COMMUNITY ASSESSMENT REPORT

ANALYSIS OF EXISTING WATER AND WASTEWATER CONDITIONS, FUTURE GROWTH, AND INFRASTRUCTURE NEEDS

ORANGEBURG COUNTY
WORKING HARD FOR YOU

Orangeburg County,
South Carolina

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TABLE OF CONTENTS

List of Tables

List of Attachments

EXECUTIVE SUMMARY

This report was created as a part of the technical analysis for the Orangeburg County Sustainability Plan, which will provide guidance for investing in Orangeburg County's growth over the next 20 years. Water and wastewater provision are key to supporting growth in a community and can be an important tool in directing growth towards certain areas.

The current state of Orangeburg County's water and wastewater infrastructure poses a hurdle to additional growth in the county. While some of the water and wastewater utilities in the county are expanding capacity, most do not have expansion plans, instead focusing on maintaining aging infrastructure. Over the next 20 years, Orangeburg County will have increased demand for water and wastewater treatment — depending on the population growth, residential demand could increase by between 0.5 and 5.6 million gallons per day (MGD), and commercial and industrial growth would require even more (see Table 19). While water providers in the county generally have available treatment capacity, wastewater providers in the county generally have very limited available capacity outside of the areas served by DPU (see Table 6 and Table 7). This report describes the current state of water and wastewater utilities in Orangeburg County, and the potential future demand these utilities may face.

ABOUT THIS REPORT

This report divided Orangeburg County into three (3) geographic sub areas: Eastern Orangeburg County, Central Orangeburg County, and Western Orangeburg County. See Map 1, "Overall Map of Orangeburg County Study Area."

For the analysis of existing infrastructure, information requests were sent to the participating local municipalities. System descriptions were created using available GIS information provided by Orangeburg County or information provided during interviews with participating municipalities. Where no GIS information was available, other data provided by the utility or otherwise publicly available was used.

After categorizing and describing the existing water and wastewater systems, the report analyzed future growth and infrastructure needs. Three (3) different Orangeburg buildout conditions (maximum extent of development) were developed using GIS information provided by Orangeburg County. The conditions were based on

proposed changes in future land use. Water and wastewater demands were also developed based on annualized growth rates over a 20-year time horizon.

The report concludes with a policy level needs assessment.

Table 1: Acronyms Used in the Report

ACRONYM	*Definition or Description*
DMR	Discharge Monitoring Report—A Discharge Monitoring Report (DMR) is a United States regulatory term for a periodic water pollution report prepared by industries, municipalities and other facilities discharging to surface waters.
DPU	Orangeburg Department of Public Utilities
EPA	Environmental Protection Agency
GIS	Geographic Information System (GIS) — a computer system that analyzes and displays geographically referenced information. It uses data that is attached to a unique location.
GPD	Gallons per Day
I&I	Inflow and Infiltration—inflow refers to stormwater that enters the sanitary wastewater collection and treatment system through leaks or illegal connections to the system. Infiltration refers to groundwater that enters the system through holes, cracks, leaky joints, or other deterioration in the collection system.
LMRWA	Lake Marion Regional Water Agency
LMRWS	Lake Marion Regional Water System
MGD	Million Gallons per Day
ND	Non-Discharge—Type of permit that allows land application of treated wastewater from WWTP that do not discharge directly into the waters of the US.

ACRONYM	*Definition or Description*
NPDES	National Pollution Discharge Elimination System—System that regulates discharge of pollutants to waters of the US. NPDES permits are required for WWTP discharges into waters of the US and limit the volume of water and level of pollutants discharged.
RDU	Residential Dwelling Units
SCDES	South Carolina Department of Environmental Services
SCRIA	South Carolina Rural Infrastructure Authority
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

DESCRIPTIONS OF EXISTING WATER AND WASTEWATER SYSTEMS

This section summarizes the existing water and wastewater systems for the study participants in Orangeburg County. The section is divided into three geographic regions of the county: eastern, central, and western Orangeburg County. Each municipal service provider is presented in order of approximate size of customer base.

EASTERN REGION

Lake Marion Regional Water Agency

Santee Cooper is South Carolina's state-owned and operated electric and water utility. Formerly known as the South Carolina Public Service Authority, it has overseen electrification and water resource projects since 1942. The utility, as of 2023, provides water to 237,000 people through the Santee Cooper Regional Water System and the Lake Marion Regional Water System (LMRWS). LMRWS provides wholesale water to the Lake Marion Regional Water Agency (LMWRA).

LMRWS owns and operates a Membrane Ultrafiltration treatment plant with a capacity of 8 MGD. The system owns and operates 46.8 miles of pipeline and serves over 3,400 people as of 2023 (including approximately 2,410 customers in Orangeburg County not including wholesale of water to municipal systems and customers served by Orangeburg County and Santee).

LMWRS recently received a 50-year Federal Energy Regulatory Commission (FERC) license renewal. Planned capital improvements include:

- Five new reaches to divert upstream water from Lake Marion and its tributary rivers to the WTP.
- Two elevated water tanks
- Water plant expansion from 8 MGD to 9 MGD

LMRWA specifically wholesales water to the Town of Santee, which wholesales water to Orangeburg County. Orangeburg County wholesales water to the Town of Bowman.

Santee

Santee provides both water and sewer services within the town. The town purchases water from Lake Marion Regional Water Agency (LMRWA) and provides water for

approximately 3,363 people. No additional information about the water system was provided. However, Santee provided information about current and planned wastewater projects.

The Town of Santee is set to begin its Utility Relocations & Basin Liner improvements as the first step in expanding the Santee Wastewater Treatment Plant (WWTP). This phase will relocate roughly 750 feet of 4-inch water main, 350 feet of 8-inch sewer force main, and 280 feet of 8-inch gravity sewer line, while upgrading the Northwest Effluent Storage Basin's clay liner. Enabled by a $545,000 SCRIA grant, a construction contract has already been awarded, and the work is slated for completion in 2026.

Beyond the utility relocations, the expansion will add key treatment facilities, including a new influent pumping station and headworks outfitted with two rotary drum screens and a vortex grit removal system. Two sequencing batch reactors will handle primary treatment, supported by effluent flow measurement and an ultraviolet disinfection facility. Ancillary upgrades include a sludge pumping station, dewatering building, conversion of the existing multi-cellular aerated lagoon into two aerobic sludge digesters, and a combined administration and laboratory building. These improvements are budgeted at approximately 12.0 million dollars.

Phase II will focus on advancing effluent management by constructing a dedicated effluent pumping station, developing additional land application sites, and installing associated piping and irrigation equipment. Designed to boost capacity to 1.5 million gallons per day, this phase incorporates flexibility for future expansion, ensuring the WWTP can meet the Town's long-term demands while promoting efficient reuse of treated water.

In parallel, Santee is partnering with the South Carolina Department of Transportation on I-95 wastewater collection system improvements to accommodate the planned $331.5 million bridges over Lake Marion. This project entails relocating 500 feet of the Town's southernmost sewer force main and 500 feet of an 8-inch gravity sewer line at the interstate Rest Area. Funded under South Carolina Act 36 (Bill 401) by SCDOT, these relocations carry a projected cost of $895,000 and aim for completion by 2028.

Holly Hill

The Town of Holly Hill provides both water and sewer services, primarily within the town boundaries. The Holly Hill Public Works Department provides water service to approximately 745 customers, serving an approximate population of 1,710 people. The

water system consists of three wells and a 500,000-gallon water tank. Average daily demand varies seasonally from 150,000 gallons to 180,000 gallons per day during peak periods in July and August.

The town provides sewer service to approximately 659 customers, primarily within the town limits. The town's sewer system treats 226,000 gallons per day, utilizing a spray field for land application. During the more limiting December to March time period, the plant discharge limits are based on an average daily discharge of 287,000 gallons per day. The town also reports inflow and infiltration (I&I) during large precipitation events, which limits available excess capacity. Holly Hill is actively pursuing an NPDES permit, in addition to land application, and is receptive to expanding their treatment capacity to support area growth. The Town has also applied for approximately $1 million dollars in RIA grants to address Inflow and Infiltration in their wastewater collection system. Removal of I&I from the collection system would allow for additional development.

Branchville

The Town of Branchville has an estimated population size of 998 people. Branchville provides both water and wastewater services within its boundaries.

Branchville owns and operates two groundwater wells and two water towers. Branchville also owns and operates a sewer system utilizing 7 lift stations and a wastewater lagoon system. Based on interviews with the WWTP operator, the system treats on average 20,000 gallons per day. The system is permitted to discharge up to 400,000 gallons per day to the Edisto River. The system is highly susceptible to inflow and infiltration during large precipitation events and often approaches the maximum permitted flow during events.

Branchville is not expecting growth and has no planned infrastructure improvements to increase capacity. All planned infrastructure improvements will be to maintain the current customer service requirements and to maintain compliance with regulatory requirements.

Bowman

The Town of Bowman has an estimated population of 800. The Town provides both water and sewer service to approximately 500 residential household and commercial customers. Bowman purchases water from Orangeburg County, which in turn

purchases water from the Town of Santee, which in turn purchases water from Lake Marion Regional Water Agency (LMRWA).

Bowman owns and operates a lagoon system wastewater treatment plant. Based on interviews with the wastewater treatment plant operator, the system treats approximately 150,000 gallons per day with a capacity of 300,000 gallons per day. The NPDES permit is based on a flow of 236,000 gallons per day.

Bowman is not expecting growth and has no planned infrastructure improvements to increase capacity. All future infrastructure improvements will be to maintain the current customer service requirements and to maintain compliance with regulatory requirements.

Elloree

The Town of Elloree water system is owned and operated by a Board of Commissioners of Public Works (CPW). The board has the decision-making authority for the utility and the Commissioners are elected by the public and operate independently of the municipal government, except for borrowing money. They are, however, eligible for government funding programs.

The Town of Elloree has an estimated population of 570. Elloree provides water services to approximately 650 customers, including approximately 1,528 people within the city boundaries and areas adjacent. The system relies on three wells and one water tower. The Town has applied for an SCRIA grant for the refurbishment of the elevated water storage tank at the Food Lion distribution center, the existing well at Railroad Avenue, and replacement of 800 linear feet of water line along Hampton Street, between Railroad Avenue and Old Number Six Highway. Total project construction costs were estimated at $1,800,000.

The town also operates a WWTP that utilizes a lagoon system with treated land application. While the system is permitted to discharge 320,000 gallons per day, the system experiences severe inflow and infiltration events for four months a year. The town has two improvement projects planned to address I&I issues and expects to utilize the existing permit capacity to increase service for an additional planned 350 residences. Whereas water service is provided both within and outside Elloree's municipal boundaries, wastewater services are only provided within the town boundaries or to neighborhoods immediately adjacent.

Eutawville

Eutawville has an approximate population of 290 people. The Town provides water service but does not provide sewer service. The water system utilizes one active well and a water tank, and serves approximately 555 people within the town and areas adjacent. All sewer service is by privately owned and maintained septic systems.

Table 2: Summary of Eastern Orangeburg Region Water and Wastewater Existing System Capacities

TOWN OR MUNICIPALITY	*WATER SOURCE*	*ESTIMATED CUSTOMER BASE*[1]	*AVERAGE DAILY PRODUCTION (GPD)*	*AVAILABLE WATER TREATMENT CAPACITY (GPD)*	*TOTAL WASTEWATER TREATMENT CAPACITY (MGD)*[2]	*POTENTIAL WWTP TREATMENT CAPACITY AVAILABLE (MGD)*
LMRWA	Surface	3,388	8,000,000	8,000,000[3]	N/A	N/A
Santee	LMRWA	3,363	Purchase Agreement	Purchase Agreement	0.713	Limited by I&I[4]
Elloree	Well	1,528	150,000	625,000	0.320	Limited by I&I
Holly Hill	Well	1,710	180,000	1,680,000	0.287	Limited by I&I
Bowman	Orangeburg County	1,274	Purchase Agreement	Purchase Agreement	0.236	Limited by I&I
Branchville	Well	1,218	130,000	Not Provided	0.400	Limited by I&I
Eutawville	Well	555	56,000	Not Provided	Septic Systems	N/A
Total		**13,036**	**8,516,000**	**10,305,000**	**1.956**	**Limited by I&I**

[1] Estimates of customer base from https://dww.des.sc.gov/DWW/, SCDES Drinking Water Watch website.
[2] Based on NPDES or ND permit.
[3] LMRWA provides water to Dorchester, Calhoun, Berkley, and Orangeburg Counties as well as the Town of Santee. Available capacity is determined by the member counties and the Town of Santee
[4] Inflow and Infiltration (I&I) refers to stormwater that enters the sanitary wastewater collection and treatment system through leaks or illegal connections to the system (Inflow)or to groundwater that enters the system through holes, cracks, leaky joints, or other deterioration in the collection system (Infiltration). During precipitation events, I&I pushes effluent discharges to the limit of these systems permits and utilizes any additional capacity the treatment facilities would have during dry weather.

CENTRAL REGION

City of Orangeburg

The Department of Public Utilities (DPU) is a wholly owned enterprise of the City of Orangeburg, providing retail electricity, natural gas, water and wastewater services to the greater Orangeburg area. DPU regularly prepares system master plans for both water and wastewater systems.

DPU produces approximately 7.22 MGD of potable water. Approximately 51% of billed potable water is delivered to residential users, 22% to commercial users, and 15% to industrial users, with the remainder as other. DPU also wholesales water to the Town of Norway and the Silver Springs Water District. The wholesale of water to the Silver Springs Water District is relatively minor at approximately 100,000 gallons per month and the contract is part of a project to cross-connect the Silver Springs Water District to the larger DPU system in cases of emergency.

The City of Orangeburg has been providing wastewater collection services since 1906. The service area covers approximately twenty-two square miles. The DPU WWTP is permitted to treat and discharge up to 9 million gallons per day, and discharges into the North Fork Edisto River. Based on discharge monitoring reports (DMR), the WWTP typically treats and discharges 5 MGD per day. However, during large precipitation events, the WWTP has pushed up to its permitted discharge volume.

DPU owns and operates 23 wastewater lift stations. See Table 3, City of Orangeburg Wastewater Lift Stations.

No major Capital Improvement projects were reported that would increase WWTP or WTP capacity. Current projects are for maintenance and repair of existing systems.

Table 3: City of Orangeburg Wastewater Lift Stations

STATION	*ADDRESS*	*Pump Rate (gpm)*
Loblolly	915 Red Bank Road	270
Northwoods	254 Hooligan Way	470
Oak lane	138 Assembly Hall Way	620
Country Club	243 Ruf Road	80
OC Tech	1495 Brentwood Drive	80
Middle Pen	844 Plywood Street	470
Corona Park	390 Glover Street	1,250
Corporate Drive	324 Eastwood Circle	228
Saddleclub	249 Fourth Street	600
Hooligan	400 Winward Street	100
Gargoyle	2002 Riverbank Drive	1,300
Ruf Road	1130 Big Buck Blvd.	1,500
Brentwood Drive	1805 Legrande Smoak	Not Reported
Sprinkle Avenue	415 Old Elloree Road	925
Glover Street	271 Chase St	350
Eastwood Acres	915 Red Bank Road	270
Fourth Street	254 Hooligan Way	470
Winward	138 Assembly Hall Way	620
Riverside Drive	243 Ruf Road	80
Industrial Park	1495 Brentwood Drive	80
Legrande Smoak	844 Plywood Street	470
Whitford Stage Creek	390 Glover Street	1,250
Chase St.	324 Eastwood Circle	228

Orangeburg County

Orangeburg County provides water to approximately 280 residential household customers, and provides wholesale water to other entities, including the Town of Bowman. Orangeburg County purchases water from the Town of Santee.

The county service area is approximately located in the triangle formed by US-176, US-301, and I-95. The majority of county customers served are along US-176 and US-301. A smaller number of customers are served on Homestead Road.

The first 12-inch water main is located along US-301. The water main begins in the Town of Santee and terminates in Orangeburg, where it connects to the Orangeburg DPU distribution system. Although the county does not purchase water from DPU, the connection allows DPU to supply water to the county system in times of emergency.

The second 12-inch water main connects to the US-301 water main near the intersection of US-301 and US-176. The main follows US-176 and terminates at the elevated water storage tank in Bowman. This line serves customers along US-176 and supplies the Town of Bowman with wholesale water.

A third line on connects to the US-301 water main and extends down Homestead Road. The line terminates shortly before the I-26 interchange.

Orangeburg County owns and operates the Goodbys Wastewater Treatment Plant (WWTP). The Goodbys WWTP was designed to be expanded in phases to become a regional WWTP. The plant is currently permitted to apply 0.276 MGD via land application, but the current treatment processes were designed to be expanded to 0.518 MGD with capital improvements. On July 18, 2025, the Goodbys WWTP received an NPDES permit for a 0.5 MGD discharge limit to discharge into Goodbys Swamp. The WWTP is currently developing plans for installation of a proposed 16-inch diameter pipe to convey the effluent to a new outfall. The WWTP will also convert the existing 5.25 million gallon effluent holding tank to an influent holding tank to receive the increased inflow.

Table 4: Summary of Central Orangeburg Region Water and Wastewater Existing System Capacities

TOWN OR MUNICIPALITY	*WATER SOURCE*	*ESTIMATED CUSTOMER BASE*[1]	*AVERAGE DAILY PRODUCTION (GPD)*	*AVAILABLE WATER TREATMENT CAPACITY (GPD)*	*TOTAL WASTEWATER TREATMENT CAPACITY (MGD)*[2]	*POTENTIAL WWTP TREATMENT CAPACITY AVAILABLE (MGD)*
City of Orangeburg	Surface	50,671	7,220,000	19,000,000	9.000	4.0
County of Orangeburg	Santee	2,661	Purchase Agreement	Purchase Agreement	0.276	0.242
Total		**53,332**	**7,220,000**	**19,000,000**	**9.276**	**4.242**

[1] Estimates of customer base from https://dww.des.sc.gov/DWW/, SCDES Drinking Water Watch website.
[2] Based on NPDES or ND permit.

WESTERN REGION

Silver Springs Water District (Neeses, Livingston, and Surrounding Area)

The Silver Springs Water District was established in 1971 by the South Carolina General Assembly. The purpose of the district was to provide water facilities and services to the Towns of Neeses, Livingston, and surrounding areas in Orangeburg County. The service area has grown to include an area with a 10-mile radius around Neeses and Livingston. The water district itself serves approximately 2,600 people, with 1,035 residential household customers and 40 commercial customers.

Neither Neeses nor Livingston provide wastewater services. All wastewater collection and treatment is via privately owned and maintained septic systems.

North

The Town of North has an estimated population of 696. North provides water and sewer services within and or near the town limits. The water system consists of a well system, capable of producing 280 gallons per minute, with an elevated water tank. Information was not provided for average daily production. The system serves approximately 1,378 people, with 512 residential household customers and 63 commercial customers.

The wastewater collection and treatment system utilizes an aerated lagoon process and treats approximately 35,000 gallons per day. The system is permitted to discharge up to 200,000 gallons per day, but experiences inflow and infiltration during large precipitation events. The inflow and infiltration eliminates any significant additional capacity.

Based on interviews with town personnel, North is not expecting growth and has no planned infrastructure improvements to increase capacity. All planned infrastructure improvements will be to maintain the current customer service requirements and to maintain compliance with regulatory requirements.

Norway

Norway provides both public water and wastewater services. The Town purchases water from Orangeburg Department of Utilities (DPU). The water system serves

approximately 775 people, with 325 residential household customers and 23 commercial customers.

Norway owns and operates a lagoon WWTP and discharges approximately 36,500 gallons per day of treated effluent into sand beds. Norway is permitted to discharge up to 165,000 gallons per day, but experiences inflow and infiltration during large precipitation events. The inflow and infiltration eliminates any significant additional capacity.

Based on interviews with town personnel, Norway is not expecting growth and has no planned infrastructure improvements to increase capacity. All planned infrastructure improvements will be to maintain the current customer service requirements and to maintain compliance with regulatory requirements.

Springfield

The Town of Springfield has an estimated population size of 504 people. Springfield provides water and wastewater services within its boundaries. Springfield produces water from two wells, serving approximately 263 residential household customers and 46 commercial customers.

No information was provided on the type of wastewater treatment process used. However, the WWTP is permitted to discharge 120,000 gallons per day.

Springfield does not anticipate population growth and has no projects slated to expand capacity; all upcoming work is focused on maintaining existing service levels and ensuring regulatory compliance. The Town is collaborating with an engineering firm to build a GIS map of its water and wastewater networks. It also secured an SCRIA grant to conduct a comprehensive water system assessment—mapping current waterlines, pinpointing critical replacement needs, analyzing water loss and hydraulic performance, and exploring regional solutions. The resulting plan will guide the Town on steps needed to enhance infrastructure viability and provide targeted recommendations for system improvement.

Table 5: Summary of Western Orangeburg Region Water and Wastewater Existing System Capacities

TOWN OR MUNICIPALITY	*WATER SOURCE*	*ESTIMATED CUSTOMER BASE*[1]	*AVERAGE DAILY PRODUCTION (GPD)*	*AVAILABLE WATER TREATMENT CAPACITY (GPD)*	*TOTAL WASTEWATER TREATMENT CAPACITY (MGD)*[2]	*POTENTIAL WWTP TREATMENT CAPACITY AVAILABLE (MGD)*
Silver Springs	Well	2,600	300,000	720,000	N/A	N/A
North	Well	1,378	140,000	400,000	0.200	Limited by I&I[3]
Norway	DPU[4]	775	Purchase Agreement	Purchase Agreement	0.165	Limited by I&I
Springfield	Well	700	70,000	Not Provided	0.120	Limited by I&I
Total		**5,453**	**510,000**	**1,120,000**	**0.485**	**Limited by I&I**

[1] Estimates of customer base from https://dww.des.sc.gov/DWW/, SCDES Drinking Water Watch website.
[2] Based on NPDES or ND permit.
[3] Inflow and Infiltration (I&I) refers to stormwater that enters the sanitary wastewater collection and treatment system through leaks or illegal connections to the system (Inflow)or to groundwater that enters the system through holes, cracks, leaky joints, or other deterioration in the collection system (Infiltration). During precipitation events, I&I pushes effluent discharges to the limit of these systems permits and utilizes any additional capacity the treatment facilities would have during dry weather.
[4] Orangeburg Department of Utilities (DPU)

SUMMARY OF EXISTING PUBLIC WATER AND PUBLIC SANITARY SYSTEMS

See Table 6 and Table 7 below.

Table 6: Water Production and Usage

Water Providers	*Population Served*[1]	*Water Source*	*SC System Identifier*	*Average Daily Production (GPD)*	*Potential Treatment Capacity (GPD)*	*AVAILABLE CAPACITY (GPD)*
Eastern Orangeburg County Region						
LMRWA	3,388	Surface Water	SC3820003	8,000,000	8,000,000	-0-[2]
Santee,	3,363	LMRWA	SC3810011	Purchase Agreement	Purchase Agreement	Purchase Agreement
Holly Hill	1,710	Groundwater	SC3810002	180,000	1,680,000	1,500,000
Elloree	1,528	Groundwater	SC3810003	150,000	625,000	475,000
Bowman	1,274	Santee	SC3810004	Purchase Agreement	Purchase Agreement	Purchase Agreement
Branchville, Town of	1,218	Groundwater	SC3810005	130,000	Not Provided	Not Provided

[1] From https://dww.des.sc.gov/DWW/
[2] Lake Marion Regional Water Agency (LMRWA) provides water to Dorchester, Calhoun, Berkley, and Orangeburg Counties as well as the Town of Santee. Available capacity is determined by the member counties and the Town of Santee

Water Providers	*Population Served*[1]	*Water Source*	*SC System Identifier*	*Average Daily Production (GPD)*	*Potential Treatment Capacity (GPD)*	*AVAILABLE CAPACITY (GPD)*
Eutawville, Town of	555	Groundwater	SC3810006	56,000	Not Provided	Not Provided
Central Orangeburg County Region						
Orangeburg DPU	50,671	Surface Water	SC3810001	7,220,000	19,000,000	11,780,000
Orangeburg County	2,661	Santee	SC3810012	Purchase Agreement	Purchase Agreement	Purchase Agreement
Western Orangeburg County Region						
Silver Springs	2,600	Groundwater	SC3820002	300,000	720,000	420,000
North, Town of	1,378	Groundwater	SC3810010	140,000	400,000	260,000
Norway, Town of	775	Orangeburg DPU	SC3810008	Purchase Agreement	Purchase Agreement	Purchase Agreement
Springfield, Town of	700	Groundwater	SC3810009	70,000	Not Provided	Not Provided
Total	**71,821**			**16,246,000**	**30,425,000**	**14,435,000**

Table 7: Wastewater Average Daily Flows and Treatment Capacities

Wastewater Treatment Facilities	*Permit Type*	*Flow that Permits are based on (MGD)*[1]	*NPDES Permit Number*	*Potential Treatment Capacity Available*[2] *(MGD)*
Santee, Town of	ND	0.713	ND0065676	Limited by I&I[3]
Bowman, Town of	NPDES	0.236	SC0040037	Limited by I&I
Branchville, Town of	NPDES	0.400	SC0047333	Limited by I&I
Elloree, Town of	ND	0.320	ND0067628	Limited by I&I
Holly Hill, Town of	ND	0.287	ND0063380	Limited by I&I
Orangeburg DPU	NPDES	9.000	SC0024481	4.0
Orangeburg County	ND	0.276	ND0086461	0.242
North, Town of	NPDES	0.200	SC0047821	Limited by I&I

[1] Permitted discharge rates are governed by the NPDES or ND permit issued by SCDES to the treatment facility. Permits govern both the total volume of discharge, as well as the constituent pollutant levels in the discharge. Permit holders are required to report both volume of discharge as well as the total mass of constituent pollutants.

[2] I&I is a critical factor in available capacity and varies in each system. The available capacity shown is calculated Using the Permitted Capacity minus the Average Daily flow at the WWTP. Consideration by each system must be made to determine the effects of I&I on their wet weather capacity and the true Available Capacity that is resultant of the specific conditions within their systems.

[3] Inflow and Infiltration (I&I) refers to Storm Water that enters the sanitary wastewater collection and treatment system through leaks or illegal connections to the system (Inflow)or to groundwater that enters the system through holes, cracks, leaky joints, or other deterioration in the collection system (Infiltration). During precipitation events, I&I pushes effluent discharges to the limit of these systems permits and utilizes any additional capacity the treatment facilities would have during dry weather.

Norway, Town of	NPDES	0.165	SC0045993	Limited by I&I[1]
Springfield, Town of	NPDES	0.120	SC0023272	Limited by I&I
Total		**11.717**		**4.242**[2]

NPDES treatment facilities discharge treated wastewater directly to surface waters, while ND facilities land apply treated wastewater. A map of the above listed wastewater treatment facilities is included in **Attachment 1**.

[1] Inflow and Infiltration (I&I) refers to Storm Water that enters the sanitary wastewater collection and treatment system through leaks or illegal connections to the system (Inflow)or to groundwater that enters the system through holes, cracks, leaky joints, or other deterioration in the collection system (Infiltration). During precipitation events, I&I pushes effluent discharges to the limit of these systems permits and utilizes any additional capacity the treatment facilities would have during dry weather.

[2] I&I is a critical factor in available capacity and varies in each system. The available capacity shown is calculated Using the Permitted Capacity minus the Average Daily flow at the WWTP. Consideration by each system must be made to determine the effects of I&I on their wet weather capacity and the true Available Capacity that is resultant of the specific conditions within their systems.

FUTURE GROWTH AND INFRASTRUCTURE NEEDS

To assist Orangeburg County in developing their county-wide Sustainability Plan, this section identifies potential areas likely to be developed and provides estimates for how much additional water and wastewater treatment will be necessary to support that development. Orangeburg County is seeing significant growth in single-family homes and subdivisions (almost 3,000 new units anticipated over the next several years), so it is worthwhile to consider potential growth scenarios and their impacts on water and sewer infrastructure.

METHODOLOGY

To identify the areas likely to be developed, WK Dickson used the GIS land use data as provided by Orangeburg County. The current land use designation was compared against the future land use designation. All parcels that were designated for land use from a current land use of vacant or agricultural to a future land use of residential, commercial, or industrial were marked as having potential for development.

This inventory was further analyzed to identify parcels either within 1,000-feet of an existing water system or within 1,000-feet of a major transportation corridor. See:

- Map 2, "Eastern Orangeburg Region Parcels with Land Use Change Near Existing Service Areas or Major Road Corridors."
- Map 3, "Central Orangeburg Region Parcels with Land Use Change Near Existing Service Areas or Major Road Corridors."
- Map 4, "Western Orangeburg Region Parcels with Land Use Change Near Existing Service Areas or Major Road Corridors."

Information on water and wastewater systems, service areas, and capacity contained in the GIS data was limited. However, fire hydrant locations throughout the county were available and were used to discern the approximate location of water lines, water service areas and wastewater services. Note: even though water and wastewater service areas do not always geographically overlap perfectly, the location and ownership of fire hydrants is a proxy for water and wastewater service areas.

For each of the county's regions (Eastern, Central, and Western Orangeburg County), three growth alternatives were considered for the ultimate buildout, or maximum extent of long-term growth of Orangeburg County. Alternative 1 considered the development of parcels within 1,000 ft of existing water infrastructure. Alternative 2

considered the development of parcels within 1,000 ft of major road corridors. Alternative 3 considered development of parcels which fit either criteria for Alternatives 1 or 2. Each Alternative was performed separately for each of the regions as identified in Attachment 1.

Wastewater average daily flow forecasts for different future land use categories were developed in accordance with guidance from South Carolina DES Regulation 61-67, Standards for Wastewater Facility Construction, Appendix A. For purposes of this report, water usage and wastewater generation were considered equivalent.

See Table 8 below for assumed demand rates.

Table 8: Wastewater Average Daily Flows, By Future Land Use Classification

Future Land Use Category	*GPD/Acre*	*Notes*
Residential		
Single-Family Residential	900	Assumes 3 RDU/acre, with 300 GPD per RDU. See Appendix A, "CC: Residences: (Per House, Unit)
Manufactured Homes Residential	900	Assumes 4 RDU/acre at 225 GPD/RDU; GPD/RDU based on Appendix A; 4 RDU/acre based on Orangeburg County Code of Ordinances, Sec. 36-171(b)(1)
Multi-Family Residential	1,650	Medium Density (4-7 units/acre) (5.5 units/acre)(300 GPD/RDU)
Commercial	900	Assumes similar water usage to Low Density Residential (3 RDU/acre)
Industrial	95	Assumes 5 employees per acre, 19 GPD per employee. See Appendix A, "O: Factories, Industries)"

Average daily flow rates for water and wastewater were then applied to the acreage for each future land use. A vacancy rate of 0.14[12] was applied to residential properties, to account for the likelihood that not all the homes would be occupied.

[1] *American Community Survey 5-year estimates, 2023*
[2] U.S. Census Bureau 2023 ACS estimate for South Carolina

EASTERN REGION

Alternative 1—Eastern Region: Wastewater Growth Projection for Parcels Near Existing Service Areas

For Alternative 1 it was assumed that parcels within 1,000 ft of the existing service area would be developed. This came to 1,277 parcels covering 3,235 acres that are most likely to be developed. Within the 1,277 parcels, there are five types of future land use types. A breakdown of the number of parcels of each type and their acreage is included in **Table 9**.

Table 9: Alternative 1-Eastern Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	761	1,887	900	1,698,300
Manufactured Homes Residential	475	1,105	900	994,500
Multi-Family Residential	19	9	1,650	14,850
Subtotal				2,707,650
Vacancy Rate of 0.14				(379,071)
Residential Subtotal				**2,328,579**
Commercial	**19**	**75**	**900**	**67,500**
Industrial	**3**	**159**	**95**	**15,105**
Total	**1,277**	**3,235**		**2,411,184**

Alternative 2—Eastern Region: Wastewater Growth Projection for Parcels Near Major Road Corridors

Alternative 2 assumed that parcels within 1,000 ft of major road corridors were most likely to be developed due to their assumed proximity to utilities like water and sewer. Approximately 3,290 parcels covering 11,116 acres fit this criteria. A breakdown of the number of parcels of each future land use type and their acreage is included in **Table 10** below.

Table 10: Alternative 2-Eastern Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	1,863	5,531	900	4,977,900
Manufactured Homes Residential	1,367	3,855	900	3,469,500
Multi-Family Residential	19	9	1,650	14,850
Subtotal				8,462,250
Vacancy Rate of 0.14				(1,184,715)
Residential Subtotal				**7,277,535**
Commercial	**27**	**134**	**900**	**120,600**
Industrial	**14**	**1,587**	**95**	**150,765**
Total	**3,290**	**11,116**		**7,548,900**

Alternative 3—Eastern Region: Combined Wastewater Growth Projection

In Alternative 3, parcels that were either within 1,000 ft of a water line or 1,000 ft of a major road corridor were assumed to be developed. Roughly 3,398 parcels covering 11,321 acres fit these criteria. Results from Alternative 1 and Alternative 2 are not additive since some parcels are within 1,000 ft of both water lines and major road corridors. A breakdown of the number of parcels of each future land use type and their acreage is included in **Table 11** below.

Table 11: Alternative 3-Eastern Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	1,942	5,684	900	5,115,600
Manufactured Homes Residential	1,395	3,890	900	3,501,000
Multi-Family Residential	19	9	1,650	14,850
Subtotal				8,631,450
Vacancy Rate of 0.14				(1,208,403)
Residential Subtotal				**7,423,047**
Commercial	**27**	**134**	**900**	**120,600**
Industrial	**15**	**1,604**	**95**	**152,380**
Total	**3,398**	**11,321**		**7,696,027**

CENTRAL REGION

Alternative 1—Central Region: Wastewater Growth Projection for Parcels Near Existing Service Areas

For Alternative 1 it was assumed that parcels within 1,000 ft of the existing service area would be developed. This came to 2,300 parcels covering 8,815 acres that are most likely to be developed. Within the 2,300 parcels, there are five types of future land use classifications. A breakdown of the number of parcels of each type and their acreage is included in **Table 12**.

Table 12: Alternative 1-Central Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	2,089	5874	900	5,286,600
Manufactured Homes Residential	88	2,000	900	1,800,000
Multi-Family Residential	22	86	1,650	141,900
Subtotal				7,228,500
Vacancy Rate of 0.14				(1,011,990)
Residential Subtotal				**6,216,510**
Commercial	**87**	**275**	**900**	**247,500**
Industrial	**14**	**580**	**95**	**55,100**
Total	**2,300**	**8,815**		**6,519,110**

Alternative 2—Central Region: Wastewater Growth Projection for Parcels Near Major Road Corridors

Alternative 2 assumed that parcels within 1,000 ft of major road corridors were most likely to be developed due to their assumed proximity to utilities like water and sewer. Approximately 4,260 parcels covering 8,734 acres fit this criteria. A breakdown the number of parcels of each future land use type and their acreage is included in **Table 13** below.

Table 13: Alternative 2-Central Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	3,292	5,887	900	5,298,300
Manufactured Homes Residential	728	1,517	900	1,365,300
Multi-Family Residential	47	92	1,650	151,800
Subtotal				6,815,400
Vacancy Rate of 0.14				(954,156)
Residential Subtotal				**5,861,244**
Commercial	**167**	**500**	**900**	**450,000**
Industrial	**26**	**738**	**95**	**70,110**
Total	**4,260**	**8,734**		**6,381,354**

Alternative 3—Central Region: Combined Wastewater Growth Projection

In Alternative 3, parcels that were either within 1,000 ft of a water line or 1,000 ft of a major road corridor were assumed to be developed. Roughly 4,417 parcels covering 9,043 acres fit these criteria. Results from Alternative 1 and Alternative 2 are not additive since some parcels are within 1,000 ft of both water lines and major road corridors. A breakdown of the number of parcels of each land use type and their acreage is included in **Table 14** below.

Table 14: Alternative 3-Central Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	3,424	6,101	900	5,490,900
Manufactured Homes Residential	751	1,585	900	1,426,500
Multi-Family Residential	49	119	1,650	196,350
Subtotal				7,113,750
Vacancy Rate of 0.14				(995,925)
Residential Subtotal				**6,117,825**
Commercial	**167**	**500**	**900**	**450,000**
Industrial	**26**	**738**	**95**	**70,110**
Total	**4,417**	**9,043**		**6,637,935**

WESTERN REGION

Alternative 1—Western Region: Wastewater Growth Projection for Parcels Near Existing Service Areas

For Alternative 1, it was assumed that parcels within 1,000 ft of the existing service area would be developed. This came to 1,158 parcels covering 2,954 acres that are most likely to be developed. Within the 1,158 parcels, there were three types of future land use type (note that no parcels near existing service areas in Western Orangeburg County were classified for future multi-family residential use or industrial use). A breakdown of the number of parcels of each type and their acreage is included in **Table 15**.

Table 15: Alternative 1-Western Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	721	2,115	900	1,903,500
Manufactured Homes Residential	427	805	900	724,500
Multi-Family Residential	-0-	-0-	1,650	-0-
Subtotal				2,628,000
Vacancy Rate of 0.14				(367,920)
Residential Subtotal				**2,260,080**
Commercial	**10**	**34**	**900**	**30,600**
Industrial	**-0-**	**-0-**	**95**	**-0-**
Total	**1,158**	**2,954**		**2,290,680**

Alternative 2—Western Region: Wastewater Growth Projection for Parcels Near Major Road Corridors

Alternative 2 assumed that parcels within 1,000 ft of major road corridors were most likely to be developed due to their assumed current or future proximity to utilities like water and sewer. Approximately 1,621 parcels covering 4,271 acres fit this criteria. A breakdown of the number of parcels of each future land use type and their acreage is included in **Table 16** below.

Table 16: Alternative 2-Western Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	979	2,770	900	2,493,000
Manufactured Homes Residential	628	1,397	900	1,257,300
Multi-Family Residential	-0-	-0-	1,650	-0-
Subtotal				3,750,300
Vacancy Rate of 0.14				(525,042)
Residential Subtotal				**3,225,258**
Commercial	**10**	**34**	**900**	**30,600**
Industrial	**4**	**70**	**95**	**6,650**
Total	**1,621**	**4,271**		**3,262,508**

Alternative 3—Western Region: Combined Wastewater Growth Projection

In Alternative 3, parcels that were either within 1,000 ft of a water line or 1,000 ft of a major road corridor were assumed to be developed. Roughly 1,804 parcels covering 4,962 acres fit this criteria. Results from Alternative 1 and Alternative 2 are not additive since some parcels are within 1,000 ft of both water lines and major road corridors. A breakdown of the number of parcels by each land use type and their acreage is included in **Table 17** below.

Table 17: Alternative 3-Western Region

	Parcels	*Acreage*	*GPD/Acre*	*Total Flow (GPD)*
Residential				
Single-Family Residential	1,089	3,112	900	2,800,800
Manufactured Homes Residential	701	1,476	900	1,328,400
Multi-Family Residential	-0-	-0-	1,650	-0-
Subtotal				4,129,200
Vacancy Rate of 0.14				(578,088)
Residential Subtotal				**3,551,112**
Commercial	**10**	**34**	**900**	**30,600**
Industrial	**4**	**70**	**95**	**6,650**
Total	**1,804**	**4,692**		**3,588,362**

SUMMARY OF NEAR-TERM WATER AND WASTEWATER DEMAND FORECASTS

The total flows listed in Tabes 9 through 17 above analyzed the ultimate buildout condition for Orangeburg County. Ultimate buildout condition assumes all parcels are eventually developed in accordance with the current future land use plan.

This section provides near-term water and wastewater demand projections based on annualized growth rates over the 2025 to 2045 time horizon. These projections assume that over the next 20 years, development will continue at the historic percentages of residential land use mix.

The projections use the flow rates established in Table 4, "Wastewater Average Daily Flows, By Future Land Use Classification." Industrial and Commercial development requirements in Tables 9 through 17 were insignificant compared to residential development requirements and are omitted from the annualized growth rate table below.

Calculations for Table 19 below used the following assumptions:

Table 18: Assumptions

	Persons per Household	*HOUSE Holds per Acre*	*% of Housing*	*PERSONS PER ACRE*	*Flow per Acre (GPD)*
Single-Family Residential	2.5	3	57%	7.5	900
Manufactured Homes Residential	1.875	4	31%	7.5	900
Multi-Family Residential	2.5	5.5	12%	13.75	1,650

The acres required columns in Table 19 were calculated as

$$Acres\ Required = (Population_{2045}) \times (1 - annual\ growth\ rate)^{2045-Year} \times \sum \frac{\%Housing\ Type}{Housing\ Type\ Persons\ per\ Acre}$$

Table 19: Water and Wastewater Demands Based on Annualized Growth Rates

		2025		2030		2035		2040		2045	
Annual Compound Growth Rate	**New Pop 2025-2045**	**Acres**	**Flow (Gpd)**	**Acre**	**Flow (Gpd)**	**Acre**	**Flow (Gpd)**	**Acre**	**Flow (Gpd)**	**Acre**	**Flow (Gpd)**
0.25%	4,367	524	518,372	530	524,901	537	531,512	544	538,206	550	544,984
0.50%	9,058	1,033	1,022,573	1,059	1,048,525	1,086	1,075,136	1,114	1,102,423	1,142	1,130,402
0.75%	14,092	1,528	1,512,875	1,587	1,570,907	1,648	1,631,166	1,711	1,693,735	1,776	1,758,705
1.00%	19,491	2,010	1,989,545	2,113	2,092,077	2,222	2,199,894	2,337	2,313,267	2,457	2,432,483
1.25%	25,267	2,478	2,452,839	2,638	2,612,062	2,810	2,781,621	2,992	2,962,187	3,186	3,154,474
1.50%	31,471	2,932	2,903,007	3,163	3,130,884	3,411	3,376,648	3,678	3,641,704	3,967	3,927,566
1.75%	38,099	3,374	3,340,292	3,685	3,648,562	4,026	3,985,280	4,397	4,353,074	4,803	4,754,811
2.00%	45,188	3,803	3,764,930	4,207	4,165,111	4,654	4,607,827	5,149	5,097,600	5,696	5,639,433

POLICY LEVEL NEEDS ASSESSMENT

As Orangeburg County continues to grow, the critical need for clear definition of the existing water and wastewater infrastructure location, condition and operational capabilities of assets across the County also grows. While differing levels of information is available from each of the utility systems across the County, sufficient collective data is not available to clearly make recommendations for feasible system improvements.

ESTABLISH A BASELINE OF THE EXISTING WATER AND WASTEWATER SYSTEMS IN THE COUNTY.

A base line of existing water and wastewater system consists of two (2) related parts of an individual system. The first is a complete inventory of the existing infrastructure. Water and wastewater physical infrastructure have replacement and/or rehabilitation cycles. In general, infrastructure replacement/rehabilitation cycles are

- Mechanical 10-15 years
- Electrical 15-20 Years
- Pipes/Valves 20-30 years
- Buildings 40-50 years
- Structures 50+ years

The second component of a system baseline is the overall management of the system, including both operations and maintenance (O&M), as well as financial management. These factors determine the overall health of the system, as well as its feasibility as a going concern in the future. Both components are required to make decisions about investments in the system.

Each utility system will need to take inventory of the data that they have in order to establish a clear picture of needs.

UTILIZE THE SOUTH CAROLINA RURAL INFRASTRUCTURE AUTHORITY (RIA) ONLINE TOOL (THE VIABILITY TOOLKIT) FOR WATER AND WASTEWATER PROVIDERS TO ESTABLISH A BASELINE OF THEIR EXISTING WATER AND WASTEWATER SYSTEMS.

The purpose of the toolkit is to help utilities make improvements that lead to long-term viability of the system. The toolkit is in the form of a self-assessment of the system and results in a quick analysis.

The tool kit requires inputs that describe the following essential areas of a water or wastewater system:

1. Infrastructure
    - Age of the majority of system assets
    - Monthly service rates per gallon of water provided or treated
    - Results of recent inspections and compliance with regulators
2. Management and Operations
    - Existence of capital improvement plans, asset management programs, and GIS system databases
    - Identification of key staff and vacancies
    - Current training of the governing body (board or council)
3. Socioeconomic Information
    - Population trends
    - Median Household income
    - Poverty Rate
    - Unemployment Rate
4. Financial Health of System, including inputs from:
    - Balance Sheet or Statement of Net Position
    - Income Statement or statement of Revenues, Expenses, and Change in Fund Net position

- Statement of Cash Flows

The toolkit then provides an assessment of the system's long-term viability benchmarked against other systems in South Carolina. The toolkit can be used to determine where changes and investments can be made in order to increase the long-term viability of the particular system.

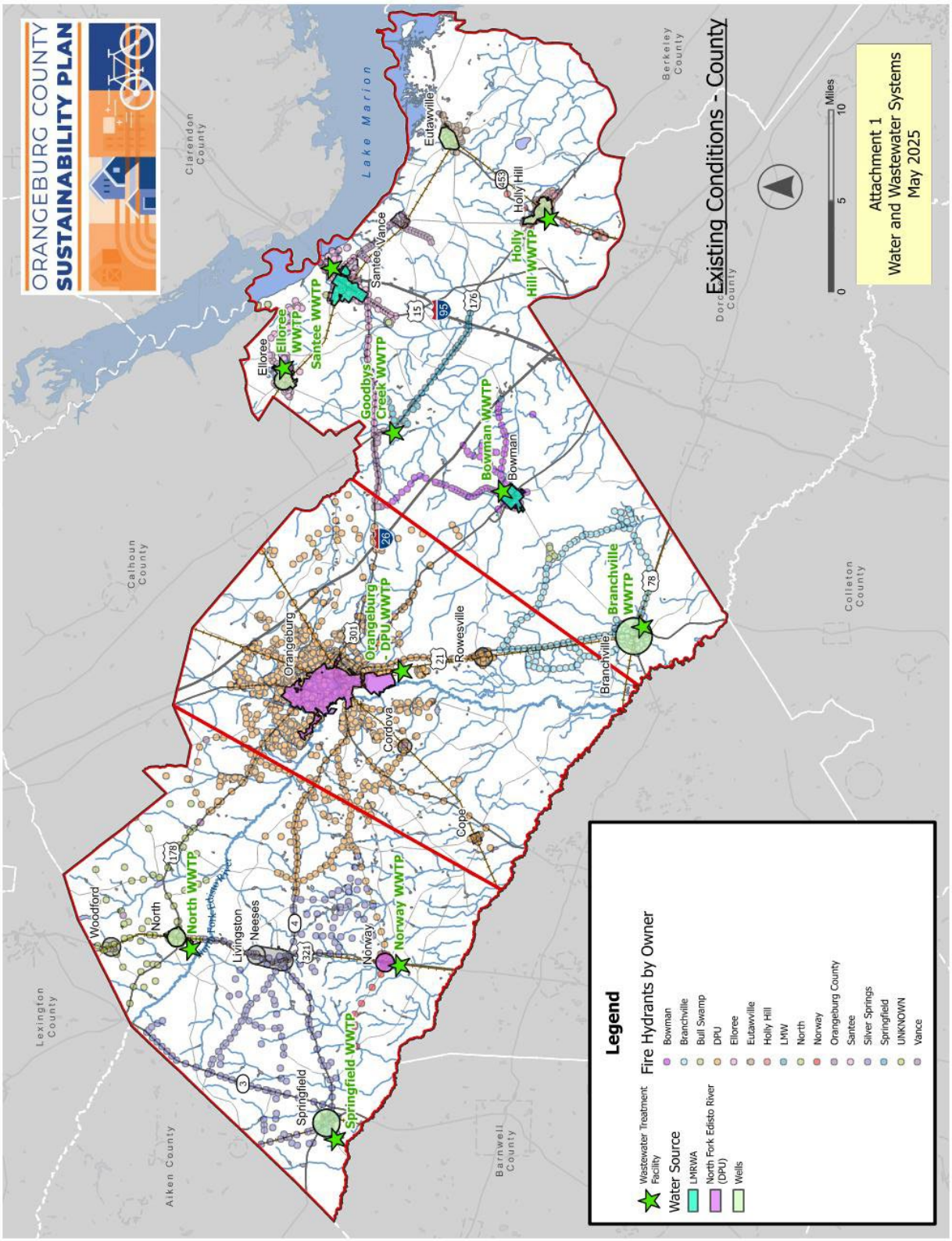
The toolkit can be found at https://ria.sc.gov/utility-viability/

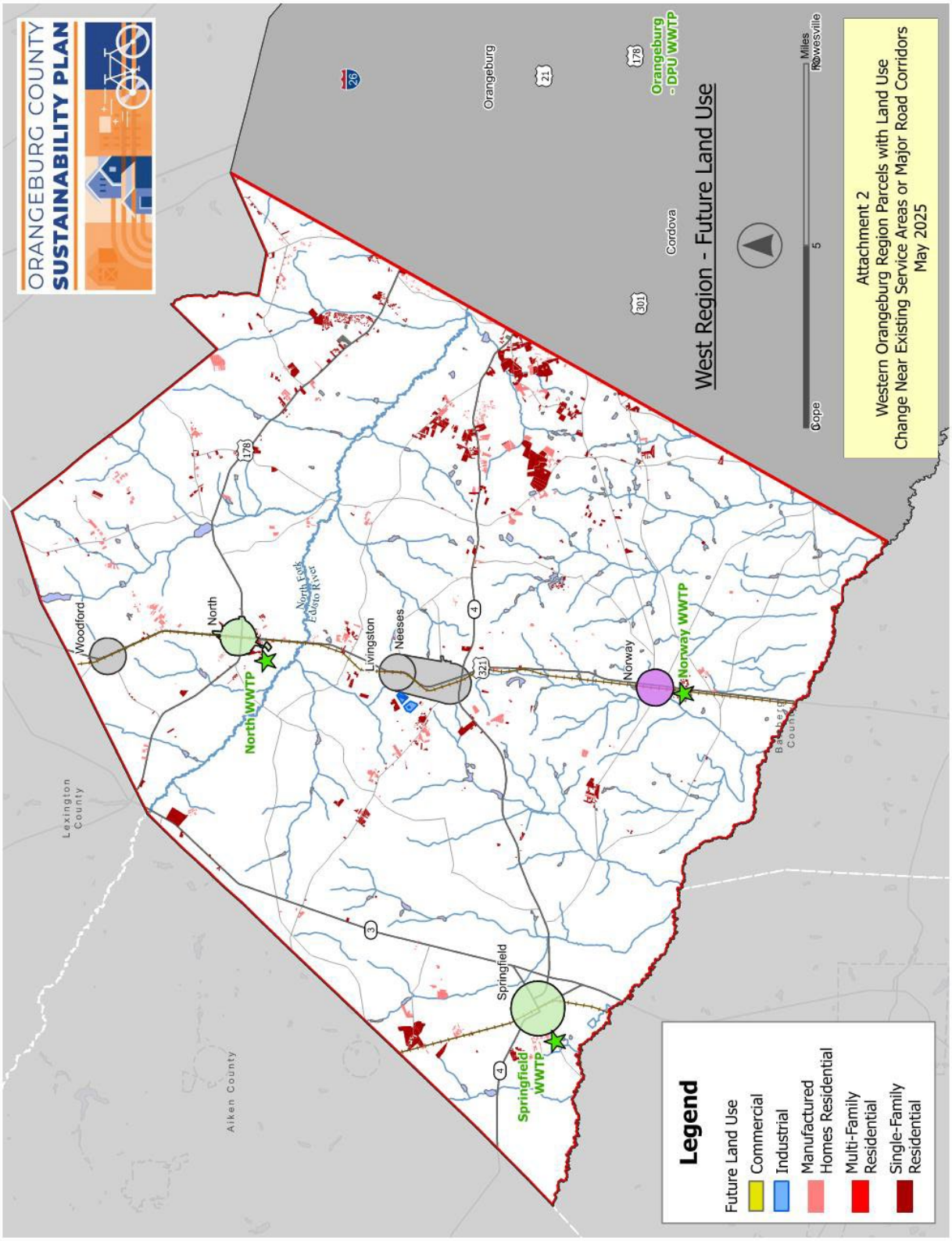
GROWTH CAPACITY

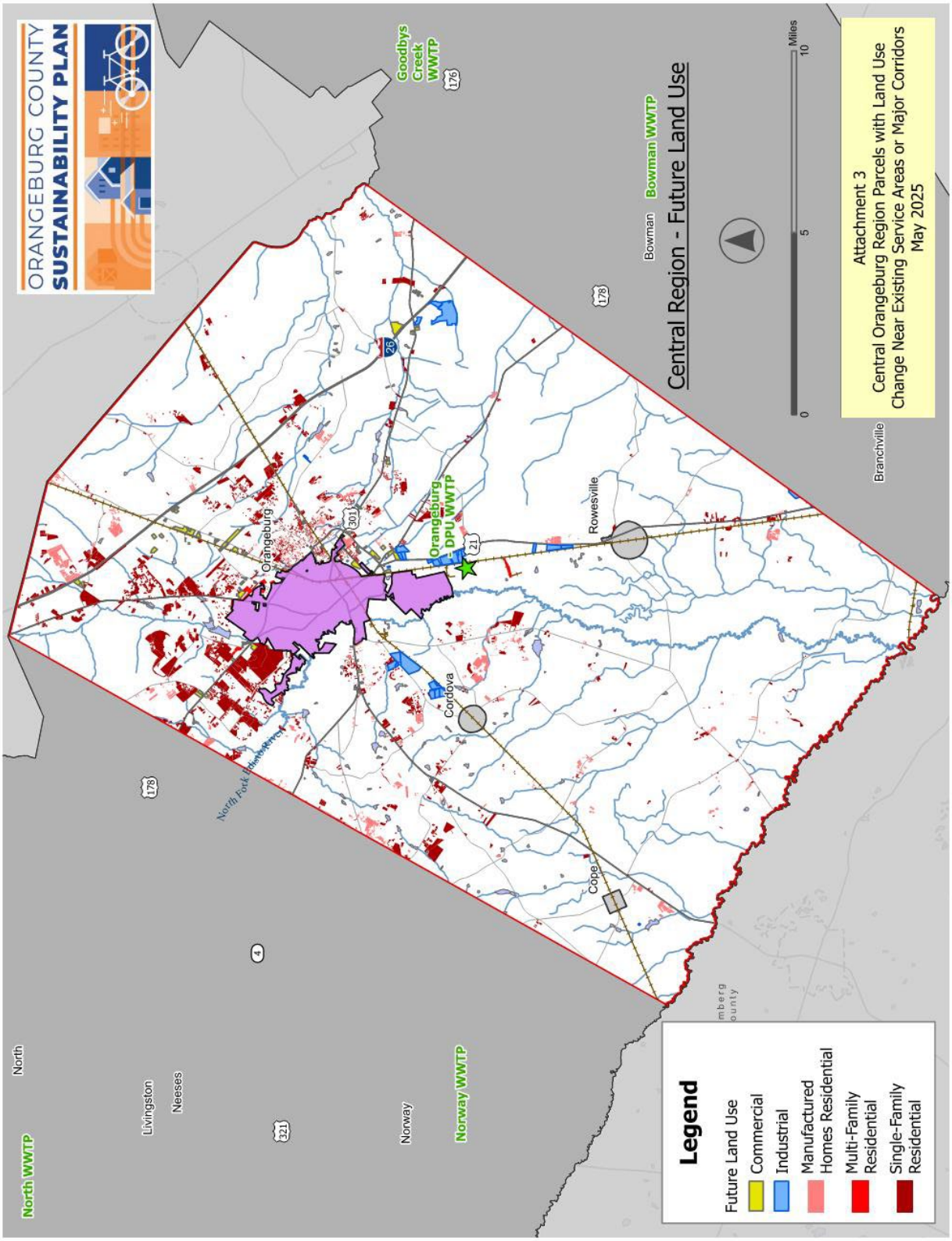
In order for growth to occur, land developers, commercial developers, and industry need both reliable water service and wastewater service. In this assessment, simple criteria were used to provide a rough estimate for the additional capacity needed in each of the three regions of the county. Even without a baseline inventory of existing wastewater collection and treatment systems in the county, there is insufficient permitted capacity presently to accommodate future development outside of the City of Orangeburg service area. See Table 7: "Wastewater Average Daily Flows and Treatment Capacities", and Table 19:" Water and Wastewater Demands Based on Annualized Growth Rates. By establishing a baseline for the viability of the existing systems, investment decisions can be made on how and where to extend service capacity to areas determined likely to be developed.

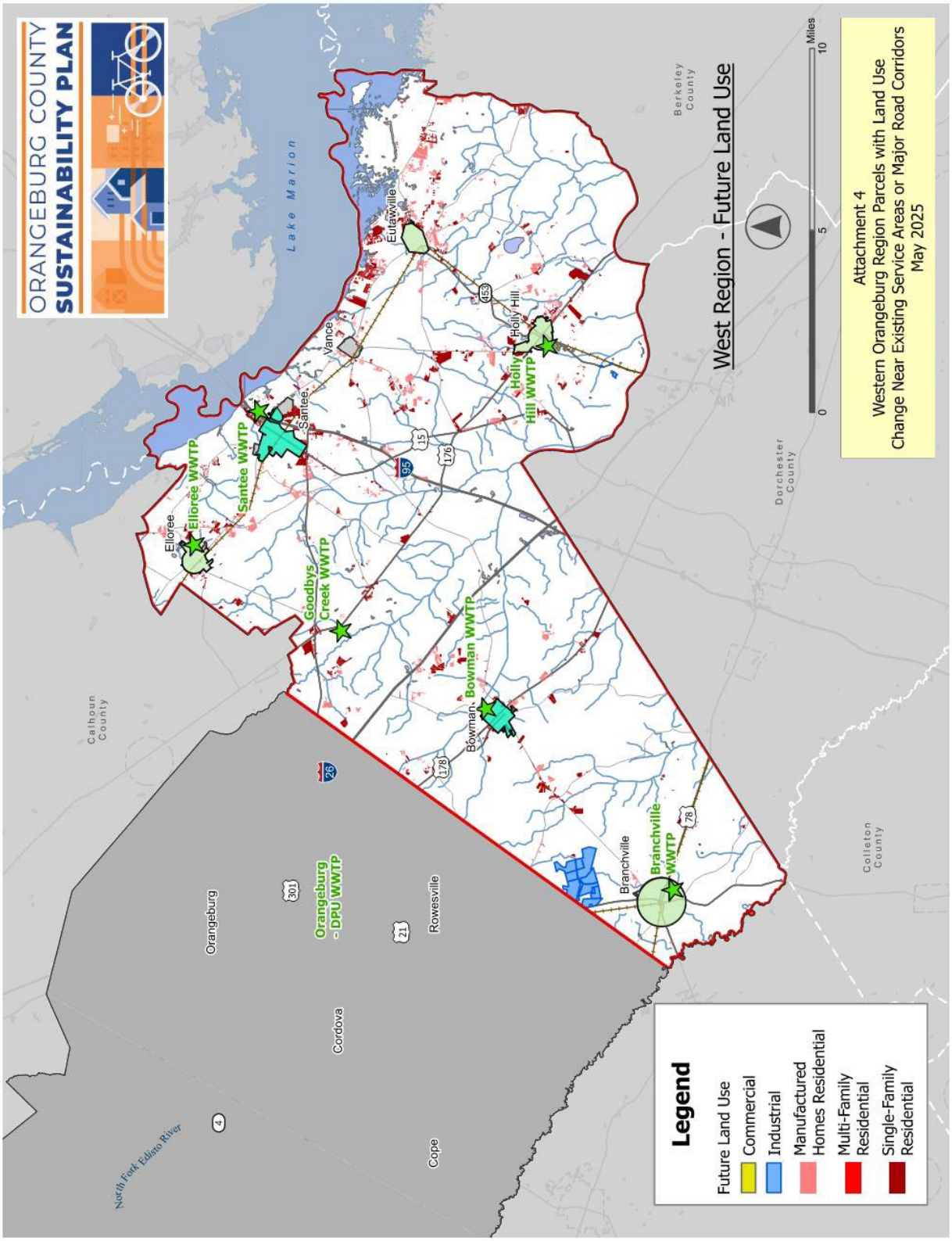
GIS AND OTHER DATABASES

For willing stakeholders who participate with the County to complete the RIA Viability Toolkit assessment, the County could lead a group of stakeholders to develop a GIS database or other databases to establish data in support ongoing maintenance and evaluation of systems. These databases will become a key driver in managing growth in Orangeburg County compatible with guiding principles for local land use and development.


ORANGEBURG COUNTY SUSTAINABILITY PLAN
Existing Conditions - County
Attachment 1
Water and Wastewater Systems
May 2025
Miles
0
5
10
Lake Marion
Clarendon County
Berkeley County
Calhoun County
Colleton County
Lexington County
Aiken County
Barnwell County
Dorchester County
Eutawville
Holly Hill
Santee
Vance
Elloree
Goodbys Creek
Bowman
Orangeburg
Rowesville
Cordova
Branchville
Cope
Woodford
North
Livingston
Neeses
Norway
Springfield
Elloree WWTP
Santee WWTP
Goodbys Creek WWTP
Holly Hill WWTP
Bowman WWTP
Orangeburg DPU WWTP
Branchville WWTP
North WWTP
Norway WWTP
Springfield WWTP
Legend
Wastewater Treatment Facility
Water Source
LMRWA
North Fork Edisto River (DPU)
Wells
Fire Hydrants by Owner
Bowman
Branchville
Bull Swamp
DPU
Elloree
Eutawville
Holly Hill
LMW
North
Norway
Orangeburg County
Santee
Silver Springs
Springfield
UNKNOWN
Vance


ORANGEBURG COUNTY SUSTAINABILITY PLAN
West Region - Future Land Use
Attachment 2
Western Orangeburg Region Parcels with Land Use Change Near Existing Service Areas or Major Road Corridors
May 2025
Miles
0
5
10
Legend
Future Land Use
Commercial
Industrial
Manufactured Homes Residential
Multi-Family Residential
Single-Family Residential
Orangeburg
Cordova
Woodford
North
Livingston
Neeses
Norway
Springfield
Orangeburg - DPU WWTP
North WWTP
Norway WWTP
Springfield WWTP
North Fork Edisto River
Lexington County
Aiken County
Barnwell County


ORANGEBURG COUNTY SUSTAINABILITY PLAN
Central Region - Future Land Use
Attachment 3
Central Orangeburg Region Parcels with Land Use Change Near Existing Service Areas or Major Corridors
May 2025
Miles
0
5
10
Legend
Future Land Use
Commercial
Industrial
Manufactured Homes Residential
Multi-Family Residential
Single-Family Residential
Goodbys Creek WWTP
Bowman WWTP
Orangeburg - DPU WWTP
Norway WWTP
North WWTP
Orangeburg
Rowesville
Cordova
Bowman
Branchville
Livingston
Neeses
Norway
North
North Fork Edisto River


ORANGEBURG COUNTY SUSTAINABILITY PLAN
West Region - Future Land Use
Attachment 4
Western Orangeburg Region Parcels with Land Use
Change Near Existing Service Areas or Major Road Corridors
May 2025
Miles
0
5
10
Legend
Future Land Use
Commercial
Industrial
Manufactured Homes Residential
Multi-Family Residential
Single-Family Residential
Lake Marion
Berkeley County
Dorchester County
Calhoun County
Colleton County
Eutawville
Vance
Santee
Holly Hill
Holly Hill WWTP
Santee WWTP
Elloree
Elloree WWTP
Goodbys Creek WWTP
Bowman
Bowman WWTP
Branchville
Branchville WWTP
Orangeburg
Orangeburg - DPU WWTP
Cordova
Rowesville
Cope
North Fork Edisto River
26
301
21
4
178
15
95
176
453
78