westonandsampson.com

WESTON & SAMPSON ENGINEERS, INC.
3543 Pelham Rd, Suite 204
Greenville, SC 29615
tel: 864.686.5774

Fair Play and Townville Area Sewer Basin Plan

May 2023

Oconee Joint Regional Sewer Authority

SOUTH CAROLINA

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1.0 SEWER MASTER PLANNING

1.1 *Introduction*

1.1.1 Background and Study Area

The purpose of this study is to explore the feasibility of sanitary sewer extension in and around Fair Play and Townville, SC. This study included both technical analysis and stakeholder engagement to explore the viability and public support for these infrastructure improvements.

At the onset of this project, the study area included only the southernmost portion of Oconee County. After the first stakeholder meeting, it was decided by Oconee County and Oconee Joint Regional Sewer Authority (OJRSA) that the study area should be expanded to include additional areas of interest. The resulting study area included the Village of Fair Play and the whole Fair Play zip code, Townville, Interstate 85 from the Georgia border to just past Exit 11, a buffer around Highway 24, and West Oak High School near the intersection of Highway 11 and Highway 24 (see Appendix A, Figure 1. Report Study Area). This area encompasses the southernmost portion of Oconee County (Census Tracts 309.01, 309.03, 309.04) and northwest corner of Anderson County (Census Tract 109) in South Carolina. This area currently does not contain public sewer except for a pump station at the Golden Corner Commerce Park and two parallel force mains associated with the pump station that connect to the OJRSA Coneross Creek Water Reclamation Facility (WRF). A proposed sewer project, referred to as Sewer South Phase II, was considered during this study. Sewer South Phase II provides sewer service to the Exit 1 Welcome Center, Exit 2 area, and Village of Fair Play, and ties into the existing Golden Corner Commerce Park Pump Station. The contract for construction of Sewer South Phase II was awarded in March 2023, and the project is expected to be in service by mid-2024. Several of the studies proposed sanitary sewer projects planned for the initial 0-5 year timeframe assume this sewer infrastructure is in service by 2024.

The goal for this study is to complete a 20-year planning document (2022-2042) that projects anticipated growth within the study area and the potential extended sanitary sewer needs and costs associated with planned public and private improvements.

Currently, OJRSA is funded through fees paid by its three member cities (Seneca, Walhalla, and Westminster), who own and maintain their own collection systems that convey flow to OJRSA for transport to the Coneross Creek WRF for treatment. OJRSA does not receive any ad valorem tax money or other funding except for funding provided by Oconee County.[1] OJRSA currently has no retail customers, but will once the Sewer South Phase II Project goes online, as there is not another sewer provider in the area. Any future customers, retail or otherwise, in the Fair Play area will likewise be a direct customer of OJRSA.

The study area currently has limited sewer service, and what sewer infrastructure exists is owned by private providers, apart from the existing Exit 1 Welcome Center treatment system. The current sewer infrastructure is as follows:

[1] Of note, Oconee County has not provided any funding for OJRSA's existing sewer system in at least six years. The only funds provided by the county has been for funding this study, subsidizing the construction of a small retail sewer system at Interstate 85 ("Sewer South Phase II"), and to operate and maintain the Golden Corner Commerce Park Pump Station, which is owned by the county.

- Foxwood Hills – serves the Foxwood Hills neighborhood. The treatment system design flow is 200,000 gallons per day (gpd).
- Chickasaw Point – serves the Chickasaw Point neighborhood. Wastewater collected and treated via a spray irrigation system on the golf course. Permitted for 150,000 gpd.
- Jacabb Utilities – a land application system serving Exit 4. Permitted for 15,000 gpd.
- West Oak High School (owned/operated by the School District of Oconee County) – serves the high school. The treatment system has a design flow of 32,000 gpd.
- Carolina Landing Campground - the treatment system has a design flow of 40,000 gpd.
- Welcome Center (owned/operated by SC Department of Parks, Recreation, and Tourism) – the treatment system has a design flow of 15,000 gpd.

In general, in the absence of sewer infrastructure, the existing developments have occurred along highways, which are generally located along ridgelines. This makes collecting sewer from existing residents and businesses difficult to do on a large scale.

Sewer investments in this area will likely stimulate additional development that may not have been possible without sewer access. This could benefit not only the study area but Oconee and Anderson Counties as well by increasing the tax base. Having a thoughtful conversation about future publicly provided sewer needs is an important aspect as a community considers plans for growth. Sewer infrastructure has both costs and benefits, and where to invest is the critical question. Based on available information, this study considered the following:

- Current infrastructure and needs
- Locations for future growth areas
- Economic development goals
- Population growth potential
- Commercial and industrial needs
- Feasibility of sewer by location
- Cost for installation and maintenance
- Environmental concerns/area constraints on growth
- Cost/benefit for both the sewer provider and customers

1.1.2 Policy Considerations – Oconee Joint Regional Sewer Authority and Oconee County

OJRSA Sewer Use Regulation Section 2.4 states:

> *"The Owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, abutting on any street, alley, or right-of-way in which there is a public sanitary sewer, is hereby required at the expense of the Owner to install suitable toilet facilities therein, and to connect such facilities directly with the public sewer in accordance with the provisions of these Regulations, within ninety (90) calendar days after date of official notice to do so, provided that said public sewer is within three hundred (300) feet of the property line. Under unusual or specific circumstances, the Director may waive this provision."*

This policy means that if public sewer is available within a reasonable distance (300 feet or less) to a home or business property line (not the structure itself), the owner of that home or business would be required to connect to the service, unless provided a waiver of exemption due to an extreme

circumstance. What is not clear within this regulation is what happens to existing septic users or what constitutes a specific circumstance that would allow a waiver. This concern was frequently vocalized at the June 28, 2022, public meeting and in the public survey results. Several residents who have new or working septic systems voiced concern about the requirement to tie into public sewer if it were made available within 300 feet of their property line. Additional information from the survey is included in Section 2.1.2 and in Appendix B.

1.1.3 Policy Consideration – Anderson County Use of Public Sewer

Anderson County has a policy regulating sewer discharge within the county's jurisdiction. Their approach is tiered pending the linear foot (LF) distance from the property to the sewer availability based on land use and size of the development. The following is the verbiage in the regulation of sewer discharge within Anderson County's jurisdiction Section 44-26:

> *"All sewage disposal within the jurisdiction of the county shall be regulated by the county, and disposal shall be by public sewers and sewerage system except where connection is impractical for technical reasons as follows:*
> - *Single Family Residence – 300 LF*
> - *Duplex Apartment Complex (2-6 units) – 800 LF*
> - *Up to 30 lot subdivision – 1500 LF*
> - *30-60 lot subdivisions – 3000 LF*
> - *60-90 lot subdivisions – 4500 LF*
> - *Greater than 90 for subdivision – 1 mile"*

There are some exceptions to this rule including challenging topography, right-of-way considerations, and subdivisions with lot sizes that are four acres or more. Additionally, according to this rule, force main lines are not considered to be readily available to the public and thus only properties that are approved for force main access by county council or wastewater department will be permitted to connect to these lines.

1.1.4 Policy Considerations – South Carolina Department of Health and Environmental Control

South Carolina Department of Health and Environmental Control (SCDHEC) has regulation related to wastewater treatment facility accessibility, regulation R 61-56 Section 300, which reads as follows:

> *"300.1 Permits for new onsite wastewater systems shall not be issued where a wastewater treatment facility is accessible for connection.*
> *300.2 Repairs to or replacement of failing onsite wastewater systems shall not be allowed where a wastewater treatment facility is accessible for connection." (SCDHEC 2022).*

Although SCDHEC does not specify a distance to which this accessibility regulation kicks in, there is a South Carolina State statute that addresses the authority for determining the connection. SC Code, Sections 5-31-210, authorizes municipal governments to "adopt and enforce regulations requiring all properties to which sewer service is available to connect to the municipality's sewage collection

facilities" (Title 5 Municipal Corporations).[2] This puts the responsibility of determining accessibility in the provider's jurisdiction, which provides context for the different approaches outlined in Section 1.1.2 and 1.1.3.

1.1.5 Policy Considerations – 303(d) South Carolina Department of Health and Environmental Control

Failing septic systems have been a concern within the study area. Coneross and Beaverdam Creeks underwent a successful Clean Water Act Section 319 Grant project. By 2005, 38 failing septic systems in the area were repaired or replaced. Both creeks were removed from the section 303(d) list of Impaired Waters in 2002, because of the development of a Total Maximum Daily Load for each site, and by 2005 water quality standards were met (EPA, 2007). Beaverdam Creek, which flows north-south, east of Highway 59 was listed again on the 303(d) list in 2018 for *E.coli* (SCDHEC, 2020). Snow Creek at the north edge of this study area, flowing west to east is also on the section 303(d) List for *E.coli* (SCDHEC, 2020). Both creeks drain to Lake Hartwell. At the time of this report, the 2018 list was the most current available and finalized version of the 303(d) list from the South Carolina Department of Health and Environmental Control (SCDHEC, 2020). During the period that this report was developed, the draft 2020 and 2022 lists were under review and not available.

Due to the lack of publicly available data for the age of septic systems in this area, an accurate depiction of failing units on water quality is unclear. Additionally, SCDHEC only requires a permit for new or total replacement of septic systems. Maintenance and repairs to individual dwelling or business septic systems are the responsibility of the owner and do not require a permit or notice from SCDHEC, which makes tracking this information difficult (SCDHEC, 2022).

1.1.6 Policy Considerations – Comprehensive Plans

Oconee County mentions sewer expansion several times in their comprehensive plan. Expanding sewer facilities for new residential use is a goal under many elements within the plan and the availability of public sewer (and water service) is noted as having the following benefits:

- "Reduce initial residential construction and development costs and enable smaller residential lot sizes in appropriate areas" making "residential development more attractive to prospective developers and less expensive for potential buyers"
- "The extension of public sewer service to currently unserved areas can lower residential development costs"
- "Increased availability of water and sewer service can also encourage the location of new industries and businesses that provide additional jobs and increased community investment"

(Oconee, 2020)

Additionally, the Oconee comprehensive plan acknowledges that "although wells and septic tanks can be less expensive alternatives to publicly provided water and sewer service over time", the need for larger lot sizes "can sometimes raise land prices higher than the smaller lots in more densely developer projects that have water and sewer service" and the initial development costs can be high for septic tank installation (Oconee, 2020). Table 1 below summarize the goals, objectives, and

[2] A legal opinion should be obtained to determine if this also applies to the OJRSA as a Joint Authority Water and Sewer System under SC Code 6-25, counties (SC Code Title 4), and other governments.

strategies related to sewer within the Oconee Comprehensive Plan.

Table 1: Summary of Sewer Related Goals from Oconee County Comprehensive Plan

Goals/Objectives/Strategies	Accountable Agencies	Time Frame for Evaluation	Date Completed
Goal 3.2. Promote and enhance access to affordable, safe, and decent housing for all Oconee residents through public and private cooperation.			
Objective 3.2.2. Work with the State, municipalities, neighboring communities, and other public and private organizations to remove barriers to, and identify solutions for, the provision of affordable housing.			
Strategy 3.2.2.1. Encourage the expansion of water and sewer infrastructure and facilities to increase opportunities for new residential development and provide service for existing residential areas that are currently unserved.	• Oconee County • Municipalities • Water and Sewer Providers • S.C. Dept. of Commerce	2023	
Goal 6.3. Preserve, protect, and enhance the quality and quantity of the water resources of Oconee County.			
Objective 6.3.1. Expand sewer service to additional areas as feasible.			
Strategy 6.3.1.1. Support wastewater treatment providers in the extension of sewer service to currently unserved or underserved areas to minimize the need for septic tanks where conditions are not suitable or water sources may be compromised.	• Oconee County • Oconee Joint Regional Sewer Authority (OJRSA) • Municipal Providers • Other Public and Private Providers	2025	
Strategy 6.3.1.2. Support wastewater treatment providers in the upgrade and expansion of existing treatment facilities to accommodate the expansion of sewer service.	• Oconee County • OJRSA • Municipal Providers • Other Public and Private Providers	2023	
Goal 7.1. Provide adequate, safe, and efficient infrastructure to support current and projected needs.			
Objective 7.1.2. Improve and expand wastewater treatment within Oconee County.			
Strategy 7.1.2.1. Expand sewer service throughout areas identified by the Land Use Element as potential areas of development, while implementing appropriate measures to avoid negative impacts on sensitive areas.	• Oconee County • OJRSA • Other Sewer Providers	2025	
Strategy 7.1.2.2. Work with neighboring jurisdictions when possible to establish regional efforts to expand sewer service into prime commercial and industrial locations	• Oconee County • Neighboring Jurisdictions	Annually	
Strategy 7.1.2.3. Partner with municipalities and the Joint Regional Sewer Authority to coordinate efforts to provide sewer throughout high growth corridors.	• Oconee County • Municipalities • OJRSA • Other Sewer Providers	Annually	
Strategy 7.1.2.4. Establish partnerships with regional, state, and federal agencies to seek and secure funding for wastewater treatment facility upgrade and expansion needs.	• Oconee County • OJRSA • Other Sewer Providers • Relevant Regional, State and Federal Agencies	Annually	

Goal 7.2. Manage community facilities, infrastructure, and public resources in a manner that ensures both current residents and businesses and future generations can enjoy the benefits and opportunities that make Oconee County an attractive and affordable place to live.			
Objective 7.2.5. Strengthen coordination among the County, municipalities, neighboring counties, regional and State agencies, and other public and private organizations.			
Strategy 7.2.5.2. Continue coordination of the provision of water, sewer, and electricity with municipalities and other public and private providers.	• Oconee County • Municipal Utility Providers • Public & Private Utilities	Ongoing	

Note: Information directly sourced from Oconee, 2020

Anderson County does not specifically mention sewer expansion in their comprehensive plan. Anderson does acknowledge that cost is a factor for extending water and sewer to undeveloped land within the county, impacting the affordability of new residential development (Anderson, 2016). Anderson also notes that there are many individuals on-lot septic systems that exist in moderate density communities (Anderson, 2016).

2.0 PLANNING AND ANALYSIS

2.1 *Data Review & Engagement*

Phase 1 of this project included reviewing previous studies performed in this area, researching, and analyzing additional data, as well as meeting with stakeholders, including the public, to better inform potential future sewer users within the study area (Figure 1. Report Study Area).

Throughout the beginning phases of this project, many previous studies, analyses, and data were considered as a part of this effort. Those items that were reviewed include, but are not limited to:

- Oconee County Comprehensive Plan (2020)
- Anderson County Comprehensive Plan (2016)
- Oconee County Zoning Enabling Ordinance (2009)
- Village of Fair Play Strategic Master Plan (2022) by Studio Main
- Wastewater Basin Study Interstate-85 Exit 4 (2021) by Thomas & Hutton
- I-85 Corridor Sewer Expansion Feasibility Study for Oconee Economic Alliance (2015) by Davis & Floyd
- Fair Play Sewer Extension Town Hall Notes from 2017 and 2018 provided by OJRSA
- Destination Oconee County Report (2015) provided by Oconee County
- Asbury Campground Market Analysis for Anderson County Economic Development (2020) provided by Anderson County Economic Development
- Census Data (2010, 2020)

When analyzing the data available to project future growth of an area, our team focused on reviewing past studies, analyzing available recent census data and projections, followed by comparing that information to institutional knowledge from stakeholders. We also considered the feasibility of growth in the area based on current land use and both opportunities and constraints to growth in this area.

2.2 *Stakeholder & Public Engagement Planning Process*

The following activities were completed to assist with sewer projections for the Fair Play Basin area:

1) Kickoff meeting with OJRSA and Oconee County
    a. February 1, 2022
2) One-on-one stakeholder calls. A summary of knowledge gained through those conversations can be found in Appendix C.
3) Stakeholder Meetings
    a. In-person March 17, 2022, at OJRSA
    b. In-person June 20, 2022, at OJRSA
    c. In-person November 2, 2022, at OJRSA
4) Public Meeting
    a. In-person June 28, 2022, at Earle's Grove Baptist Church

A kickoff meeting was held at OJRSA on February 1, 2022, to review project scope, goals, schedule, and process. Additionally, the Stakeholder Group was identified, with the following groups originally recommended to be present at the stakeholder meetings:

- OJRSA
- Oconee County
- Anderson County
- Oconee Economic Alliance
- Anderson County Economic Development
- Oconee County Parks & Recreation
- Appalachian Council of Governments
- Lake Hartwell Association
- Lake Hartwell Partners for Clean Water
- Pioneer Water
- Village of Fair Play Development Corporation

The Project Team then completed several weeks of due diligence research and preliminary GIS analysis ahead of the first stakeholder meeting, held on March 17, 2022. During this stakeholder meeting it was suggested that the original proposed study area from the Request for Qualifications be revised to include Foxwood Hills to the west, West-Oak High School to the north, a buffer around Highway 24 to include parcels on both sides of the corridor, Townville, and along I-85 through Exit 11 within Anderson County. Oconee County council voted unanimously to support this expansion during their April 19, 2022, council meeting. These additions are reflected in the study area map in the previous section (Figure 1. Report Study Area). As a result, Anderson County was added to the stakeholder group.

According to state statute, OJRSA is a Joint Water and Sewer System under SC Code 6-25 (Joint Authority Water and Sewer Systems Act). By this statute OJRSA is allowed as an entity to expand services into an adjacent county. Additionally, they are eligible for grants and can enter into contracts related to expanding services. Both Oconee and Anderson Counties would need to be in agreement for cross county line service to occur and the Appalachian Council of Governments (ACOG) would also need to be involved as the regional planning agency for this area. The ACOG planning authority is derived from Section 208 of the Clean Water Act.

A second stakeholder meeting was held on June 20, 2022, to review the changes in data analysis due to the study area expansion. Preparation for the public meeting was also completed and stakeholders were reminded to advertise for the public meeting. The public meeting was held on June 28, 2022, at Earle's Grove Baptist Church. Approximately 30 people were present for the public meeting. A handout and a survey (both paper and online formats) were provided to attendees (Appendix B). In addition to the survey, attendees were asked to place a green dot on a map where they would like to see sewer infrastructure and a red dot on a map where they would prefer no sewer to be installed. Each attendee had three of each color dots that they could choose to place, but they did not have to place all six of their dots. The results are shown in Appendix A (Figure 2. Areas Public Meeting Attendees Supported Sewer Growth and Figure 3. Areas Public Meeting Attendees Opposed Sewer Growth). The general trend is that most attendees would like to see sewer along major corridors and would prefer the areas in between to be on septic if they are developed. Similar trends were observed by the few addresses specified in the results from the online version of the survey.

A third stakeholder meeting was held on November 2, 2022, to review the engineering analysis and

proposed phasing for sewer expansion. These observations are provided in Section 3.

2.3 *Public Survey*

A seven-question survey was developed and distributed to garner public opinion on sewer within the study area. The full results are included in **Appendix B**. The survey was available online under the Resource page on OJRSA's webpage from June 28 through July 24, 2022. Stakeholders and public participants who attended the in-person meeting were encouraged to promote others to take the survey. OJRSA also posted flyers with information on how to access the survey in key businesses within the study area. There were 141 survey takers who predominantly described themselves as full-time residents within the study area (109 people or 77.3 percent). A summary of the results is included below, with predominant responses noted in **bold text**.

1. How would you classify your relationship to the study area? (Check all that apply)
    - **77.3% (109) full-time residents**
    - 9.2% (13) business owner or employee
    - 7.8% (11) concerned citizen residing outside the study area
    - 6.4% (9) seasonal/weekend residents
    - 6.4% (9) rental property / investment owner
    - 6.4% (9) agricultural
    - 6.4% (9) open space / vacant property owner

2. How do you feel about sanitary sewer expansion within the study area?
    - **33.3% (47) strongly support**
    - 4.3% (6) moderately support
    - 6.4% (9) neither support nor oppose
    - 4.3% (6) moderately oppose
    - **43.3% (61) strongly oppose**
    - 7.8 % (11) depends (please comment below) – *results are summarized below in section 2.1.3.1*

3. Where would you like to see sewer investment made (select all that apply)
    - 27.7 % (39) residential (general)
    - **39.7% (56) commercial/industrial (general)**
    - **39.7 % (56) I-85 corridor**
    - **35.5 % (50) along other main corridors (examples Hwy-24, Hwy-11, Hwy-59, Old Dobbins Bridge Road)**
    - 22.7% (32) Village of Fair Play
    - 12.1% (17) Townville
    - 9.9% (14) western Anderson County
    - 18.4% (26) along Lake Hartwell
    - **39.7% (56) I would prefer no sanitary sewer in the area**

4. What concerns do you have about sewer expansion in the area?
    - Open ended – *results are summarized below in section 2.1.3.1*
5. What opportunities do you identify with sewer expansion in the area?
    - Open ended – *results are summarized below in section 2.1.3.1*
6. Is there a specific address that you would like to comment on regarding sanitary sewer?
    - Open ended – *results are summarized below in section 2.1.3.1*
7. Would you like to be contacted by the project team to share additional information?
    - 31 people, providing 30 individual emails asked to be contacted. These individuals were emailed shortly after the survey closed at the end of July to inquire about additional input.

2.4 *Open Ended Question Survey Summary*

Question two allowed survey takers to elaborate on their responses. In general, most of the comments fell into the following categories:

- Support for sewer in certain places, which differed by responder
- Opposition for sewer due to concerns regarding growth/loss of rural appeal to the area
- Opposition for the current Sewer South project
- General questions about cost, having land taken, and being forced to connect to sewer if they are already on a viable septic system
- General concern about being retired and having a fixed income and concern about cost

Question four asked for responders to voice their concerns. In general, most of the comments fell into the following categories:

- Cost was the most frequently mentioned
    - Cost to install
    - Cost to connect
    - Tax increase concerns
    - Cost especially for seniors/retirees
- Expansion without proper planning and zoning
- Odor
- Being required to connect
- Uncontrolled growth
- Loss of agriculture
- Loss of quality of life, too crowded
- Maintenance for the new system, failure of lift stations, leaks
- Health of Lake Hartwell if sewer is installed due to concern about additional growth or failing sewer infrastructure.
- Opposition to the potential Sanctuary Pointe development
- Increased traffic and congestion
- Damage to roads
- Damage to real estate
- Unnecessary loss of trees and plants
- Higher water bills
- Increase in crime due to population increases
- The current makeup of OJRSA's board and only having city representatives
- Contamination of drinking water

Additionally, there were some positive comments expressed under this question:

- Positive comments about replacing septic along Lake Hartwell for sewer as an environmental benefit
- Positive comment about sewer being critical to safe and desirable spaces to live

Question five asked for responders to voice what opportunities they identify with sewer. In general, most of the comments fell into the following categories:

- Economic development and business
- High incidence of septic tank failure, sewer to mitigate bacteria pollution, watershed protection/environmental benefits
- Industry
- Upgrade to visitor center
- Neighborhood development
- Growth in general
- Restaurants
- Managed growth, keeping rural environment intact
- Access to retail/grocery
- More efficient land use and less time and cost for permitting
- Hospital and nursing home facilities
- Sustainable development that maintains agricultural and recreational communities – residential and industrial development should be dense
- Jobs
- Better support for residents
- Increased tax base
- Expand sewer around the cities

Additionally, there were some critiques/suggestions expressed under this question:

- There was concern that this study isn't being performed for the Clemson/Seneca area, where development opportunities should be occurring
- One existing septic user requested that the hookup be offered at a discount
- Consideration to roads should take place before growth
- Golden Corner Commerce Park has not had development yet even with investment in infrastructure
- General concern about the disconnect between benefits to the tax base and the desire to keep the area rural
- Reiteration that residents do not want to be forced to tie into sewer

2.5 *Census Data & 20-year Projections*

Population growth forecasts were needed to assess potential future demand for sewer in the study area. First, the project team developed a baseline for the current population in the area and the extent of sewer within the study area. The Population Density and Proposed Sewer map illustrates where the population is primarily located and the proposed sewer lines to be installed from the Golden Corner Commerce Park pump station to Exit 1 on Interstate-85 (Sewer South Project) (Figure 4. Population Density and Proposed Sewer).

The South Carolina Revenue and Fiscal Affairs Office provides population projections through 2035 for the state and each county based on Census data (Table 2). According to those projections, growth in Oconee and Anderson should continue through 2035 at a rate slightly lower than the total state growth. Both counties are projected to experience less growth over time through 2035.

Table 2. South Carolina Population Estimates and Projections

Table 2 South Carolina Population Estimates from 2010-2015 and Population Projections from 2020-2035							
Location	2010 Estimates	2015 Estimates	2020 Projections	2025 Projections	2030 Projections	2035 Projections	Growth 2010-2035
	Total	Total	Total	Total	Total	Total	Total
South Carolina	4,635,846	4,896,006	5,225,257	5,565,142	5,913,634	6,263,614	
Percent Change		6%	7%	7%	6%	6%	35%
Oconee County	74,349	75,908	80,243	84,121	87,557	90,506	
Percent Change		2%	6%	5%	4%	3%	22%
Anderson County	187,095	193,806	204,486	214,765	224,862	234,656	
Percent Change		4%	6%	5%	5%	4%	25%

Notes: Data from South Carolina Revenue and Fiscal Affairs Office; Population Projections 2010-2035 – Revised September 2021 https://rfa.sc.gov/data-research/population-demographics/census-state-data-center/population-data/population-projections-2000-2035-rev2019

Narrowing to the study area and considering growth between 2010 and 2020 within the pertinent census tracts, this area experienced a 9.2 percent increase in population (Table 3). The nature of this study lends itself to focusing on recent growth trends rather than considering past trends that may skew the data.

Table 3. Census Tract Population and Percent Change

Table 3 Census Tract Population for Study Area and Percent Change between 2010 and 2020							
	2010			2020			
County Census Tract	Oconee 309.01	Oconee 309.02	Anderson 109	Oconee 309.01	Oconee 309.03	Oconee 309.04	Anderson 109
Population	2,454	7,526	4,085	3,148	4,688	3,020	4,504
Percent Change by Tract Between 2010 and 2020				28.3%	2.4%		10.3%
Study Area Population Total 2010							14,065
Study Area Population Total 2020							15,360
Percent Change Total Between 2010 and 2020							9.2%

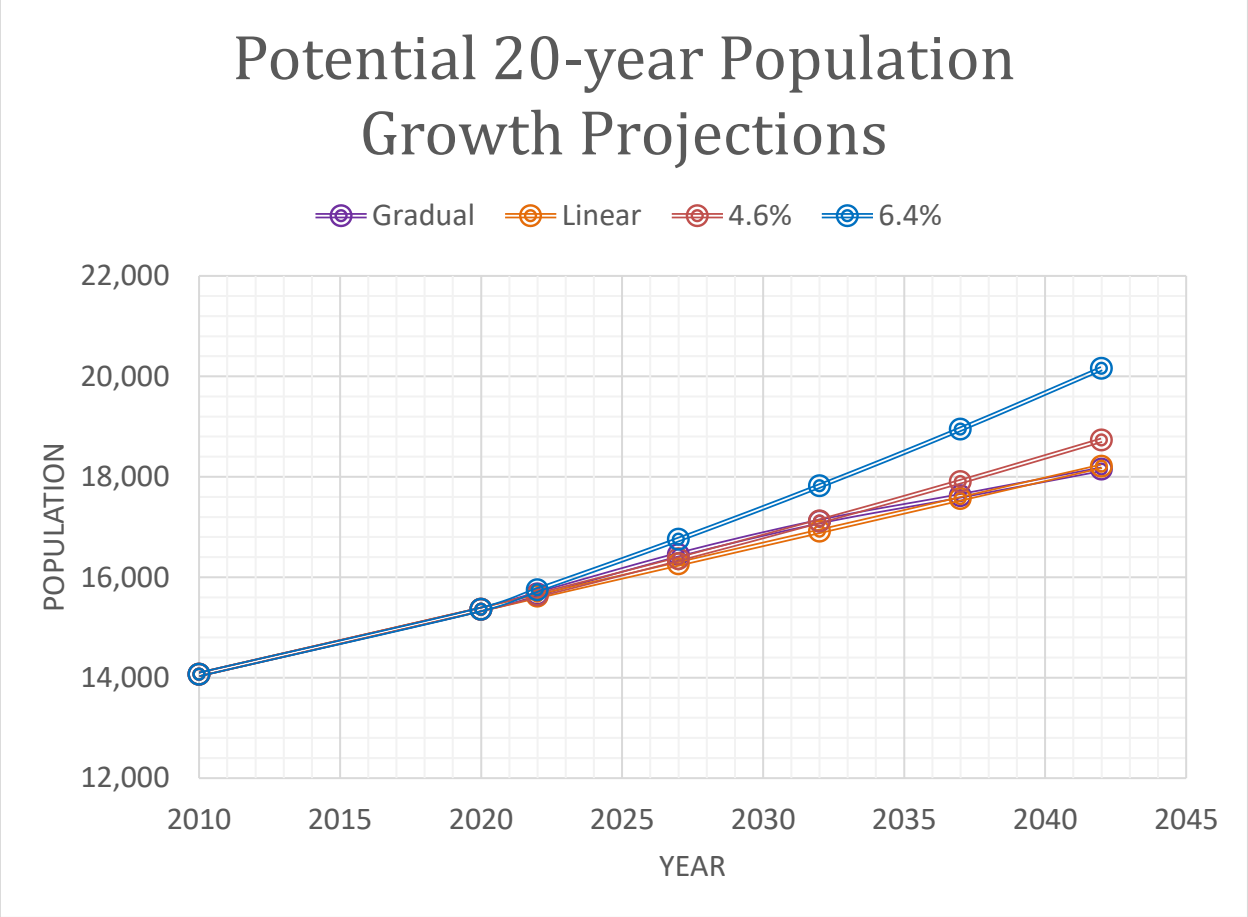
Notes: Data from the U.S. Census Bureau; Decennial Census P1 2010 Race; Decennial Census P1 2020 Race; <https://data.census.gov/cedsci/>; generated February 1, 2022.

According to stakeholder information, the Upstate of South Carolina has been experiencing significant growth and it was articulated by many stakeholders that the lack of sewer in the study area could be hindering possible growth within that region, potentially losing out on its share of the growth. The most recent census tract data indicates that the growth happening in the study area is more concentrated within the census tract that is on the western edge of Oconee County along Lake Harwell (census tract 309.01). Census tract 309.02 in Oconee from 2010 became two census tracts in 2020 – 309.03 and 309.04.

This data was presented to the stakeholder group at the second meeting along with four growth scenarios (Chart 1). The four growth scenarios assume different levels of growth starting with the same known total populations for the study area for 2010 (14,065 persons) and 2020 (15,360 persons). Each growth scenario estimated the current population for 2022 and then extrapolated over the 20-year study period in five-year increments (2022-2027, 2027-2032, 2032-2037, 2037-2042). The scenarios are in order as follows:

1. Gradual Growth
    a. Assumes similar growth to the Oconee County projections from the SC Revenue and Fiscal Affairs Office – 5% initially through 2027, 4% through 2032, and 3% through 2042
    b. This is the growth projection should the rate continue with the trend estimated for Oconee County
    c. Yields 15.9% total growth from 2022-2042 or 2,483 additional persons
2. Linear Growth
    a. Assumes linear growth using the two known data points
    b. This is very similar to the gradual growth scenario
    c. Yields 16.6% total growth from 2022-2042 or 2,590 additional persons
3. 4.6% Growth
    a. Assumes growth will continue at the same rate at each five-year increment that the study area experienced between 2010 and 2020
    b. Assumes a consistent 4.6% growth every 5 years – 4.6% is half of the growth rate of 9.2% observed between 2010 and 2020 for the study area
    c. This is a slightly more aggressive growth model
    d. Yields 19.7% total growth from 2022-2042 or 3,086 additional persons
4. 6.4% Growth
    a. Assumes a consistent 6.4% growth every 5 years – 6.4% is half of the growth rate of 12.7% observed between 2010 and 2020 for the state of South Carolina
    b. Assumes growth in the study area will exceed the rate observed from 2010-2020
    c. This growth model could occur if a catalyst project leads to a significant change in the growth pattern for this area
    d. This is an ambitious growth model, implying the study area will surpass the anticipated growth rates
    e. This model could also help correct for the unknown growth potential that may occur in this area should sewer become more readily available
    f. Yields 28.0% total growth from 2022-2042 or 4,403 additional persons

Chart 1: Potential 20-Year Population Growth Projections



Feedback was requested of the shareholder group after presenting the graphic pictured above. There was some disagreement about how quickly this area could grow. Some felt that if sewer was available, this area could grow rapidly, but others were skeptical about any drastic population changes to this rural area. There appeared to be consensus that the more ambitious 6.4% growth model would be inclusive of a catalyst project in this study area – for example, an industry moving into Golden Corner Commerce Park. The Oconee Economic Alliance informed the project team that they are targeting industry that will increase jobs in this area, but it is unclear how significant that job growth could be and what it could mean for residential growth specifically for this study area. According to the Oconee County Comprehensive Plan, between 2010 and 2019, economic development announcements brought 1,783 jobs into the County as a whole. This difference in opinion was considered during the following steps for sewer infrastructure need projections.

2.6 *Land Use*

In addition to considering census data and receiving feedback from stakeholders about growth within this region, the Project Team considered spatial data to project growth. The Current Zoning for the study

area (Figure 5. Current Zoning) and the proposed Future Land Use for the study area (Figure 6. Future Land Use) from each county's comprehensive plans were studied. The current land use is predominately unzoned, and the future land use is predominately agricultural with some residential. Neither of these provide much assistance with projecting how the area could grow

A constraints analysis was prepared which considered the following items as areas that may not be capable of being developed for feasibility or policy reasons (Figure 7. Constraints):

- Wetlands
- 100-year floodplain
- Hydric soils
- Prime farmland (*see reasoning below*)
- Known conservation easements and protected lands
- Steep slopes greater than 33% over 10 feet

This analysis pointed out that there are some steep slopes near the lake, which would present challenge for sewer infrastructure. Additionally, many of the protected lands are clustered within the triangular area formed by Highways 24, 59, and 243. The study area also contains a significant amount of prime farmlands. Although prime farmland is not a direct constraint to redevelopment, it is important to note where this land is located within the study area since both agritourism, and agriculture are an important economic benefit to this area.

2.7 *Potential Future Sewer*

The Potential Sewer Map (Figure 8. Sewer Potential) shows the opportunity parcels for sewer based on existing constraints for development, current and future land use, stakeholder feedback, and adherence to smart growth principles, focusing on main corridors and nodes for development. Specific opportunities were noted throughout this process:

- Develop along the main corridors such as I-85, Hwy 11, Hwy 24, Hwy 243, and Hwy 59
- Develop industry at and adjacent to Golden Corner Commerce Park along Hwy 59.
- Capitalize on outdoor recreation as an opportunity for growth
- Align growth to complement the Village of Fair Play development goals

The following were not considered as part of the planning process and would be dependent upon the feasibility of sewer installation based on engineering requirements:

- Consideration to tourism, rentals, and second homes, particularly along Lake Hartwell, which are already significant within this study area.
- Sewer to aging package plants within specific communities, for example, Chickasaw Point and Foxwood Hills.

This analysis was the basis for sewer projections moving forward with this study.

2.8 *Joint Treatment Plant Potential for Anderson and Oconee Counties*

Prior to and during this study, both Anderson and Oconee Councils met separately in executive session[3] to discuss the potential of a new, regional sewer plant that could result in a partnership between the two

[3] Oconee County Council discussed this at their August 16, 2022 meeting, where they revealed the project was formally known under an economic development codename, Project Harmony, which was first acknowledged as

counties. At the end of the project analysis, Weston & Sampson and Bolton & Menk were made aware of these conversations, and we were provided two draft engineering reports prepared by Goodwyn Mills Cawood (GMC) that reflected previous work on this topic. One report was prepared for Oconee Economic Alliance and the other was prepared for Oconee and Anderson Counties. The following are the planning implications for future sewer planning from these GMC reports:

- Both GMC reports and the efforts within this report consider a very similar study area.
- Future sewer infrastructure phasing in this report (OJRSA Fair Play and Townville Area Sewer Basin Plan) reflects a public engagement process, while the GMC reports were not informed by a public engagement process. As a result, the goals reflected in the GMC reports were different from those that were expressed by the stakeholder group and from the public survey that this project gathered.
- The GMC reports made future growth potential assumptions that were high level and did not take land use into consideration. As a result, the areas targeted for growth led to different phasing recommendations.
- Both GMC reports identify the potential impact and increased demand for sewer needs at Golden Corner Commerce Park should an economic development project arise in the area.

an executive session item for consideration at the December 7, 2021 meeting. Anderson County Council's first publicly referenced a joint treatment plant with Oconee County at their October 5, 2021 meeting and continued considering it as late as their July 19, 2022 meeting.

3.0 PLANNING RECOMMENDATIONS AND CONCLUSIONS

The following recommendations are based on research, stakeholder conversations, and public involvement with respect to the scope of work performed by Bolton & Menk.

1) Consider revisiting the current guidelines for the Oconee County overlay districts. There is a concern about targeting specific land uses and specific types of development to aid in the growth of the study area based on the public feedback.
2) Although not readily available, it would be beneficial to work with SCDHEC to further understand where failing septic systems within the study area may be located for a more proactive approach to sewer connections or septic repair/replacement.
3) Public opinion was predominately divided between strong opposition and strong support for sewer within this study area. In addition to the general confusion around the 300-foot rule based on current OJRSA Sewer Use Regulation, there was also a clear divide between responders' opinions about which wastewater solution, septic or public sewer, was better for the environment. We suggest a partnership with other public entities including the Army Corps of Engineers, SCDHEC, Clemson University Center for Watershed Excellence, Anderson County, Oconee County, and Lake Hartwell Partners for Clean Water for public outreach explaining the pros and cons to both, including publicly available supporting data. This could potentially be funded by a grant.
4) Perform an Oconee County-wide study to be inclusive of all potential growth areas for a more holistic view of sewer needs. We suggest including census tract 109 in Anderson County for a more comprehensive basin approach, should a potential cross county partnership remain viable. We also suggest combining this effort with a land use analysis that considers both sewer and water infrastructure. This would better align with the goals articulated in the Oconee County Comprehensive Plan.
    a) Should additional public engagement/surveying occur, adding some demographic questions could assist with better understanding the financial hardship existing users may experience should they be required to connect newly available potential sewer. Additionally, we would recommend gathering better location information from survey takers to confirm inclusive participation.
    b) Consider revisiting the current zoning and future land use in partnership with Oconee and Anderson Counties. There are inconsistencies between the current maps, public feedback, and the Comprehensive Plans, especially with respect to where growth and development should take place.
5) Clarify the OJRSA Sewer Use Regulation Section 2.4, 300-foot rule and provide communication to the public. According to the survey, existing septic users are very concerned about the cost to connect if they already have a viable septic system. Additionally, there was concern about the word "required" within the regulation and what exceptions would be allowed from OJRSA that are categorized as "unusual" or "specific". We recommend that the existing policy be reviewed and revised, and public outreach performed to lessen the current confusion and concern. A path forward should be determined for current septic users within the study area and the potential for incentives to connect to new public sewer lines. Articulating what will happen to existing septic users is important for public transparency. Septic tanks will continue to fail sporadically and having an incentive plan may help alleviate waiting until failure of existing septic systems occurs.
    a) Consider updating Oconee County's municode website to clarify that the 300-foot rule language has been repealed and only OJRSA has such a regulatory requirement, if this is indeed the case.

b) Should OJRSA/Oconee and Anderson embark on a treatment plant together, it is recommended that the counties have consistent approaches for handling grandfathered uses within the sewer basin, as well as future connections. Revisions to the current language should take into consideration the financial burden implications to residents within this rule, which may require additional study and outreach.
c) Should Oconee and Anderson embark on a treatment plant together, it is recommended that both utilize and enforce a commonly agreed upon set of ordinances/regulations that are identical and enforceable across county lines for the system that will be served by this treatment facility.
d) Analysis should be performed to determine at each stage of sewer expansion if the wastewater system itself has the capacity to handle all the potential volume from property owners that would be required to or could potentially connect.
e) Should it be determined that the financial burden could be unattainable for some residents, Oconee and Anderson County could consider an annual stipend or grants that provide assistance for residents to apply as an offset to the costs to connect to sewer. This could be beneficial to Oconee County as they are required to subsidize the operation and maintenance of the retail sewer in the county if OJRSA is not able to receive enough revenue from the connected users to offset these expenses. If more customers are connected, especially in areas where gravity sewer is already available, then more revenue is likely achieved and costs for each user should be reduced.

6) Future assessments and considerations
a) At a minimum, this plan - the Fair Play and Townville Area Sewer Basin Plan – should be revisited every 3 years or after a major change to the area such as a catalyst project or development.
b) We also recommend that the stakeholder group established by this planning process continue to meet twice a year for a facilitated conversation regarding sewer in order to maintain the positive momentum established during this project.
c) We suggest also adding an agricultural / farming interest person or persons to the stakeholder group.

4.0 SEWER IMPLEMENTATION PLANNING

4.1 *Assumptions*

The planning portion of the project detailed in the Section 1.0 identified areas where there is interest in developing or would be well suited to developing. The planning also provided estimates for population growth over the 20-year study period. The third piece of this analysis involves looking at the area from a sewer infrastructure perspective based on the results of the initial planning assessment.

Certain areas that are near existing infrastructure or in low-lying areas easily served by gravity sewer can be served with sewer more economically than others. By considering all of these factors, a sewer master plan can be developed that provides a road map to serve the area that balances capital improvement costs, provides flexibility to expand the system beyond the planning period, and meets the needs of the community while providing growth opportunities where the community would like growth. The population projections for the study area can be allocated in large part to these areas served with sewer since sewer infrastructure will be a significant driver for where population growth will occur.

The analysis looks at what anticipated population growth means as far as wastewater flows for sizing the system and what the population growth means as far as adding customers to fund the improvements. Assuming higher customer growth would be conservative from an infrastructure sizing perspective but less conservative from a funding perspective. As a result, the analysis used separate assumptions for sizing the system and for projecting what the revenue might be as that infrastructure is installed.

Sewer system infrastructure is typically sized for a 20-year timeframe or longer, because the incremental cost of building infrastructure for a longer-term flow is cheaper and less impactful to the public than having to build upgrades over a 20-year period. Therefore, for the basins which were projected to be served with sewer within the 20-year timeframe, it was assumed that 50 percent of the present population would connect to the new sewer within the 20-year timeframe. This percentage is a conservative number since current residents would have existing septic tanks, and many would not have a need to tie on during a 20-year period. Also, it is common for a septic tank or associated facilities to require expensive repairs or replacement within the 20-year period and many of these customers will either elect to connect to sewer or be required to by state regulations. Furthermore, additional sewer lines would need to be extended into the basin over the 20-year period to fully serve the basin. The sizing calculations assumed that all new residents would be connected to sewer, since development in the area would tend to aggregate near areas served with sewer.

For the revenue projection assumptions, we assumed 100% of new residents adjacent to gravity sewer would connect to sewer as it's made available. If all new residents are assumed to be connected to the sewer, then it is reasonable to expect all new residents to be paying customers. For projecting revenue due to existing residents, two options were evaluated:

- Zero existing residents connecting to sewer
- 50% of the existing residents within a 300-foot distance of the proposed sewer infrastructure.

In the end, the revenue resulting from new residents was significantly more than the revenue from either existing resident scenario, and as a result, did not affect the conclusions regarding projected revenue.

4.2 *Methodology*

Available GIS contour data was used to delineate the study area into 28 different sub-basins (**Figure 9. Sub-basin Boundaries for Study Area**).

The sub-basins were labeled and relationships between drainage areas defined (**Figure 10. Sub-basin Boundaries for Study Area with Labels**). For instance, N-1 was designated as a sub-basin draining directly into Lake Hartwell. Two sub-basins (N-2 and N-3) both drain to N-1. Further upstream, N-2A drains to N-2 and N-3A to N-3. These drainage relationships help define what flows will be conveyed to sub-basins further downstream in the analysis.

Where described below, residences within each subbasin were estimated from reviewing parcel maps and aerial photography, and are included in Table 4.

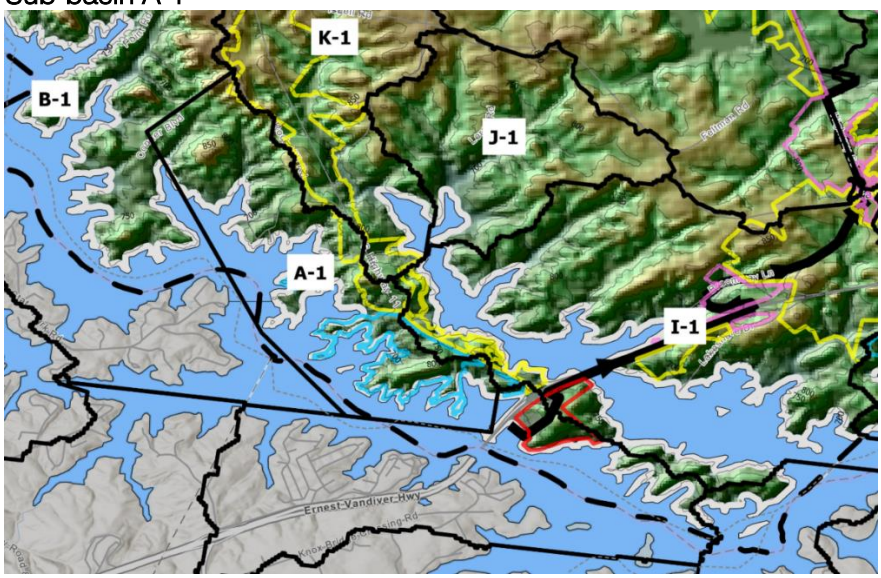
4.3 *Sub-Basin Focus*

Based on the criteria described above, the following subbasins were identified as good prospects for sewer infrastructure and additional development:

4.3.1 A-1

Subbasin A-1 includes the western side of Highway 11 at Exit 1. On the east side of Exit 1 is an existing restaurant, fireworks store, and office building, that is currently served by septic. Additional existing developments served by septic are Cherokee Bay, Heritage Shores, and Lake Hartwell State Park.

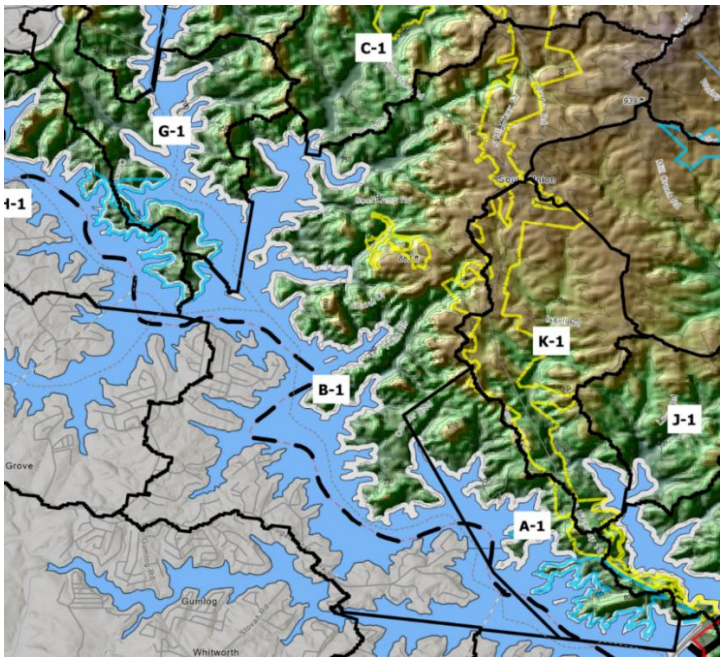
Sub-basin A-1



4.3.2 B-1

Subbasin B-1 continues up the western side of Highway 11 along the Savannah River branch of Lake Hartwell. The Chickasaw Point subdivision is currently served by a private collection system and a wastewater treatment plant that provides partially treated water to the neighborhood golf course for irrigation.

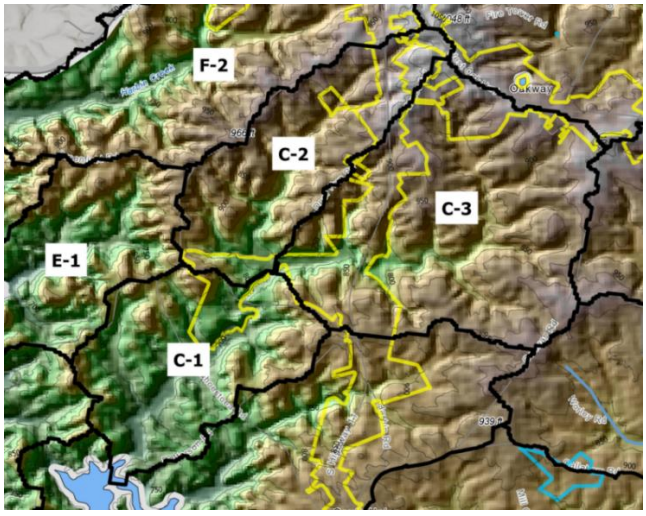
Sub-basin B-1



4.3.3 C-2

Subbasin C-2 is further inland from Lake Hartwell near the West Oak area, and currently has about 140 residences within the basin. Flow from the subbasin would flow by gravity to C-1 which is not suitable for future development due to steep topography around Lake Hartwell.

Sub-basins C-2 and C-3



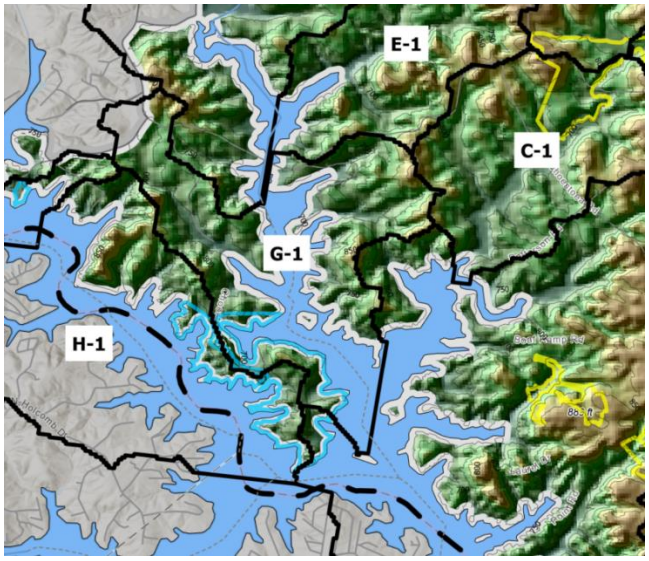
4.3.4 C-3

Subbasin C-3 is to the south of C-2 bisected by Highway 11, and currently has about 370 residences on septic systems within the basin. Flow from the subbasin would flow by gravity to C-1 which is not suitable for future development due to steep topography around Lake Hartwell.

4.3.5 G-1

Subbasin G-1 is in the far northwest portion of the study area. Foxwood Hills subdivision, currently sewered by a private collection system and treatment plant, is contained in this basin as well as others. All wastewater flow is assumed to be conveyed to the treatment plant in subbasin G-1. Thus, the flow for the entire subdivision is allocated to G-1. There are currently approximately 1,330 residences in the subbasin.

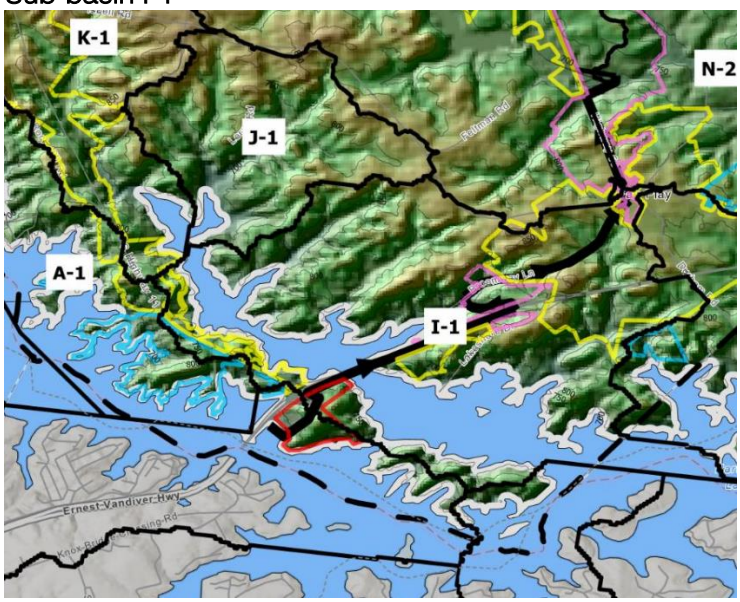
Sub-basin G-1



4.3.6 I-1

Subbasin I-1 includes the Exit 2 area the Welcome Center Pump Station at Exit 1, and Sanctuary Pointe, which will soon be served by the Sewer South project, slated to be constructed by mid-2024. The completion of the project will make this an advantageous and strategic subbasin to add sewer infrastructure. Additionally, the Welcome Center Pump Station at Exit 1 that will be constructed as part of the Sewer South Phase II project will convey flow to this subbasin, so wastewater from that area is allocated to I-1 as well. There are currently approximately 375 residences in the subbasin.

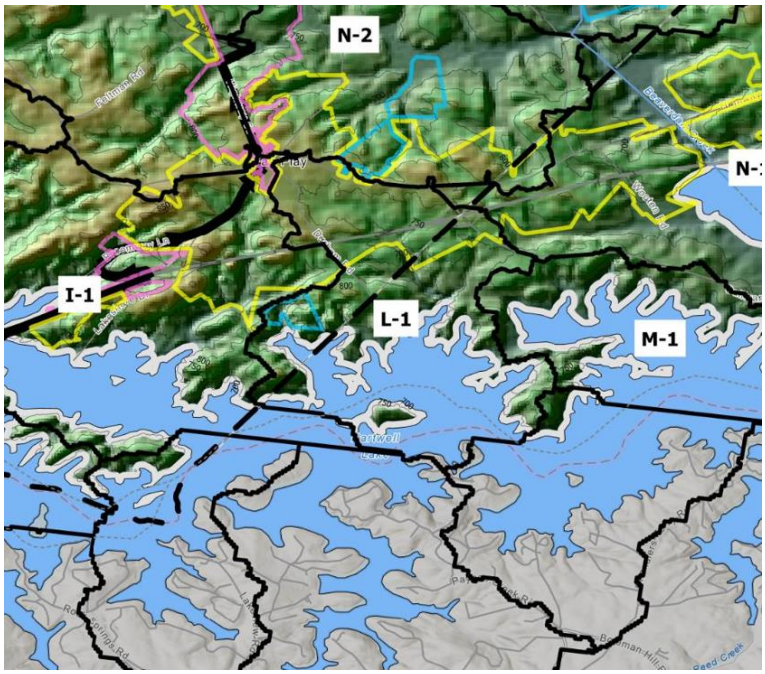
Sub-basin I-1



4.3.7 L-1

Subbasin L-1 includes the Exit 4 area that straddles the Oconee County / Anderson County line. There are currently approximately 315 residences in the subbasin, the Carolina Landing campground, plus a 15,000 gpd treatment package plant that serves the truck stops at Exit 4. L-1 has areas near the lake that have fairly steep topography that could inhibit significant sewer construction.

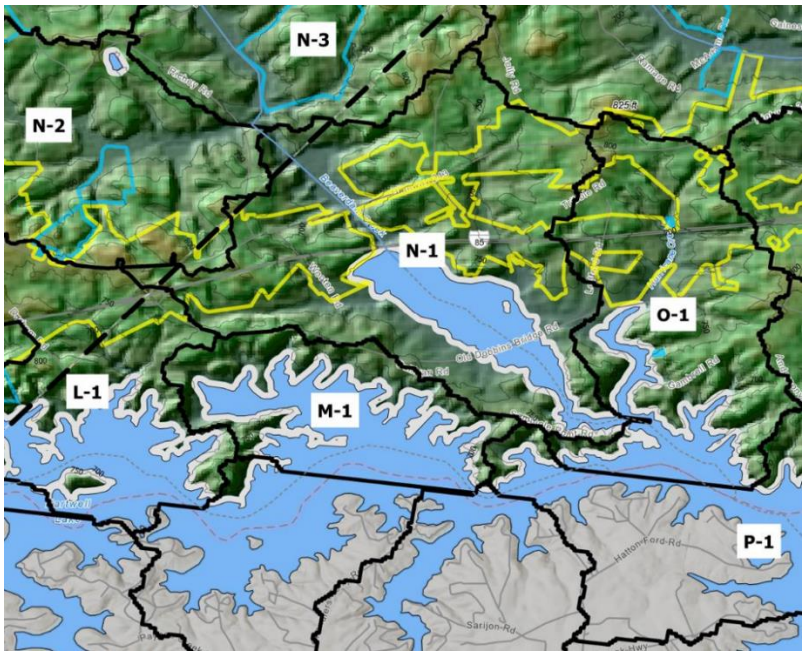
Sub-basin L-1



4.3.8 M-1

Subbasin M-1 lies along Lake Hartwell in Anderson County west of L-1. There are currently approximately 330 residences on septic systems in the subbasin. M-1 has areas with fairly steep topography near the lake.

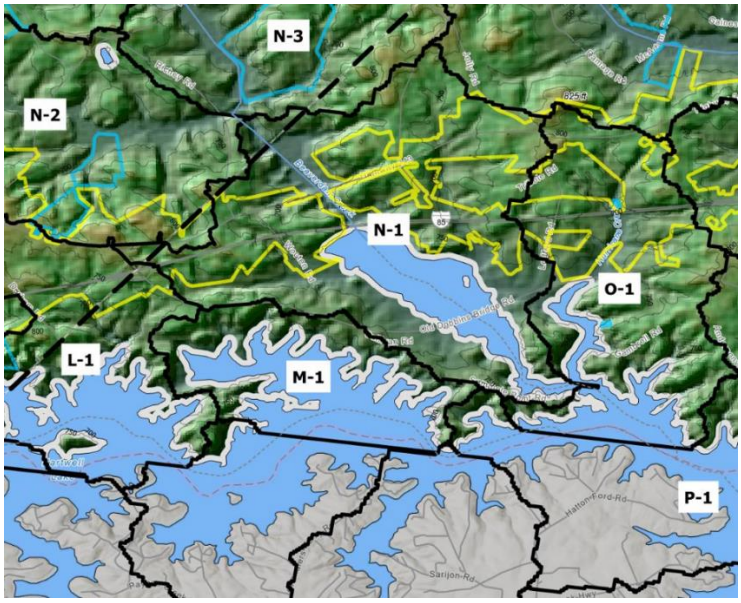
Sub-basin M-1



4.3.9 N-1

Subbasin N-1 lies along Lake Hartwell in Anderson County west of M-1. Beaverdam Creek flows through and discharges to Lake Hartwell within the subbasin. There are currently approximately 336 residences in the subbasin.

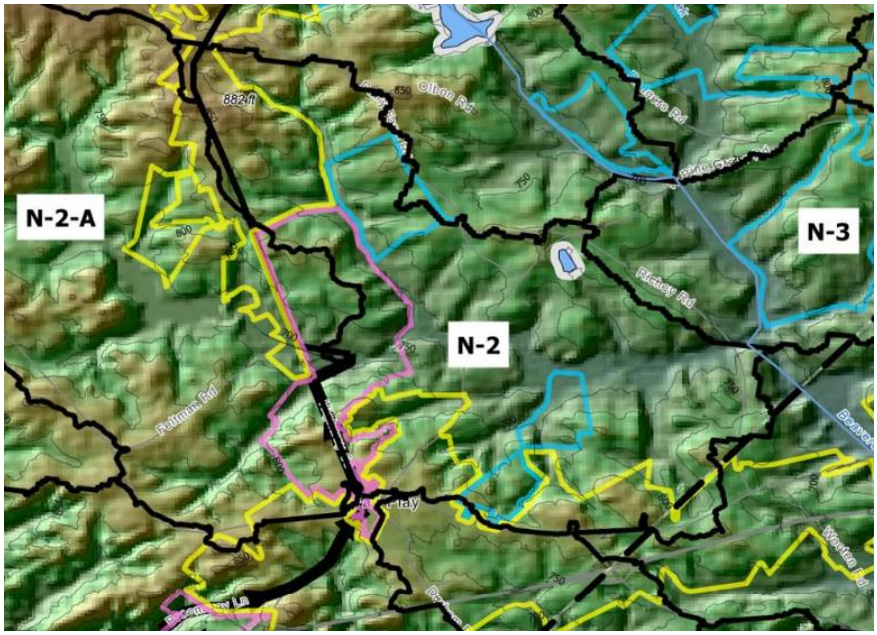
Sub-basin N-1



4.3.10 N-2

Subbasin N-2 lies along Beaverdam Creek upstream of N-1. The northeastern quadrant of the Town of Fair Play lies within the basin, and all flow east of Highway 59 and north of Highway 243 in Fair Play would flow into N-2. The Golden Corner Pump Station is at the upper end of the N-2 subbasin. There are currently approximately 235 residences in the subbasin.

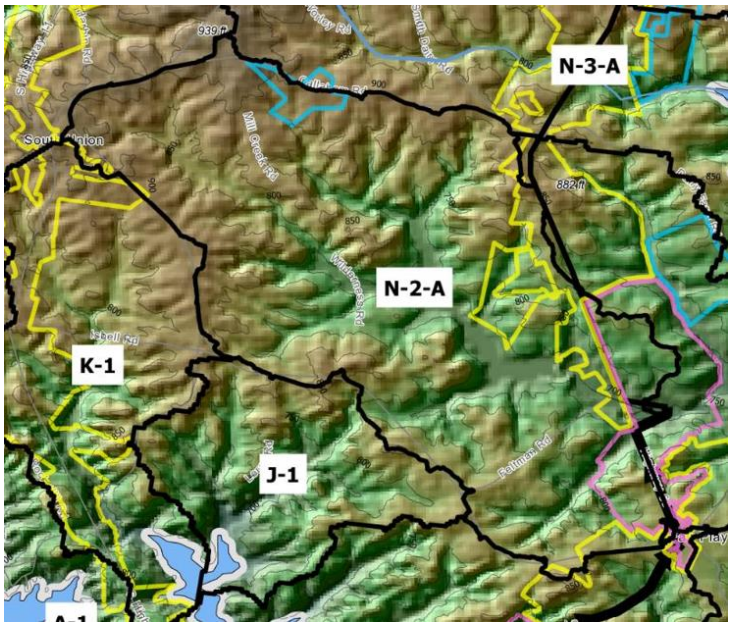
Sub-basin N-2



4.3.11 N-2-A

Subbasin N-2-A lies along Beaverdam Creek upstream of N-2. The northwestern quadrant of the Town of Fair Play lies within the subbasin. The Golden Corner Pump Station lies at the bottom of the subbasin, and so all flow within N-2-A would flow by gravity there. There are currently approximately 370 residences in the subbasin.

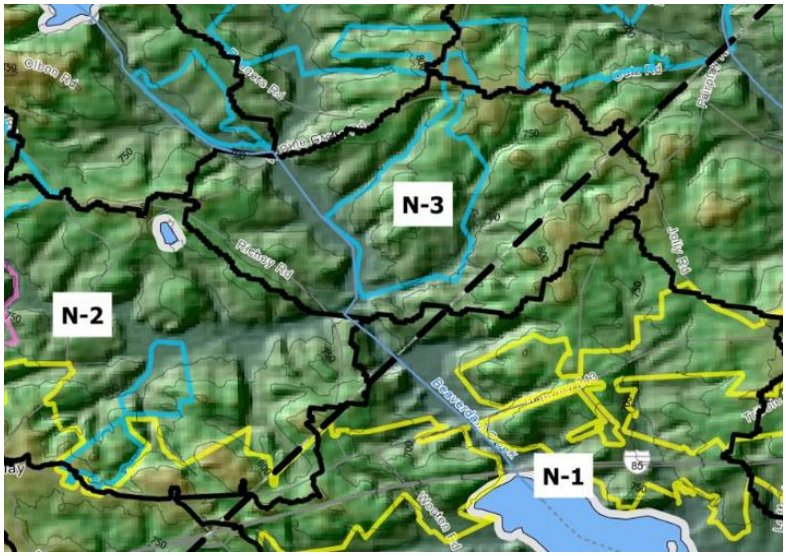
Sub-basin N-2-A



4.3.12 N-3

Subbasin N-3 is centered along the eastern tributary of Beaverdam Creek east of N-2, upstream of N-1. The lower 20% of the basin lies in Anderson County; the remainder is in Oconee County. There are currently approximately 72 residences in the subbasin.

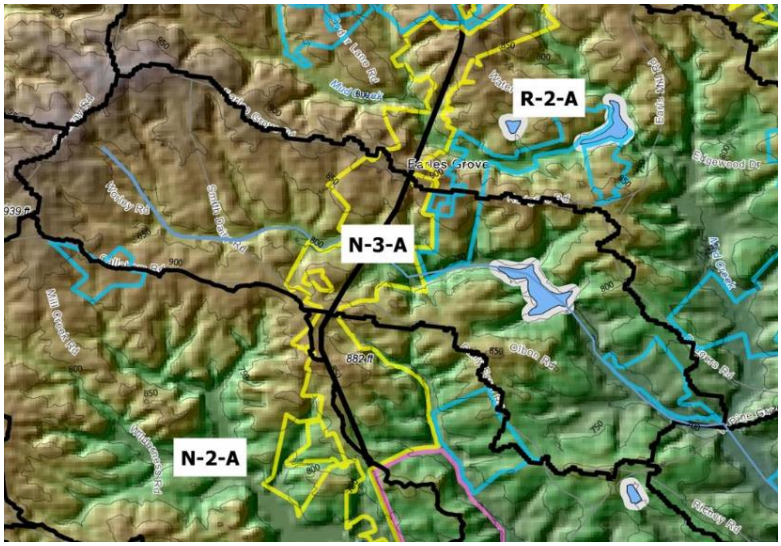
Sub-basin N-3



4.3.13 N-3-A

Subbasin N-3-A lies along Beaverdam Creek upstream of N-1. There are currently approximately 150 residences in the subbasin.

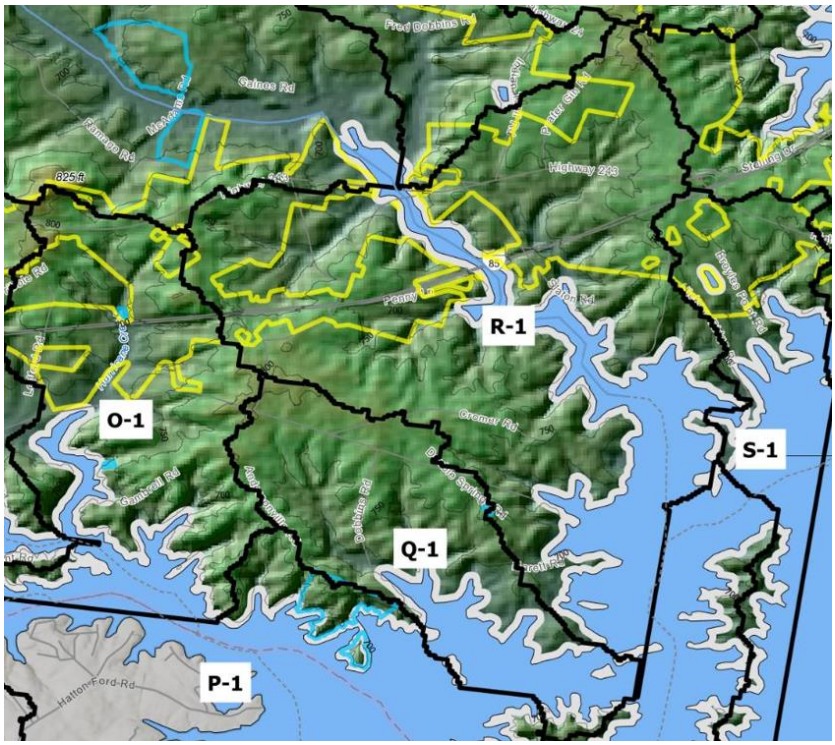
Sub-basin N-3-A



4.3.14 R-1

Subbasin R-1 lies along Lake Hartwell and includes the western half of the Exit 11 (Highway 24) area. In addition to a few convenience stores, there are currently approximately 407 residences in the subbasin.

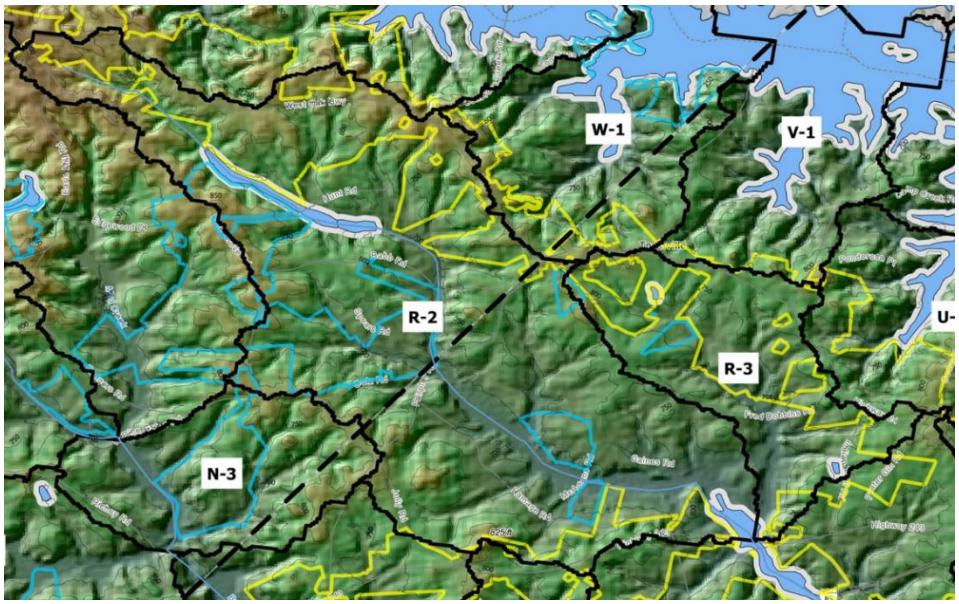
Sub-basin R-1



4.3.15 R-2

Subbasin R-2 lies further inland from R-1 extending to the southeastern corner of West Oak and drains into R-1. The subbasin is largely undeveloped, but the northeastern boundary of the subbasin is Highway 24, so any future development within the subbasin would likely occur there. There are currently approximately 383 residences in the subbasin.

Sub-basins R-2 and R-3



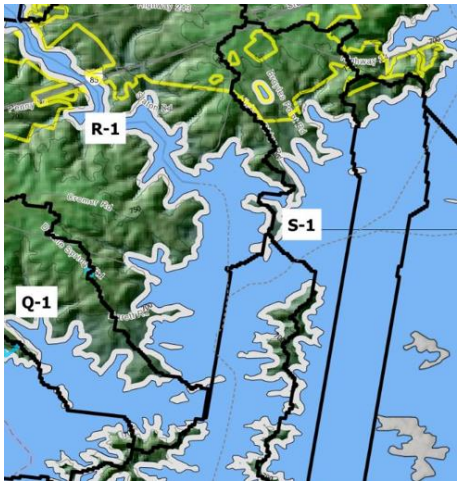
4.3.16 R-3

Subbasin R-3 lies further inland from R-1 along the southern side of Highway 24 near the Exit 11 intersection. There are currently approximately 150 residences in the subbasin.

4.3.17 S-1

Subbasin S-1 includes the southeastern quadrant of the Exit 11 intersection and drains to Lake Hartwell. There are currently approximately 175 residences in the subbasin.

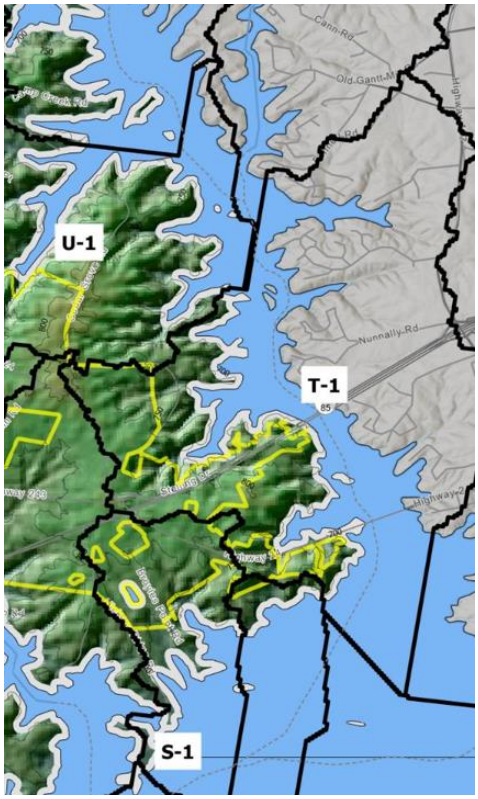
Sub-basin S-1



4.3.18 T-1

Subbasin T-1 includes the northeastern quadrant of the Exit 11 intersection and drains to the Seneca River branch of Lake Hartwell. There are currently approximately 173 residences in the subbasin.

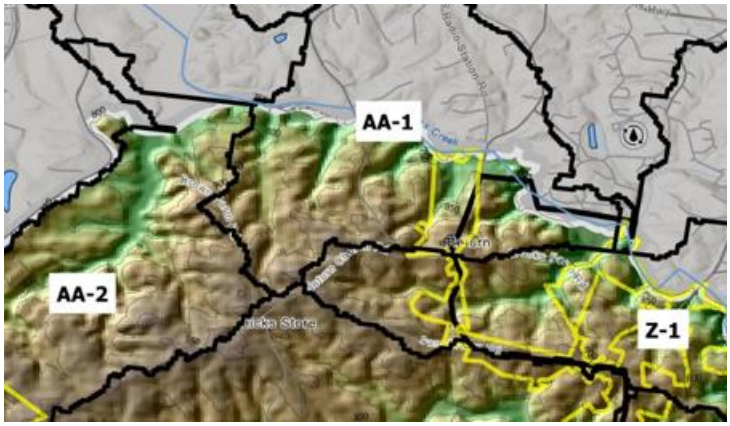
Sub-basin T-1



4.3.19 AA-1

Subbasin AA-1 lies in the very northern corner of the study area. It connects to a currently sewered area served by a 36-inch interceptor just upstream of Coneross Creek WRF. There are currently approximately 116 residences in the subbasin.

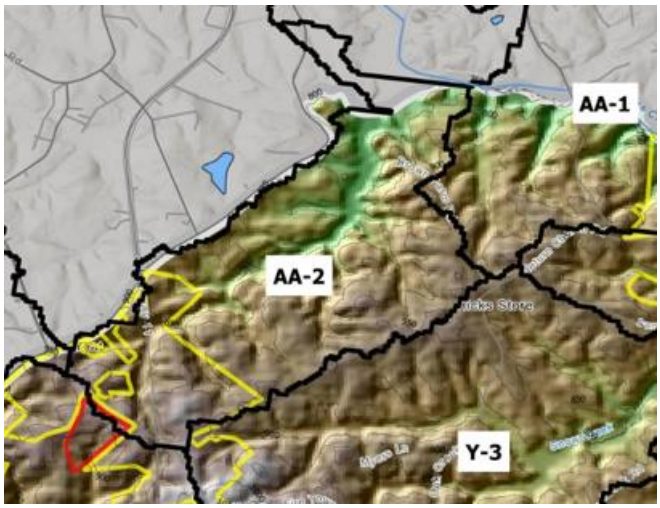
Sub-basin AA-1



4.3.20 AA-2

Subbasin AA-2 is upstream of AA-1. The Oakway community is in the subbasin, as well as West Oak High School, which is currently served by an existing dedicated wastewater treatment facility. There are currently approximately 265 residences in the subbasin.

Sub-basin AA-2



4.3.21 Future Flow Projections

As noted in Section 2.5, a variety of population growth projections were considered. The most aggressive projection, a net population growth of 4,403 people over the 20-year period (6.4% growth) was carried forward into the engineering projections. Stakeholders agreed that this aggressive projection would be inclusive of the growth that may occur, should a catalyst project such as an employee-heavy industry moving into Golden Corner, were to come to fruition. This projection was selected for the engineering analysis as it would provide for the most conservative sizing assumptions to ensure that the infrastructure that was planned would be sufficient to accommodate future growth over the planning period. This population was then allocated to each subbasin as shown in Figure 11. Basin Population Growth Estimates.

Once the focused subbasins were identified, population growth over the 20-year period was allocated to each subbasin. To do so, several factors were considered. Future known development projects were identified by stakeholders in the B-1 and G-1 subbasins along Lake Hartwell, and population growth was allocated there accordingly. Additional population growth was then focused on those subbasins that will have sewer infrastructure plus other advantageous characteristics including interstate access, topography, proximity to other developed areas, etc: I-1 (Exit 1 and 2), L-1 and M-1 (Exit 4), and R-1, S-1, and T-1 (Exit 11). Those subbasins were assumed to grow by 33% over the 20-year period. Subbasins N-2 (Town of Fair Play), and AA-1 and AA-2 (Oakway community) have a community footprint already but are not as close to the interstate and Lake Hartwell, and were allocated 6-7% as a result. The remainder of the basins were then allocated 0-2% growth depending on the favorability of the basin for development.

In addition to the residential growth, some targeted commercial growth was also projected at the Exit 1, Exit 2, and Exit 11 subbasins. Sanctuary Pointe, at Exit 1, is an area of undeveloped land that has been considered for a potential development project for decades. While it is unknown whether any development will ultimately occur, it was considered in the future flow projections for this study. The 300,000 gpd flow estimate for that development was allocated to the I-1 (Exit 2) subbasin because it would be pumped to that basin through the new Welcome Center Pump Station as part of the Sewer South project.

Specific industrial flows are not projected, as the magnitude of them can vary widely. Industrial developments such as warehouses can require large amounts of land but have very low wastewater flows. Conversely, there could be industrial developments that have smaller footprints but that could be very water-intensive. New industrial developments that produce large volumes of wastewater typically contribute capital improvement funds for needed infrastructure upgrades as part of their developments.

Important notes:

- All costs stated within this section are in 2023 dollars and are not adjusted for inflation or other factors[4] that are unknown at the time this report was completed.
- Project costs include construction, plus a 30% allowance for "soft costs": design, stand, legal services, land purchase, etc. A 20% project contingency is included in the costs as well.
- Unless otherwise indicated, this study does not include the project cost for smaller collection lines that will need to be extended beyond the main trunk sewers described herein. The main trunk sewers are the larger lines that form the backbone of a sewer system; there will also be smaller collector lines that may be constructed within the neighborhoods or to serve smaller clusters of properties. These collector lines will typically be funded and constructed by developers as part of projects to provide sewer service to future developments.
- Some subbasins above (mainly along the lake) have been noted to have steep topography that could inhibit either denser development or sewer construction. Areas like this could be served by grinder pump systems (a small pump system individually owned and located at each house) or low pressure grinder sewer systems (owned and operated by OJRSA that would serve multiple houses in small developments). Both would pump to a public gravity sewer system, and could share force mains where appropriate.

A summary of the projected flow calculations are shown in Table 4:

[4] Examples: Changes in regulations governing treatment technology requirements and wastewater-related construction materials, considerable levels of rock that cannot be accounted for in a basin study, supply and demand of materials, escalation of land and easement costs for purchase, infrastructure-related demands caused by government or other programs such as the American Rescue Plan Act of 2021, etc.

Table 4. Projected Flow Calculations by Subbasin

Table 4: Projected Flow Calculations By Subbasin								
Subbasin	Area (acres)	Existing Septic Residences In Basin [1]	Total Existing Flow[2] (gpd)	Projected New Residences[3]	Projected New Residential Flow[4] (gpd)	Projected New Commercial Flow[5] (gpd)	Total Projected New Flow[6] (gpd)	Total Projected 20-Year Flow[7] (gpd)
A-1	1,008	40	5,988	-	-	20,000	20,000	25,988
B-1	5,210	680	88,400	346	103,844	-	103,844	192,244
C-2	1,140	140	18,200	3	989	-	989	19,189
C-3	2,283	370	48,100	8	2,472	-	2,472	50,572
G-1	1,237	1,331	173,030	659	197,799	-	197,799	370,829
I-1	2,648	375	48,750	124	37,087	325,000	362,087	410,837
L-1	1,322	315	80,950	104	31,153	25,000	56,153	137,103
M-1	693	330	42,900	109	32,637	-	32,637	75,537
N-1	2,963	336	43,680	8	2,275	-	2,275	45,955
N-2	2,726	235	30,550	15	4,549	-	4,549	35,099
N-2-A	4,189	370	48,100	9	2,571	-	2,571	50,671
N-3	1,557	72	9,360	2	494	-	494	9,854
N-3-A	3,292	150	19,500	3	989	-	989	20,489
R-1	3,728	407	52,910	134	40,252	20,000	60,252	113,162
R-2	6,990	383	49,790	8	2,472	-	2,472	52,262
R-3	1,873	150	19,500	-	-	-	-	19,500
S-1	778	175	22,750	58	17,307	10,000	27,307	50,057
T-1	1,168	173	22,490	57	17,110	10,000	27,110	49,600
AA-1	1,068	116	15,080	8	2,275	-	2,275	17,355
AA-2	1,842	265	34,450	18	8,100	-	5,341	39,791
TOTALS	47,714	6,413	933,268	1,693	501,168	410,000	911,618	1,801,096

[1] *Calculated from review of parcels and aerial photography*

[2] *Assumes 50% of the septic residences tie on to the sewer within the 20-year period (for infrastructure sizing purposes*

[3] *Derived from allocating projected growth within the various subbasins based on concentrating future growth in areas with sewer availability and other favorable characteristics for development*

[4] *300 gallons per day per residence*

[5] *Small commercial growth at interstate exits assumed*

[6] *New residential flow plus new commercial flow*

[7] *Total projected new flow plus total existing flow*

4.4 *Scenarios Overview*

The next step was to develop a master plan, which would include identifying infrastructure to serve the area. In many cases, infrastructure development is a step-by-step process. A package treatment plant, pump station or gravity sewer lower in the basin must be built before infrastructure is built further upstream. Emphasis was made to install the lower infrastructure to facilitate additional system expansion as the study period progresses. Additionally, emphasis was made to develop infrastructure in the areas identified as being best suited to spur development, such as around the interstate exits. Over the course of the study, it became apparent that it would be helpful to identify various levels of investment and note that there could be multiple ways to serve the area with sewer. Four options were evaluated:

Scenario 1 (Base)

- The base scenario, which includes serving Exit 1, 2, 4, and 11, Chickasaw, West Oak, and Beaverdam Creek. A WRF was included on Beaverdam Creek near the Oconee / Anderson County line.

Scenario 1B

- The base scenario plus constructing a pump station to take the existing treatment plant at Foxwood and pump it to the new system. During the course of the study, it was discovered that the Foxwood system was in the process of being purchased. It is unclear at this time if the new owners would be willing to transfer ownership and was not included as a potential expansion area at this time and should be reconsidered in the future.

Scenario 2

- The base scenario but replacing the WRF at Beaverdam Creek with a pump station and a force main that pumps to the existing Golden Corner force main. Since the Golden Corner PS is eliminated in this scenario, its force main is available to be utilized for repurposing as part of the Beaverdam Creek PS.

Scenario 3

- The base scenario except moving the Water Reclamation Facility (WRF) upstream to the Golden Corner site. This would eliminate development in the Beaverdam Creek basin downstream of Golden Corner. In discussing with OJRSA, the cost savings did not warrant the lack of developable basins, in conjunction with other challenges that made the Golden Corner location not as desirable, such as having a WRF in close proximity to the existing Pioneer Water District water treatment plant. As a result, this option was not further analyzed.

4.5 *Scenario 1*

4.5.1 0-5 Year Plan

The Sewer South project, expected to be complete by mid-2024, will provide sewer service to both Exit 1 and 2 (shown in black in Figure 12. Scenario 1: 0-5 Years). The Welcome Center Pump Station at Exit

1 and the Broomway Pump Station at Exit 2 will convey flow to the Golden Corner Pump Station. That project is already funded and not included in the CIP for the 0-5 year scenario. However, additional projects will utilize those improvements as a sewer backbone for the extension within the area.

The two projects slated for the 0-5 year plan are the Exit 2 Sewer Improvements that will provide the area between I-85 Exit 2 and Lake Hartwell with sewer service, and the Exit 4 Sewer Improvements, which will do the same for Exit 4. The Exit 4 project could additionally eliminate a small treatment system that serves the Loves Truck Stop at Exit 4.

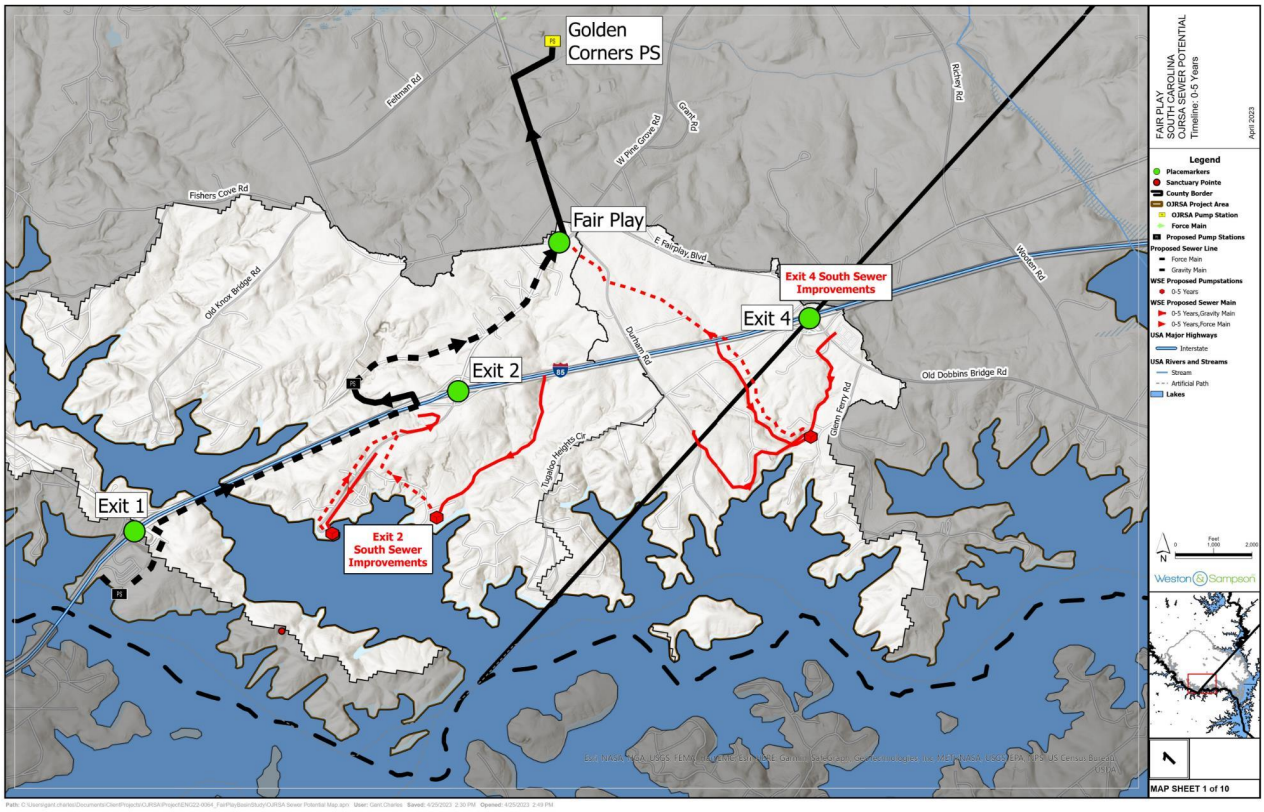


Table 5. Capital Improvement Plan, 0-5 Years

Table 5 Capital Improvement Plan, 0-5 Years			
Basin No.	Project Name	Description	Capital Costs
L-1	Exit 2 South Sewer Improvements	120-gpm pump station, 15,200 L.F. 8" gravity sewer, and 3,000 L.F. 4" force main collecting flow from south side of Exit 2 and discharging to Sewer South at Exit 2	$ 5,300,000
L-1	Exit 4 South Sewer Improvements	120-gpm pump station, 12,900 L.F. 8" gravity sewer, and 5,300 L.F. 4" force main collecting flow from south side of Exit 4 and discharging to Sewer South at Fair Play	$ 5,100,000
		TOTAL	$ 10,400,000

4.5.2 5-10 Years

The second five-year timeframe, from 5-10 years, builds upon the infrastructure created at Exits 2 and 4, and adds infrastructure at the other two interstate exits within the study area, at Exit 1 and Exit 11 (see Figure 14. Scenario 1: 5-10 Years). The Exit 1 Improvements consist of a gravity sewer that collects flow from the northeast side of Exit 11, flowing to a pump station that then conveys it to the Welcome Center Pump Station on the southwest side of the exit. The Exit 11 Improvements will consist of gravity sewer to collect flow from the west side of Exit 11 that flows to a pump station which then conveys it either to a new treatment plant (discussed below) or the Golden Corner Pump Station.

Beaverdam Creek is a favorable geographic location for a wastewater treatment plant to serve the study area. OJRSA's only existing treatment plant, the Coneross Creek WRF, is approximately 14.5 miles away from Exit 11, and to convey flow from the various corners of the study area would entail a significant capital and ongoing maintenance expenses from numerous pump stations and force mains.[5] Constructing a treatment plant on Beaverdam Creek would minimize additional costs, as well as allow future expansion and upgrades at the Coneross Creek to be delayed, thus postponing a necessary significant expense at that site for numerous years. Locating a plant on Beaverdam Creek would allow for eventually eliminating the Golden Corner Pump Station, which is located further upstream on Beaverdam Creek, as it can be served by a gravity sewer extension from the Beaverdam Creek WRF (see 10-15 year plan below). The optimal location for the treatment plant would be in the vicinity of the Oconee / Anderson County line just north of Highway 243.

It is recommended that the WRF be sized for a flow of 1.5 million gallons per day (mgd), but that OJRSA purchase enough land to eventually upgrade the plant to buildout flows of 3.0 mgd or greater. A

[5] Besides the annual cost to operate and maintain pump stations and force mains, these typically have a design life of 20 years before extensive rehabilitation and/or replacement must take place. It should also be planned to replace pumps and other mechanical equipment every 10-12 years for each station. On the other hand, if sized appropriately and growth escalates as projected, then gravity sewers generally have a much longer useful life, typically exceeding 40 years before *some* rehabilitation may be necessary; replacement of a gravity sewer is extremely rare. The costs to operate and maintain gravity sewers over time versus pump stations and force mains is inversely proportional—gravity sewers are more expensive to install initially and cost less over the years whereas pump stations are relatively inexpensive (compared to gravity sewer) to install but may be more expensive in the long run.

sufficient buffer area around the built-out plant should be considered when purchasing the land. For planning purposes, a buffer of 150-200 feet should be considered when purchasing land, but could be decreased depending on neighboring land use, proximity to houses, etc. An area of 8-16 acres would be needed for the original construction of a plant this size with a future parallel train. The need would vary based on shape of the property (the more square a property the less property needed), topography, unusable acreage within the property, treatment method selected, any auxiliary uses envisioned beyond the basic treatment processes, etc. It should be noted that the plant coming online is shown in the 5-10 year timeframe solely because the time to design, permit, and construct a new treatment plant is typically 4-6 years at a minimum after the decision to build one is made. As a result, should OJRSA wish to bring the plant online within the schedule shown, it should begin the preliminary engineering phase as soon as possible.

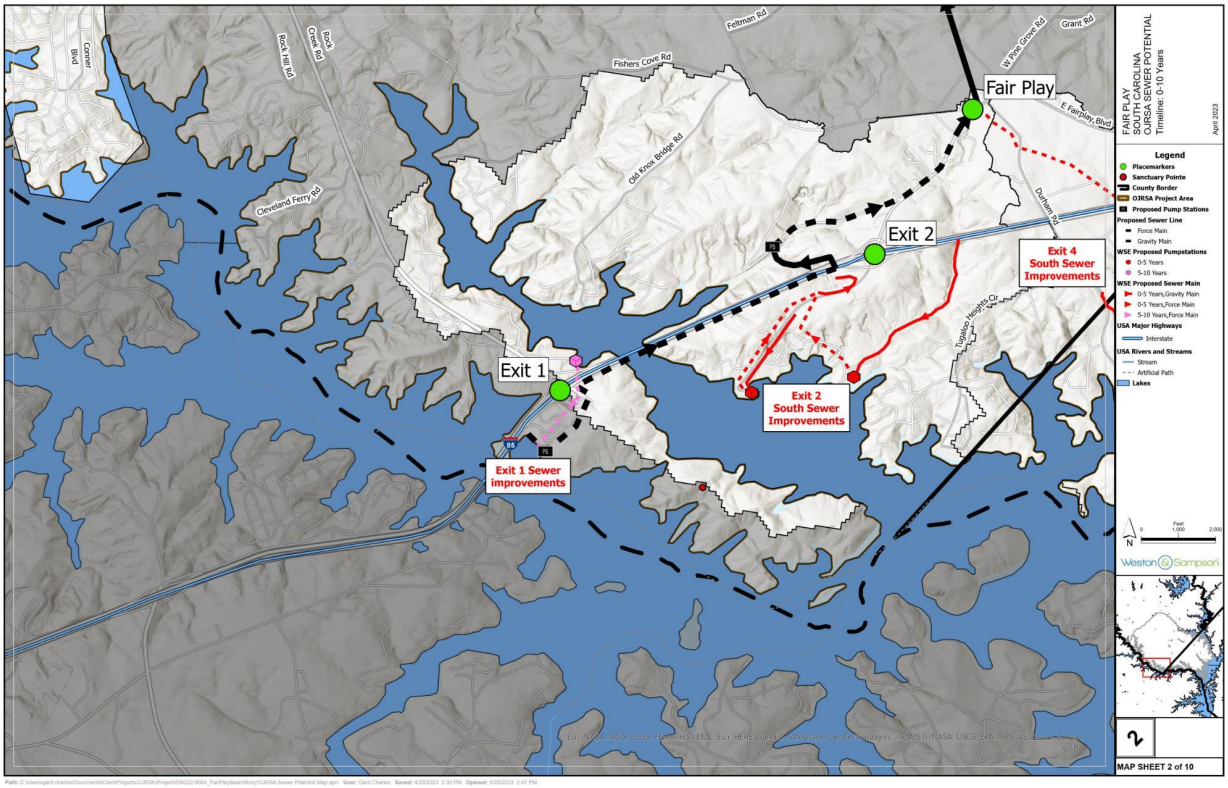
Table 6. Capital Improvement Plan, 5-10 Years

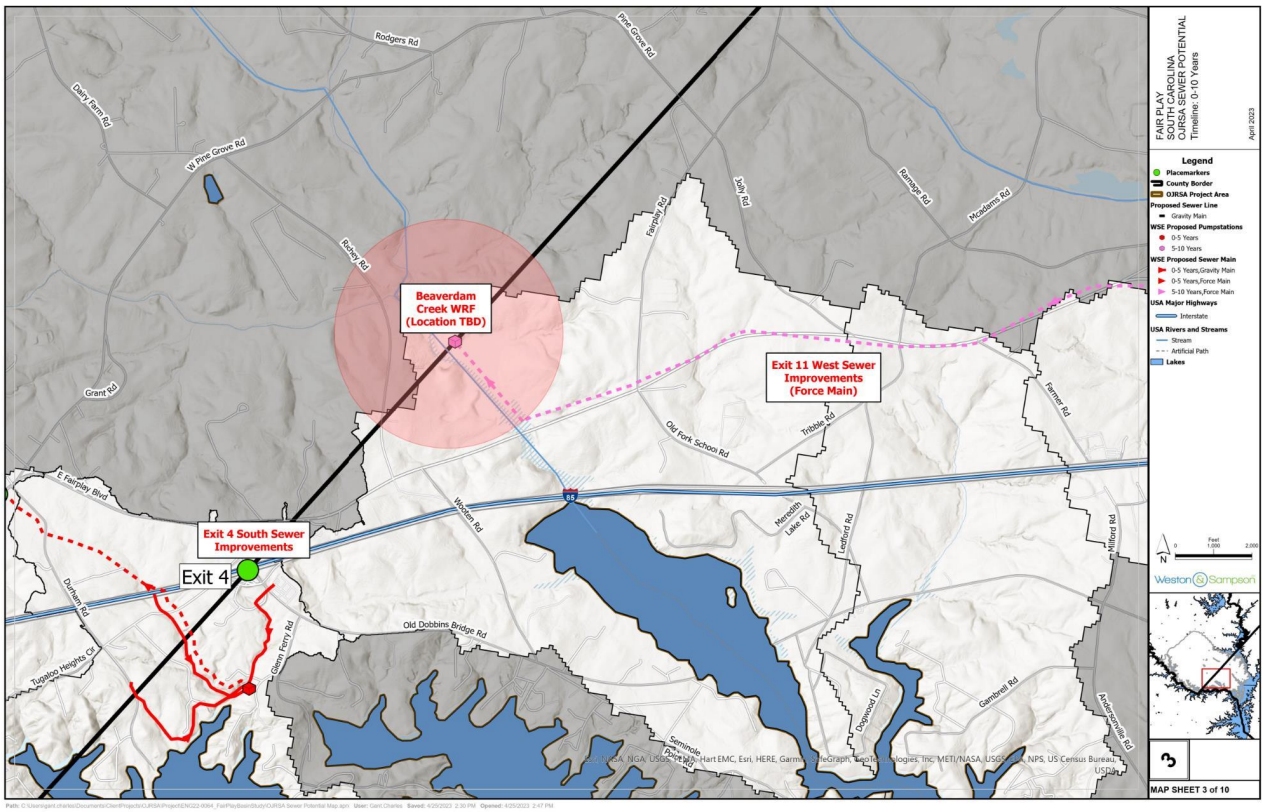
Table 6 Capital Improvement Plan, 5-10 Years			
Basin No.	Project Name	Description	Capital Costs
R-1	Exit 11 West Sewer Improvements	Pump station, gravity sewer, and force main collecting flow from west side of Exit 11 and discharging to Golden Corner PS or Beaverdam Creek WWTP	$ 11,300,000
N-1	Beaverdam Creek WWTP	1.5 MGD WWTP, with land available to expand to 3.0 MGD	$ 32,300,000
A-1	Exit 1 Sewer Improvements	Pump Station, gravity sewer, and force main collecting flow from north side of Exit 1 and pumping to Welcome Center PS	$ 1,400,000
		TOTAL	$ 45,000,000

4.5.3 10-15 Years

The next timeframe, from 10-15 years, will build upon the construction of the Beaverdam Creek WRF by extending gravity sewer up further up Beaverdam Creek, first to take the Golden Corner Pump Station offline (Lower Mill Creek Sewer Improvements) and then to provide sewer service to Highway 11 by continuing the sewer all the way to the top of the basin (Upper Mill Creek Sewer Improvements). Once sewer is extended to Highway 11, then the Chickasaw Point land application system could be taken offline and pumped to the Upper Mill Creek gravity sewer (see Figure 18. Scenario 1: 10-15 Years).[6]

[6] Note: The condition of the Chickasaw Point and other privately owned wastewater collection systems is unknown and is beyond the scope of this study. Before taking ownership of any privately-owned sewer collection or treatment system, the OJRSA should perform a comprehensive assessment of the system to determine its condition and funding needs to rehabilitate it as necessary.


Fair Play
Exit 1
Exit 2
Exit 1 Sewer Improvements
Exit 2 South Sewer Improvements
Exit 4 South Sewer Improvements
FAIR PLAY SOUTH CAROLINA OJRSA SEWER POTENTIAL Timeline: 0-10 Years
April 2023
Legend
Placemarkers
Sanctuary Pointe
County Border
OJRSA Project Area
Proposed Pump Stations
Proposed Sewer Line
Force Main
Gravity Main
WSE Proposed Pumpstations
0-5 Years
5-10 Years
WSE Proposed Sewer Main
0-5 Years,Gravity Main
0-5 Years,Force Main
5-10 Years,Force Main
USA Major Highways
Interstate
USA Rivers and Streams
Stream
Artificial Path
Lakes
MAP SHEET 2 of 10


Beaverdam Creek WRF (Location TBD)
Exit 11 West Sewer Improvements (Force Main)
Exit 4 South Sewer Improvements
Exit 4
FAIR PLAY SOUTH CAROLINA OJRSA SEWER POTENTIAL Timeline: 0-10 Years
April 2023
Legend
Placemarkers
County Border
OJRSA Project Area
Proposed Sewer Line
Gravity Main
WSE Proposed Pumpstations
0-5 Years
5-10 Years
WSE Proposed Sewer Main
0-5 Years,Gravity Main
0-5 Years,Force Main
5-10 Years,Force Main
USA Major Highways
Interstate
USA Rivers and Streams
Stream
Artificial Path
Lakes
MAP SHEET 3 of 10

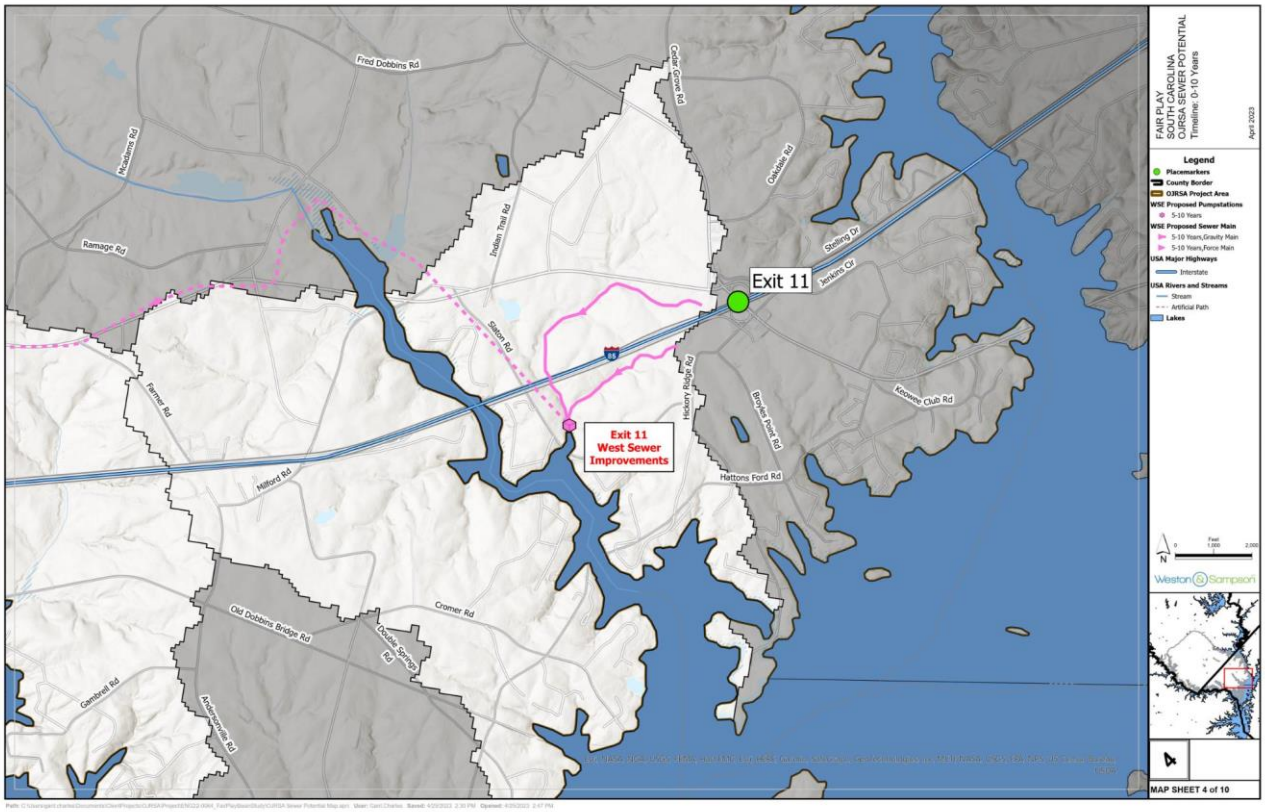
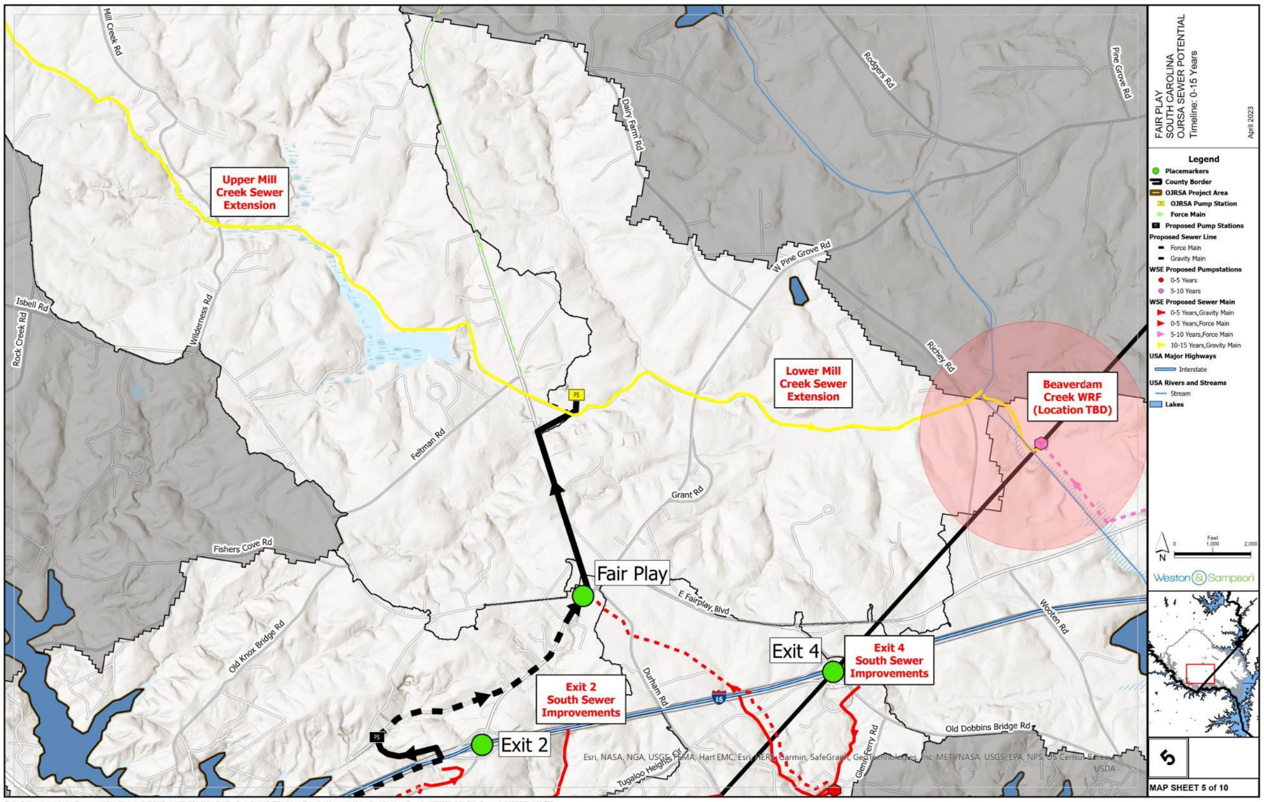


Table 7. Capital Improvement Plan, 10-15 Years

Table 7 Capital Improvement Plan, 10-15 Years			
Basin No.	Project Name	Description	Capital Costs
N-2	Lower Mill Creek Sewer Extension	Eliminate Golden Corner PS and convey flow to Beaverdam Creek WWTP	$ 8,800,000
N-2A	Upper Mill Creek Sewer Extension	Extend gravity sewer from Golden Corner PS to Hwy 11	$ 7,500,000
B-1	Chickasaw WWTP Elimination	Pump Station & Force Main to eliminate existing WWTP, to discharge to Mill Creek Sewer	$ 4,900,000
		TOTAL	$ 21,200,000

4.5.4 15-20 Years

The final time period, from 15-20 years, focuses on the northern corner of the study area (see **Figure 21. Scenario 1: 15-20 Years**). The West Oak Sewer Extension provides sewer service to the West Oak High School area, connecting to the existing interceptor upstream of the Coneross Creek WRF. The project would take an existing plant adjacent to the high school offline. Unlike the remainder of the recommended capital improvements projects, this project is not dependent on other projects being completed. As a result, it could be moved to an earlier timeframe should conditions or demand warrant it.


FAIR PLAY
SOUTH CAROLINA
OJRSA SEWER POTENTIAL
Timeline: 0-15 Years
April 2023
Legend
Upper Mill Creek Sewer Extension
Lower Mill Creek Sewer Extension
Beaverdam Creek WRF (Location TBD)
Fair Play
Exit 2
Exit 2 South Sewer Improvements
Exit 4
Exit 4 South Sewer Improvements
Mill Creek Rd
Dairy Farm Rd
Rodgers Rd
Pine Grove Rd
W Pine Grove Rd
Richey Rd
Isbell Rd
Rock Creek Rd
Wilderness Rd
Feltman Rd
Grant Rd
Fishers Cove Rd
Old Knox Bridge Rd
E Fairplay Blvd
Durham Rd
Wooten Rd
Old Dobbins Bridge Rd
Tugaloo Heights Dr
MAP SHEET 5 of 10

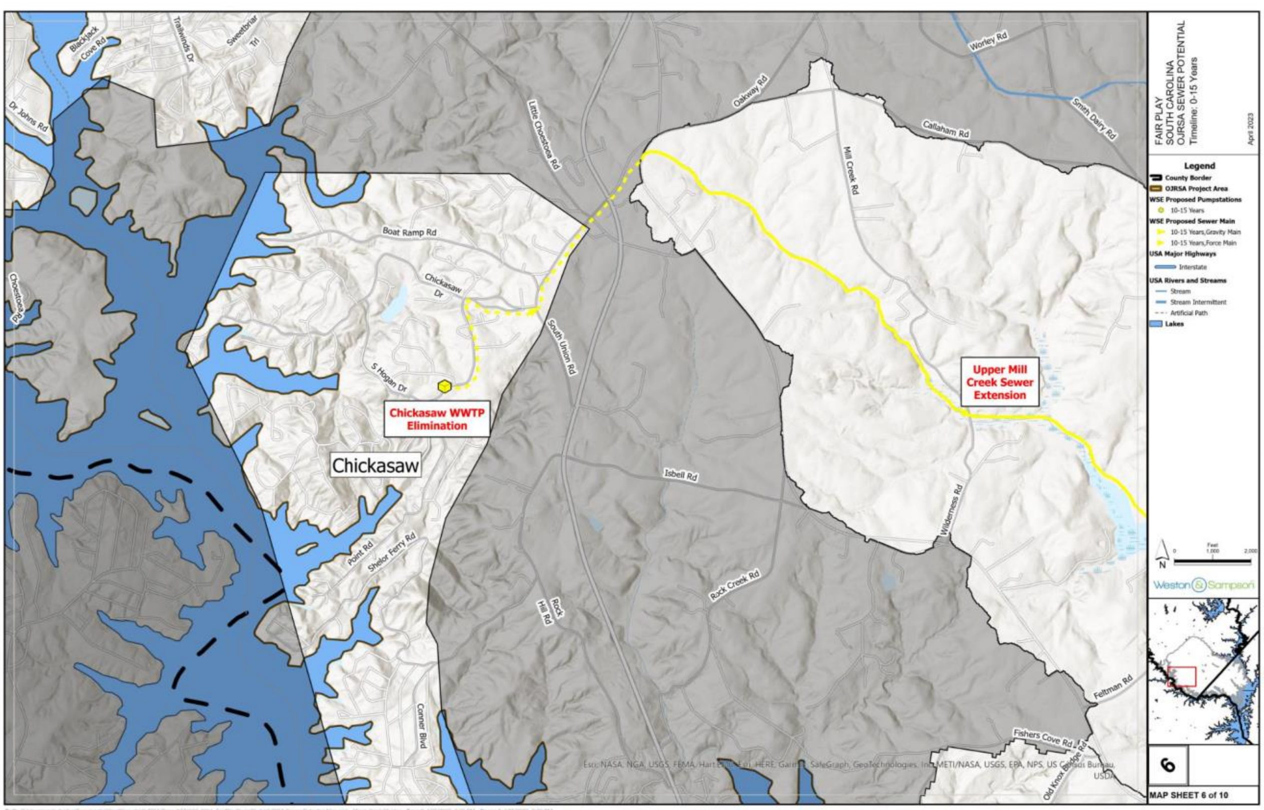

FAIR PLAY
SOUTH CAROLINA
OJRSA SEWER POTENTIAL
Timeline: 0-15 Years
April 2023
Legend
Upper Mill Creek Sewer Extension
Chickasaw WWTP Elimination
Chickasaw
Boat Ramp Rd
Chickasaw Dr
S Hogan Dr
South Union Rd
Little Choestoea Rd
Oakway Rd
Worley Rd
Callaham Rd
Smith Dairy Rd
Mill Creek Rd
Isbell Rd
Rock Creek Rd
Wilderness Rd
Feltman Rd
Fishers Cove Rd
Rock Hill Rd
Conner Blvd
Shelor Ferry Rd
Point Rd
MAP SHEET 6 of 10

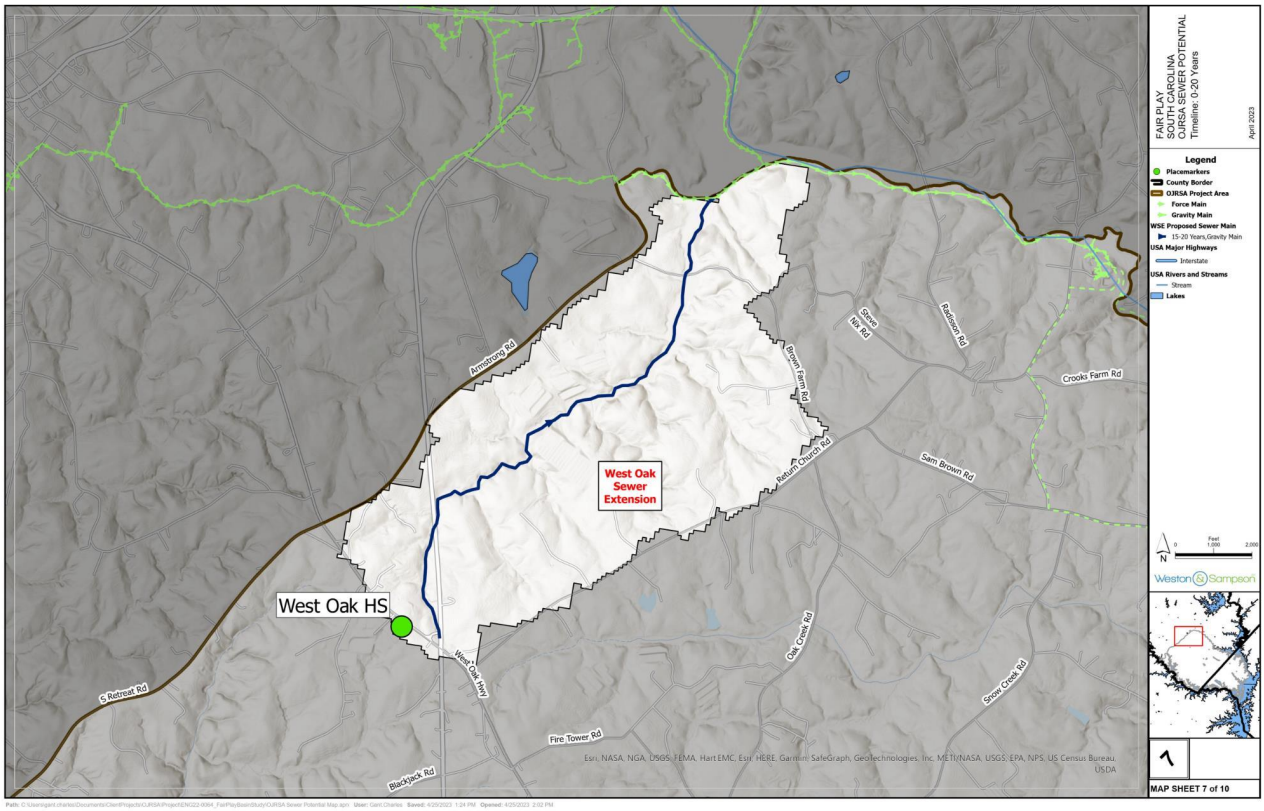
Table 8. Capital Improvement Plan, 15-20 Years

Table 8 Capital Improvement Plan, 15-20 Years			
Basin No.	Project Name	Description	Capital Costs
AA-1	West Oak Sewer Extension	Gravity Sewer to eliminate West Oak HS WWTP	$ 4,400,000

4.6 *Scenario 2*

As discussed above, a separate scenario was considered where instead of constructing the Beaverdam Creek WRF, a pump station is constructed at the same location (see Figure 23. Scenario 2). Flow would then be pumped north to the Coneross Creek WRF which has a remaining capacity of approximately 3.1 mgd. The existing Golden Corner force main could be used for a portion of the route to minimize additional capital costs, since it would be eliminated under this scenario.

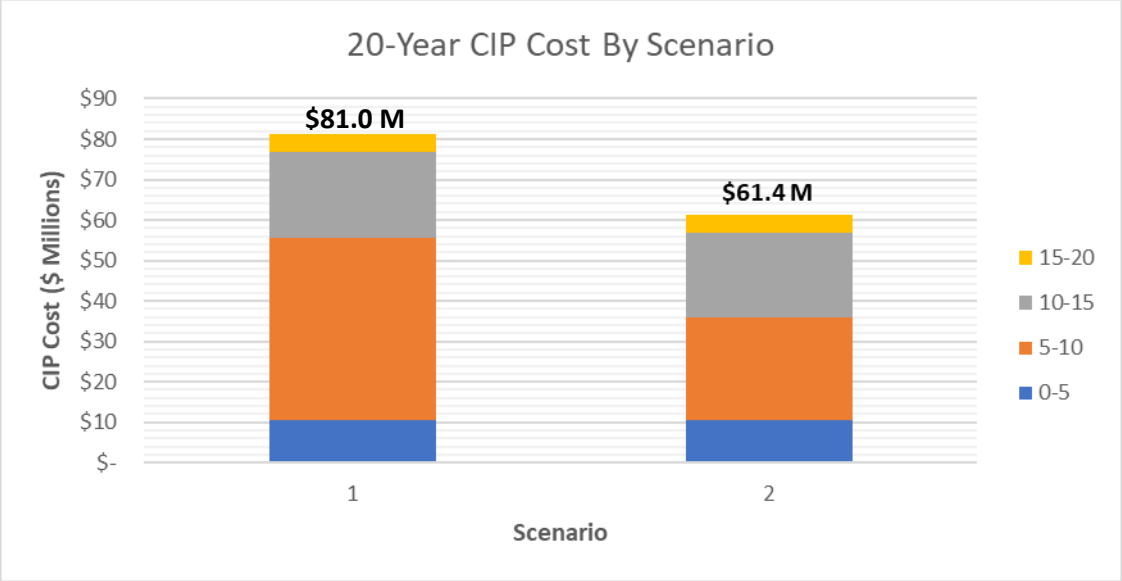
IMPORTANT NOTE: This will require expansion of the Coneross Creek WRF. The requirements and costs of such an expansion are beyond the scope of this project but could be further investigated if desired.



4.7 *Scenario Comparison*

Of the two scenarios that were finalized, Scenario 1 had the highest capital costs due to the high cost of the treatment plant construction. However, because of the higher capacity of the plant versus the pump station, the capacity for future development within the study area will be higher with the treatment plant. Additionally, constructing the treatment plant could delay costly upgrades at the Coneross Creek WRF, which could save or postpone OJRSA significant costs.

Chart 2: Scenario Capital Cost Comparison (Scenario 2 does not include the CIP costs to expand Coneross Creek WRF)

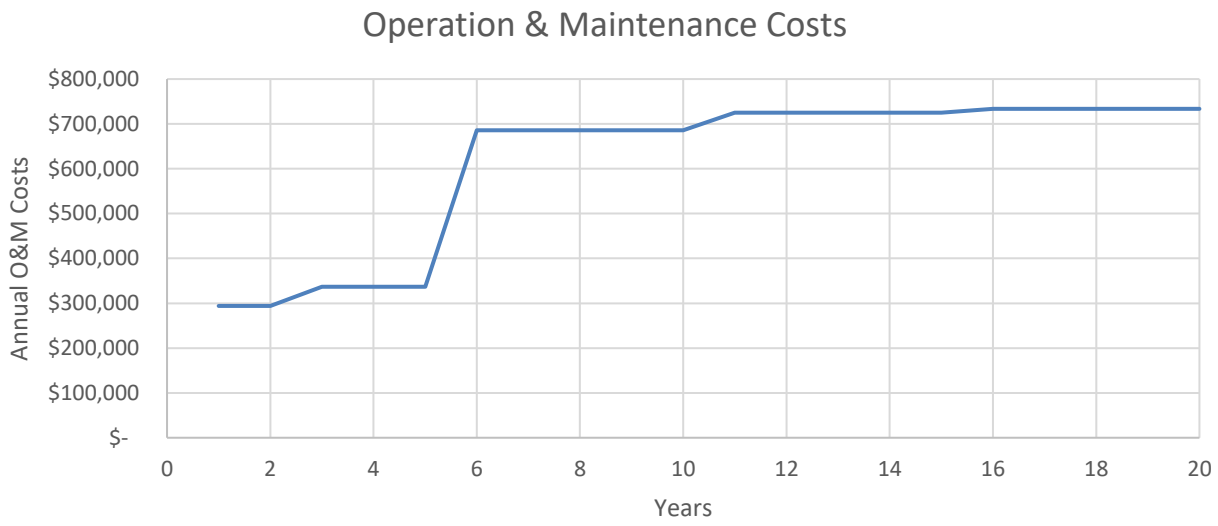


4.8 *Operation and Maintenance Costs*

Operation and maintenance (O&M) costs were estimated for Scenario 1. These annual O&M costs can be overshadowed by the capital costs in situations like this, but it is important to have a realistic expectation for budgeting purposes. Chart 3 shows how annual O&M costs will increase over time as infrastructure gets added. The large jump in Year 6 is when the Beaverdam Creek WRF comes online, and the increased costs associated with operating the plant become a factor. The O&M costs were estimated in conjunction with OJRSA input, the annual OJRSA operations budget, and general industry information.

- $325,000/year for a 1.5 mgd WRF (including operator labor costs)
- $18,000/year for each pump station in the system
- $0.50/year for each linear foot of gravity sewer
- $240,000/year for additional staffing, overhead (includes two staff plus vehicle and miscellaneous expense)

Chart 3: Operation and Maintenance Costs

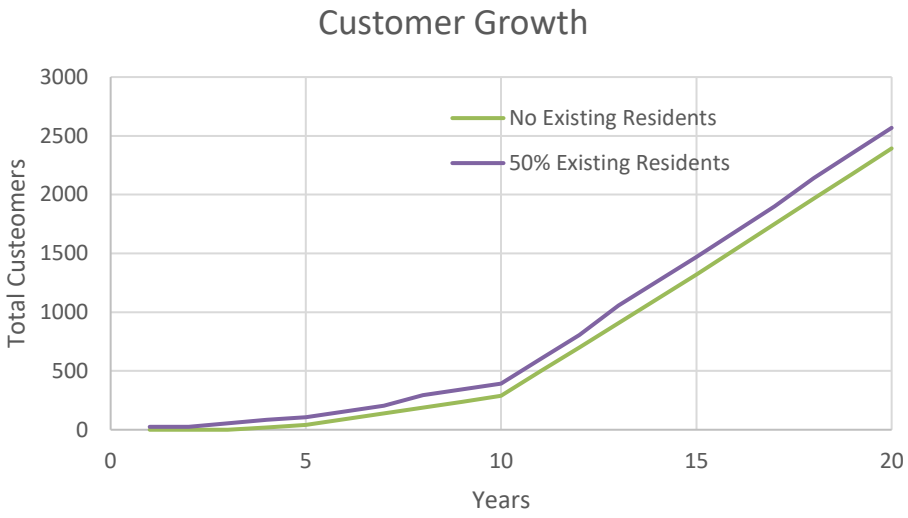


4.9 *Customer Growth and Revenue*

Customer growth, and by extension, revenue growth, will be slow in the initial stages of the study period. There are not many areas of significant concentrated development within the study area. The residences and commercial areas within the study area are relatively spread out. Furthermore, without sewer service in the area, development has historically occurred along the highways (generally on top of ridges), rather than along low-lying areas where gravity sewer would be placed. While gravity sewer will (and should) be routed to maximize the number of residents that can connect to the sewer, it will still be a relatively small number that will be able to connect to sewer.

The majority of the customer growth will be due to new and likely more dense developments being located near the sewer infrastructure. As a result, two scenarios were considered for customer growth: one where no existing residents connected within the 20-year period; and a second scenario where 50% of the existing residents within a 300-foot distance of the gravity sewer connected (see below, Chart 4).

Chart 4: Customer Growth

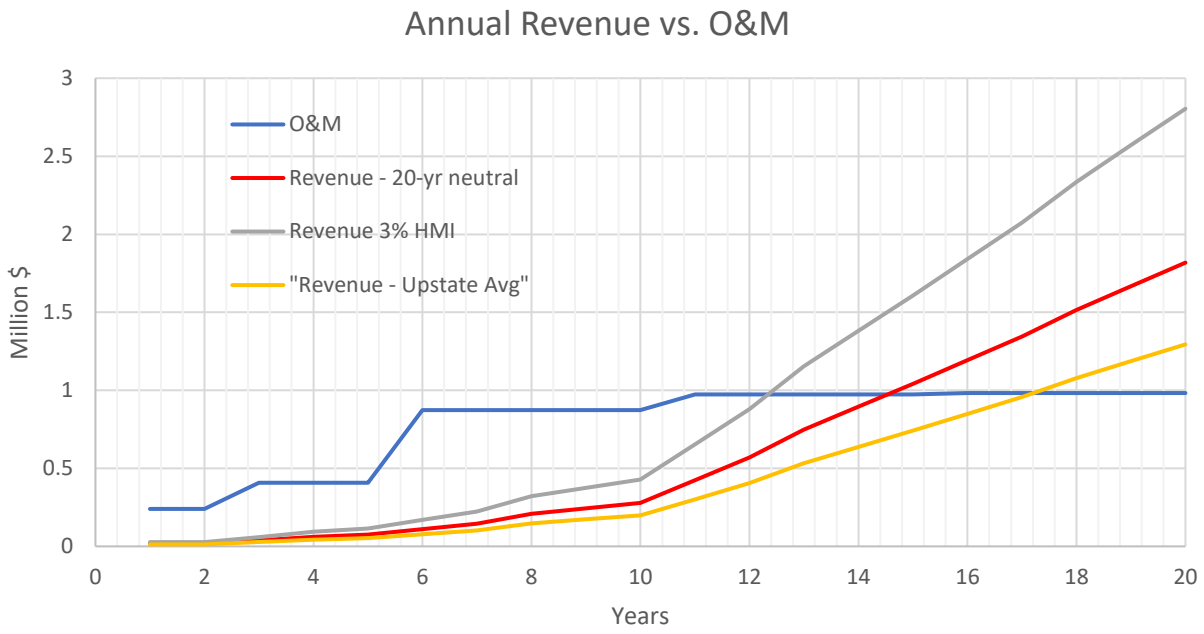


A full rate study should be performed to develop a rate structure that is equitable and optimizes revenue, but there are some high-level assumptions that can be made to estimate revenue. At more than $60 million over 20 years, it is not feasible to cover capital costs over the 20-year period. Capital improvement costs will have to be funded by a combination of grants, low interest loans, and investment by the County and OJRSA. A few different approaches were considered as part of this study, but none of them resulted in revenue that exceeded O&M costs until Year 12 at the earliest.[7] However, because of the fast increase in customer growth, revenue does increase well beyond O&M costs during the latter phases of the 20-year period (see below, Chart 5). The three revenue assumptions that were considered were:

- Sewer bill equal to the Upstate average sewer bill in the Upstate: $42/month (*South Carolina Rural Infrastructure Authority Office of Local Government 2021 Municipal Water & Sewer Rate Survey)*
- Sewer bill that would result in revenue over the 20-year period equal to the total 20-year O&M costs ($59/month)
- Sewer bill equal to 3% of the Household Monthly Income for the Fair Play area: $91/month. *(U.S. Census Bureau (2021) American Community Survey 5-year estimates)*. The 3% HMI is an industry standard for a maximum bill that meets affordability criteria.

[7] However, a large wastewater generator, such as an industry, could drastically impact this timeline.

Chart 5: Annual Revenue vs. O&M Costs



5.0 ENGINEERING CONCLUSIONS AND RECOMMENDATIONS

The following recommendations are based on the engineering analysis performed as part of this study:

1) Perform a rate study to develop an optimal rate structure for the retail system in the Fair Play area.
2) Perform preliminary planning and engineering work to evaluate further feasibility of the Beaverdam Creek WRF, since the duration needed to permit, design, and construct a new treatment plant is typically at least 4-6 years.
3) As soon as the treatment plant concept is proven viable, purse purchasing land for the WRF.
4) Refine conceptual plans for the capital improvements in the 0-5 year timeframe.
5) Identify and pursue funding opportunities for the 0-5 year timeframe capital improvement projects.
6) Where applicable, begin discussions with private systems to gauge their interest in allowing OJRSA to take over their systems as a possibility to quickly develop a customer base. If there is interest, OJRSA would want to perform an analysis of the private system to ensure that an acquisition would be beneficial.
7) Update the master plan every 3 years to adjust the plan to any changes in conditions.

6.0 REFERENCES

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APPENDIX A

Report Figures

Figure 1. Report Study Area

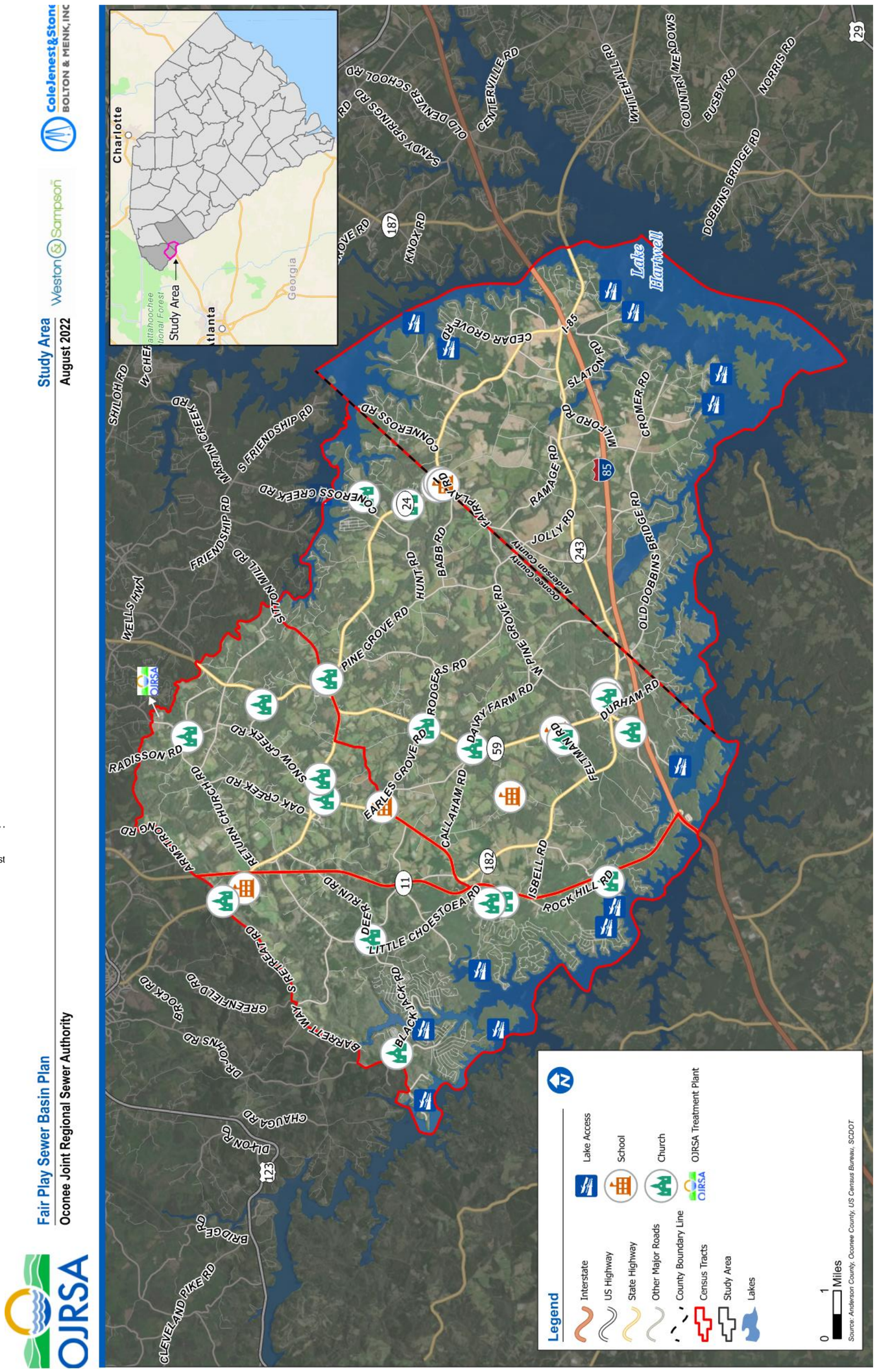


Figure 2. Areas Public Meeting Attendees Supported Sewer Growth

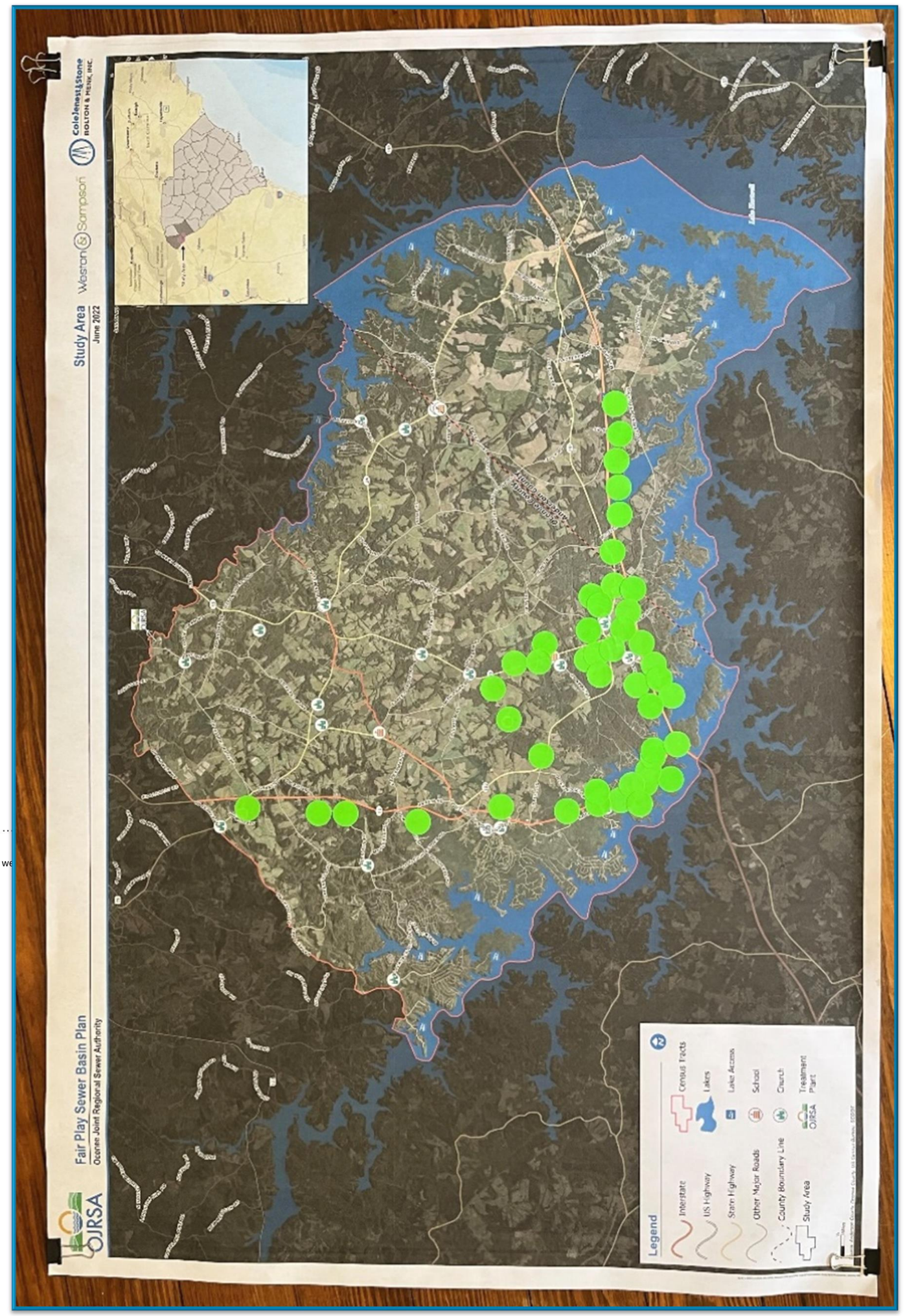


Figure 3. Areas Public Meeting Attendees Opposed Sewer Growth

Figure 4. Population Density and Proposed Sewer

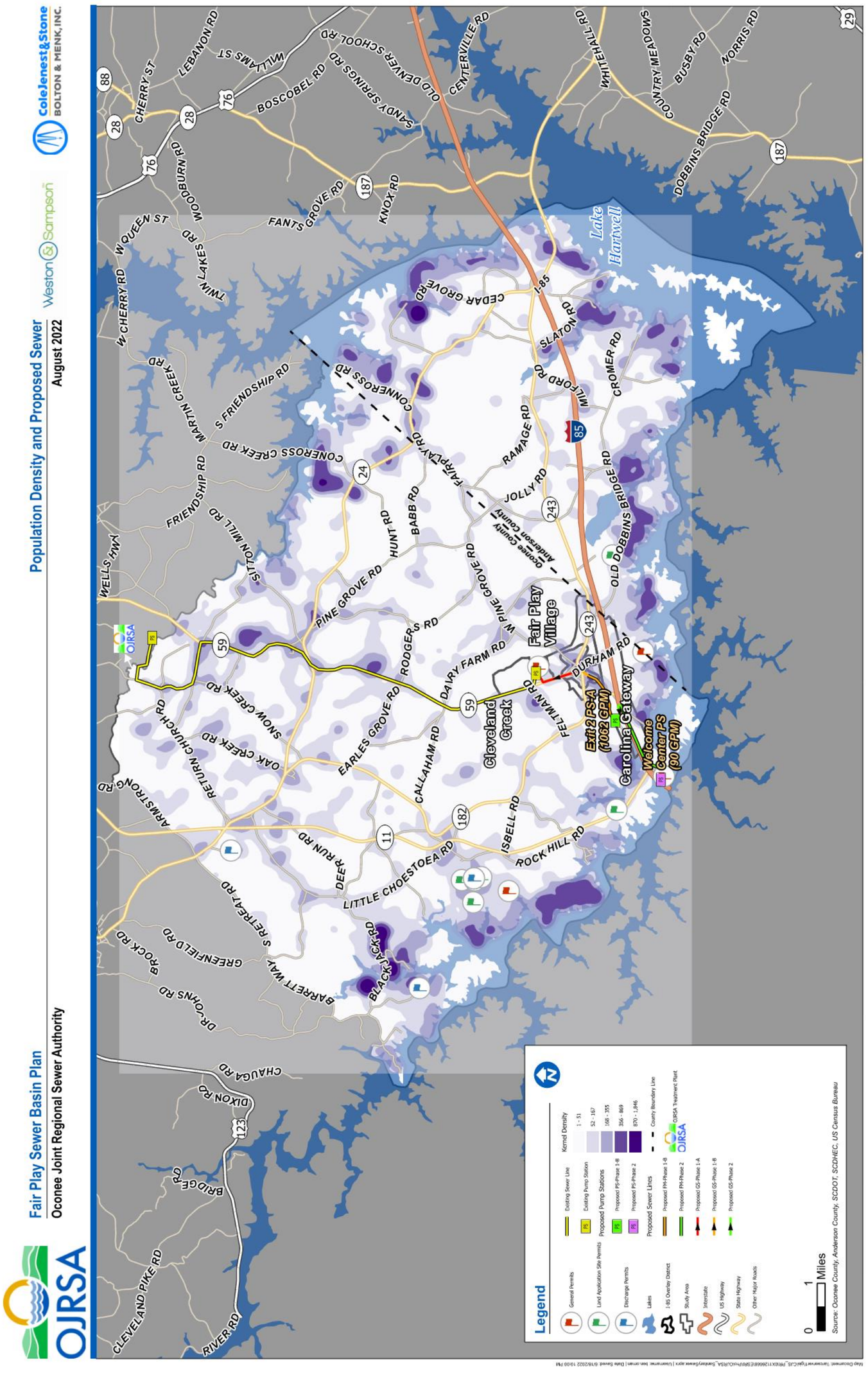


Figure 5. Current Zoning

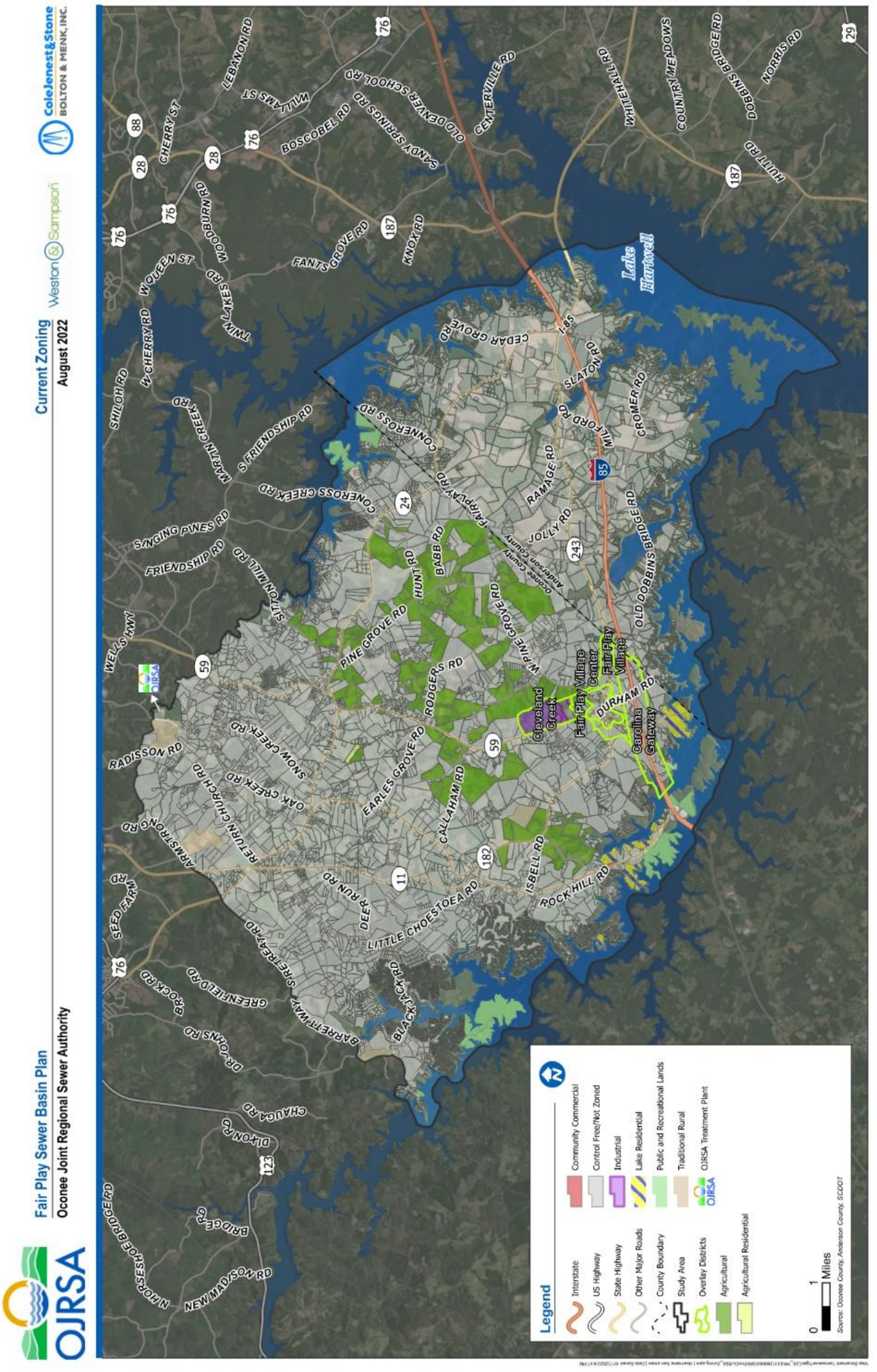


Figure 6. Future Land Use

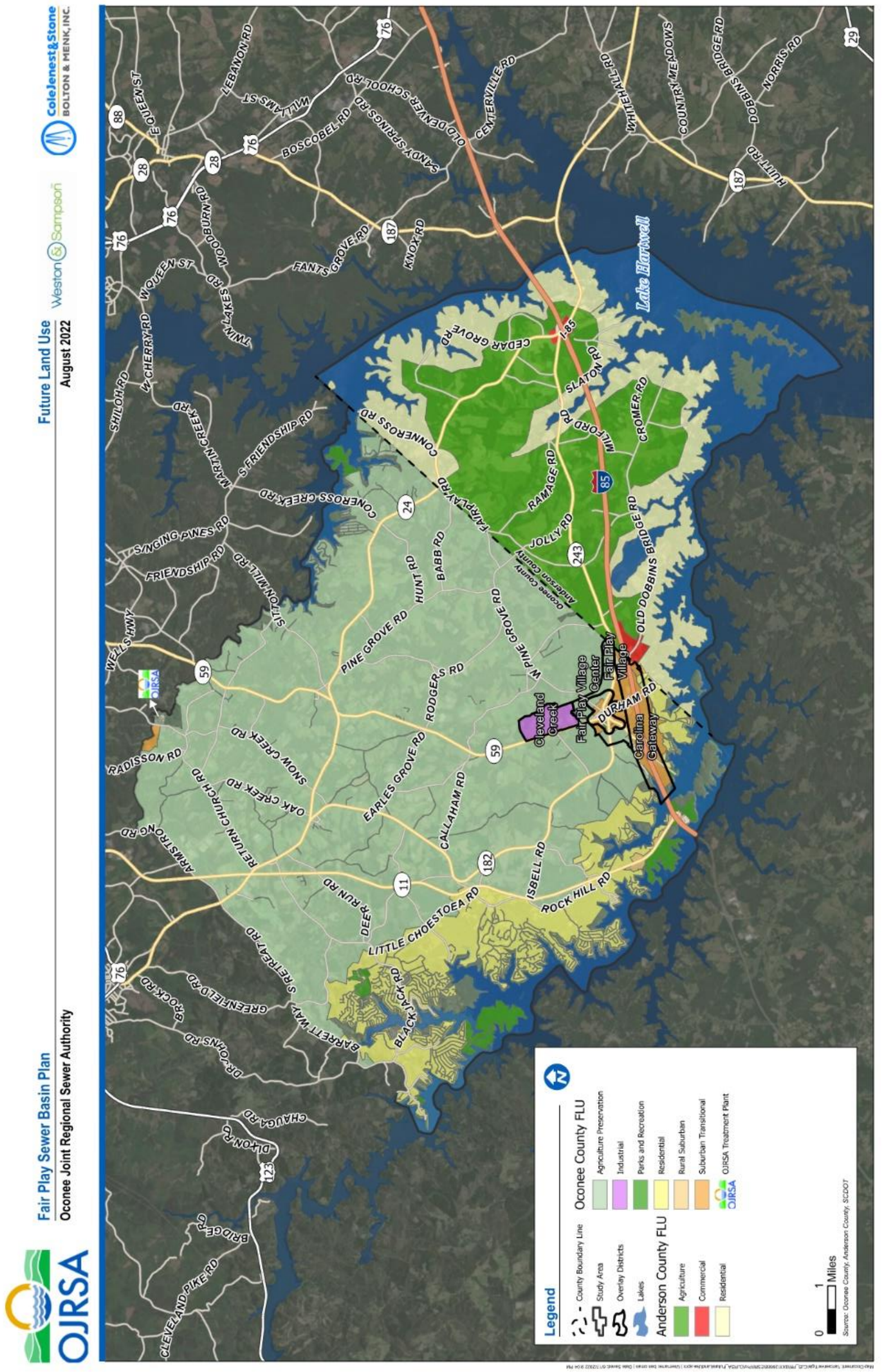


Figure 7. Constraints

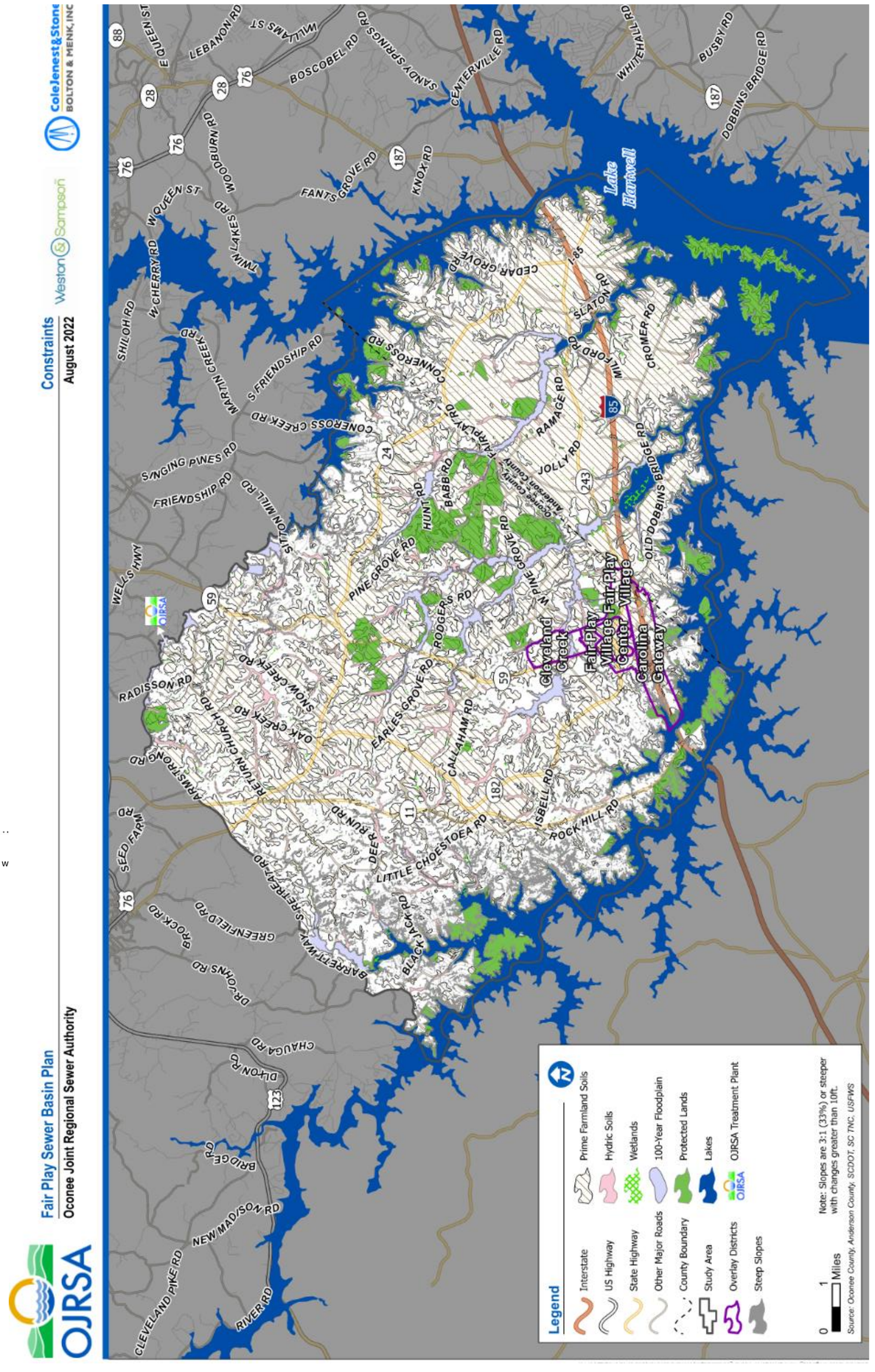


Figure 8. Sewer Potential

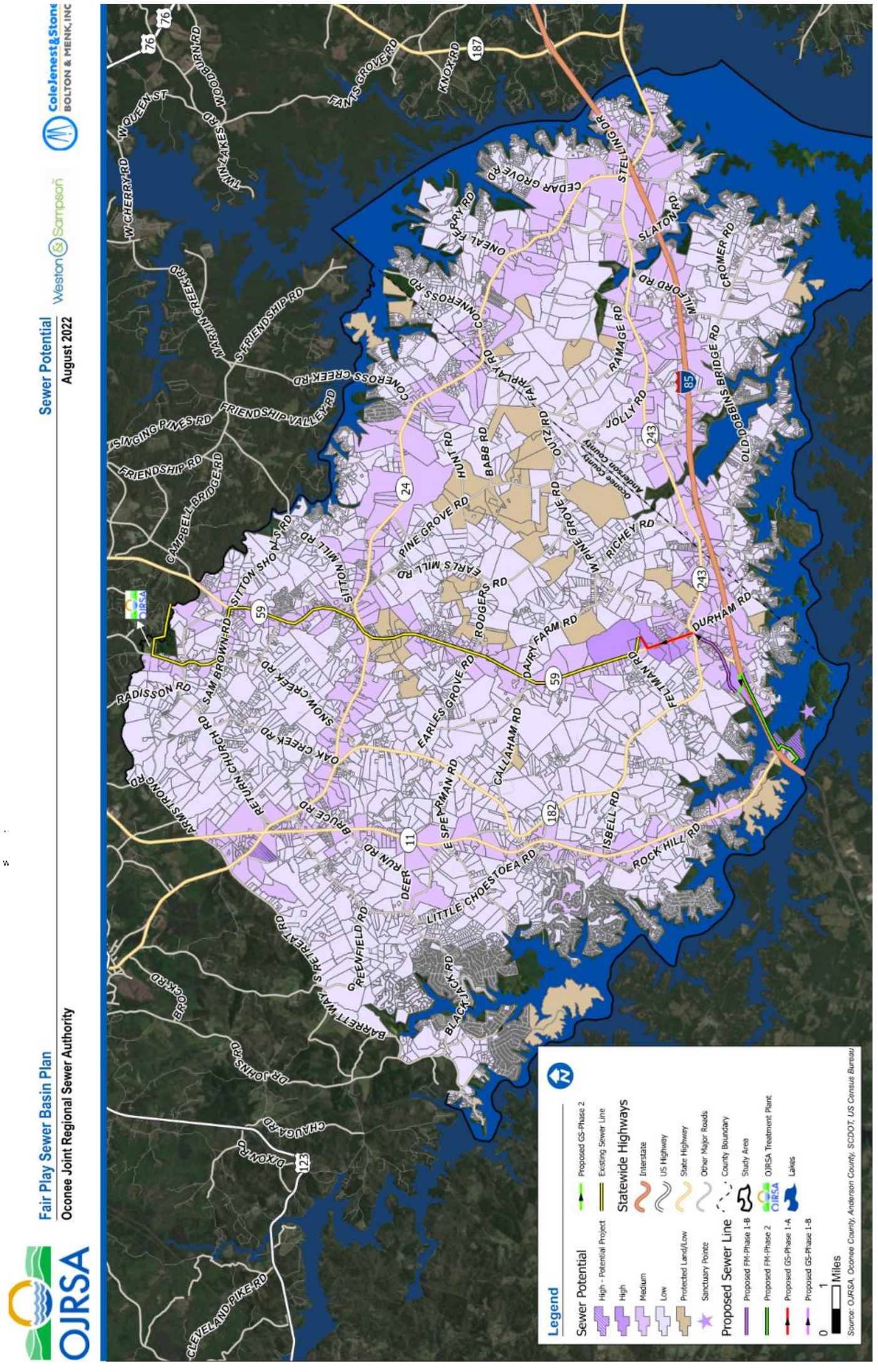


Figure 9. Sub-basin Boundaries for Study Area

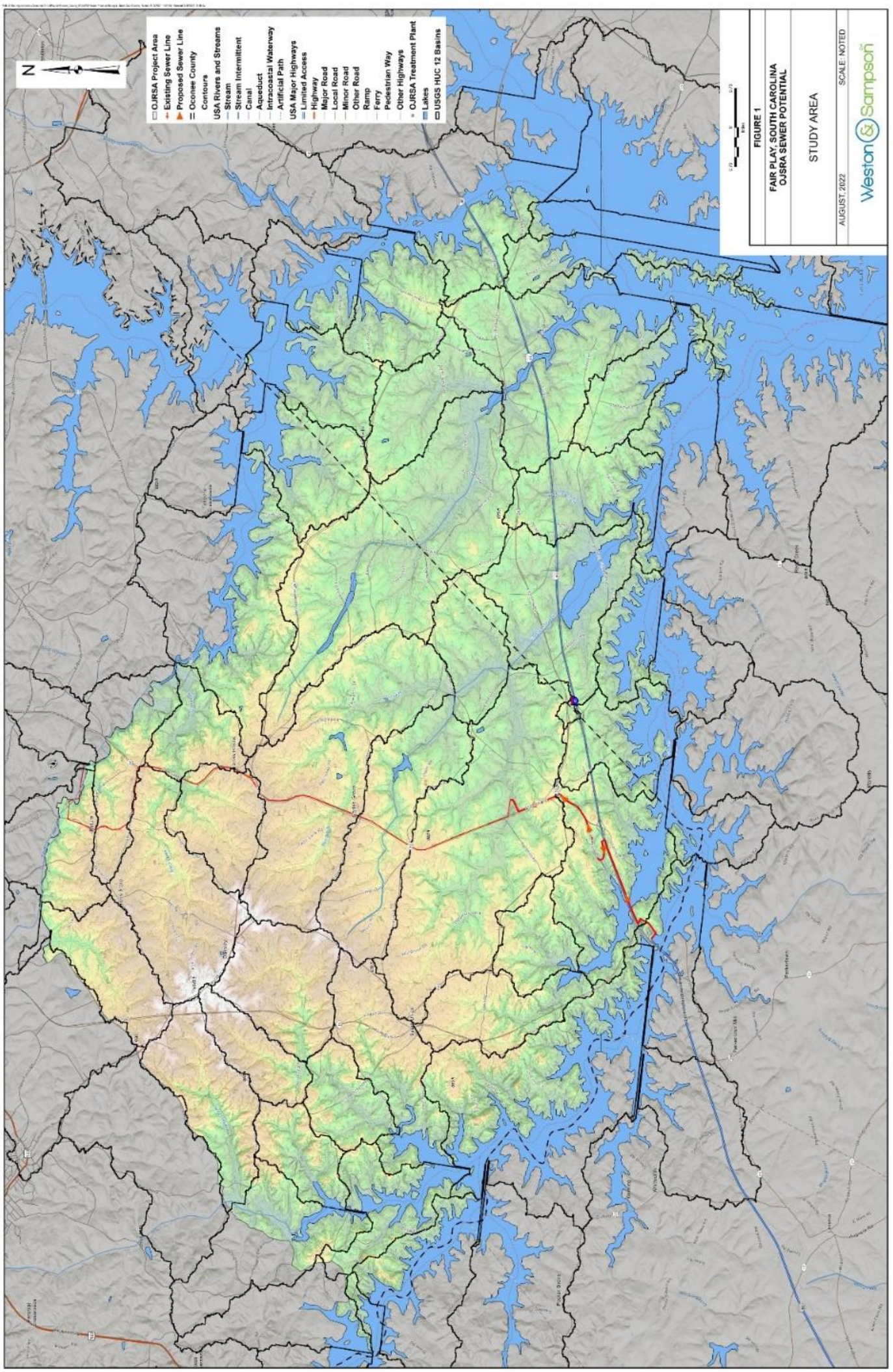


Figure 10. Sub-basin Boundaries for Study Area with Labels

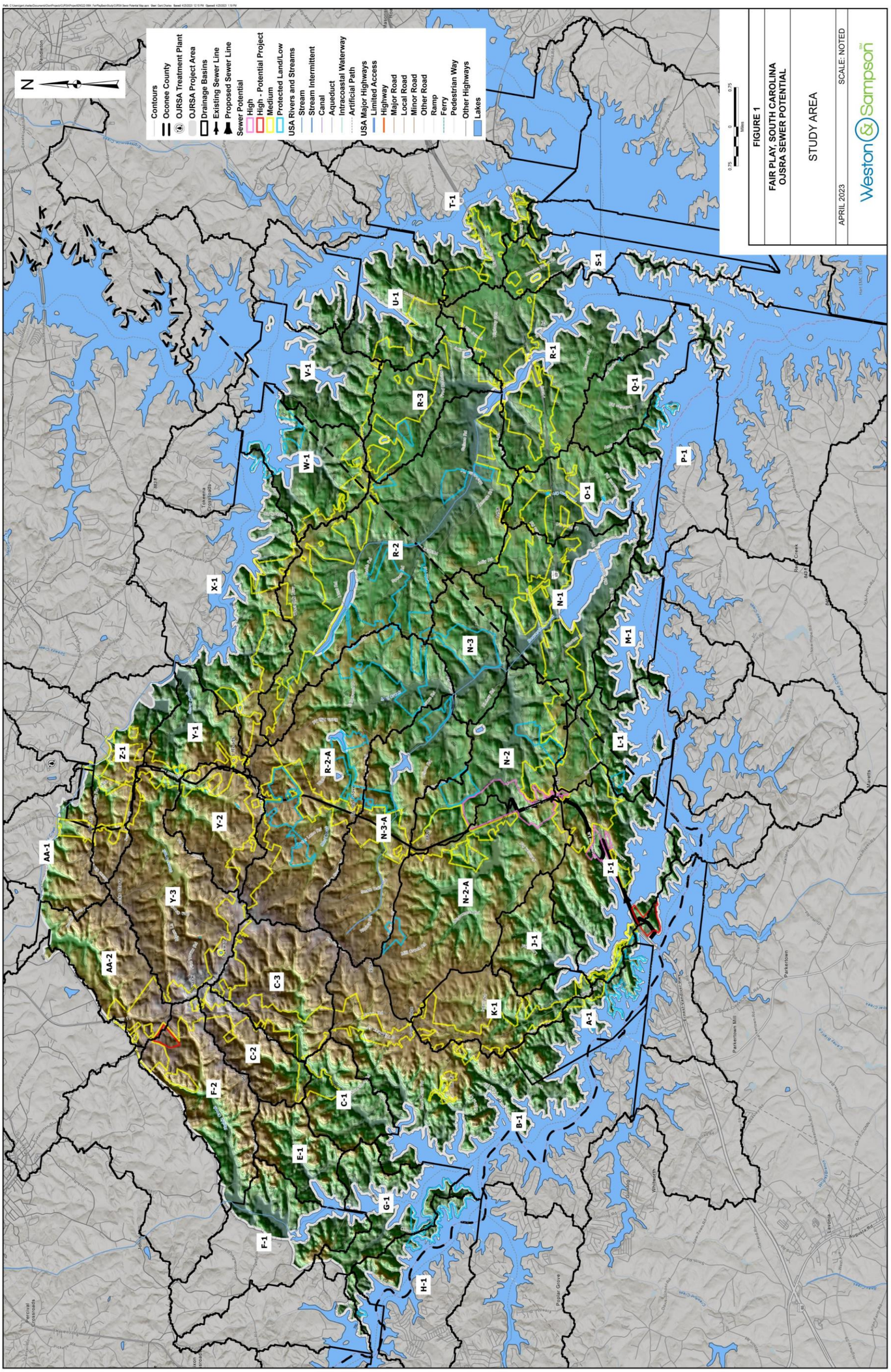


Figure 11. Basin Population Growth Estimates

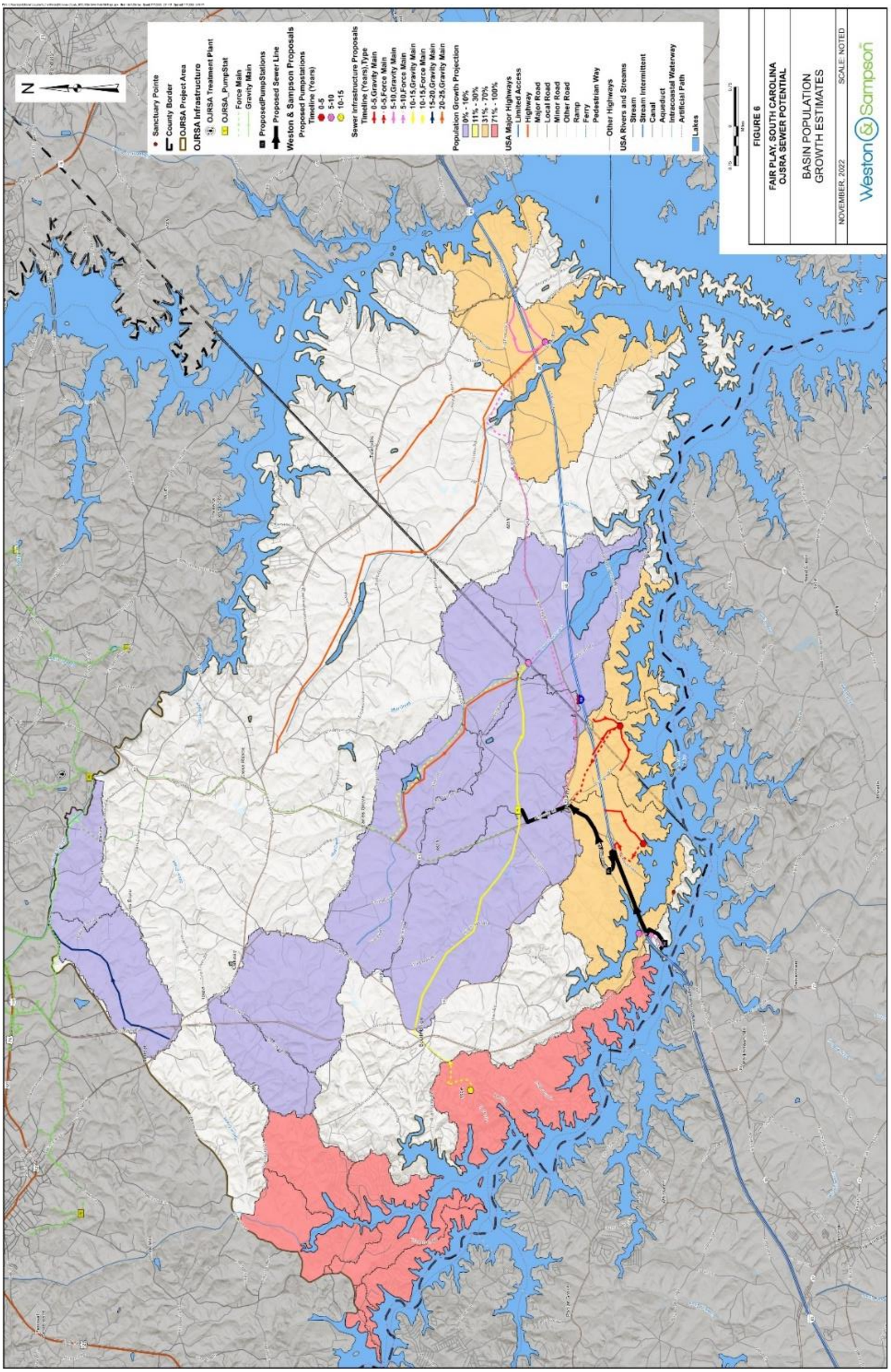


Figure 12. Scenario 1: 0-5 Years

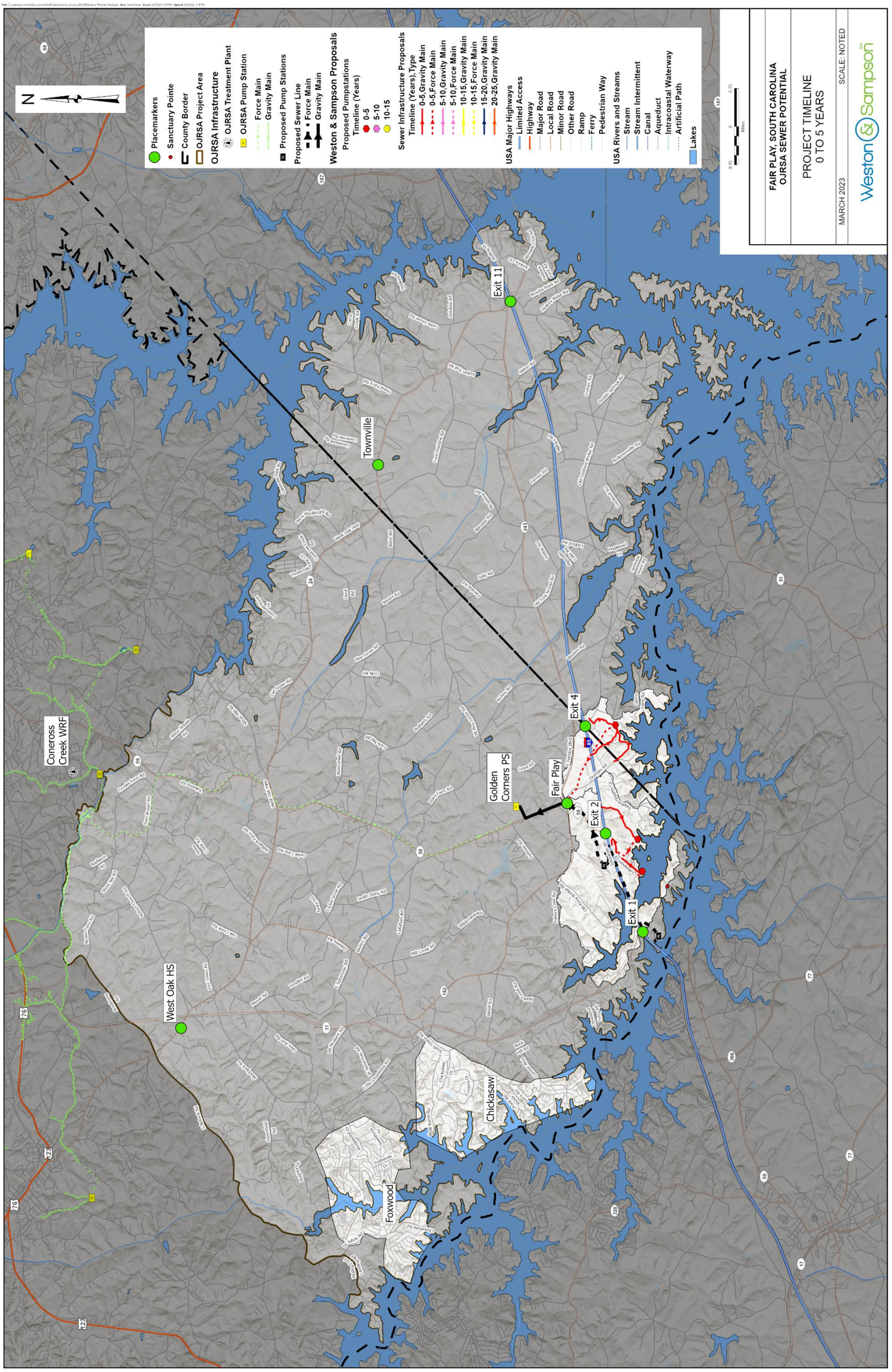


Figure 13. Scenario 1: 0-5 Years Zoomed

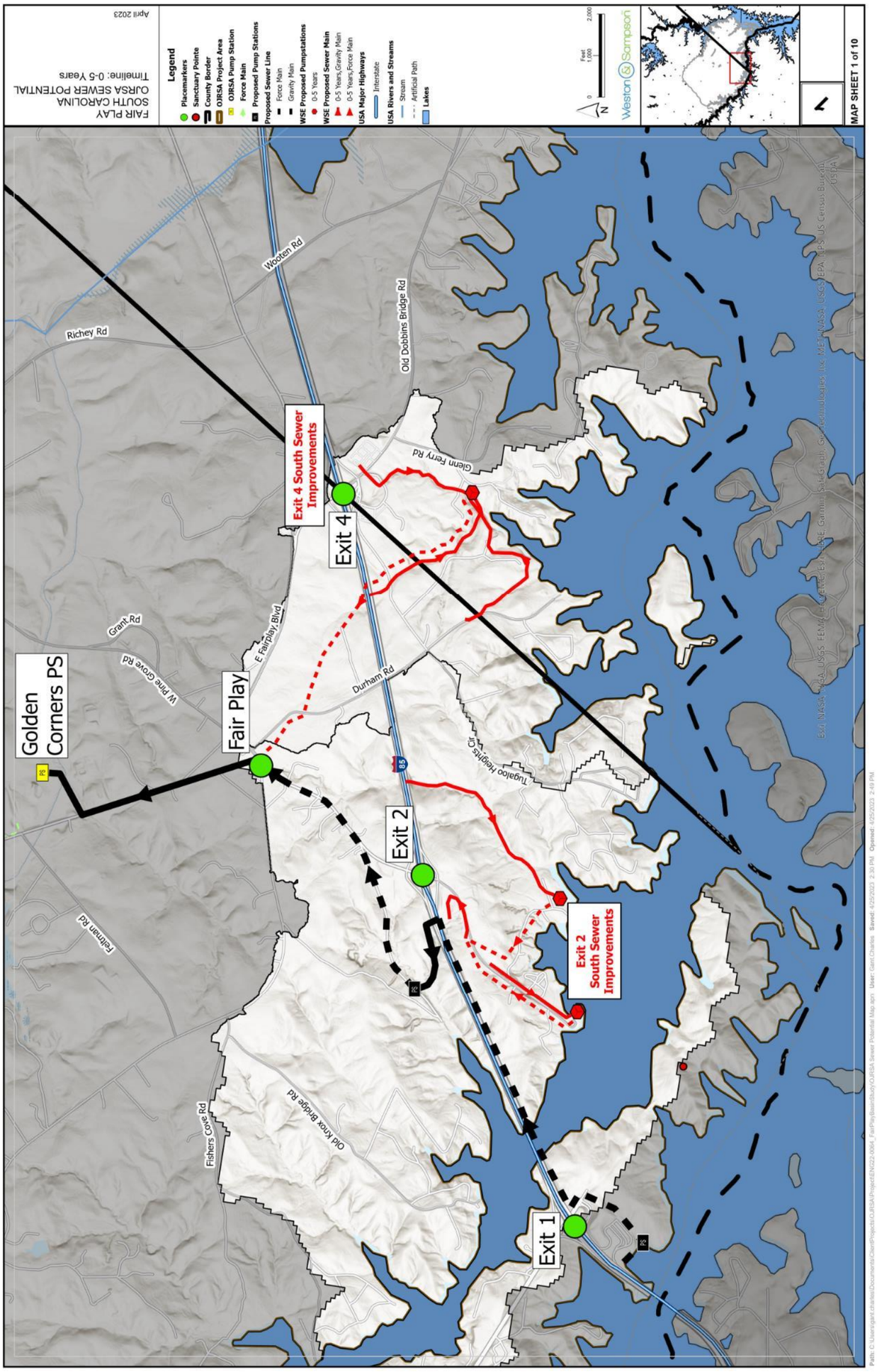


Figure 14. Scenario 1: 5-10 Years

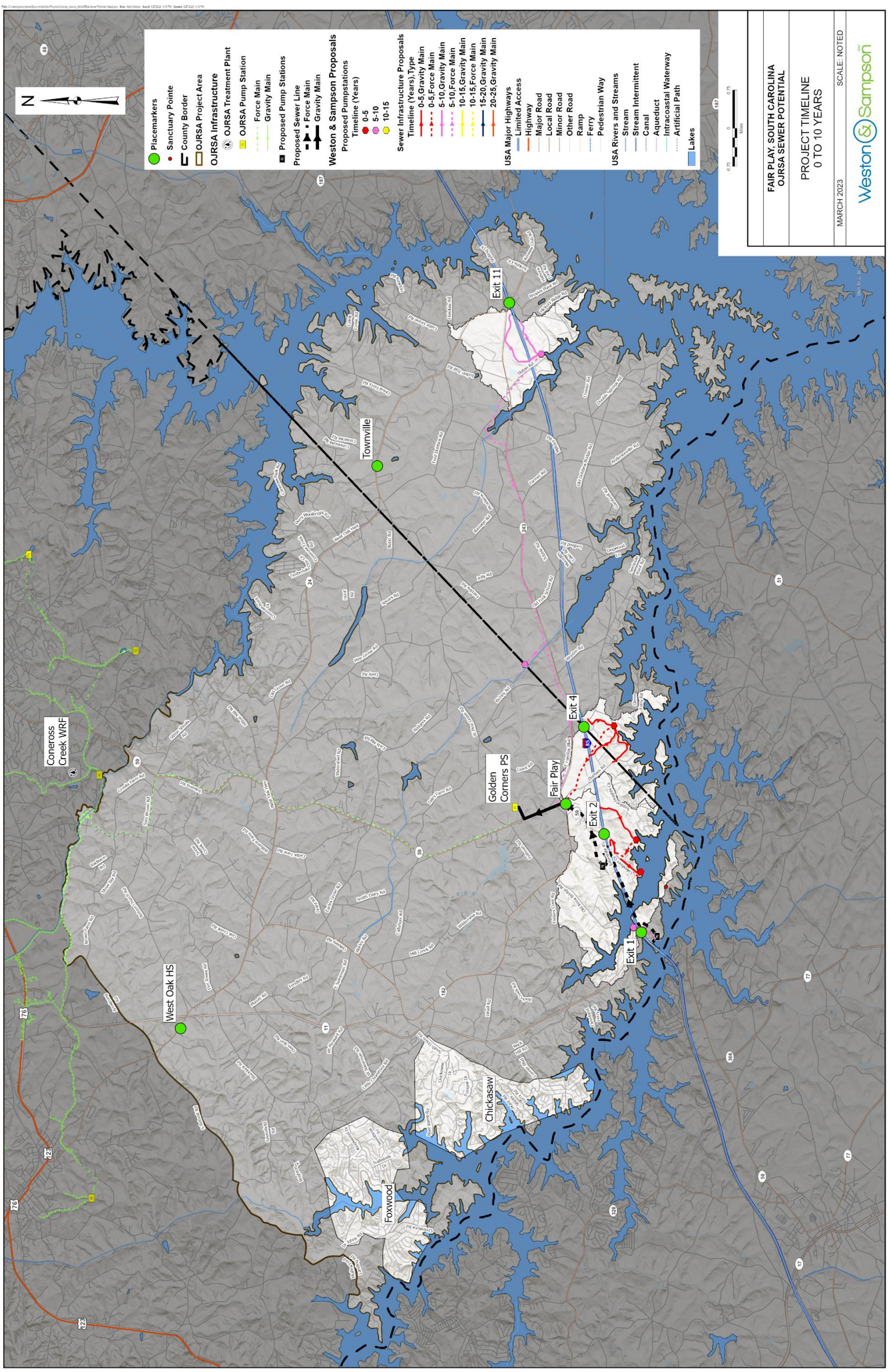
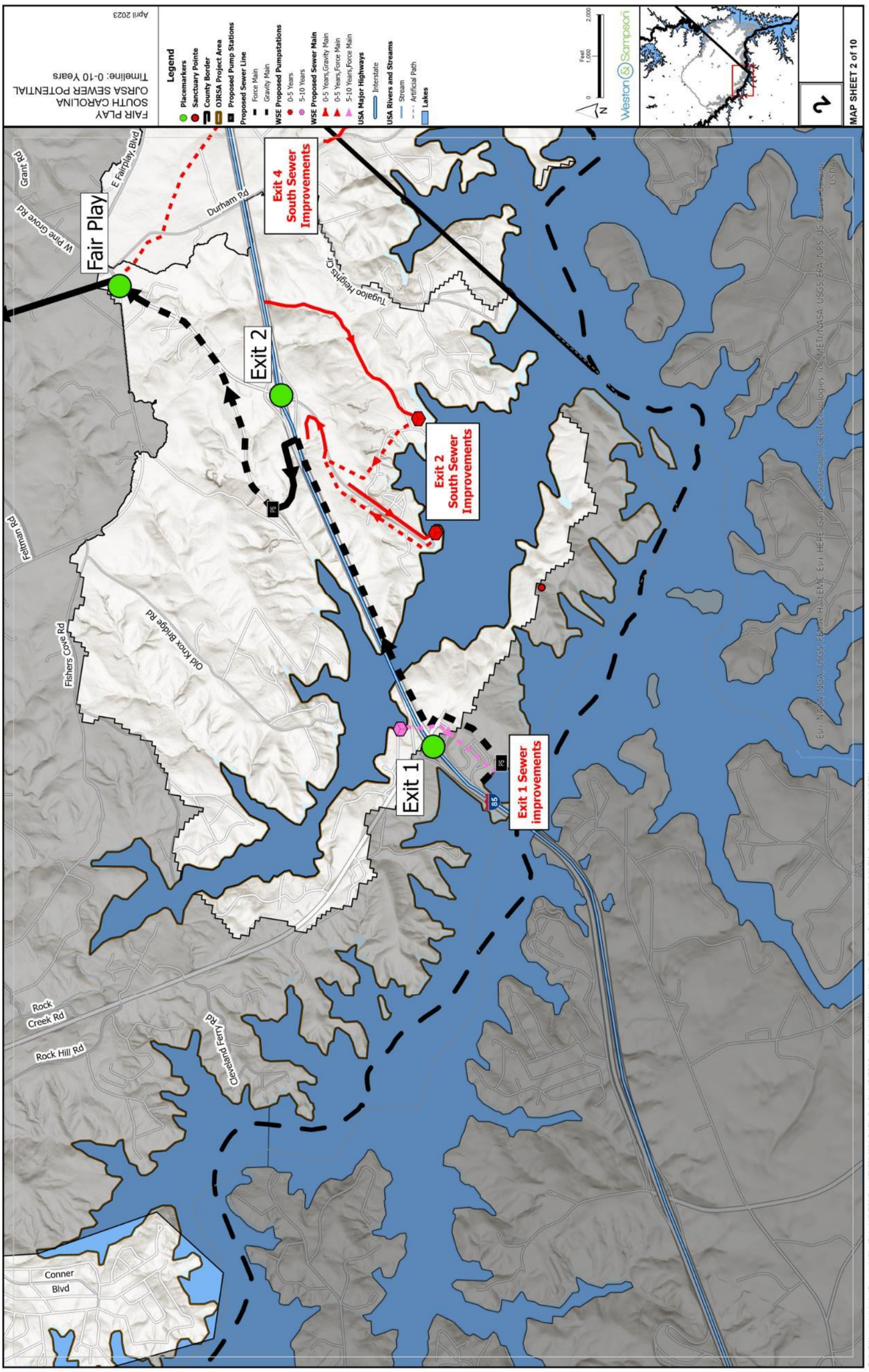


Figure 15. Scenario 1: 5-10 Years Zoomed



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we

Figure 16. Scenario 1: 5-10 Years Zoomed

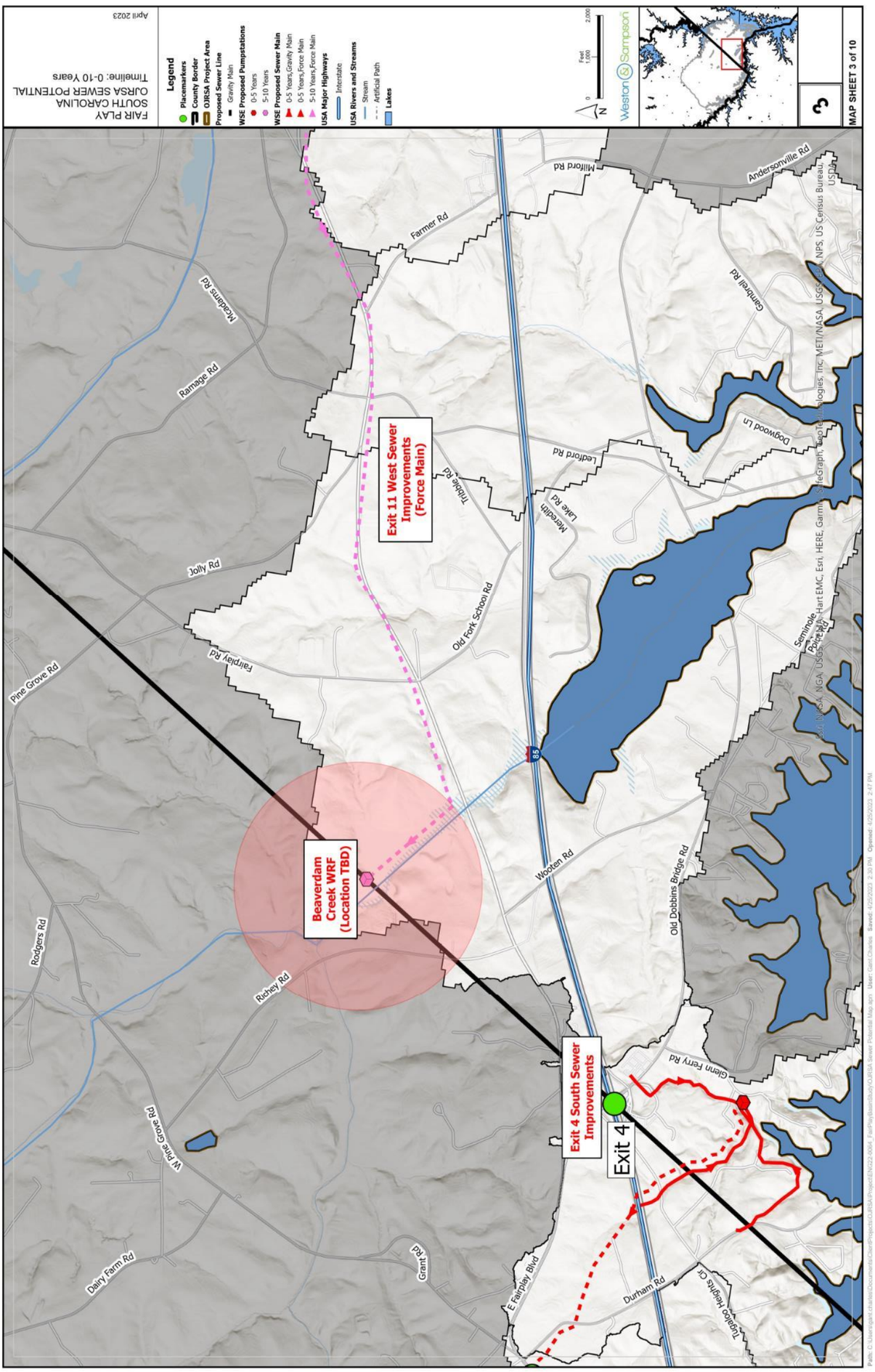


Figure 17. Scenario 1: 5-10 Years Zoomed

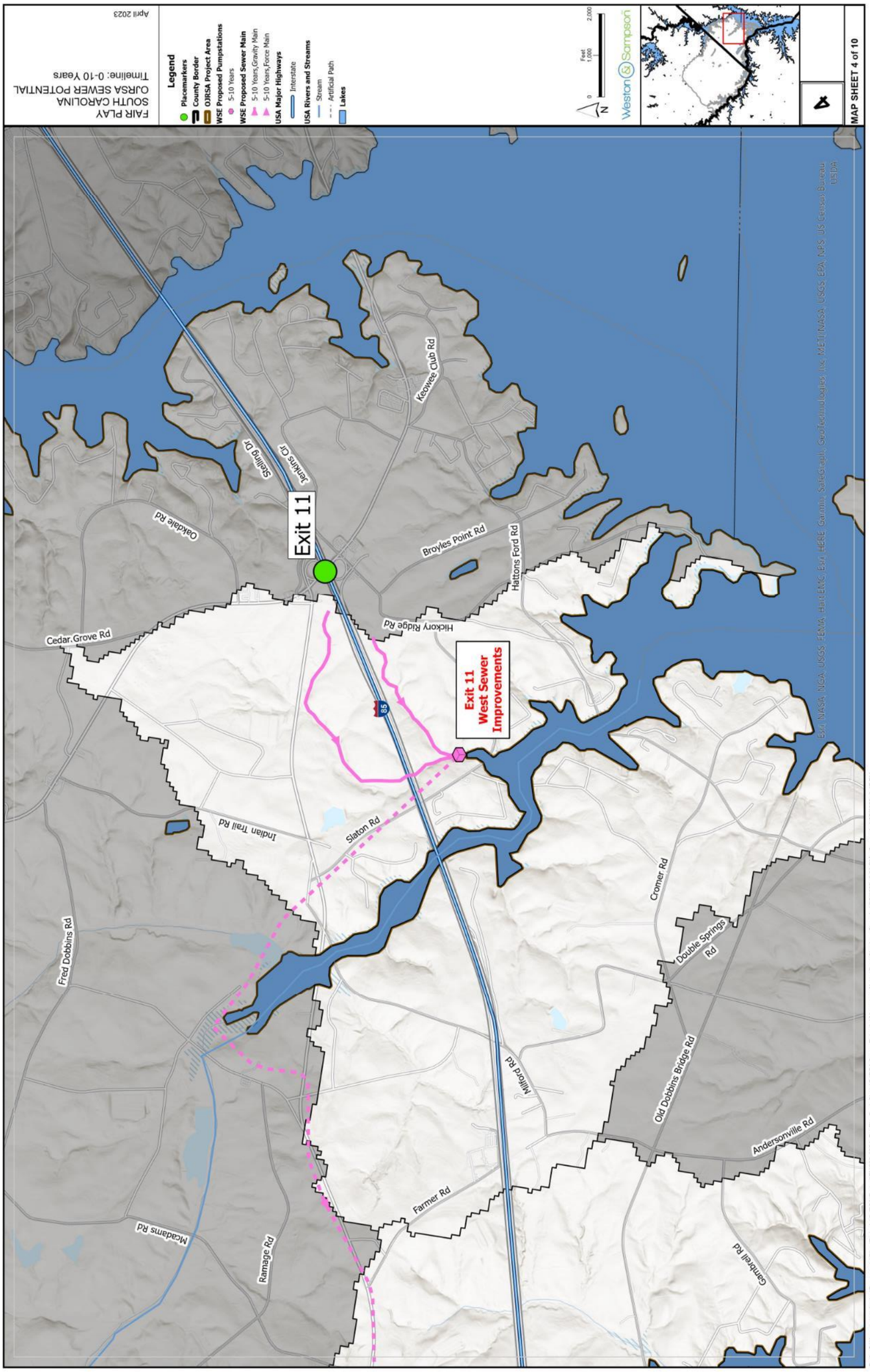


Figure 18. Scenario 1: 10-15 Years

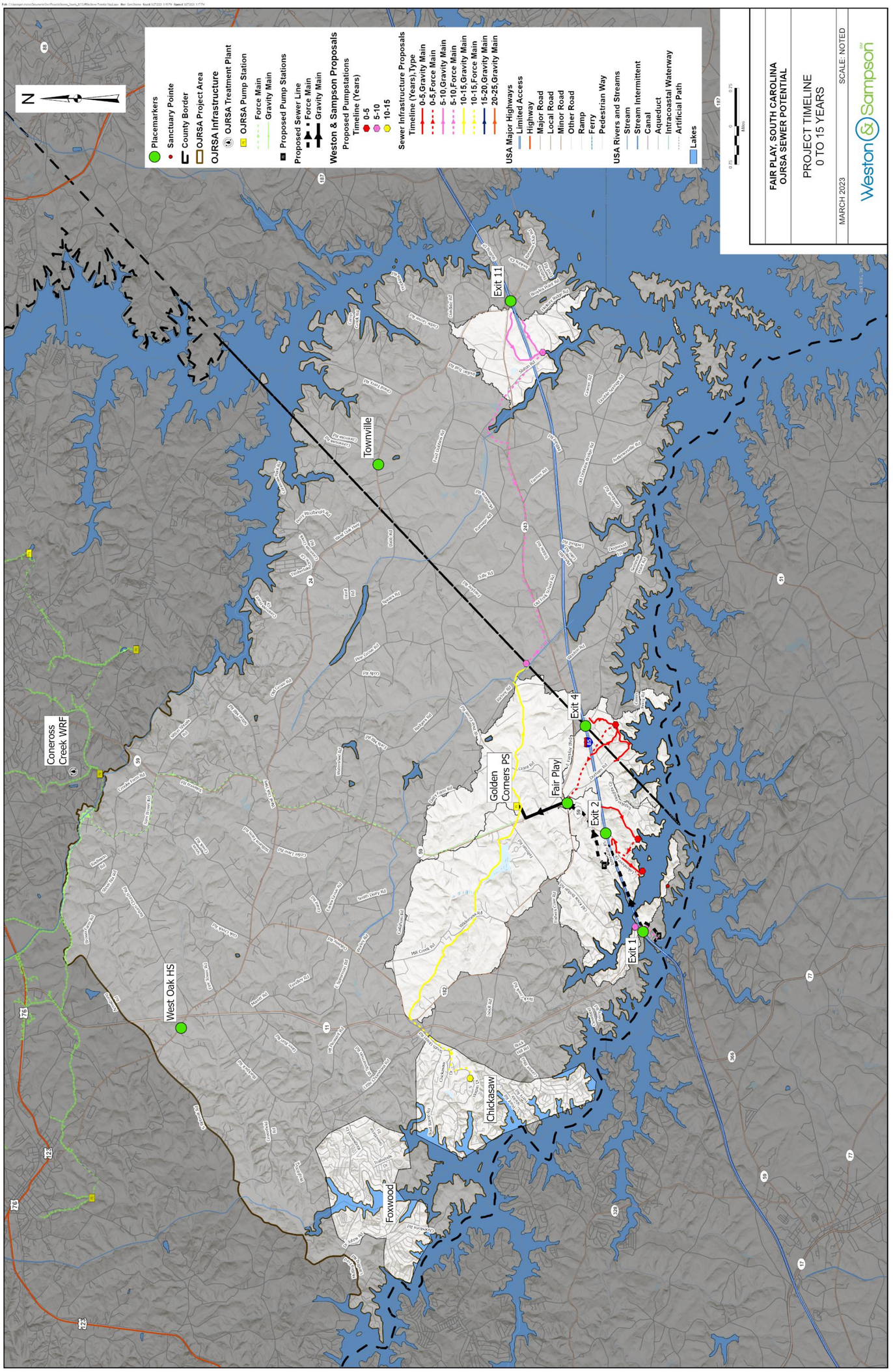


Figure 19. Scenario 1: 10-15 Years zoomed

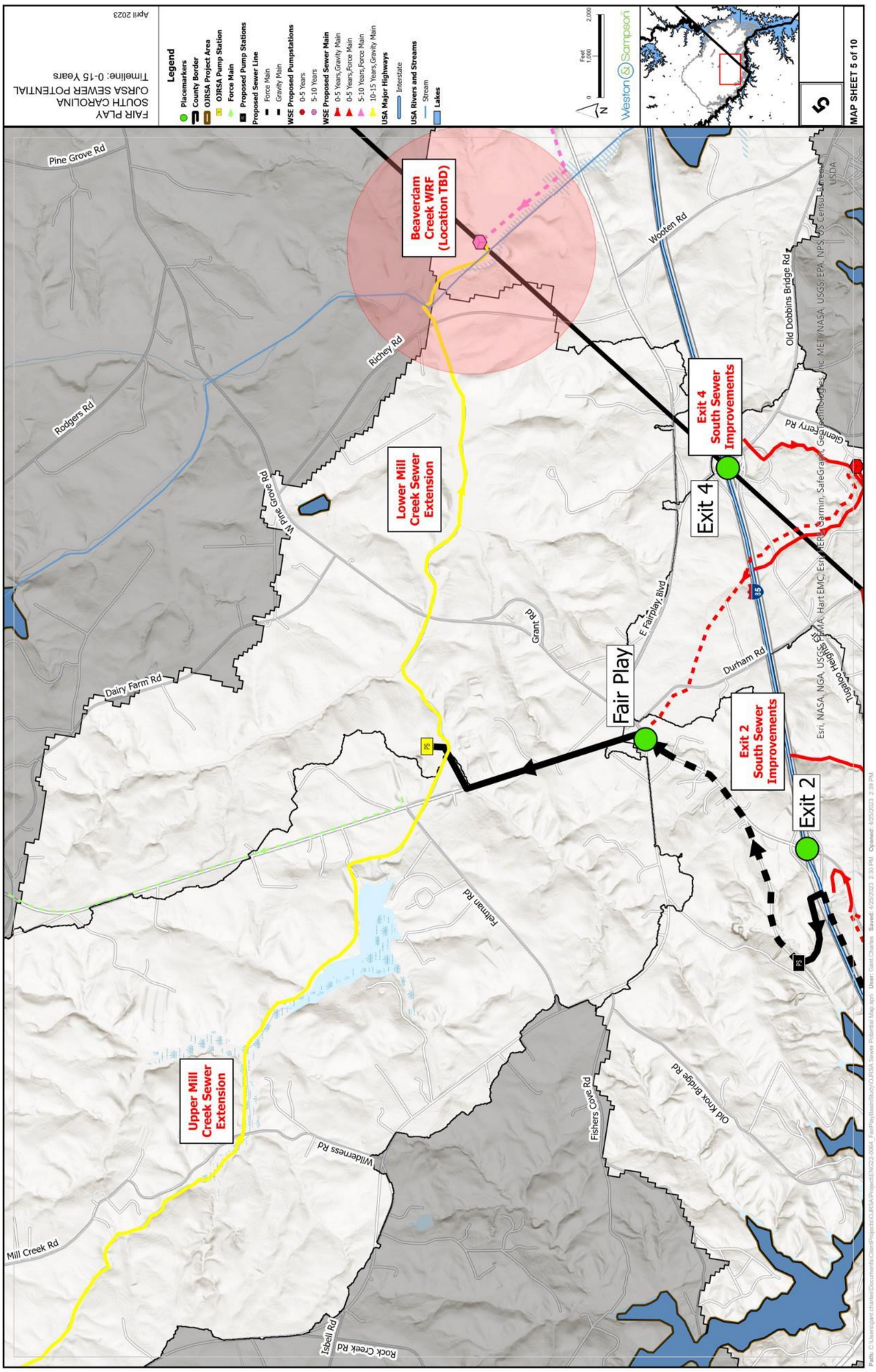


Figure 20. Scenario 1: 10-15 Years zoomed

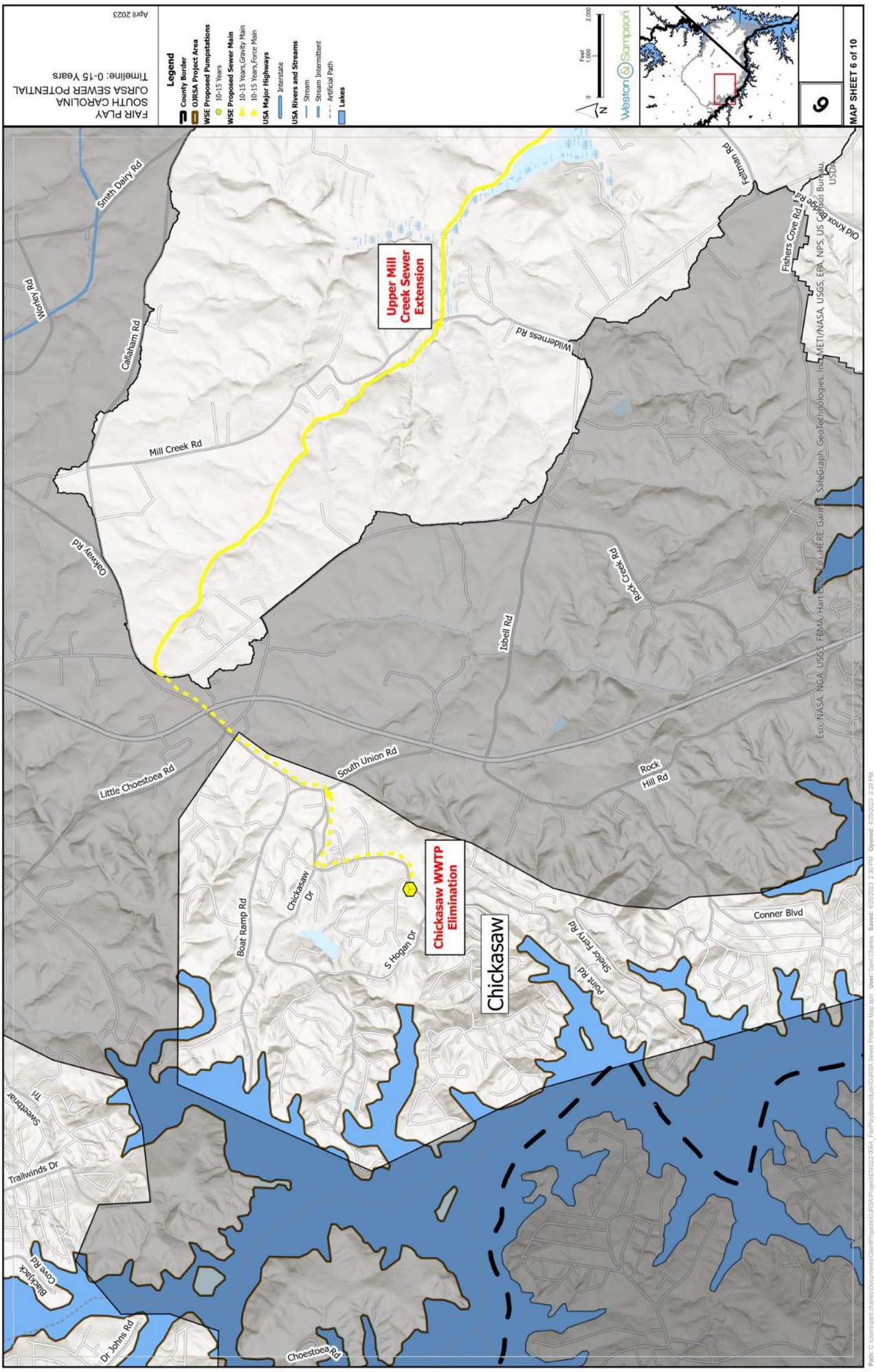


Figure 21. Scenario 1: 15-20 Years

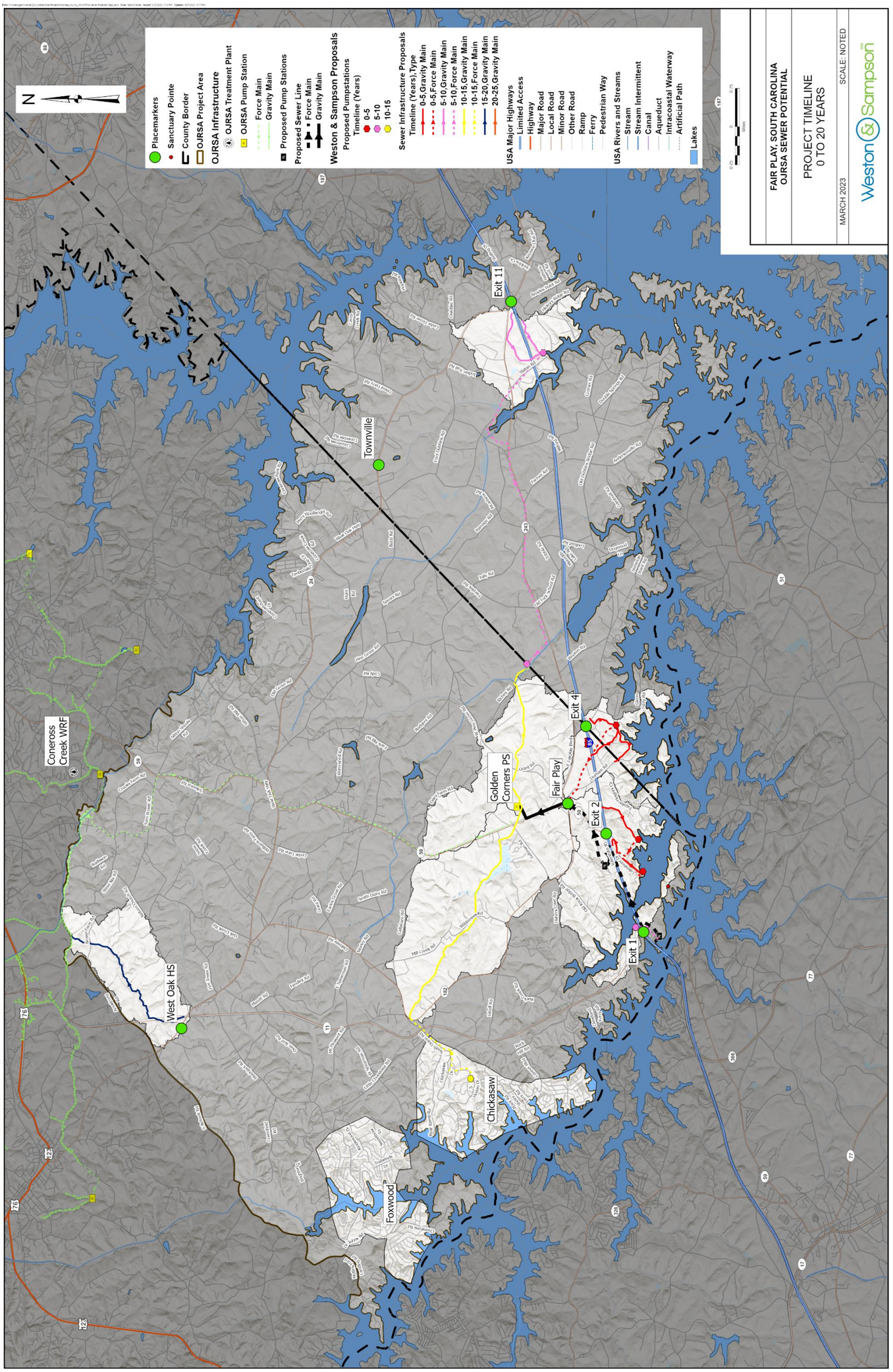


Figure 22. Scenario 1: 15-20 Years Zoomed

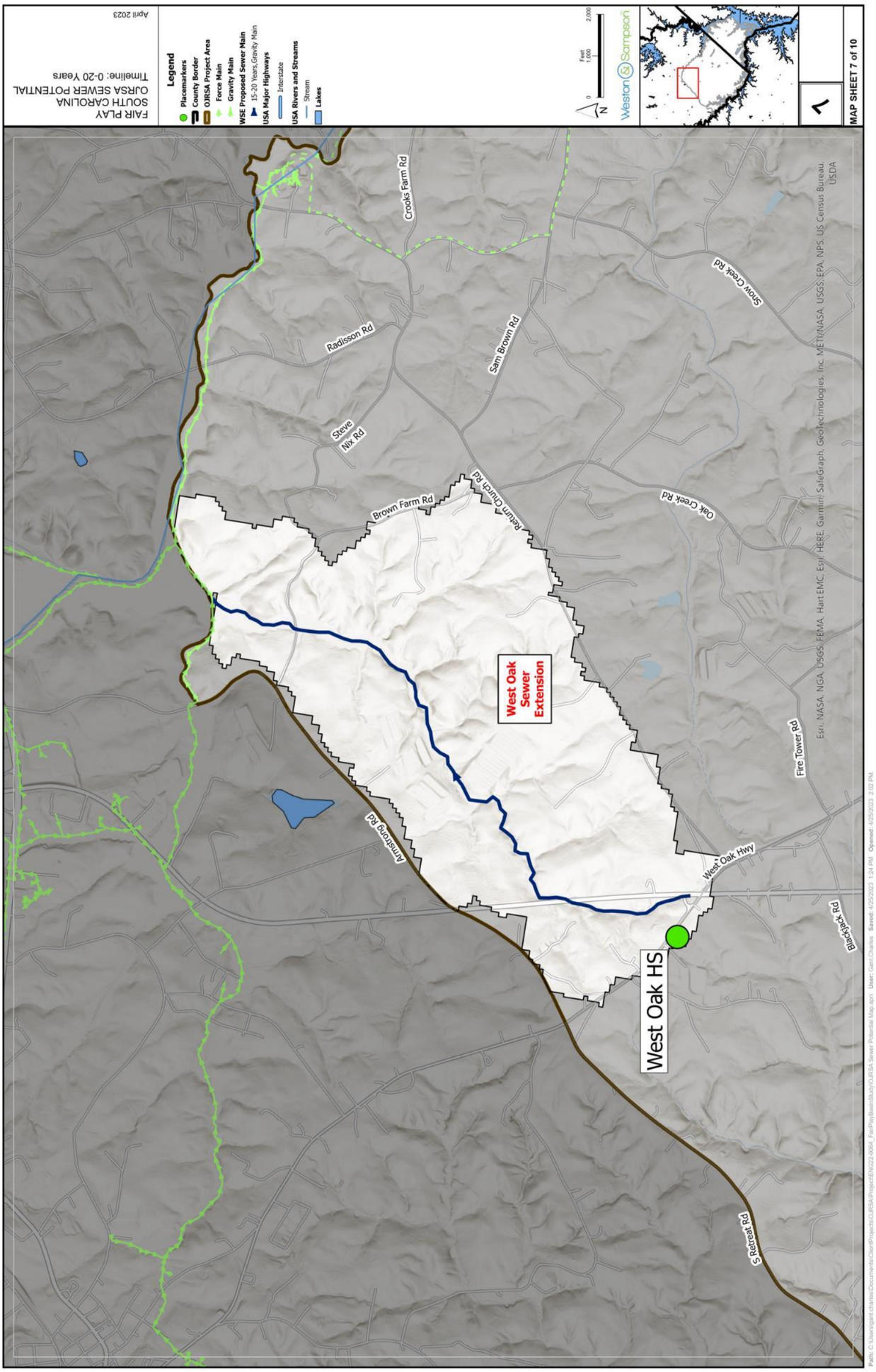
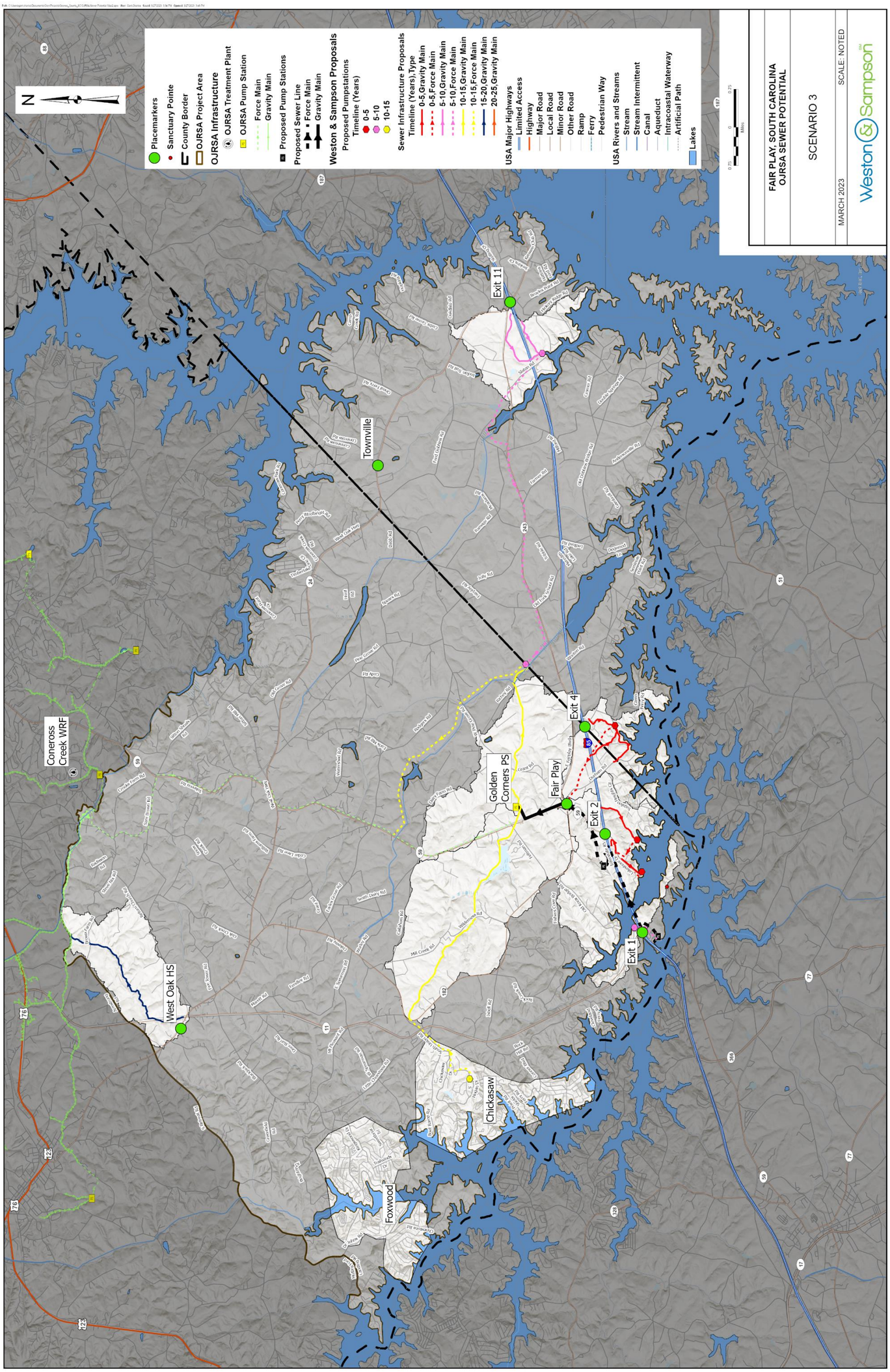


Figure 23. Scenario 2



APPENDIX B

Public Survey Advertisement and Results

Fair Play / Townville Area Sewer Basin Study

WHY SANITARY SEWER INFRASTRUCTURE?

Having a thoughtful conversation about future publicly provided sewer needs is an important aspect as a community considers plans for growth. Sewer infrastructure has both costs and benefits, and where to invest is a critical question and decision makers consider the following:

- Current infrastructure and needs
- Location for future growth areas
- Economic development goals
- Population growth potential
- Commercial and industrial needs
- Feasibility of sewer by location
- Cost for installation and maintenance
- Environmental concerns
- Cost/benefit for both the sewer provider and customers

THE FOLLOWING OUTLINES SEVERAL BENEFITS TO PUBLIC SEWER:

- The presence of sewer can lead to considerable increases in property value, as it can significantly increase the potential scale and value of site development.
- Presence of sewer can help attract new residential and commercial/industrial investment in areas with service.
- Public sewer provides environmental benefits by replacing septic systems that are old and in areas with poor soil drainage.
- By avoiding the need for new septic tanks and removing existing septic tanks, both ground water and surface water can be better protected, which in turn helps protect drinking water systems and bodies of water that provide recreational benefit to residents and visitors.
- Typically, private septic systems are not maintained as frequently or as well as publicly owned systems. Publicly owned sewer systems are permitted and must meet stringent federal/state requirements.
- Publicly owned sewers may allow for new connections to be added in the future, which if planned thoughtfully, can help with growth demands in the area.
- Septic systems typically place the cost and maintenance on the individual or smaller group of individuals, while public sewer costs are a shared responsibility.

Do you have any questions prior to filling out the survey?

Please email the project public engagement lead, **Katherine.Amidon@bolton-menk.com**

OJRSA OCONEE

FOR CONSIDERATION:

- Septic systems - which are found throughout the study area – will continue to be a good solution for handling wastewater in certain areas. Infrastructure costs need to be considered – if extending a sewer line will only serve a few properties over a larger area that would likely be an inefficient use of resources and will not be cost effective.
- Future growth planning may dictate larger pipe than is required to serve a few properties. While growth is happening, those larger pipes may not receive the adequate flushing velocities expected when full buildout occurs, causing routine maintenance issues. Installing smaller pipe in the interim may lead to infrastructure upsizing long before the full life cycle of the pipe, which can contradict sustainability planning.
- Topography may influence the ability for sewer to be feasibly installed in a cost-effective way in certain areas.
- Oconee Joint Regional Sewer Authority Sewer Use **Regulation Section 2.4** states: *"The Owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, abutting on any street, alley, or right-of-way in which there is a public sanitary sewer, is hereby required at the expense of the Owner to install suitable toilet facilities therein, and to connect such facilities directly with the public sewer in accordance with the provisions of these Regulations, within ninety (90) calendar days after date of official notice to do so, provided that said public sewer is within three hundred (300) feet of the property line. Under unusual or specific circumstances, the Director may waive this provision."* **What this means is that if public sewer is available within a reasonable distance (300 feet or less) to your home or business property line, that you will be required to tie into the service unless due to an extreme circumstance there needs to be an exception.**

Do you have any questions prior to filling out the survey?

Please email the project public engagement lead, **Katherine.Amidon@bolton-menk.com**

Fair Play/Townville Area Sewer Basin Study

COMMUNITY SURVEY

1. How would you classify your relationship to the study area? (Select all that apply)

_____ Full-Time resident
_____ Seasonal/weekend resident
_____ Business owner or employee
_____ Rental property/investment owner
_____ Agricultural
_____ Open space/vacant property owner
_____ Concerned citizen residing outside the study area

2. How do you feel about sanitary sewer expansion within the Study Area?

_____	_____	_____	_____	_____
Strongly Support	Moderately Support	Neither Support nor Oppose	Moderately Oppose	Strongly Oppose

_____ Depends (please comment below): _____

_____

_____

3. Where would you like to see sewer investment made? (Select all that apply)

_____ Residential (general)
_____ Commercial/Industrial (general)
_____ I-85 corridor
_____ Along other main corridors (examples Hwy-24, Hwy-11, Hwy-59, Old Dobbins Bridge Road)
_____ Village of Fair Play
_____ Townville
_____ Western Anderson County
_____ Along Lake Hartwell
_____ I would prefer no sanitary sewer in the area

4. What concerns do you have about sewer expansion in this area?

_____

_____

_____

_____

OJRSA OCONEE

COMMUNITY SURVEY

5. What opportunities do you identify with sewer expansion in the area?

_____

_____

_____

_____

6. Is there a specific address that you would like to comment on regarding sanitary sewer?
Please list the address below and clearly state what you hope occurs at that address. If you do not have a comment about a specific location, please go to the next question.

Address: _____

Comment: _____

_____

_____

7. Would you like to be contacted by the project team to share additional information?

_____ Yes _____ No, thank you

If yes, please provide your name, email address, and phone number and a project team member will be in touch with you.

Name: _____

Email: _____

Phone: _____

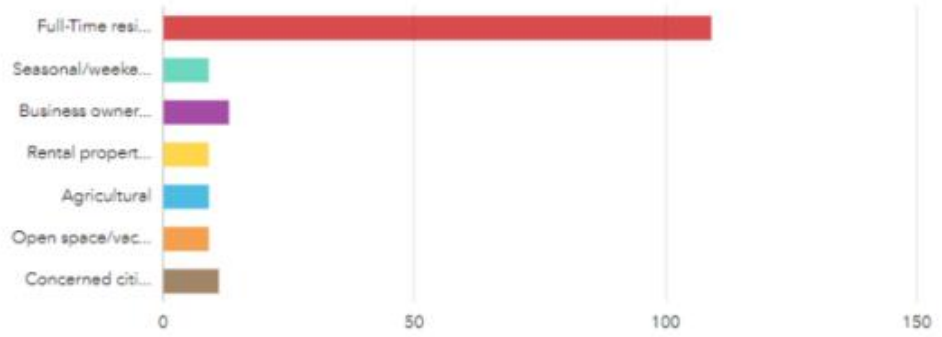
ColeJenest&Stone
BOLTON & MENK, INC.

200 South Tryon Street, Suite 1400
Charlotte, NC 28202
Office: 704-376-1555
colejeneststone.com

Public Engagement – Survey Results Summary
04808.00 – OJRSA Fair Play Area Sewer Basin Plan
September 18, 2022

Comments made herein have not been edited from their original response and may contain spelling mistakes or grammatical errors.

1) How would you classify your relationship to the study area? (Check all that apply) Column Bar



Hide table Empty categories Sort

Answers	Count	Percentage
Full-Time resident	109	77.3%
Seasonal/weekend resident	9	6.38%
Business owner or employee	13	9.22%
Rental property/investment owner	9	6.38%
Agricultural	9	6.38%
Open space/vacant property owner	9	6.38%
Concerned citizen residing outside the Study Area	11	7.8%

Answered: 141 Skipped: 0

2) How do you feel about sanitary sewer expansion within the Study Area?

Column Bar Pie Map

- Strongly Support
- Moderately Support
- Neither Support nor Oppose
- Moderately Oppose
- Strongly Oppose
- Depends (Please Comment Below)

Hide table

Other response Empty categories Sort

Answers	Count	Percentage
Strongly Support	47	33.33%
Moderately Support	6	4.26%
Neither Support nor Oppose	9	6.38%
Moderately Oppose	6	4.26%
Strongly Oppose	61	43.26%
Depends (Please Comment Below)	11	7.8%

Answered: 140 Skipped: 1

Details are included below

2) How do you feel about sanitary sewer expansion within the Study Area?	Depends (Please Comment Below) - 2) How do you feel about sanitary sewer expansion within the Study Area? Depends: please provide additional information
Neither Support nor Oppose	Concerned about too much growth
Moderately Support	Regional sewer for quality planned development I am all for. I also want to see us move away from septic tanks being the only disposal solution around Lake Hartwell.
Strongly Oppose	This is nothing but gross mismanagement from day one. How many customers or industries were committed before starting this project? Why has it taken so long? Now that you have it almost there do they realize the new tap and impact fees? This should have been package plant. Now you have line to nowhere with zero customers and have to maintain it. Also since you have zero commits it has zero capacity at the plant...per new rules.
other	How much is it gonna cost for the home owners? How much land are they gonna take ?
other	Concerned with initial cost and monthly cost. As water bills rise and fall each month depending on usage and number of people living in the house hold. I am concerned with the cost of connecting to the sewer initially and the monthly cost we will have to pay thereafter. With costs rising of everything else and the fact that I live in an area that hasn't seen development in years, how would this benefit me as I have a septic tank already? I admit that I haven't kept up with this whole thing, but I'd like to know where my property would fall in the big picture.
other	I am not against the concept of the new sewer system or growth in the area. My concern is with the type of growth this system may bring. People love Townville and FairPlay because it is a rural community; the slower pace and less crowded area seems to be a large part of the appeal. Having grown up on a farm in Townville and still participating in agriculture there today, my fear is that the growth we see isn't just restaurants and retail but housing developments and industrial parks. I think the area around Pendleton High School is a prime example of growth gone wrong where infrastructure wasn't updated to support to growth, and it's aesthetically not appealing. On a larger scale, the growth in Greenville County is also a sign of what growth gone wrong can look like where values can increase so much that they're prohibitive for people still involved in production agriculture or even the "average" citizen.
Strongly Oppose	I moved to Townville 10 years ago to get away for the city. I don't want there to be big stores of factories here.
other	Sewer should be an option not a requirement for residents!
Strongly Oppose	The county having and expanding the sewer project is great but expecting and forcing new or existing homes to connect is not acceptable! Ours is maintained a this would be a financial burden on many of us senior citizens
other	Depends on cost to residence and projection of future costs.
other	How would this affect our existing septic system? Overall, in favor of sewer system.
other	Only if expansion of sewer is to increase business and progress in Fair Play/Townville proper. All properties that are on the lake or other primary residences that have established septic systems should not be forced into the system especially with all the costs that the homeowner would have to incur. Not to mention many are on fixed incomes at this stage of their lives. Many people have settled in this area and don't want the tranquil nature of lake and area where they have selected to live be overrun with ongoing construction and businesses.
other	would like to hear more details as the plan moves forward
other	Most residents in this community are retired and on fixed income, as this would be a positive growth for the community im certain not everyone could afford to have the said work to hook up to sewer service in the future! In addition most of the homeowners, Are all fixed incomes and would not be able to afford without loans or a true hardship to thier life style.
Strongly Oppose	Sparsely populated area doesn't need expensive expansion that has no real benefit. Anyone in the area has approved sewage
other	Home owner cost
Strongly Oppose	Our roadway easements have already been torn up multiple times just for just clean water problems and we don't need sewage issues also !... N0 THANKS .
Strongly Oppose	Too expensive

Strongly Oppose	Too Costly and the Septic Systems in our neighborhood work fine.
other	1) If this project raises my property taxes then I am apposed. I am retiring in Fair Play and I am on a limited fixed income. 2) I am building my full time retirement home in Edgewater and just put in a brand new septic system. If I will be forced to abandon this system (that I just put in) and tie into a new sewer system (at my own expense) then I am apposed 100%. 3) I am also strongly apposed to this if I am forced to use this new system and I will be responsible to pump my waste to get to tie into your service. 4) I would be supportive of this initiative if there was no direct cost to me or an increase in my taxes and this new service was targeted at commercial areas.
Moderately Support	What additional cost is it to the residence and the enviromental impact to the community? What is the time ine and would the septic tanks be removed at no cost to the residences?
Strongly Oppose	The people that reside in this area, choose to live here knowing the commute. We want to maintain a rural life.
Strongly Oppose	I don't want the additional expenses required to connect to a sewage system and the monthly fee.
Strongly Support	Pastor at Earl's Grove Baptist Church. In future I could see sewer being beneficial for church, this community, and Fair Play area.
Strongly Support	will it be required to spend OJR $$ to hook JP or only with OJR soptic fails
Strongly Support	we need to put in the infrastructures
Strongly Oppose	What is the cost to residents in the area?

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200 South Tryon Street, Suite 1400
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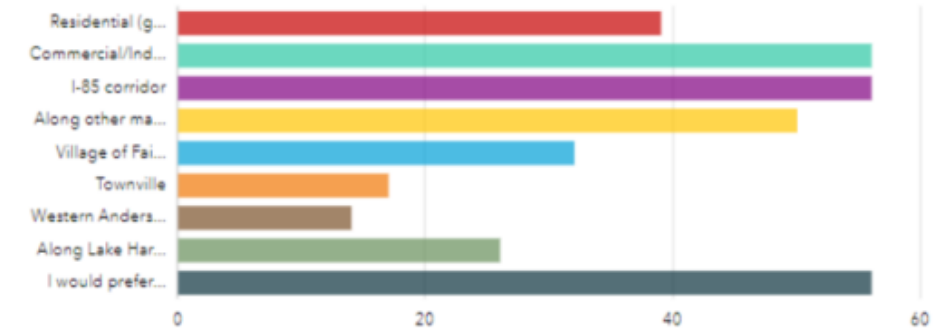
Office: 704-376-1555
colejeneststone.com

3) Where would you like to see sewer investment made (select all that apply)?

Column Bar



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Empty categories Sort

Answers	Count	Percentage
Residential (general)	39	27.66%
Commercial/Industrial (general)	56	39.72%
I-85 corridor	56	39.72%
Along other main corridors (examples Hwy-24, Hwy-11, Hwy 59, Old Dobbins Bridge Road)	50	35.46%
Village of Fair Play	32	22.7%
Townville	17	12.06%
Western Anderson County	14	9.93%
Along Lake Hartwell	26	18.44%
I would prefer no sanitary sewer in the area.	56	39.72%

Answered: 140 Skipped: 1

4) What concerns do you have about sewer expansion in this specific study area?
Exit 4 appears to be an after thought
Eliminating septic tanks near the lake that could fail and enter the watershed.
Priority is 85
Uncontrolled population growth and loss of agriculture property
It will drive unwanted growth that doesn't add to the quality of life.
I am in favor of expansion but I am hope that it will not place a burden on the residential community that will be required to connect to it. Also, I have concerns that the system will be expensive to install and rates will not be competitive rates.
Nine
The upstate and Oconee County will experience considerable growth in the near future planning for this growth through sewer and water expansion will be critical to sustaining safe and desirable residential and commercial growth in our area.
None
Odor
Oconee is getting too crowded and I don't want it to be like the Easley or Clemson area.
Between Clemson and Seneca is the growth area and always will be. Clemson University is a world wide brand and always will be. FairPlay ? Townville? I85 ?
Costing me money.
Residents cannot afford the additional cost forced on them requiring connection at their own expense
Cost to residential homeowners.
Do not want to be required to run sewer to our home at our cost. Also would not want a large increase in development in the Fair Play area. We like that it is rural.
I like that Fair Play is small and am not interested in a bunch of businesses crowding out of the the farm and small business economy. I will not run sewer to my house at my cost.
Oconee Joint Regional Sewer Authority Sewer Use Regulation Section 2.4 states: "The Owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, abutting on any street, alley, or right-of-way in which there is a public sanitary sewer, is hereby required at the expense of the Owner to install suitablemtoilet facilities therein, and to connect such facilities directly with the public sewer in accordance with the provisions of these Regulations, within ninety (90) calendar days after date of official notice to do so, provided that said public sewer is within three hundred (300) feet of the property line. Under unusual or specific circumstances, the Director may waive this provision." Enforcement of this is not feasible for much of the area population. Many cannot afford to pay for this themselves and moreover, have perfectly fine septic systems in place. If the county wants to require it, the county can pay for it.
My other concerns are maintenance and cleanup should there be a broken line. As we do not have this problem unless this is installed, how will that be dealt with?
See comment above for concerns. It is primarily regarding the type of growth that this system would ultimately bring.
I have concerns with the growth that could result from this system being installed. It could affect traffic, crowding, the strain on other infrastructure, and our tax burden.
As seniors we do not need the additional fees and taxes to cover these items.
Most people who live in Townville or Fairplay don't want to live in a city. We like the small town country life. A sewer expansion would change that.
I have seen lift stations fail due to storm caused power outages in the Pensacola FL area. The failures resulted in massive raw sewage contamination of recreational waters. That is my concern for sewer investment along the shore of Lake Hartwell.
Commercial growth

I do not think the individual property owner should to be forced to pay for sewer when we have a septic system just to have water that we already pay for.
Not happening soon enough.
The natural beauty and peaceful living would be compromised. People who live in this area rely on farming and do all we can to preserve the quality of life we have enjoyed for generations. Sewer=increased population, manufacturing encroachment, infrastructure problems, pollution, crime, obliteration of all that our ancestors worked for.
Farm land being sold and developed
Growth of area, keep our small town SMALL! Potential effects of lake and wildlife. Odor!
Expansion without proper planning and zoning
Sewage backup and Townville growing. We love here because it is quiet and I believe that the majority of us prefer to keep it this way.
Too much commercial growth
It will destroy our small community and contaminate our Lake Hartwell !! WE do not want ur shitty sewer system!!!
Not having options. Being told we have to hook up to the sewer and not having the option to choose whether or not we would like to or not.
Backflow risks to lake hartwell. Imposing on resident property. Developed only for industrial use.
I am not interested in this at all.
Cost and forced connection of residential area with newer homes
I do not want to see the proposed hotel, etc. in the area near the SC Welcome Station on I-85.
Increased nvironmen resulting from commercial development.
The cost to connect, if connection would be needed if septic is in working order. Is there a cost advantage to connect now vs later (my septic was installed last year)
Costs to county residents
Forcing it on Seniors
Cost to convert from a perfectly good paid for septic, to an unwanted sewer system. I estimate it will cost me $20,000 to connect to the sewer system which is ridiculous because I gain nothing from that expense that I don't already have, If you make the change over FREE, I will reconsider.
Cost of impact fees to individual home/land owners
Not clear that septic systems are a big enough problem to justify a sewer system for the rural area.
Do NOT want it coming into our sub-division, Parkview South. The community is currently on septic tank. Do not want to incur all the additional expenses that individual property owners will have.
Have Septic Tank System. Do not like being forced to accept sewer system in Park View South Subdivision. Makes no sense what so ever.
Too expensive for us to pay. We are retired.
Potential contamination, higher costs, no clear need
How would roads and properties be affected by installation of new system? How would our taxes/fees be affected? What would timeline for start to finish completion be?
Cost
$$$$&
Sewer expansion leads to uncontrolled growth. We are so worried about growing that we forget proper planning and density is what leads to sustainable development. The moment you install sewer developers will start creating subdivision and expect the county to start providing services.
Ambiguities with coats for residents to remove/fill current septic tanks and any other hidden costs. Need transparency.

Damage to roads and neighborhood.
Damage to personal property and roads
Excess expansion of business, ruining the existing tranquility for many who have selected this area for retirement
Costly to homeowners on fixed income.
Cost and damage to real estate
Owner cost
Prices
My concerns are the project will tear up the area and the roads and cost the property owners several thousand dollars out of pocket
LEAKS
Being forced to connect, expenses not well defined, fees to decommission existing septic not being included, etc, etc. etc.
Traffic delays, unsightly digs, unnecessary tree removal, digging up all the wild daffodils and not replacing them. Higher water bills.
I AM CONCERNED THAT RESIDENTIAL AREAS THAT HAVE PROPERLY FUNCTIONING SPETIC SYSTEMS WILL BE REQUIRED TO SPEND MONEY THAT THEY DO NO HAVE.
There are too many people here now as it is. My septic tank works just fine, and I do not want to be compelled to pay thousands more to hook into a line when I just build my house.
Increase in growth which also brings an increase in traffic and crime.
The nvironment what will the impact be and if it has an impact then no changes should be made as well as additional charges since for now we do not pay a fee for monthly maintenance.
The cost to connect my property to the public sewer. I would be a huge cost and completely destroy my landscaping and drive. I have spent 20 years and and a lot on money on my property and would not want to be forced to spend this money on something I do not need. My septic system has been well maintained and serviced since installation. Being forced use a service I do not want of feel I need is wrong!!!
DEVELOPMENT. We CHOSE rural.
If sewerage needs to be pumped from my property to the sanitary connection, I would not support the project. I am concerned about the cost of connection to the line.
Extraordinary costs to the existing system without adding any additional value.
Expense
I live on fixed income and have concerns about the cost to hook up to the system.
Extremely high cost per lot
Forcing homeowners to connect to the sewer system.
Do not want to see businesses or subdivisions going up
It has taken some time to get to this point, the county as well as local residents will benefit greatly from sewer in the area.
No concerns.
None!
Expensive but worth it
no concerns. All positive!
The cities in control of oconcer sewer authority- how will they work with project
lack of commitment
being able to pay for it and not being able to implement the plans
contamination of drinking water
contamination of drinking water

5) What opportunities do you identify with sewer expansion in the area?
Economic development
There is a very high incidence of septic tank failure in this area. I see this as a major benefit to the mitigation of bacterial pollution resulting from septic tank failure.
Industrial
Economic growth
Removal of failing septic system around the lake. Much needed economic development for Oconee County.
1. Economic development opportunities along I-85 and Hwy 24 2. Upgrade and expand capacity for visitors center 3. Take over existing private systems at residential subdivisions on Hwy 11 to ensure long-term viability 4. Allow development of neighborhoods in Fair Play community 5. Protect the watershed in this community
Growth opportunities along with being environmentally safe as compared to septic
More restaurants in our area
Cleaner water, more commercial businesses. Proper quality for schools.
More businesses and housing development
New opportunities for business good jobs to keep our children close to home and managed growth keeping our Rhule atmosphere intact.
Business
Businesses and growth
Zero... total waste of money. Hard to believe you did all this work and survey while you have over 200 million in development opportunities between Clemson and Seneca. Where is that basin study for that area?
New businesses
Make the hook up when available a discount while doing the project.
Increased traffic and industry. If you're going to do this, start with our roads. No one wants to come into the area and need an alignment because they chose to visit.
I'd agree that it may bring business and residential expansion opportunities to the area, though there have been other industrial sites that have been built, especially in Oconee County that have not succeeded even after extensive infrastructure additions. If I am correct, there was supposed to be an industrial park on Hwy 59 coming into Fairplay that an issue with water and sewer were prevalent, and there had been no development there at all.
I realize there are retail opportunities and opportunities for development of land into other purposes. I just don't agree that these types of growth are always a good thing. To the person or local government receiving the benefits of the increased tax base it sounds like it is all good, but to the citizen living in this area, I don't think we need to lose more farm land and more rural communities for the sake of building housing developments, industrial parks, and retail centers.
Access to retail
More people, more business, loss of small town relationships.
Non that I would like
The trend seems to be toward more and more residential housing construction radiating out from Seneca and Clemson into the Townville area. A sewer expansion would allow more efficient use of land and ease permitting time and costs.
Major growth for the Fair Play area's, retail and residential developments. Hospital and nursing home facilities.
None positive.
None
More industry and retail development

Overdevelopment.
I get the idea for growth for our community. That's great. But don't like the idea of being told we have to do something we don't want/ need to do.
Opportunity for sustainable development and planning for overall ecological health to maintain our agricultural and recreational communities. Not opposed to growth as long as it dense residential substantial industrial development.
New business , restaurants
People trying to force me to hook up to it. I will not.
Industrial & commercial only
Sanitary sewer around Lake Hartwell would lessen the negative impact leaking/unattended septic tanks have on the water quality. Investments along I-85 for industrial purposes would lead to tremendous cash and job investments.
The area needs more infrastructure to support its residents: law enforcement, grocery stores, drug stores, medical offices, etc. Residents of Fair Play need to drive 30 minutes to Seneca or Anderson for anything that is not carried at the Dollar Store. There is a section of Durham Road between the I-85 overpass and the fire station that is VERY run down. It is my hope that building infrastructure will clean up this area.
business growth, increased tax base
Opportunity to expand business opportunities and bring a grocery store to the fair Play / Townville area.
Great for commercial properties
Commercial development along I-85.
worried about too much commercial development (hotels)
Businesses along the I-85 corridor
Only for commercial customers that could build in years to come or new subdivisions . Making older subdivision hook on is not right.
Convenience
Growth of infrastructure, including grocery/retail closer than Anderson or Seneca, possibly more of a "Main Street" feel for more small businesses, increased sense of community
Commercial growth
Expand the sewer in and around the cities and allow for dense development controlled by the cities
Please be transparent with residents. Overheads will be incurred. Currently no advantages.
Don't need kt
Better for homeowners and new business.
More business into the general area.
None.
My concerns are the project will tear up the area and the roads and cost the property owners several thousand dollars out of pocket. I don't see any opportunities.
Cleaner lake.
I STRONGLY AGREE THAT COMMERICIAL DEVELOPMENT WOULD BE POSITIVELY IMPACTED BY SEWER EXPANSION.
None
Possible increase of services. Possible increase in retail.
The maintenace perhaps
The possibility of commercial and industrial growth with business and services that would enhance our area.
None. We want to stay rural and enjoy those opportunities.
None
Commercial is fine but residential is not needed.

growth
Jobs, housing increase, retail increase,
I support a planned effort to provide sewer service so the cost/benefits are analyzed ahead of development. The area under consideration is (I believe) often considered for development. Good planning will help direct growth.
Future Growth
1) provides greater potential for business and residential growth 2) improved conditions of lake - less septics
positive growth
possible growth to area and unable to do it fast enough
restaurants, small businesses
it should help pull in and help build industry and smaller businesses
job growth planned residential green space public use commercial exits I-2-4 & 3
planned growth and development
good commercial and industrial growth that will add to a diversified employment back and support county property taxes
property value, new businesses, fast food.
new businesses moving in area property value

APPENDIX C

Stakeholder Meeting Summary

ColeJenest&Stone
BOLTON & MENK, INC.

200 South Tryon Street, Suite 1400
Charlotte, NC 28202
Office: 704-376-1555
colejeneststone.com

Stakeholder Engagement – Meeting Minutes

04808.00 – OJRSA Fair Play Area Sewer Basin Plan

September 16, 2022

Abbreviations:
ColeJenest & Stone (CJS)

Comments and observations made herein were reviewed for accuracy to the best of our ability. Some of the comments are opinion based and do not represent the opinion of OJRSA, Weston & Sampson, or ColeJenest & Stone.

Oconee Economic Alliance (OEA)
Virtual Meeting: Teams
Katherine Amidon (CJS)
Morgan Holcomb (OEA)
February 15, 2022

A. Recommendations and Information
    a. Speak to Tim Mays – unofficial mayor of Fair Play
    b. The Golden Corner Commerce Park is an SC Department of Commerce certified industrial park
    c. OEA has access to Emsi if any of these reports will be helpful
        i. Easier to use than Esri data - OEA usually pulls both though to compare
        ii. Emsi pulls from Census data and MLS as well
        iii. Information can be searched by NAICS code – specific 51-000 manufacturing
        iv. Information can also be searched by census tract, and drive time
        v. OEA considers 11 counties to be within the labor shed

Blake Sanders (Studio Main)
Virtual Meeting: Teams
Katherine Amidon (CJS)
Blake Sanders (Studio Main)
February 16, 2022

A. Village of Fair Play Strategic Master Plan (2022)
    a. Almost final, presenting to the public March 10, 2022
    b. Created in partnership with Arnett Muldrow & Associates
    c. Overarching themes
        i. Preserve the core, engage the public, identify infrastructure needs, consider infill development, consider center of town vehicular movement challenges, consider marketing for Fair Play
            1. Fair Play is a state of mind, but how can it be branded as a gateway to the Golden Corner
        ii. Consideration to keeping the village intact, but acknowledging that farmland could get sold it is a matter of when

iii. Blake used Claritas to gather consumer and business data for this region by zip code
iv. There are plans for a new fire department
v. SCDOT has some projects in the works in the area
    1. Plans to realign the intersection and construct turn lanes in Town of Fair Play at the intersection of SC-243 and SC-182 with SC-59
vi. Blake will provide the final report to our team once it has been approved (provided March 11, 2022)

B. Recommendations
    a. Hardeeville could be a good case study for the OJRSA project, they recently had massive population growth for a small area
    b. Speak with Tim Mays who developed a Community Development Corporation, which enables this group to apply for grants
        i. Parks and Recreation Development Fund (SC Department of Parks, Recreation, and Tourism)
    c. Yoders is an institution: many people drive in to work there, consideration to their parking needs should be considered, they already have a satellite loading yard

Appalachian Council of Governments (ACOG)
In-Person Meeting: ACOG office
Katherine Amidon (CJS)
Chip Bentley (ACOG)
Lance Estep (ACOG)
February 17, 2022

A. Background information
    a. Historically the three Cities ran OJRSA (Seneca, Walhalla, Westminster) and the County did not take a role in sewer.
        i. There are nine commissioners appointed by the councils of the three Cities:
            1. Seneca – 4
            2. Walhalla – 2
            3. Westminster – 2
            4. At-large for Walhalla and Westminster – 1
    b. There was a lawsuit at one time related to Fair Play developing. Someone sued because it would not benefit the full County and thus there is almost a defacto service boundary because expansions tend to not happen outside of the cities.
        i. This has led to a disconnect with infrastructure and planning for that area
        ii. Similar to the sewer need in Fair Play, north of SC-123 is also ripe for development but there is no sewer
    c. Chickasaw Point Property Owners Association (POA) and Foxwood POA - have their own individual sewer. These package plants could be potential sources of revenue down the road, and they will need a succession plan as this area grows

B. Recommendations
    a. Reach out to SCDOT about projects in the area
        i. Check the SCDOT project preview page which has an interactive project viewer: https://www.scdot.org/business/projectviewer.aspx
        ii. Brandon Wilson is the contact for this area. He will understand these projects at a development level and understanding of the needs
        iii. Thomas Alexander is the president of the senate – District 1 South Carolina Senate brought the SCDOT project to the table

i. At this time, land has not been identified and it is not on council's long-term plan
ii. This could be an Oconee County driven project or a community project – this has yet to be determined

d. Phil is of the mindset that if and when sewer comes to Exits 1, 2, and 4, there will be drive for a hotel and anything along the Lake could have the potential for growth

B. Recommendations:
a. Reach out to the State PRT office. Start by calling the main line and ask to speak with Duane Parrish or a project engineer or facilities
i. Ask about Lake Hartwell Park expansion plans
b. Consider the current Lake Hartwell access points, which are all on septic
i. Some are managed by Oconee PRT on lease from the US Army Corps of Engineers
1. 10-year lease for all except Seneca Creek Access Area which is on a 25-year lease and Oconee PRT is putting in capital improvements

South Carolina Parks, Recreation, & Tourism (SCPRT)
Phone Call
Katherine Amidon (CJS)
Jonathan Kent (SCPRT)
February 28, 2022

A. Background
a. Jonathan is a state engineer, he recommended to email him, and he would ask around the office and follow up with our team
i. The only current project within the study area that would involve sewer is the Fair Play Welcome Center Replacement
b. The State is working on a new Welcome Center project in Fair Play, and it is at the beginning phases of securing an engineer
i. They are hiring external for this work. This was publicly bid in the fall of 2021

Village of Fair Play Community Development Corporation (Fair Play CDC)
Phone Call
Katherine Amidon (CJS)
Tim Mays (Fair Play CDC)
March 2, 2022

A. Background
a. In 2021 there was an effort to create a Fair Play overlay district
i. They went through a process of creating an overlay with standards along I-85 and the village center
ii. They also considered corridor buffers around the village center addressing building height, setbacks, etc.
b. They have established as a Community Development Corporation (CDC).
i. The group is now considering what can they do now
ii. There is an understanding that no one wants to be told what to do with their property but there is a balance of being able to have choice over what you do and not being a burden to your neighbor
iii. They created this group to help determine how this area can grow
c. Fair Play used to be a thriving area before I-85 split the community but now it is the fact that I-85 is there that Fair Play may have a chance to grow again

B. Recommendations:
    a. Exit 4 – North of this is the Industrial Park – Golden Corner Commerce Park that Blue Ridge Electric owns.
    b. Along the I-85 corridor there is an opportunity for commercial and industrial development
    c. The area to the south could grow as residential
    d. Some of the property in these growth areas is pastureland and some owners may be hanging onto it until the timing makes sense to sell
    e. In general, the parcels around the I-85 corridor and especially by the Exits need to be considered
        i. Some owners are going to hold onto this land, while others are just waiting to sell.
            1. Some of these key property owners (maybe just 3 people) should be engaged as part of this project
    f. There are some conservation easements in the area
        i. Sammy Glenn (who is deceased) set them up and his son-in-law Steve Lawson would be good to talk to
    g. Need to get clarity on the sewer line that is being installed towards Exit 1 – according to Gary Gaulin only certain spots of that line will be eligible to be tapped
    h. Once we have maps, Tim Mays is willing to discuss this area with us and introduce us to key folks

School District of Oconee County (SDOC)
Virtual Meeting: Teams
Katherine Amidon (CJS)
Michael Thorsland (SDOC)
March 4, 2022

A. Current Status:
    a. Fair-Oak Elementary School is the only school in the Study Area and thus is likely on large septic, which is not unusual for elementary schools
    b. People have talked for years about potential growth in this area and there is some skepticism about when/if this growth will happen once sewer is in place
    c. The County looks at internal data and student enrollment mostly to predict future needs
B. Future School Needs:
    a. Rough statistics for the County: 60 years ago, Oconee had roughly 40,000 residents and there were approximately 10,000 K-12 students. Today the County has roughly 80,000 residents and still there are approximately 10,000 K-12 students
        i. Historically people moving in have been retirees who are not bringing children with them. There has been some change with COVID-19 and families moving into the area
            1. As of right now the numbers have remained relatively flat.
    b. If the school district needed to expand it would likely be an elementary school in the Tokeena area where SC-24 intersects with SC-59. Residents in this study area would thus drive north to school
        i. They would not likely put one at the southern end of the study area
        ii. In Michael's opinion they are definitely not building a new school in this area in the next 5 years, within 10 years is extremely unlikely, within 15 years is unlikely, and within 20 years is hard to predict
    c. West-Oak High School, which is just to the north of the study area near the intersection of SC-11 and SC-24, serves the Fair Play area

i. Currently there are approximately 850 students, but the facility can handle a student population of 1,400
d. West Oak Middle School can add 2-300 students before reaching capacity
e. One of the biggest aspects to growth that could really change the makeup of the demographics is the Golden Corner Commerce Park
i. An increase in jobs could influence growth and school population sizes

South Carolina Department of Transportation (SCDOT)
Phone Call
Katherine Amidon (CJS)
Brandon Wilson (SCDOT)
March 8, 2022

A. Background
a. Currently the projects slated for the Study area are related to safety and resurfacing and not growth.
b. There has been little to no growth in this area over the past five years
i. Growth is happening around Seneca
c. SCDOT does not look across state borders for the growth happening in other states.
d. Most of the time SCDOT is not involved early enough in a project and end up being reactive rather than proactive
e. SCDOT does have traffic counts available to review, which can be found here: https://www.scdot.org/travel/travel-trafficdata.aspx
i. 2021 numbers should be released soon (*posted in February)*
ii. https://scdottrafficdata.drakewell.com/publicmultinodemap.asp (*through 2020)*
f. According to SCDOT– interested industrial development has chosen a different county even with the Golden Corner Commerce Park

Fort Hill Nature Gas
Virtual Call
Katherine Amidon (CJS)
Joey Hawkins
March 15, 2022

A. Background
a. The Golden Corner Commerce Park is a continuous site, the sire is a gem and unique not only to the area but the sate
i. Its proximity to Charlotte and Atlanta is great and in his opinion the Greenville Spartanburg area is maxed out along the I-85 corridor
ii. It's also good for the labor market because it is hard to compete with BMW rates
b. Joey suggested I reach out to Beth Land to connect about the site
i. A call and message were left on March 15th with her
c. He also suggested I reach out to Burris Nelson regarding Anderson County Growth (notes follow this summary)
i. Terry Gilstrap with Anderson may also be helpful
d. Industrial growth should be along the industrial corridor and should avoid sprawl

Anderson County Economic Development
Virtual Call
Katherine Amidon (CJS)
Burriss Nelson
March 15, 2022

A. Background
   a. Exit 4: There has been prior discussion about development around Exit 4, which is split by the county line. Lots of farmland is in this area. Smaller industry is interested here. There is a confidential project in this area that is likely 10 years out and the success of that would rely on the presence of sewer.
   b. There are some areas by the lake that might provide an opportunity for a conference center
   c. Exit 1 had the proposed Sanctuary Point development
   d. Exit 14: Anderson is working to develop this exit with a package plant or lift station to carry up SC-187
   e. Exit 11: There has been conversation with Oconee about sewer here. This could be a mega site for automotive
   f. Anderson did a market analysis for Asbury Park that Burriss can send if we are interested.

South Carolina Department of Health & Environmental Control (SCDHEC)
Phone Call
Katherine Amidon (CJS)
Bryan Ball (SCDHEC)
March 24, 2022

A. Background – Septic Data Availability
   a. They do not have GIS (according to Bryan this data isn't available anywhere in the state)
   b. They have two separate databases (one for less than 5 years and one that is older) that can be individually searched by parcel, person, street, city, etc.
   c. The Fair Play Area is a mix – some old, some new septic, but most are likely over 10 or maybe even 20 years old in our study area
   d. He brought up the lack of permit for repairs and only for full replacements – he doesn't have any news on that changing
   e. Just to give you an idea for Fair Play he has 266 total records since 2006 that were issued. Not all of these led to an install, some have been purged from DHEC's system and they don't have the full report.
   f. Bryan confirmed the process that Chris explained in the meeting that DHEC requires you to hook up to sewer if it's available, but relies on the supplying entity to determine what distance that is (for OJRSA it's 300 feet to the parcel boundary) and then holds the septic permit until there is a letter from the supplying entity saying sewer is not available.
   g. In Bryan's opinion, although helpful to consider, the USGS soil data isn't granular enough for our project of our size. He has seen drastically different percolation rates within ¼ mile of each other in this region and his experience is that the Village of Fair Play is worse than some parcels along Lake Hartwell.
   h. Some alternatives were installed in the 1990s that had a reduced drain field. These were advertised as being as effective but proved to fail within approximately 10 years. They were removed from the market, and most have been replaced by this point.

Respectfully,

ColeJenest & Stone | Bolton & Menk

Katherine Amidon, AICP
Senior Environmental Planner
Katherine.amidon@bolton-menk.com