28	\$1,582,008,302	\$7,800,598	0.49%

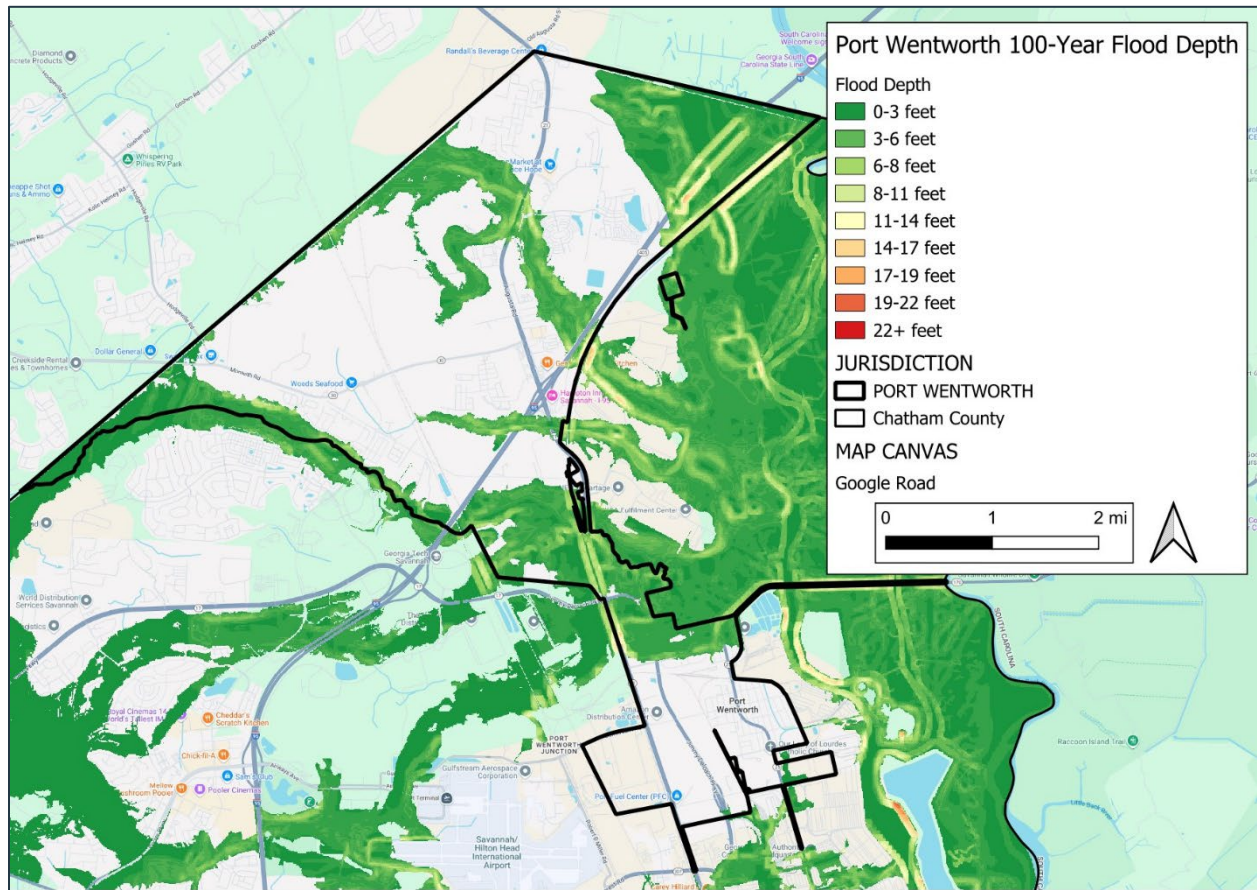
Source: HAZUS

Figure E-11 – FEMA Flood Hazard Areas, City of Port Wentworth



Source: FEMA 2018 DFIRM

Figure E-12 – Flood Depth, 1%-Annual-Chance Floodplain, City of Port Wentworth



Source: GEMA, UGA ITOS 2025

E.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table E-13 summarizes the wildfire risk products created for the jurisdiction.

Table E-13 – Wildfire Risk Assessment Products

Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.

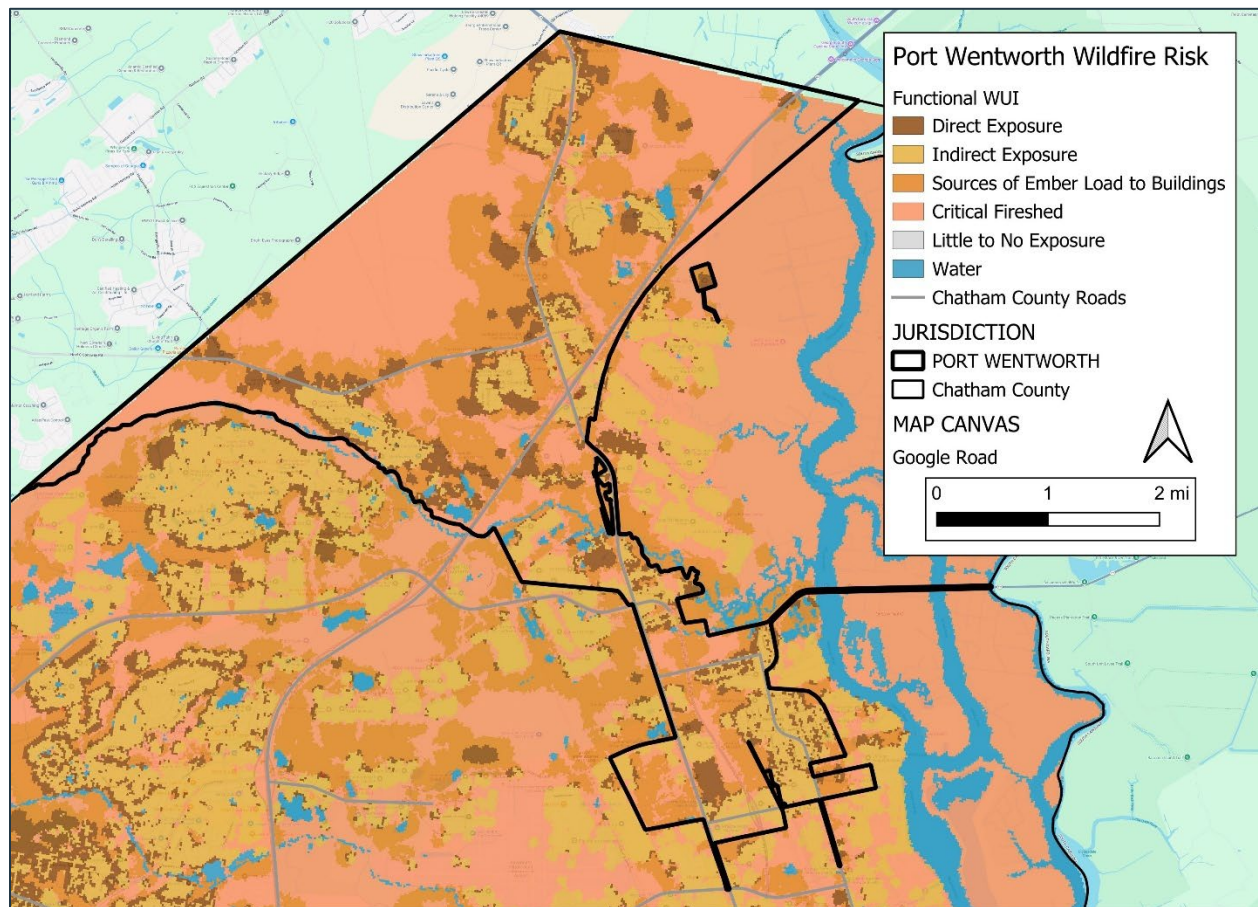
Risk Evaluation Category	Description
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.

Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure E-13 depicts the Functional WUI for the City of Port Wentworth. Functional WUI risk across the city includes significant critical fireshed and sources of ember load with direct and indirect exposure to buildings, primarily along Jimmy Deloach Pkwy, Hwy 21, and Benton Blvd. The categories of risk are defined below:

- **Direct Exposure** - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
 - **Indirect Exposure** - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
 - **Critical Fireshed** - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
 - **Sources of Ember Load to Buildings** - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- Little-to-No Exposure** - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No-Exposure zone, but smoke and evacuations could still impact this area.

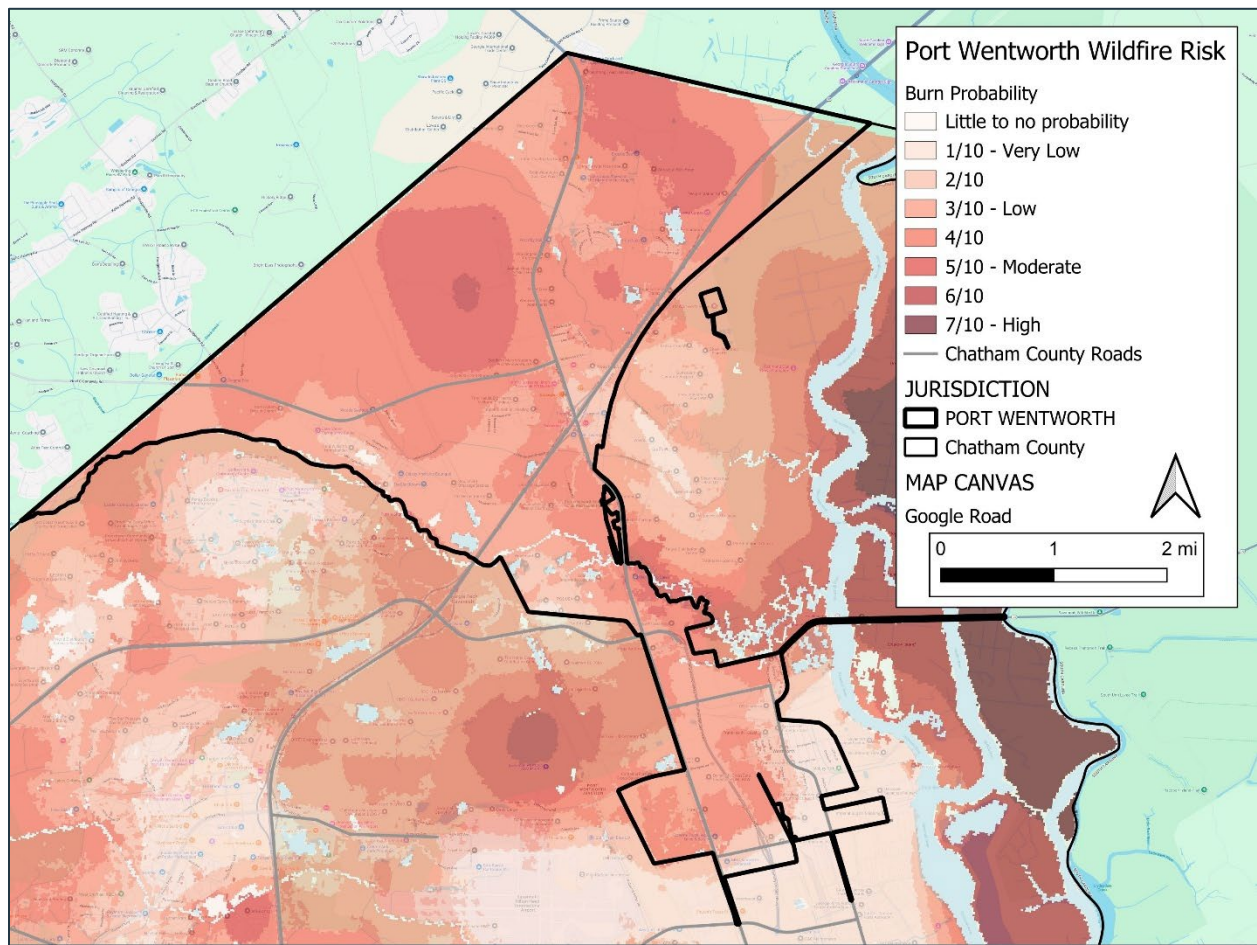
Figure E-13 – Wildland Urban Interface, City of Port Wentworth



Source: Southern Wildfire Risk Assessment

Figure E-14 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. Burn Probability in Garden City is generally low with higher risk areas along Saussy Rd and Rice Hope Plantation Rd.

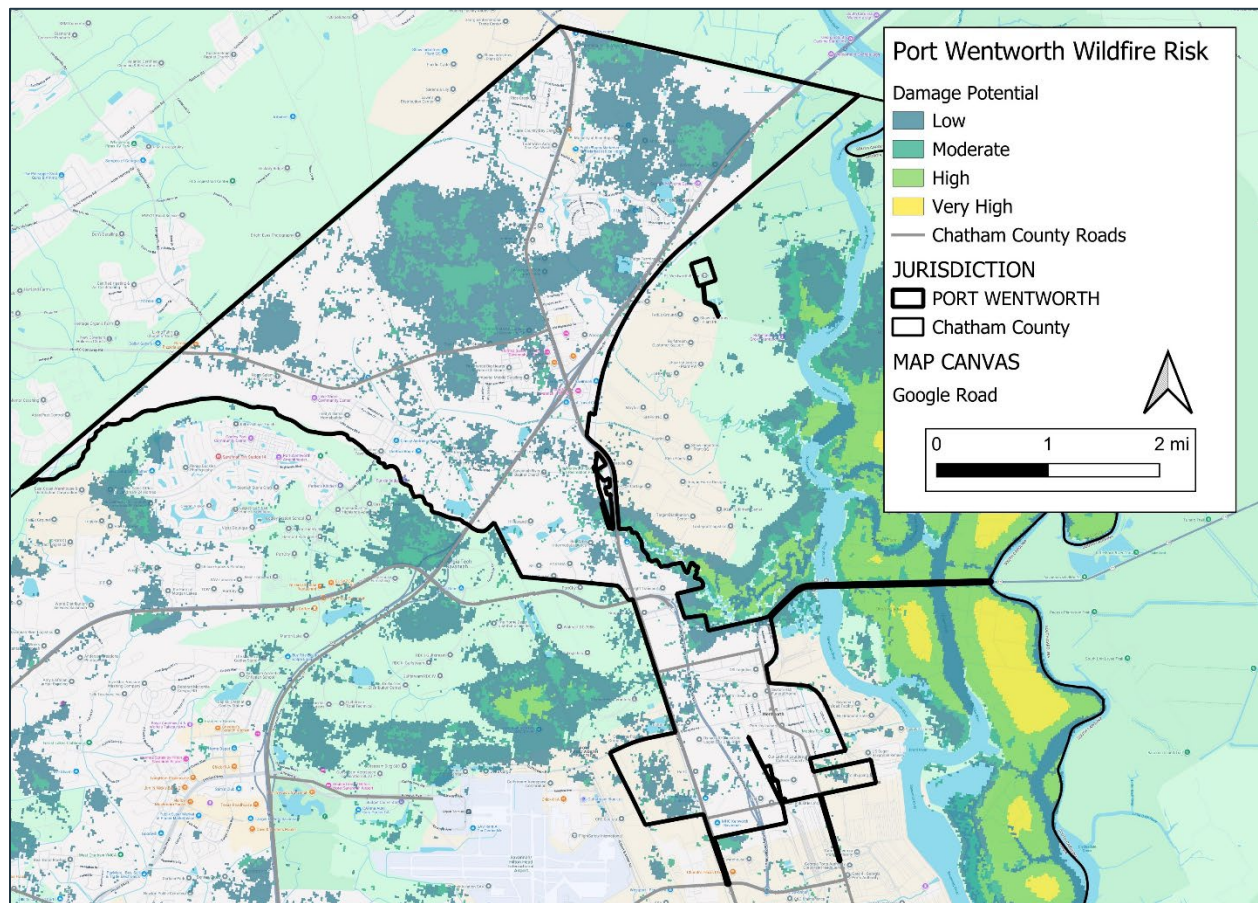
Figure E-14 – Burn Probability, City of Port Wentworth



Source: Southern Wildfire Risk Assessment

Figure E-15 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. Damage Potential is generally low across the city. Higher risk areas, though still low, include locations along Saussy Rd and Rice Hope Plantation Rd.

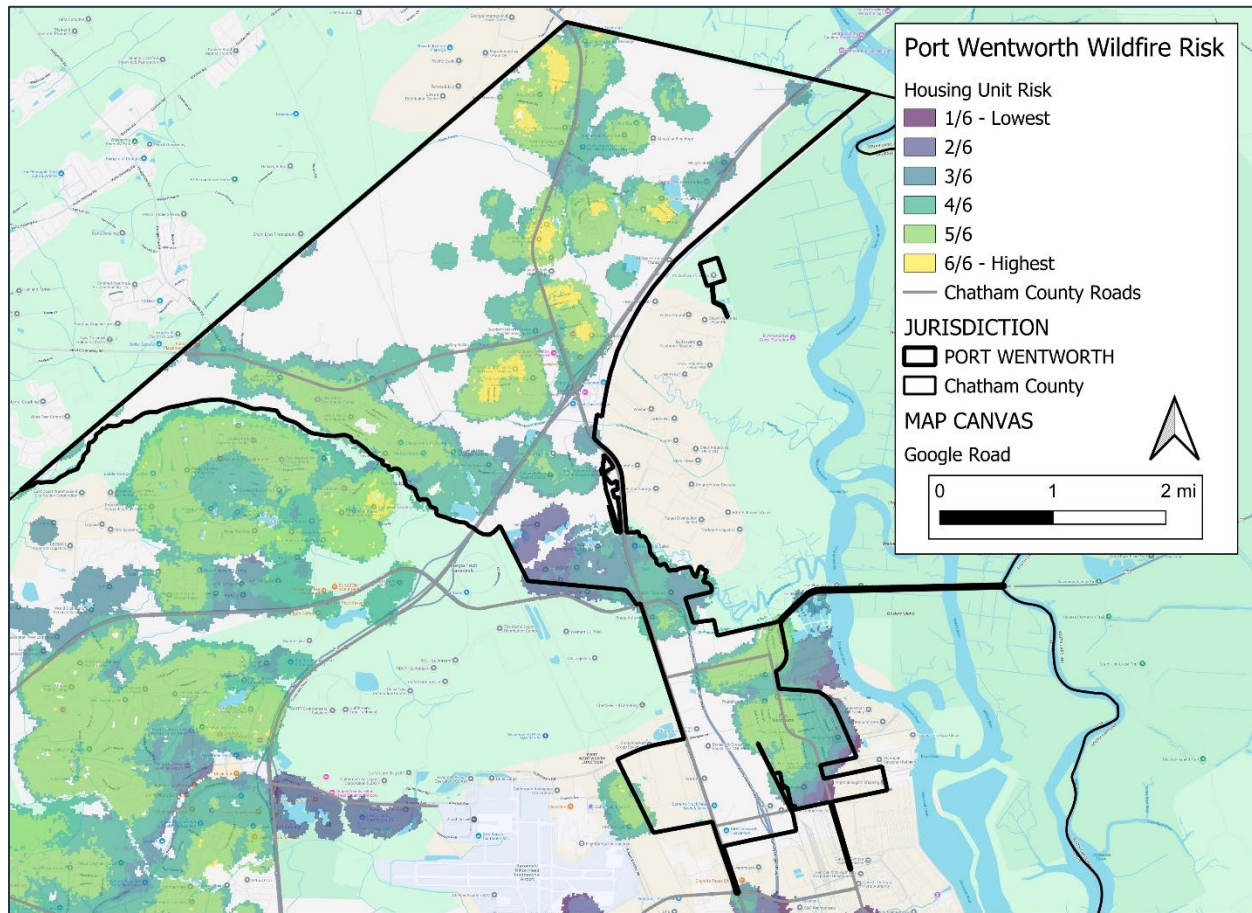
Figure E-15 – Damage Potential, City of Port Wentworth



Source: Southern Wildfire Risk Assessment

Figure E-16 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. High Housing Unit Risk is found along the Hwy 21 corridor, along Monteith Rd. and Meinhard Rd., and along Hwy 25 in southern Port Wentworth.

Figure E-16 – Housing Unit Risk, City of Port Wentworth



Source: Southern Wildfire Risk Assessment

E.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

The City of Port Wentworth joined the NFIP emergency program in 1971 and has been a regular participant in the NFIP since March 1973. The following tables reflect NFIP policy and claim data for the City categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table E-14 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	129	\$115,465	\$35,711,000	19	\$154,718.48
2-4 Family	0	\$0	\$0	0	\$0
All Other Residential	7	\$18,712	\$2,546,000	0	\$0
Non-Residential	17	\$42,361	\$7,550,000	0	\$0
Total	153	\$176,538	\$45,807,000	19	\$154,718.48

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Table E-15 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Polices	Number of Post-FIRM Policies
AO1-30 & AE Zones	63	\$39,236.11	50	13
A Zones	0	\$0	0	0
V01-30 & VE Zones	0	\$0	0	0
B Zone / X Shaded	0	\$0	0	0
C / X Zone	90	\$115,482.37	57	33
No Zone Identified	0	\$0	0	0
Total	153	\$154,718.48	107	46

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

E.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Property Protection									
PP-1	Structural Hardening for Critical Facilities	All	2.1	Moderate	City Administration	HMGP, General Fund, SPLOST	2026	Carry Forward	
Structural Projects									
SP-1	Drainage projects for stormwater runoff	Flood, Tropical Cyclone, Sea Level Rise	2.1	Moderate	City Administration / Public Works	SPLOST	2025	Carried Forward	Drainage projects Mobley Park I, II, & III and Bonney Bridge Drainage Projects I & II. Engineering completed, acquiring right of way. The only pending project is the Bonnybridge Rd drainage # 2. Engineering is complete, but we are still working on the right-of-way acquisition.
SP-2	Renovate the sanitary sewage system on the south end of Port Wentworth	Flood	2.1	Moderate	City Administration / Public Works	SPLOST	2027	Carried Forward	The investigation phase is complete, and we are in the bidding process.
Emergency Services									
ES-1	Generators for critical facilities	All	2.1, 5.1	Moderate	City Administration	HMGP, General Fund	2026	Carry Forward	City wide generator grant submitted
ES-2	Purchase and install generator quick connects and transfer switches for critical facilities	All	2.1, 5.1	Moderate	City Administration	HMGP, General Fund	2026	Carry Forward	included in grants
Public Education and Awareness									
PEA-1	Increase public education and awareness within the city by including flyers in the water bills and providing documents in the public buildings	All	3.2	Moderate	City Administration	Local Funds	2025	Carry Forward	Ongoing project.

Annex F City of Savannah

F.1 PLANNING PROCESS

The table below lists the HMPC members who represented the City of Savannah.

Table F-1 – HMPC Members

Member Name	Title	Agency/Department
Dave Donnelly	Emergency Management Officer	Emergency Management

F.2 COMMUNITY PROFILE

F.2.1 Overview of the Community

The City of Savannah is centrally located within Chatham County and is bordered by the Savannah River to the north and is approximately 20 miles from the coast of Georgia.

According to the U.S. Census Bureau, Savannah has a total area of 113.7 square miles of which 108.9 square miles (95.8%) is land and 4.8 square miles (4.2%) is water.³²

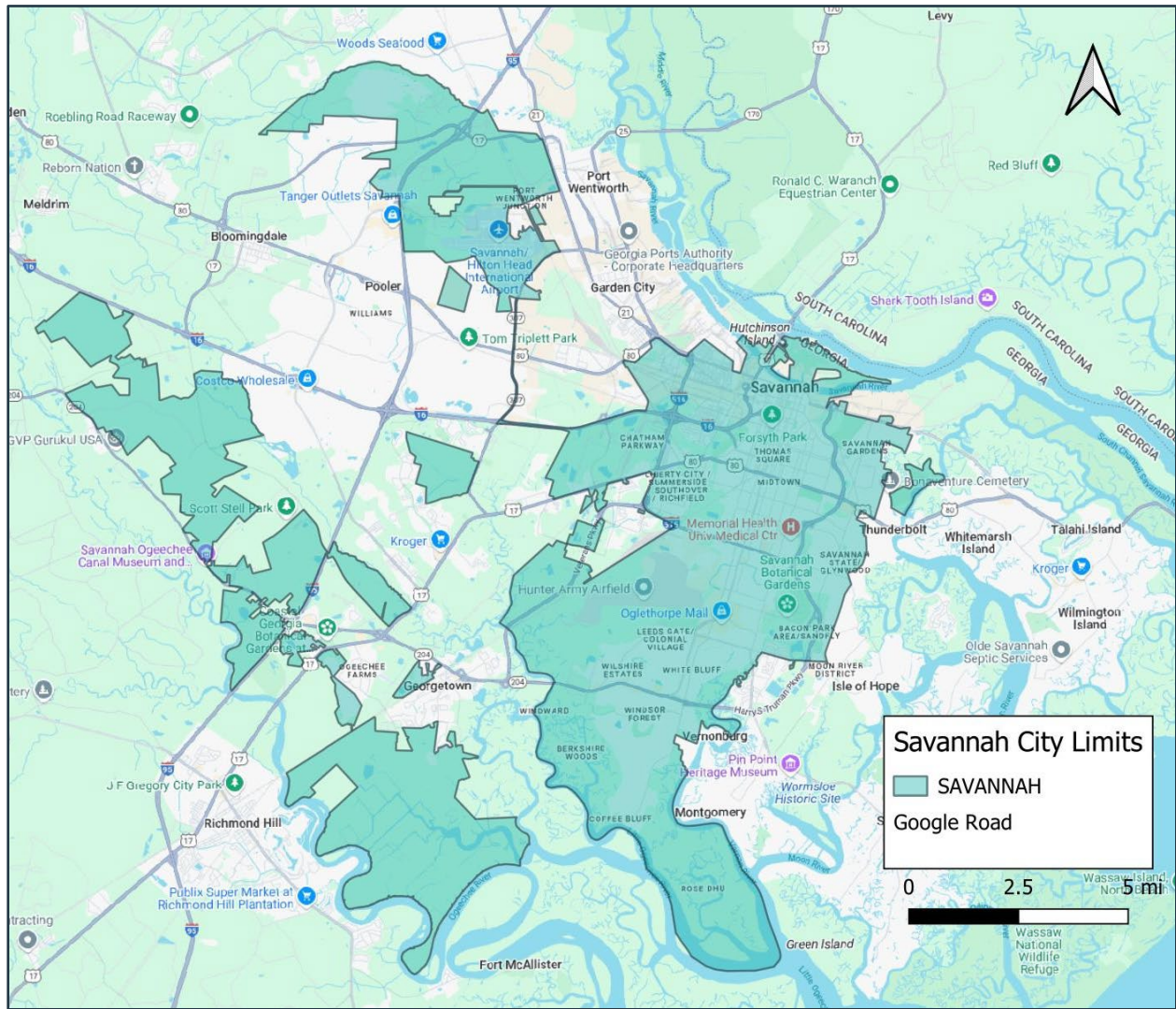
According to the U.S. Census Bureau’s American Community Survey (ACS) 5-Year Estimates, the city had a total population of 148,808 in 2024.³³ Therefore, the City’s average population density is approximately 1,309 people per square mile.

The Location Map below reflects Savannah’s boundaries and shows the City’s location within the county and in relation to surrounding municipalities.

³² <https://data.census.gov/table?q=Savannah+city,+Georgia+geography>. Retrieved 07-02-2025.

³³ <https://www.census.gov/quickfacts/fact/table/savannahcitygeorgia,chathamcountygeorgia,GA,US/IPE120223>. Retrieved 07-02-2025.

Figure F-1 – Location Map, Savannah



F.2.2 Geography and Climate

Please refer to Chatham County Community Profile for a summary of climate for Chatham County.

Because the City of Savannah is spread throughout different areas of the County, portions of the City lie within ten (10) different HUC 12 watersheds. The HUC 12 watersheds that contain portions of the city limits are listed in the table below.

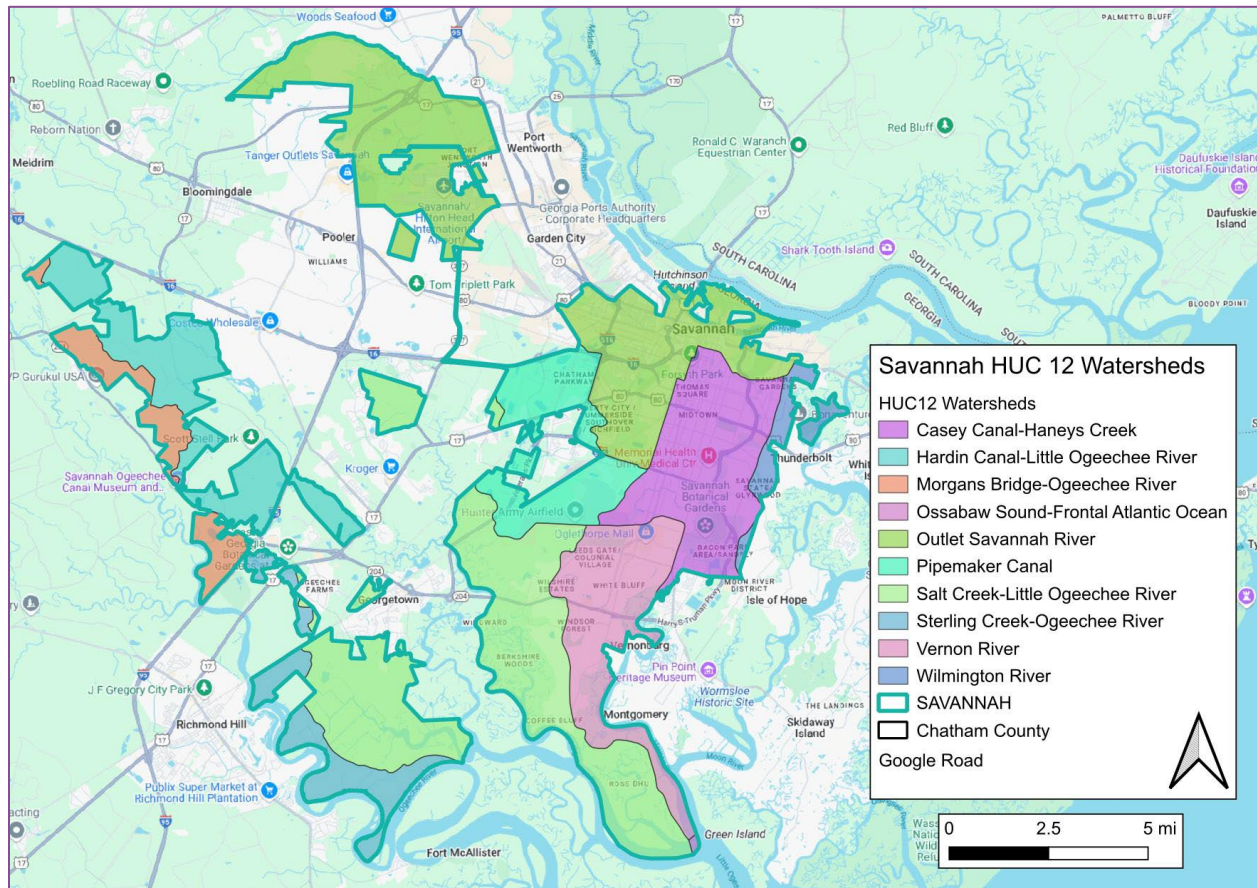
Table F-2 – HUC 12 Watersheds, Savannah

Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Sterling Creek – Ogeechee River	67.43	14.11	53.32	Ossabaw Sound – Frontal Atlantic Ocean	030602040301
Salt Creek – Little Ogeechee River	73.24	73.24	0.00	Ossabaw Sound – Frontal Atlantic Ocean	030602040203
Vernon River	27.98	27.98	0.00	Ossabaw Sound – Frontal Atlantic Ocean	030602040303
Hardin Canal – Little Ogeechee River	74.75	47.94	26.81	Salt Creek – Little Ogeechee River	030602040201
Ossabaw Sound – Atlantic Ocean	1.67	1.67	0.00	Ocean	030602040305
Wilmington River	32.75	32.75	0.00	Wassaw Sound – Frontal Atlantic Ocean	030602040101
Casey Canal – Haneys Creek	13.78	13.78	0.00	Vernon River	030602040302
Morgans Bridge – Ogeechee River	117.02	13.7	103.32	Sterling Creek – Ogeechee River	030602020605
Outlet Savannah River	196.73	109.31	87.42	Atlantic Ocean	030601090307
Pipemakers Canal	14.41	14.41	0.00	Salt Creek – Little Ogeechee River	030602040202

Source: Chatham County Coastal Watershed Management Plan, 2020

Figure F-2 illustrates the HUC 12 drainage basins and drainage features in and around the City of Savannah.

Figure F-2 – HUC 12 Watersheds, Savannah



F.2.3 Cultural, Historic, and Natural Resources

F.2.3.1 Cultural and Historic Resources

The City of Savannah has numerous cultural and historic resources available to residents and visitors to the city. The city has many museums that cover various topics, such as art, preservation, transportation, the military, and others. A sample of these resources is summarized below. A full list of museums can be obtained from the Coastal Museums Association.

Enmarket Arena

Enmarket Arena is a multi-purpose complex in Savannah that hosts music, sports, and entertainment experiences. It opened in February 2022 with a 9,500-seat arena, including twelve luxury suites, five lodge boxes, and a party suite. Enmarket Arena is the home to the Savannah Ghost Pirates of the ECHL.

Dr. Otis S. Johnson Cultural Arts Center

The Dr. Otis S. Johnson Cultural Arts Center, located at 201 Montgomery Street, is one of the most technologically advanced facilities in Savannah and serves as a creative and inspirational space connecting residents, the local arts community, and organizations, who will not only be able to experience art but engage with and create art as well. The center serves as a key gateway into Savannah with wonderful proximity to the city's other major art facilities. The facility



includes a 464-seat performing arts theater, studio theater, art gallery, as well as five visual arts studios designed for patrons to develop their creative skills. Three of the visual arts studios are specialized, providing a metals/glass room, hand-building room, and wheel throwing room.

Telfair Academy

The Telfair Academy is the oldest public art museum in the South and the first art museum in America founded by a woman. Formerly the Telfair family mansion, the museum opened its doors to the public in 1886. The Telfair Academy presents a celebrated collection of fine art, decorative art, and period rooms, displayed within the stunning architectural setting designed by European architects William Jay and Detlef Lienau. It is also home to the Bird Girl statue made famous by the book *Midnight in the Garden of Good and Evil*.



The Jepson Center

The Jepson Center, located across Telfair Square from the Telfair Academy, links the history preserved by the Owens-Thomas House & Slave Quarters and Telfair Academy to the future of art and architecture. The strikingly modern building, opened in 2006, is filled with art, activities, and educational opportunities that encourage learning.

SCAD Museum of Art

The SCAD Museum of Art is a premier contemporary art museum that features emerging and established international artists through commissioned works and rotating exhibitions; engages local communities with special initiatives of an international scope; and serves as a resource for SCAD students and alumni during their academic careers and beyond.

Tricentennial Park

Located at 655 Louisville Road, Tricentennial Park includes three museums at single location: Georgia State Railroad Museum, Savannah Children's Museum, and Savannah History Museum.

Davenport House Museum

Located at 324 E. State St., the stately Federal-style home, built by master carpenter Isaiah Davenport for his household, provides a glimpse into 1820s domestic life in the urban port city of Savannah. In 1955 the saving of the Davenport House from demolition was the first effort of Historic Savannah Foundation, which has gone on to national prominence as a preservation leader as well as ushering in the preservation renaissance of the coastal city.



Historic Sites

The 2025 list of sites in the City of Savannah listed on the National Register of Historic Places can be found in the table below.

Table F-3 – Historic Sites, Savannah

Site	Address	Nearest City/Location
Ardsley Park-Chatham Crescent Historic District	Roughly bounded by Ardsley Pk., Chatham Crescent, Bull St., Baldwin Pk. and Ardmore	Savannah
Atlantic Greyhound Bus Terminal	109 Martin Luther King, Jr. Blvd.	Savannah
Bonaventure Cemetery	Bonaventure Rd., 1 mi. N of US 80	Savannah
Carver Village Historic District	Bounded by W Gwinnett & Endley Sts., Allen Blun, & Collat Aves.	Savannah
Central of Georgia Depot and Trainshed	W. Broad and Liberty Sts.	Savannah
Central of Georgia Railroad: Savannah Shops and Terminal Facilities	W. Broad St. and Railroad Ave.	Savannah
Central of Georgia Railway Company Shop Property	Between W. Jones St. and Louisville Rd.	Savannah
Charity Hospital	644 W. 36th St.	Savannah
Cuyler-Brownville Historic District	Roughly bounded by Anderson Ln., W. 31st St., Montgomery St., Victory Dr., Ogeechee Rd., and Hopkins St.	Savannah
Daffin Park-Parkside Place Historic District	Bounded by Victory Dr., Waters Ave., Bee St. and 51st Street Ln.	Savannah
Davenport, Isaiah, House	324 E. State St.	Savannah
Drayton Arms Apartments	102 E. Liberty St.	Savannah
Drouillard-Maupas House	2422 Abercorn St.	Savannah
Eastside Historic District	Roughly bounded by E. Broad, Cedar, Gwinnett and Anderson Sts.	Savannah
Fairway Oaks-Greenview Historic District	Bounded approx. by DeRenne Dr., Waters Ave., Truman Pkwy., and Casey Canal, and the Live Oaks Golf Course	Savannah
Federal Building and U.S. Courthouse	Wright Sq.	Savannah
First Bryan Baptist Church	575 W. Bryan St.	Savannah
Gordonston Historic District	Roughly bounded by Skidaway Rd., Goebel Ave., Gwinnett St., and Pennsylvania Ave.	Savannah
Green-Meldrim House	Macon and Bull Sts.	Savannah
Hill Hall at Savannah State University	Savannah State University campus	Savannah
Hodgson, W. B., Hall	501 Whitaker St.	Savannah
Kensington Park-Groveland Historic District	Roughly bounded by DeRenne & Waters Aves., Abercorn & Johnston Sts.	Savannah
Kiah Museum	505 West 36th Street	Savannah
Grove-North Cemetery	W. Anderson St.	Savannah
Laurel Grove-South Cemetery	37th St.	Savannah
Low, Juliette Gordon, Historic District	10 Oglethorpe Ave., E., 330 Drayton St., 329 Abercorn St.	Savannah

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Site	Address	Nearest City/Location
Magnolia Park Historic District	Roughly bounded by DeRenne Ave., Latimer and Brogdon Sts., Lovett and Bacon Park Drs., Broadmoor Cir., and Truman Pkwy.	Savannah
Massie Common School House	207 E. Gordon St.	Savannah
Owens-Thomas House	124 Abercorn St.	Savannah
Pine Gardens Historic District	Roughly bounded by Goebel Ave., Beech & Capitol Sts.	Savannah
Savannah and Ogeechee Canal	Roughly along I-95, between the Savannah and Ogeechee Rs.	Savannah
Savannah National Landmark Historic District	Bounded by E. Broad, Gwinnett, and W. Broad Sts. and the Savannah River	Savannah
Savannah Victorian Historic District	Roughly bounded by Gwinnett, Price, Anderson, and Montgomery Sts.	Savannah
Savannah Victorian Historic District (Boundary Increase)	Bounded by Gwinnett, Anderson and 31st Sts.	Savannah
Savannah Water Works Pump House	1204 West Gwinnett St.	Savannah
Scarborough, William, House	41 W. Broad St.	Savannah
Slotin Building	101 W. Broad St.	Savannah
Springfield Terrace School	707 Hastings St.	Savannah
St. Philip AME Church	613 W. Broad St.	Savannah
Sturges, Oliver, House	27 Abercorn St.	Savannah
Telfair Academy	121 Barnard St.	Savannah
Thomas Square Streetcar Historic District	Roughly bounded by Anderson Ln., 42nd St., Victory Dr., E. Broad St., and Martin Luther King, Jr. Blvd.	Savannah
Two Pierpont Circle	2 Pierpont Cir.	Savannah
U.S. Customhouse	1-3 E. Bay St.	Savannah

Source: National Register of Historic Places, 2025

F.2.3.2 Parks, Preserves, and Conservation

The following list summarizes the City of Savannah's many parks and playgrounds.

Table F-4 – Savannah Parks and Playgrounds

Park Name	Park Address	Acres	Facilities
Alpine	Alpine Drive / White Bluff Road	1.0	Playground, Basketball court, Picnic area
Ashley Homes Park	East Henry @ Bee Road		Neighborhood Greenspace
Ashley Homes Square	Dieter Street between Waldburg & Collins		Neighborhood Passive Park
Avondale	Texas / Ohio Ave.	1.2	Playground, Athletic field, Picnic area, Spray pool
Bacon Park Forest	Skidaway Rd./ Bacon Pk Dr	53	Leisure Trails
Bacon Park Tennis Complex	6400 Skidaway Road		Tennis Courts
Baldwin	E. 41st St. / Atlantic Ave.	1.5	Playground
Barjan Terrace	5600 Emory Drive	1.7	Playground, Picnic area
Blackshear	Wheaton / Dundee St.	2.8	Playground, Basketball courts, Spray pool
Bowles C. Ford Park	Stiles Avenue @ Cloverdale Drive		Pool
Bryan, Charlie S.	King St. / Darling St.	1.0	Playground, Basketball court, Picnic area
Cann	46th St. / Bulloch St.	2.5	Playground, Basketball court, Athletic field, Picnic area
Carver Village	Winburn / Bowden St.	1.0	Playground, Basketball court, Athletic field
Cedar Grove	13317 Chesterfield	2.0	Leisure Trail
Clark, Ben	Park Ave. / Live Oak St.	1.6	Playground, Picnic area
Cloverdale	Cloverdale Drive / Eleanor St.	5.0	Playground, Basketball courts, Tennis courts, Athletic field
Coffee Bluff Marina Park	14915 Coffee Bluff Rd	2.1	Playground, Picnic Area
Crossroad Villa	401 W. Montgomery Road	0.6	Playground, Picnic area
Crusader	81 Coffee Bluff Villa	3.7	Playground, Basketball court, Athletic field Neighborhood center, Golden age center Picnic area
Daffin Park	1 Waring Dr. / S. Victory Drive / Washington Ave. / Waters Ave. / Bee Road	77.0	Playground, Basketball courts, Athletic fields, Tennis courts, Volleyball court, Swimming pool, Walking trail, Picnic area lake / pavilion
Davant	Lincoln St. / E Perry Lane	0.6	Playground, Picnic area
Dixon	East Broad / Henry St.	0.1	Playground, Picnic area
Eastside	409 Goebel Ave/ Elgin St	0.5	Playground, Swimming Pool, Regional Center, Golden Age Center
Edgemere/Sackville Park	Cedar Street between East 58th & DeLesseps		Walking Trail, playground, picnic area, pavilion
Feiler Park	Meding Street & Alamo Street		Playground
Fellwood	Richards / West St.	1.0	Playground, Picnic area
Ford, Bowles	Cloverdale / Stiles Ave.	16.5	Playground, Picnic area, Swimming pool Walking trail lake / pavilion

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Park Name	Park Address	Acres	Facilities
Forrest Hills	Skidaway / Berkshire Road	7.2	Playground, Picnic area, Tennis courts, Spray pool
Forsyth	Drayton St. / Gaston St. / Whitaker St. / Park Ave.	19.0	Playground, Basketball courts, Athletic field Tennis courts, Spray pool
Gray, Rebecca	W Lathrop / Hudson Ave.	8.7	Playground, Basketball courts, Athletic fields, Spray pool
Harmon Creek Park	Chatham Street @ Atwood Street		
Hitch	56th / Boyd St.	2.3	Playground, Basketball court, Athletic field Picnic area
Holly Heights Park	East 56th Street @ Honduras Street		Playground
Hull	55th / Atlantic Ave	2.8	Playground, Picnic area, Athletic field Spray pool
Jasper Springs	Augusta Avenue @ I-516		Passive park
Jefferson Street	Jefferson / Wayne St.	0.1	Playground
Kennedy (Carver Heights)	Collat Ave. / Gwinnett St.	6.2	Playground, Picnic area, Basketball courts Athletic field, Tennis courts, Neighborhood center, Golden age center
Kensington	101 Althea Pkwy	4	Playground
Lamara Heights	Atlantic / E. 66th St.	0.9	Open space, Playground
Law, W. W.	Harmon / E. Bolton St.	1.2	Playground, Regional Center, Gymnasium Swimming pool
Liberty City	1401 Mills B. Lane	7.3	Playground, Neighborhood Center, Golden Age Center, Picnic Area, Leisure Trail
Magnolia	Bacon Park Dr/ Morgan St	2.2	Playground
Mayfair	1462 Dale Drive	0.6	Playground
Minick, Guy Complex	Eisenhower / Sallie Mood	13.8	Playground, Athletic fields
Mohawk Lake	1132/1134 Mohawk St	29	Lake
Ogeecheeton	Page St. / Dempsey Ave.	0.5	Playground
Ridgewood Park	Atlantic Avenue @ East 66th Street		Playground
Rivers End	Hurst Ave. / Rivers End Drive	0.5	Playground
Robinson, Robbie	Pendleton / Carroll St.	5.0	Playground, Basketball Courts, Picnic Area
Ross, W. C.	Stratford / Abbott St.	3.6	Playground, Swimming Pool, Picnic Area
Savannah Gardens	516 Pennsylvania Ave.		Playground, Pool, Picnic Area
Soldiers Field (Paulsen)	Paulsen / Joe St.	3.0	Playground, Basketball court, Athletic field Swimming pool, Picnic area
Staley Heights	Dillon Ave. / Sherman St.	3.2	Playground, Basketball court, Athletic field Swimming pool, Picnic area
Summerside	4113 Clinch St	0.3	Playground, Basketball Court, Picnic Area
Sunset	Sunset Blvd.	3.9	Playground, Basketball court, Picnic area
Sustainable Fellwood	S. Carolan St/ Kenneth Dunham St/ Fellwood	1.8	Playground, Picnic Area
Sylvan Terrace Park	5330 Montgomery Street		Playground, basketball court, athletic field, picnic area
Thomas	36th / Bull St.	1.3	Passive picnic area
Tompkins	39th St. / Ogeechee Road	3.9	Playground, Regional center, Gymnasium Swimming pool, Picnic area

Park Name	Park Address	Acres	Facilities
Treat	Treat Ave / Gable St.	0.3	Playground
Tremont	Plymouth Ave. / Comet	1.7	Playground
Tribble, Joe	Largo Drive	51	Walking trail, Playground, Picnic area, Lake
Vernon River Tract	13710 Coffee Bluff Drive		Playground
Victory Heights	E 42nd St / Raskin Ave.	1.0	Playground, Spray pool, Picnic area
Wells	38th St. / MLK Jr. Blvd.	1.4	Playground, Picnic area, Basketball court
Wessels, Fred	East Broad/ Henry St	0.5	Playground, Basketball Courts, Picnic Area
Westside	Rogers / Carolan St.	0.9	Playground, Basketball court
White Bluff Elementary	9902 White Bluff Road	7.5	Basketball court, Athletic field
Willie C. Ross Memorial Park	Brittany Street @ Chester Street		Playground
Windsor Forest	12412 Woodley Road	4.0	Playground, Athletic field, Regional center Gymnasium, Golden age center
Yamacraw	349 Bryan St.	1.2	Playground, Picnic area
38th Street	712 E 38th St. (between Paulsen and Atlantic Ave.)	0.3	Playground, Spray pool

Source: City of Savannah website: www.savannahga.gov; Savannah Emergency Management Officer

The City of Savannah has nine (9) walking trails as summarized below.

- ▶ **Daffin Park:** A paved sidewalk and a rubberized trail completely outline the perimeter of Daffin Park and is 1.5 miles around. The rubberized trail, named in honor of Robert Espinoza, is perfect for runners. The concrete sidewalk is eight feet wide and has no incline, which makes it handicapped accessible.
- ▶ **Forsyth Park:** This is the southernmost boundary of the historical district. Paved, lighted sidewalks are handicapped accessible and surround Savannah's most popular walking trail. The distance around the 30-acre park is 1.5 miles. The northern part of the park has 44 trees per acre with the predominant tree being the Live Oak and the predominant shrub being the azalea.
- ▶ **Bowles Ford:** Lighted, paved walking trails surround the 16-acre lake. The distance around is 0.7 miles. Bowles Ford is located just off Stiles Avenue, near the Cloverdale neighborhood.
- ▶ **Tatemville Park:** Lighted, paved walking trails surround the 20-acre lake. The distance around is 0.7 miles. Tatemville is located just off Staley Avenue, turn right off Staley Avenue on Coleman Street.
- ▶ **Savannah-Ogeechee Canal:** Stroll through scenic river swamp forest along old Jenkes Toll Road. Children are welcome; dogs on a leash are permitted. The Savannah-Ogeechee Canal is off GA 204, 2.3 miles west of I-95. The site includes locks 5 and 6 of the original canal that began operation in 1831.
- ▶ **Mohawk Lake:** The 17-acre lake located at 1132 Mohawk Street offers open space and fishing.
- ▶ **Joe Tribble Park:** This 51-acre park located at 12519 Largo Drive in the Windsor Forest Neighborhood includes an 11-acre lake, 0.568 miles of paved and lighted sidewalk, open space, and the park is handicapped accessible.
- ▶ **Fernwood/Parkwood Walking Trail:** Fernwood/Parkwood walking Trail is located at 2236 N. Fernwood Dr. The newly paved, 0.2-mile walking trail with lighting was designed as a product of the City's Floodways to Greenways Program which City Council endorsed in 2009. Floodways to Greenways is a new way of addressing drainage issues, combining stormwater infrastructure with community amenities like passive parks and gardens. The City's Water Resources Bureau

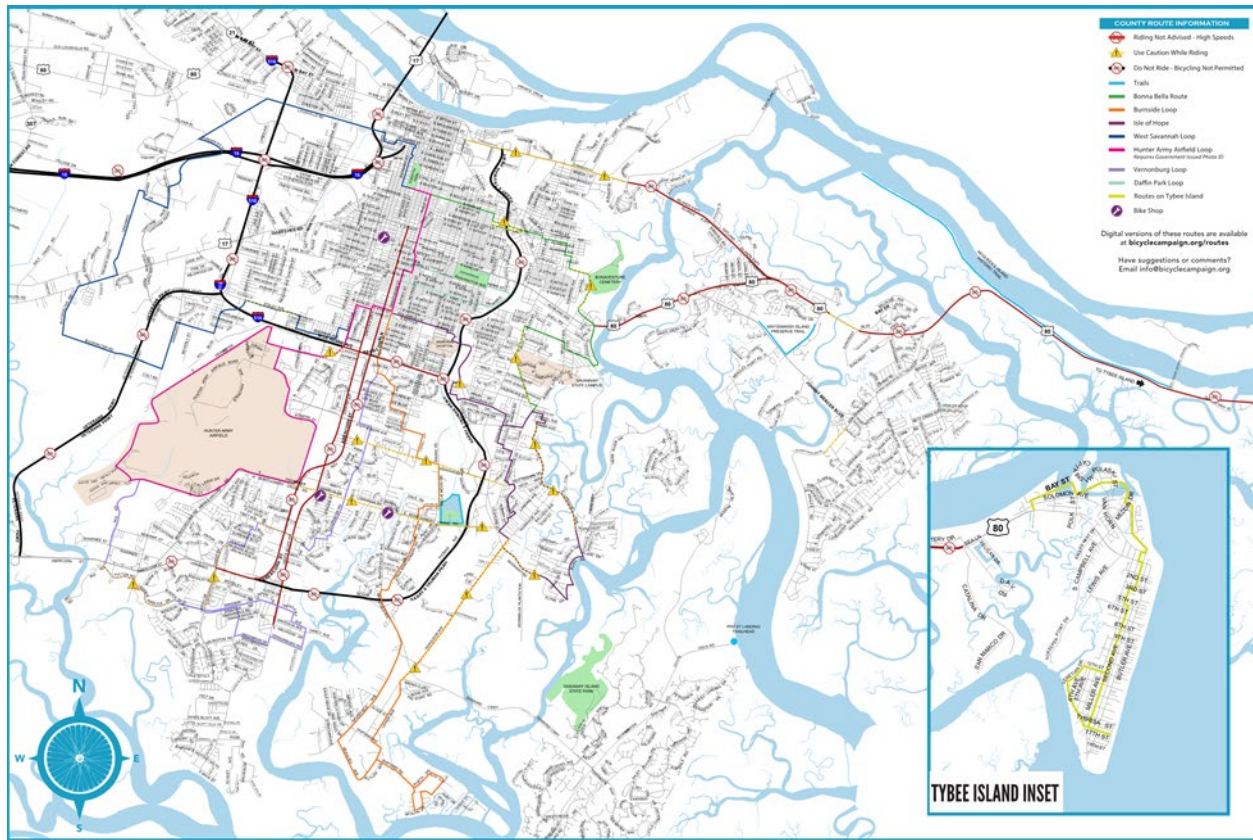
has planned events throughout the year to introduce the unique ecological benefits of the new Fernwood/Parkwood Trail.

- ▶ Liberty City Park: Located at 1401 Mills B Lane Boulevard has a lighted, paved walking trail which surrounds the three-acre lake. The distance around the lake is .331 miles.

The City of Savannah has three biking trails which are summarized below.

- ▶ West to East Corridor: 52nd Street to Ward Street to LaRoche Avenue to the entrance of Savannah State University.
- ▶ North to South Corridor: Habersham Street to Stephenson Avenue to Hodgson Memorial Drive to Edgewater Drive to Hillyer Drive to Dyches Drive to Lorwood Drive to Tibet Avenue to Largo Drive to Windsor Road to Science Drive.

Figure F-3 – Savannah Parks and Playgrounds



Source: City of Savannah website: www.savannahga.gov

F.2.3.3 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within the City of Savannah are identified in the figure below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table F-5 – Flood Zones, Savannah

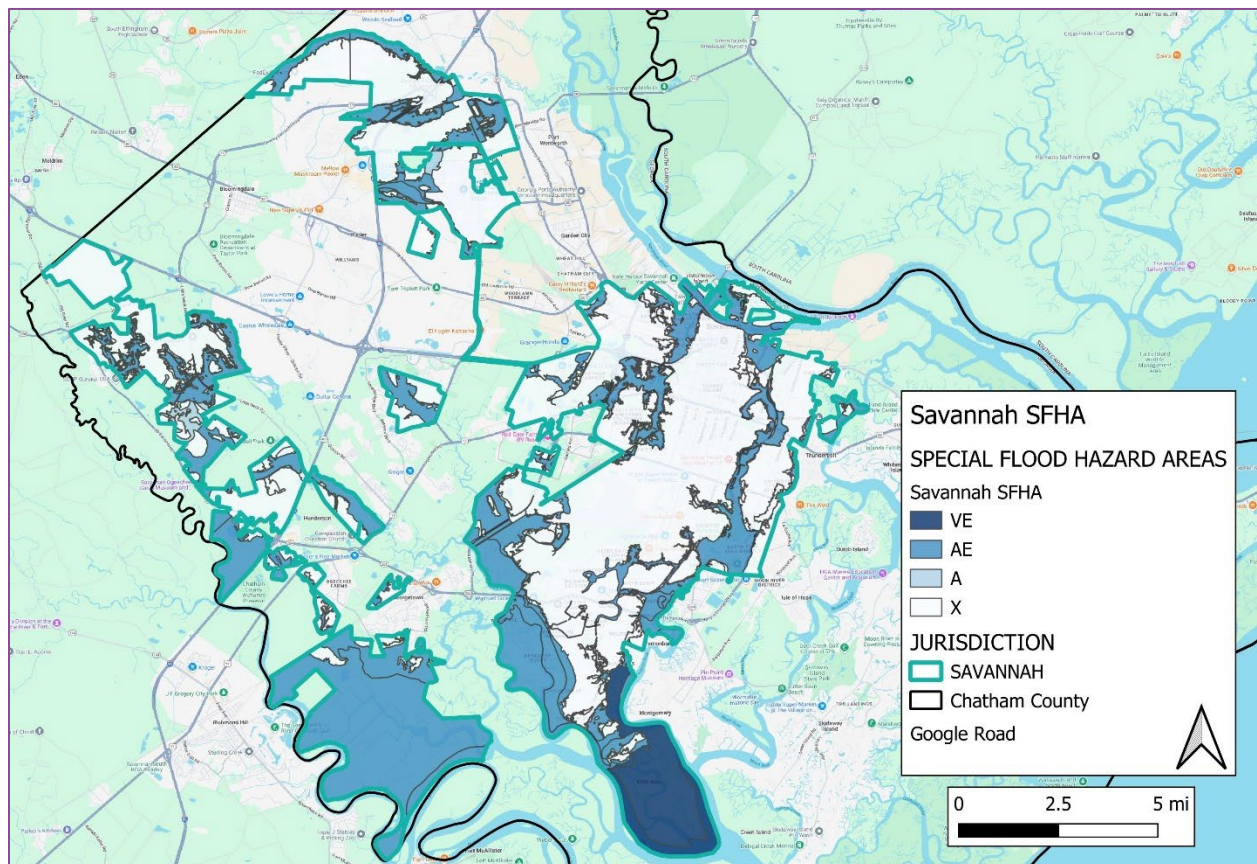
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
A	453	0.71	0.006
AE	25,816	40.34	35.3
VE	4,067	6.35	5.6
X500	3,826	5.98	5.2
X	38,929	60.83	53.3
TOTAL	73,091	114.20	100.0%

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, 30,336 acres of the land within the city is located within a 100-year floodplain (Zone AE, A, VE), which equals 47.4 percent of the city. An additional 38,929 acres are located within moderate or minimal flood hazard areas (53.3 percent of the city). With over 47 percent of the city at high risk to flooding in the Special Flood Hazard Area (SFHA), the City of Savannah should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in Savannah include wetland areas and low-lying land along the major rivers in and around the city including the Ogeechee River, Little Ogeechee River, Vernon River, Wilmington River, and the South Channel of the Savannah River. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates, and acting as a flood storage area to reduce downstream peaks. The city should strive to keep floodplain and floodplain waters free of contaminants, such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

Figure F-4 – FEMA Flood Zone Map, Savannah

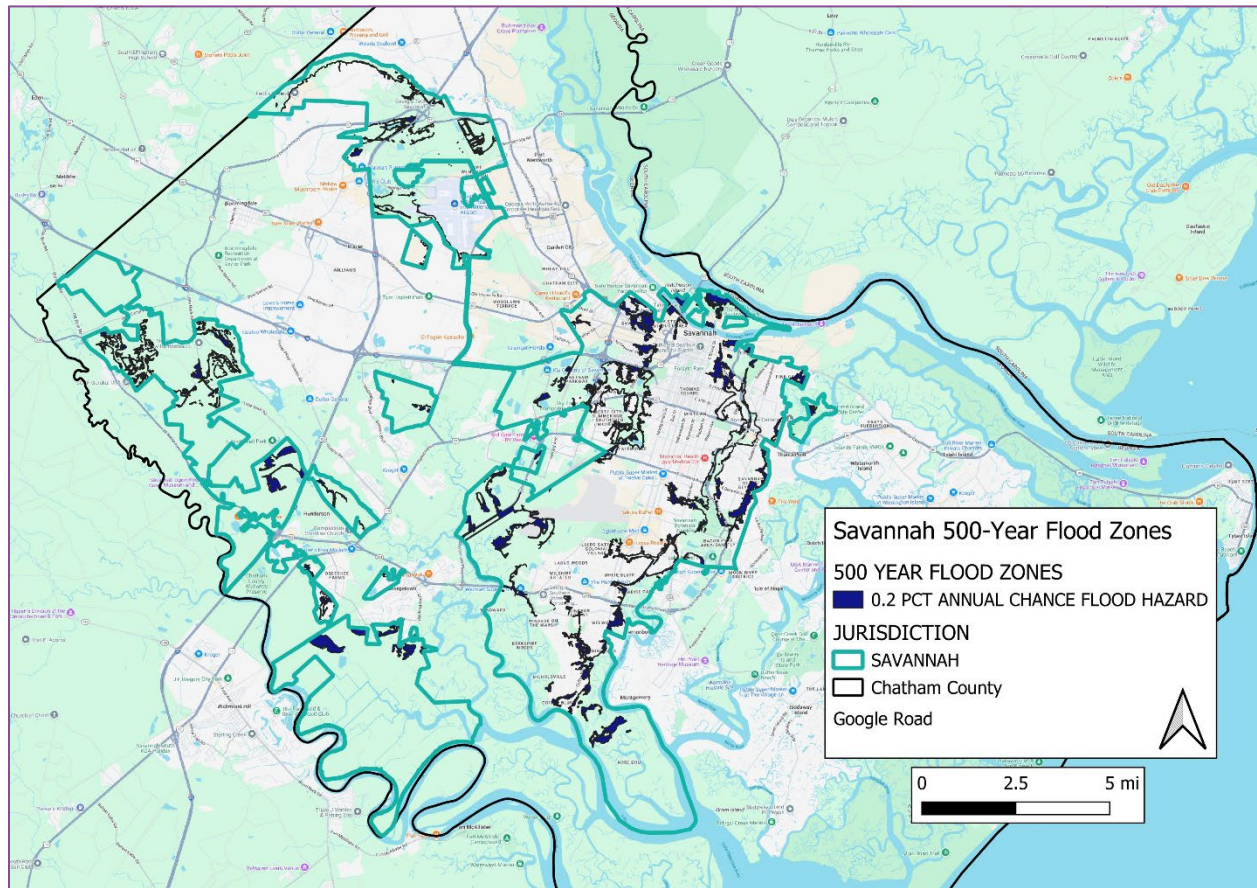


Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplain, these zones can still

experience significant flooding during extreme events. The X500 zone for Savannah is depicted in the map below and represented in Table F-5 above.

Figure F-5 – X500 Zone, Savannah



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through this process, pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetland Inventory (NWI), wetlands throughout the City of Savannah make up 32,810.14 acres (51.27 square miles) or 45.1 percent of the City (see the Figure F-6 below).

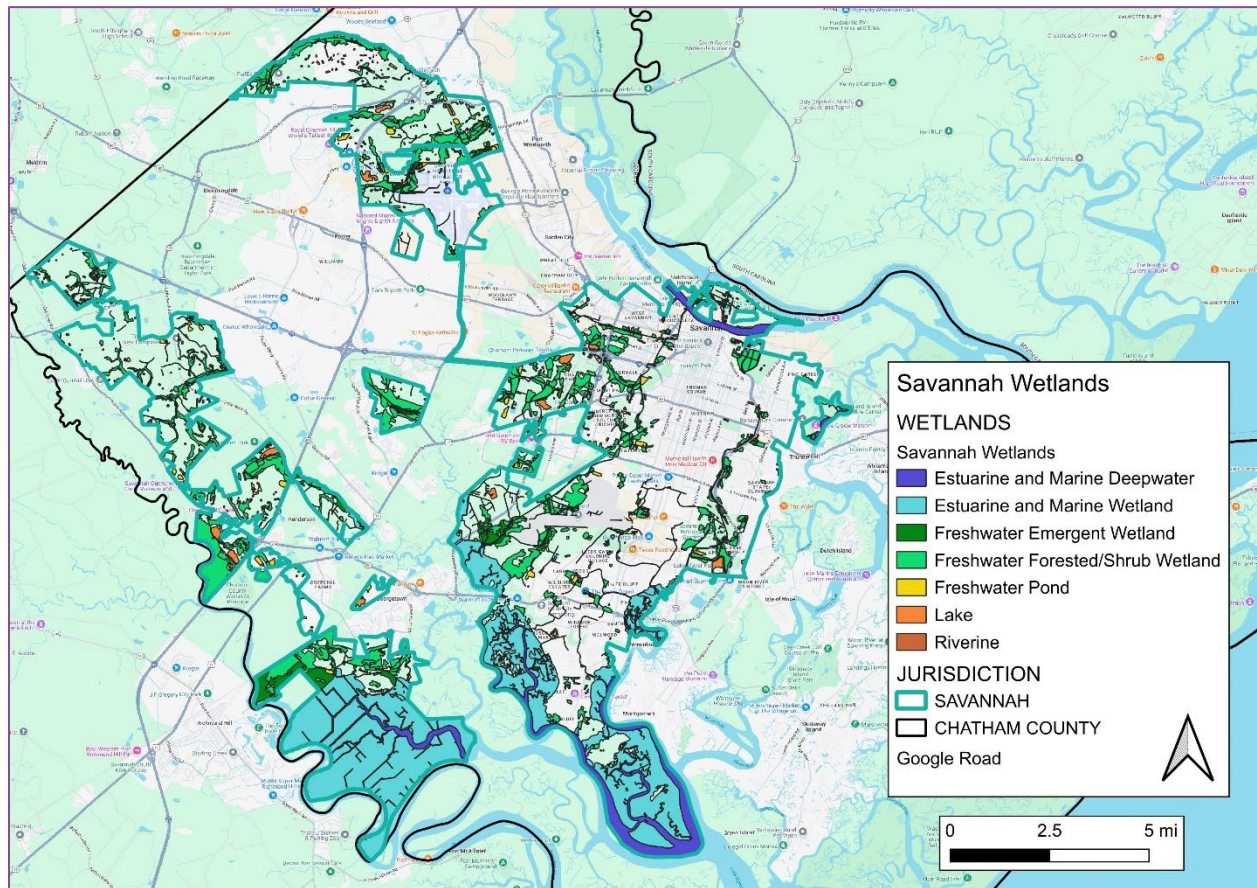
Table F-6 – Wetland Types, Savannah

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Non-Wetland	39,957.86	62.43	54.9
Estuarine and Marine Deepwater	406.68	0.64	0.6
Estuarine and Marine Wetland	12,839.20	20.06	17.6
Freshwater Emergent Wetland	1,690.08	2.64	2.3
Freshwater Forested/Shrub Wetland	15,451.24	24.14	21.2

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Freshwater Pond	736.34	1.15	1.0
Lake	345.89	0.54	0.5
Riverine	1,340.72	2.09	1.8
TOTAL	72,768.0	113.7	100.0%

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Figure F-6 – Wetlands Map, Savannah



Source: National Wetlands Inventory, 2022; SAGIS, 2025

Estuarine and Marine Deepwater

Estuarine and marine deepwater classifications, as defined by the Cowardin classification system, are distinguished by their location and water chemistry. Marine deepwater is part of the Marine System, which is exposed to the open ocean and extends from the outer edge of the continental shelf shoreward. Estuarine deepwater, part of the Estuarine System, is partially enclosed by land and has a mixture of fresh and saltwater.

Estuarine and Marine Wetland

Estuarine and marine wetlands are classified within a broader hierarchical system that includes five main systems: marine, estuarine, riverine, lacustrine, and palustrine. These classifications are based on factors like salinity, water type, vegetation, and geological features. Within the marine and estuarine systems,

further subdivisions exist, such as subsystems (subtidal and intertidal) and classes (e.g., rock bottom, unconsolidated bottom, aquatic bed).

Freshwater Emergent Wetland

Freshwater emergent wetlands are classified within the Palustrine System by the U.S. Fish and Wildlife Service (USFWS) as part of their National Wetlands Inventory (NWI). This system categorizes wetlands based on their landscape position, vegetation cover, and hydrologic regime. Within the Palustrine System, emergent wetlands are further defined by their vegetation (grasses, sedges, forbs) and whether the vegetation is persistent (remaining until the next growing season) or non-persistent.

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Freshwater Pond

Within the Palustrine system, ponds are often categorized as Lacustrine or Palustrine. Specifically, ponds may be classified as emergent, scrub-shrub, or forested, depending on the dominant vegetation.

Lake

Lacustrine wetlands are defined as wetlands associated with lakes and large ponds. They are characterized by the water level of the lake influencing the water table of the adjacent wetland, and they often occur along lake shores.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Waterbodies

Approximately 5.2 percent of the City's area is open water, and another 36.3 percent are wetlands. These areas are primarily associated with the main waterways surrounding the city including the Ogeechee River, Little Ogeechee River, Vernon River, Wilmington River, and South Channel of the Savannah River.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across the City of Savannah, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure F-7 – Land Cover Map, Savannah

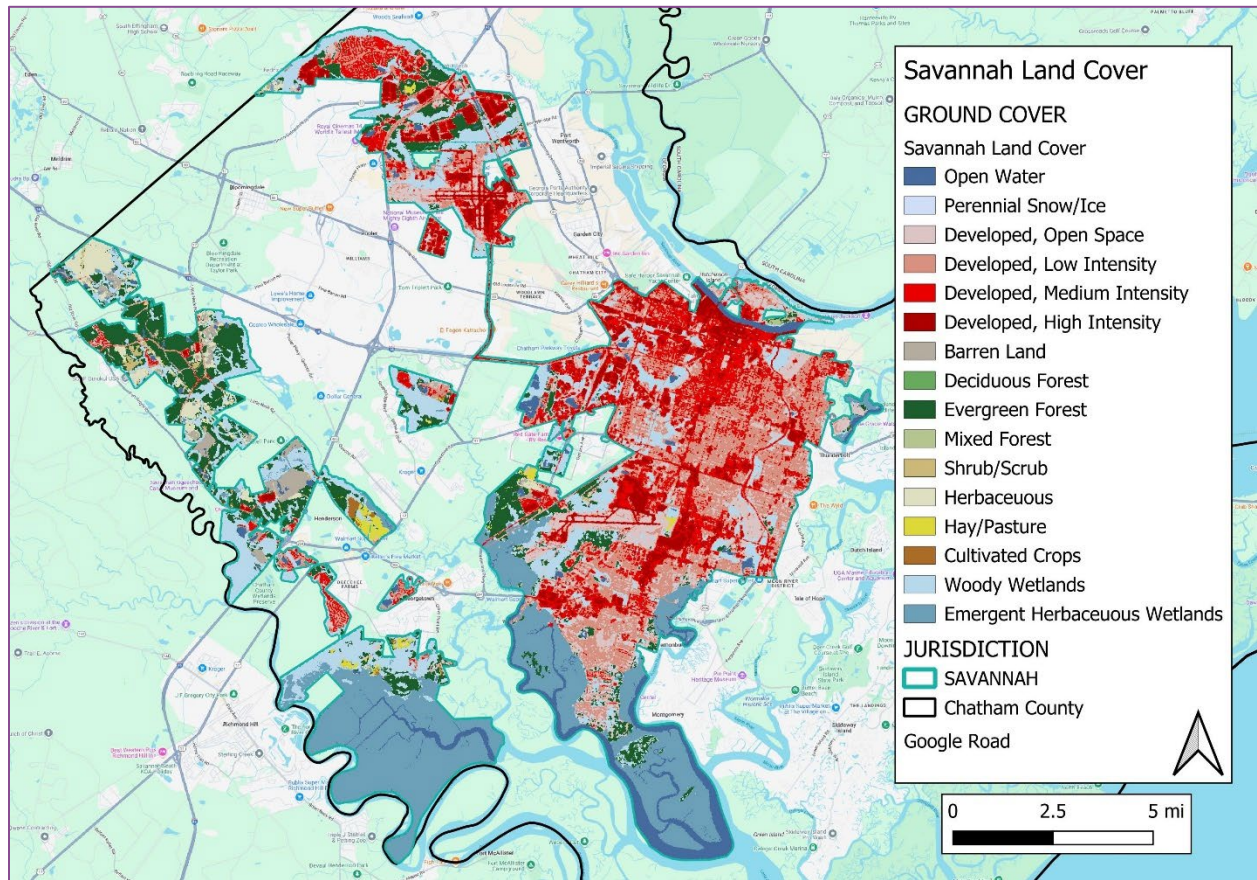
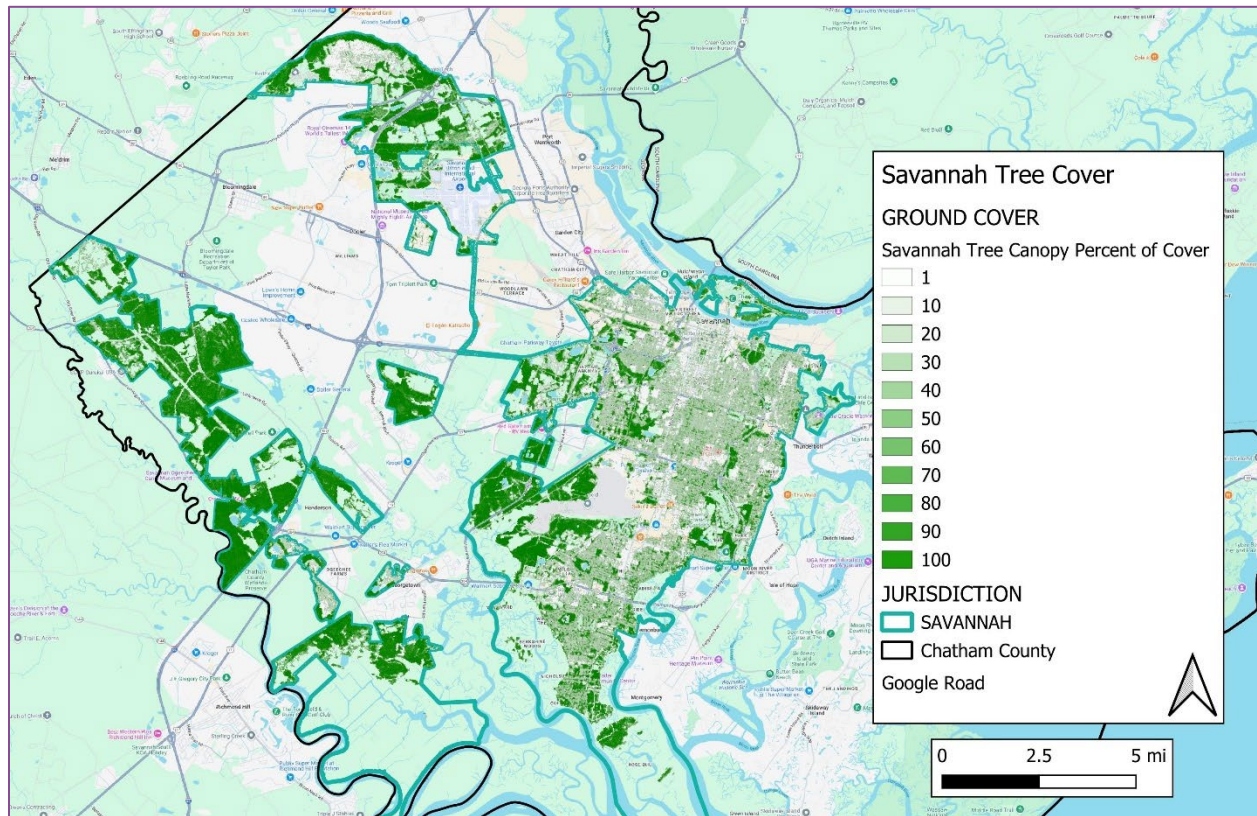


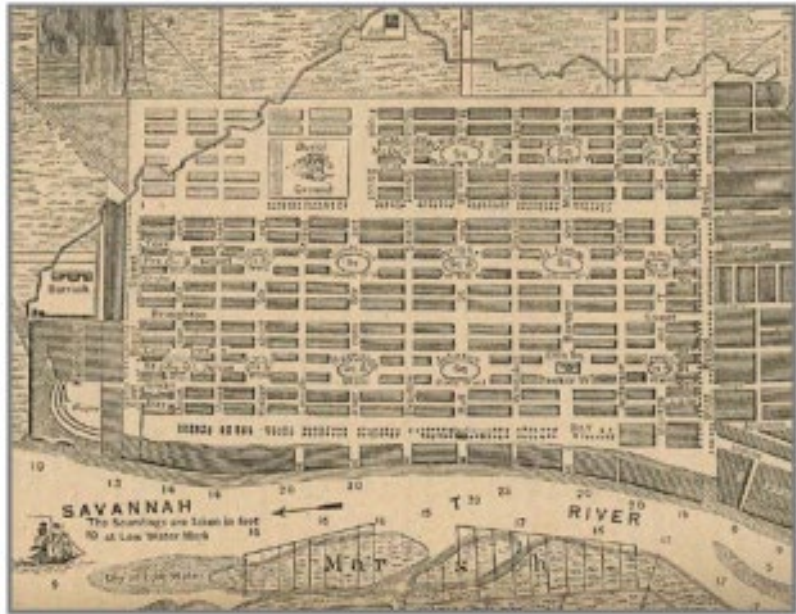
Figure F-8 – Tree Cover Map, Savannah



F.2.4 History

The Savannah coastal region of Georgia was part of the territories of indigenous peoples, such as the Guales (pre 1660), the westo (circa 1660-1680) and the Yamacraw (circa 1680-1740). Before European settlement, the Savannah River area was primarily inhabited by the Yamacraw, a group that included both Creek and Yamasee people. This tribe lived near the Savannah River and is known for its role in the founding of the Georgia colony. Their chief, [Tomochichi](#), was instrumental in negotiating a peaceful relationship with the English settlers.

Permanent European settlement came to the Chatham County – Savannah region in 1733 when the British settled the Colony of Georgia to buffer their northern colonies from the Spanish in Florida. James Edward Oglethorpe founded Savannah as the seat of the thirteenth English colony near a Creek village called Yamacraw. Oglethorpe forged friendly relations with the Native Americans which enabled him to establish a successful town 18 miles inland from the Atlantic Ocean. Oglethorpe devised a colonial settlement plan that set it apart from other cities in the New World.



The nucleus of the plan was the ward. Each ward had a name and was a part of a larger integrated regional land system that included town commons, gardens, farms, agricultural villages, and fortified outposts. The plan informed the architecture, resulting in a dense urban pattern of townhouses and carriage houses in the old town and a more suburban pattern as development advanced into the former farm lots. Modern-day street patterns closely follow the old land divisions between the farm lots.

Savannah's regional plan with its town lots and squares, garden lots, and farm lots formed a blueprint for growth that is evident in the street patterns even today. Major boulevards such as 37th Street, Victory Drive, Bull Street, and Waters Avenue follow the former divisions between the farm lots.

Beyond the farms were agricultural villages such as Hampstead and Highgate (now occupied by Hunter Army Airfield) and outposts on the water such as Wormsloe and Beaulieu. The plan was completed by fortified farming villages such as those at Thunderbolt and Modena on Skidaway Island.

The outlying settlements were connected to the City of Savannah by waterways and colonial road systems. These colonial roads followed the high ground (usually the ridges of old barrier island dune structures). Early development naturally occurred along these routes including the Western Road (Louisville Road), the White Bluff Road (an extension of Bull Street), the Great Ogeechee Road (Southern Road), Wheaton Street (to Thunderbolt and the ferry to Skidaway Island), and the Augusta or River Road. Plantations were established along the Savannah and Ogeechee Rivers and on the islands such as Ossabaw, Skidaway, and Wassaw.

After the Civil War, street railroads, also known as streetcars, encouraged suburban and river resort development. With the arrival of the automobile, many of these summer resorts became year-round residential suburbs and palm-lined causeways connected these communities to the mainland. Street railroads enabled urban expansion into the former farm lots where larger lots and deeper setbacks were the norm and are today desirable residential neighborhoods.

Industrial development replaced the Savannah River plantations in the Twentieth Century. Like the Nineteenth Century canals and railroads, industries spurred the development of industrial worker communities like Woodville and West Savannah. Prior to World War II, the Savannah urban area was bounded roughly by DeRenne Avenue on the South, Pennsylvania Avenue on the East, and Lathrop Avenue and Laurel Grove Cemetery on the West. Outside of several smaller municipalities, the remaining areas were rural in character, dominated by dairy farms, timber, and truck farming.

Since World War II, automobile-related mobility enabled urban expansion and suburbanization, which spread to all quadrants of the County. With the exception of the estates of Wormsloe, Beaulieu, Grove Point, Oakland, Lebanon, and the islands of Wassaw and Ossabaw, there is little rural landscape left in modern day Chatham County.

F.2.5 Economy

F.2.5.1 Wages and Employment

Per the 2019-2023 American Community Survey 5-Year Estimates, the median household income for Savannah is \$56,782, which is 27.2 percent lower than the state's median household income (\$74,664).³⁴ Approximately 19.5 percent (26,819) of the population is considered to be living below the poverty level. Moreover, 28.9 percent (8,479) of people under 18 years of age and 14.0 percent (2,812) of people 65 years and over are living below the poverty level.³⁵

The table below shows employment and unemployment rates along with industry employment by major classification for the city.³⁶

Table F-7 – Employment and Occupation Statistics for Savannah, GA, 2019-2023

Employment Status	Count	Percentage (%)
In labor force	78,162	63.9
Employed	73,460	60.1
Unemployed	3,597	2.9
Armed Forces	1,105	0.9
Not in labor force	44,089	36.1
Occupation	Count	Percentage (%)
Management, business, science, and arts	28,250	38.5
Service	15,575	21.2
Sales and office	14,196	19.3
Natural resources, construction, and maintenance	4,310	5.9
Production, transportation, and material moving	11,129	15.1

³⁴ <https://www.census.gov/quickfacts/fact/table/savannahcitygeorgia,chathamcountygeorgia,GA,US/IPE120223>. Retrieved 07-02-2025.

³⁵ <https://data.census.gov/table/ACSST5Y2023.S1701?q=Savannah+city,+Georgia+poverty+level>. Retrieved 07-02-2025.

³⁶ <https://data.census.gov/table?q=Savannah+city,+Georgia+employment>. Retrieved 07-02-2025.

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Major industry sectors in the City of Savannah include management, business, science, and arts (38.5%); service (21.2%); sales and office (19.3%); natural resources, construction, and maintenance (5.9%); and production, transportation, and material moving (15.1%).

Major employers are discussed in the Chatham County Community Profile.

F.2.6 Housing

According to the 2019-2023 ACS 5-Year Estimates, there are 68,153 housing units in Savannah, of which 86.0 percent (58,632) are occupied.³⁷ Approximately 44.4 percent (26,019) of occupied units are owner-occupied (55.6% occupied by renters). A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster. Therefore, higher rates of home rentals in Savannah may indicate that residents are not able to implement certain types of mitigation in their homes.

Median home value in Savannah is \$225,200. Of the City's owner-occupied housing units, 63.6 percent (16,558) have a mortgage. Most householders (84.4% / 49,495) have lived in their current homes since the year 2000 or later, 11.5 percent (6,739) moved in between 2000 and 2009, 26.1 percent (15,289) moved in between 2010 and 2017, 29.6 percent (17,374) moved in between 2018 and 2020, and 17.2 percent (10,093) moved in 2021 or later. 10.6 percent (6,191) of householders in occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

The majority (55.3% / 37,722) of housing units in Savannah are detached single family homes. However, 1.3 percent (917) of units are mobile homes, which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

The City's housing stock is old, with the majority (77.7% / 52,979) of occupied housing built before 2000. below details housing age in Savannah.

Table F-8 – Housing Age, Savannah

Year Structure Built	Percent of Occupied Housing	Number of Structures
2020 or later	1.3	915
2010 to 2019	11.9	8,108
2000 to 2009	9.0	6,151
1980 to 1999	17.8	12,132
1960 to 1979	22.4	15,239
1940 to 1959	20.8	14,238
1939 or earlier	16.7	11,370

Source: U.S. Census Bureau, American Community Survey 2019-2023 5-Year Estimates

Age can indicate the potential vulnerability of a structure to certain hazards. For example, the City of Savannah first entered the National Flood Insurance Program in 1971. Therefore, based on housing age estimates approximately 48 percent of housing in the City was built before any floodplain development restrictions were required.

³⁷ <https://data.census.gov/table/ACSDP5Y2023.DP04?q=Savannah+city,+Georgia+tenure>. Retrieved 07-02-2025.

F.2.7 Population

According to the U.S. Census Bureau, Savannah had an estimated population of 148,808 residents in 2024 and a population of 147,780 at the time of the 2020 U.S. Census (0.7% increase from 2020-2024). As of 2024, Savannah's population density was 1,309 persons per square mile. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates.³⁸

Table F-9 – City of Savannah Demographic Profile Data, 2019-2023

Demographic	Savannah
Gender/Age	
Male	69,345
Female	78,201
Under 5 Years	9,063
65 Years and Over	20,604
Race/Ethnicity (One Race)	
White	54,856
Black or African American	76,972
American Indian/Alaska Native	283
Asian	4,226
Two or More Races	7,998
Hispanic or Latino ¹	10,484
Education	
High School Graduate or Higher	87,377
Bachelor's Degree or Higher	9,667

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

¹Hispanics may be of any race, so also are included in applicable race categories.

F.2.8 Land Use

Land use data was obtained from the 2020 Update to the Chatham County – Savannah Comprehensive Plan 2040 (Comp Plan). The intent of the Comp Plan is to serve as a comprehensive planning document that guides Chatham County's and Savannah's collective growth and development decisions over the next 20 years. The Comp Plan serves both participating communities as a general statement of intent to promote local goals related to economic development, land use, transportation, housing, quality of life, and other related topics.

F.2.8.1 Character Areas

The Character Areas established by the City's Comp Plan include those listed below and shown in the Character Areas Map.

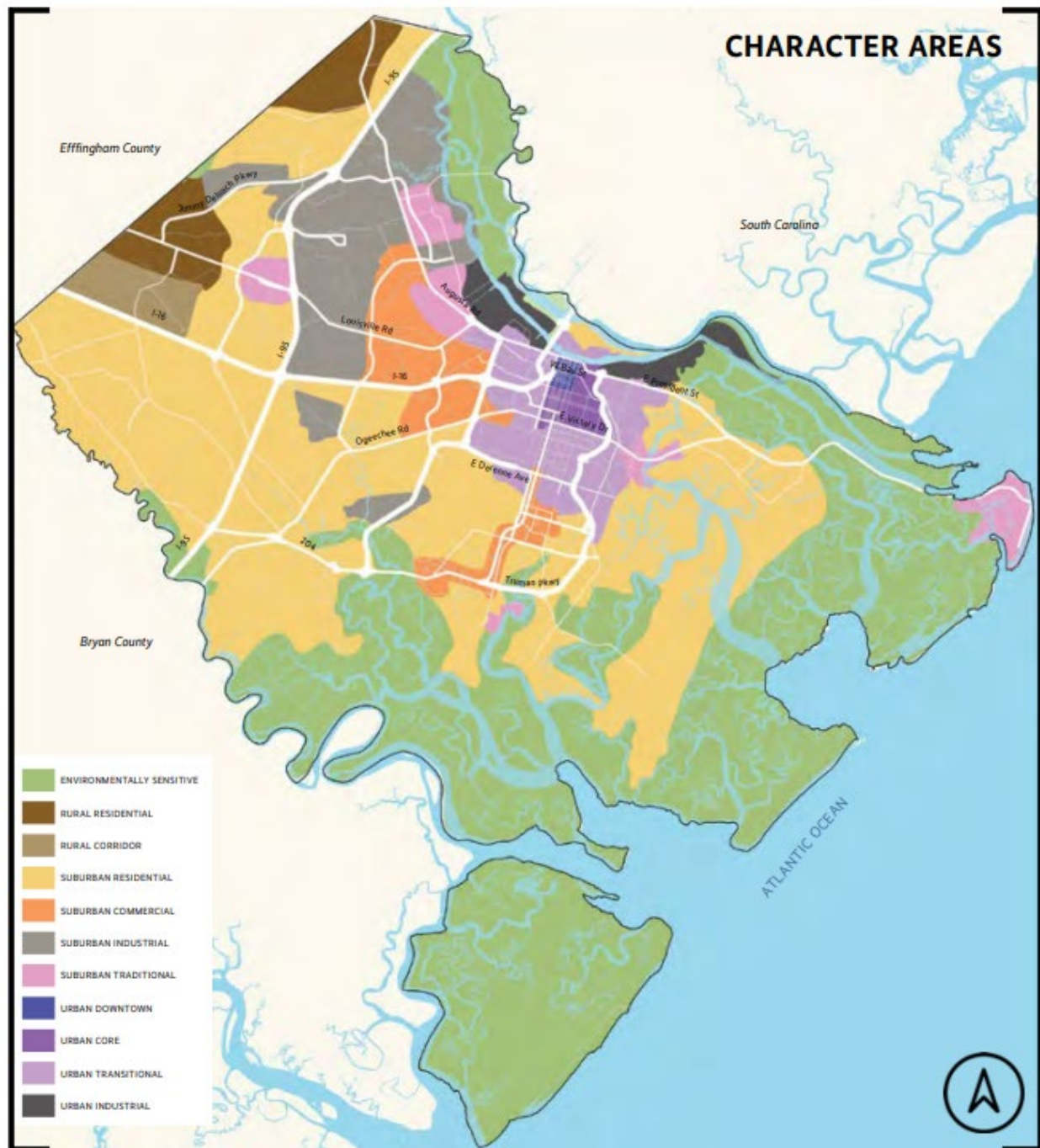
Table F-10 – Character Areas, Savannah

Character Area	Definition
Environmentally Sensitive	Open space areas that offer opportunities for limited to no development that is well-integrated with the natural landscape system.

³⁸ <https://data.census.gov/table/ACSDP1Y2023.DP05?q=Savannah+city,+Georgia+population>. Retrieved 07-02-2025.

Character Area	Definition
Rural Residential	Contains low-intensity development with large lots, low pedestrian orientation and access, and a sizeable amount of open space. It may be undeveloped or associated with working farms.
Rural Corridor	Contains a mix of lower density light industrial, warehousing, or service uses along Interstate 16.
Suburban Residential	Includes low and medium density developments, which are largely single-family structures on large lots or medium-lot residential subdivisions.
Suburban Commercial	Automobile-oriented commercial centers that contain community and regional shopping and service needs.
Suburban Industrial	Areas that generally contain large-footprint buildings and businesses that accommodate warehousing, light industrial, manufacturing, office spaces, and other uses, such as airports and landfills.
Suburban Traditional	Areas that have a more “urban” style of development, with gridded/interconnected street patterns, attached buildings, and sidewalks.
Urban Downtown	Consists of local and National Register Landmark Historic Districts with mixed-use, mid-rise buildings and attached single-family homes.
Urban Core	Contains the local and National Register Victorian and Streetcar Historic Districts, as well as the Eastside neighborhoods in the city of Savannah. This area is characterized by a mix of detached and attached single-family homes, mid-size multi-family buildings, and smaller-scale, neighborhood commercial.
Urban Traditional	Areas classified as “urban edge” or “urban expansion” with automobile-oriented, suburban style residential areas that still provide access to urban amenities and public transit.
Urban Industrial	Areas near the Urban Downtown and Core that have higher intensity uses, such as light and heavy manufacturing, warehouses, and ports.

Figure F-9 – Character Areas Map, Savannah



Source: Chatham County – Savannah Comprehensive Plan 2020-2040

F.2.8.2 Existing Land Use

The City of Savannah includes a total area of 72,740.9 acres (113.7 square miles) as calculated from GIS and obtained from the U.S. Census. According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

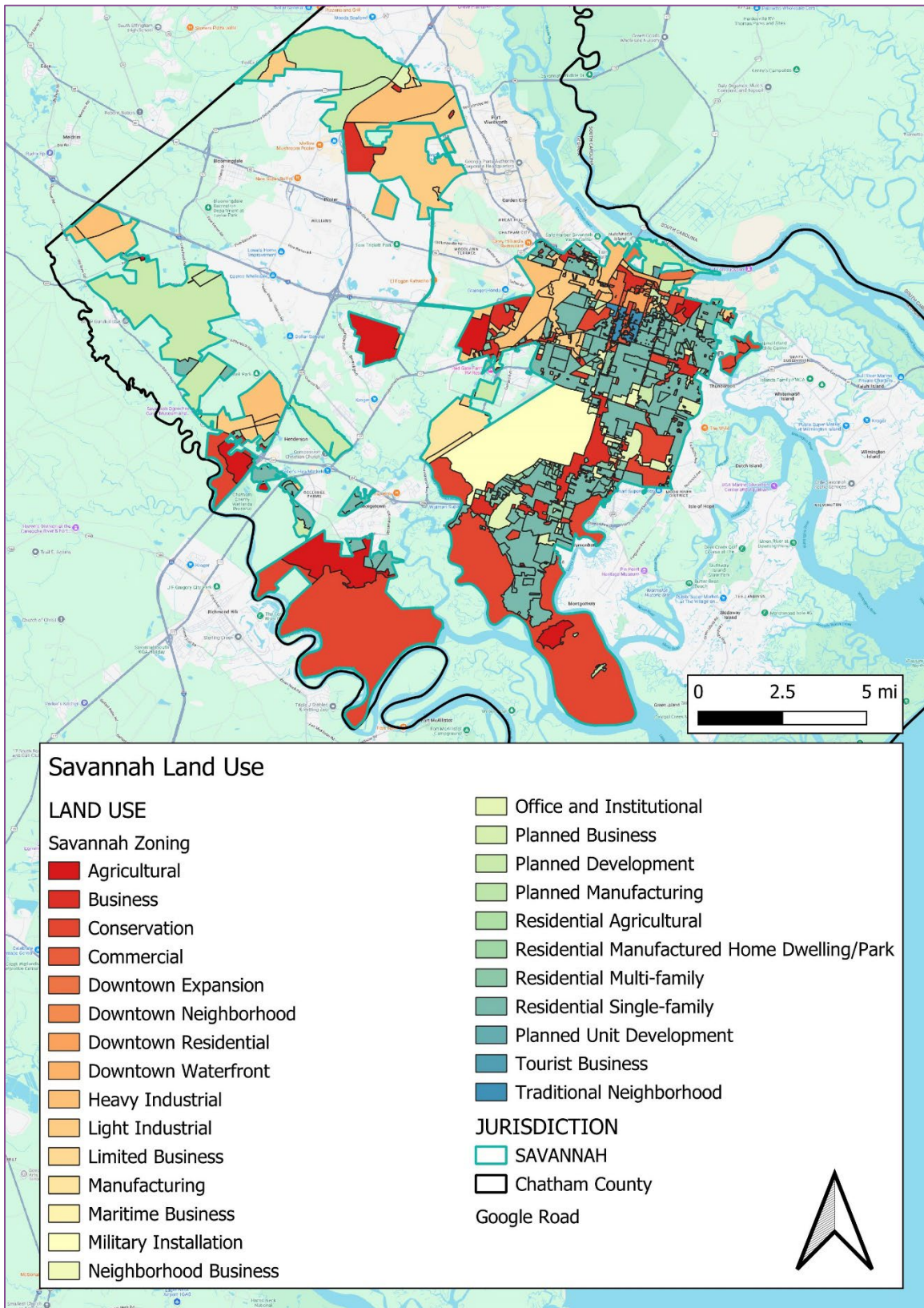
Table F-11 – Existing Land Use, Savannah

Land Use/Zoning	Area (Acres)	Area (Square Miles)
Agricultural	3,932	6.14
Business	2,985	4.66
Conservation	17,496	27.34
Commercial	629	0.98
Downtown Expansion	513	0.80
Downtown Neighborhood	45	0.07
Residential Single-Family	13,318	20.81
Downtown Waterfront	89	0.14
Heavy Industrial	5,229	8.17
Light Industrial	7,205	11.26
Limited Business	34	0.05
Manufacturing	1,241	1.94
Maritime District	3	0.005
Military Installation	4,873	7.61
Neighborhood Business/Commercial	593	0.93
Office and Institutional	1,609	2.51
Planned Business	6	0.01
Planned Development	10,920	17.06
Planned Manufacturing	5	0.01
Residential Agricultural	24	0.04
Residential Manufactured Home Park/Dwelling	65	0.10
Residential Multi-Family	1,897	2.96
Savannah Harbor Parcel 5 Planned Unit Development	42	0.07
Tourist Business	6	0.01
Traditional Neighborhood	383	0.60
TOTAL	73,142	114.28

Source: SAGIS – Zoning, 2024

An existing land use map for zoning is included below for Savannah, as taken from the SAGIS map viewer for Chatham County.

Figure F-10 – Existing Land Use and Zoning Map, Savannah



Source: SAGIS – Zoning, 2024

F.2.8.3 Future Land Use

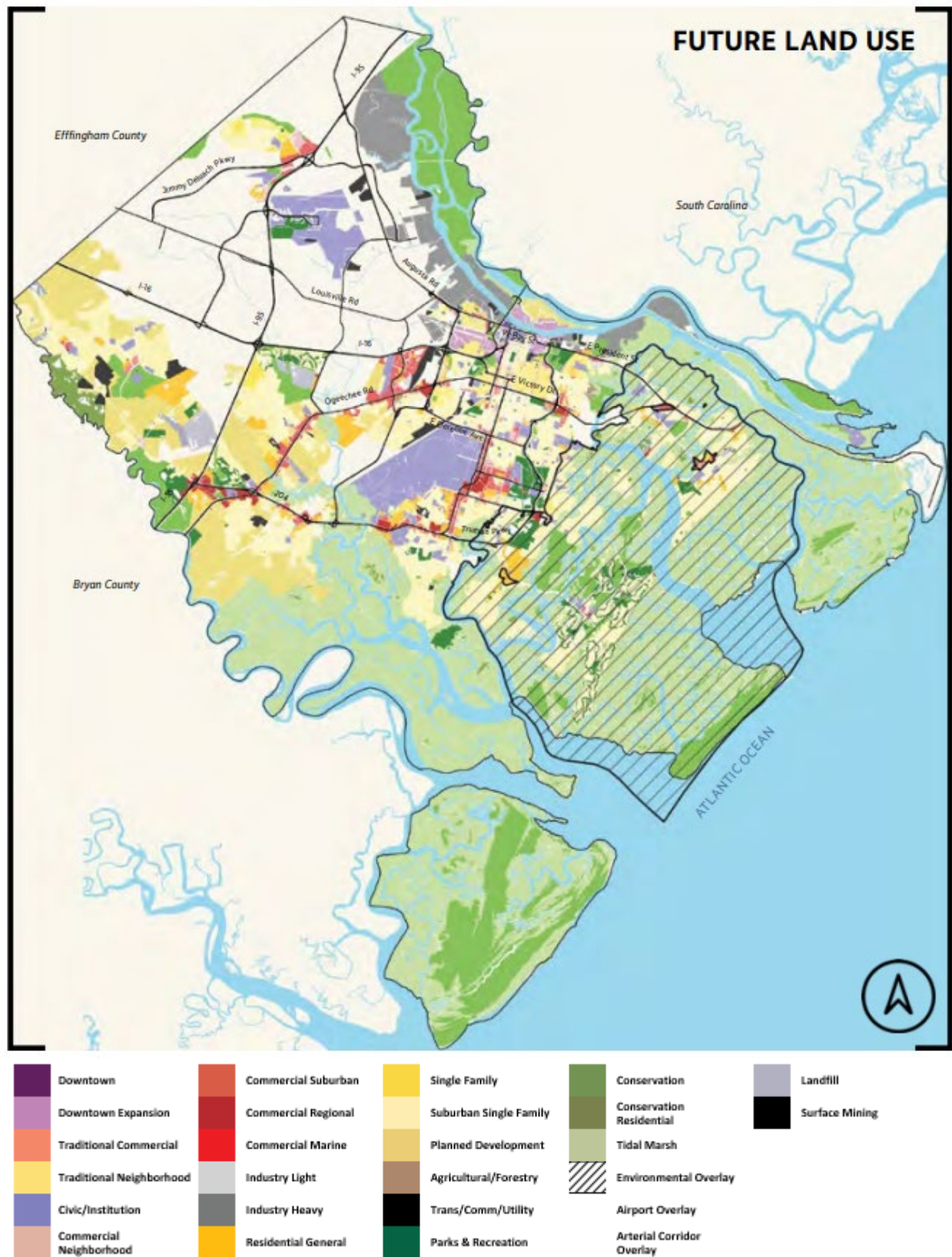
The 2020 Chatham County – Savannah Comprehensive Plan includes a Future Land Use Map (FLUM) that serves as a guide for zoning decisions. The FLUM represents the City’s and County’s future development policy and is taken into consideration for all zoning requests, local policy reviews, and land development decisions. The FLUM’s Future Land Use Categories include those listed below and shown in the following maps.

Table F-12 – Future Land Use Categories

Future Land Use Category	Definition
Downtown	Traditional Central Business District, including retail, office, entertainment, institutional, civic, and residential uses.
Downtown Expansion	Areas in close proximity to the Central Business District that are identified for growth.
Traditional Commercial	Business areas in close proximity to downtown or in outlying historically settled areas.
Traditional Neighborhood	Residential areas in close proximity to downtown or in outlying historically settled areas.
Civic / Institution	Areas that consist of educational, religious, medical, and/or public uses, which may be in a campus setting and may include private or public open space.
Commercial Neighborhood	Nodal and multi-tenant retail areas that are within predominately residential areas and are developed at a scale and intensity compatible with adjacent residential uses.
Commercial Suburban	Business areas supporting shopping centers and corridor commercial uses at a scale and intensity capable of serving regional markets.
Commercial Regional	Business areas supporting most retail, service, office, and institutional uses.
Commercial Marine	Land dedicated to marina operations including those ancillary uses that are both marine-related and an integral part of the marina complex.
Industry Light	Areas supporting warehouses, wholesale facilities, and the manufacturing, assembly or production of parts and products that may require intensive truck traffic and outdoor storage but that do not produce noise, odor, dust, or waterborne contaminants above ambient levels.
Industry Heavy	Areas supporting uses that are involved in the large-scale freight, operation, demolition, surface mining, and production of materials and may produce noise, odor, dust, and waterborne contaminants measurably above ambient levels.
Residential General	Areas with a wide range of residential uses, including multi-family dwellings, attached dwellings, small lot single-family dwellings at densities greater than 10 units per gross acre.
Single Family	Areas identified for single-family detached residential dwellings at a density not to exceed eight (8) units per gross acre.
Suburban Single Family	Areas identified for single-family detached residential dwellings at a density not to exceed five (5) units per gross acre.
Planned Development	Master planned areas accommodating cluster development, neotraditional development, or mixed residential, commercial, or civic uses.
Agricultural / Forestry	Areas principally used for farming, silviculture, dairy or livestock production, and resources extraction.
Transportation / Communication / Utility	Areas dedicated principally to railroad facilities, airports, cell towers, sub stations, solar farms, and similar uses that produce intensive or obtrusive activities that are not readily assimilated into other districts.

Future Land Use Category	Definition
Parks / Recreation	Land dedicated to open space that is accessible to the public or areas dedicated to sports, exercise, or other types of leisure activities.
Conservation	Land that is publicly or privately held and designated for preservation in a natural state or for use for passive recreation.
Conservation Residential	This category is for back barrier islands that are in private ownership and have uplands exceeding two acres on a contiguous land mass.
Tidal Marsh	Areas of estuarine influence that are inundated by tidal waters on a daily basis and are characterized by <i>Spartina</i> (cord grass) habitat.
Environmental Overlay	The island, estuarine, and marsh areas of unincorporated Chatham County, to include back barrier islands, hammocks, and other environmentally sensitive areas and/or habitats.
Airport Overlay	Areas adjacent to airport facilities that are within Clear Zones, Accident Potential Zones, and Noise Zones where day-night averages are greater than 65 decibels, or similar zones of influence.
Arterial Corridor Overlay	Areas having established residential character that, due to their arterial location, are confronted with potential commercial intrusion.
Landfill	A land depository or excavation area operated in a controlled manner for the dumping of debris or inert material; or a disposal site operated by means of compacting and covering solid waste with an approved material.
Surface Mining	Areas constituting all or part of a process for the removal of minerals, ores, or other solid matter for sale or for consumption.

Figure F-11 – Future Land Use Map, Savannah 2020-2040



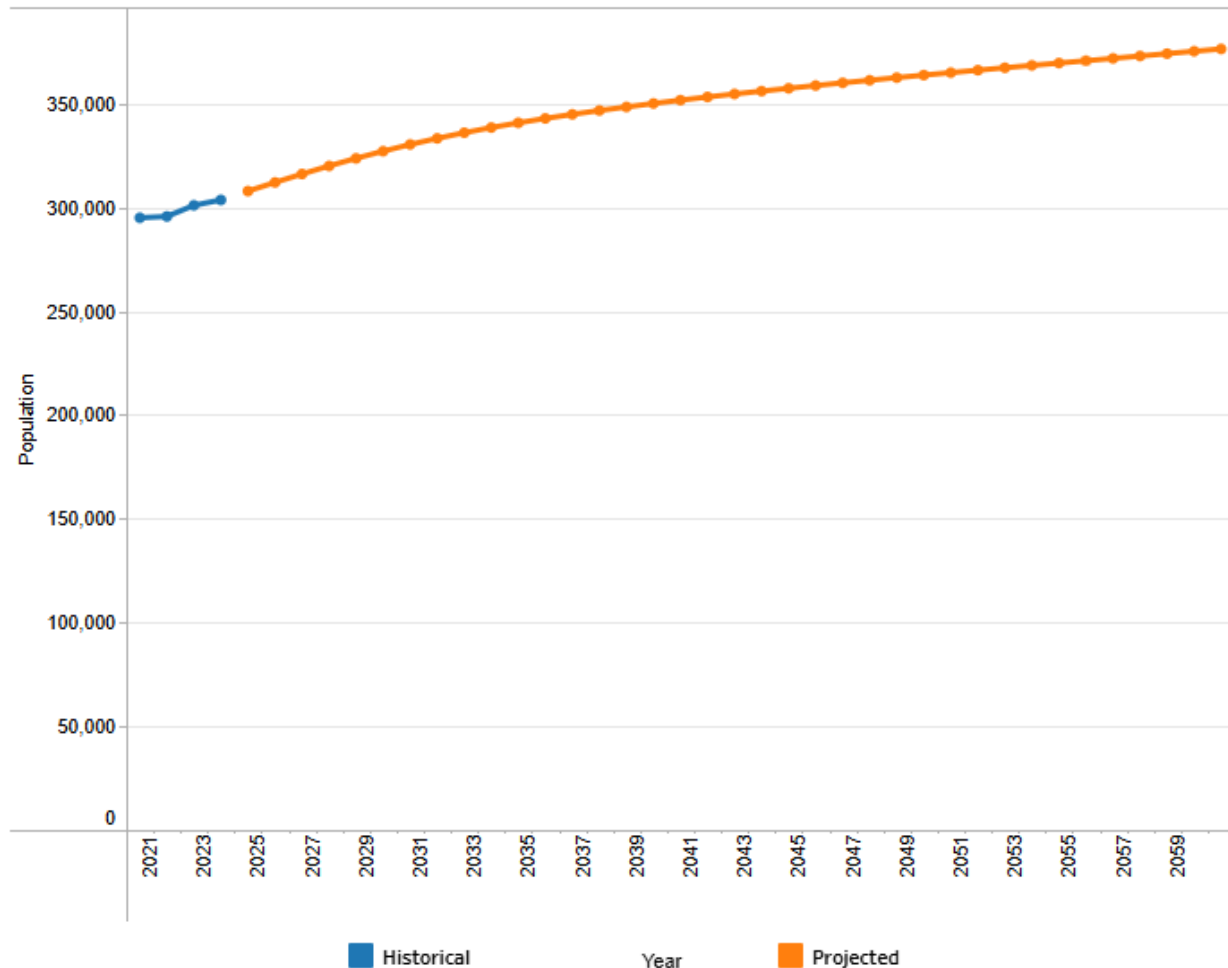
F.2.9 Growth and Development Trends

According to U.S. Census and American Community Survey population estimates, the City of Savannah population has increased from 147,780 in 2020 to 148,808 in 2024, representing a total increase of 0.7 percent and an annual increase of 0.18 percent.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be about 0.8 percent through 2060.

Figure F-12 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget

The 2020-2040 Chatham County – Savannah Comprehensive Plan includes an estimate for population growth of the Savannah Metropolitan Statistical Area (MSA), which also includes Bryan and Effingham Counties. Chatham County is the largest county in the Savannah MSA and serves as the region's largest population center, commercial core, and industrial hub. By 2040, the population of the Savannah MSA is projected to be approximately 500,000 people, which is an increase of 27 percent. Additionally,

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F.3 ASSET INVENTORY

F.3.1 Property

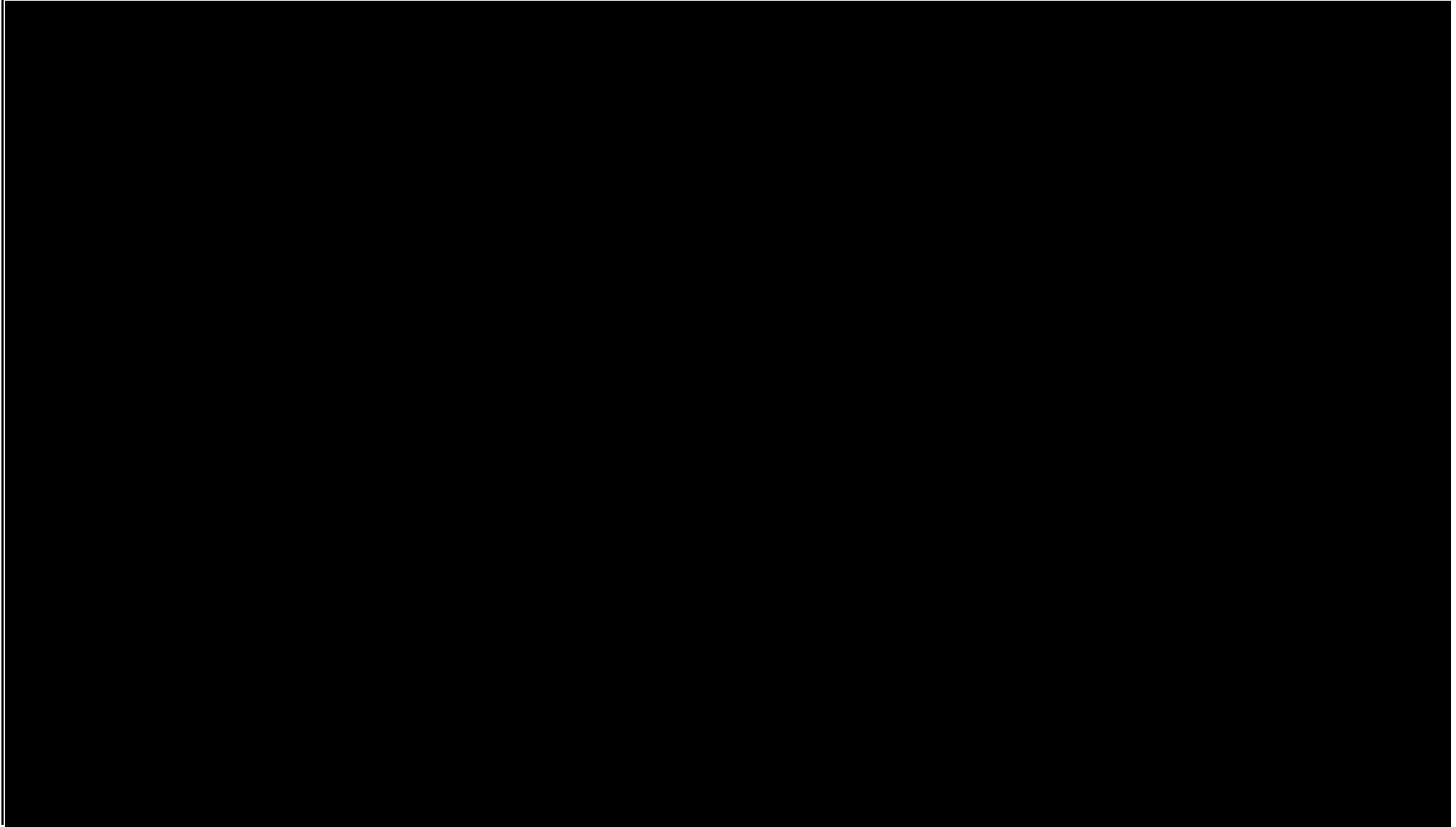
Table F-13 – City of Savannah Building Exposure

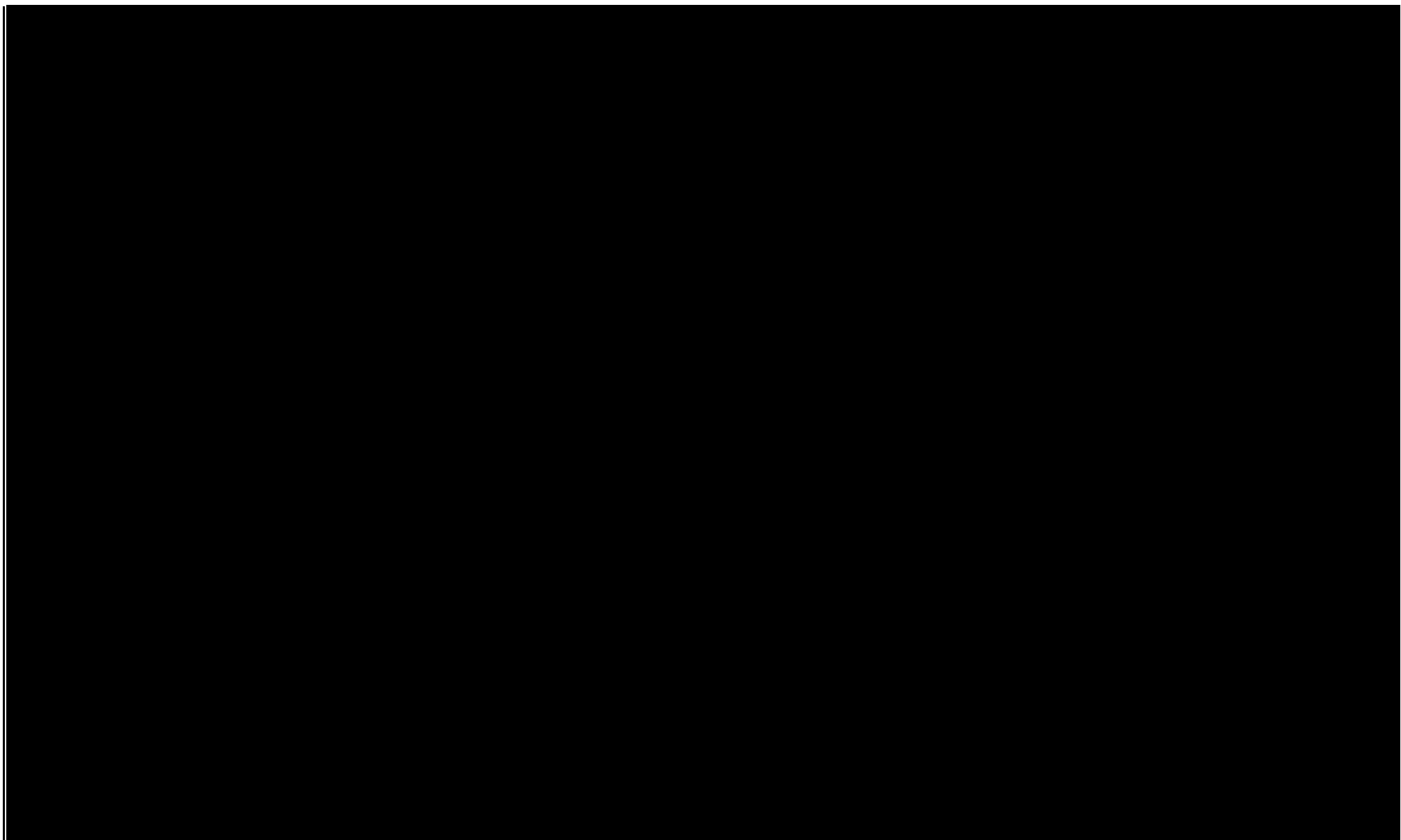
Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	5,074	\$5,839,573,854	\$5,839,573,854	\$11,679,147,708
Government	186	\$1,046,161,837	\$1,046,161,837	\$2,092,323,674
Industrial	753	\$1,308,741,033	\$1,963,111,550	\$3,271,852,583
Non-Profit	1,100	\$1,080,911,900	\$1,080,911,900	\$2,161,823,800
Residential	48,132	\$8,801,592,053	\$4,400,796,027	\$13,202,388,080
Utility	106	\$18,428,105	\$27,642,158	\$46,070,263
Total	55,351	\$18,095,408,782	\$14,358,197,326	\$32,453,606,108

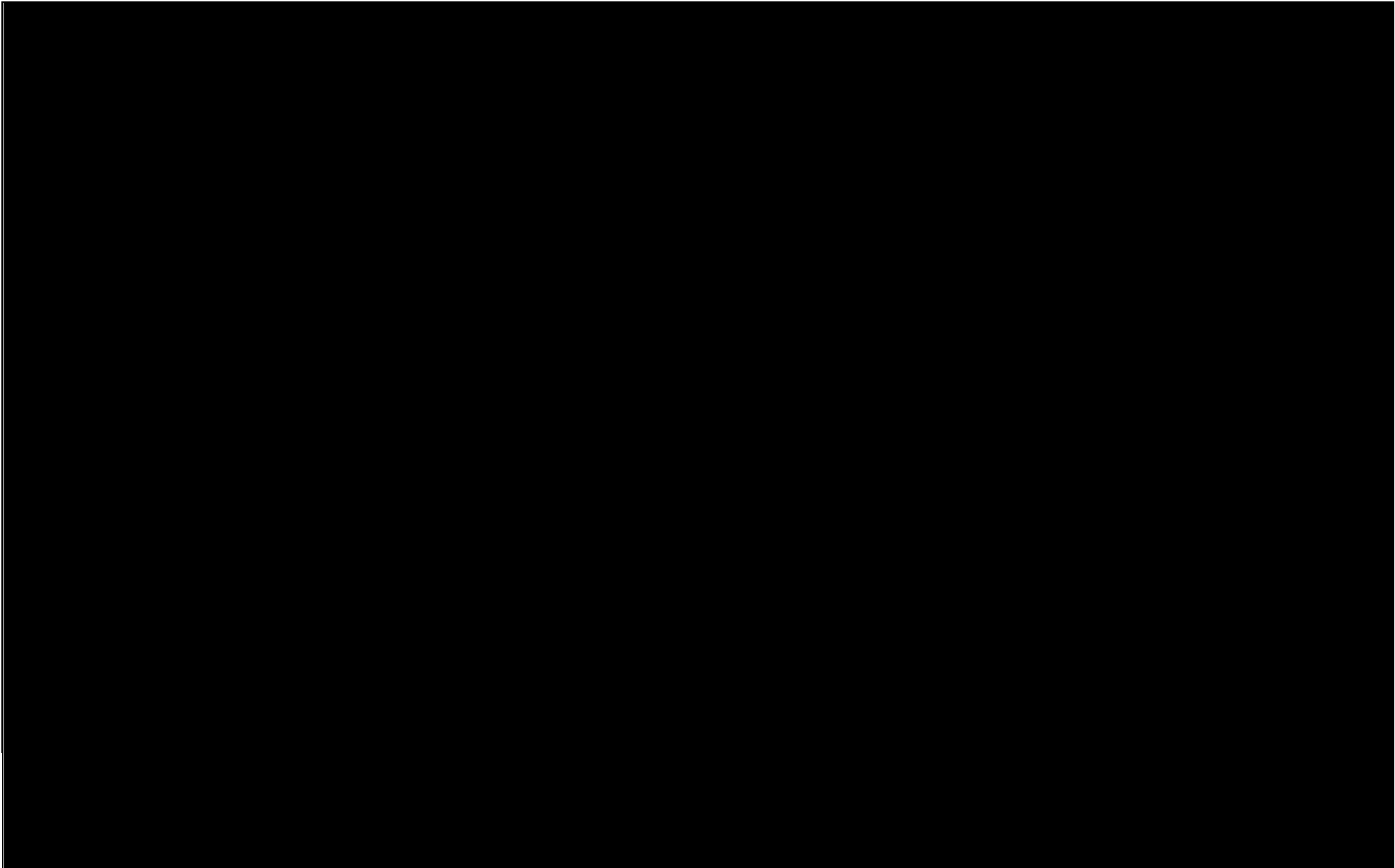
Source: Chatham County

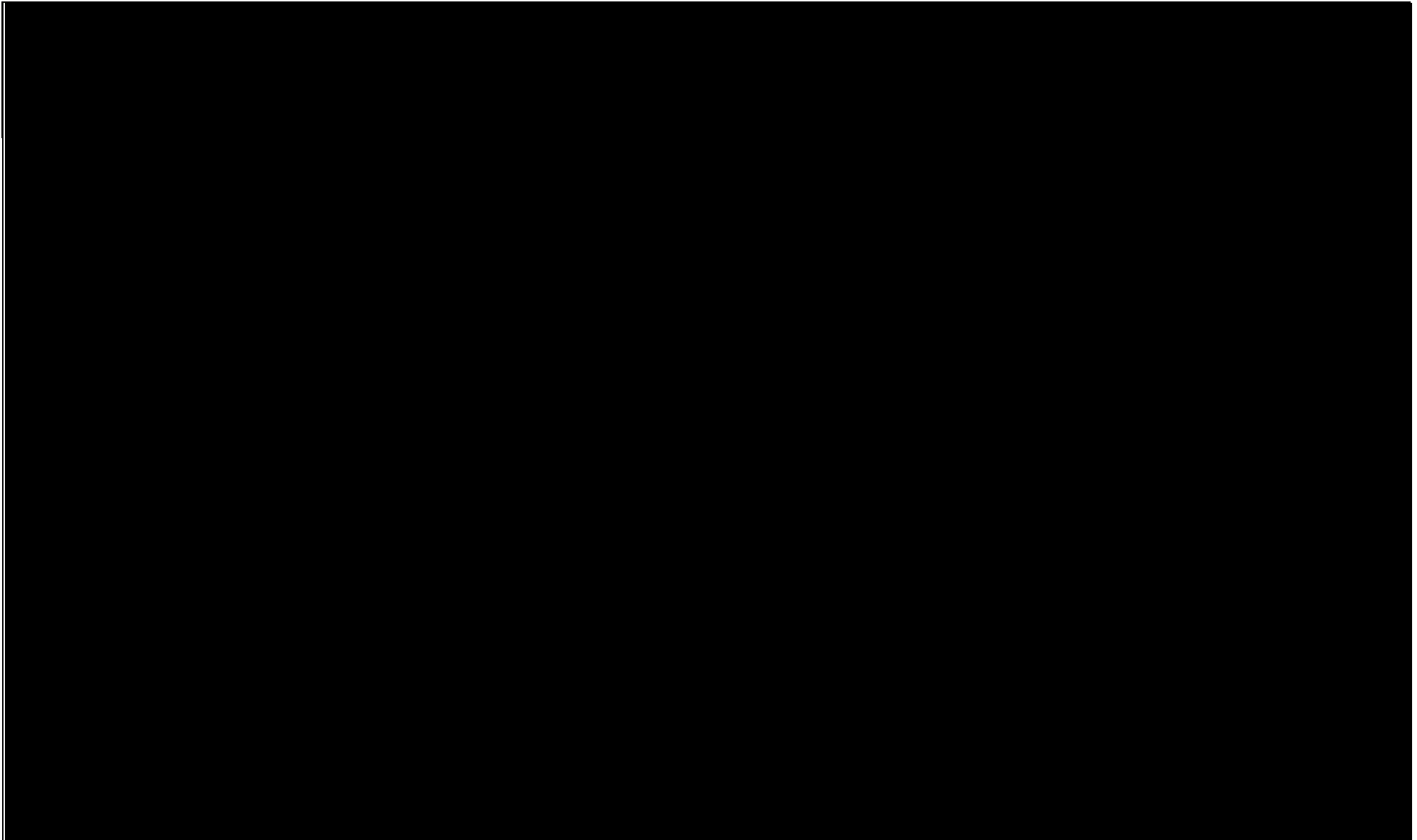
F.3.2 Critical Facilities

Table F-14 – Critical Facilities and Infrastructure at Risk









Source: Chatham County

F.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

F.4.1 Flood

Approximately 6.1 percent of buildings in Savannah are within the mapped 1%-annual-chance floodplains (Zones A, AE, and VE) and 7.8 percent are within the X500 zone. provides building counts and estimated damages by occupancy type for the 1% annual chance of a coastal flood event.

Table F-17 – Savannah Estimated Building Damage, 1% Annual Chance Coastal Flood

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damages Buildings
Agricultural	9	1	\$38,708,479	\$2,575	0.01%
Residential	45,151	11	\$11,487,549,681	\$539,248	0.00%
Total	45,160	12	\$11,526,258,160	\$541,823	0.00%

Figure F-14 reflects the mapped flood hazard zones for the City of Savannah, and Figure F-15 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table F-15 below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

Table F-15 – Properties at Risk by Flood Zone

Flood Zone	Number of Buildings	Total Fair Market Building Value
A	22	\$16,613,600
AE	4,004	\$2,121,569,509
VE	9	\$1,260,800
X500	5,142	\$2,331,342,804
Total	9,177	\$4,470,786,713

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2024

Table F-16 provides building counts and estimated damages by occupancy type for the 1% annual chance of a riverine flood event. Savannah critical facilities that are at risk of damage during a 1% annual chance flood are:

- Chatham County Health Department
- Georgia Regional Hospital
- Chatham EMS Station #7
- Chatham Fire Station #11
- Largo-Tibet Elementary School
- 7012 Skidaway Maritime Extension
- 7015 Skidaway Shellfish Facility

Table F-16 – Savannah Estimated Building Damage, 1% Annual Chance Riverine Flood

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ration of Exposed to Damaged Buildings
Agricultural	9	1	\$38,708,479	\$33,693	0.09%
Religious	349	8	\$87,422,931	\$167,179	0.19%
Residential	45,121	1,597	\$11,487,849,681	\$94,206,416	0.82%
Commercial	3,059	44	\$2,821,840,971	\$21,767,795	0.77%
Industrial	637	39	\$2,149,012,666	\$1,798,539	0.08%
Total	49,175	1,689	\$16,584,834,728	\$117,973,922	0.71%

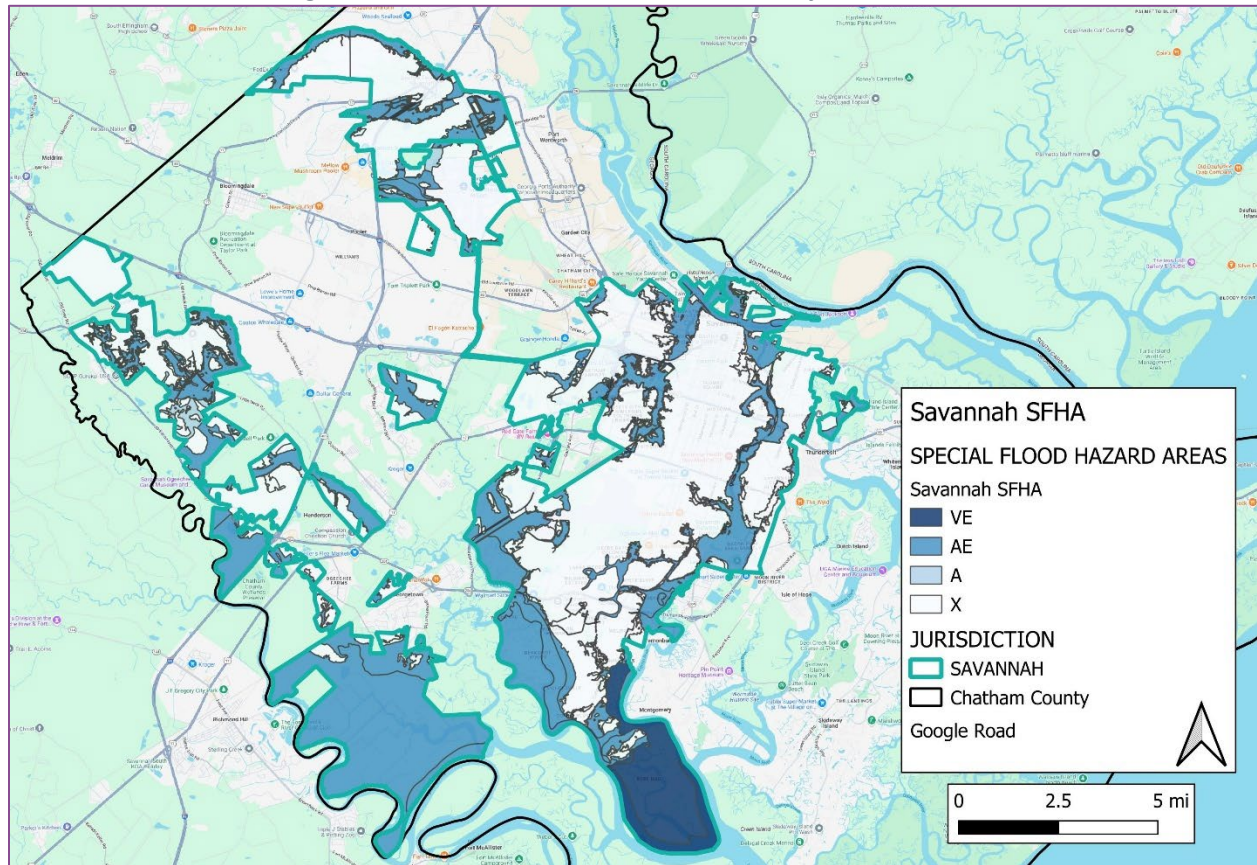
Source: HAZUS

Table F-17 provides building counts and estimated damages by occupancy type for the 1% annual chance of a coastal flood event.

Table F-17 – Savannah Estimated Building Damage, 1% Annual Chance Coastal Flood

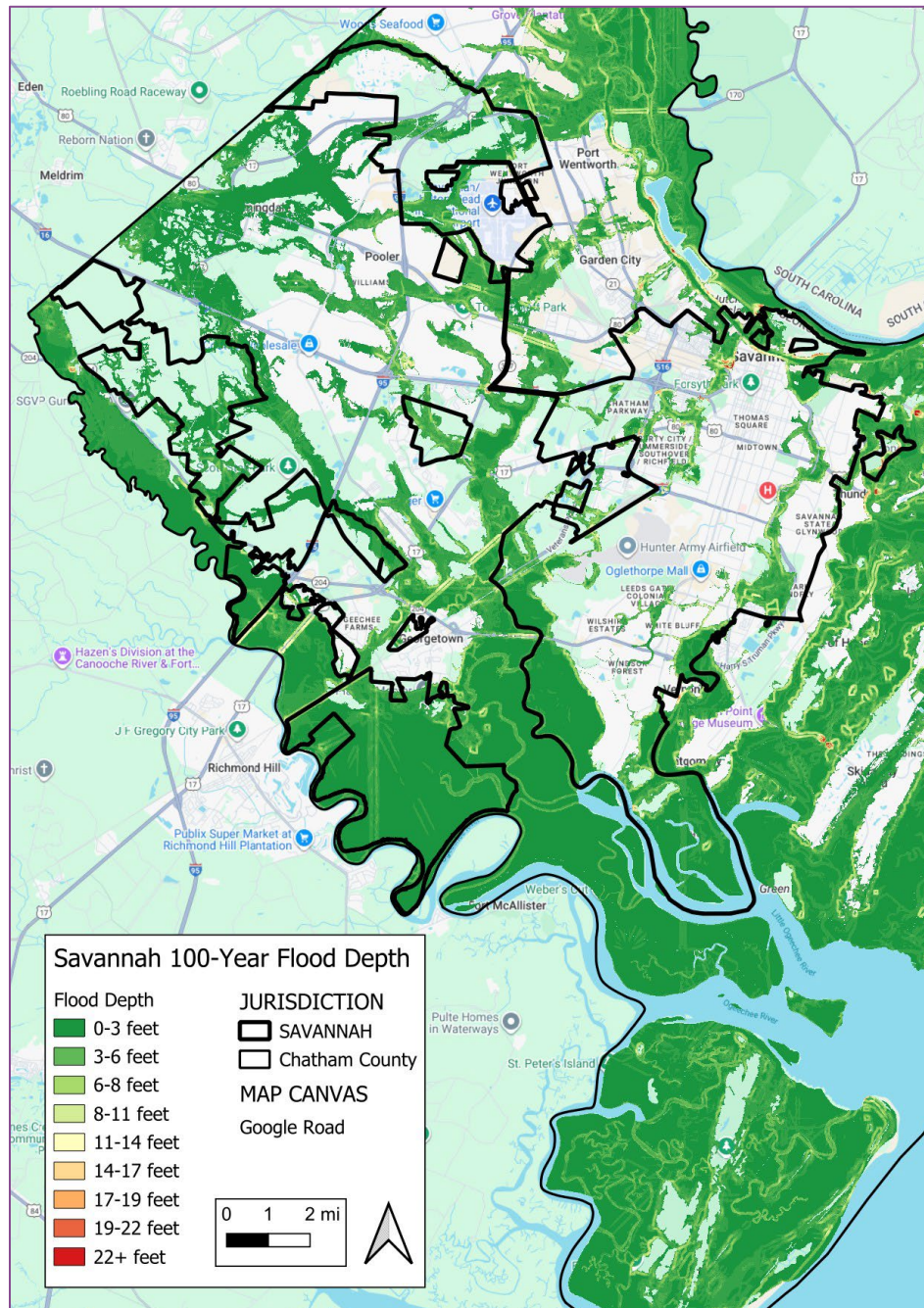
Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Raito of Exposed to Damages Buildings
Agricultural	9	1	\$38,708,479	\$2,575	0.01%
Residential	45,151	11	\$11,487,549,681	\$539,248	0.00%
Total	45,160	12	\$11,526,258,160	\$541,823	0.00%

Figure F-14 – FEMA Flood Hazard Areas, City of Savannah



Source: FEMA 2018 DFIRM

Figure F-15 – Flood Depth, 1%-Annual-Chance Floodplain, City of Savannah



Source: GEMA, UGA ITOS 2025

F.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table F-18 summarizes the wildfire risk products created for the jurisdiction.

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Table F-18 – Wildfire Risk Assessment Products

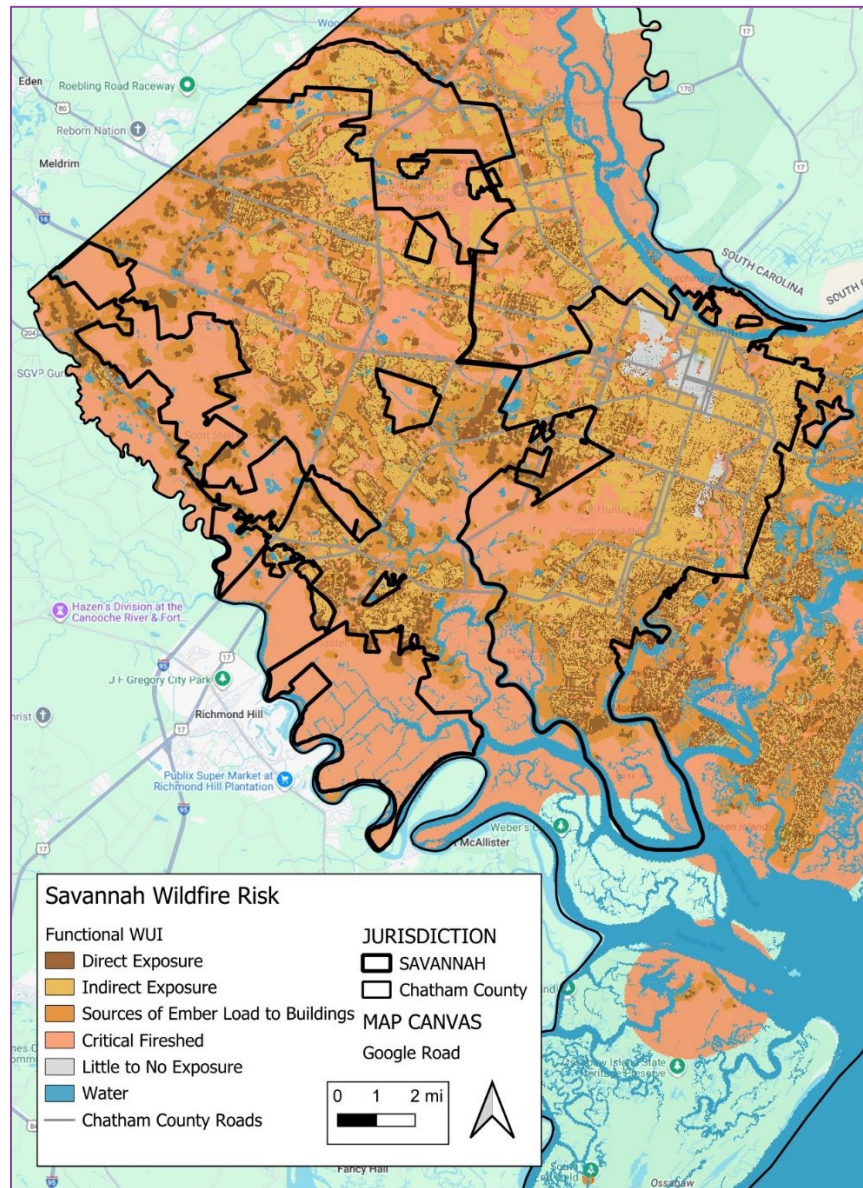
Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.

Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure F-16 depicts the Functional WUI for the City of Savannah. Functional WUI risk across the city includes significant critical fireshed and sources of ember load with direct and indirect exposure to buildings. Indirect exposure is the largest risk to the city, especially along the Abercorn St./Hwy 204 corridor. The categories of risk are defined below:

- **Direct Exposure** - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
- **Indirect Exposure** - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
- **Critical Fireshed** - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
- **Sources of Ember Load to Buildings** - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- **Little-to-No Exposure** - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No Exposure zone, but smoke and evacuations could still impact this area.

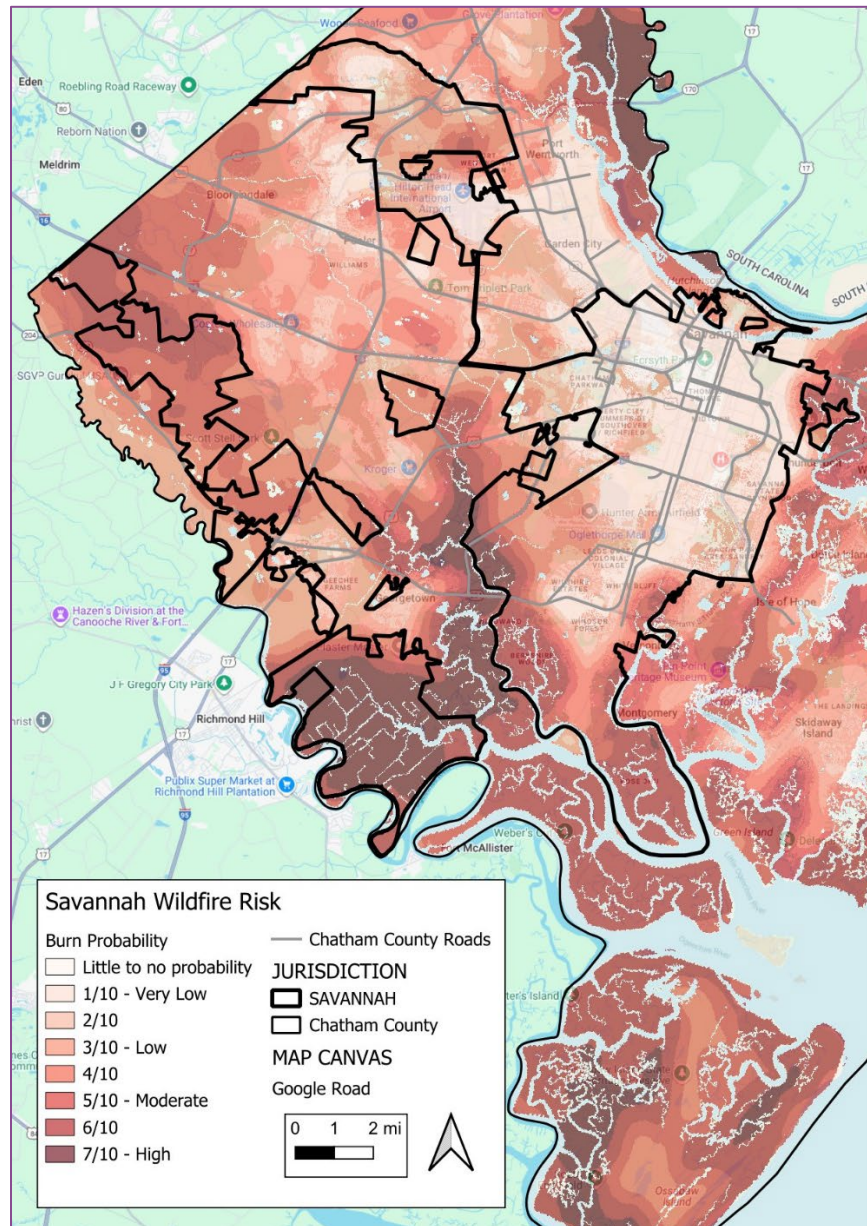
Figure F-16 –Functional Wildland Urban Interface, City of Savannah



Source: Southern Wildfire Risk Assessment

Figure F-17 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. The highest burn probability areas are in South Savannah near the Bryan County border, around Veterans Pkwy near Hwy 204, and in West Savannah near John Carter Rd. and I-16.

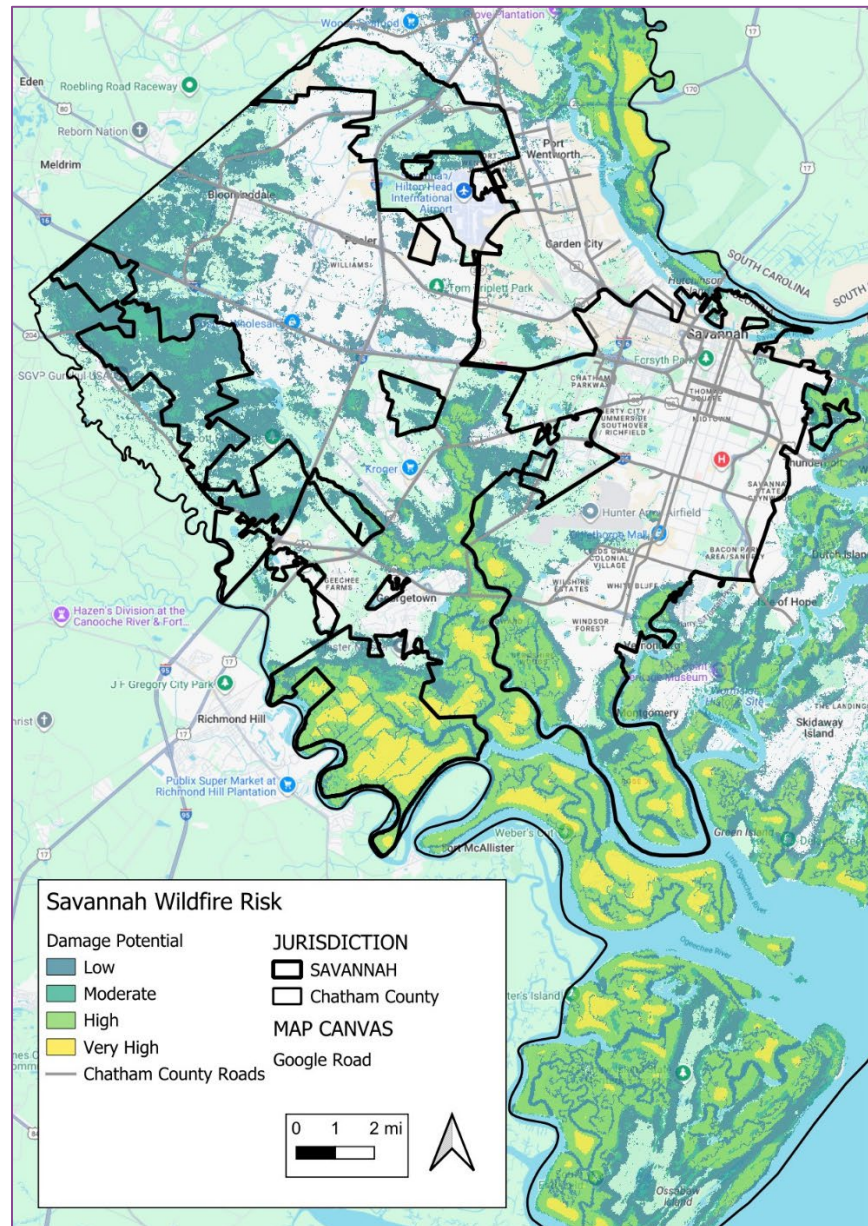
Figure F-17 – Burn Probability, City of Savannah



Source: Southern Wildfire Risk Assessment

Figure F-18 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. The highest Damage Potential risks in Savannah are along the southern city borders from Rose Dhu Island to I-16 and John Carter Road

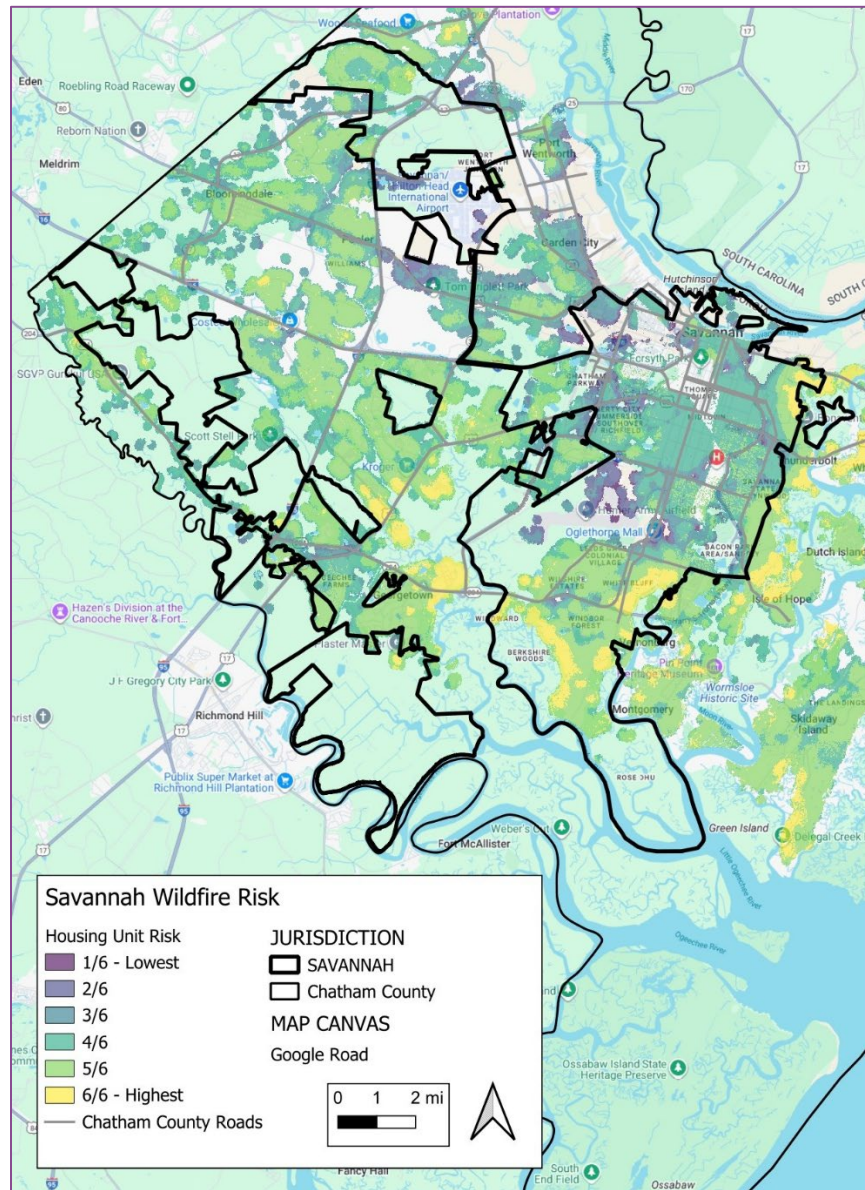
Figure F-18 – Damage Potential, City of Savannah



Source: Southern Wildfire Risk Assessment

Figure F-19 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. The highest Housing Unit Risk areas in Savannah are around Windsor or the Marsh, Colonial Oaks, Paradise Park, River's End, Savannah Gardens, and Pine Gardens.

Figure F-19 – Housing Unit Risk, City of Savannah



Source: Southern Wildfire Risk Assessment

F.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

The City of Savannah joined the NFIP emergency program in 1970 and has been a regular participant in the NFIP since May 1971. The following tables reflect NFIP policy and claim data for the City categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table F-19 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	4,557	\$2,694,532	\$1,323,890,000	410	\$4,596,042.16
2-4 Family	191	\$93,340	\$53,994,000	3	\$11,401.92
All Other Residential	309	\$315,024	\$177,700,000	21	\$1,931,480.67
Non-Residential	606	\$969,998	\$321,714,000	36	\$1,198,692.08
Total	5,663	\$4,075,894	\$1,877,298,000	470	\$7,737,616.83

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Table F-20 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Policies	Number of Post-FIRM Policies
AO1-30 & AE Zones	1,832	\$5,579,644.71	1,287	545
A Zones	6	\$5,499.03	4	2
V01-30 & VE Zones	7	\$380,388.14	6	1
B Zone / X Shaded	10	\$0	4	6
C / X Zone	3,808	\$1,772,084.95	2,480	1,328
No Zone Identified	0	\$0	0	0
Total	5,663	\$7,737,616.83	3,781	1,882

Source FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

F.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Prevention									
P-1	Study potential storm surge effects on cemeteries	Tropical Cyclone	2.1	Moderate	Cemeteries	Local funds (CIP); estimated cost \$30,000	2029	Carry Forward	No funds available - need to revisit timeline
P-2	2019: Update the CRS Flood Mitigation Plan (FMP 510), Repetitive Loss Area Analysis (RLAA) and Natural Floodplain Functions Plan	Flood	1.3, 2.3, 4.1	High	City Development Services	FEMA Pre-Disaster Mitigation Grant; estimated cost \$50,000	2026	Carry Forward	The process was completed in 2021, but time for another five-year update to be completed in 2026. RFP completed and awaiting City Council's approval during April 10, 2025, Meeting.
P-3	Acquire, elevate or mitigate properties prone to flooding	Flood	3.1	High	City Development Services	HMGP	2030	Carry Forward	No buildings were mitigated. Continue to look for opportunities to mitigate flooded structures.
P-4	Relocate fiber cable supporting all City facilities to below ground	All	2.1, 5.1	Moderate	Public Works	TBD	2030	Carry Forward	Need to get status from Innovation and Technology (IT) Division, who should lead agency on this.
P-5	Conduct Basin Studies, Watershed Modeling, and Alternative Evaluations	Flood, Tropical Cyclone	1.3, 2.3, 4.1	Moderate	Water Resources	HMGP, General Fund	2026-2030	New	New action
Property Protection									
PP-1	Coordinate with the Chatham County Resource Protection Commission (RPC) to acquire lands vulnerable to flooding through SPLOST funds and other grant opportunities.	Flood	2.2, 3.2	Moderate	Development Services	SPLOST Funding	2028	Carry Forward	Have a couple of meetings with Jackie Jackson with Chatham County. Discussed Grant opportunities but no funds.
PP-2	Harden roof, windows, doors, rooftop units and/or energy systems for critical facilities	Tornado, Severe Weather, Tropical Cyclone	1.3, 2.1	Low	Water Resources/ Facilities Management	PDM, HMGP	2030	Carry Forward	Continuing to identify locations for hardening.
PP-3	Install signage in train trestle area at Anderson Street to indicate water depth	Flood	1.2, 3.1	Moderate	Mobility Services	HMGP	2027	Carry Forward	Still need to complete. Continue to search project funding. Like for GA Tech's "Sea Level Sensors" program to help with the design and implementation.
PP-4	Elevate or dry flood proof components or systems vulnerable to flood damage	Flood	2.1	High	Public Works	TBD	2025	Carry Forward	No action, but need to continue.
PP-5	Acquire/deploy environment monitoring systems for all/various weather hazards.	All	2.1, 4.2, 4.3	Moderate	City Development Services	Local Funding; HMGP	2026-2028	New	New action
Structural Projects									
SP-1	Construct and/or improve drainage systems to alleviate drainage issues	Flood	2.1	Moderate	Stormwater Department	City SPLOST funding	2026	Carry Forward	The city currently has ongoing drainage improvement project at 1. Vassar St, 2. Vicksburg Pond (Placentia basin) and Ardsley Park area. will need to continue the existing projects plus add additional drainage to include Tremont Subdivision.
Emergency Services									
ES-1	Emergency power to Wells, Lift Stations and Pumps (portable generators). Estimated size ranges from 60 kw and 100 kw	All	2.1, 5.1	High	Emergency Preparedness, Capital Projects.	HMGP, General Fund	2027	Carry Forward	Revised to: Emergency power to disbursed critical assets, such as well, pumps, lift stations and traffic lights.
ES-2	Portable generators for fixed critical facilities	All	2.1, 5.1	High	Public Works	HMGP, General Fund	2027	Carry Forward	The city has identified several facilities for this project. Would like the description changed to Generators for fixed critical facilities. The lead agency needs to be changed to Emergency Preparedness/ Capital Projects.
ES-3	Purchase and install generator quick connects and transfer switches for critical facilities	All	2.1, 5.1	High	Public Works	HMGP, General Fund	2027	Carry Forward	The city has identified several facilities for this project. Would like the description changed to Generators for fixed critical facilities. The lead agency needs to be changed to Emergency Preparedness/ Capital Projects.
Public Education and Awareness									
PEA-1	Remove building code/insurance disconnect through education of builders/realtors and modification of technical review checklist	Flood	2.2, 3.1, 3.2	High	City Development Services	City Operating Budget	2026	Carry Forward	Meet with Home Builders Committee about HUD two feet freeboard for new homes in the SHA. Promoted the change with local engineering origination.

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
	(cross-check NFIP/Insurance/Ordinance/IBC). Provide documents that clearly display the difference with the 2018 International Building Codes, NFIP 44 CFR, and Local Flood Damage Prevention Ordinance.								Also, the ASCE 7-22 future conditions requirement of a two feet FB and 500-year requirement that will go into effect in 2026.
PEA-2	Implement FEMA's High Water Mark Initiative	Flood	3.1, 3.2	Moderate	City Development Services	City Operating Budget	2028	Carry Forward	Altered direction by concentrating on the GA Tech's "Sea Level Rise Sensors" program. Hope to use the team to design and install solar warning lights signs based on the flood water level.
PEA-3	Provide outreach to vulnerable populations via various outreach methods (print, tv, radio, social media, etc.)	All	3.2	High	City Development Services	TBD	2025	Carry Forward	Savannah Morning News dropped the Penny Saver publications, so newspaper inserts are not as effective to communicate with the public. Have to be creative to reach the population such as utility bills and social platforms. Have to utilize the City's Office of Marketing and Communications Department to get the message out. Also, use the school system such as STEAM event to promote flooding awareness.

Annex G Town of Thunderbolt

G.1 PLANNING PROCESS

The table below lists the HMPC members who represented the Town of Thunderbolt.

Table G-1 – HMPC Members

Member Name	Title	Agency/Department
Andrew Bateman	Fire Chief	Fire Department
Odis Boyles	Fire Chief	Fire Department
Sean Clayton	Police Chief	Police Department

G.2 COMMUNITY PROFILE

G.2.1 Overview of the Community

The Town of Thunderbolt is located approximately five miles southeast of downtown Savannah and is bordered to the east by the Wilmington River (part of the intercoastal waterway).

According to the U.S. Census Bureau, Thunderbolt has a total area of 1.5 square miles of which 1.3 square miles (86.0%) is land and 0.2 square miles (14.0%) is water.³⁹

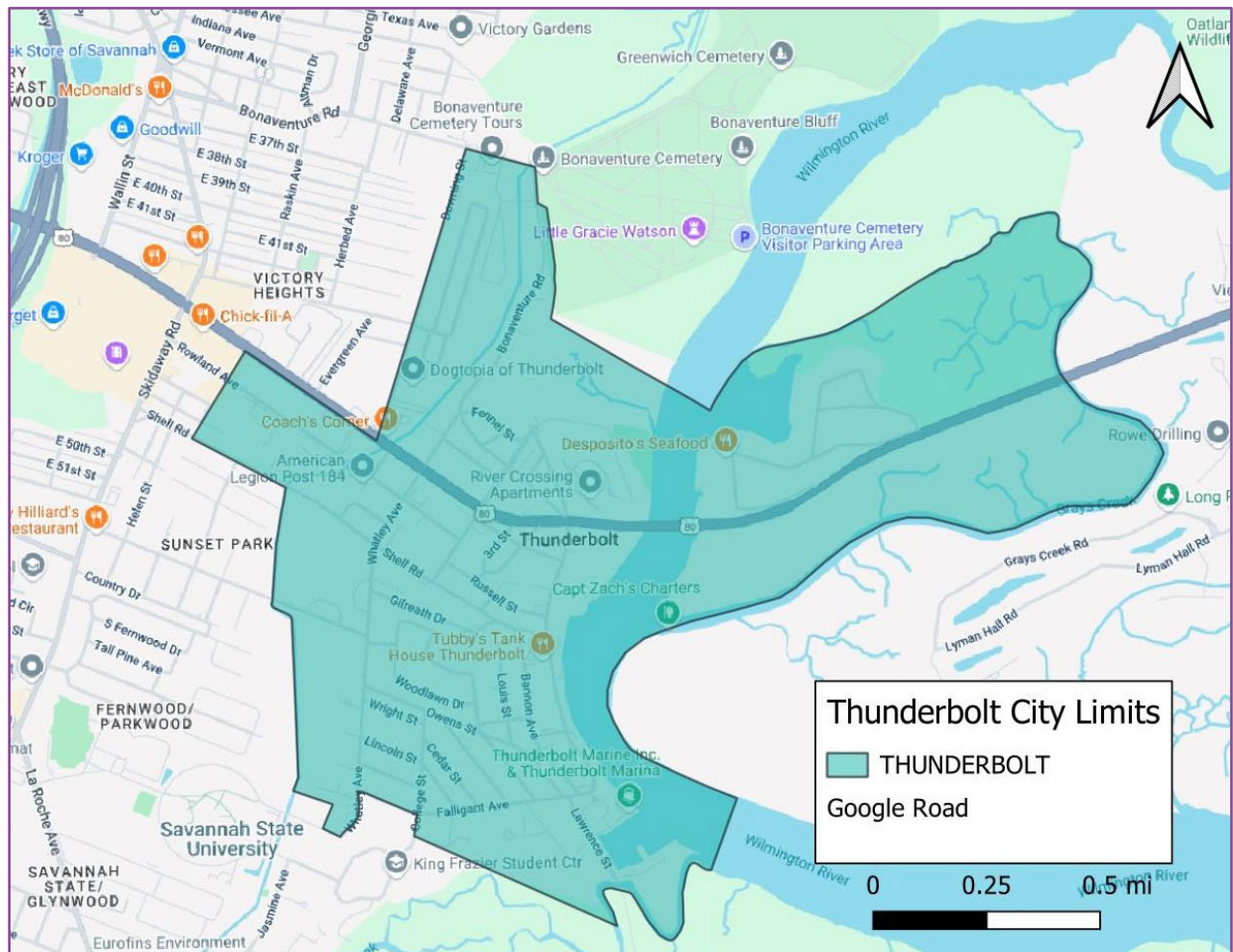
According to the U.S. Census Bureau's American Community Survey (ACS) 5-Year Estimates, the town had a total population of 2,552 in 2023.⁴⁰ Therefore, the town's average population density is approximately 1,701 people per square mile.

The map below reflects the Town of Thunderbolt boundaries and shows the City's location within the county and in relation to surrounding municipalities.

³⁹ <https://data.census.gov/table?q=Thunderbolt+town,+Georgia+geography>. Retrieved 07-03-2025.

⁴⁰ <https://data.census.gov/table/ACSDP5Y2023.DP05?q=Thunderbolt+town,+Georgia+population>. Retrieved 07-03-2025.

Figure G-1 – Location Map, Thunderbolt



G.2.2 Geography and Climate

Please refer to Chatham County Community Profile for a summary of climate for Chatham County.

Thunderbolt is located partially within the Casey Canal – Haney’s Creek HUC 12 Basin and the Wilmington River HUC-12 Basin.

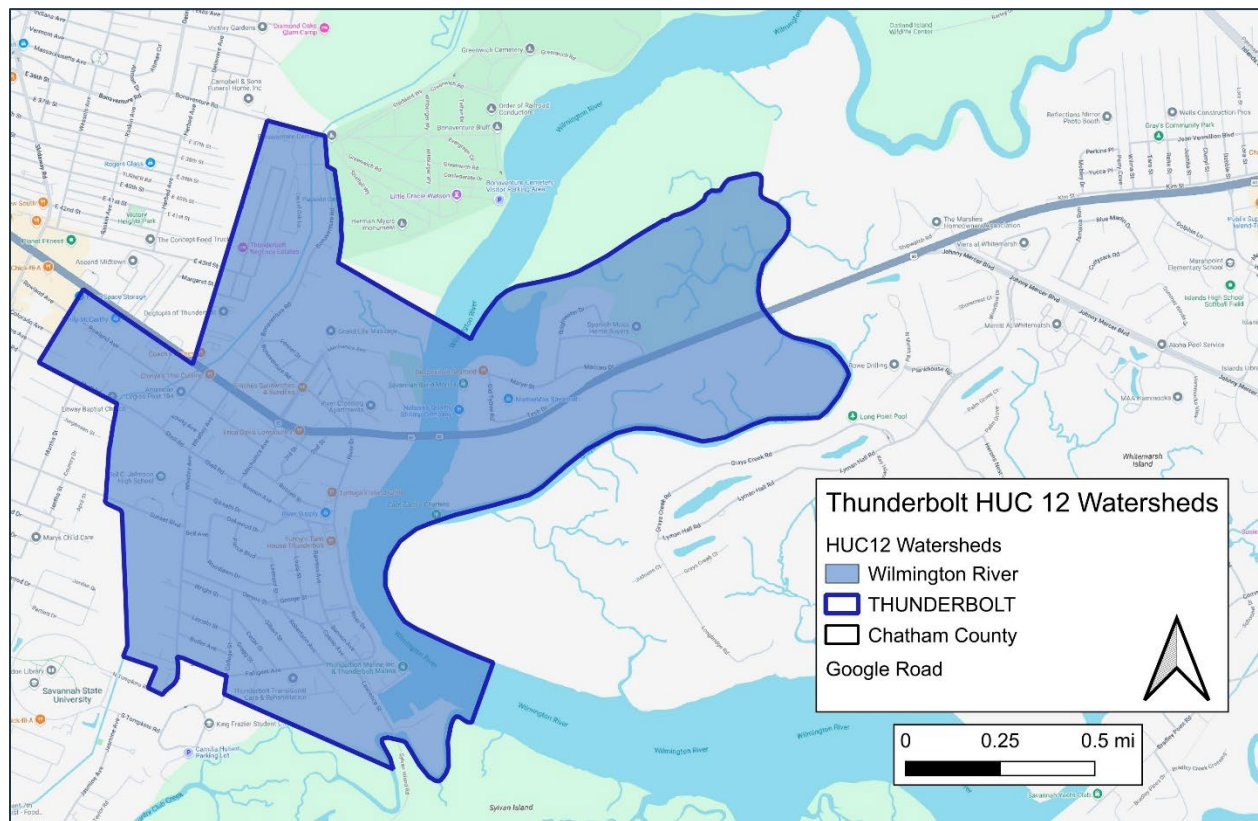
Table G-2 – HUC 12 Watersheds, Thunderbolt

Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Casey Canal – Haney’s Creek	13.78	13.78	0.00	Vernon River	030602040302
Wilmington River	32.75	32.75	0.00	Wassaw Sound – Frontal Atlantic Ocean	030602040101

Source: Chatham County Coastal Watershed Management Plan, 2020

The figure below illustrates the HUC 12 drainage basins and drainage features in and around Thunderbolt.

Figure G-2 – HUC 12 Watersheds, Thunderbolt



G.2.3 Cultural, Historic, and Natural Resources

G.2.3.1 Cultural and Historic Resources

The Town of Thunderbolt’s Museum is located at the corner of Victory Drive and Mechanics Ave.



The Thunderbolt Senior Citizens' Center is located at 3236 Russell Street and provides local senior citizens with a place for fellowship and entertainment.



G.2.3.2 Parks, Preserve, and Conservation

The town of Thunderbolt has three public parks as summarized in the table below.

Table G-3 – Public Parks, Thunderbolt

Name	Amenities	Photo
Nellie Johnson Park	• Swing • Basketball Court • Covered Picnic Area • Slide and playground • Restrooms	
W.E. Honey Park	• Pavilion • Fishing Pier • Playground • Restrooms	
Thomson Park	• Pavilion • Scenic view of Wilmington River	

G.2.3.3 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within the Town of Thunderbolt are identified in the figure below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table G-4 – Flood Zones, Thunderbolt

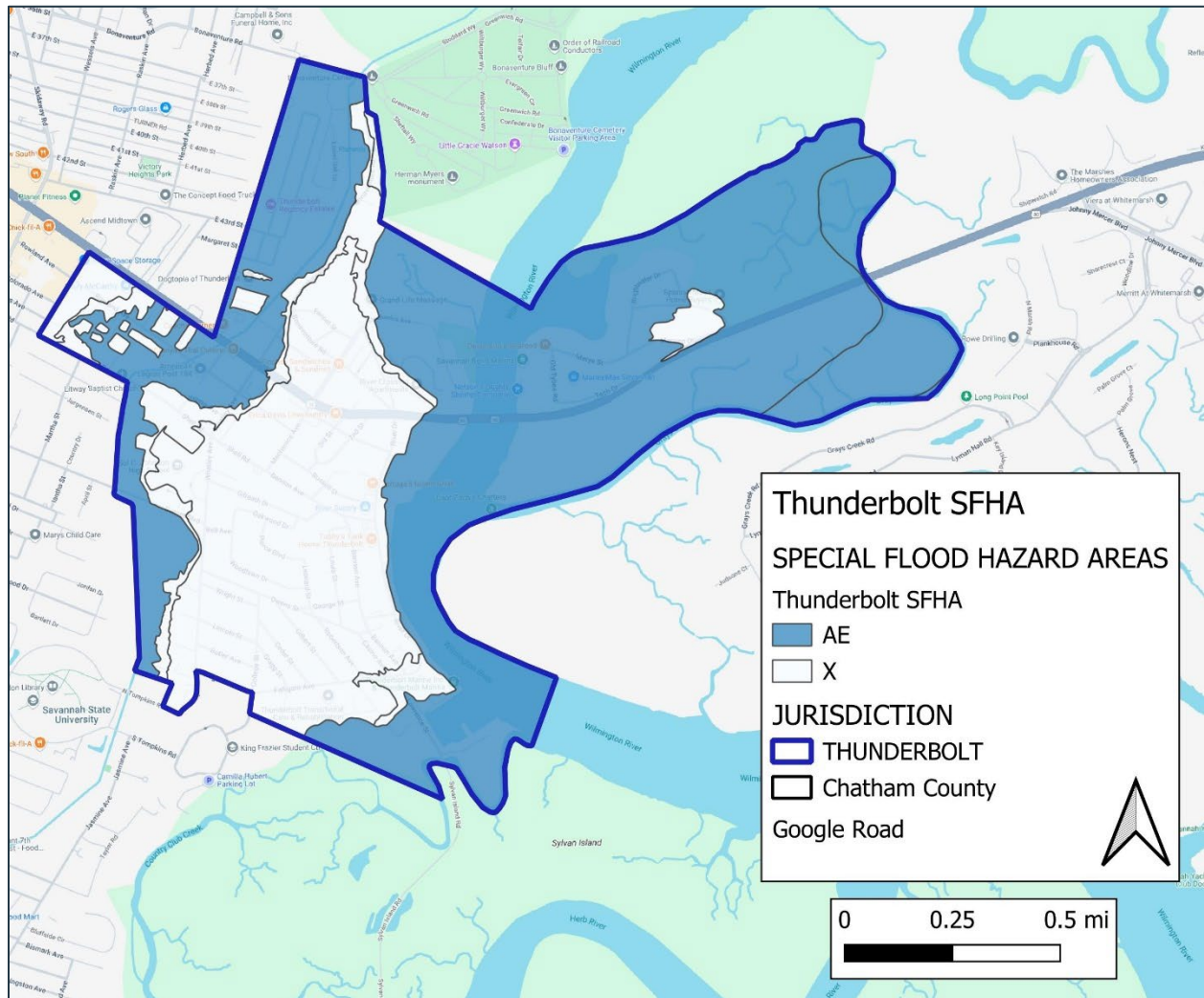
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
AE	652	1.02	64.6
X	359	0.56	35.4
TOTAL	1,011	1.58	100.0

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, 652 acres of the land within the Town is located within a 100-year floodplain (Zone AE), which equals 64.6 percent of the Town. An additional 359 acres are located within moderate or minimal flood hazard areas (35.4% of the Town). With nearly 65 percent of the Town at high risk to flooding in the Special Flood Hazard Area (SFHA), the Town of Thunderbolt should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in Thunderbolt include wetland areas and low-lying land along the major waterways in and around the Town including the Savannah River. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates, and acting as a flood storage area to reduce downstream peaks. The Town should strive to keep floodplain and floodplain waters free of contaminants, such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

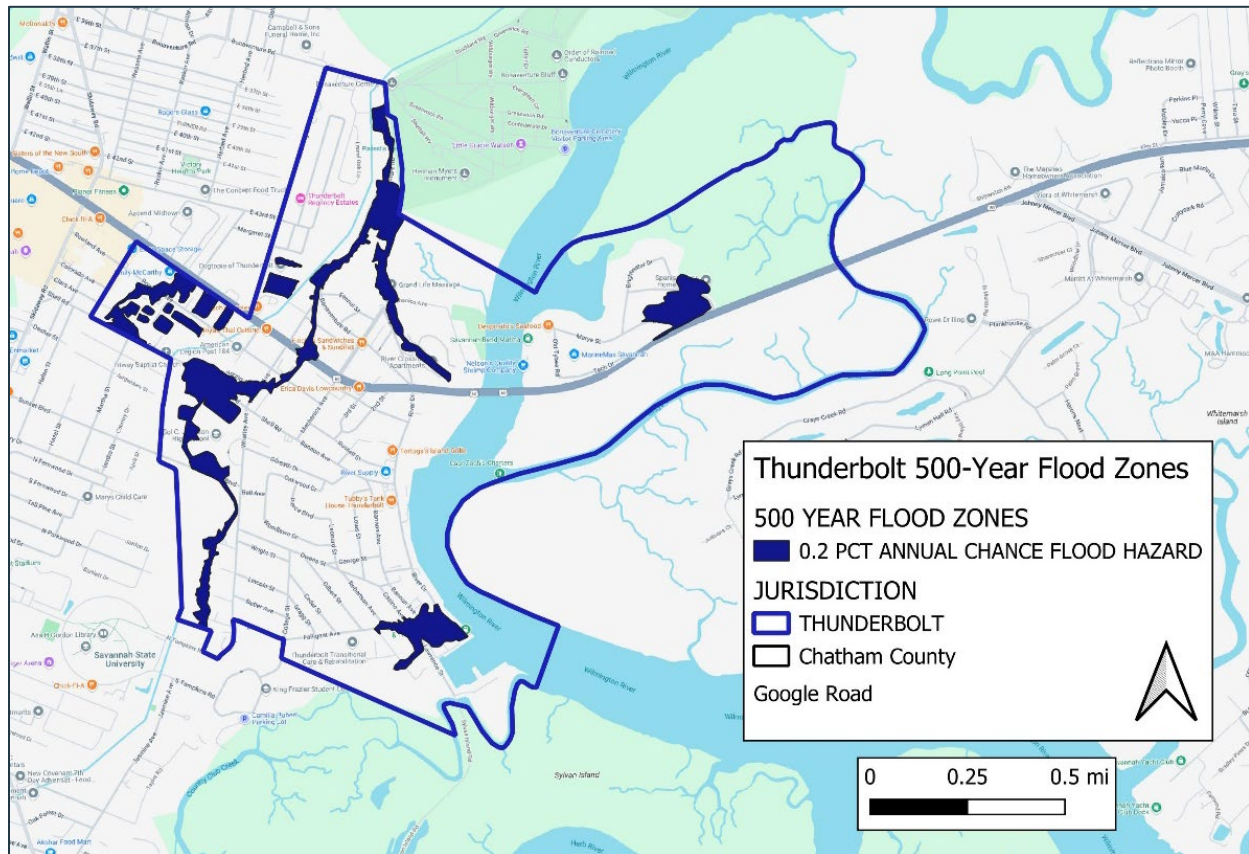
Figure G-3 – FEMA Flood Zone Map, Thunderbolt



Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplain, these zones can still experience significant flooding during extreme events. The X500 zone for Thunderbolt is depicted in the map below and represented in Table G-4 above.

Figure G-4 – X500 Zone, Thunderbolt



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

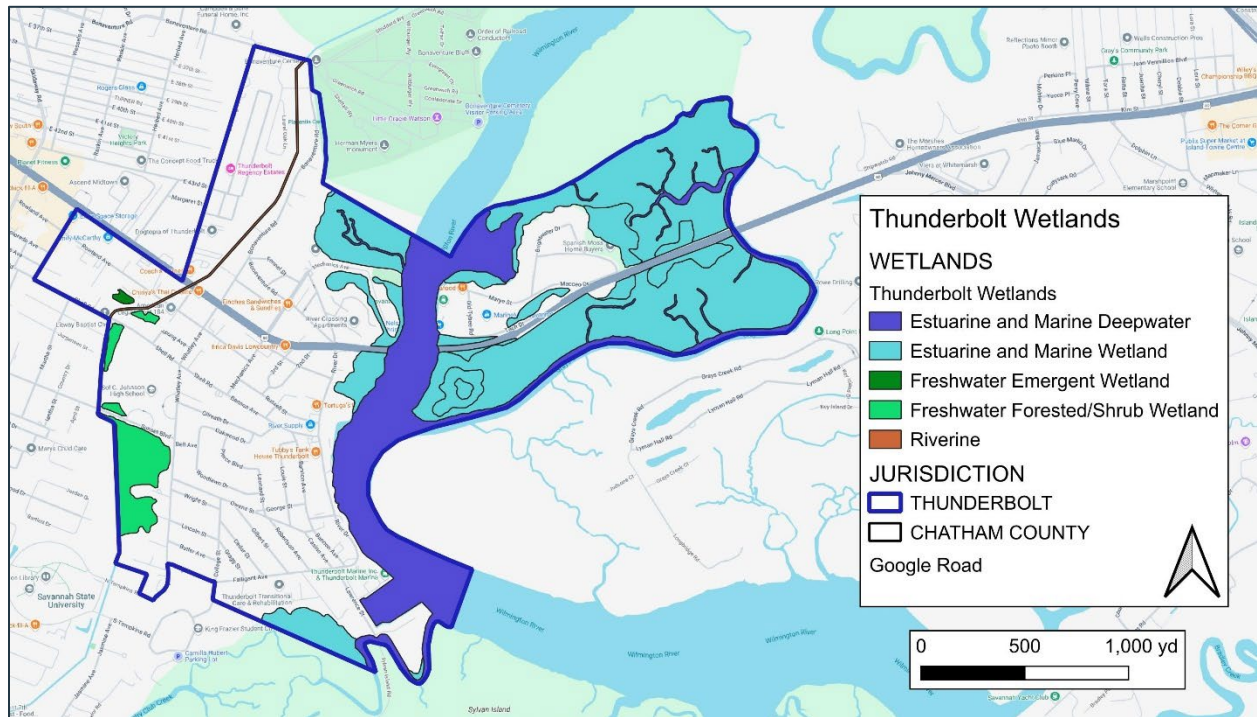
Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through these processes pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetland Inventory (NWI), wetlands throughout Thunderbolt make up 783.20 acres (1.22 square miles) or 81.3 percent of the Town (see Table G-5 below).

Table G-5 – Wetland Types, Thunderbolt

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Non-Wetland	176.8	0.28	18.7
Estuarine and Marine Wetland	738.09	1.15	76.7
Freshwater Emergent Wetland	0.82	0.001	0.0007
Freshwater Forested/Shrub Wetland	36.79	0.06	4.0
Riverine	8.32	0.01	0.7
TOTAL	960	1.5	100.0

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Figure G-5 – Wetlands Map, Thunderbolt



Source: National Wetlands Inventory, 2022; SAGIS, 2025

Estuarine and Marine Wetland

Estuarine and marine wetlands are classified within a broader hierarchical system that includes five main systems: marine, estuarine, riverine, lacustrine, and palustrine. These classifications are based on factors like salinity, water type, vegetation, and geological features. Within the marine and estuarine systems, further subdivisions exist, such as subsystems (subtidal and intertidal) and classes (e.g., rock bottom, unconsolidated bottom, aquatic bed).

Freshwater Emergent Wetland

Freshwater emergent wetlands are classified within the Palustrine System by the U.S. Fish and Wildlife Service (USFWS) as part of their National Wetlands Inventory (NWI). This system categorizes wetlands based on their landscape position, vegetation cover, and hydrologic regime. Within the Palustrine System, emergent wetlands are further defined by their vegetation (grasses, sedges, forbs) and whether the vegetation is persistent (remaining until the next growing season) or non-persistent.

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across the Town of Thunderbolt, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure G-6 – Land Cover Map, Thunderbolt

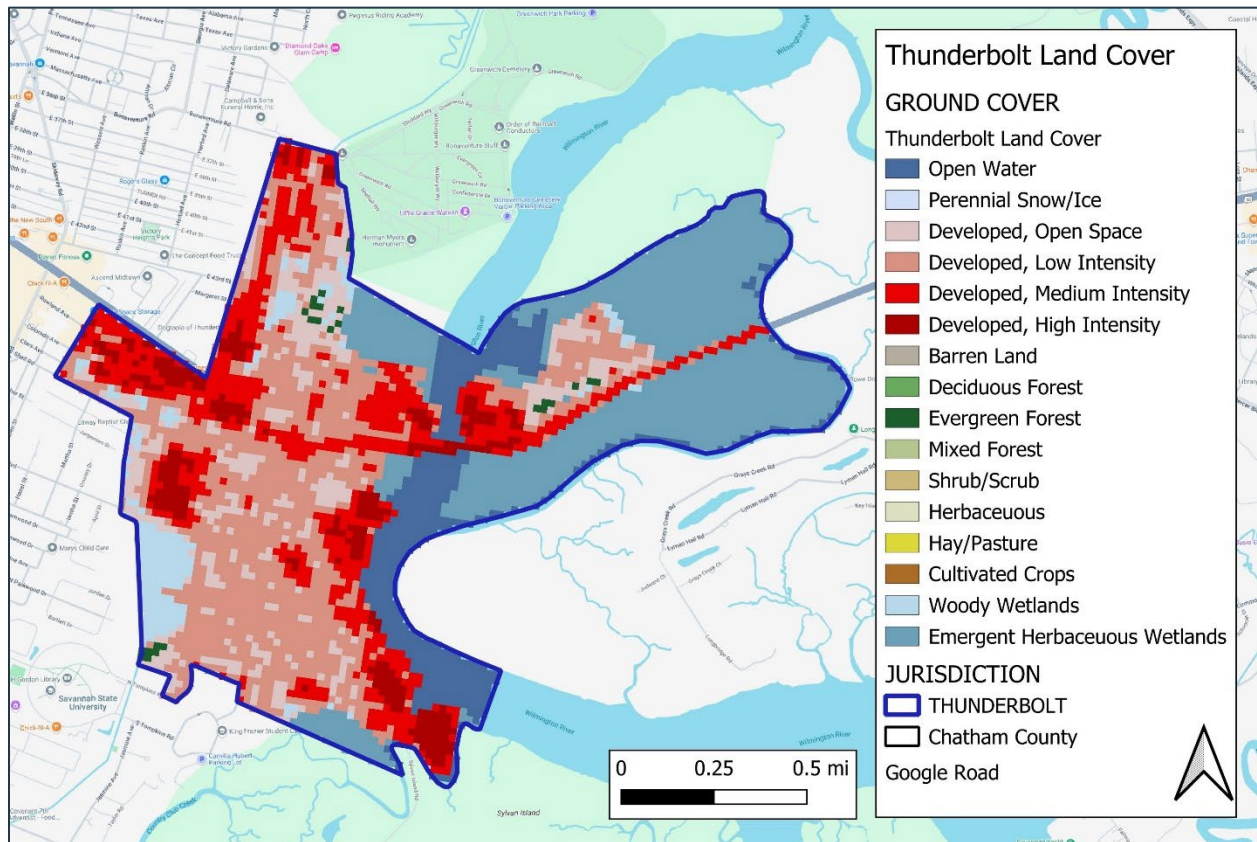
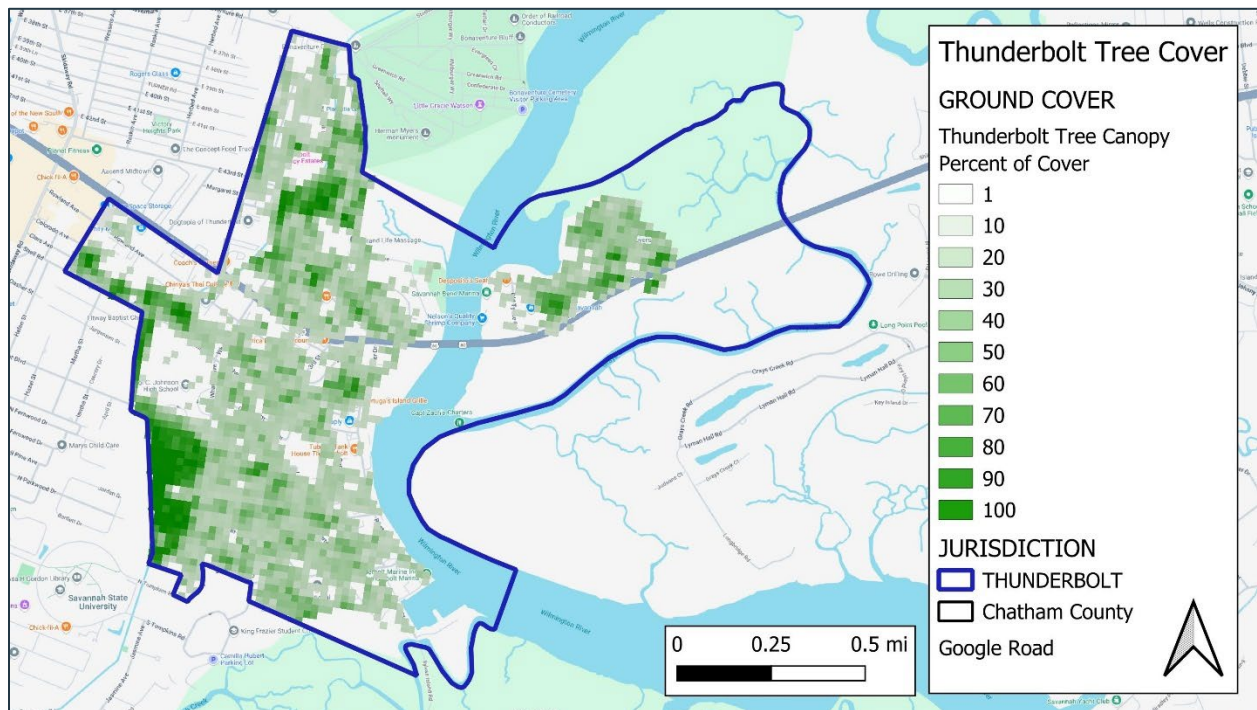


Figure G-7 – Tree Cover Map, Thunderbolt



G.2.4 History

The Town of Thunderbolt got its name from a legend of a lightning strike that created a freshwater spring on a bluff overlooking the Wilmington River. Native Americans were found to be among the first inhabitants.

Thunderbolt was a settlement which evolved into a shipping point for local plantation needs which also serviced the river traffic. In 1856, the Town of Thunderbolt was incorporated as Warsaw and then began its history as a processing port for the fishing community. In 1890, Georgia State College was founded for the education of African Americans. This college continues to be a historically black institution and is known today as Savannah State University.

In 1921, Warsaw's name was restored to Thunderbolt and the seafood processing continued to play a large part in this community's development. In 1939, yacht racing became popular and saw the construction of a yacht basin. Annually, the "Blessing of the Fleet" was celebrated until recent years, and shrimping evolved into the primary seafood product.

G.2.5 Economy

G.2.5.1 Wages and Employment

Per the 2019-2023 American Community Survey 5-Year Estimates, the median household income for Thunderbolt is \$69,191, which is 7.6 percent lower than the state's median household income (\$74,664).⁴¹ Approximately 17.8 percent (433) of the population is considered to be living below the poverty level. Moreover, 21.5 percent (86) of people under 18 years of age and 8.2 percent (43) of people 65 years and over are living below the poverty level.⁴²

⁴¹ <https://data.census.gov/table?q=Thunderbolt+town,+Georgia+employment>. Retrieved 07-07-2025.

⁴² <https://data.census.gov/table?q=Thunderbolt+town,+Georgia+poverty+level>. Retrieved 07-07-2025.

The table below shows employment and unemployment rates along with industry employment by major classification for the Town.

Table G-6 – Employment and Occupation Statistics for Thunderbolt, GA, 2019-2023

Employment Status	Count	Percentage (%)
In labor force	1,381	63.9
Employed	1,295	60.0
Unemployed	72	3.3
Armed Forces	14	0.6
Not in labor force	779	36.1
Occupation	Count	Percentage (%)
Management, business, science, and arts	588	45.4
Service	146	11.3
Sales and office	301	23.2
Natural resources, construction, and maintenance	98	7.6
Production, transportation, and material moving	162	12.5

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Major industry sectors in the Town of Thunderbolt include management, business, science, and arts (45.4%); service (11.3%); sales and office (20.7%); natural resources, construction, and maintenance (7.6%); and production, transportation, and material moving (12.5%).

Major employers are discussed in the Chatham County Community Profile.

G.2.6 Housing

According to the 2019-2023 ACS 5-Year Estimates, there are 1,442 housing units in Thunderbolt, of which 87.9 percent (1,267) are occupied.⁴³ Approximately 65.4% (829) of occupied units are owner-occupied (34.6% occupied by renters). A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because, according to Cutter, et al. (2003), renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster. Therefore, higher rates of home rentals in Thunderbolt may indicate that residents are not able to implement certain types of mitigation in their homes.

Median home value in Thunderbolt is \$303,500. Of the town's owner-occupied housing units, 67.4 percent (559) have a mortgage. Most householders (68.0% / 861) have lived in their current homes since the year 2000 or later, 13.5 percent (171) moved in between 2000 and 2009, 27.2 percent (344) moved in between 2010 and 2017, 18.3 percent (232) moved in between 2018 and 2020, and 9.0 percent (114) moved in 2021 or later. 0.6 percent (8) of householders in occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

The majority (48.3% / 696) of housing units in Thunderbolt are detached single family homes. However, 5.8 percent (84) of units are mobile homes, which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

⁴³ <https://data.census.gov/table/ACSDP5Y2023.DP04?q=Thunderbolt+town,+Georgia+tenure>. Retrieved 07-07-2025.

The town's housing stock is aging, with the majority (78.4% / 1,131) of occupied housing built before 2000. The table below details housing age in the town.

Table G-7 – Housing Age, Thunderbolt

Year Structure Built	Percent of Occupied Housing	Number of Structures
2020 or later	0.0	0
2010 to 2019	2.2	32
2000 to 2009	19.3	279
1980 to 1999	16.8	243
1960 to 1979	41.3	596
1940 to 1959	13.2	191
1939 or earlier	7.0	101

Source: U.S. Census Bureau, American Community Survey 2019-2023

Age can indicate the potential vulnerability of a structure to certain hazards. For example, the Town of Thunderbolt first entered the National Flood Insurance Program in 1987. Therefore, based on housing age estimates at least 65 percent of housing in the town was built before any floodplain development restrictions were required.

G.2.7 Population

According to the U.S. Census Bureau, Thunderbolt had an estimated population of 2,552 residents in 2023 and a population of 2,556 at the time of the 2020 U.S. Census (0.16% decrease from 2020-2023). As of 2019, Thunderbolts' population density was 1,701 persons per square mile. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates.⁴⁴

Table G-8 – Town of Thunderbolt Demographic Profile Data, 2019-2023

Demographic	Thunderbolt
Gender/Age	
Male	1,147
Female	1,405
Under 5 Years	57
65 Years and Over	625
Race/Ethnicity (One Race)	
White	1,579
Black or African American	816
American Indian/Alaska Native	72
Asian	0
Two or More Races	53
Hispanic or Latino ¹	122
Education	
High School Graduate or Higher	1,875
Bachelor's Degree or Higher	862

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

⁴⁴ <https://data.census.gov/table/ACSDP5Y2023.DP05?q=Thunderbolt+town,+Georgia+population>. Retrieved 07-07-2025.

¹Hispanics may be of any race, so also are included in applicable race categories.

G.2.8 Land Use

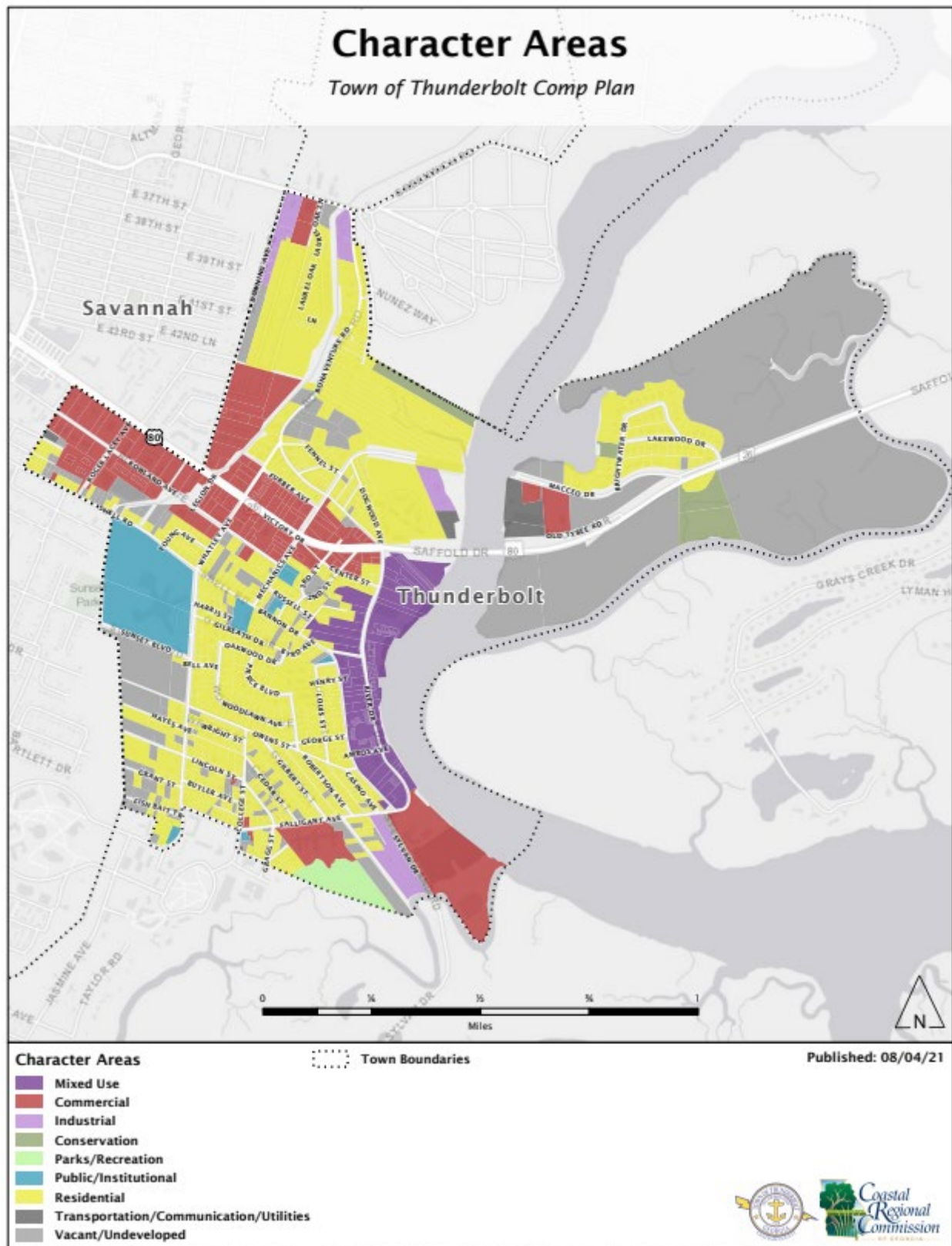
The Town of Thunderbolt's Comprehensive Plan 2021-2041 (Comp Plan) establishes Character Areas to guide future development and includes a Future Land Use Map.

G.2.8.1 Character Areas

The Character Areas established by the City's Comp Plan include those listed below and shown in the Character Area Map.

- Traditional Neighborhood: Eclectic mix ranging from a mobile home park to luxury waterfront condominiums and including single-family homes, small townhome developments, apartment complexes, and large condominium developments.
- Commercial: Located primarily along Victory Drive but are interspersed throughout the town, which is true to the village nature of the town.
- Mixed Use: To create a vibrant mixed-use district along River Drive in the area commonly perceived as "Main Street" Thunderbolt.
- Industrial: Intended to maintain and expand the maritime industry in Thunderbolt.
- Transportation/Communications/Utilities: Specific use of providing utility easements and the transportation network throughout the town.
- Public/Institutional: Sets aside land for public and institutional uses, including churches, schools, town hall, museum, police station, fire station, and library.
- Parks/Recreation: Parks with active and passive recreation, green spaces, and conservation areas.
- Conservation: Includes coastal marshland that cannot be developed and should be preserved.
- Vacant/Undeveloped: Refers to land within Town limits that is not currently used for any other land use.

Figure G-8 – Character Areas Map, Thunderbolt



G.2.8.2 Existing Land Use

According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

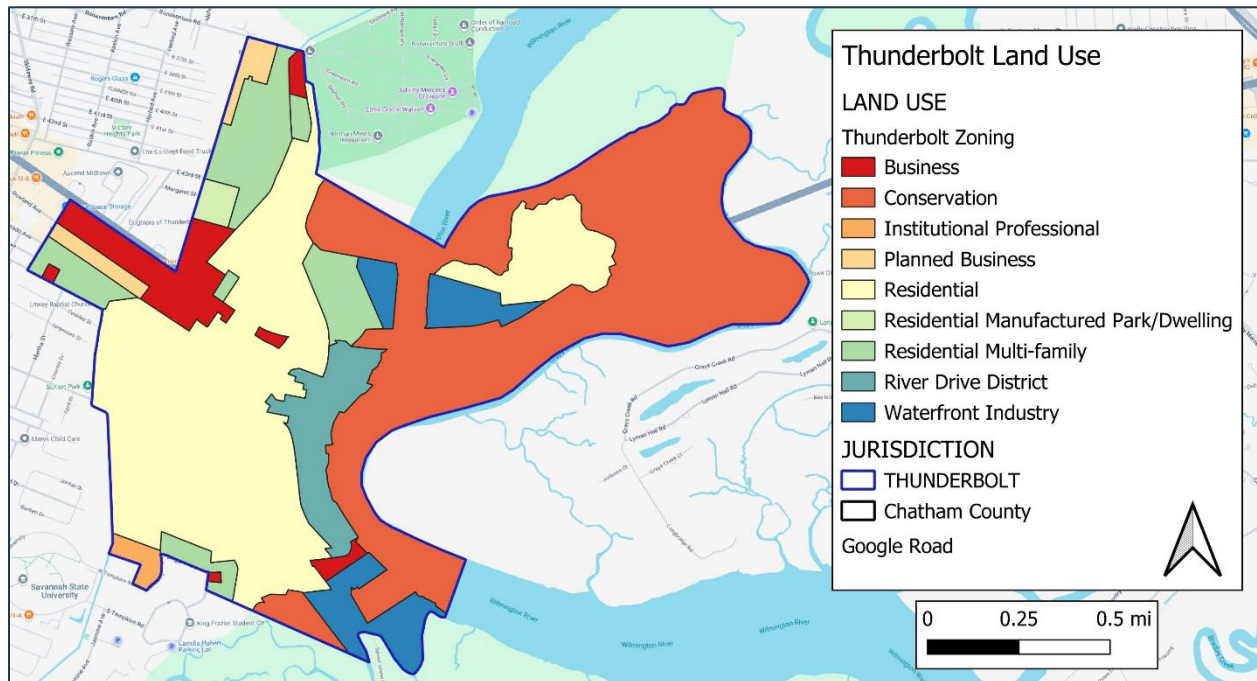
Table G-9 – Existing Land Use, Thunderbolt

Land Use/Zoning	Area (Acres)	Area (Square Miles)
Business	52	0.08
Institutional	7	0.01
Conservation	386	0.60
Residential Multi-Family	91	0.14
Planned Business	16	0.03
Residential Single-Family	349	0.55
Residential Manufactured Home Park/Dwelling	7	0.01
River Drive District	45	0.07
Waterfront Industry	58	0.09
TOTAL	1,011	1.58

Source: SAGIS – Zoning, 2024

An existing land use map for zoning is included below for Thunderbolt, as taken from the SAGIS map viewer for Chatham County.

Figure G-9 – Existing Land Use and Zoning Map, Thunderbolt



Source: SAGIS – Zoning, 2024

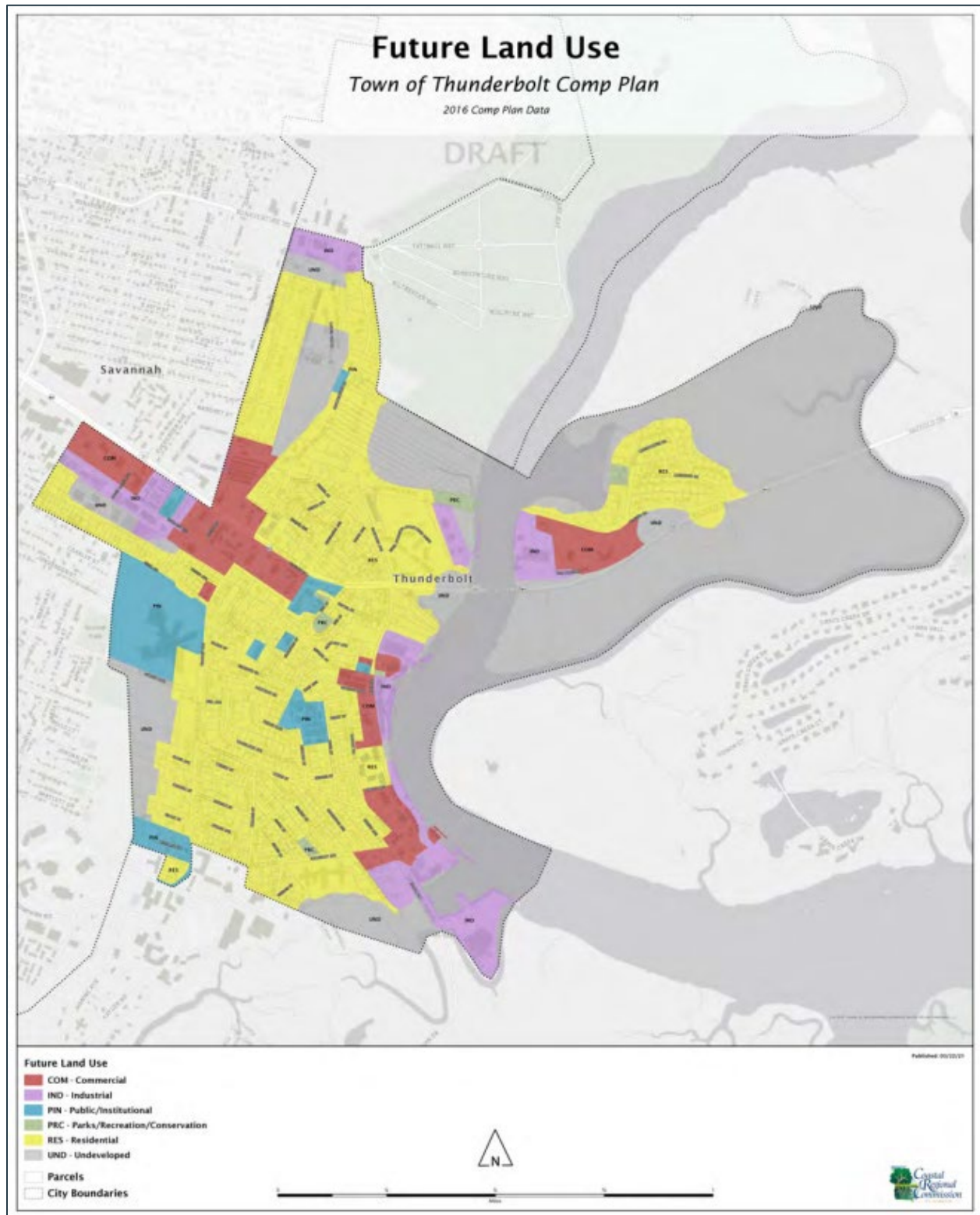
G.2.8.3 Future Land Use

The Town of Thunderbolt has the following Future Land Use Categories as shown in the Future Land Use Map below:

- Residential: Predominately single-family and multi-family homes and makes up the largest land use category within Thunderbolt.

- Commercial: Commercial corridors are found in highly trafficked areas, such as Victory Drive and River Drive.
- Industrial: Located primarily along Victory Drive and adjacent to the Wilmington River serving the maritime related industries.
- Public Institution: Located throughout the community and includes town hall, police and fire, schools, churches, and the library.
- Parks, Recreation, Conservation: Passive and active recreation throughout the community.
- Undeveloped: Thunderbolt has a few areas of undeveloped land that may be developed in the future or reserved as conservation areas.

Figure G-10 – Future Land Use Map, Thunderbolt



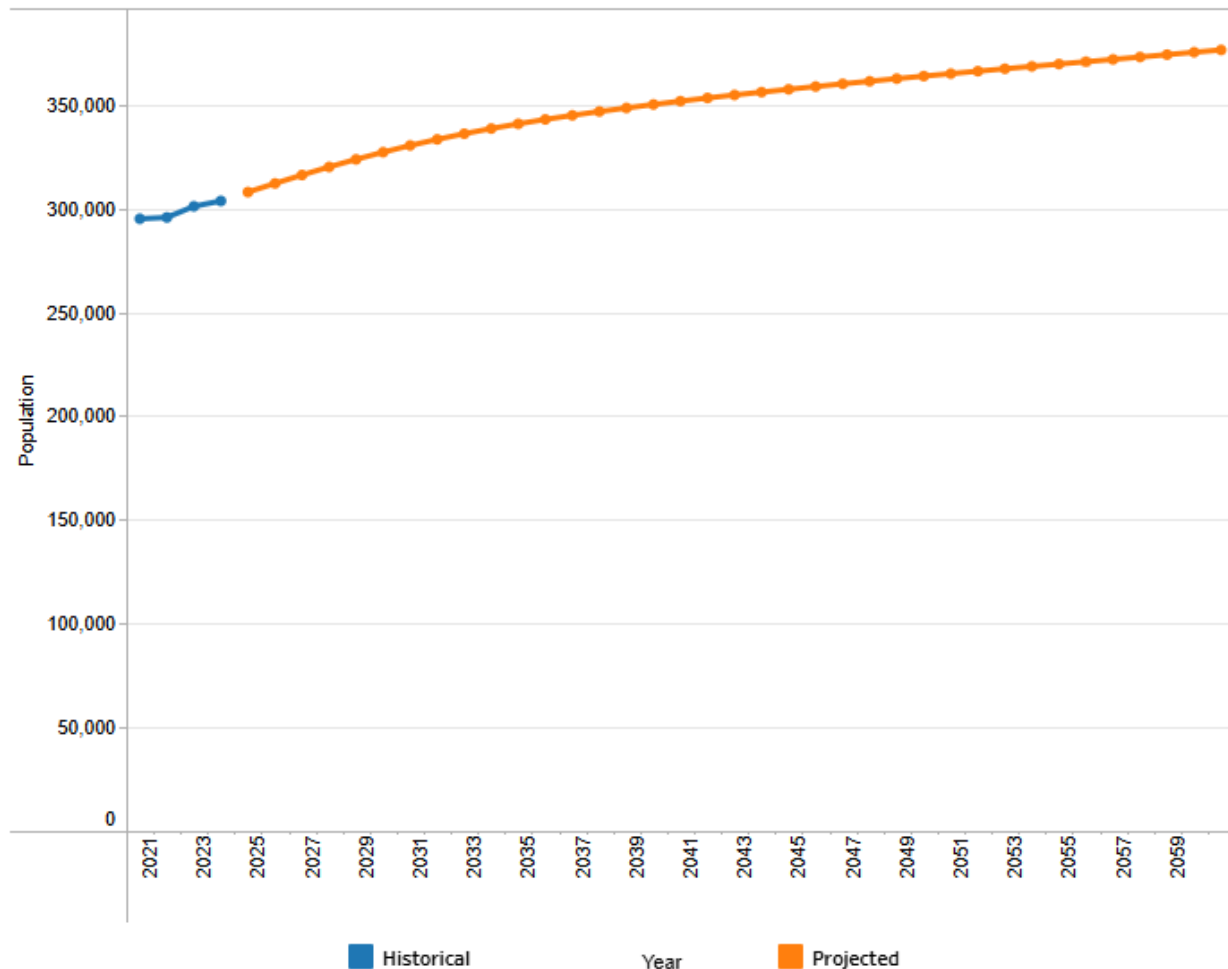
G.2.9 Growth and Development Trends

According to U.S. Census and American Community Survey population estimates, Thunderbolt's population has decreased slightly from 2,556 in 2020 to 2,522 in 2023, representing a total decrease of 1.3 percent and an annual decrease of 0.43 percent.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be about 0.8 percent through 2060. Only population projections for Chatham County are included in this section as there are currently no population projections available for Thunderbolt at the time of planning.

Figure G-11 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget

G.3 ASSET INVENTORY

G.3.1 Property

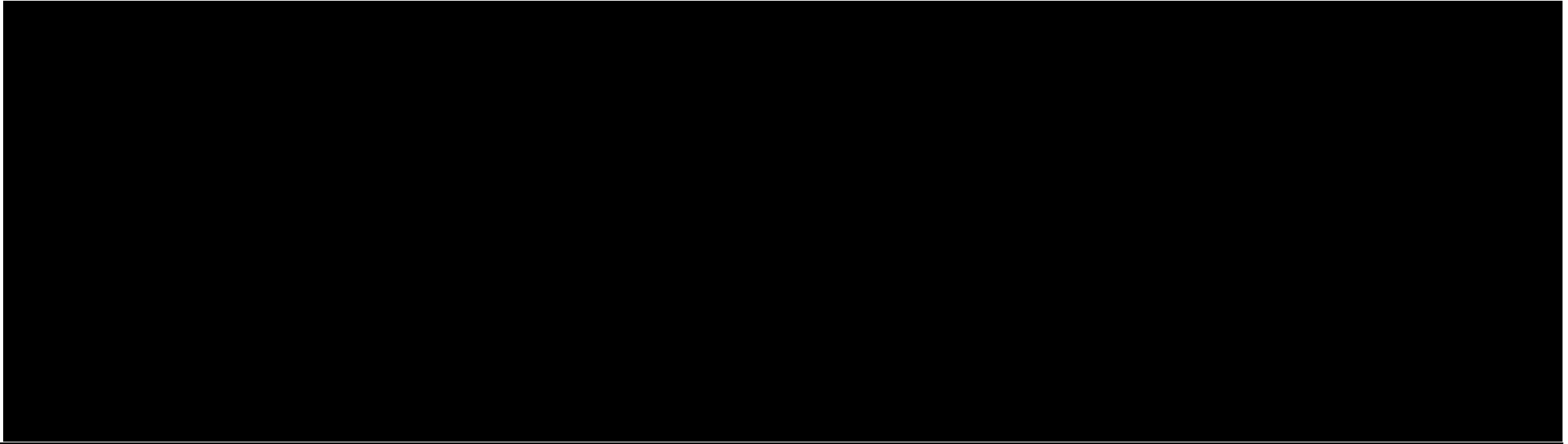
Table G-10 – Town of Thunderbolt Building Exposure

Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	102	\$64,228,600	\$64,228,600	\$128,457,200
Government	6	\$1,943,400	\$1,943,400	\$3,886,600
Industrial	39	\$7,999,500	\$11,999,250	\$19,998,750
Non-Profit	16	\$3,615,500	\$3,615,500	\$7,231,000
Residential	1053	\$180,074,725	\$90,037,363	\$270,112,088
Utility	2	\$0	\$0	\$0
Total	1,218	\$257,861,725	\$171,824,113	\$429,685,638

Source: Chatham County

G.3.2 Critical Facilities

Table G-11 – Critical Facilities and Infrastructure at Risk



Source: Chatham County
*Served by TB-1 Generator

G.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

G.4.1 Flood

Approximately 13.1 percent of buildings in Thunderbolt are within the mapped 1%-annual-chance floodplains (Zones A, AE, and VE) and 9.5 percent are within the X500 zone. Figure G-12 reflects the mapped flood hazard zones for the Town of Thunderbolt, and Figure G-13 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table G-12, below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

Table G-12 – Properties at Risk by Flood Zone

Flood Zone	Number of Buildings	Total Fair Market Building Value
AE	215	\$105,874,925
X500	156	\$80,843,700
Total	371	\$186,718,625

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2024

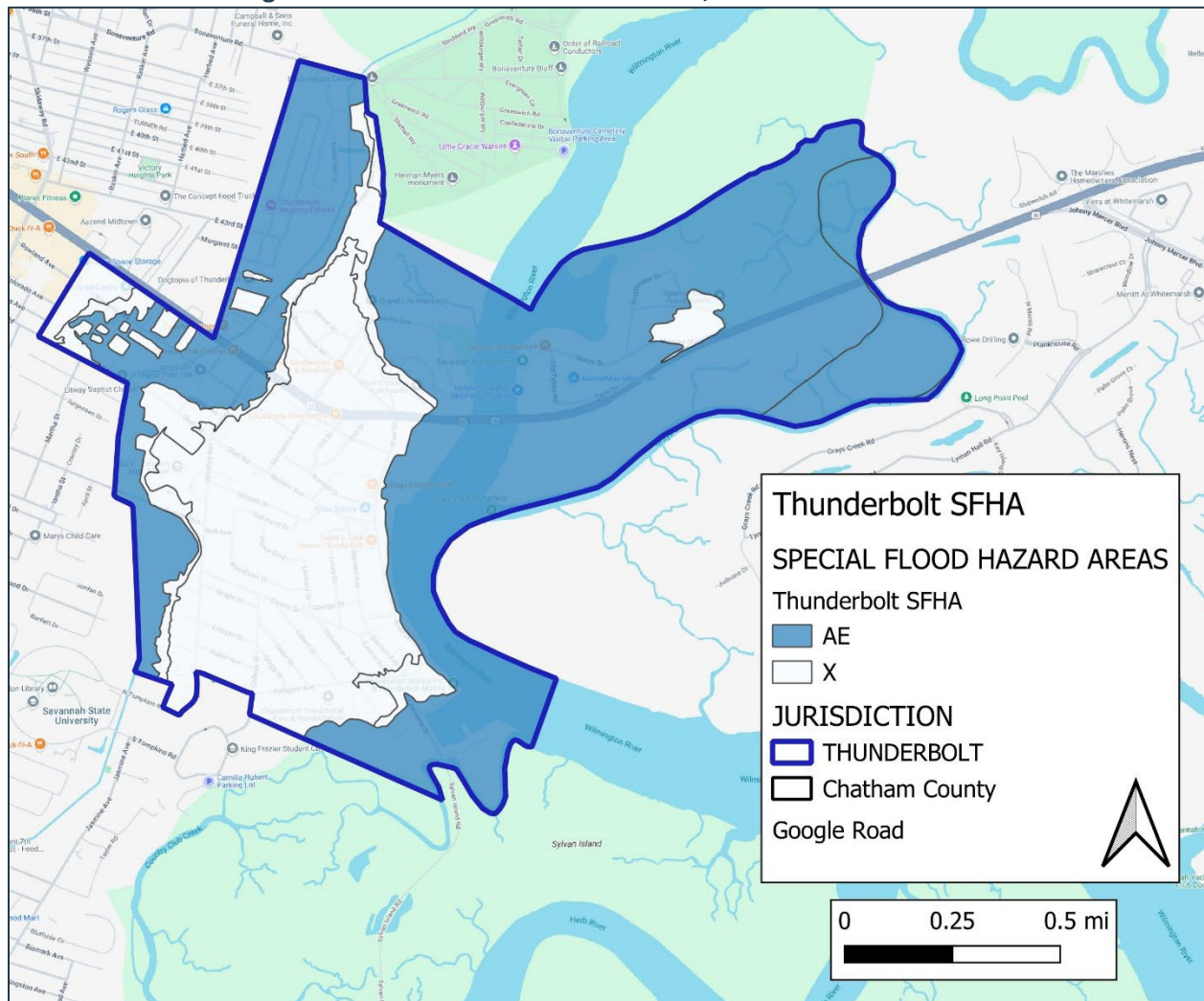
Table G-13 provides building counts and estimated damages by occupancy type for the 1% annual chance of a riverine flood event. No critical facilities were identified to be at risk in the HAZUS scenario.

Table G-13 – Thunderbolt Estimated Building Damage, 1% Annual Chance Riverine Flood

Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ration of Exposed to Damaged Buildings
Commercial	47	19	\$26,208,218	\$1,671,917	6.38%
Industrial	46	11	\$14,088,544	\$3,346,543	23.75%
Residential	879	151	\$192,081,812	\$7,528,485	3.92%
Total	972	181	\$232,378,574	\$12,546,945	5.40%

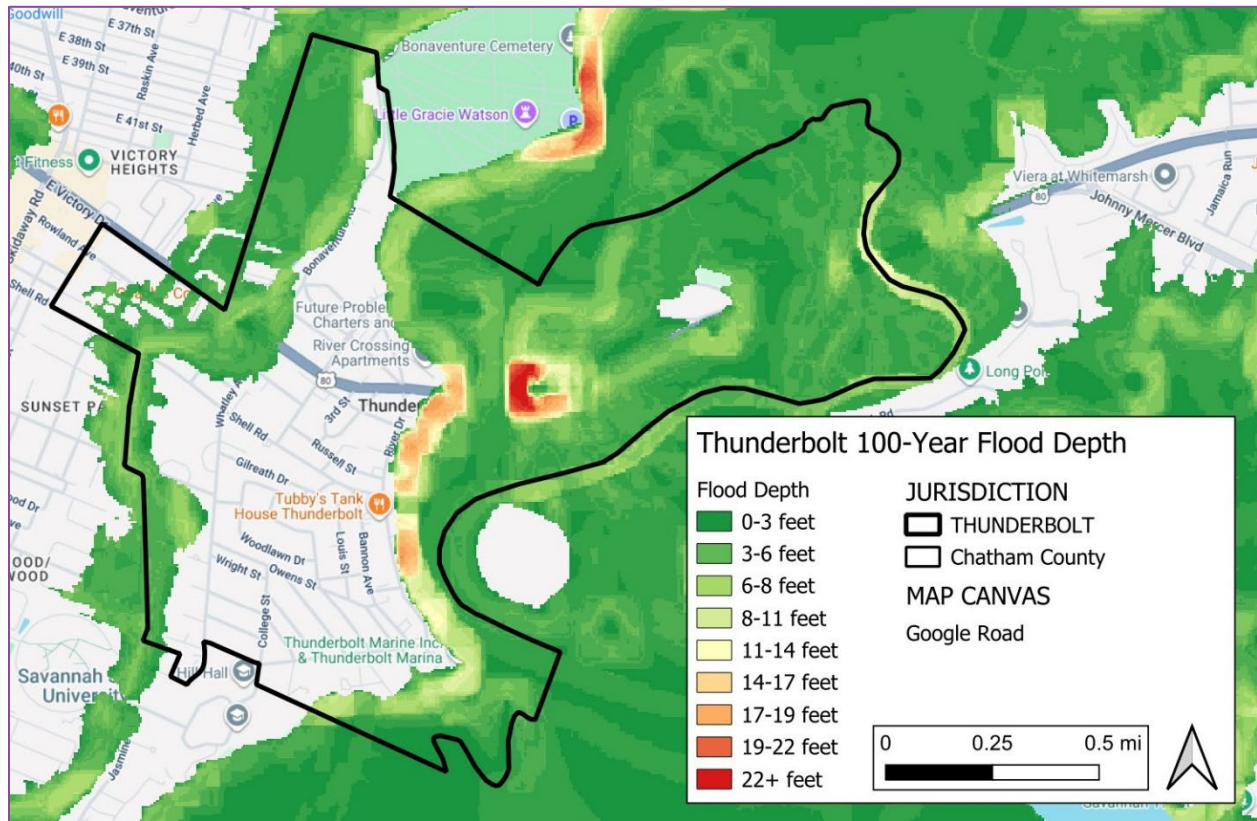
Source: HAZUS

Figure G-12 – FEMA Flood Hazard Areas, Town of Thunderbolt



Source: FEMA 2018 DFIRM

Figure G-13 – Flood Depth, 1%-Annual-Chance Floodplain, Town of Thunderbolt



Source: GEMA, UGA ITOS 2025

G.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table G-14 summarizes the wildfire risk products created for the jurisdiction.

Table G-14 – Wildfire Risk Assessment Products

Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.

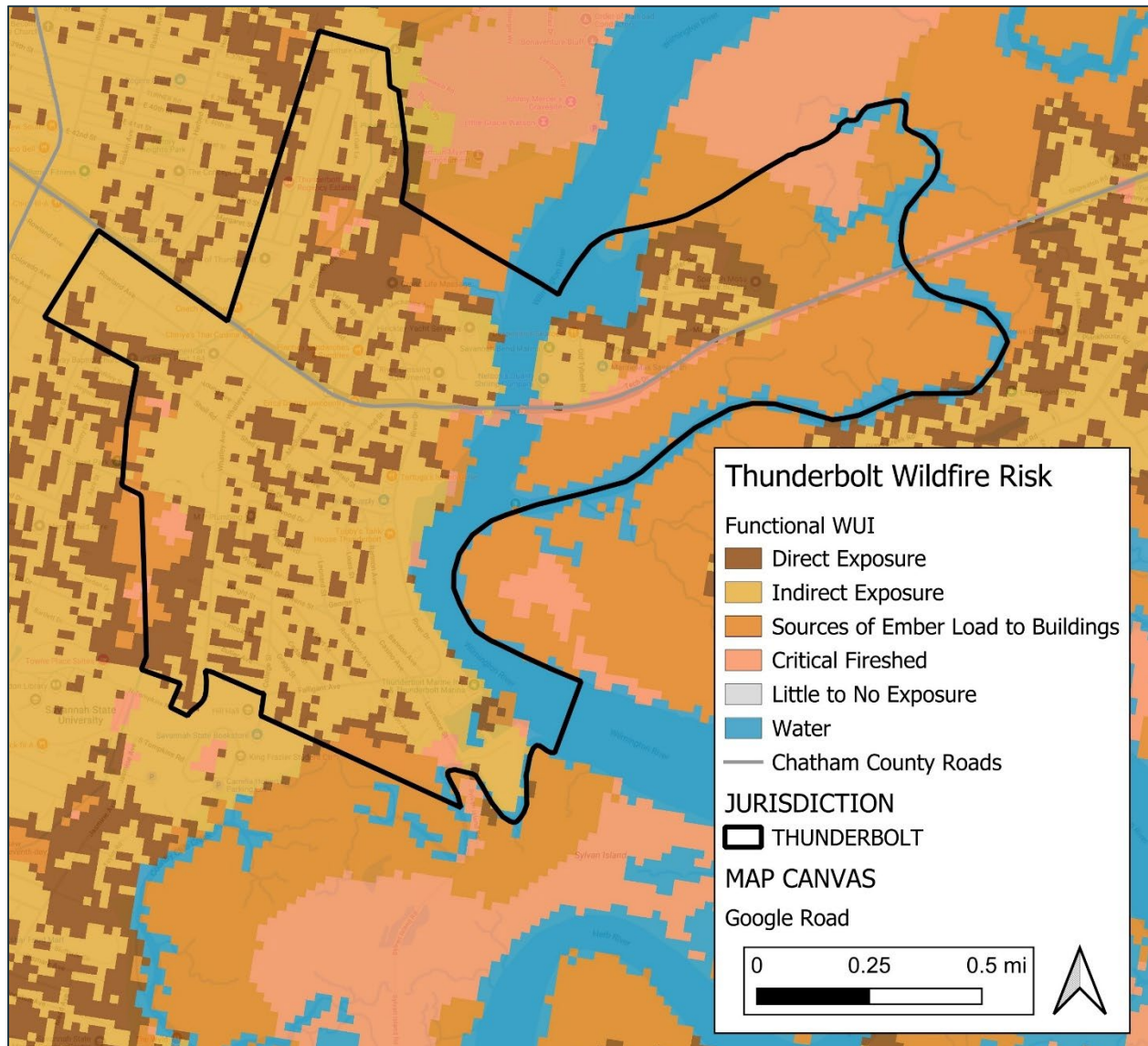
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.
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Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure G-14 depicts the Functional WUI for the Town of Thunderbolt. Functional WUI risk across the town includes critical fireshed and sources of ember load with direct and indirect exposure to buildings. The primary risk is indirect exposure through the town on the west side of the Wilmington River with a small area of indirect exposure to developed land on the east side of the river. The categories of risk are defined below:

- **Direct Exposure** - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
- **Indirect Exposure** - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
- **Critical Fireshed** - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
- **Sources of Ember Load to Buildings** - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- **Little-to-No Exposure** - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No-Exposure zone, but smoke and evacuations could still impact this area.

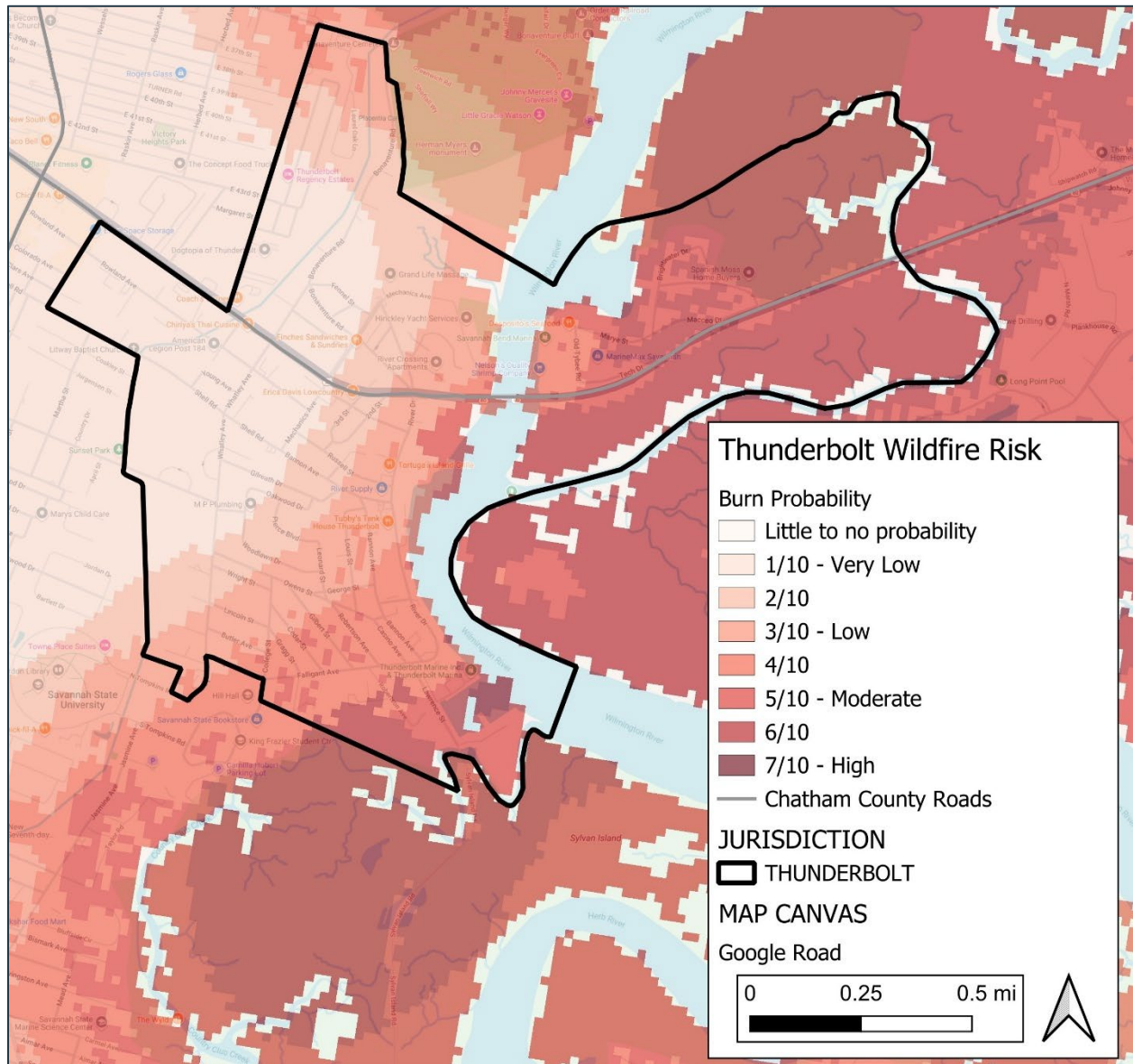
Figure G-14 – Functional Wildland Urban Interface, Town of Thunderbolt



Source: Southern Wildfire Risk Assessment

Figure G-15 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. The highest burn probability areas in Thunderbolt are along Hwy 80 east of the Wilmington River.

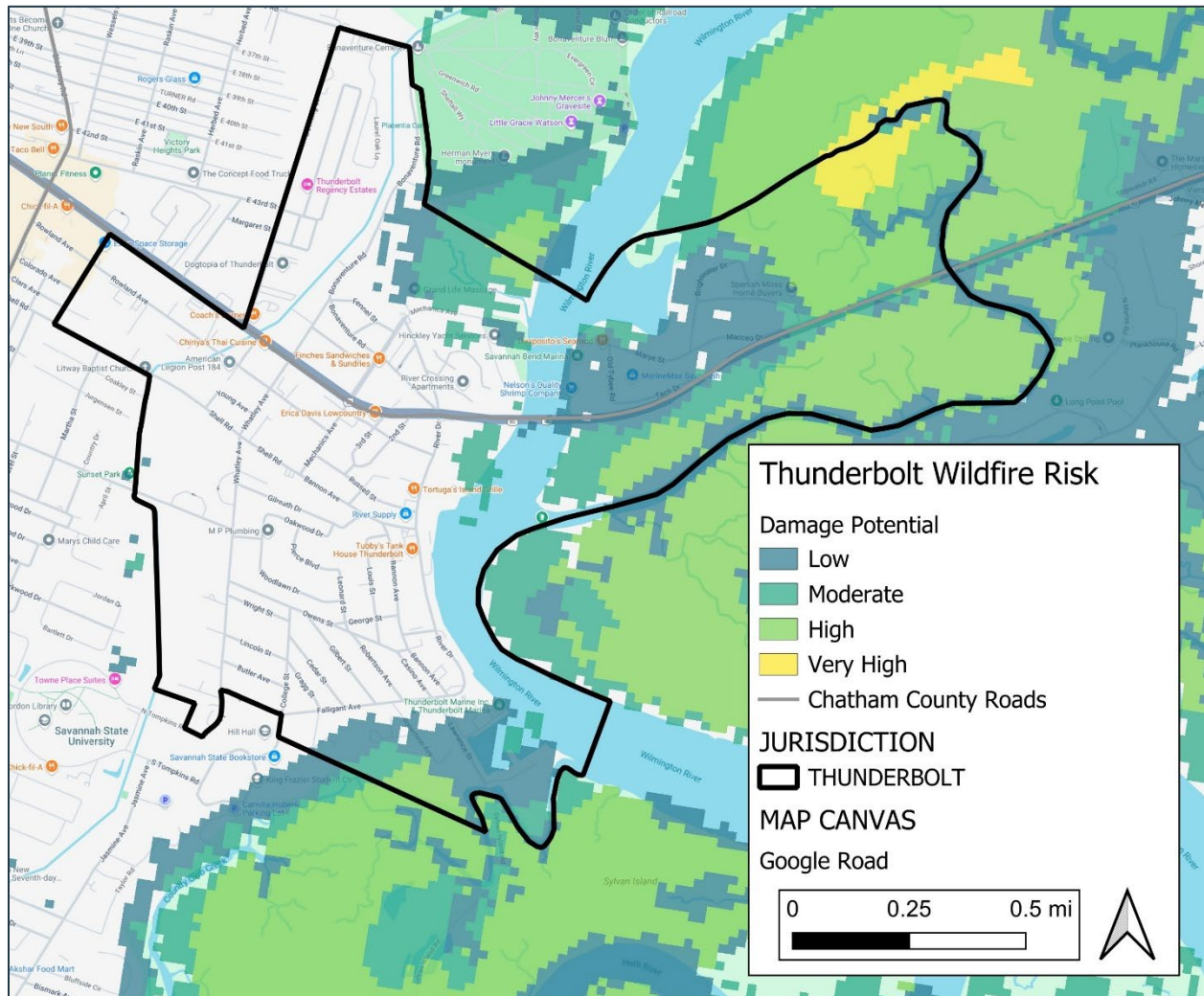
Figure G-15 – Burn Probability, Town of Thunderbolt



Source: Southern Wildfire Risk Assessment

Figure G-16 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. Damage Potential risk is High to Very along Hwy 80 east of the Wilmington River.

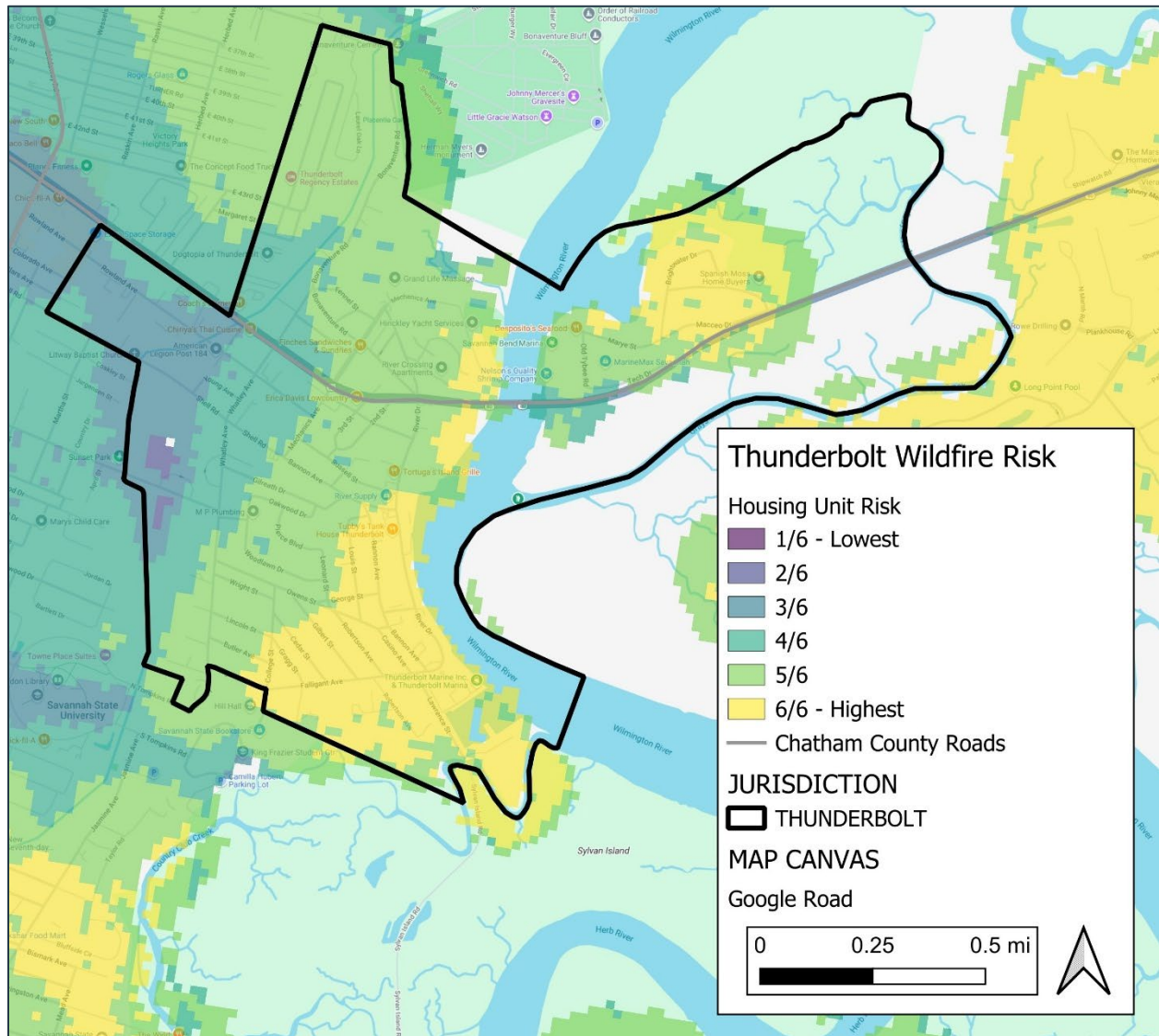
Figure G-16 – Damage Potential, Town of Thunderbolt



Source: Southern Wildfire Risk Assessment

Figure G-17 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. Housing Unit Risk is highest in the developed area east of the Wilmington River, along the west bank waterfront, and at the south end of the town along River Rd. and Falligant Ave.

Figure G-17 – Housing Unit Risk, Town of Thunderbolt



Source: Southern Wildfire Risk Assessment

G.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

The Town of Thunderbolt joined the NFIP emergency program in 1980 and has been a regular participant in the NFIP since July 1987. The following tables reflect NFIP policy and claim data for the Town categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table G-15 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	181	\$141,968	\$49,470,000	20	\$478,144.74
2-4 Family	0	\$0	\$0	0	\$0

ANNEX G: TOWN OF THUNDERBOLT

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
All Other Residential	31	\$40,177	\$24,756,000	4	\$15,608.71
Non-Residential	54	\$116,472	\$21,186,000	4	\$150,558.13
Total	266	\$298,617	\$95,412,000	28	\$644,311.58

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Table G-16 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Policies	Number of Post-FIRM Policies
AO1-30 & AE Zones	172	\$617,489.40	86	86
A Zones	0	\$0	0	0
V01-30 & VE Zones	0	\$0	0	0
B Zone / X Shaded	0	\$0	0	0
C / X Zone	94	\$26,822.18	77	17
No Zone Identified	0	\$0	0	0
Total	266	\$644,611.58	163	103

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

G.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2020 Status	2020 Implementation Status Comments
Prevention									
P-1	Increase the area for debris following a storm with an MOU with the Board of Education to use the fields at Johnson High School as an additional area.	All	1.1	Moderate	Town of Thunderbolt Public Safety and Public Works	N/A	2027	Carry Forward	The Town only has one location for debris at Cesaroni ball field and this would greatly expand their capacity.
P-2	Conduct a full inspection of the Thunderbolt bridge to ensure that it will be open during any event or extreme threat.	All	2.1	High	Town of Thunderbolt Public Safety/GA DOT	PDM; HMGP	2027	Carry Forward	If the drawbridge on President Street is unavailable, the Thunderbolt Bridge is the only means of access from the islands to the mainland including access to hospitals and critical care facilities.
P-3	Assist and coordinate with Tara Nursing Home for evacuation of patients in the event of a threat.	All	1.1	Moderate	Town Administration / CEMA	Local Staff Time	2027	Carry Forward	New-The Nursing Home has a plan in place; however, the Town's involvement would be to ensure that the removal and transition of patients would be as smooth as possible.
Property Protection									
PP-1	Upgrade and Elevate Lift Station	Flood	2.1	High	Town of Thunderbolt Public Works	HMGP; CIP	2028	Carried Forward	Revised. *New After Irma - Lift station was inundated with water during hurricane Irma.
PP-2	Purchase and install bypass pumps	Flood, Tropical Cyclone	2.1	Moderate	Public Works	Local Funds	2025	New	
PP-3	Purchase Vac Truck for Stormwater	Flood, Severe Weather, Tropical Cyclone	2.1	Moderate	Town of Thunderbolt Public Works	HMGP 5%	2027	Carried Forward	The public works department will utilize the vac truck to mitigate flooding issues.
PP-4	Retrofit Community Park Piers, Decks and Pavilions	Flood	2.1	Low	Town of Thunderbolt Public Works	HMGP; CIP	2028	Carried Forward	Thomson Park was inundated with water during Hurricane Irma; would like to retrofit the pier, deck and pavilion with higher impact/flood resistant materials.
PP-5	Anchor HVAC units and Storage Tanks	All	2.1	Moderate	Town of Thunderbolt Public Works	TBD	2025	New	
PP-6	Acquire or elevate properties prone to flooding	Flood	2.2 & 3.1	Moderate	Town of Thunderbolt Public Works	HMGP	2030	New	
PP-7	Elevate or dry floodproof components or systems vulnerable to flood damage	Flood	1.3 & 2.1	High	Town of Thunderbolt Public Works	TBD	2025	New	
Structural Projects									
SP-1	Construct and/or improve drainage systems to alleviate drainage issues.	Flood	5.1	Moderate	Public Works	HMGP	2026	New	
Emergency Services									
ES-1	Generators for critical facilities	All	5.1	Moderate	Town of Thunderbolt Public Works	HMGP, General Fund	2026	New	
ES-2	Portable generators for critical facilities	All	5.1	Moderate	Town of Thunderbolt Public Works	HMGP, General Fund	2026	New	
ES-3	Purchase and install generator quick connects and transfer switches for critical facilities	All	5.1	Moderate	Town of Thunderbolt Public Works	HMGP, General Fund	2026	New	

Annex H City of Tybee Island

H.1 PLANNING PROCESS

The table below lists the HMPC members who represented the City of Tybee Island.

Table H-1 – HMPC Members

Member Name	Title	Agency/Department
Justin McMillan	Chief	Fire Department
Patricia Sinel	Director	Community Development

H.2 COMMUNITY PROFILE

H.2.1 Overview of the Community

The City of Tybee Island is located on a barrier island along the coast of Georgia approximately 18 miles east of Savannah and is the easternmost point in the State of Georgia.

According to the U.S. Census Bureau, Tybee Island has a total area of 3.2 square miles of which 2.9 square miles (90.6%) is land and 0.3 square miles (9.4%) is water.⁴⁵

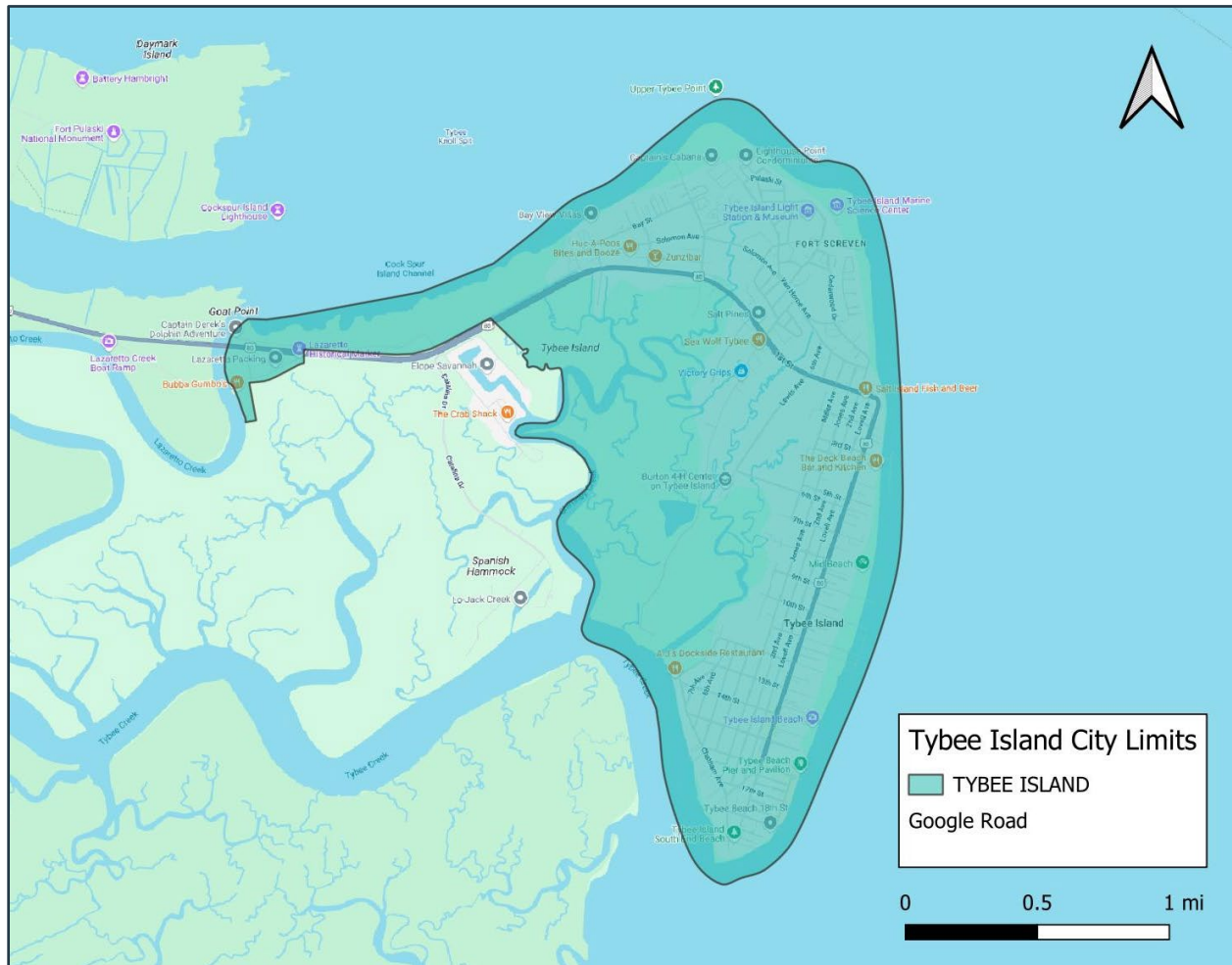
According to the U.S. Census Bureau’s American Community Survey (ACS) 5-Year Estimates, the city had a total population of 3,121 in 2023. Therefore, the City’s average population density is approximately 975 people per square mile.⁴⁶

The Location Map below reflects the City of Tybee’s boundaries and shows the City’s location within the county and in relation to surrounding municipalities.

⁴⁵ <https://data.census.gov/table?q=Tybee+Island+city,+Georgia+geography>. Retrieved 07-07-2025.

⁴⁶ <https://data.census.gov/table/ACSDP5Y2023.DP05?q=Tybee+Island+city,+Georgia+population>. Retrieved 07-07-2025.

Figure H-1 – Location Map, Tybee Island



H.2.2 Geography and Climate

Please refer to Chatham County Community Profile for a summary of climate for Chatham County.

Tybee Island lies within the Sea Island Flatwoods Level IV Ecoregion, which consists of flat plains on marine terraces. Waterways consist of swamps, bays, and low gradient streams with sandy and silty substrates. Elevations average approximately 20 feet. Typical land cover consists of evergreen forests, pine plantations, and forested wetlands.

Tybee Island is located partially within the HUC 12 Watersheds summarized in the table below.

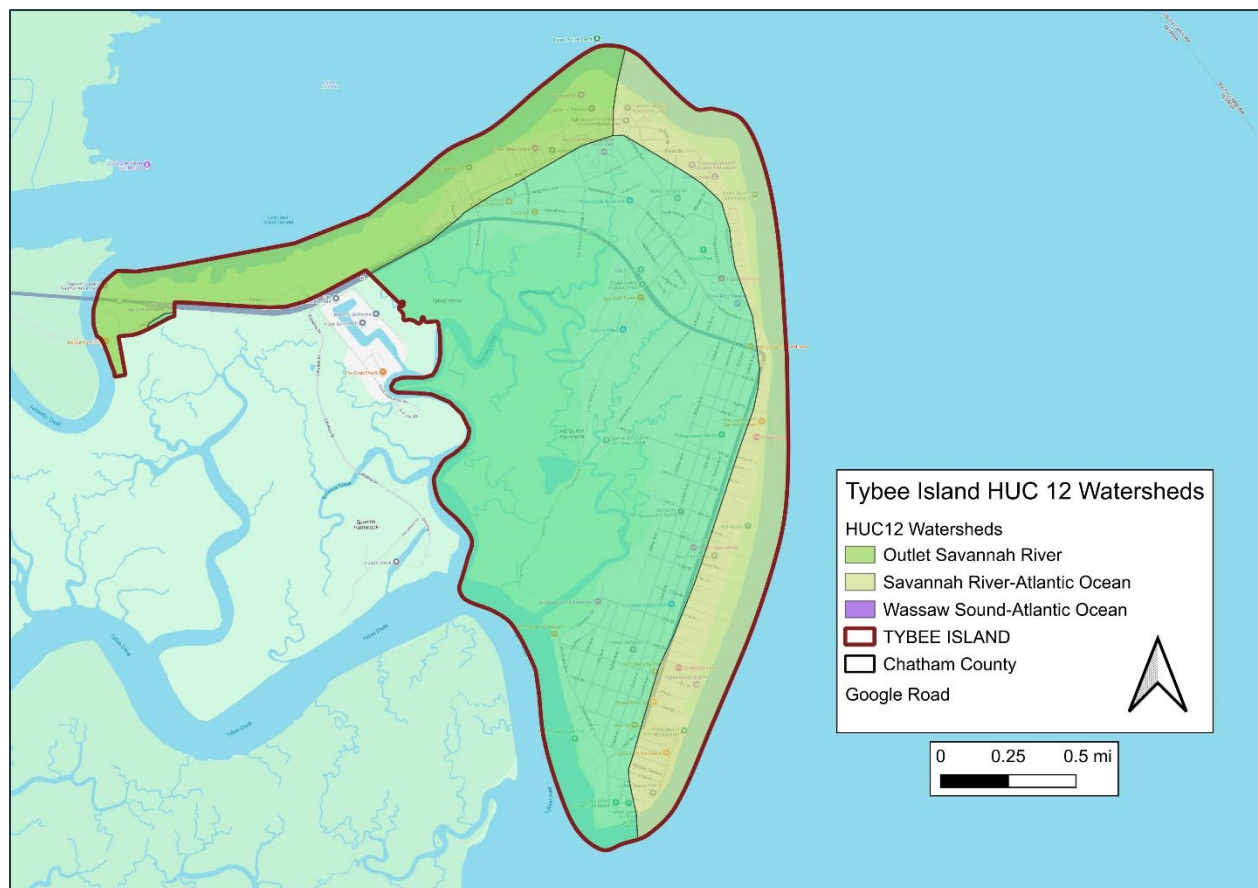
Table H-2 – HUC 12 Watersheds, Tybee Island

Name	Total Area (Sq Miles)	Inside Chatham County	Outside Chatham County	Drains into HUC	HUC 12 Number
Outlet Savannah River	196.73	109.31	87.42	Atlantic Ocean	030601090307
Wassaw Sound – Frontal Atlantic Ocean	69.90	68.8	1.10	Wassaw Sound – Atlantic Ocean	030602040102
Savannah River – Atlantic Ocean	0.73	0.73	0.00	Ocean	030601090309

Source: Chatham County Coastal Watershed Management Plan, 2020

The figure below illustrates the HUC 12 drainage basins and drainage features in and around Tybee Island.

Figure H-2 – HUC 12 Watersheds, Tybee Island



H.2.3 Cultural, Historic, and Natural Resources

H.2.3.1 Cultural and Historic Resources

Cultural and historic facilities on Tybee Island include:

- A complex of buildings located at 204 Fifth Street near Butler and include:
 - Tybee Gymnasium
 - The YMCA
 - Cafeteria
 - Old School Complex
- City Hall (403 Butler Avenue)
- Community Building (Guard House: 31 Van Horne Ave.)
- Tybee American Legion
- Tybee Lite Shrine Club
- Tybee Arts Association: Provides classes, plays, Annual Art Auction, and Annual October Festival of the Arts
- Tybee Island Lighthouse
- Tybee Post Theater
- Marine Science Center

An additional comprehensive list of the sites in the City of Tybee Island on the National Register of Historic Places can be found in the table below.

Table H-3 – Historic Sites, Tybee Island

Site	Address	Nearest City/Location
Abrahams, Edmund and Mildred, Raised Tybee Cottage	4 8th St.	Tybee Island
Bordley Cottage-Beach View House	1701 Butler Ave.	Tybee Island
The Carbo House	9 Tybrisa St.	Tybee Island
Curry-Miller-Byrd Cottage	16 Izlar Ave.	Tybee Island
Dutton-Waller Raised Tybee Cottage	1416 7th Ave.	Tybee Island
Fort Screven Historic District	Tilton, Butler, Van Horn, Railroad and Alger Aves., and Pulaski Rd.	Tybee Island
Johnson, J. Herbert and Julia, Raised Tybee Cottage	1306 Jones Ave.	Tybee Island
Morgan-Ille Cottage	703 2nd Ave.	Tybee Island
Mulherin-Righton Raised Tybee Cottage	14 8th Pl.	Tybee Island
Rourke, James and Odessa, Jr., Raised Tybee Cottage	702 14th St	Tybee Island
Savannah Beach Town Hall and Auditorium	403 Butler Ave.	Tybee Island
Sea View Apartments	7 18th St.	Tybee Island
Tybee Island Back River Historic District	Along Chatham Ave., from Tybee River to Venetian Dr.	Tybee Island
Tybee Island Strand Cottages Historic District	Along Butler Ave., between 12 St. and 14th St.	Tybee Island
Weil, Edgar A., House	802 14th St.	Tybee Island

Source: National Register of Historic Places, 2025

H.2.3.2 Parks, Preserve, and Conservation

The City of Tybee Island has two main public parks as summarized in the table below.

Table H-4 – Public Parks, Tybee Island

Name	Amenities	Photo
Jaycee Park (30 Van Horn St.)	• Baseball / Softball Diamond • Basketball Court • Soccer Field • Bike Trail • Walking Trail • Gazebo • Playground • Scenic Waterway • Picnic Areas • Disc Golf Course	
Memorial Park (402 Jones Ave.)	• Basketball Court • Beach Volleyball Court • Cemetery • Picnic Areas • Open pavilion • Soccer • Tennis Court	

Other outdoor facilities include:

- Park of 7 Flags: Small passive park with fountain and bench seats located on Butler Ave. at the west end of Tybrisa.
- Sally Pearce Nature Trail: A short hiking trail located on the south side of US Hwy. 80 at Fifth Ave.
- Blue Heron Nature Trail: Located on the north side of US Hwy. 80 opposite Lewis Ave.
- North Beach Birding Trail: Bird Sanctuary located west of the Tybee Island Lighthouse in the North Beach area.
- Tybee Pier and Pavilion (Chatham County)

H.2.3.3 Natural Resources

Floodplains and Flood Zones

FEMA flood zone designations within the City of Tybee Island are identified in the figure below. The flood hazard areas shown are designated by the Federal Emergency Management Agency (FEMA) and include: Zone A (subject to inundation by the 1% annual-chance flood event with no base flood elevation (BFE) determined), Zone AE (subject to inundation by the 1% annual-chance flood event with BFE determined), Zone VE (subject to inundation by the 1% annual-chance flood event with additional hazards due to storm waves with BFE determined), Zone X500 (Moderate Risk areas outside the SFHA and inside the 0.2% annual-chance floodplains with no BFE or base flood depths determined) and Minimal Risk areas outside the SFHA and X500 zone).

Table H-5 – Flood Zones, Tybee Island

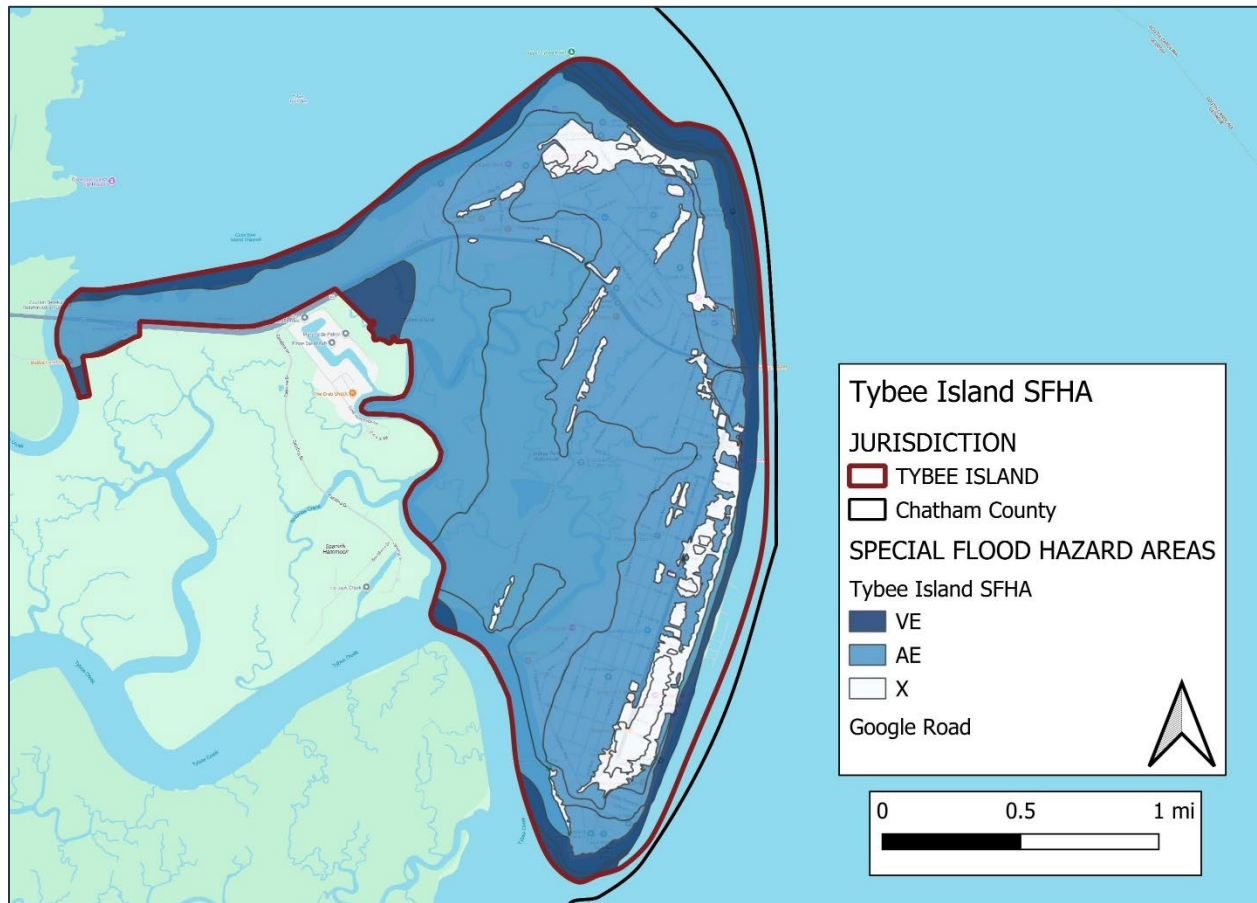
Flood Zone	Area (Acres)	Area (Square Miles)	Percent of City (%)
AE	1,552	2.43	79.2
VE	247	0.39	12.7
X500	131	0.20	6.5
X	37	0.06	2.0
TOTAL	1,967	3.07	100.0

Source: FEMA National Flood Hazard Layer, 2024

According to the 2024 FEMA data, 1,799 acres of the land within Tybee Island are located within a 100-year floodplain (Zone AE and VE), which equals about 91.9 percent of the city. An additional 37 acres are located within moderate or minimal flood hazard areas (2.0% of the city). With nearly 92 percent of the city at high risk of flooding in the Special Flood Hazard Area (SFHA), the City of Tybee Island should seek ways to balance future development with strategies to preserve sensitive lands and natural drainage features.

Natural and Beneficial Floodplain Functions: Under natural conditions, a flood causes little or no damage in floodplains. Nature ensures that floodplain flora and fauna can survive the more frequent inundations, and the vegetation stabilizes soils during flooding. Natural floodplains in Tybee include wetland areas and low-lying land along the major waterways in and around the city, including the Atlantic Ocean, Lazaretto Creek, Tybee Creek, the Back River, and other tidal creeks on the west side of the island. Natural floodplains reduce damage by allowing flood waters to spread out over large areas, aiding infiltration into the ground, reducing flow rates, and acting as a flood storage area to reduce downstream peaks. The city should strive to keep floodplain and floodplain waters free of contaminants, such as oil, paint, anti-freeze, pesticides, plastics, and other trash. These chemicals and waste materials pollute local waterways, decreasing the water quality that local wildlife and plants depend upon.

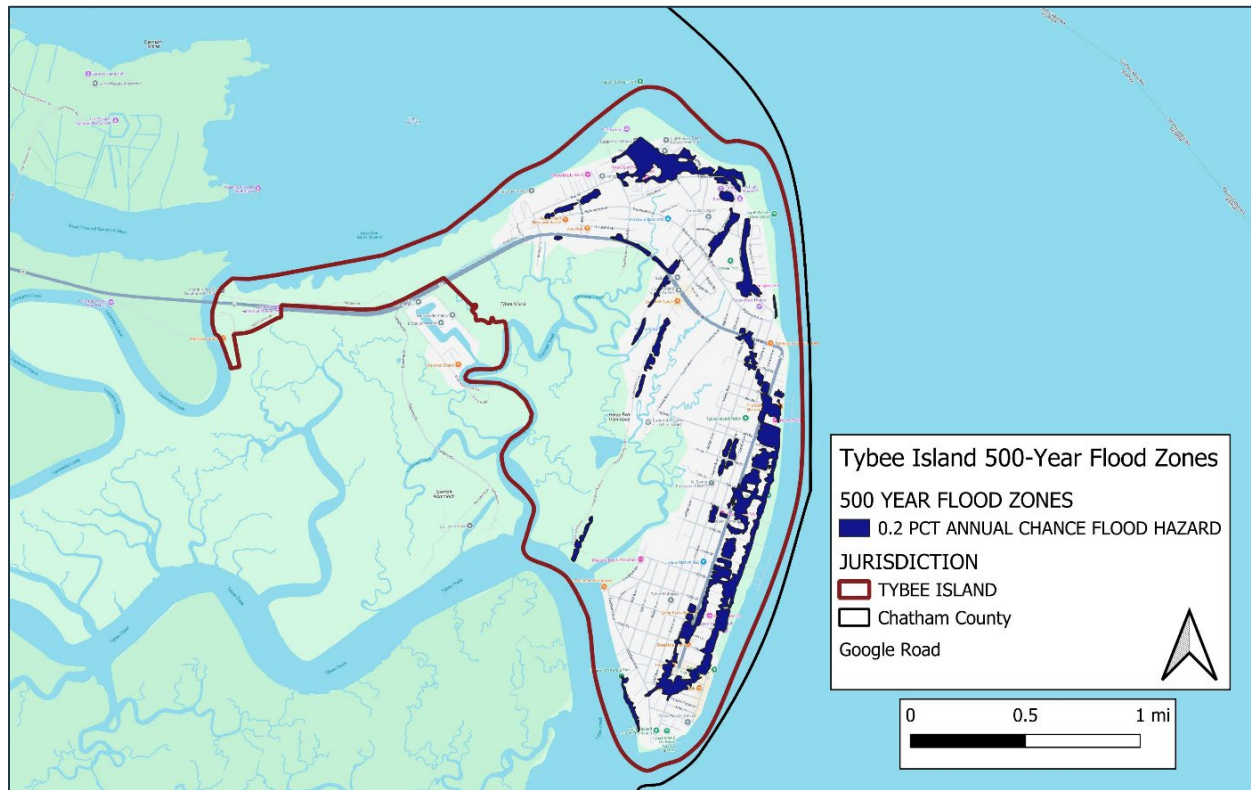
Figure H-3 – FEMA Flood Zone Map, Tybee Island



Source: FEMA National Flood Hazard Layer, 2024

A 500-year flood zone, also known as the X500 zone, represents areas with a 0.2% probability of flooding in any given year. While less likely to flood than areas within the 100-year floodplain, these zones can still experience significant flooding during extreme events. The X500 zone for Tybee Island is depicted in the map below and represented in Table H-5 above.

Figure H-4 – X500 Zone, Tybee Island



Source: FEMA National Flood Hazard Layer, 2024

Wetlands

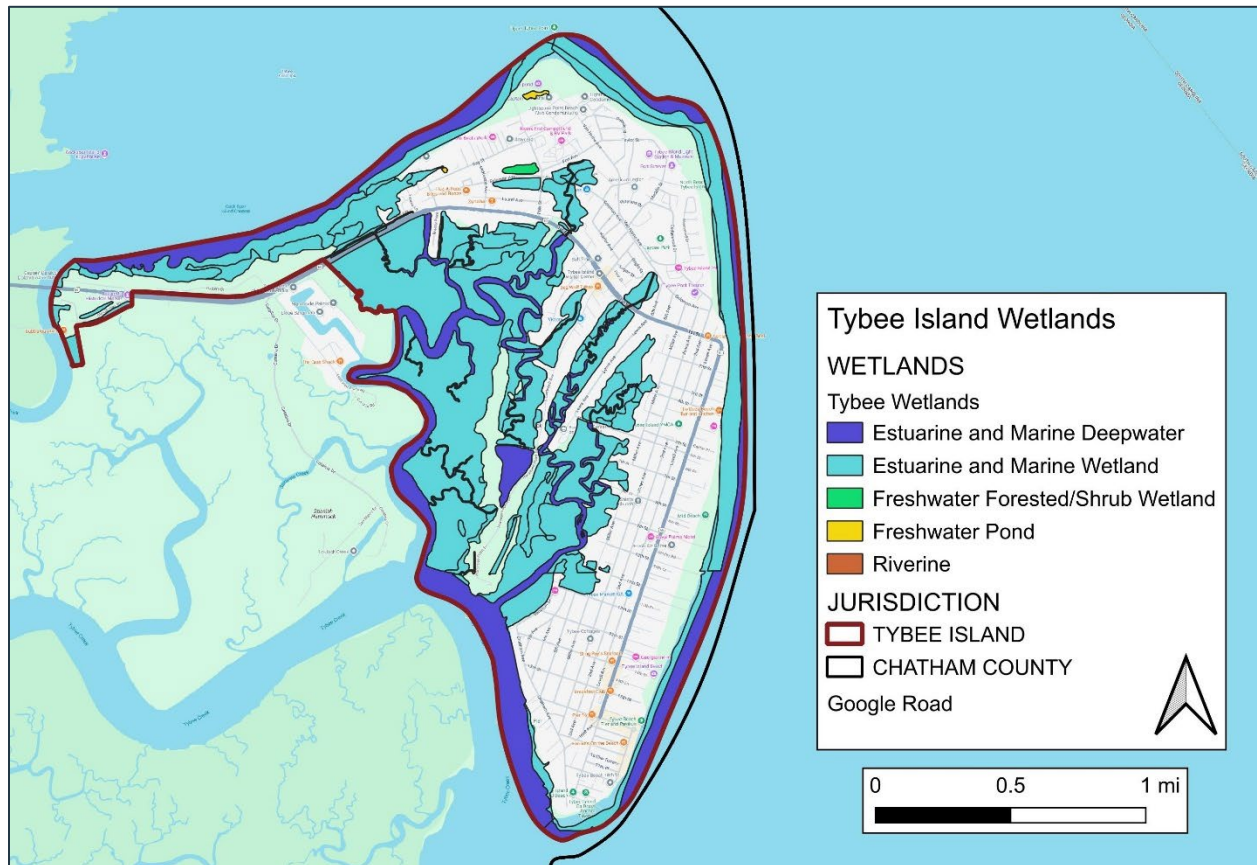
Wetlands benefit the ecosystem by storing, changing, and transmitting surface water and groundwater. Through these processes pollution is removed, nutrients are recycled, groundwater is recharged, and biodiversity is enhanced. Wetland composition varies extensively, with seven distinct categories for classification: Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, Freshwater Forested/Shrub Wetland, Freshwater Pond, Lake, and Riverine. Based on data from the National Wetland Inventory (NWI), wetlands throughout the City of Tybee Island make up 1,553.32 acres (2.43 square miles) or 75.9 percent of the City (see Table H-6 below).

Table H-6 – Wetland Types, Tybee Island

Wetland Type	Area (Acres)	Area (Sq. Miles)	Percent of City
Non-Wetland	494.68	0.77	24.1
Estuarine and Marine Deepwater	13.94	0.02	0.01
Estuarine and Marine Wetland	1,533.31	2.40	0.75
Freshwater Forested/Shrub Wetland	2.46	0.004	0.001
Freshwater Pond	1.23	0.002	0.001
Riverine	2.38	0.004	0.001
TOTAL	2,048	3.2	100.0

Source: National Wetlands Inventory, 2022; SAGIS, 2025

Figure H-5 – Wetlands Map, Tybee Island



Source: National Wetlands Inventory, 2022; SAGIS, 2025

Estuarine and Marine Deepwater

Estuarine and marine deepwater classifications, as defined by the Cowardin classification system, are distinguished by their location and water chemistry. Marine deepwater is part of the Marine System, which is exposed to the open ocean and extends from the outer edge of the continental shelf shoreward. Estuarine deepwater, part of the Estuarine System, is partially enclosed by land and has a mixture of fresh and saltwater.

Estuarine and Marine Wetland

Estuarine and marine wetlands are classified within a broader hierarchical system that includes five main systems: marine, estuarine, riverine, lacustrine, and palustrine. These classifications are based on factors like salinity, water type, vegetation, and geological features. Within the marine and estuarine systems, further subdivisions exist, such as subsystems (subtidal and intertidal) and classes (e.g., rock bottom, unconsolidated bottom, aquatic bed).

Freshwater Forested/Shrub Wetland

Freshwater forested/shrub wetlands are also classified using the Cowardin System. The system identifies wetlands based on their dominant vegetation (trees or shrubs), soil type, and hydrology.

Freshwater Pond

Within the Palustrine system, ponds are often categorized as Lacustrine or Palustrine. Specifically, ponds may be classified as emergent, scrub-shrub, or forested, depending on the dominant vegetation.

Riverine

Riverine wetlands are characterized by flowing fresh water and are found within channels, including rivers, streams, and other watercourses. They are further categorized based on their position in the watershed and hydrologic regime into tidal, lower perennial, upper perennial, and nonperennial subsystems.

Ground Cover

The maps below provide an overview of the natural and developed surfaces across the City of Tybee Island, including vegetation, impervious surfaces, water bodies, and barren land. This information is essential for understanding how different land cover types influence hazard vulnerability, such as flood risk, wildfire potential, and erosion. Identifying these patterns helps inform targeted mitigation strategies and land use planning efforts.

Figure H-6 – Land Cover Map, Tybee Island

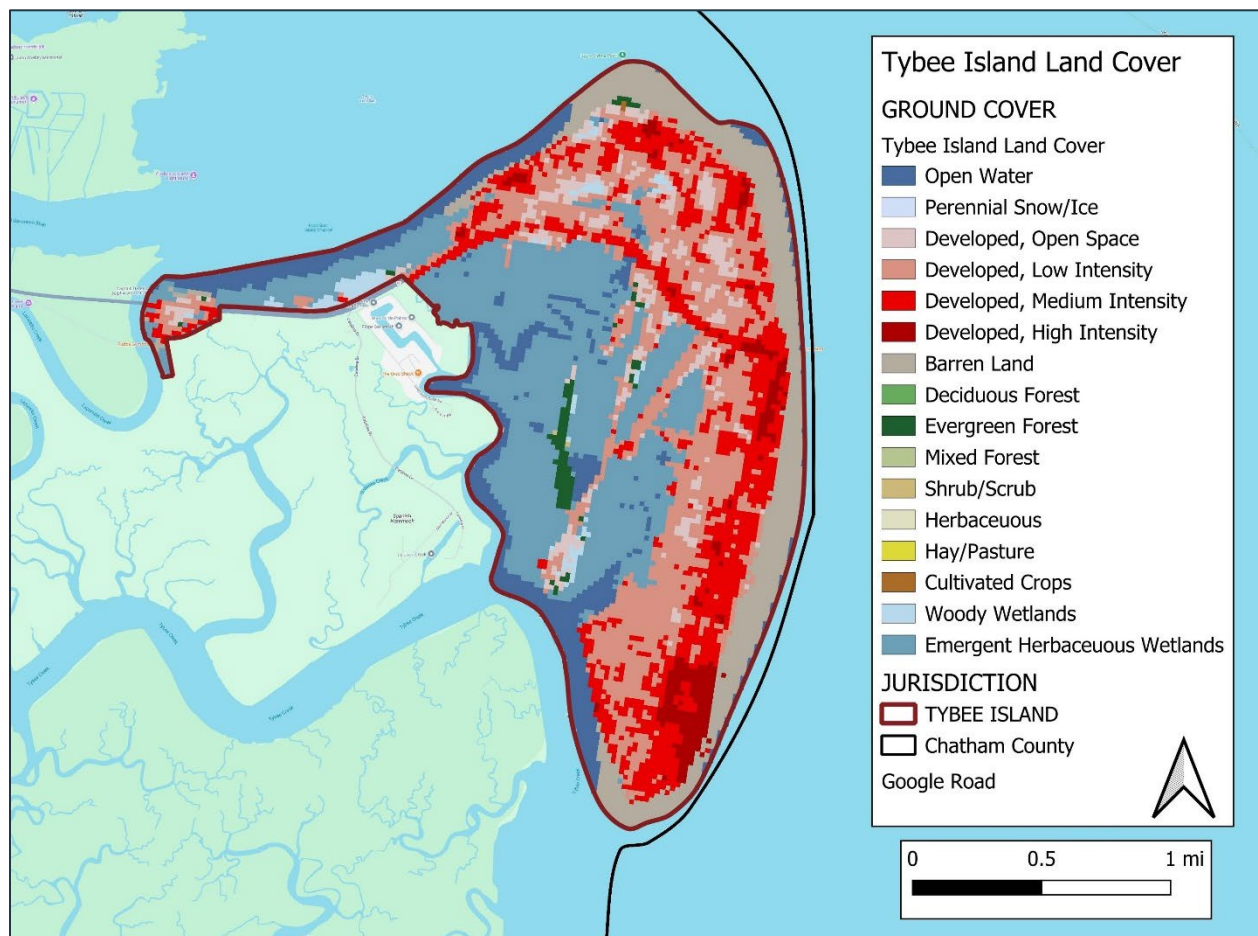
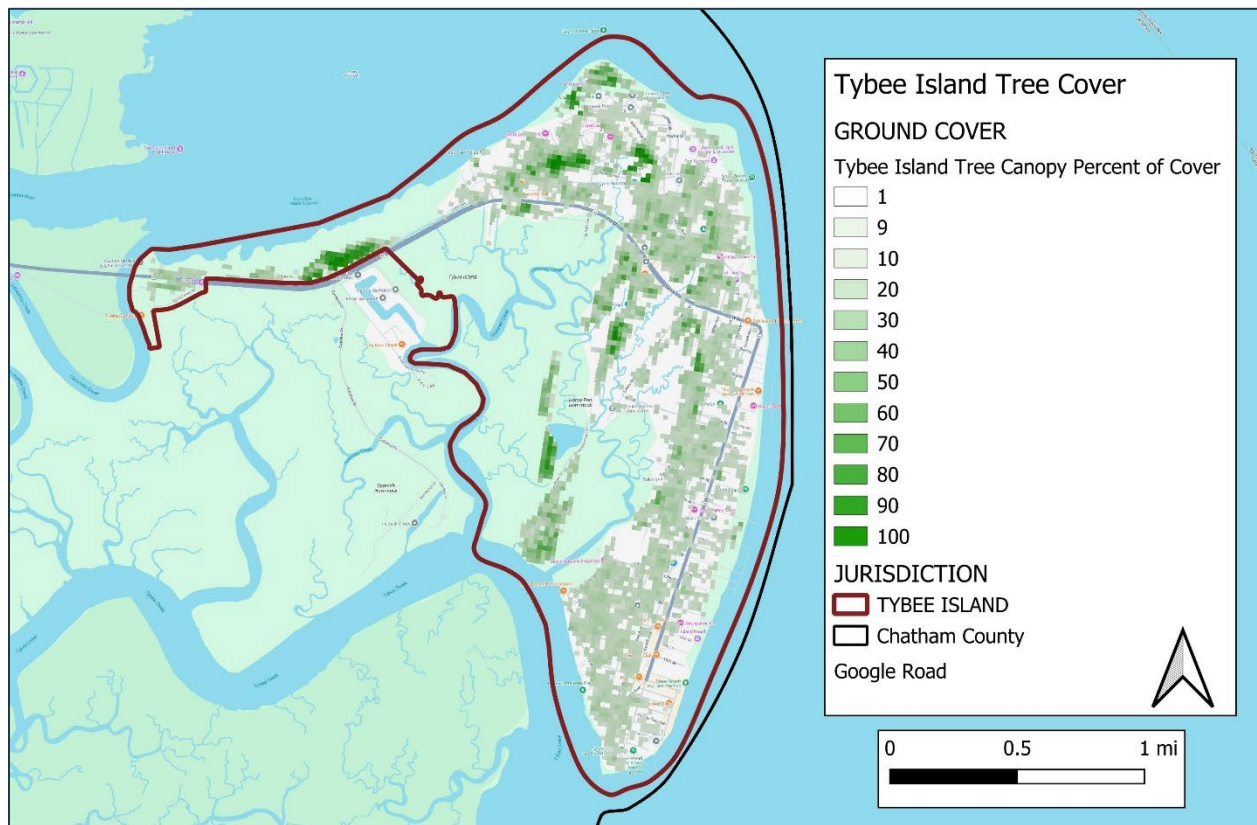


Figure H-7 – Tree Cover Map, Tybee Island



H.2.4 History

At the time of the first European exploration of Tybee by the Spanish in the 16th century, the island was home to the Euchee Indians. The name “Tybee” is derived from the Euchee word for “salt.” In 1733, James Oglethorpe settled the City of Savannah and the Colony of Georgia 17 miles upriver. The island was important for defense and commerce due to its strategic location at the mouth of the Savannah River.

In 1873, the Tybee Improvement Company established what would become the City of Tybee with the first partial survey of lots. The federal government acquired land to establish a military reservation on the north end of the island in 1875, which became Fort Screven. The following year brought the first resort hotel, Ocean House, on the south end of the island and other commercial and residential development soon followed especially after the construction of the Savannah-Tybee Railroad in 1887. By 1890, when the Savannah-Tybee Railroad became a unit of the Central of Georgia Railroad, Tybee became a regional resort. In the early 1920s, Tybee began its golden era as a resort with the completion of the Tybee Road connecting with the mainland via Victory Drive. As a result, Tybee experienced an unparalleled building boom with boarding houses and hotels.

By the mid-1930s, Tybee had a permanent population of 350 with a swell to 6,000 during the summer resort season. The establishment of a permanent population served to stabilize the community and the economy. During this time the intersection of Tybrisa Street (formerly 16th Street) at Butler Avenue began to develop as the main commercial area for the town. By the end of the 1940s, Tybee year-round population was over 1,000.

By 1990, the population of Tybee Island was 2,800 and Tybee was selected as a host site for the 1996 Olympics. Today, Tybee Island is just as popular as it was before the 1950s with a year-round population

of 2,900 and a swell to 30,000 in the summer season. In addition to the miles of beaches, acts of preservation, and sense of community, Tybee offers a variety of accommodations, restaurants, shops, and entertainment for all ages.

H.2.5 Economy

H.2.5.1 Wages and Employment

Per the 2019-2023 American Community Survey 5-Year Estimates, the median household income for Tybee is \$112,778, which is 40.7 percent higher than the state's median household income (\$74,664).⁴⁷ Approximately 6.5 percent (195) of the population is considered to be living below the poverty level. Moreover, 10.2 percent (26) of people under 18 years of age and 2.8 percent (38) of people 65 years and over are living below the poverty level.⁴⁸

The table below shows employment and unemployment rates along with industry employment by major classification for the city.

Table H-7 – Employment and Occupation Statistics for Tybee Island, GA, 2019-2023

Employment Status	Count	Percentage (%)
In labor force	1,230	41.5
Employed	1,211	40.8
Unemployed	19	0.6
Armed Forces	0	0.0
Not in labor force	1,737	58.5
Occupation	Count	Percentage (%)
Management, business, science, and arts	724	59.8
Service	185	15.3
Sales and office	107	8.8
Natural resources, construction, and maintenance	18	1.5
Production, transportation, and material moving	177	14.6

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

Major industry sectors in Tybee Island include management, business, science, and arts (59.8%); service (15.3%); and sales and office (8.8%); natural resources, construction, and maintenance (1.5%); and production, transportation, and material moving (14.6%).

Major employers are discussed in the Chatham County Community Profile.

H.2.6 Housing

According to the 2019-2023 ACS 5-Year Estimates, there are 3,337 housing units in the City of Tybee Island, of which 45.2 percent (1,508) are occupied.⁴⁹ Approximately 89.3 percent (1,346) of occupied units are owner-occupied (10.7% occupied by renters). A high percentage of renters is an indicator of higher pre- and post-disaster vulnerability because, according to Cutter, et al. (2003), renters often do not have the financial resources of homeowners, are more transient, are less likely to have information about or access to recovery aid following a disaster, and are more likely to require temporary shelter following a disaster.

⁴⁷ <https://data.census.gov/table?q=Tybee+Island+city,+Georgia+employment>. Retrieved 07-08-2025.

⁴⁸ <https://data.census.gov/table?q=Tybee+Island+city,+Georgia+poverty+level>. Retrieved 07-08-2025.

⁴⁹ <https://data.census.gov/table/ACSDP5Y2023.DP04?q=Tybee+Island+city,+Georgia+tenure>. Retrieved 07-08-2025.

Therefore, higher rates of home rentals in Tybee Island may indicate that residents are not able to implement certain types of mitigation in their homes.

Median home value in Tybee is \$613,400. Of the town's owner-occupied housing units, 38.6 percent (519) have a mortgage. Most householders (83.6% / 1,260) have lived in their current homes since the year 2000 or later, 25.5 percent (385) moved in between 2000 and 2009, 38.8 percent (585) moved in between 2010 and 2017, 14.7 percent (222) moved in between 2018 and 2020, and 4.5 percent (68) moved in 2021 or later. 0.6 percent (9) of householders in occupied housing units have no vehicle available to them, which suggests these residents may have difficulty in the event of an evacuation.

The majority (64.9% / 2,167) of housing units in Tybee are detached single family homes. There are no mobile homes, which can be more vulnerable to certain hazards, such as tornadoes and windstorms, especially if they aren't secured with tie downs.

The City's housing stock is relatively old, with the majority (68.6% / 2,290) of occupied housing built before 2000. Table H-8 details housing age in the town.

Table H-8 – Housing Age, Tybee Island

Year Structure Built	Percent of Occupied Housing	Number of Homes
2020 or later	0.0	0
2010 to 2019	3.3	110
2000 to 2009	28.1	937
1980 to 1999	24.8	828
1960 to 1979	17.0	566
1940 to 1959	17.6	588
1939 or earlier	9.2	308

Source: U.S. Census Bureau, American Community Survey 2019-2023 5-Year Estimates

Age can indicate the potential vulnerability of a structure to certain hazards. For example, the City of Tybee first entered the National Flood Insurance Program in 1971. Therefore, based on housing age estimates approximately 35 percent of housing in the town was built before any floodplain development restrictions were required.

H.2.7 Population

According to the U.S. Census Bureau, Tybee had an estimated population of 3,121 residents in 2023 and a population of 3,114 at the time of the 2020 U.S. Census (0.2% increase from 2020-2023). As of 2023, Tybee's population density was 975 persons per square mile. The table below provides demographic profile data from the 2019-2023 American Community Survey 5-Year Estimates.⁵⁰

Table H-9 – City of Tybee Island Demographic Profile Data, 2019-2023

Demographic	Tybee Island
Gender/Age	
Male	1,460
Female	1,661
Under 5 Years	69
65 Years and Over	1,461

⁵⁰ <https://data.census.gov/table/ACSDP5Y2023.DP05?q=Tybee+Island+city,+Georgia+population>. Retrieved 07-08-2025.

Demographic	Tybee Island
Race/Ethnicity (One Race)	
White	2,961
Black or African American	77
American Indian/Alaska Native	0
Asian	0
Two or More Races	38
Hispanic or Latino ¹	0
Education	
High School Graduate or Higher	2,732
Bachelor's Degree or Higher	1,402

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

¹Hispanics may be of any race, so also are included in applicable race categories.

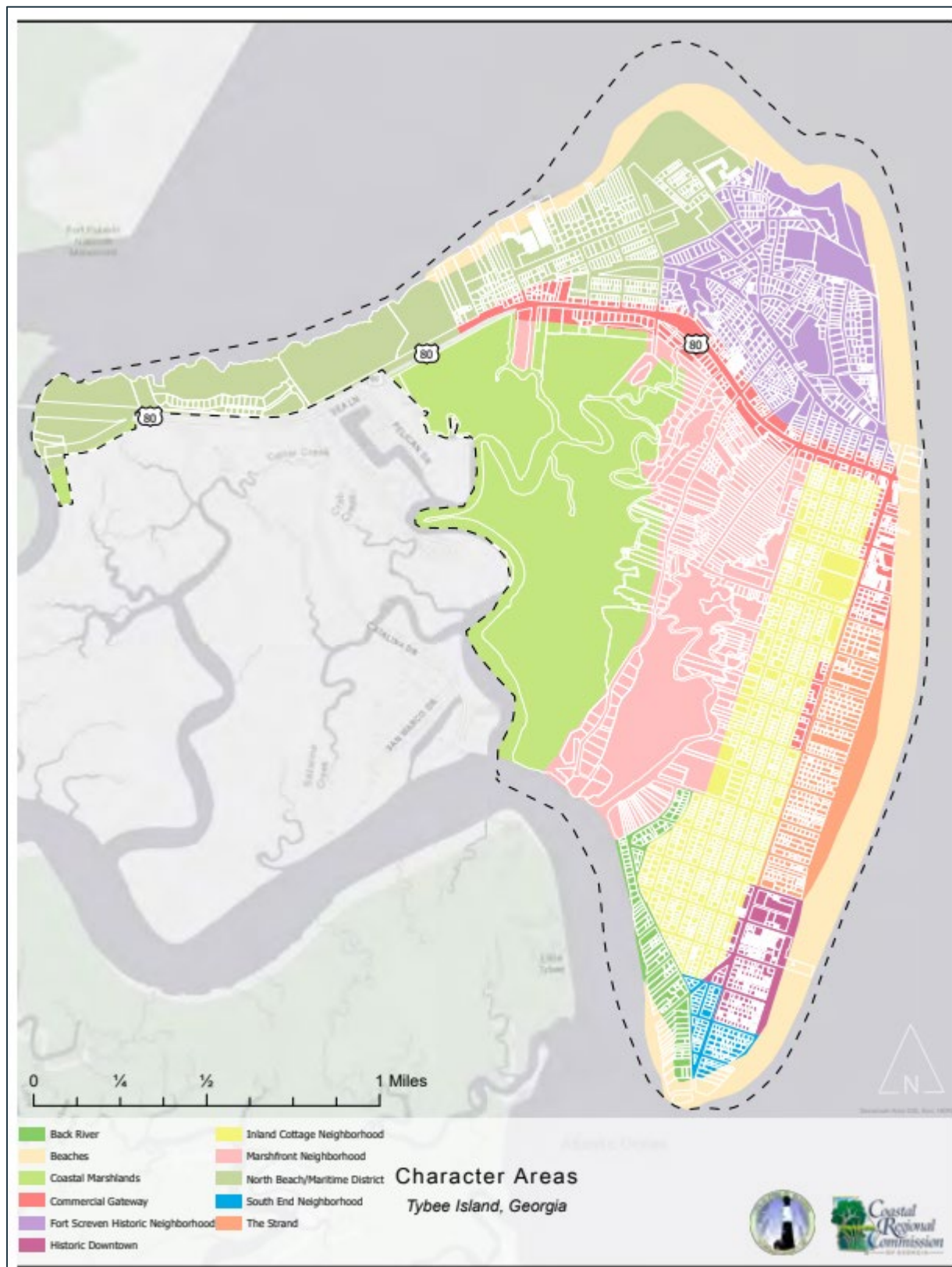
H.2.8 Land Use

H.2.8.1 Character Areas

The City of Tybee Island Comprehensive Plan (2021-2026) establishes updated Character Areas to guide future development including:

- **Back River:** Consists of cottages with waterfront lots, facing Tybee Creek and the Back River Beach.
- **Beaches:** Covers the protective dune system and the environmentally economically essential beachfront.
- **The Strand/Beachfront Neighborhood:** The historic area is exclusively residential and is characterized by wide streets with on street parking and old growth trees supplemented by side alleys with public and private beach access.
- **Coastal Marshlands:** Includes environmentally sensitive undeveloped natural land not suitable for development. The marshlands buffer against flooding and erosion and provide marine/wildlife habitat and recreational opportunities.
- **Commercial Gateway:** Function as an activity center and serves as the main corridor on and off the Island and includes a wide mix of uses that varies along its route, such as shopping, art, restaurants, and homes.
- **Ft. Screven Historic Neighborhood:** Includes Officers Row and all of Ft. Screven, which represents significant historic, cultural, and natural resources.
- **Inland Cottage Neighborhood:** Predominantly residential with a mix of dwelling types that compose much of the area west of Butler Ave to the Back River and Marshfront Neighborhood areas.
- **Marshfront Neighborhood:** Largely residential with a fine mix of home type, size, and scale, and anchored by the proximity of the coastal salt marshes, which provide beautiful scenic views and environmental benefits.
- **North Beach/Maritime District:** This district includes commercial, recreational, campground, public/government uses and buildings, and a mix of residential styles and homes set on narrow streets.
- **South End Neighborhood:** This area is just south of the Downtown area and features a mix of residential and seasonal rental units.
- **Historic Downtown District:** This district is the traditional "Main Street" of Tybee Island.

Figure H-8 – Character Areas Map, Tybee Island



H.2.8.2 Existing Land Use

According to zoning data from the SAGIS map viewer, existing land use is summarized in the table below.

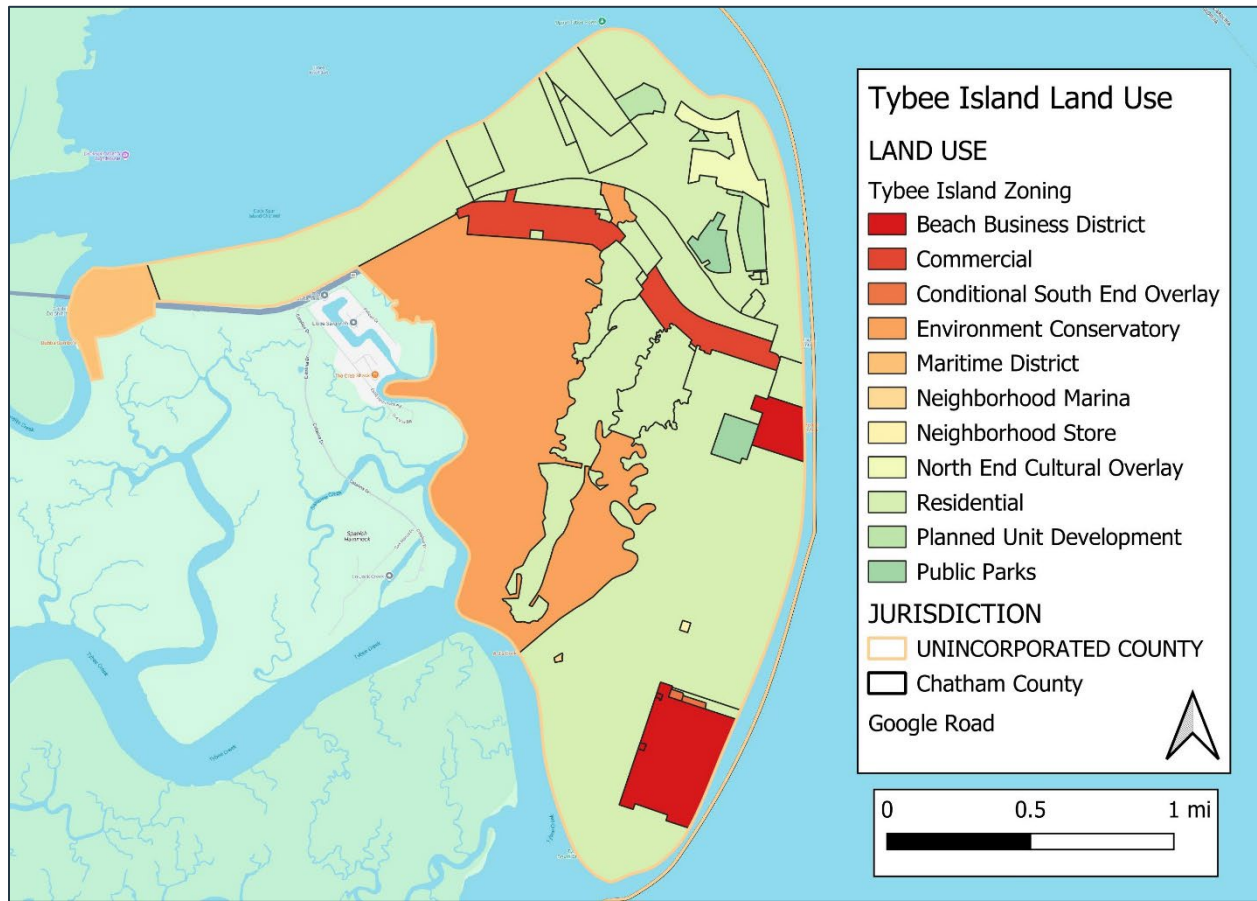
Table H-10 – Existing Land Use, Tybee Island

Land Use/Zoning	Area (Acres)	Area (Square Miles)
Beach Business District	92	0.14
Commercial	73	0.11
Conditional – South End Overlay	40	0.06
Environment Conservatory	485	0.76
Maritime District	45	0.07
Neighborhood Marina	0	0.00
Neighborhood Business/Commercial	1	0.002
North End Cultural Overlay	28	0.04
Residential Single-family	1,252	1.96
Planned Unit Development	24	0.04
Public Parks	23	0.04
Residential	22	0.03
TOTAL	2,085	3.26

Source: SAGIS – Zoning, 2024

An existing land use map for zoning is included below for Tybee Island, as taken from the SAGIS map viewer for Chatham County.

Figure H-9 – Existing Land Use and Zoning Map, Tybee Island



Source: SAGIS – Zoning, 2024

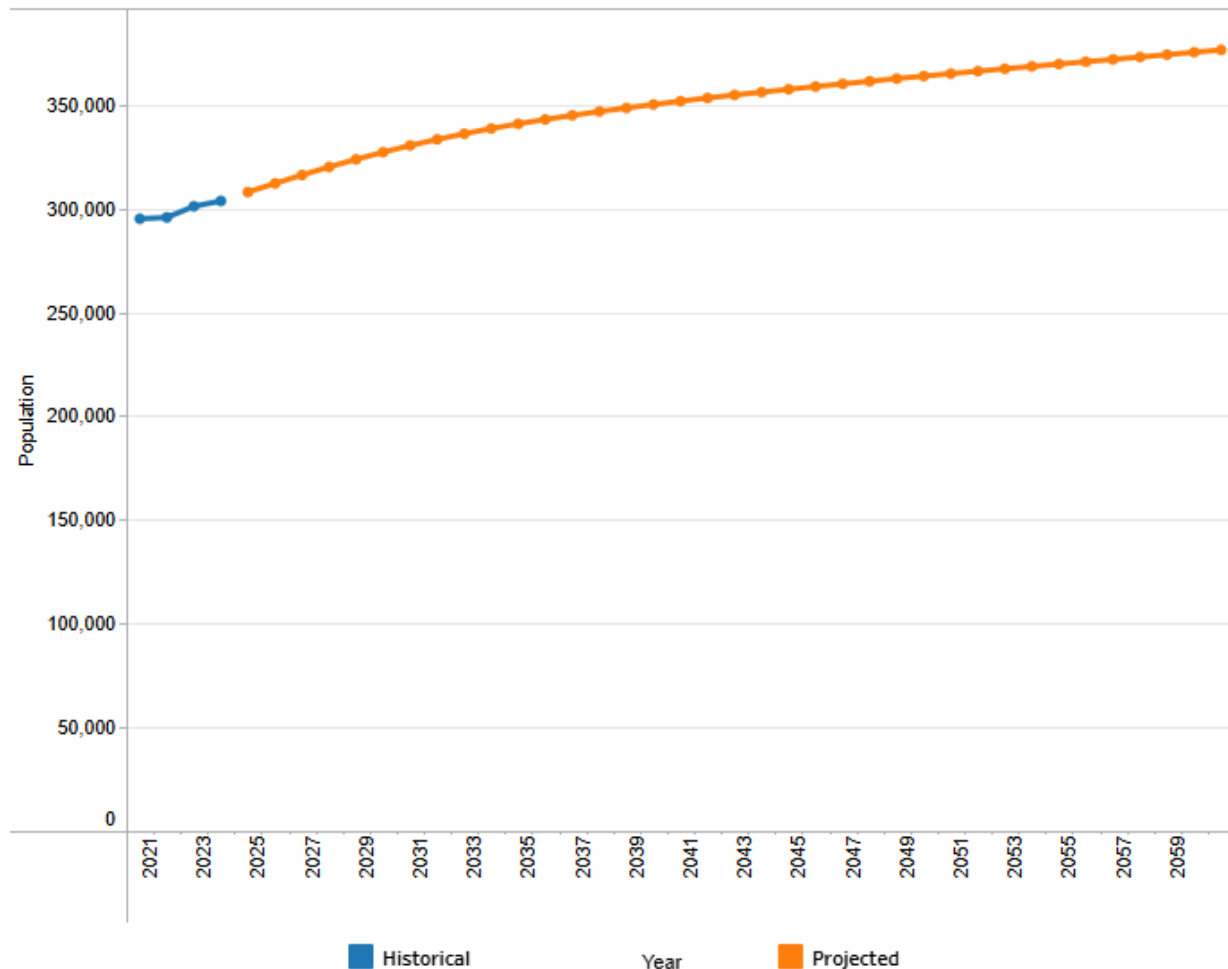
H.2.9 Growth and Development Trends

According to the U.S. Census Bureau, Tybee Island had an estimated population of 3,121 residents in 2023 and a population of 3,114 in 2020, representing a total increase of 0.2 percent and an annual increase of 0.07 percent.

According to the Georgia Governor's Office of Planning and Budget (GOPB), Chatham County is projected to reach a population of 376,419 by 2060, which represents a 22.2 percent increase from the 2024 population. The population projections from the GOPB estimate the annual growth for the County to be about 0.8 percent through 2060. Only population projections for Chatham County are included in this section as there are currently no population projections available for Tybee Island at the time of planning.

Figure H-10 – Population Projections for Chatham County 2020-2060

Historical and Projected Population, 2020-2060



Historical data is based on the U.S. Census Bureau's Vintage 2023 Population Estimates

Source: Georgia Governor's Office of Planning and Budget

H.3 ASSET INVENTORY

H.3.1 Property

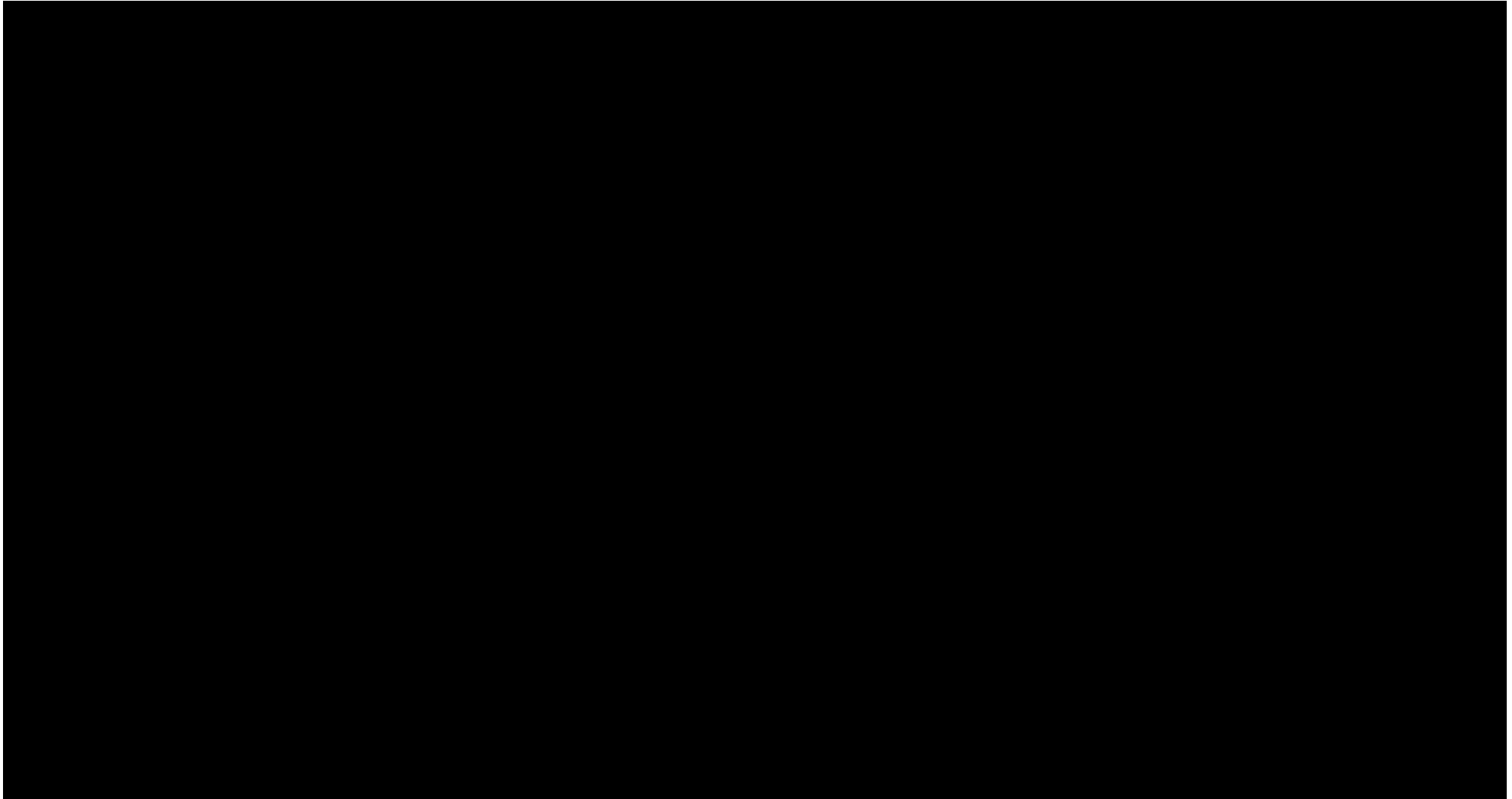
Table H-11 – City of Tybee Island Building Exposure

Occupancy Type	Total Number of Buildings	Total Building Value	Estimated Content Value	Total Value
Commercial	151	\$76,404,481	\$76,404,481	\$152,808,962
Government	9	\$6,396,300	\$6,396,300	\$12,792,600
Historic	8	\$3,945,400	\$3,945,400	\$7,890,800
Industrial	4	\$859,400	\$1,289,100	\$2,148,500
Non-Profit	27	\$5,765,700	\$5,765,700	\$11,531,400
Residential	3,653	\$1,054,328,518	\$527,164,259	\$1,581,492,777
Utility	3	\$113,334	\$170,001	\$283,335
Total	3,855	\$1,147,813,133	\$618,135,241	\$1,768,948,374

Source: Chatham County

H.3.2 Critical Facilities

Table H-12 – Critical Facilities and Infrastructure at Risk



Source: Chatham County

H.4 RISK ASSESSMENT

Risk and vulnerability findings are presented here for those hazards that are spatially defined and have variations in risk that could be evaluated quantitatively on a jurisdictional level. The hazards included in this section are Flood and Wildfire.

H.4.1 Flood

Approximately 83.2 percent of buildings in Tybee Island are within the mapped 1%-annual-chance floodplains (Zones A, AE, and VE) and 30.7 percent are within the X500 zone. Figure H-11 reflects the mapped flood hazard zones for the City of Tybee Island, and Figure H-12 displays the depth of flooding estimated to occur in these areas during the 1%-annual-chance flood. The data in this risk assessment is based off FEMA's 2018 DFIRM.

Properties at risk are detailed by flood zone in Table H-13, below. Parcel data was used to assess Fair Market Value of buildings in hazard areas. Building footprint data was analyzed against floodplain layers to determine which buildings were in the designated floodplain.

Table H-13 – Properties at Risk by Flood Zone

Flood Zone	Number of Buildings	Total Fair Market Building Value
AE	2582	\$866,127,298
VE	31	\$8,647,600
X500	964	\$370,502,424
Total	3,577	\$1,245,277,322

Source: FEMA 2018 DFIRM & Chatham County parcel and building footprint data, 2019

Table H-14 provides building counts and estimated damages by occupancy type for the 1% annual chance of a riverine flood event.

Table H-14 – Tybee Island Estimated Building Damage, 1% Annual Chance Riverine Flood

Occupancy	Buildings Impacted	Building and Contents Cost	Estimated Building Damages	Estimated Content Damages	Loss Estimate
Commercial	191	\$69,058,700.66	\$5,131,263.03	\$17,215,955.11	32.36%
Industrial	4	\$768,477.50	\$55,852.14	\$179,751.38	30.66%
Residential	2,182	\$741,249,077.99	\$140,335,460.89	\$86,132,540.04	30.55%
Total	2,377	\$811,076,256.15	\$145,522,576.06	\$103,528,246.53	30.71%

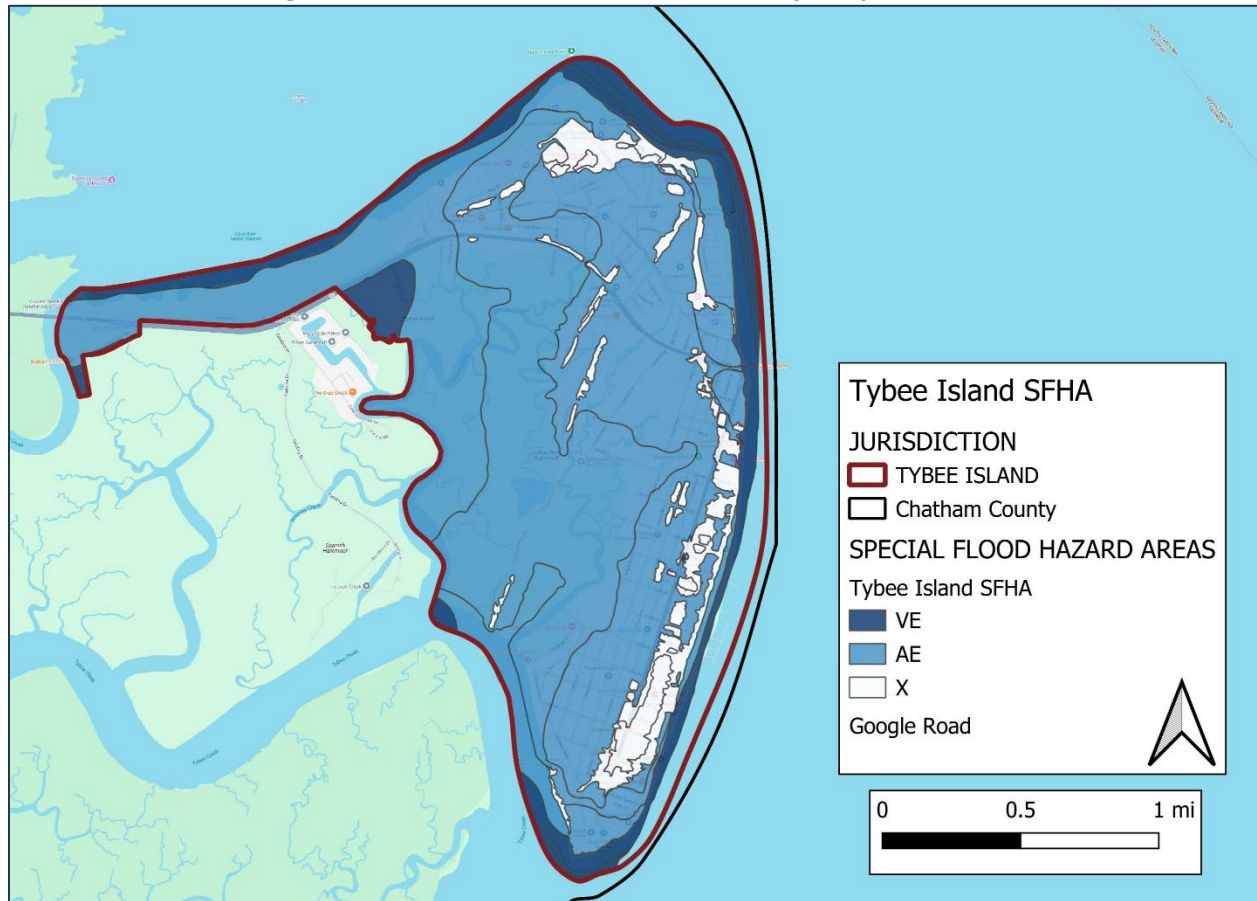
Source: HAZUS

Table H-15 provides building counts and estimated damages by occupancy type for the 1% annual chance of a coastal flood event.

Table H-15 – Tybee Island Estimated Building Damage, 1% Annual Chance Coastal Flood

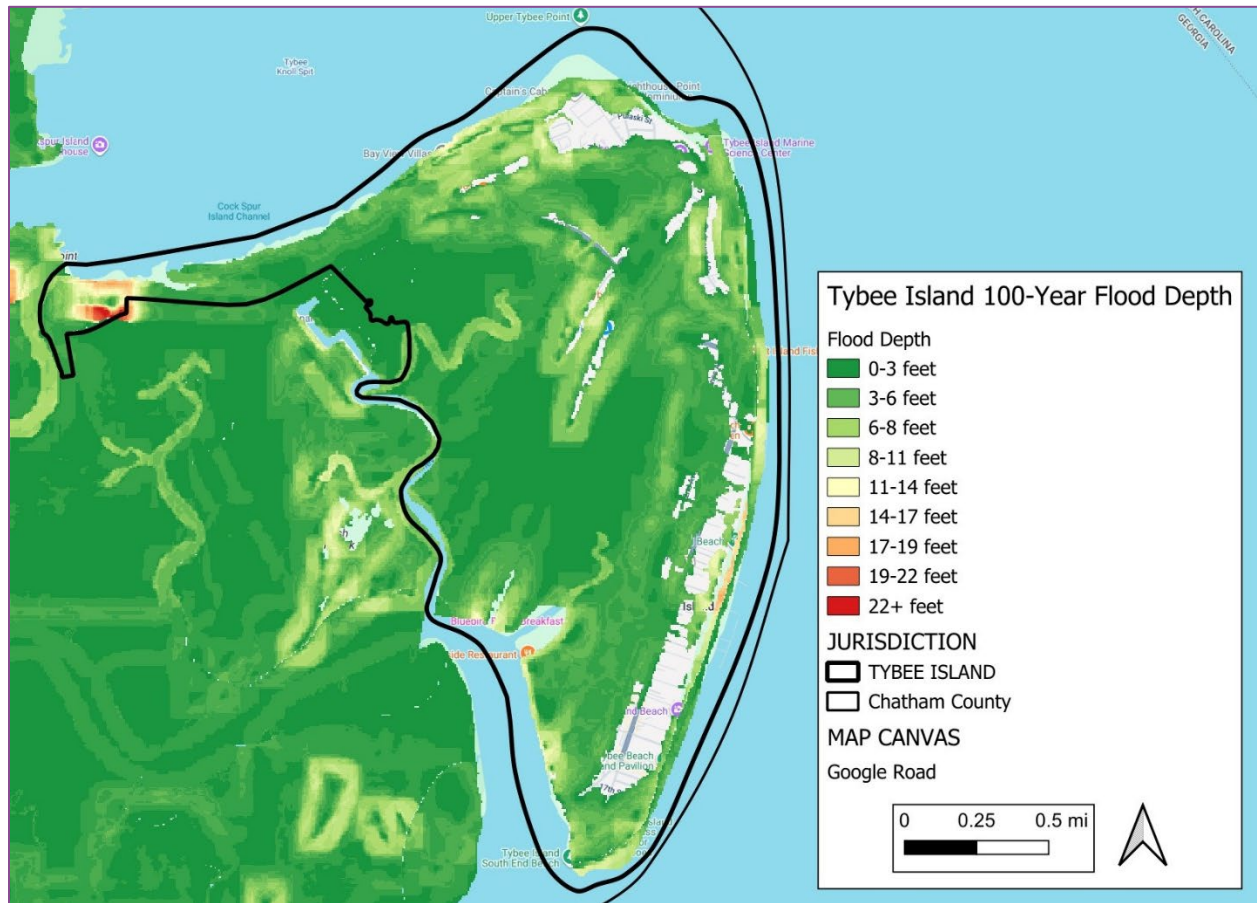
Occupancy	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damages Buildings
Commercial	81	1	\$28,809,862	\$30,268	0.11%
Residential	3,276	98	\$9,420,854	\$9,321	0.00%
Total	3,357	99	\$38,230,716	\$39,589	0.10%

Figure H-11 – FEMA Flood Hazard Areas, City of Tybee Island



Source: FEMA 2018 DFIRM

Figure H-12 – Flood Depth, 1%-Annual-Chance Floodplain, City of Tybee Island



Source: GEMA, UGA ITOS 2025

H.4.2 Wildfire

Wildfire risk was assessed using the 2025 Southern Wildfire Risk Assessment Report, which is provided in Appendix F of the 2025 Chatham County Hazard Mitigation Plan. Associated report data was captured from southernwildfirerisk.com for GIS analysis and mapping.

Previous versions of the Plan addressed identified WUI areas for risk. Recent wildfires across the county have shown that risk to people and property extends beyond identified risk areas. Table H-16 summarizes the wildfire risk products created for the jurisdiction.

Table H-16 – Wildfire Risk Assessment Products

Risk Evaluation Category	Description
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Burn Probability	Burn Probability is the likelihood of wildfire burning at a specific location within one calendar year or wildfire season.

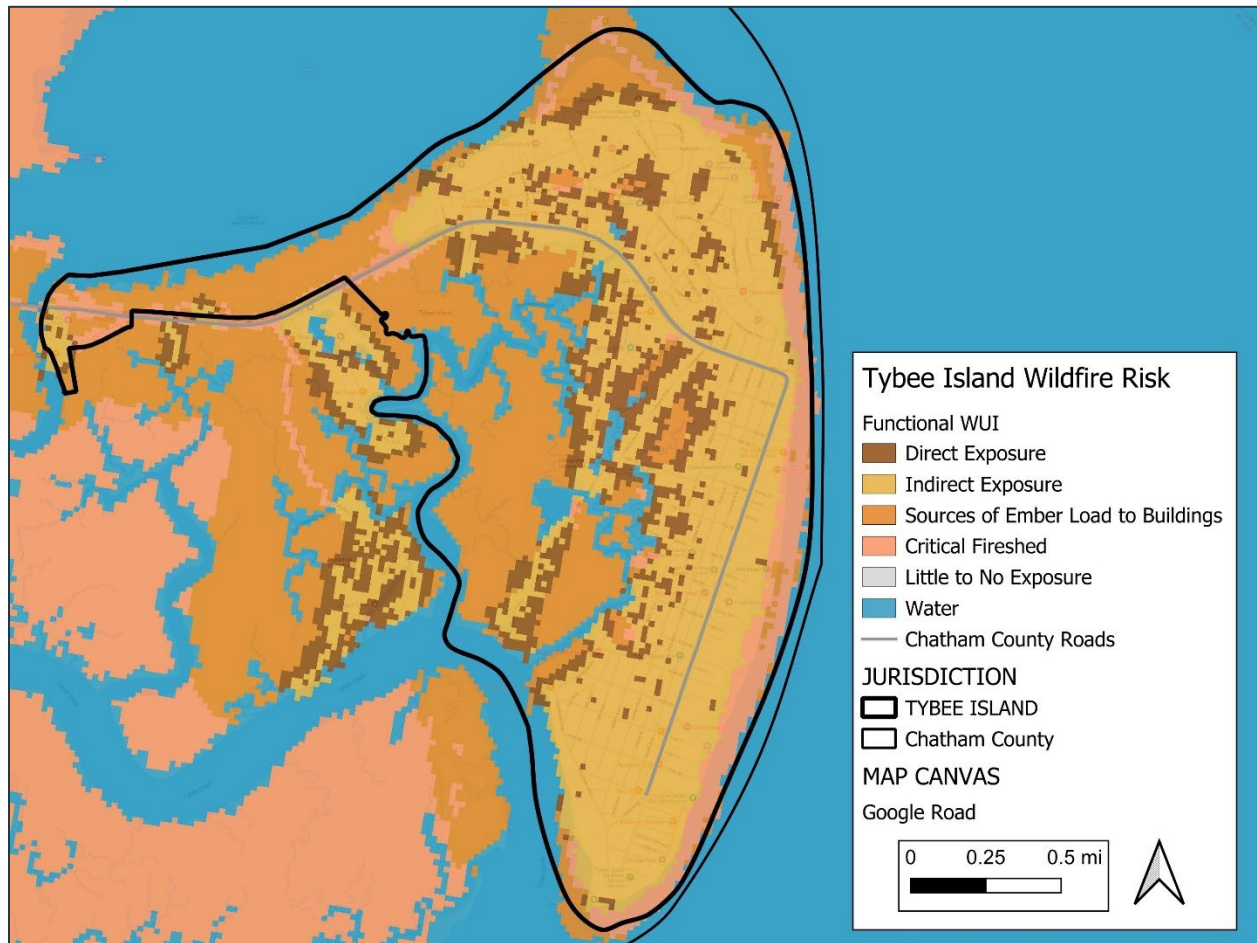
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.

Source: Southern Wildfire Risk Assessment

The Southern Wildfire Risk Assessment Report utilizes Functional Wildland Urban Interface to describe risk based on dynamic factors like terrain, vegetation types, fuel and ground moisture, human activity, accessibility for firefighters, and fire history. Figure H-13 depicts the Functional WUI for the City of Tybee Island. Functional WUI risk across the city includes significant critical fireshed and sources of ember with direct along the shore and in the marsh areas. Direct and indirect exposure to buildings is significant across the island. The categories of risk are defined below:

- Direct Exposure - The Direct Exposure zone is burnable land cover within 75 m of a structure. Reducing fire intensity and ember production in this zone would reduce the exposure of nearby buildings to heat and embers. Buildings in this zone also require hardening of the structure to resist ignition.
- Indirect Exposure - The Indirect Exposure zone is nonburnable land cover within 1500 m of burnable land cover that is within 75 m of a structure, meaning that embers and home-to-home spread could reach within this zone. Indirectly exposed structures would benefit from the hardening of the structure to resist ignition from embers and nearby structures, but defensible space is usually not required due to the heavily developed nature of the zone.
- Critical Fireshed - The Critical Fireshed is the unpopulated land within about 2.4 km of a group of structures. Fires that originate within or spread to the Critical Fireshed have an immediate threat of reaching the nearby structures; fuel treatments that slow fire spread in this zone can reduce risk to these structures.
- Sources of Ember Load to Buildings - These are areas of burnable land cover that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity, and ember travel is a function of wind speed and direction. Fuel treatment in this zone is a priority for reducing ember load to the nearby buildings.
- Little-to-No Exposure - The Little-to-No Exposure zone is nonburnable land that is within 75 m of a structure but greater than 1500 m from a large (500 ha) contiguous block of burnable land cover. Flames—even from home-to-home spread—and embers are unlikely to reach the Little-to-No-Exposure zone, but smoke and evacuations could still impact this area.

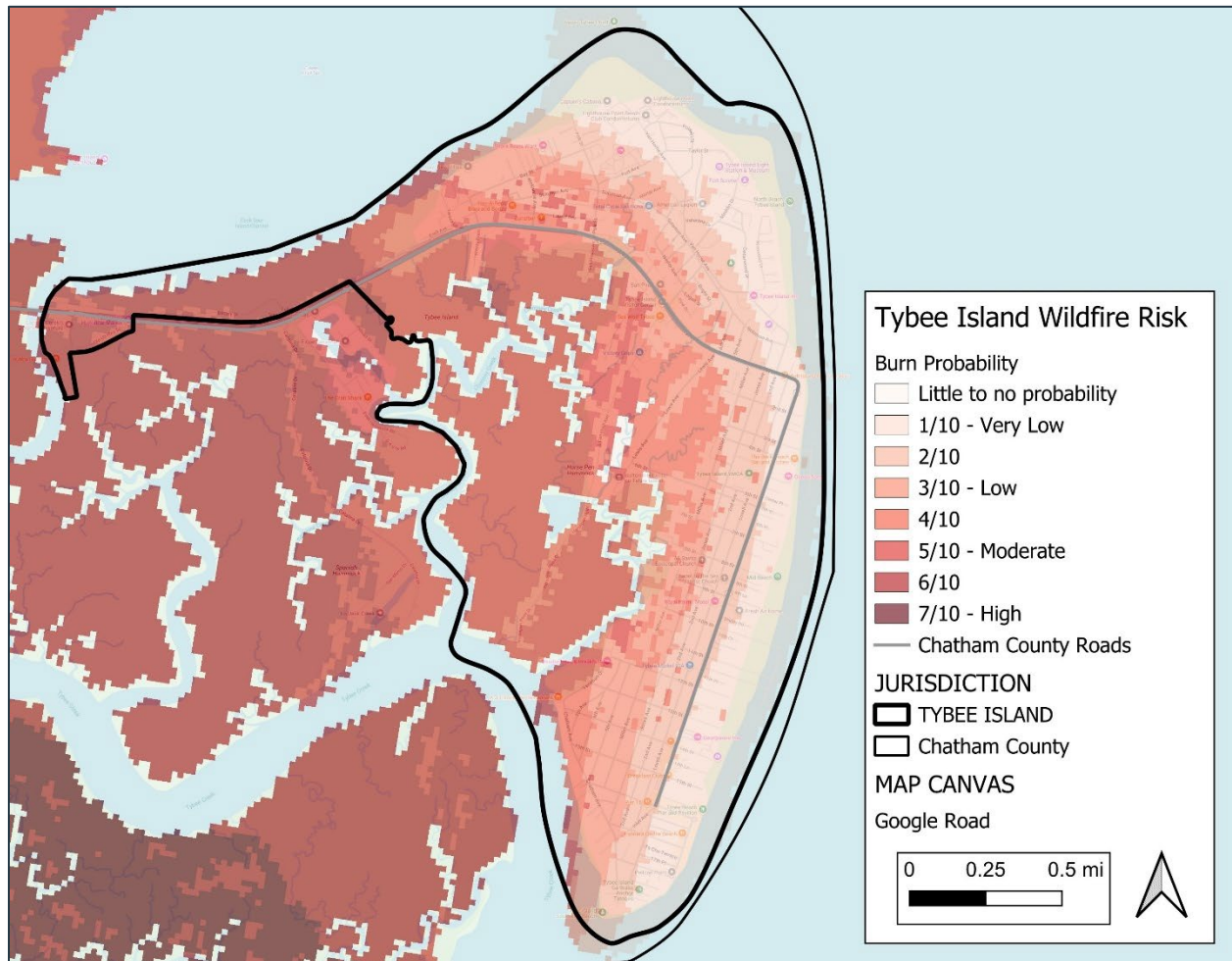
Figure H-13 – Functional Wildland Urban Interface, City of Tybee Island



Source: Southern Wildfire Risk Assessment

Figure H-14 depicts Burn Probability, which is an annualized risk based on fuel loads and other environmental factors. The model is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs. The highest burn probability areas in the City of Tybee Island are in the marsh and along Hwy 80 west of Teresa Ln.

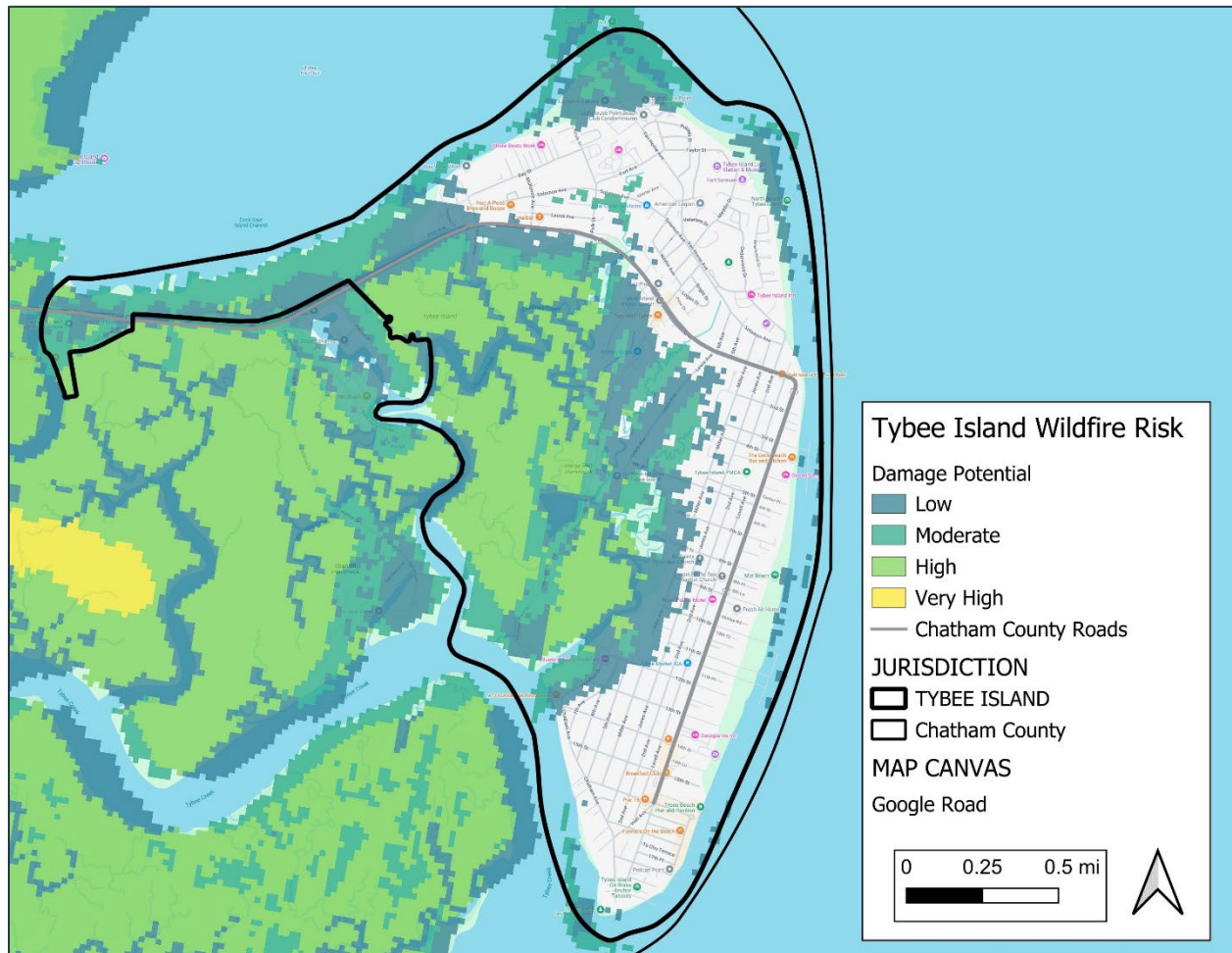
Figure H-14 – Burn Probability, City of Tybee Island



Source: Southern Wildfire Risk Assessment

Figure H-15 depicts Damage Potential, which models potential wildfire impacts for homes and parcels. It considers factors like flame length and embers lofted from nearby fuel. Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. Damage Potential is generally low across the developed areas of the island. High Damage Potential is seen in the island marsh west of Campell Ave, south of 6th St. and west of Miller Ave.

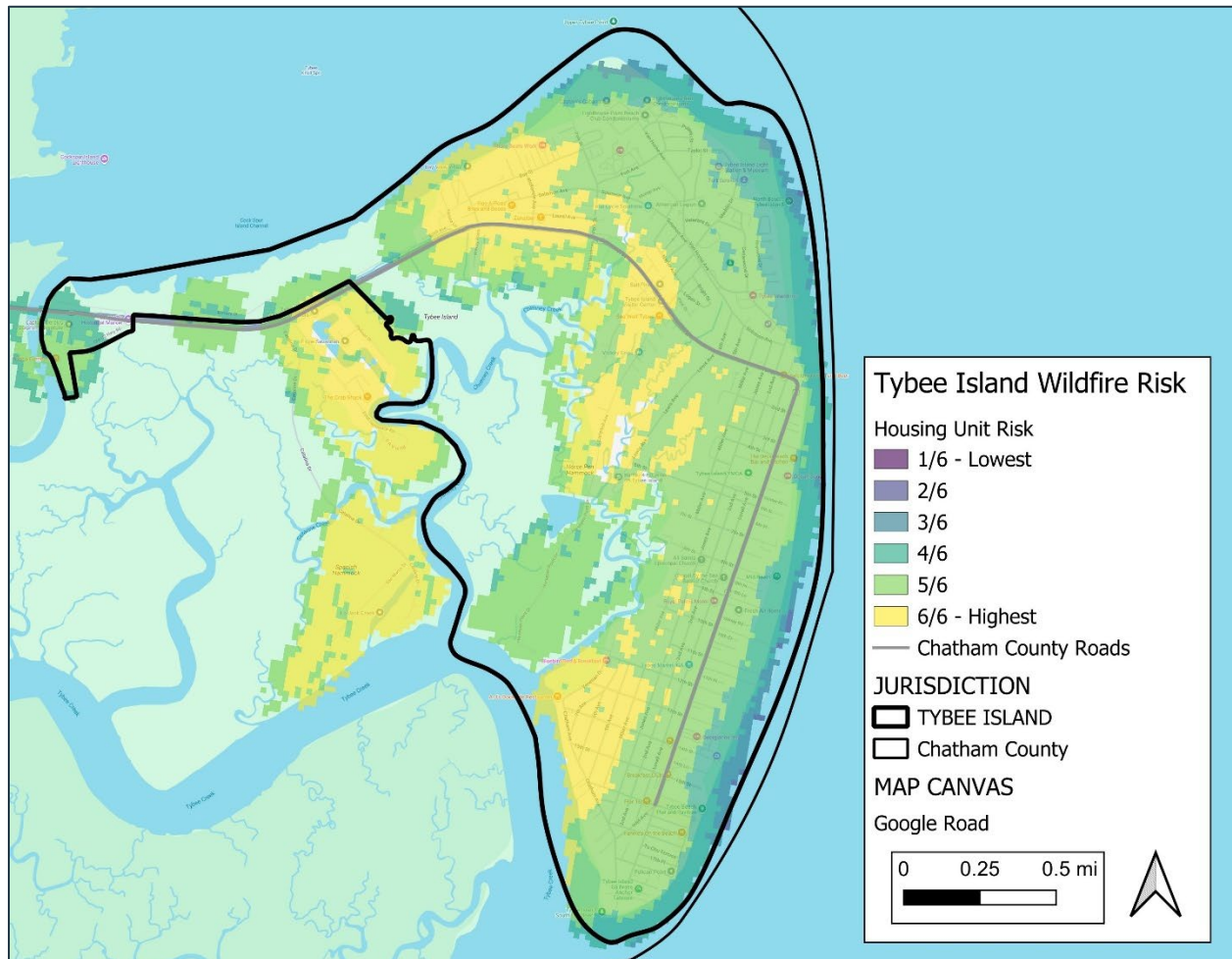
Figure H-15 – Damage Potential, City of Tybee Island



Source: Southern Wildfire Risk Assessment

Figure H-16 depicts the Housing Unit Risk, which represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on areas where housing unit density is greater than zero. Housing Unit Risk does not reflect individual structure mitigations that would influence susceptibility. The highest Housing Unit Risk areas in the City of Tybee Island are in the Bay St/Estill Ave. area, around Eagles Nest Dr. and S. Campbell Ave., and in South Tybee Island around Chatham Ave. to Miller Ave.

Figure H-16 – Housing Unit Risk, City of Tybee Island



Source: Southern Wildfire Risk Assessment

H.5 FLOODPLAIN MANAGEMENT CAPABILITY ASSESSMENT

The City of Tybee Island joined the NFIP emergency program in 1970 and has been a regular participant in the NFIP since January 1972. The following tables reflect NFIP policy and claim data for the City categorized by structure type, flood zone, Pre-FIRM and Post-FIRM. Closed paid losses include building, contents, and Increased Cost of Compliance (ICC) claims. Zones with no policies or closed paid losses were left out of the tables below.

Table H-17 – NFIP Policy and Claims Data by Structure Type

Structure Type	Number of Policies in Force	Total Premium	Insurance in Force	Number of Closed Paid Losses	Total of Closed Paid Losses
Single Family	1,657	\$1,991,959	\$488,739,000	448	\$11,201,889.38
2-4 Family	95	\$124,180	\$28,284,000	44	\$694,932.25
All Other Residential	139	\$302,597	\$209,165,000	15	256,937.60
Non-Residential	95	\$329,641	\$45,586,000	13	\$671,630.16
Total	1,986	\$2,748,377	\$771,774,000	520	\$12,825,389.39

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

Table H-18 – NFIP Policy and Claims Data by Flood Zone

Flood Zone	Number of Policies in Force	Total of Closed Paid Losses	Number of Pre-FIRM Policies	Number of Post-FIRM Policies
AO1-30 & AE Zones	1,699	\$12,519,732.97	805	894
A Zones	0	\$0	0	0
V01-30 & VE Zones	20	\$167,350.11	12	8
B Zone / X Shaded	0	\$0	0	0
C / X Zone	267	\$38,406.31	126	141
No Zone Identified	0	\$0	0	0
Total	1,986	\$12,825,389.39	943	1,043

Source: FEMA FIMA NFIP Redacted Claims and NFIP Redacted Policies, accessed September 2025

H.6 MITIGATION STRATEGY

Action #	Action Description	Hazard(s) Addressed	Goal & Objective Addressed	Priority	Lead Agency / Department	Potential Funding Source	Implementation Timeline	2025 Status	2025 Implementation Status Comments
Property Protection									
PP-1	Acquire or elevate or mitigate repetitive loss and other flood properties.	Flood	2.1, 3.1	Moderate	City Administration	HMGP; PDM; SRL; FMA	2025	Carry Forward	Revised, researching funding opportunities
PP-2	Purchase and install generators at 12 sewer lift stations (1609 Strand Ave., 1664 2nd Avenue, 407 14th Street, 1002 2nd Avenue, 300 4th Avenue, 101 Jones Avenue, 102 S. Campbell, 1275 Soloman Avenue, 101 Fort Street, 25 Gulick Street, 8 Rosewood Avenue and 111 Lewis Avenue.)	All	2.1, 5.1	High	City Water and Sewer Department	Existing Budget; HMGP	2025	Carry Forward	11/12 completed
PP-3	Purchase and install stabilizers for the water and sewer department.	All	2.1	High	City Water and Sewer Department	Existing Budget; HMGP	2025	Carry Forward	Ongoing
PP-4	Purchase and Install storm shutters for the Old Marine Science Center	Tornado, Tropical Cyclone, Severe Weather	2.1	High	City Water and Sewer Department	Existing Budget; HMGP	2025	Carry Forward	Revised
PP-6	Elevate or dry floodproof components or systems vulnerable to flood damage	All	2.1	High	City Water and Sewer Department	TBD	2025	Carry Forward	
Natural Resource Protection									
NRP-1	Protect existing sand dunes.	Tornado, Tropical Cyclone, Severe Weather, Erosion, Sea Level Rise	2.1, 2.3	Moderate	City Administration	PDM; FMA; HMGP	2027	Carry Forward	ongoing
NRP-2	Build additional sand dunes.	Tornado, Tropical Cyclone, Severe Weather, Erosion, Sea Level Rise	2.3, 4.1	Moderate	City Administration	Local Funds	2028	Carry Forward	ongoing
Structural Projects									
SP-1	Remove submerged hazards from North Beach (pieces of old jetties protrude at low tide but are covered at high tide creating a safety hazard for swimmers).	Tropical Cyclone	1.1	Moderate	City Administration	Local Funds	2027	Carry Forward	ongoing
SP-2	Construct and/or improve drainage systems to alleviate drainage issues.	Flood, Severe Weather, Tropical Cyclone	2.1	Moderate	City Administration	Local Funds	2030	Carry Forward	ongoing
Emergency Services									
ES-1	Fixed site generators for critical facilities	All	2.1, 5.1	High	City Administration	Local Funds	2026	Carry Forward	ongoing
ES-2	Portable generators for critical facilities	All	2.1, 5.1	High	City Administration	Local Funds	2026	Carry Forward	ongoing
ES-3	Purchase and install generator quick connects and transfer switches for critical facilities	All	2.1, 5.1	High	City Administration	Local Funds	2026	Carry Forward	ongoing
Public Education & Awareness									
PEA-1	Increase public education and awareness utilizing an all-hazards approach in the city via various outreach methods (print, tv, radio, social media, etc.)	All	3.2	High	City Administration	Local Funds	2025	Carried Forward	ongoing